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Russian Federation: Selected Issues

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INTERNATIONAL MONETARY FUND

RUSSIAN FEDERATION

Selected Issues

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Approved by the European II Department

September 1, 2000

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Russian Federation: Basic Data

Social and demographic indicators 1/	
Area	17,075,200 sq. km
Population (in millions) 2/	146.3
Urban (As a percent of total population)	73
Rate of population growth (Percent per annum)	-0.3
Life expectancy at birth (Years)	67.0
Infant mortality rate (Per 1,000 live births)	16.5
Literacy (Percent of population)	99.1

	1993	1994	1995	1996	1997	1998	1999
Share of gross domestic product 3/				(In percent of GDP)			
Agriculture 4/	7.7	6.2	6.7	6.7	6.0	5.3	6.3
Industry	32.4	31.5	27.0	27.1	26.0	26.8	29.1
Services	46.3	49.3	51.1	50.0	52.0	53.5	50.2
GDP							
Nominal GDP (in billions of rubles)	171.5	610.7	1,540.5	2,146	2,522	2,696	4,545
Real GDP (percentage change)	-8.7	-12.7	-4.1	-3.4	0.9	-4.9	3.2
Consumer prices (percentage change, period average)	874	308	198	48	15	28	86
Enlarged government finances				(In billions of rubles)			
Total revenue	62.1	211.5	524.8	719.1	920.0	900.8	1,618.9
(in percent of GDP)	36.2	34.6	34.1	33.5	36.5	33.4	35.6
Total expenditure	74.7	275.2	619.2	909.5	1,118.9	1,116.0	1,792.7
(in percent of GDP)	43.6	45.1	40.2	42.4	44.4	41.4	39.4
Overall balance	-12.6	-63.6	-94.4	-190.4	-198.8	-215.2	-173.8
(in percent of GDP)	-7.3	-10.4	-6.1	-8.9	-7.9	-8.0	-3.8
Money and credit (end-period)							
Ruble broad money (in billions of rubles)	28.9	92.4	220.7	295.1	370.3	448.4	704.7
Velocity of ruble broad money (level)	11.1	11.0	8.9	8.3	7.4	7.3	7.8
Balance of payments				(In billions of U.S. dollars)			
Total exports	...	67.8	82.7	90.6	89.0	74.9	75.3
Total imports	...	48.5	64.0	72.8	71.6	57.8	39.5
Current account balance	...	8.4	4.8	3.9	2.8	1.0	20.8
Official reserves (in months of imports of goods and services)	1.2	1.2	2.4	2.0	2.9	2.8	2.9
Exchange rate, rubles per U.S. dollar, end-period	1.25	3.55	4.64	5.56	5.96	20.65	27.00

Sources: Russian authorities; and Fund staff estimates.

1/ Data for 1998 or latest available.
2/ Population declined to 145.2 million as of June 1, 2000.
3/ Share of gross value added generated by sectors in factor prices to GDP in market prices.
4/ Agriculture, including companies servicing agriculture and forestry.

1. This report provides background information for the discussion contained in SM/00/196, 8/23/00 of the main policy issues currently facing the authorities. The primary focus is on two key features of recent macroeconomic developments—the sustained recovery in output and the substantial improvement in the fiscal position—notably on the relative importance of the sharp ruble depreciation and the increase in international energy prices in accounting for these developments. A detailed analysis of the factors underlying the 1998 crisis and of macroeconomic developments immediately after the crisis was provided in SM/99/178, 7/14/99.

2. Chapter I and Annex I describe the recovery in output and the main components of demand. A main conclusion is that the recovery in output after the 1998 crisis was originally driven primarily by import substitution, but that the recovery has now become much more broad based with robust increases in non-energy exports and the principal components of domestic demand. An important conclusion for the policy discussions is the finding that the ruble depreciation has been relatively more important than the increase in oil prices in explaining the strong output performance, although the impact of the latter is by no means negligible.

3. Chapter II and Annex II are concerned with the fiscal adjustment. While there has been a significant improvement in the overall balance at all levels of government, the adjustment at the federal level has been almost entirely accounted for by higher revenues, whereas adjustment at other levels has been mostly due to expenditure compression. The relative importance of discretionary policy changes, changes in the macroeconomic environment, and a residual item (which would include improved tax compliance) in explaining the strong increase in revenues at the federal level are analyzed. In this regard, the most important factor appears to be discretionary policy changes. Chapter II also includes a description of recent tax reforms as well as a discussion of the major outstanding structural fiscal problems, reflecting the priority assigned by the new government to fiscal reform.

4. Annexes III and IV provide a chronology of recent changes in the exchange and trade systems, respectively.

I. The Recovery in Output

A. Introduction

5. **Output has rebounded strongly and is now above the pre-crisis level.**[1] Following a decline of almost 5 percent in real GDP during 1998, with a particularly sharp decline in the third quarter, output grew by over 3 percent in 1999. Estimates for the first quarter of 2000 suggest that the recovery has since gained further momentum. The output recovery was initially driven by import substitution in response to the large real depreciation. Subsequently, the recovery has become more broadly based as exports are growing and domestic demand, including both investment and, more recently, private consumption, is becoming more buoyant.

6. **Inflationary pressure stemming from the ruble depreciation was quickly reigned in and inflation has been brought down to relatively low levels**. Following an initial burst of inflation stemming from the depreciation, inflation was reduced by late 1999 to about 1 percent per month on a seasonally adjusted basis.

7. **Both the ruble depreciation and the increase in world energy prices have played important roles in the recovery**. Breaking out the contribution of each of these factors is difficult but, the data suggest that the increase in world energy prices has, to date, played a secondary role in the recovery. In this regard, the bulk of the improvement in the external current account during 1999 came from a reduction in imports rather than an increase in energy exports.

8. **The strong growth in output has resulted in a decline in unemployment**. Despite the existence of important rigidities in the labor market, the unemployment rate fell to 11 percent at end-June 2000.

B. Developments Since the 1998 Crisis

9. **Output began recovering in the last quarter of 1998 and has since gained further momentum**. In the first quarter of 2000, real GDP stood 8.4 percent above its level one year earlier, almost 3 percent above its previous, end-1997 peak. Further, in a sharp break with pre-crisis experience, the current expansion involves most sectors and almost all regions—84 out of 89 regions experienced growth in industrial output in 1999.

10. **Any analysis of the dynamics and causes of this recovery is complicated by severe data limitations**. Seasonal adjustment is extremely difficult, both because the data series are very short and unstable, and because there have been significant changes in the structure of the economy (see Box 1).

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[1] Annex I provides a longer-term perspective on output growth in Russia and a comparison with experience in other transition countries.

Box 1. Issues in Seasonal Adjustment

Seasonal fluctuations in Russian **real activity are unusual in both magnitude and timing, but the amplitude seems to be diminishing,** Box Figure 1 (1 and 2). The seasonal pattern, with a very sharp fall in January, followed by strong growth in subsequent months and a peak in December, differs somewhat from the seasonal pattern normally found in countries with a similar climate and industrial structure. The Russian seasonal pattern partly reflects the orthodox holiday period that falls in January as well as old central planning behavior, in which the desire to fulfil the annual plan led to increased activity towards the end of the planning period. Central planning-based accounting and data-reporting practices artificially exacerbated the pattern; in particular, the output of smaller enterprises, which only reported once every year, was incorporated into the series on a cumulative year-to-date basis during the last period. Over the period 1995–99, the estimated seasonal January decrease in industrial output shrank from 7.8 to 6.7 percent, and the estimated seasonal first quarter decrease in real GDP shrank from 12.7 to 12 percent. This reflects both changes over time in the structure of the economy, and in particular the weakening influence of the old central planning mentality and improvements in statistical practices.

Seasonal adjustment in such a situation must allow the seasonal pattern to change over time and to take into account the impact of shocks, notably the August 1998 financial crisis. Allowing for changes in the seasonal pattern is only feasible if it can be assumed that the changes are sufficiently small and/or smooth. With short time series, a single isolated shock, such as the August 1998 financial crisis, can have a large and misleading impact on estimates of seasonal factors. Box Figure 1 (3) contrasts two seasonally adjusted (SA) time series for real GDP growth. In the first ("SA incl. crisis"), seasonal adjustment is achieved by passing the entire, unadjusted time series through the X-12 filter. In the second ("SA excl. crisis"), the crisis and post-crisis period (1998 Q3 onwards) is ignored when estimating the seasonal factors. The substantive difference is that, in the first time series, the output dynamics stemming from the August 1998 crisis and the post-crisis recovery influence the estimates of the normal seasonal movement. As a result, the procedure will tend to estimate higher SA growth rates for Q3 and lower SA growth rates for Q1, Q2, and Q4.

Controlling for the crisis, Box Figure 1 (4) shows SA growth for real GDP, an "output of basic sectors" index (covering about 60 percent of GDP), and industrial output. The figure suggests that, in 1999 Q1–Q2, growth was very fast, particularly for industrial output. In 1999 Q3, there was a sharp slow-down, although the real GDP and the output of basic sectors series give contrasting indications about the precise magnitude. In 1999 Q4, the growth rate rose again. Use of monthly data, see Box Figure 1 (5), confirms this pattern.

Using instead an ARIMA approach has both disadvantages and advantages. Estimating a simple ARIMA regression with seasonal dummies has two disadvantages: the estimates can be heavily influenced by outliers, and changes in the seasonal pattern cannot be accommodated. The approach does, however, permit the calculation of standard errors of the estimated seasonal factors. Box Figure 1 (6) plots the upper and lower bounds of a 90 percent confidence interval for the estimated SA growth rate, using both the full sample and the non-crisis period alone to estimate the seasonal factors and their standard errors. There are two key conclusions, which reflect the fact that quarter-on-quarter changes in Russia are large and variable. First, the magnitude of the depicted confidence interval is extremely large; indeed, so large that in 1999 the null hypothesis of zero growth cannot (or can only barely) be rejected for any individual quarter. Second, the magnitude of the depicted confidence interval greatly overwhelms the differences implied by using different estimation methods, for example, including or excluding the crisis period, or using X-12 filters versus an econometric approach. Note though that the standard errors diminish dramatically over periods greater than an individual quarter. Indeed, by definition, the standard error is zero for the year as a whole. On the other hand, the confidence intervals would be even wider if account were taken of the (unknown) measurement error associated with the collection of the underlying, unadjusted data.

Box Figure 1. Russian Federation: Seasonal Factors in GDP and Industrial Production, 1996-2000

Figure 1. Real GDP, 1997=100

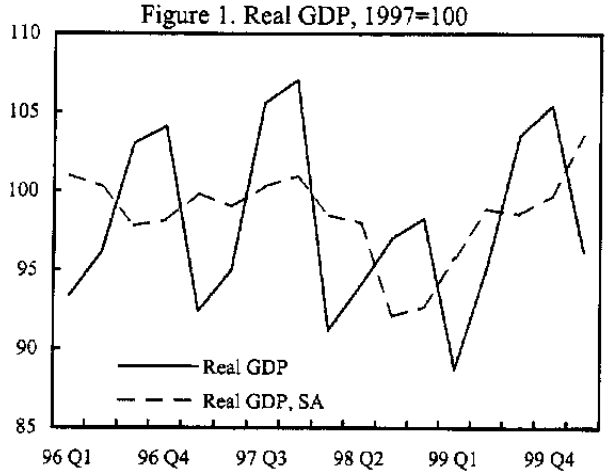


Figure 2. Industrial output, 1997=100

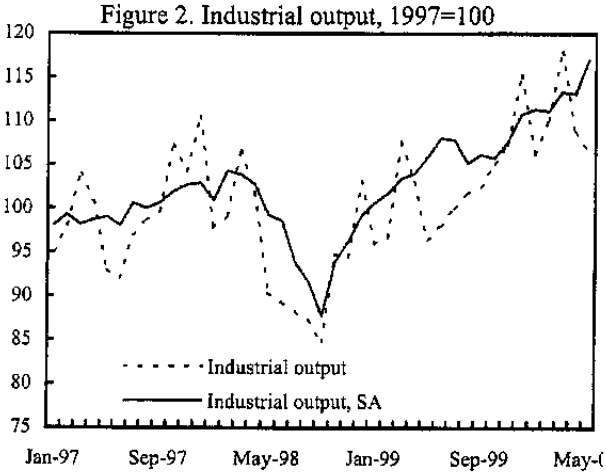


Figure 3. Real GDP growth, SA

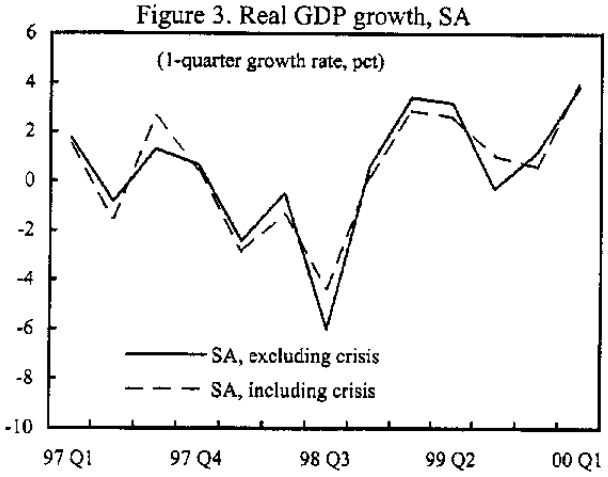


Figure 4. Output growth, SA

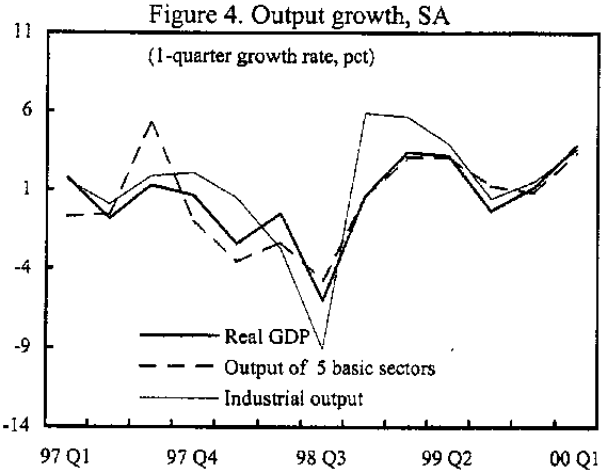


Figure 5. Output, SA, 1997=100

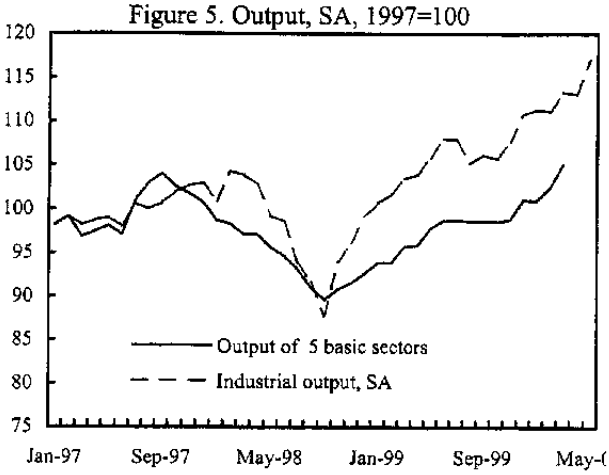
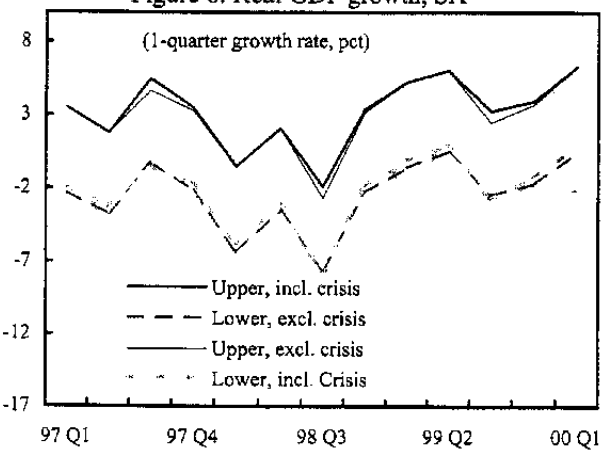


Figure 6. Real GDP growth, SA



Source: Goskomstat and Fund staff estimates.

In addition, key macroeconomic time series are unavailable, internally inconsistent, or of only limited reliability, especially at a quarterly frequency.[2]

11. **The post-crisis recovery was initially led by import substitution, in response to the sharp real ruble depreciation.** This first phase began in late 1998 and lasted until the middle of 1999. It was characterized by rapid growth of the external trade-oriented industrial sector, whose output increased on average by over 5 percent per quarter (Text Table 1, Figure 1). Import volumes, seasonally adjusted, fell by 50 percent in the second half of 1998 as a result of the depreciation-related substitution effect as well as an income effect originating from a sharp decline in real wages and consumption demand in the aftermath of the crisis. As for exports, energy export volumes remained broadly flat after the crisis, since the scope for expansion is limited by extraction and transportation constraints (see below). In contrast, non-energy exports (seasonally adjusted) declined by about 15 percent in dollar terms between the crisis and the second quarter of 1999, although customs data suggest that export volumes increased significantly, especially to non-CIS countries.[3,4] The resultant dramatic increase in net foreign demand more than offset a decline in domestic demand, in

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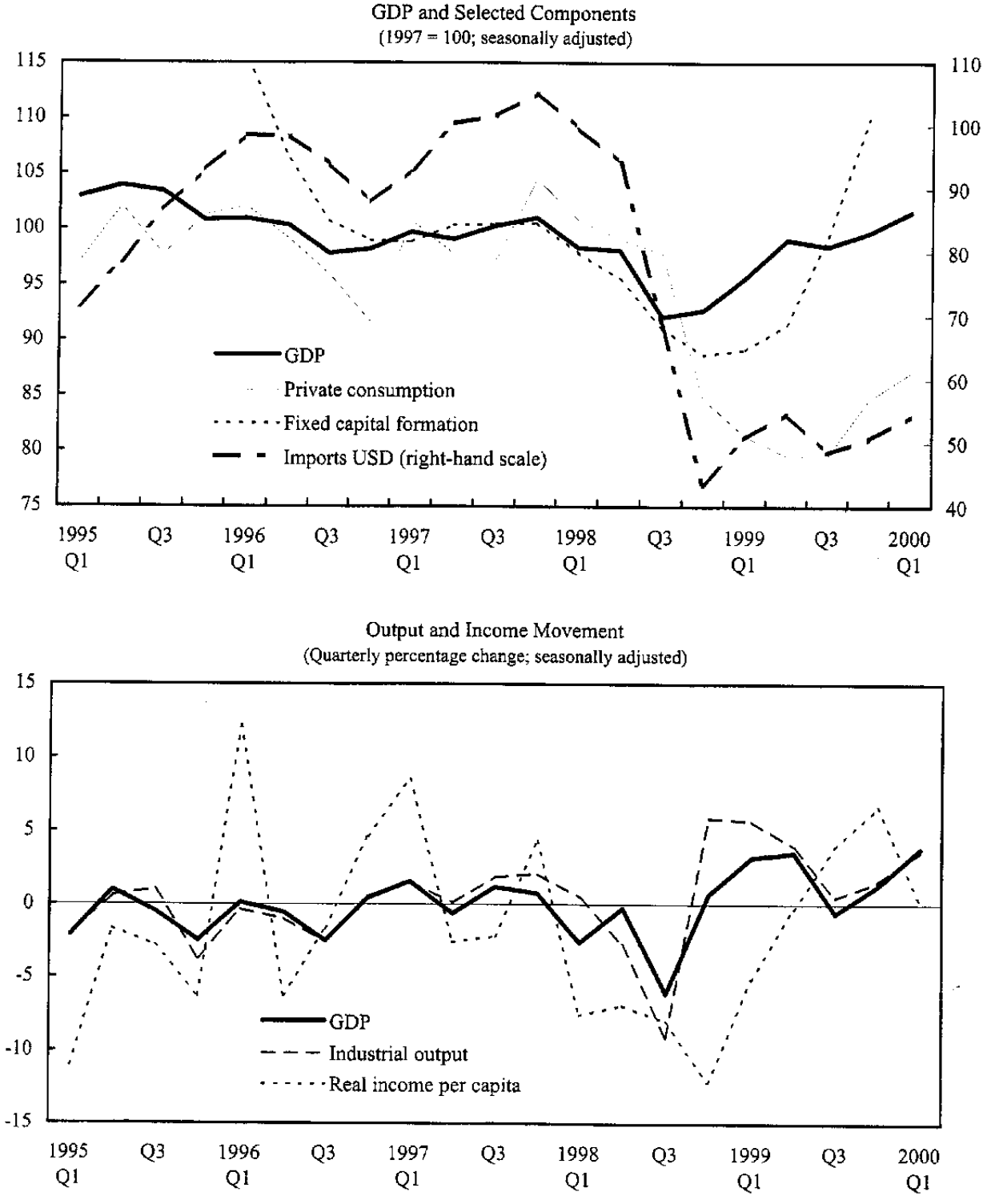
[2] For quarterly data, there are two main problems. First, for export and import volumes and prices, there are no aggregate time series, but only year-on-year growth rates for selected commodities. This is particularly significant since annual customs data suggest that there have been major changes in the prices of both exports and imports that cannot be related to changes in observable world market prices, such as the spot price for oil. Thus, construction of export and import price indices on the basis of world prices is unlikely to provide reliable information on underlying developments. Second, there are no quarterly time series for the expenditure components of real GDP. While proxies are available for both private consumption and fixed capital formation, the time series for such proxies are internally inconsistent and are only weakly correlated with the annual national income data.

[3] In 1999 Q1, for instance, export volumes for machinery, chemicals, and wood and paper products, which together account for about one-quarter of total exports, were on average some 40 percent above their level one year before. For ferrous and non-ferrous metals, which account for another 22 percent of total exports, the corresponding year-on-year growth rate was almost 13 percent.

[4] The counterpart of such volume increases must be large decreases in dollar prices. The latter can only in small part be linked to movements in observable world commodity prices, such as for nickel and other metals. The dollar price declines were especially large for exports to the CIS, which account for about 15 percent of total exports, reflecting the weakening output and the devaluations in some of these countries as well as Russia's position as a large country for trade with the CIS in some products. In 1999 Q1, for example, average prices for metal exports to CIS and non-CIS countries, respectively, were 55 percent and 29 percent below their values of one year before. For chemicals, the corresponding figures were 55 percent and 37 percent.

Figure 1. Russian Federation: Output and Income, 1995-2000



Source: Goskomstat.

particular in consumption, which fell sharply as real wages declined to three-fifths of their pre-crisis level (Figure 2).

Text Table 1. Key Real Sector Growth Rates
(Seasonally adjusted, one-period growth)

	1998 Year	Q1	Q2	Q3	Q4	1999 Year	Q1	Q2	Q3	Q4	2000 Q1
Real GDP	-4.7	-2.4	-0.5	-6.0	0.6	3.1	3.4	3.2	-0.3	1.2	3.8
Industrial output	-2.3	0.5	-2.7	-9.1	5.9	8.1	5.7	3.9	0.5	1.5	3.6
Private consumption	-5.0	-3.6	-1.4	-1.6	-18.0	-15.0	0.3	-1.8	0.5	7.3	2.3
Fixed capital formation	-6.7	-2.6	-2.4	-4.6	-2.7	4.5	0.6	2.6	8.6	11.0	...

Sources: Goskomstat; and Fund staff estimates.

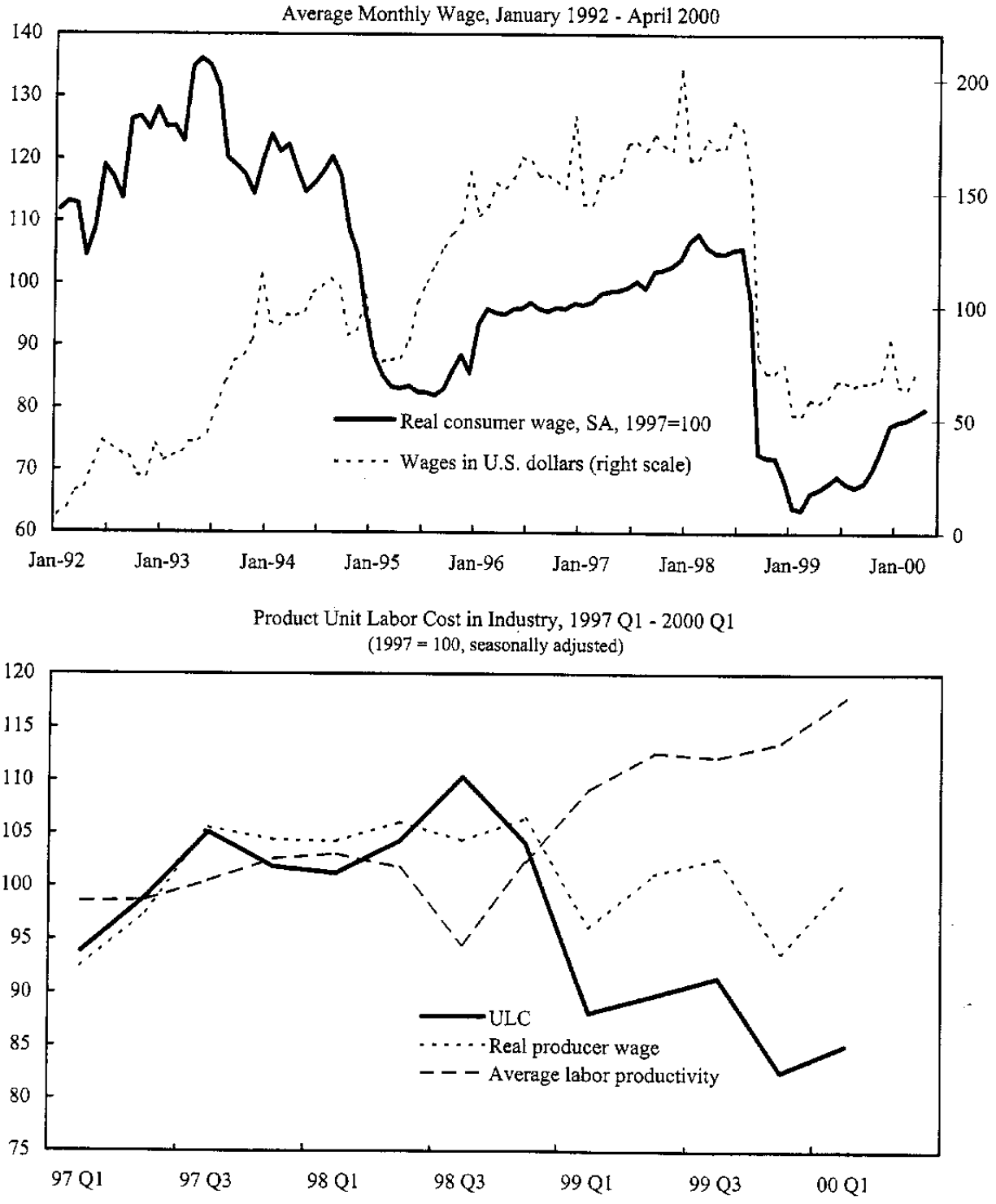
12. **The recovery appeared to be petering out in the second half of 1999.** There was a significant slowdown in growth, with imports stabilizing while domestic consumption remained depressed. Investment rebounded strongly as the depreciation and rising oil prices improved the financial condition of enterprises, albeit from a very low base.

13. **Output growth gained new and more broad-based momentum from late 1999.** Output growth rates have returned to the levels observed in early 1999 and the expansion is now more broadly based, with a significant increase in domestic demand. In particular, private consumption has been growing sharply reflecting both a 20 percent increase in real wages since August 1999 and the near-elimination of wage arrears (Table 18), in turn linked to the strong financial situation of enterprises. Capital formation remains strong as rising international oil prices have further improved profits, and overall public confidence in economic prospects has strengthened in the wake of the recent elections. Three firms alone (Lukoil and Sifneft in the fuel sector, and Norilsk Nickel in the metal sector, which over the last six months has also experienced a major increase in export prices) have announced capital expenditure plans for 2000 that imply a (combined) increase in fixed capital formation of almost 1 percent of GDP. While such increases occur from a very low base, they do nonetheless represent a major break with the long-running trend decline.[5]

14. **Non-energy exports have grown strongly.** In the last quarter of 1999, dollar values were 6 percent above the level one year before, and customs reports suggest that volumes for all major categories of exports (except agriculture and raw hides) were at least 13 percent higher than a year earlier, with much larger increases in some categories, such as textiles and

[5] Data on capital formation in the first quarter of 2000 are difficult to interpret. The official estimate implies a decline of 6 percent, but this conflicts with other data showing a significant increase in construction activity.

Figure 2. Russian Federation: Wages and Unit Labor Costs, 1992-2000



Sources: Goskomstat; and IMF staff calculations.

machinery.[6] For 1999 as a whole, non-energy export volumes grew by about 15 percent, largely driven by rising exports of metals, fertilizers, and timber to non-CIS countries. While the dollar value of non-energy exports declined further, this reflected a continued fall in dollar prices, especially for exports to the CIS. These figures imply that the growth in exports contributed 3–4 percentage points to output growth in 1999.

15. **Import volumes have also begun to recover following a sharp decline in 1999.** For 1999 as a whole, customs data imply that imports fell by 31 percent in U.S. dollar terms, of which about one-third can be attributed to a decline in prices. However, this fall partly reflects a post-crisis shift in the composition of imports towards cheaper product categories and, within each category, towards cheaper brands. Such structural changes are not handled well by the present indices, both because they are actually unit-value indices and due to the inherent difficulty in identifying appropriate weights. In the first quarter of 2000, reflecting the recovery in domestic demand, imports grew by almost 5 percent in dollar terms, and about 14 percent in volume terms, relative to the first quarter of 1999. Nevertheless, import volumes remained about 40 percent below their pre-crisis level, in part because real wages remain significantly below their pre-crisis levels.

16. **The government sector has made a negative contribution to demand growth in the wake of the crisis.** General government consumption at constant prices grew by less than 1 percent in 1999 (Table 2). While data on government investment are not available, enlarged government expenditure as a share of GDP fell by 2 percentage points, and non-interest expenditure declined by almost 4 percentage points (Table 22). With the ratio of enlarged government revenues to GDP increasing by over 2 percentage points, the primary deficit decreased by 6 percentage points (see Chapter II).

17. **Following an initial surge in the aftermath of the crisis, inflation quickly subsided and has remained modest despite the rapid output recovery.** Consumer price inflation spiked sharply in September 1998, but declined to around 3 percent on a monthly basis (seasonally adjusted) between April and August 1999. It dropped further in late 1999, not exceeding 1 percent between October 1999 and April 2000 (Table 15). Inflation (unadjusted) ticked up to almost 2 percent in May and 3 percent in June, in part a reflection of special factors, including in particular sharp increases in the customs duty on sugar, adjustments in administered prices (including those for electricity and gas), and seasonal increases in the price of several foodstuffs. Nevertheless, underlying inflation also likely increased, to about 1.5 percent per month, in part reflecting difficulties in keeping control over the growth of base money in the face of large foreign exchange interventions by the CBR. Industrial producer prices have grown consistently faster than consumer prices since February 1999, largely reflecting the steady increase in prices for fuel and other commodities, in turn linked to changes in world market prices (Table 16).

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[6] Year-on-year growth rates for textiles and machinery were, respectively, 55 percent and 41 percent.

C. Main Factors Behind the Post-Crisis Recovery

18. **The ruble depreciation and the rise in world energy prices have been the most important factors behind the output recovery.** It is difficult to disentangle the relative impact of these factors, since both have contributed to increased profitability in the tradables sectors, improvement in financial and liquidity conditions in the economy at large, and progress toward sustainable macroeconomic stability. While both the ruble depreciation and the increase in international energy prices have played important roles in the recovery, the ruble depreciation has, to date, been the primary driving force behind the recovery.

The role of the ruble depreciation

19. **The sharp depreciation following the August 1998 crisis led to a significant improvement in the competitiveness of the tradables sector** (see Box 2). The CPI-based real effective exchange rate (REER) depreciated by 45 percent in the wake of the crisis, and through April 2000 remained about 40 percent below its pre-crisis level (Figure 3).[7] The REER based on relative unit labor costs (ULC) improved even more dramatically, declining some 70 percent after the crisis as real wages collapsed, and remaining about 60 percent below the pre-crisis level as of end-1999. Profitability, as measured by product unit labor costs, improved by over 15 percent following the crisis, with a further small increase since then.

20. **The strengthening of external competitiveness and profitability in the tradables sector led to a dramatic improvement in the external trade balance.** As discussed above, imports fell sharply in the second half of 1998 and have only staged a slow recovery. There has also been a positive response from exports, although this has been dampened by the economic problems in main CIS partner countries.

21. **Increased profitability also stimulated an expansion of investment and a reduction in arrears.** Given the underdevelopment of domestic capital markets and the low level of credit to the economy from the banking system, retained earnings have been the main source of investment funds. Hence, the improved profitability in the tradable goods sector eased the financing constraint on enterprises' capital expenditures. In addition, the improved financial conditions in enterprises stimulated the economic recovery by contributing to a significant reduction in arrears and non-cash payments throughout the economy (Figure 4).[8]

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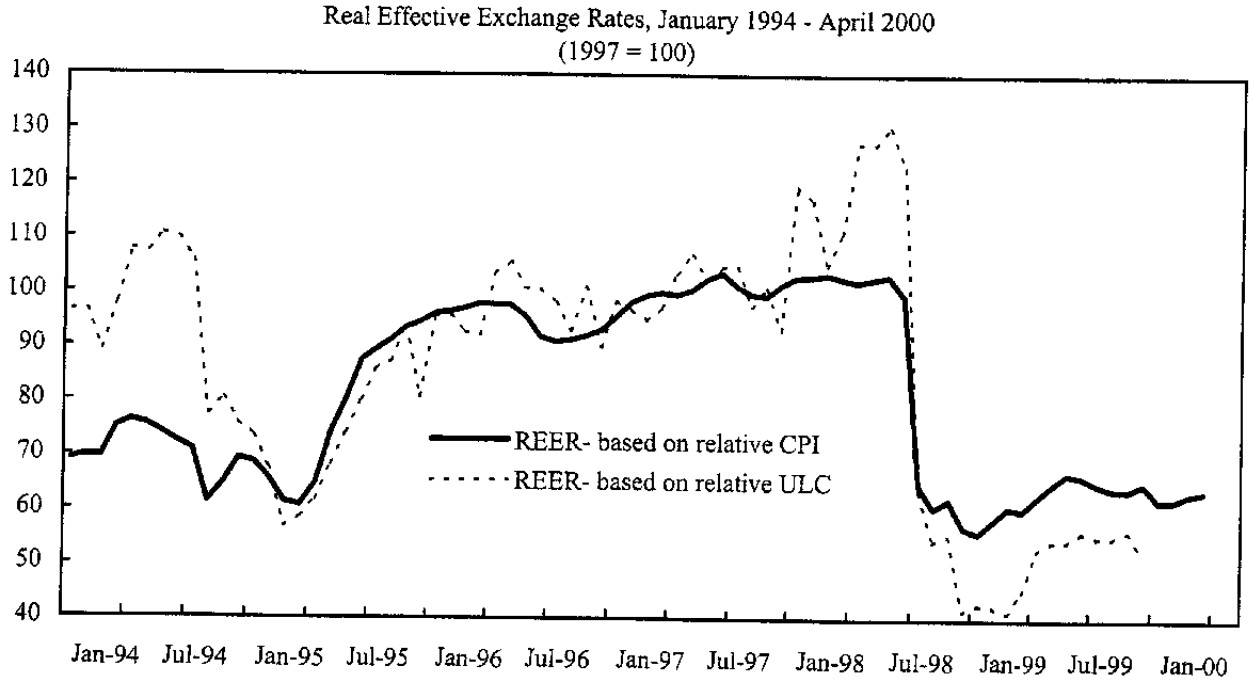
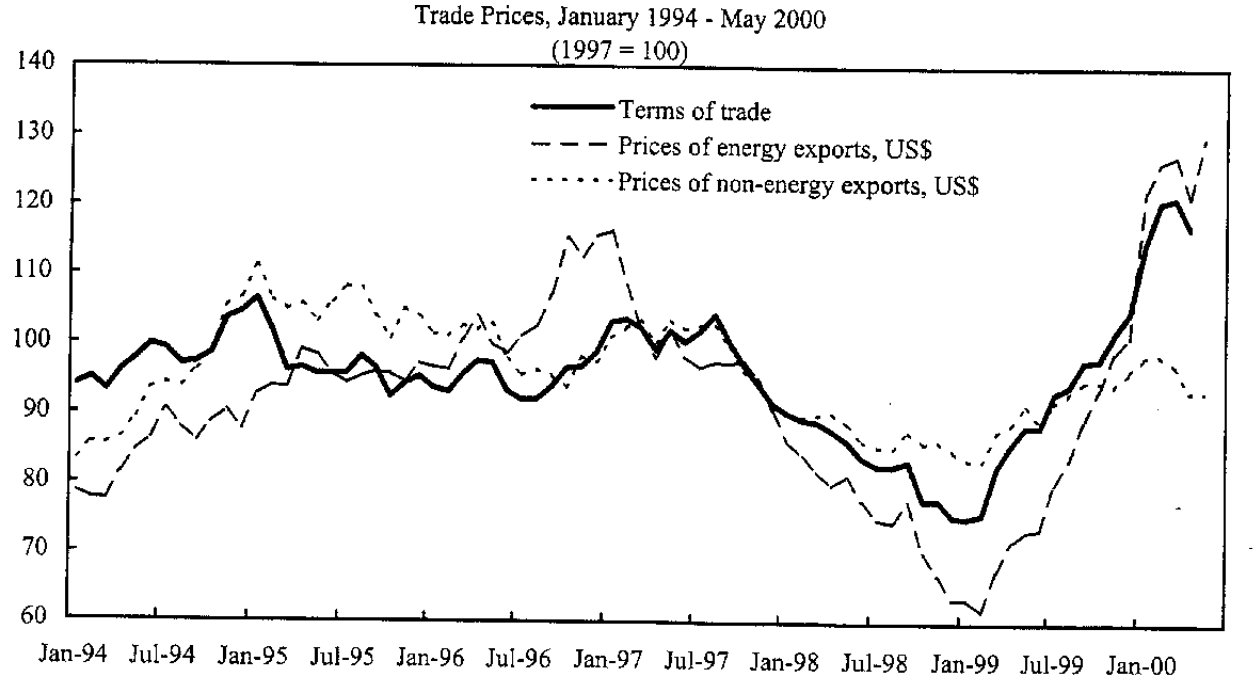
[7] The real exchange rate relative to the U.S. dollar, though, appreciated by 2.5–3.0 percent per month in May through July 2000.

[8] A detailed discussion of the real effects of the non-payment crisis is contained in SM/99/178, 7/14/99.

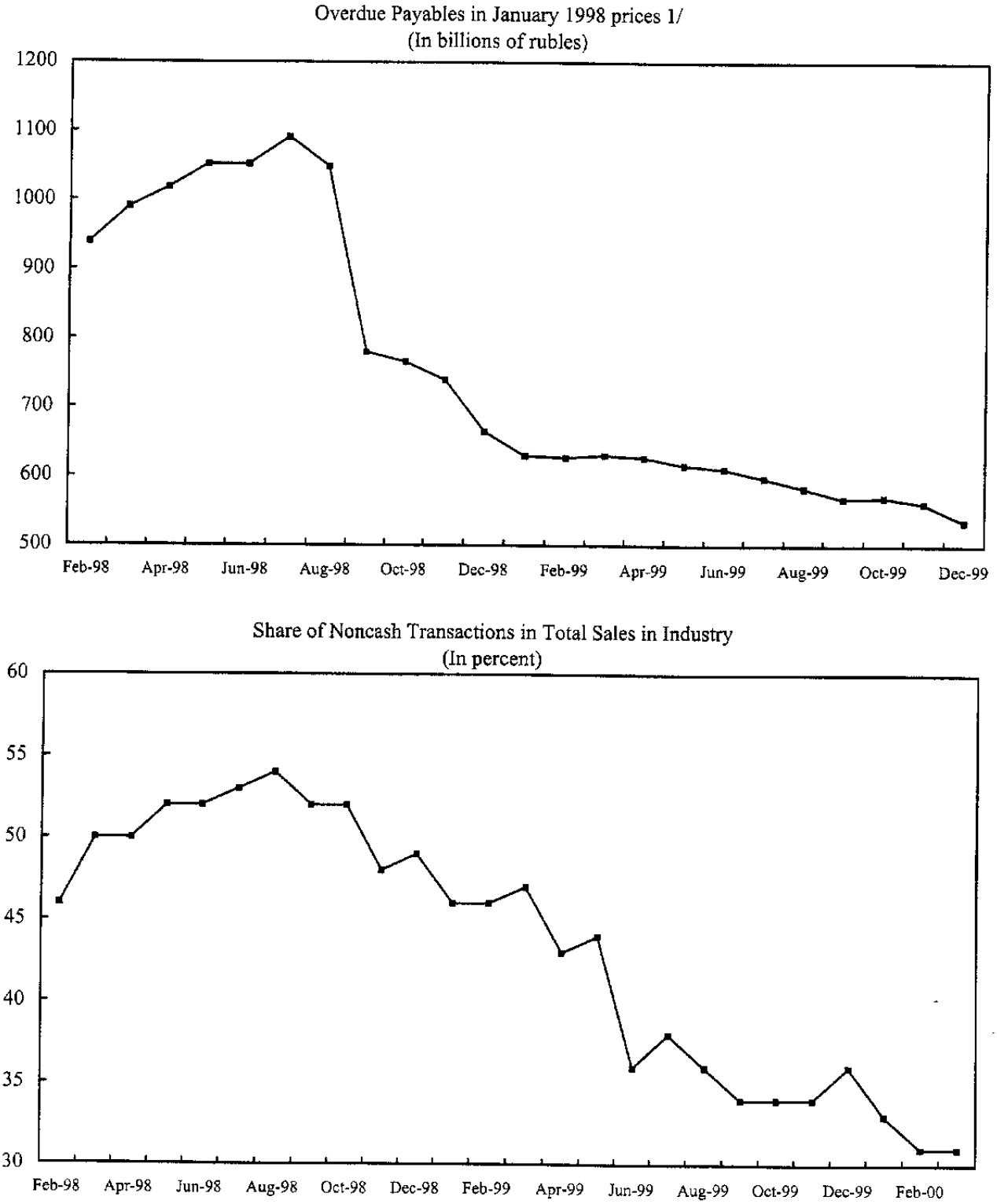
Figure 3. Russian Federation: Real Exchange Rates and Trade Prices, 1994-2000





Sources: Goskomstat; and IMF staff calculations.

Figure 4. Russian Federation: Enterprise Financing, 1998-2000



Source: Goskomstat; The Russian Economic Barometer, Vol. 9, No 2.

1/ Relative to GDP, overdue payables were equivalent to 30 percent of GDP at the end of 1999, down from 46 percent in mid-1998.

Box 2. Real Effective Exchange Rates, Competitiveness, and Profitability

The August 1998 crisis led to a dramatic real depreciation of the ruble and improvement in industrial profitability. The CPI-based real effective exchange rate (REER) depreciated by about 40 percent in the wake of the crisis (Figure 3). Through April 2000, the REER was broadly constant. The unit labor cost (ULC) based REER declined even further as real wages collapsed. While this measure may be contaminated by data problems in CIS partner countries, it fell by almost 70 percent in the wake of the crisis, and is still at only about 40 percent of its pre-crisis level. Profitability in industry, as measured by product unit labor costs (PULC), improved by over 15 percent between the second quarter of 1998 and the first quarter of 1999, with a further small improvement since. Increases in productivity, rather than changes in real producer wages, have driven the decline in PULC. Figure 2 and Table 5 depict real producer wages, average labor productivity, and product unit labor costs. Regarding capital costs, nominal interest rates have only recently started to decline, implying that real interest rates rose in the post-crisis period (Figures 5 and 6). The growth in profitability has, however, increased the availability of internally generated investment funds, reducing enterprises' effective cost of capital.

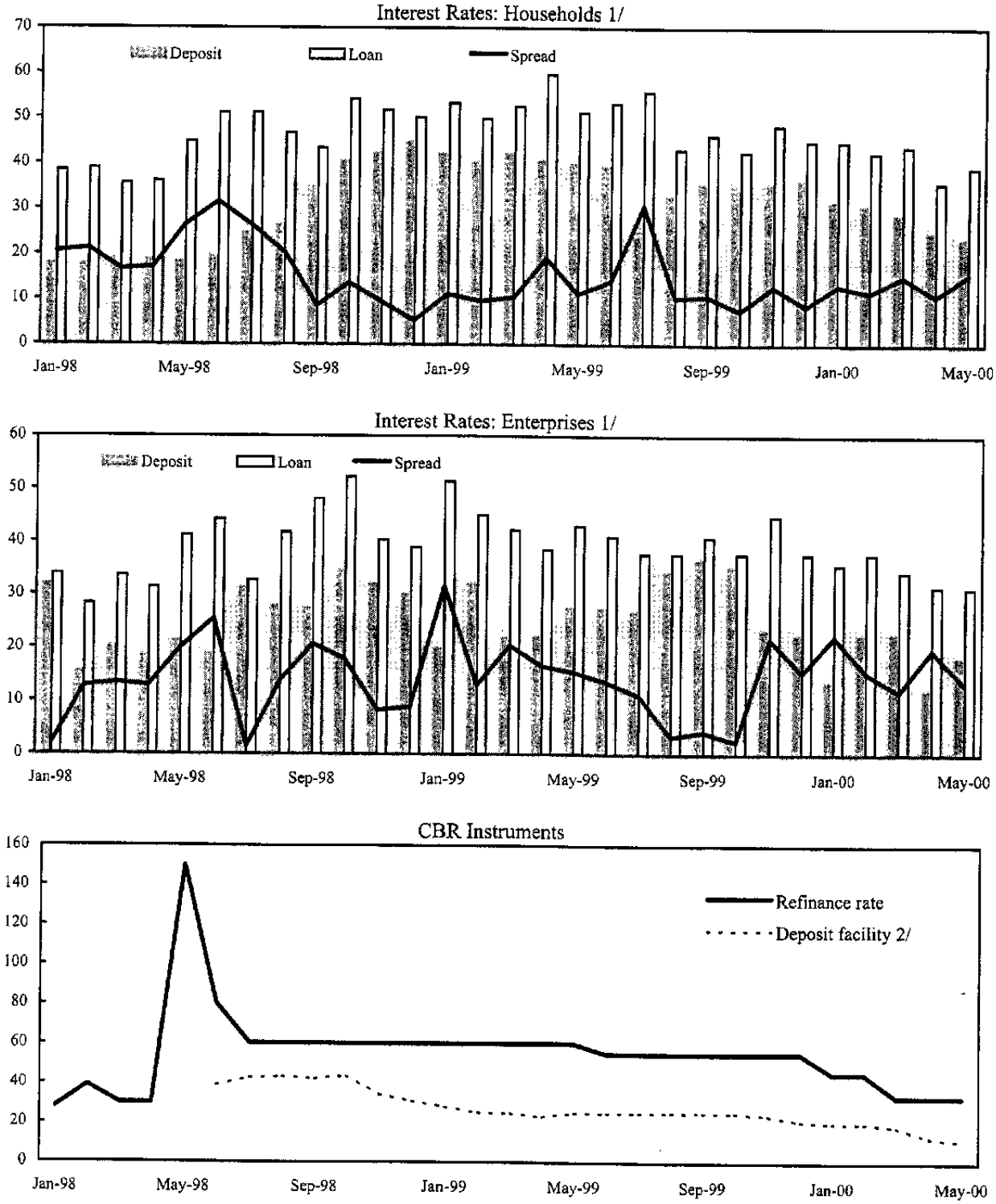
Overall profitability in the economy has improved markedly after the crisis. As illustrated in the table below, in 1999 net profits as a share of GDP increased by a massive 17 percentage points. Three arguments suggest that this increase in aggregate profits largely reflects the impact of the depreciation on profits in all tradable sectors, as opposed to the effect of the increase in dollar export prices, in particular for oil. First, the increase in net profits amounted to about twice the total fuel sector value added, and an even larger multiple of the change in sectoral value added. Second, over four-fifths of the improvement in economy-wide net profits was accounted for not by an increase in gross profits, but by a reduction in gross losses. Assuming that even in 1998 the fuel sector only accounted for a small share of loss-makers suggests, again, that the increase in profitability largely originated outside the fuel sector. Finally, the increase in net profits in 1999 was roughly equivalent to $30 billion. In contrast, oil export earnings only increased by $4 billion, while the change in total fuel export earnings was even smaller. Further, it is unlikely that profits on domestic fuel sales rose as much as profits on fuel exports, given that, since the crisis, domestic fuel prices have dropped substantially relative to world market prices and the continued existence of targets for domestic deliveries by oil exporters (see Box 3). Even allowing for the reduced effective tax burden on the oil sector, one must largely look outside the fuel sector to account for the increase in overall profitability.

Enterprise Profits

	1995	1996	1997	1998	1999
	(Billions of rubles)				
Gross profits	288	238	309	358	729
Gross losses	37	114	135	473	152
Net profits	251	124	174	-115	577
	(Percent of GDP)				
Gross profits	18.7	11.1	12.3	13.3	16.0
Gross losses	2.4	5.3	5.4	17.5	3.3
Net profits	16.3	5.8	6.9	-4.3	12.7

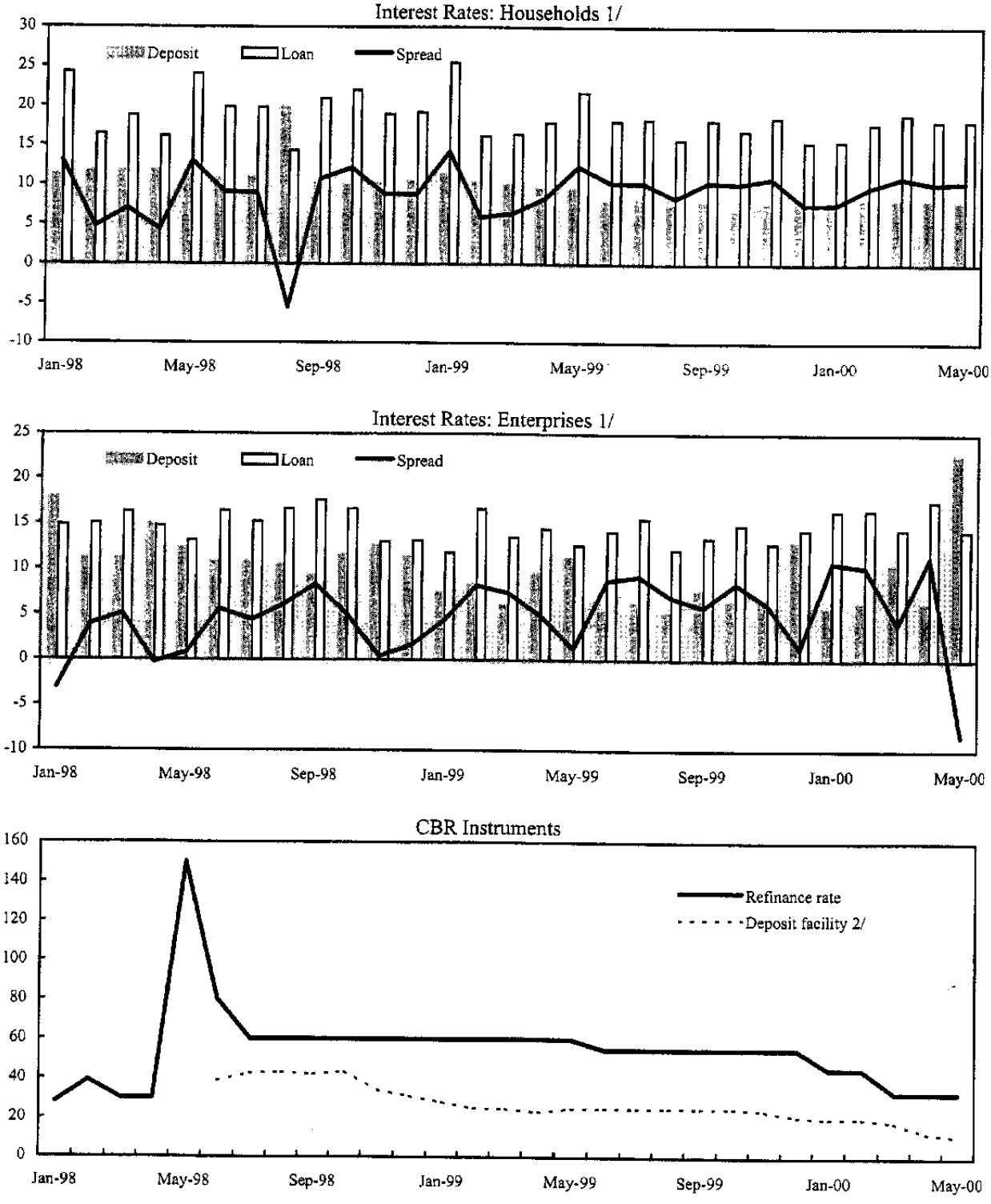
Sources: Goskomstat; and Fund staff estimates.

Figure 5. Russian Federation: Ruble Interest Rates, 1998-2000
(In percent)



Source: CBR Bulletin of Banking Statistics.
1/ Interest rates on loans and deposits maturing in 91-180 days.
2/ Rate on longest maturity offered. Through April 1999, equals one month. From May 1999, rate on 3 month deposits.

Figure 6. Russian Federation: Interest Rates on U.S. Dollar Instruments, 1998-2000
(In percent)



Source: CBR Bulletin of Banking Statistics.

1/ Interest rates on loans and deposits maturing in 91-180 days.

2/ Rate on longest maturity offered. Through April 1999, equals one month. From May 1999, rate on 3-month deposits.

22. **On the other hand, the depreciation led to a collapse in real consumer wages and hence to a sharp fall in consumption.** The crisis caused the income distribution to shift dramatically against labor, reflecting the large rise in unemployment. In addition, given some inertia in nominal wages, the post-crisis acceleration in inflation led to a sharp reduction in real wages. The response of real wages to the depreciation involved a substantial under-shooting. Over time, as unemployment has subsequently fallen and inflation decreased, the shift was partially reversed and real wages and consumption have recovered. Real wages (seasonally adjusted) at end-April 2000 are now 17 percent above their end-1998 level but are still more than 20 percent below the end-1997 level.

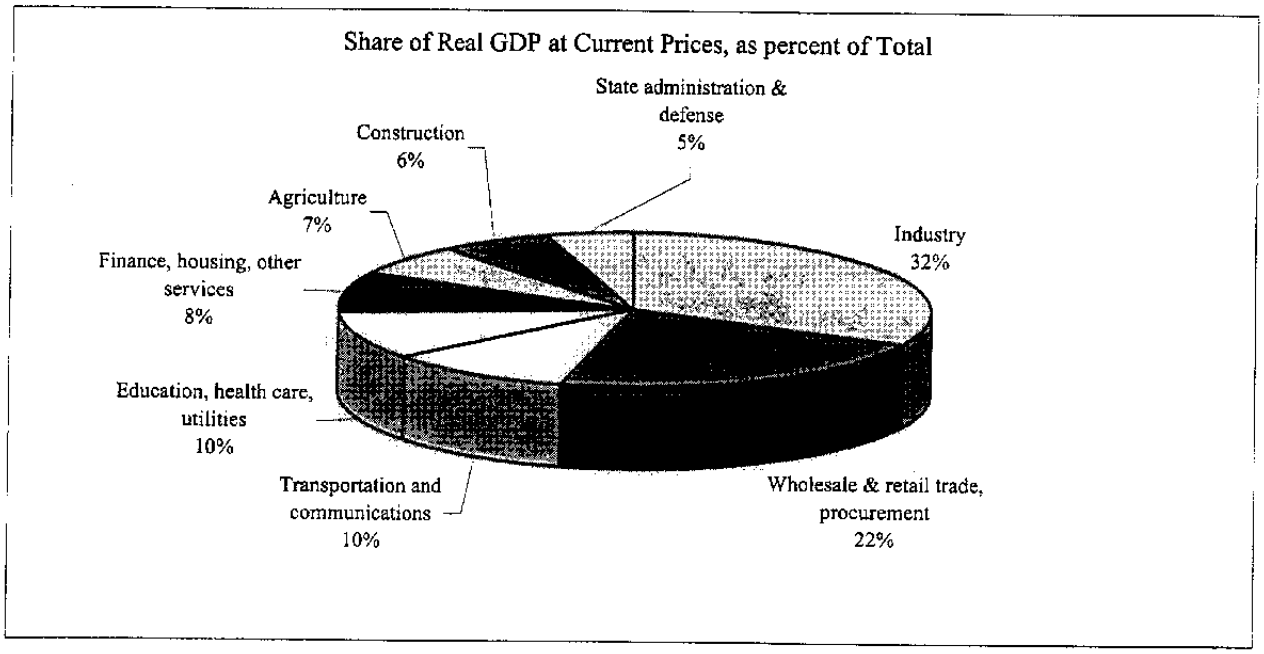
The role of higher international energy prices

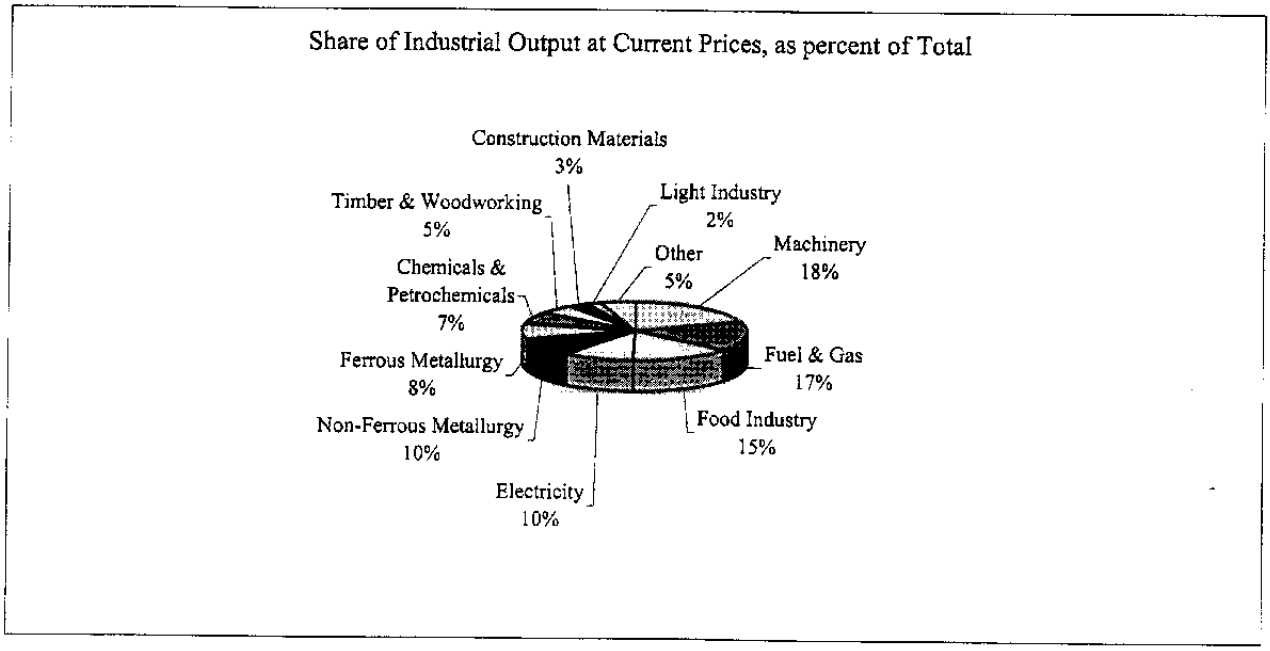
23. **The external terms of trade have improved drastically since early 1999, reflecting mainly the increase in international oil prices.** Average dollar prices of energy exports declined almost continuously between January 1997 and February 1999, falling by a cumulative 47 percent. Since then they have increased to reach a level about 10 percent above the January 1997 level. With oil exports accounting for about one-fifth of total exports, and other fuel items for roughly another fifth, the overall terms of trade (measured using world market prices to proxy for Russia's non-energy export prices) declined by about 10 percent between the August 1998 crisis and the start of 1999, but have since increased by more than 50 percent.

24. **There are four main channels linking the increase in energy prices with output growth.** First, there is a direct supply response of energy output to higher prices. Second, demand by the energy sector for output of other sectors would increase. Third, energy prices may also affect output because of the significant financial linkages between export sectors and the rest of the economy. Finally, high energy prices have helped promote financial stability through their impact on the current account and foreign exchange reserves.

25. **In the short term, the direct supply response of energy output to higher prices does not appear to be significant.** Overall growth, especially of exports, is limited by capacity constraints at both the extraction and transportation stages. Hence, production of oil and of gas (including gas condensate) increased, respectively, by only 0.3 percent and 4.1 percent in 1999. The fuel and fuel products sector accounts for less than 25 percent of overall industrial production, even assuming that all of the chemical and petrochemical industry is concentrated in oil and gas derivatives (Figure 7 and Table 4). Since industrial production in turn equals just over 30 percent of overall GDP (Table 3), the fuel sector accounts for about 8 percent of Russian GDP. Hence, the change in oil and gas output in 1999 caused a direct impact of only about 0.2 percent of GDP. In addition, the increase in fuel output likely reflected mainly previous years' investment decisions rather than changes in energy prices. In the medium term, energy prices are likely to have a larger impact on fuel sector growth rates. Increases in the profitability of the fuel sector both increase available funds for investments by fuel companies themselves and attract interest from potential foreign investors. However, economic and political stability are likely to be more important determinants of fuel sector investment decisions than are energy prices, given the long

Figure 7. Russian Federation: Structure of Output, 1999





Source: Goskomstat.

gestation periods associated with such investments and the long life of the assets and infrastructure involved. In addition, the oil companies' long-term oil price forecast is not significantly affected by short-term fluctuations.

26. **The increase in energy prices has contributed to an increase in exporters' margins, and a large fraction of these gains is being spent on capital equipment and other domestic inputs**. For instance, higher energy prices have encouraged energy companies to improve their infrastructure, leading in particular to a boom in oil companies' demand for (domestically produced) oil pipes. In turn, rising incomes for all those linked to the fuel sector result in a second-round growth in aggregate demand. In addition, exporters are using their increased resources not just to expand their traditional operations, but also to diversify, both downstream and horizontally. In particular, some exporters are shifting their focus from natural resource extraction to processing.[9] Nevertheless, the economy-wide increase in profitability appears to have been driven less by the increase in energy prices than by the effect of the devaluation on profits in both exporting and import-competing industries (Box 3).

27. **The windfall gains in the export sector enabled it to increase payments to suppliers and the budget.** In turn, this helped bring about a more generalized reduction in arrears and non-cash payments, including at the level of the federal budget. However, the above evidence on profitability hints, again, at a lesser role for higher energy prices in solving the non-payment crisis, compared to the impact of the devaluation.[10] This conclusion is reinforced by evidence on timing: in 1999, total overdue payables fell in every single month, including those months when energy prices were still falling.[11]

28. **The positive effect of high energy prices on financial stability, through their impact on the current account and on foreign exchange reserves, is significant but it has not been as important as the ruble depreciation.** The contraction of imports following the August 1998 crisis accounted for a much greater fraction of the turn-around in the trade balance in 1999 than changes in energy prices. Specifically, while the average Urals oil price increased from $11.8 in 1998 to $17.0 per barrel in 1999, the dollar value of Russia's oil exports rose by only $4 billion, in part due to the fact that the oil price increase occurred in

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[9] The aluminum industry, which has also benefited from an increase in dollar export prices, is a prominent example.

[10] Three additional factors may have contributed to the decline in non-payments. First, liquidity is no longer being absorbed by the GKO market. Second, the federal government has insisted on collecting revenues in cash. Third, confidence may have increased in the ability of the courts to pursue bankruptcy proceedings and protect property rights.

[11] Defined as the stock of overdue payables in the nine basic sectors of the economy, deflated by the PPI.

Box 3. Administered Prices

In the wake of the August 1998 devaluation, most administered prices were not fully adjusted in line with inflation; this real erosion has not been reversed. As shown in Figure 8, the real (CPI-deflated) consumer prices for utilities (including electricity, gas, heating, water and sewage, and hot water) had been gradually rising over 1997 and the first half of 1998, with a particularly sharp increase for gas prices. This reflected the continuation of a trend reduction in implicit subsidies which had started in 1992. However, the crisis led to a sharp break in this trend. Real utility prices fell by about 40 percent between July 1998 and January 1999, and since then they have been only marginally increased. The decline in dollar terms has been even sharper, reflecting the ruble's real depreciation. For instance, the cost of electricity per kWh has decreased from about 2.6¢ in July 1998 to just over 1¢ in March 2000. These developments appear to reflect a deliberate attempt both to protect household living standards in the face of a sharp decline in real wages, and to support energy-intensive industrial sectors.

In contrast, real fuel prices fell initially, but have increased sharply since early 1999. In CPI-deflated terms, which are most relevant to gauging the impact on living standards, consumer and producer prices for gasoline fell by about one-third between July 1998 and January 1999. However, by March 2000, they were almost one-third and almost 80 percent, respectively, above their immediate pre-crisis levels. Likewise, producer prices for furnace fuel and diesel fuel, after an initial decline, were respectively about 25 percent and 60 percent above their July 1998 levels. In PPI-deflated terms, which are most relevant to gauging the impact on production costs, even immediately after the crisis none of the above prices declined significantly.

The increases in fuel prices have failed to match changes in the world oil price. When gauging changes in the extent of subsidization, it may be more relevant to deflate energy prices by the world oil price, that is, to look at the ratio of domestic energy prices to world oil prices. For consumer prices for gasoline, this ratio fell by over 70 percent between July 1998 and April 1999. A series of sharp price adjustments then brought the ratio back, by October 1999, to 50 percent of the pre-crisis level. Since then, the ratio has again declined, reflecting the recent oil price swings. Producer prices for fuel have displayed similar swings, although since the crisis they have risen sharply relative to consumer fuel prices.

Specific taxes on the oil sector, like utility prices, have been subject to significant real erosion in the wake of the crisis. Following the ruble devaluation, all taxes set as ruble-denominated flat rates (including gasoline and crude excises, local refining taxes, and local production taxes) fell significantly in dollar terms: total ruble-denominated taxes have declined from the equivalent of around $4/barrel in 1996 and 1997 to $1/barrel in 1999. In particular, crude excises have not changed in ruble terms since the devaluation. Although gasoline excises have been raised twice in ruble terms, they have still declined in dollar terms; the same is true of local taxes.

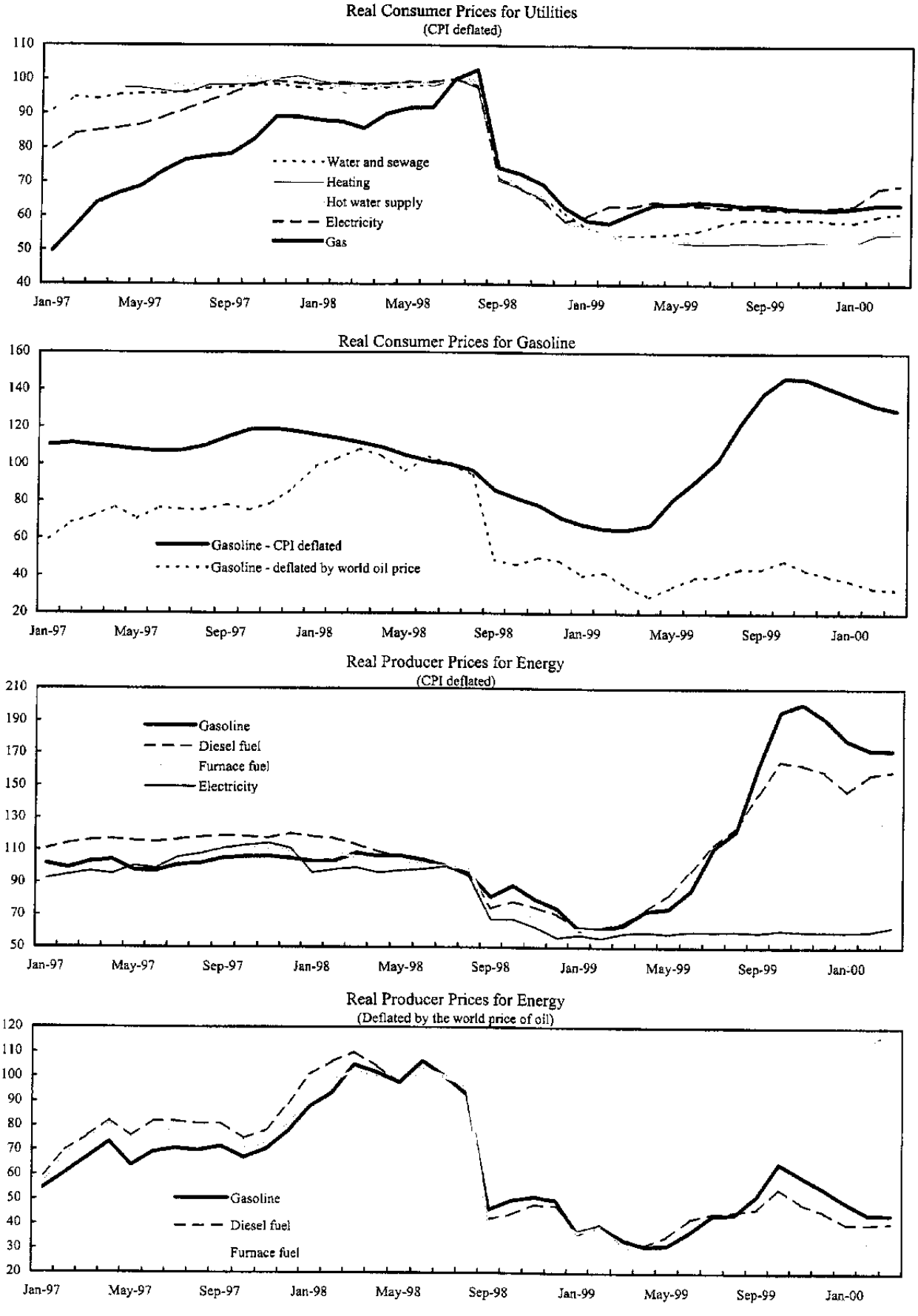
Notwithstanding the introduction of new taxes, effective taxation rates in the oil sector remain below pre-crisis levels. Crude oil export duties had been scrapped at the beginning of 1996, but were reintroduced (denominated in euros) in February 1999. However, their effective value has remained quite low, relative to world oil prices. Specifically, crude export duties averaged about $0.5/barrel in the first half of 1999, rising to about $1/barrel in the last quarter of 1999, and about $2.5/barrel in the first quarter of 2000. Further, these duties are only charged on around 38 percent of Russian-produced barrels (the share which is exported). The result has been that the ratio of oil companies' tax expenses to total revenues fell substantially between 1997 and 1999 (see table below), although a partial recovery is estimated to have occurred in 2000.

Russian Oil Production and Refining: Tax Burden

	1996	1997	1998	1999
Tax expenses (excluding profit tax) gross revenues, percent	44	44	45	31
Memo: Tax expenses, US$/barrel	10.19	9.86	6.42	4.54

Source: Troika Dialog

Figure 8. Russian Federation: Consumer and Producer Prices for Utilities and Energy, 1997-2000
(July 1998 = 100)



Source: Goskomstat and Fund staff estimates.

the second half of the year. The change in total fuel exports was even smaller. Indeed, overall dollar exports barely changed relative to their 1998 level. In contrast, the total trade surplus increased by over $20 billion.

29. **The high world energy prices have enabled the authorities to delay adjustment in the administered prices for domestic utility and energy, providing an implicit subsidy to energy users particularly the industrial sector. However, the magnitude of the implicit subsidy provided by artificially depressed utility prices is likely no greater than the subsidy that used to be provided in the form of acceptance of arrears.**[12] Domestic real prices for most utilities, including electricity (the most important source of energy for enterprises) and gas, fell by about 40 percent after the crisis and are still some 30 percent below their pre-crisis levels. On the other hand, domestic real fuel prices (including those for all gasoline types, diesel oil, and furnace oil) fell sharply in the immediate aftermath of the crisis, but were soon adjusted upwards. By July 1999, most fuel prices were already well *above* their pre-crisis levels, and they have increased significantly since, even though the increases have lagged behind changes in the world oil price. Further, arrears to the energy sector have been shrinking over time, while cash collection rates have been rising. As a result, some estimates suggest that the amount of subsidy extended by the infrastructure monopolies to other sectors of the economy may have remained relatively stable over the years, at about 2–3 percent of GDP.

D. Labor Market Trends

30. **Unemployment has started to decline but remains at about 11 percent.** Unemployment had increased steadily since the start of transition reflecting considerable excess labor and constraints to lay-offs. Overall, under the ILO definition, the unemployment rate stood at 11 percent just before the crisis. It then rose to over 14 percent in February 1999, before declining to just over 12 percent at end-1999 (Table 9) and to 11.4 percent at end-June 2000. Registered unemployment is much lower, and actually declined from 3 percent at end-1997 to 2 percent at end-1999. The wide discrepancy between estimated and registered unemployment reflects the impact of the limited unemployment benefits, combined with strict eligibility requirements. Unemployment spells have become longer, with the average duration of job search increasing steadily from 9 months at end-1997 to 10 months at end-1999 (Table 11). As the persistence of unemployment has increased, so has the share of long-term unemployed, especially among those approaching retirement age.

31. **Regional variation in unemployment rates is extremely high, and shows little evidence of declining** (Table 10). For instance, in 1999 unemployment rates of 6–9 percent in Moscow and Orlov contrasted with average rates of over a quarter in the North Caucasus,

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[12] This issue is explored in depth in the "1998–2000 Economic Review — Russian Federation" publication of the OECD.

even excluding Chechnya. Migration flows across regions have so far had only a limited impact on this variation in unemployment, and they show little sign of increasing over time (Table 14). Labor mobility is greatly hampered by rigidities in the housing market and the sheer geographical size of Russia which makes relocation costs prohibitive for many workers.

32. **The labor market has become more active but a number of serious rigidities remain**. Labor turnover statistics indicate a relatively active labor market, where the annual separation rate and the annual rate of new hires are both around one-quarter of total employment (Table 6). However, the extent of inter-sectoral labor reallocation is slowing down, while formal employment has lagged well behind output movements at the sectoral level (Tables 5 and 7). Enterprises continue to hoard labor for several reasons, including significant political pressures not to lay off workers and legal restrictions on severing labor contracts.[13] Labor movement is also constrained by the existence of significant non-wage social benefits provided by firms, the inadequacy of the social safety net, and limited opportunities for geographic mobility.[14]

[13] Rigidities in the labor market are discussed in more detail in SM/99/178, 7/14/99.

[14] The range of social services provided by enterprises has actually been increasing over time, partly reflecting the relatively favorable tax treatment of fringe benefits as opposed to cash wages.

Table 1. Russian Federation: Selected Indicators of Economic Activity, 1991-99

(Annual percentage change)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Gross domestic product	-5.0	-14.5	-8.7	-12.7	-4.1	-3.4	0.9	-4.9	3.2
Industrial output	-8.0	-18.0	-14.1	-20.9	-3.3	-4.0	2.0	-5.2	8.1
Extraction industries	-4.4	-10.9	-9.8	-9.7	-1.4	-2.0	-1.2	...	...
Processing industries	-9.3	-19.2	-14.8	-24.0	-3.9	-4.6	2.6	...	...
Agricultural output	-4.5	-9.4	-4.4	-12.0	-8.0	-5.1	1.5	-13.2	2.4 2/
Crops 1/	0.4	-5.4	-2.9	-10.4	-4.6	0.3	7.3	-22.3	9.0 2/
Livestock	-7.3	-11.9	-5.4	-13.1	-10.4	-11.0	-5.0	-1.8	-3.7 2/
Freight transport 3/	-7.0	-14.0	-12.0	-14.0	-1.0	-5.0	-3.6	-3.5	5.2

Source: Goskomstat.

1/ Plant growing.
2/ Preliminary data.
3/ Turnover of transport companies (including pipelines).

Table 2. Russian Federation: GDP by Expenditure, 1991-99

	1991	1992	1993	1994	1995	1996	1997	1998	1999	1995-99	
										Cumulative Change	Change in GDP: Decomposition
					(Annual percentage change at constant prices) 1/						
Gross domestic product	-4.6	-14.6	-7.6	-11.7	-4.5	-6.7	0.9	-5.5	3.2	-8.2	-8.2
Total domestic demand	-4.0	-17.0	-12.9	-11.6	-4.9	-7.7	1.3	-9.0	-1.4	-16.1	-15.0
Consumption	-6.1	-5.2	-1.0	-3.1	-2.7	-3.1	3.0	-2.3	-3.5	-5.9	-4.2
Households	-4.6	-3.0	1.2	1.2	-2.8	-4.7	5.4	-3.6	-5.3	-8.3	-4.1
General government	-11.3	-11.8	-6.4	-2.9	1.1	0.8	-2.4	0.6	0.9	-0.1	0.0
Non-profit institutions	34.5	-1.0	0.2	-35.9	-30.5	-0.5	-1.8	-1.6	0.0	-3.9	-0.1
Gross Investment	-2.3	-36.9	-29.4	-31.2	-10.8	-20.6	-3.6	-31.3	9.3	-42.5	-10.8
Capital formation	-15.5	-41.5	-25.8	-26.0	-7.5	-19.3	-5.7	-11.2	2.4	-30.8	-6.6
Changes in inventory	264.1	-29.2	-37.4	-47.1	-30.4	-27.3	8.9	...	-55.7	...	...
Net exports of goods and services	171.4	717.1	23.2	-13.0	3.2	21.2	-8.8	111.0	60.2	273.6	6.8
Memorandum Items											
GDP at production basis	-5.0	-14.5	-8.7	-12.7	-4.1	-3.4	0.9	-4.9	3.2	-4.3	n.a.
					(In percent of GDP at current prices)						
Total domestic demand	100	85	92	95	97	96	97	93	84	-13	n.a.
Consumption	63	50	64	70	71	71	75	77	69	-2.5	n.a.
Households	41	34	41	44	49	49	50	54	50	1.2	n.a.
General government	17	14	18	23	19	20	21	19	15	-4.0	n.a.
Non-profit institutions	4	2	5	3	2	2	3	3	3	0.4	n.a.
Gross Investment	37	36	28	26	25	24	22	15	15	-10.4	n.a.
Capital formation	24	25	21	22	21	21	19	17	16	-5.4	n.a.
Changes in inventory	13	11	7	4	4	3	3	-2	-1	-4.9	n.a.
Net exports of goods and services	0	15	8	5	3	4	3	7	16	12.8	n.a.
Exports goods and services (fob)	14	64	39	28	28	25	23	31	43	15.5	n.a.
Imports of goods and services (fob)	13	50	31	23	24	20	21	23	27	2.6	n.a.

Source: Goskomstat and Fund staff estimates.

1/ In last year's comparable prices.

Table 3. Russian Federation: GDP by Sector, 1991-99 1/

	1991	1992	1993	1994	1995	1996	1997	1998	1999
					(In percent)				
Agriculture 2/	14.0	7.2	8.2	6.5	7.2	7.3	6.5	5.8	6.9
Industry	38.2	33.7	34.4	32.8	29.0	29.5	28.3	29.0	31.9
of which: processing industry									
Construction	9.4	6.3	7.9	9.1	8.5	8.4	7.9	7.1	5.9
Wholesale, retail, foreign trade, public catering, procurement	12.2	29.1	19.0	18.3	19.6	18.3	17.6	19	22.1
Transportation and communications 3/	7.5	7.4	8.6	9.9	11.9	12.4	12.1	11.1	10.2
Finance, credit, insurance, real estate operations, science and research, housing, geology, subsoil resources, exploration, meteorology, computer services, others	8.7	8.2	10.8	9.6	9.0	8.0	8.9	9.1	8.3
State administration and defense	2.5	2.1	3.1	4.7	5.2	5.2	6.2	6.7	4.8
Education, culture and art, health care, physical education & social security, utilities, non-production activities services to households, people's associations	7.5	6.0	8.0	9.1	9.6	10.9	12.5	12.2	9.9

Source: Goskomstat and Fund staff estimates.

1/ Unit weight of gross added values generated by economic sectors in basis prices to GDP in basis prices unadjusted by indirectly measured financial intermediary services.
2/ Agriculture, including companies servicing agriculture and forestry.
3/ Transport, communications, road infrastructure.

Table 4. Russian Federation: Gross Industrial Output by Sector, 1991-99

	1991	1992	1993	1994	1995	1996	1997	1998	1999
				(Annual average percentage changes)					
Total	-8.0	-18.0	-14.1	-20.9	-3.3	-4.0	2.0	-5.2	8.1
Electric power generation	0.3	-4.7	-4.7	-8.8	-3.2	-1.6	-2.1	-2.5	0.2
Fuel	-6.0	-7.0	-11.6	-10.2	-0.8	-1.5	0.3	-2.5	2.4
Ferrous metallurgy	-7.4	-16.4	-16.6	-17.3	9.6	-2.5	1.2	-8.1	14.4
Nonferrous metallurgy	-8.7	-25.4	-14.1	-8.9	2.8	-3.6	6.0	-5.0	8.5
Chemicals and petrochemicals	-6.8	-21.6	-21.8	-25.5	8.0	-8.1	2.0	-7.5	21.7
Machinery	-10.0	-15.0	-15.8	-31.0	-9.3	-4.7	3.5	-7.5	15.9
Forestry, timber processing, paper and pulp	-9.0	-14.6	-18.7	-30.5	-0.7	-17.5	0.9	-0.4	17.2
Construction materials	-2.4	-20.4	-16.0	-27.3	-8.0	-17.3	-4.0	-5.8	7.7
Light industry	-9.0	-30.0	-23.0	-46.0	-30.2	-22.5	-2.4	-11.5	20.1
Food processing	-9.5	-16.4	-9.0	-17.5	-8.2	-4.2	-0.8	-1.9	7.5
				(In percent of 1991 level)					
Total	100.0	82.0	70.4	55.7	53.9	51.7	52.8	50.0	54.1
Electric power generation	100.0	95.3	90.8	82.8	80.2	78.9	77.2	75.3	75.5
Fuel	100.0	93.0	82.2	73.8	73.2	72.1	72.4	70.5	72.2
Ferrous metallurgy	100.0	83.6	69.7	57.7	63.2	61.6	62.4	57.3	65.6
Nonferrous metallurgy	100.0	74.6	64.1	58.4	60.0	57.9	61.3	58.3	63.2
Chemicals and petrochemicals	100.0	78.4	61.3	45.7	49.3	45.3	46.2	42.8	52.1
Machinery	100.0	85.0	71.6	49.4	44.8	42.7	44.2	40.9	47.4
Forestry, timber processing, paper and pulp	100.0	85.4	69.4	48.3	47.9	39.5	39.9	39.7	46.6
Construction materials	100.0	79.6	66.9	48.6	44.7	37.0	35.5	33.4	36.0
Light industry	100.0	70.0	53.9	29.1	20.3	15.7	15.4	13.6	16.3
Food processing	100.0	83.6	76.1	62.8	57.6	55.2	54.8	53.7	57.7

Source: Goskomstat.

Table 5. Russian Federation: Employment, Labor Productivity and Real Wages in Industry by Sector, 1991-99

	1991	1992	1993	1994	1995	1996	1997	1998	1999 1/
				(In thousands of people)					
Employment 2/									
Total	20,117	20,020	18,864	17,440	16,006	14,934	14,009	13,173	12,975
Electric power generation	563	626	666	710	750	790	810	852	868
Fuel	815	870	886	860	846	856	821	794	749
Ferrous metallurguy	772	795	788	738	727	727	683	673	680
Nonferrous metallurgy	502	532	542	517	549	537	508	469	470
Chemicals and petrochemicals	1,115	1,143	1,109	1,011	968	923	891	858	860
Machinery	9,093	8,767	7,933	7,029	6,190	5,628	5,262	4,856	4,681
Forestry, timber processing, paper and pulp	1,725	1,813	1,641	1,535	1,383	1,261	1,138	1,034	1,040
Construction materials	1,067	1,136	1,095	1,040	973	868	783	713	700
Light industry	2,145	1,845	1,699	1,600	1,332	1,133	1,006	888	850
Food processing	1,533	1,554	1,556	1,554	1,506	1,487	1,454	1,396	1,420
Others	787	939	949	846	782	724	653	640	657
				(In percent of 1991 levels)					
Average Labor Productivity 3/									
Total	100	82	75	64	68	70	76	76	84
Electric power generation	100	86	77	66	60	56	54	50	49
Fuel	100	87	76	70	71	69	72	72	79
Ferrous metallurguy	100	81	68	60	67	65	70	66	74
Nonferrous metallurgy	100	70	59	57	55	54	61	62	68
Chemicals and petrochemicals	100	76	62	50	57	55	58	56	67
Machinery	100	88	82	64	66	69	76	77	92
Forestry, timber processing, paper and pulp	100	81	73	54	60	54	60	66	77
Construction materials	100	75	65	50	49	45	48	50	55
Light industry	100	81	68	39	33	30	33	33	41
Food processing	100	82	75	62	59	57	58	59	62
				(In percent of 1991 levels)					
Real producer wages 4/									
Total	100	76	65	54	37	40	43	46	46
Electric power generation	100	94	84	70	46	50	50	53	46
Fuel	100	113	93	74	51	54	57	57	62
Ferrous metallurguy	100	96	75	55	39	47	47	47	47
Nonferrous metallurgy	100	101	82	64	47	48	49	55	60
Chemicals and petrochemicals	100	85	63	50	37	40	43	47	47
Machinery	100	64	57	48	32	35	37	41	39
Forestry, timber processing, paper and pulp	100	73	56	45	33	33	34	34	36
Construction materials	100	69	65	55	34	35	37	37	33
Light industry	100	58	45	29	20	19	21	22	21
Food processing	100	76	73	59	36	40	41	43	40
				(In percent of 1991 levels)					
Product Unit Labor Costs 5/									
Total	100	93	87	84	55	58	56	60	55
Electric power generation	100	109	109	107	76	88	94	107	95
Fuel	100	130	124	106	73	78	79	79	79
Ferrous metallurguy	100	118	110	91	59	71	66	72	63
Nonferrous metallurgy	100	144	138	113	85	88	80	88	88
Chemicals and petrochemicals	100	111	102	100	64	73	74	85	70
Machinery	100	73	70	74	49	50	49	53	43
Forestry, timber processing, paper and pulp	100	90	77	82	55	61	56	52	47
Construction materials	100	93	100	111	70	78	76	75	61
Light industry	100	71	66	75	60	65	63	66	51
Food processing	100	92	98	95	62	70	71	72	64

Source: Goskomstat and Fund staff calculation.

1/ Preliminary data.
2/ The table contains the average payroll fund data.
3/ Measured as the ratio of production to workforce.
4/ Deflated by industrial PPI.
5/ Measured as the ratio of real producer wages to average labor productivity.

Table 6. Russian Federation: Labor Force Turnover, 1993-99 1/

	1993	1994	1995	1996	1997	1998	1999
				(In thousands)			
Total number of separations	14,284	14,597	13,069	11,372	11,017	10,650	10,274
of which: in industry	5,381	5,268	4,284	3,709	3,385	3,333	3,152
Number of newly hired	11,963	11,079	11,480	8,982	8,981	8,984	10,128
of which: in industry	3,770	2,997	3,192	2,321	2,426	2,387	3,200
				(As percent of total employment)			
Total number of separations	25.1	27.4	25.7	23.9	24.5	24.9	24.2
of which: in industry	28.8	32.0	28.4	27.0	26.8	27.7	27.0
Number of newly hired	21.1	20.8	22.6	18.9	19.9	21.0	23.9
of which: in industry	20.1	18.2	21.1	16.9	19.2	19.8	27.4

Sources: Goskomstat.

1/ Data for large and medium enterprises.

Table 7. Russian Federation: Employment by Sector, 1991-99 1/

	1991	1992	1993	1994	1995	1996	1997	1998	1999 2/
					(In percent of 1991 level)				
Total	100.0	97.6	95.9	92.7	90.0	89.3	87.5	86.2	87.3
Industry	100.0	95.2	92.9	82.9	76.7	73.0	66.5	63.1	63.9
Agriculture and forestry	100.0	103.7	103.8	105.6	100.3	95.4	88.6	89.9	89.1
Construction	100.0	92.9	84.1	80.0	73.1	69.2	66.6	59.5	58.4
Transportation and communication	100.0	97.9	94.1	93.1	91.4	90.8	89.0	83.8	85.3
Commerce, food service, material and technical supply, marketing and procurement	100.0	100.9	113.3	115.3	118.7	120.8	154.7	164.5	171.0
Public health, physical training, social security, education, art, culture and science	100.0	98.0	95.6	94.9	93.7	93.1	90.5	89.1	90.8
Administrative staff, lending and state insurance	100.0	94.2	106.0	115.5	137.6	175.2	170.4	178.0	179.7
Other sectors (housing, pub. utilities, nonproduction types of gen. services to the public)	100.0	100.2	94.0	92.0	93.6	101.6	96.2	96.7	99.3
					(In percent of total employment)				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry	30.3	29.6	29.4	27.1	25.9	24.8	23.0	22.2	22.2
Agriculture and forestry	13.5	14.3	14.6	15.4	15.1	14.4	13.7	14.1	13.8
Construction	11.5	10.9	10.1	9.9	9.3	8.9	8.7	7.9	7.7
Transportation and communication	7.8	7.8	7.6	7.8	7.9	7.9	7.9	7.6	7.6
Commerce, food service, material and technical supply, marketing and procurement	7.6	7.9	9.0	9.5	10.1	10.3	13.5	14.5	14.9
Public health, physical training, social security, education, art, culture and science	19.4	19.5	19.4	19.9	20.2	20.3	20.1	20.1	20.2
Administrative staff, lending and state insurance	2.9	2.8	3.1	3.5	4.3	5.4	5.5	5.5	5.5
Other sectors (housing, public utilities, nonproduction types of general services to the public)	6.9	7.1	6.8	6.9	7.3	7.9	7.6	8.0	8.1
Memorandum:									
Total employment (in thousands)	73,800	72,071	70,852	68,484	66,441	65,950	64,639	63,642	64,500

Source: Goskomstat.

1/ Average for the year; does not include students.
2/ Preliminary data.

Table 8. Russian Federation: Indicators of Hidden Unemployment, 1993-99 1/

	Shortened Workday 2/		Forced Leave 3/	
	Thousands of persons	In percent of workforce	Thousands of persons	Avg. leave days per person per quarter
1993				
Q1	950	2.8	1908	14.0
Q2	924	2.8	2819	18.1
Q3	1074	3.3	3682	23.6
Q4	1558	4.9	4875	28.9
1994				
Q1	3274	10.6	4632	19.0
Q2	4348	14.2	6782	25.0
Q3	4858	16.0	7274	35.0
Q4	5048	16.7	7727	42.0
1995				
Q1	2244	4.4	2466	11.0
Q2	1991	3.9	1868	11.0
Q3	1900	3.8	1793	11.0
Q4	2051	4.1	2401	10.0
1996				
Q1	2952	6.1	2316	11.0
Q2	3292	6.8	1991	10.0
Q3	3184	6.6	1793	12.0
Q4	3409	7.2	2408	10.0
1997				
Q1	2382	5.2	1708	11.0
Q2	2552	5.6	1688	9.0
Q3	2482	5.5	1223	11.0
Q4	2596	5.8	1494	9.0
1998				
Q1	2324	5.4	2471	18.2
Q2	3060	7.1	4095	21.0
Q3	3724	8.6	4155	33.0
Q4	4306	10.1	4742	38.8
1999				
Q1	2196	5.3	2000	17.6
Q2	2444	5.8	2484	23.8
Q3	2591	6.2	2804	28.4
Q4	2728	6.5	3325	29.5

Source: Goskomstat.

1/ In industry, construction, transportation, communication, services, science, and scientific support.
2/ For 1993, 1995-99 data include number of people on shortened workday at the end of each quarter; for 1994 data show those on shortened workdays over the course of the period.
3/ Without pay or with partial pay.

Table 9. Russian Federation: Selected Labor Market Indicators, 1992-99

	Total Employment 1/	Registered Vacancies	Registered Jobseekers	Registered Unemployment		Unemployment According to ILO Definition
				Total	Receiving Benefits	
	(In percent of labor force)					
End-year 1992	-2.4	0.4	1.3	0.8	0.5	5.2
End-year 1993	-1.7	0.5	1.5	1.1	0.7	6.1
End-year 1994	-3.3	0.4	2.6	2.2	1.9	7.8
End-year 1995	-3.0	0.4	3.5	3.2	2.8	9.0
End-year 1996	-0.7	0.4	3.8	3.5	3.1	10.0
End-year 1997	-2.0	0.5	3.0	2.8	2.4	11.2
End-year 1998	-1.5	0.4	2.9	2.6	2.4	13.3
End-year 1999	1.3	0.8	2.0	1.7	1.5	11.9

Source: Goskomstat.

1/ Annual percentage change.

Table 10. Russian Federation: Unemployment Rate by Regions (ILO methodology), 1993-99
(In percent of labor force)

	1993	1994	1995	1996	1997	1998	1999
Northern Region							
Karelian Republic	7.8	8.7	13.2	11.5	11.9	16.6	15.8
Komi Republic	4.9	9.3	10.9	10.4	13.9	17.8	16.1
Arkhangel'sk Oblast	6.1	9.7	11.0	12.0	12.4	14.9	14.9
Nenets Autonomous Okrug	...	...	...	...	13.3	11.3	20.1
Vologodsk Oblast	4.2	7.6	8.8	8.0	10.5	12.7	11.8
Murmansk Oblast	6.5	9.1	12.4	14.7	18.5	21.0	16.3
North-western region							
Saint Petersburg	8.0	9.9	10.6	10.3	9.9	11.3	11.0
Leningrad Oblast	6.7	9.4	10.2	10.0	12.8	15.0	14.8
Novgorod Oblast	5.8	8.3	10.2	9.1	13.5	15.4	14.5
Pskov Oblast	7.9	12.4	12.2	13.7	14.2	16.1	14.1
Central region							
Bryansk Oblast	4.7	8.8	9.4	8.2	12.9	15.7	16.7
Vladimir Oblast	5.9	10.0	13.1	11.5	11.6	12.0	13.1
Ivanovo Oblast	8.4	13.6	14.6	16.5	16.9	18.8	17.7
Kaluzhska Oblast	5.1	5.7	8.3	7.8	11.2	10.2	11.6
Kostromska Oblast	8.1	9.5	9.4	9.9	9.4	11.2	10.1
Moscow	6.5	7.7	7.0	6.3	4.8	4.8	5.6
Moscow Oblast	5.1	7.0	7.9	7.6	8.8	9.9	10.7
Orlov Oblast	4.5	6.5	8.0	9.6	9.8	13.2	9.2
Ryazan Oblast	5.1	6.6	6.7	6.4	10.1	7.1	12.8
Smolensk Oblast	6.5	7.8	10.2	11.3	12.9	16.4	14.2
Tver Oblast	4.0	6.7	8.2	5.7	9.9	11.3	10.4
Tula Oblast	4.1	6.7	6.2	6.9	10.0	11.6	11.6
Yaroslavl Oblast	5.6	8.5	12.1	10.8	8.8	11.1	8.8
Volga region							
Marii-El Republic	4.8	9.4	11.8	11.3	18.0	13.1	10.8
Mordoviya Republic	6.3	8.1	11.6	13.1	12.2	14.5	12.8
Chuvash Republic	7.1	10.0	10.2	11.1	13.9	13.9	13.9
Kirov Oblast	6.1	9.7	9.2	8.9	11.4	13.1	10.1
Nizhegorod Oblast	5.2	6.6	8.7	9.0	9.7	9.1	7.7
Central-Chernozem region							
Belgorod Oblast	4.4	5.5	6.1	6.6	10.7	11.3	13.1
Voronezh Oblast	4.4	5.6	8.2	9.2	8.1	9.5	12.5
Kursk Oblast	3.8	6.4	6.1	7.4	8.1	10.2	11.5
Lipetsk Oblast	5.2	5.7	6.3	6.7	9.8	11.1	11.1
Tambov Oblast	5.8	7.5	10.6	11.1	12.9	12.7	14.3
Povolgski region							
Kalmykiya Republic	9.1	12.1	22.2	14.5	26.1	30.8	25.5
Tatarstan Republic	3.6	6.1	6.5	6.5	7.9	10.9	11.4
Astrakhan Oblast	7.3	9.7	14.7	12.8	14.6	15.9	14.1
Volgograd Oblast	5.6	7.6	11.5	11.2	50.0	14.7	12.5
Penzensk Oblast	6.4	8.9	13.9	14.9	12.0	18.1	11.6
Samara Oblast	4.6	6.3	8.0	8.7	9.3	8.6	12.4
Saratov Oblast	5.9	8.9	10.4	10.5	15.8	16.1	11.2
Ulyanov Oblast	4.8	6.5	8.3	8.2	9.8	11.1	9.2

Continued on next page.

Table 10 (continued). Russian Federation: Unemployment Rate by Regions (ILO methodology), 1993-99

	1993	1994	1995	1996	1997	1998	1999
North-Kaukaz region							
Adygeya Republic	8.0	13.0	12.4	11.1	12.3	16.0	21.1
Dagestan Republic	17.5	18.0	25.3	27.7	27.0	30.0	31.2
Ingush Republic	...	...	43.1	32.2	58.2	51.1	51.8
Kabardino-Balkar Republic	9.6	14.3	14.3	17.1	17.7	22.4	28.2
Karachaev-Circassian Republic	9.6	11.3	27.4	20.8	18.9	25.5	22.4
North Ossetian-Alaniya Republic	...	...	23.3	30.1	22.2	26.6	33.4
Chechen Republic							
Krasnodarsk Krai	7.2	8.6	9.3	10.7	16.5	16.2	15.9
Stavropol Krai	6.2	5.6	9.4	9.8	13.9	16.3	19.2
Rostov Oblast	5.6	7.8	8.5	8.5	12.0	15.7	18.5
Ural							
Bashkortostan Republic	4.3	6.7	7.8	7.9	11.2	13.4	12.5
Udmurt Republic	6.2	8.7	...	13.1	12.1	13.1	11.6
Kurgan Oblast	5.6	9.5	8.4	10.2	12.5	13.1	13.4
Orenburg Oblast	3.3	6.2	7.5	5.5	9.5	13.4	14.2
Perm Oblast	5.7	8.4	9.0	8.8	11.1	13.0	14.3
Komi-Permyatsk Autonomous Okr	...	...	...	...	17.6	17.4	10.5
Sverdlovsk Oblast	6.2	8.2	8.5	8.5	10.2	10.5	13.9
Chelyabinsk Oblast	6.5	8.2	8.2	8.7	9.5	12.4	12.0
West-Siberia							
Altai Republic	9.3	13.5	9.9	13.2	18.4	18.5	19.4
Altai Krai	6.7	8.4	11.1	10.7	13.9	16.0	13.1
Kemerovo Oblast	4.9	7.2	6.6	6.8	11.2	12.5	13.8
Novosibirsk Oblast	6.7	8.1	10.1	8.9	10.7	13.7	15.0
Omsk Oblast	5.4	7.6	5.4	7.0	13.4	15.5	15.0
Tomsk Oblast	7.6	10.2	7.9	7.9	12.8	14.6	16.5
Tyumen Oblast	5.1	7.5	6.9	9.2	8.9	14.0	11.3
Khanti-Mansi Autonomous Okrug	...	...	...	...	12.5	14.4	11.3
Yamalo-Nenetsk Autonomous Okr	...	...	...	...	10.7	11.2	10.0
East Siberia							
Buryat Republic	5.8	9.8	15.1	14.6	21.3	22.1	18.1
Tyva Republic	6.5	11.0	21.4	18.1	22.0	20.9	26.0
Khakasian Republic	4.6	6.2	8.7	11.6	13.0	9.6	16.1
Krasnoyarsk Krai	5.4	8.3	9.0	8.1	13.3	16.4	14.3
Taimyrsk Autonomous Okrug	...	...	...	...	7.0	15.6	9.7
Evenkisk Autonomous Okrug	...	...	...	...	3.4	5.9	7.2
Irkutsk Oblast	6.2	8.3	8.9	11.2	14.4	13.7	15.1
Ust-Ordinsk Buryat Autonomous	...	...	...	...	7.7	8.4	14.9
Chitinsk Oblast	5.8	7.1	9.2	14.9	18.5	20.4	21.0
Aginsk Buryat A. Okrug	...	...	...	...	28.1	35.7	23.5
Far East region							
Sakha republic (Yakutiya)	3.9	6.0	7.1	6.7	12.6	13.6	13.9
Jewish Autonomous Oblast	5.6	11.7	17.0	12.6	25.1	23.9	19.0
Chukotsk A. Oblast	...	...	...	...	8.4	4.7	9.3
Primorye Krai	5.4	7.5	10.0	9.6	13.3	14.9	13.7
Khabarovsk Krai	6.8	9.2	11.4	12.1	12.7	12.4	14.4
Amur Oblast	5.3	8.7	13.4	11.0	15.6	16.9	16.4
Kamchatka Oblast	5.6	9.7	6.8	7.0	12.5	17.6	18.2
Koryak Autonomous Okrug					6.8	8.4	8.9
Magadan Oblast	6.3	10.9	9.7	10.4	13.6	18.1	20.6
Sakhalin Oblast	8.0	9.9	11.3	10.9	15.0	17.1	20.7
Kaliningrad Oblast	7.1	9.6	9.2	13.9	11.5	16.7	15.9

Source: Goskomstat.

Table 11. Russia Federation: Unemployment Composition by Duration of Job Search and Age Group, 1996-99

	Job search time (months)						
	Under 1	1-3	3-6	6-9	9-12	12+	Average
	(In percent of total)						
Total unemployed, October 1996	7.4	10.3	26.8	12.3	10.7	32.5	8.2
of which: ages							
Under 20	10.4	13.1	29.2	15.1	12.7	19.6	6.8
20-24	7.1	11.6	28.0	13.3	11.1	28.8	7.8
25-29	8.1	8.4	27.4	10.3	9.3	36.6	8.5
30-34	7.1	10.1	25.5	12.8	8.1	36.3	8.5
35-39	6.8	9.6	27.0	11.9	10.4	34.3	8.4
40-44	5.9	10.3	25.8	12.3	12.2	33.5	8.4
45-49	6.8	8.9	24.9	11.5	11.5	36.4	8.7
50-54	5.5	10.3	24.8	12.6	12.4	34.4	8.6
55-59	6.7	9.1	26.7	10.5	11.2	35.7	8.6
60-64	11.7	12.7	22.6	12.3	3.9	36.9	8.0
65-72	16.3	14.3	35.8	6.5	5.5	21.7	6.0
Total unemployed, October 1997	7.8	15.9	15.8	10.7	11.6	38.1	8.8
of which: ages							
Under 20	11.7	23.2	24.1	10.1	10.8	20.1	6.5
20-24	9.1	19.1	19.9	10.1	10.7	31.1	7.9
25-29	8.6	16.0	15.1	10.2	11.0	39.1	8.8
30-34	7.8	14.9	13.9	10.9	12.4	40.1	9.1
35-39	6.6	14.9	13.2	11.4	11.8	42.2	9.3
40-44	6.6	14.0	14.3	11.9	12.5	40.6	9.3
45-49	5.7	12.2	13.2	11.1	12.4	45.4	9.8
50-54	5.9	11.1	11.7	12.5	12.9	45.9	10.0
55-59	7.1	11.7	13.7	8.7	12.8	45.9	9.8
60-64	6.0	15.9	15.3	6.6	5.4	50.7	9.7
65-72	5.3	12.7	13.3	4.9	10.2	53.6	10.4
Total unemployed, October 1998	6.1	16.0	15.9	10.3	10.8	40.9	9.1
of which: ages							
Under 20	7.6	24.6	27.4	9.2	8.8	22.4	6.7
20-24	7.7	18.9	18.5	10.2	10.3	34.4	8.3
25-29	6.3	15.3	16.5	12.6	10.4	38.9	9.0
30-34	5.2	15.1	13.3	10.5	12.5	43.4	9.5
35-39	5.8	14.1	12.9	10.0	11.0	46.2	9.7
40-44	5.2	13.1	14.4	9.5	10.8	47.1	9.8
45-49	5.5	13.7	13.4	10.1	11.4	45.9	9.7
50-54	4.6	15.4	13.9	8.3	9.2	48.6	9.8
55-59	6.4	16.0	12.5	9.3	10.5	45.3	9.5
60-64	4.6	13.9	15.9	13.4	13.1	39.1	9.3
65-72	6.6	12.7	11.3	7.4	15.0	47.0	10.0
Total unemployed, October 1999	6.4	13.6	13.1	9.3	10.6	47.1	9.8
of which: ages							
Under 20	13.0	22.1	17.8	9.9	12.2	25.0	7.1
20-24	7.9	17.1	14.6	10.8	10.3	39.4	8.8
25-29	6.1	12.1	14.2	8.4	11.2	48.0	9.9
30-34	5.3	13.1	13.5	9.6	10.9	47.6	9.9
35-39	5.7	11.8	12.3	9.0	10.3	51.0	10.2
40-44	5.2	11.2	12.7	9.0	10.5	51.4	10.3
45-49	5.2	13.6	10.8	9.3	10.1	51.0	10.2
50-54	4.5	10.1	10.6	9.2	10.0	55.5	10.8
55-59	4.7	9.7	9.0	8.7	10.4	57.6	11.0
60-64	6.1	10.4	8.8	5.8	8.4	60.5	11.0
65-72	4.4	5.8	8.1	5.6	8.2	68.1	12.0

Source: Goskomstat Statistical Bulletin, various issues.

Table 12. Russia Federation: Unemployment by Reason of Being Unemployed, 1992-99 1/
(In percent of total unemployed)

	1992	1993	1994	1995	1996	1997	1998	1999
Total unemployed	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Those who had a previous job	79.9	81.3	83.6	83.2	83.7	88.0	85.9	80.6
of which: left the previous employment because of :								
release, redundancy, liquidation	21.0	22.9	28.9	28.3	29.8	34.0	37.1	34.4
resignation	34.8	40.4	39.3	39.4	38.4	25.0	22.2	20.8
completion of term of temporary, seasonal or co	7.0	5.8	4.9	4.8	4.0	4.4	5.3	4.1
discharge from military	1.9	1.7	1.3	1.5	1.1	0.9	1.2	0.5
other reasons	15.3	10.5	9.2	9.2	10.6	23.7	20.2	20.8
Those who have not had a job before	20.1	18.7	16.4	16.8	16.3	12.0	14.1	19.4
Total unemployed: male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Those who had a previous job	80.7	82.1	85.4	84.8	85.6	89.0	86.8	80.6
of which: left the previous employment because of :								
release, redundancy, liquidation	14.3	17.2	23.8	23.8	26.0	31.1	34.4	31.7
resignation	40.0	45.7	44.5	43.9	42.4	29.5	25.7	24.1
completion of term of temporary, seasonal or contract work	7.6	5.4	4.6	4.6	3.7	5.2	5.8	5.0
discharge from military	3.4	3.0	2.4	2.8	1.8	1.6	2.1	0.9
other reasons	15.4	10.8	10.1	9.7	11.7	21.7	18.9	18.8
Those who have not had a job before	19.3	17.9	14.6	15.2	14.4	11.0	13.2	19.4
Total unemployed: female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Those who had a previous job	79.1	80.4	81.6	81.4	81.5	86.8	84.8	80.7
of which: left the previous employment because of :								
release, redundancy, liquidation	28.3	29.2	34.8	33.6	34.2	37.5	40.3	37.5
resignation	29.1	34.5	33.3	34.1	33.6	19.7	18.0	17.1
completion of term of temporary, seasonal or contract work	6.4	6.3	5.1	5.1	4.3	3.6	4.7	3.0
discharge from military	0.2	0.1	0.2	0.0	0.2	0.1	0.1	0.1
other reasons	15.2	10.2	8.2	8.5	9.2	25.9	21.6	23.0
Those who have not had a job before	20.9	19.6	18.4	18.6	18.5	13.2	15.2	19.3

Source: Goskomstat.

1/ For 1992-1997, data refer to end-October values; for 1998-1999, data refer to annual average.

Table 13. Russia Federation: Distribution of the Unemployed by Job Search Methods, 1992-99

(In percent of total)

	1992 Oct.	1993 Oct.	1994 Oct.	1995 Oct.	1996 Mar.	1997 Oct.	1998 Oct.	1999 1/
Application to the state employment service	28.1	28.3	34.4	36.3	39.0	39.9	37.2	33
Application to a commercial employment service	1.0	3.1	3.7	3.8	4.2	2.4	2.4	2.4
Placing ads in papers, responding to ads	8.7	13.6	15.6	16.9	17.6	16.3	18.6	19.2
Contacting friends, relatives, acquaintances	29.9	36.7	37.8	38.5	37.0	55.0	57.8	55.7
Directly contacting the management/employer	26.3	30.9	29.0	27.9	25.6	28.8	29.5	31.5
Search for land, machines and equipment, raw materials, financial resources for starting own business, applying for licenses, etc.	1.8	1.9	1.4	1.4	0.9	1.1	1.0	0.8
Other methods	9.0	12.9	12.0	15.3	14.3	14.7	15.6	11.9

Source: Goskomstat.

1/ Annual average.

Table 14. Russian Federation: Migration Between the Regions of Russia, 1989-99
(In thousands)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	1992-99	
												Total	Total as percent of population 1/
Northern Region	-9.5	-13.2	-39.2	-45.6	-37.5	-40.8	-25.3	-24.3	-30.4	-31.7	-33.7	-269.3	-4.5
Karelian Republic	0.5	0.8	0.4	0.9	-0.7	1.6	1.8	0	0.2	-0.2	-0.3	3.3	0.4
Komi Republic	-5.6	-7.8	-15.7	-11.9	-15.1	-22.3	-12.1	-9.1	-11.1	-10.6	-12.1	-104.3	-8.3
Arkhangel'sk Oblast	-4.8	-3.4	-9.2	-7.6	-5.4	-3.5	-4.8	-6	-7.6	-7.7	-8.4	-51.1	-3.3
Vologodsk Oblast	0	-0.2	1.5	4.1	6.3	4.3	5.5	4.2	3	2.6	1.6	31.6	2.4
Murmansk Oblast	0.4	-2.6	-16.2	-31.1	-22.6	-20.9	-15.7	-13.4	-14.9	-15.7	-14.4	-148.7	-12.7
North-western region	12.4	19.1	-6.6	-3.9	7.4	47.8	40.3	41.5	28.2	34.3	23.7	219.3	2.8
Central region	91.1	7.8	9	61.5	113.2	216.2	166.2	138.5	139.3	138.8	112.2	1085.9	3.4
Volga region	-8.6	-1.5	4.3	22.2	26	50.8	31.6	21.7	19.9	18.7	14.4	205.3	2.5
Central-Chernozem region	12.4	23.2	26.3	80.1	91.8	102.4	62.6	53.2	38.8	37.6	33.6	500.2	6.8
Povolgski region	20.7	40.1	33.4	104.4	131.2	167.2	104.7	62.9	67.3	59.3	40.2	737.2	4.6
North-Kaukaz region	19.7	78.6	149.5	103.1	143	167.3	86.4	35.2	36.5	26.7	26.4	624.6	3.7
Ural	-39.4	-23.1	-4.1	36.6	41.3	123.6	74.4	49	66.8	54.5	37.7	483.8	2.4
West Siberia	6.1	-2.2	-32	-8.2	26.3	112.2	49.7	30.4	64.3	34.3	-5.8	303.2	2.0
East Siberia	-25	-24.5	-28.6	-36.2	-22.6	-7.3	3.9	-7.7	-21.4	-20.6	-22.6	-134.6	-1.5
Far East region	-0.2	-9.6	-66.1	-150.4	-101.1	-147.8	-102.8	-65	-69.7	-64.6	-65.0	-766.4	-9.5
Sakha republic (Yakutiya)	1.6	-4.5	-28.4	-27.9	-20.4	-30.9	-18.7	-12	-17.2	-19.7	-15.3	-162.1	-13.9
Jewish Autonomous Oblast	0.3	0.1	-0.1	-2.6	-1.4	-5.5	-1.4	-1.8	-1.8	-1.9	-2.8	-19.2	-8.7
Chukotsk A. Oblast	-3.6	-3.7	-9.3	-22.2	-11.5	-13.6	-9.3	-5.2	-4.7	-4.0	-4.2	-74.7	-47.2
Primorye Krai	7.6	6	1.9	-7.9	-7	-5.4	-9.4	-9.4	-11	-4.2	-7.5	-61.7	-2.7
Khaberovsk Krai	1.2	-0.3	-2.9	-13.7	-8.3	-14.8	-10.9	-7.5	-5.3	-6.3	-8.4	-75.2	-4.7
Amur Oblast	-0.4	-0.7	-4.1	-15.2	-4	-13.6	-1.1	-3.9	-5.7	-6.2	-6.1	-55.8	-5.3
Kamchatka Oblast	0.1	0.1	-3.6	-16.6	-16.5	-15	-11.7	-7	-7	-6.4	-6.5	-86.7	-18.0
Koryak Autonomous Okrug	-0.3	0	-0.5	-1.9	-2.3	-1.6	-0.9	-0.6	-1	-1.0	-0.8	-10.1	-24.7
Magadan Oblast	-5.2	-6.7	-18.7	-38.1	-18.9	-26.8	-20.4	-6.6	-5.4	-6.0	-6.7	-128.9	-34.4
Sakhalin Oblast	-1.8	0.1	-0.9	-6.2	-13.1	-22.2	-19.9	-11.6	-11.6	-10.0	-7.5	-102.1	-14.4
Kaliningrad Oblast	3.2	6.3	5.7	12.5	11.1	18.4	10.5	8.2	13	13.0	3.6	90.3	10.5

Source: Goskomstat.

1/ Total as percent of regional population at end-1991.

Table 15. Russian Federation: Consumer Price Inflation, 1992-2000 1/

	Overall CPI	Food 2/	Nonfood 3/	Paid Services 4/	Overall CPI Seasonally Adjusted
	(Percentage changes from December to December)				
1992	2508.8	2526.2	2573.4	2120.5	
1993	839.9	804.9	641.8	2311.2	
1994	213.7	214.2	164.8	521.6	
1995	131.4	123.5	116.4	232.8	
1996	21.8	17.8	17.8	48.3	
1997	11.0	9.1	8.3	22.6	
1998	84.5	96.1	99.5	18.5	
1999	36.6	36.1	39.0	33.8	
	(Monthly percentage changes)				
1998 Jan	1.5	2.1	0.5	1.7	-0.4
Feb	0.9	1.2	0.3	1.0	0.3
Mar	0.6	0.7	0.2	1.2	0.5
Apr	0.4	0.3	0.2	1.0	0.7
May	0.5	0.6	0.1	1.1	0.7
June	0.1	0.0	0.0	0.6	0.6
July	0.2	-0.1	0.1	1.2	0.8
Aug	3.7	2.4	7.1	1.2	6.7
Sep	38.4	39.5	54.3	3.4	39.1
Oct	4.5	3.9	7.4	1.6	4.0
Nov	5.7	7.6	4.3	1.3	4.7
Dec	11.6	17.1	6.3	1.8	10.5
1999 Jan	8.4	10.3	6.2	4.1	6.5
Feb	4.1	4.4	4.0	3.2	3.5
Mar	2.8	2.8	3.2	1.9	2.7
Apr	3.0	2.6	4.0	3.1	3.3
May	2.2	2.0	2.7	2.1	2.4
June	1.9	1.7	1.6	3.5	2.4
July	2.8	3.2	1.9	3.1	3.5
Aug	1.2	0.5	2.4	1.9	4.1
Sep	1.5	0.8	2.7	2.0	2.0
Oct	1.4	0.9	2.2	2.0	0.9
Nov	1.2	1.0	1.5	1.7	0.3
Dec	1.3	1.4	1.1	0.9	0.3
2000 Jan	2.3	2.2	2.2	3.4	0.4
Feb	1.0	0.5	1.3	3.0	0.4
Mar	0.6	0.1	1.4	1.5	0.5
Apr	0.9	0.3	1.5	2.1	1.2
May	1.8	2.2	1.1	1.3	2.0
June	2.6	...	...	...	3.1
Memorandum items:					
1992 weights	100	44.5	46.1	9.4	
1993 weights	100	55.3	38.9	5.8	
1994 weights	100	53.5	40.3	6.2	
1995 weights	100	52.5	37.8	9.7	
1996 weights	100	56.6	30.1	13.2	
1997 weights	100	54.4	29.0	16.6	
1998 weights	100	51.9	32.1	16.0	
1999 weights	100	59.9	27.2	12.9	

Source: Goskomstat and staff estimates.

1/ The Russian authorities have discontinued the practice of publishing average monthly inflation rates since November 1994. Data reported in this table, since December 1994 are on an end of period basis.
2/ Includes food, beverages, and tobacco.
3/ Includes clothing and footwear, household goods, medicines, recreation, education, culture, and personal care and effects.
4/ Includes rent, water, fuel and power, transport, and communication.

Table 16. Russian Federation: Industrial Producer Prices, 1991-2000

	Overall PPI Index	Electricity	Fuel	Ferrous Metallurgy	Chemicals	Machinery	Construction Materials	Light Industry	Food Industry
				(Percentage changes from December to December)					
1991	236	110	129	237	165	212	215	371	314
1992	3,278	5,409	9,166	3,525	3,791	2,621	2,714	1,158	2,628
1993	895	1,258	634	1,086	848	949	1,169	681	1,229
1994	233	229	201	242	262	230	212	241	208
1995	175	199	187	185	168	178	171	163	156
1996	26	35	40	16	18	24	34	20	22
1997	7	9	11	1	5	9	8	10	12
1998	23	3	1	11	26	29	13	44	53
1999	67	14	135	89	44	50	37	56	63
				(Monthly percent changes)					
1998 Jan	0.9	1.2	1.1	0.4	1.1	0.9	1.0	1.0	0.9
Feb	0.5	1.7	0.0	0.5	-0.8	1.2	0.6	0.9	0.3
Mar	-0.1	-0.3	-0.7	0.8	-1.2	0.4	0.4	0.6	0.4
Apr	0.0	1.7	-1.9	0.5	-1.0	0.4	0.6	0.3	-0.1
May	-0.9	-1.8	-3.4	-1.0	0.8	0.7	0.0	0.1	-0.2
Jun	0.0	1.0	-1.6	0.1	0.5	0.4	0.1	0.1	-0.5
Jul	-0.8	0.1	-4.9	1.0	0.6	-0.1	0.3	-0.2	-0.2
Aug	-1.2	-2.1	-5.6	-1.7	-0.3	0.1	0.3	0.2	-0.2
Sep	7.4	1.2	1.8	2.4	8.3	8.6	3.6	10.5	21.1
Oct	5.9	1.4	5.3	2.9	7.5	3.8	2.7	9.2	5.1
Nov	5.1	-0.9	7.3	1.9	4.5	5.9	1.0	8.2	7.6
Dec	4.8	-0.5	4.2	3.2	3.9	4.1	1.6	7.3	11.3
1999 Jan	6.9	1.3	6.0	6.2	4.9	8.6	3.2	6.6	9.2
Feb	5.6	3.8	3.4	4.9	3.2	5.8	1.6	8.3	8.7
Mar	3.9	0.2	3.9	7.6	3.2	3.3	1.9	5.4	6.2
Apr	3.7	0.7	3.9	4.4	4.0	3.6	1.6	2.6	4.2
May	3.6	1.4	8.2	5.7	1.5	3.3	1.8	2.2	2.6
Jun	3.7	1.3	6.4	6.6	1.8	2.2	2.0	2.5	2.1
Jul	3.1	0.7	7.8	3.2	4.4	3.0	3.5	1.8	2.9
Aug	4.7	0.0	12.1	6.5	0.8	1.9	3.9	2.8	5.4
Sep	5.9	1.7	15.0	7.1	3.6	2.3	3.8	3.5	4.5
Oct	5.5	0.6	15.2	5.1	2.5	2.7	3.0	3.8	2.6
Nov	3.9	0.7	5.8	4.9	5.9	2.3	4.0	3.5	0.9
Dec	2.2	1.2	1.9	3.3	1.4	2.2	1.9	2.5	0.7
2000 Jan	4.0	2.0	9.6	5.0	1.7	3.8	2.5	1.3	1.0
Feb	3.7	4.2	5.6	5.1	1.4	3.8	2.5	2.3	0.8
Mar	2.6	4.8	2.3	3.4	3.0	2.6	2.8	1.9	0.5
Apr	1.5	...	...	...	...	...	...	...	...
May	1.7	...	...	...	...	...	...	...	...
Jun	2.3	...	...	...	...	...	...	...	...

Source: Goskomstat.

Table 17. Russian Federation: Wages, Pension and Per Capita Income, 1992-99

	1992	1993	1994	1995	1996	1997	1998	1999
				(In rubles per month)				
Average monthly wages	6.0	58.7	220.4	472.4	790.2	950.2	1,051.0	1,582.0 1/
Minimum wage	0.7	6.1	17.6	42.5	75.9	72.7	83.5	83.5
Pensions	1.6	19.9	78.0	188.1	302.1	328.1	399.0	448.7
Income per capita	4.0	45.2	206.3	515.4	760.0	930.0	969.9	1,563.0
				(Annual percentage change 2/)				
Real wages	-40.4	0.4	-7.8	-27.9	13.4	4.9	-13.4	-19.0
Minimum wage	-78.8	-10.6	-29.2	-18.8	21.0	-16.5	-10.0	-46.2
Pensions	...	27.6	-3.8	-18.9	8.8	-5.3	-4.7	-39.5
Real income per capita	-53.2	15.9	12.0	-16.0	-0.1	6.7	-18.3	-13.3

Source: Goskomstat and staff calculations

1/ Preliminary data.
2/ CPI deflated numbers.

Table 18. Russian Federation: Wage Arrears in Industry, Agriculture, and Construction, 1992-2000

	Industry		Agriculture		Construction	
	Nominal 1/	Real 2/	Nominal 1/	Real 2/	Nominal 1/	Real 2/
End year 1992	15	3.6	6	1.4	8	1.9
End year 1993	364	9.2	287	7.2	115	2.9
End year 1994	2,170	17.4	1,301	10.4	729	5.8
End year 1995	7,734	26.8	2,572	8.9	1,941	6.7
End year 1996	22,149	63.0	5,913	16.8	6,467	18.3
End year 1997	26,607	67.1	7,965	20.1	7,457	18.8
End year 1998	32,471	45.2	9,398	13.1	9,600	13.4
End year 1999	17,058	17.4	7,859	8.0	5,622	5.7
1998 Jan	28,011	70.9	8,285	21.0	7,989	20.2
Feb	29,541	74.1	8,393	21.0	7,769	19.5
Mar	30,746	76.6	8,388	20.9	7,870	19.6
Apr	31,812	79.0	8,331	20.7	8,026	19.9
May	33,542	82.8	8,504	21.0	8,363	20.7
Jun	34,963	86.3	8,848	21.8	8,387	20.7
Jul	36,474	89.8	9,240	22.8	8,802	21.7
Aug	39,106	92.9	9,645	22.9	9,469	22.5
Sep	39,264	67.4	9,909	17.0	10,095	17.3
Oct	36,879	60.5	10,040	16.5	10,280	16.9
Nov	35,807	55.6	9,747	15.1	10,181	15.8
Dec	32,471	45.2	9,398	13.1	9,600	13.4
1999 Jan	32,122	41.2	9,866	12.7	9,238	11.9
Feb	30,078	37.1	9,623	11.9	8,943	11.0
Mar	27,929	33.5	9,348	11.2	8,471	10.2
Apr	25,948	30.2	9,159	10.7	7,895	9.2
May	25,226	28.7	9,047	10.3	7,518	8.6
Jun	23,665	26.4	9,191	10.3	7,050	7.9
Jul	23,485	25.5	9,301	10.1	7,032	7.6
Aug	22,291	23.9	9,257	9.9	6,640	7.1
Sep	21,174	22.4	9,046	9.6	6,603	7.0
Oct	20,635	21.5	8,885	9.3	6,533	6.8
Nov	19,832	20.5	8,566	8.8	6,455	6.7
Dec	17,058	17.4	7,859	8.0	5,622	5.7
2000 Jan	17,493	17.4	7,806	7.8	5,989	6.0
Feb	17,170	16.9	7,820	7.7	5,777	5.7
Mar	16,407	16.1	7,744	7.6	5,465	5.4
Apr	16,107	15.6	7,742	7.5	5,133	5.0

Source: Goskomstat.

1/ In millions of rubles.

2/ In constant March 1992 prices, deflated by CPI.

RUSSIA'S GROWTH PERFORMANCE, 1991–97

Stylized facts: output growth in transition economies

33. **The transition process was associated with a large output loss.** Output collapsed in almost all countries when transition began, and the sharp initial decline was followed by a sometimes protracted "bottoming out" phase. By 1997, growth had resumed in the vast majority of transition countries. These developments are depicted in Figure 9, which presents output paths for the Baltics, Russia and other countries of the former Soviet Union (BRO) and Central and Eastern Europe (CEE), both in standard calendar time and in "transition time" (where output indices for different countries are compared across similar years in the transition process, so as to adjust for differences in the year when transition began).

34. **While the length of the transitional contraction varied considerably across countries, on average it was much longer and deeper in the BRO than in the CEE** (Table 19). In the BRO the duration of the contraction ranged from 4 to 9 or more years, with a median of 6 years; in Russia, it lasted 9 years. In the CEE the contractions generally lasted between 2 and 5 years, with a median of 4 years. Similarly, while the depth of the contraction varied significantly across countries, in general it was distinctly larger in the BRO than in the CEE. In the BRO the average contraction equaled 52 percent of real GDP, ranging from 15 percent in Uzbekistan through 47 percent in Russia to 77 percent in Georgia.[15] In the CEE the average contraction only amounted to 23 percent.

35. **The depth of the contraction also varied substantially across sectors and regions within the same country.** In the BRO, the (unweighted) average output dropped by 46 percent between 1990 and 1997. The decline was more pronounced in industry and transport & communications, where production fell by over half, and most dramatic in the construction sector, which shrank to one-third of the level observed in 1990. In contrast, production in agriculture and trade only fell by around one-third. The evolution of output has also varied substantially across regions within the same country, particularly in large and diverse countries such as Russia, Ukraine and Kazakhstan (Table 20). These differences across regions reflect *inter alia* the diversity in the stance of local policies which, for Russia, have been documented in Berkowitz & DeJong (1999).

Growth accounting in Russia

36. **Assuming an aggregate Cobb-Douglas production function, aggregate output growth can be decomposed into labor growth, capital growth, and the residual, total**

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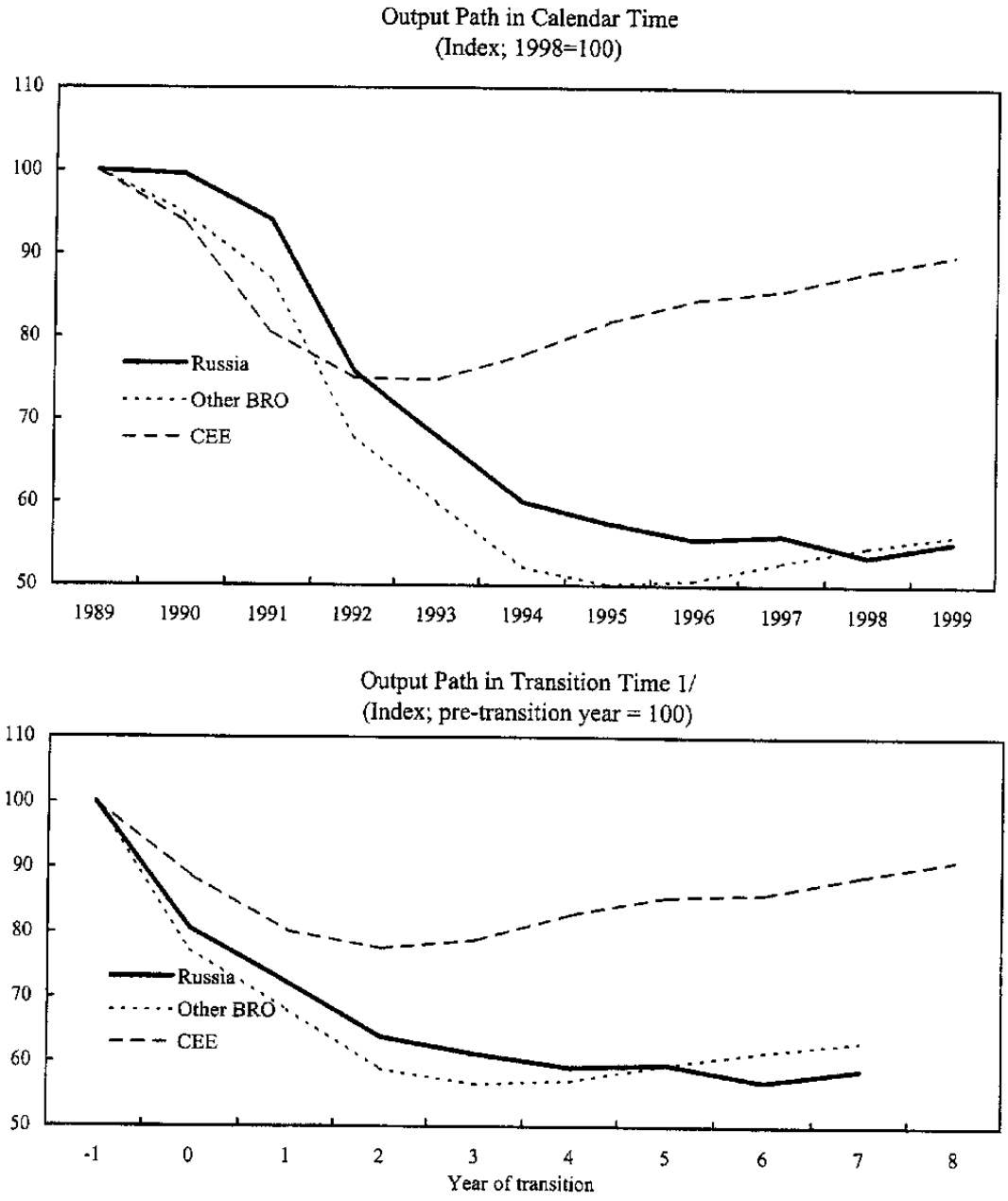
[15] The relatively shallow Uzbek contraction has surprised many, given the country's hesitant and idiosyncratic approach to reform. Zettelmeyer (1998) argues this growth performance reflected a combination of low initial industrialization, significant cotton production, and self-sufficiency in energy.

Figure 9. Economic Transition and GDP Changes, 1989-99



Source: IMF World Economic Outlook database.

1/ Transition year zero is defined as the year in which central planning was decisively abandoned. This is taken to be 1992 for the BRO countries, 1990 for Poland, Hungary and countries on the territory of the former Socialist Federal Republic of Yugoslavia, and 1991 for the remaining Central and Eastern European countries.

factor productivity (TFP) growth.[16,17] TFP growth should not be interpreted as simply an estimate of the rate of exogenous technological progress: it includes any factor affecting the efficiency with which inputs are used.[18]

37. **Most of the output contraction was accounted for by negative TFP growth.** Over the period 1991–97, Russian output declined by an average 7.4 percent per year reflecting an average decline in TFP of 5.9 percent per year. For comparison, over 1971–90 average output growth equaled 2.2 percent per annum, while average TFP growth was close to zero. In the early years of the transition, TFP growth was sharply negative, but it then gradually stabilized although it remained negative even after 1995.

38. **This approach can be refined in a number of ways.** One is to adjust labor input for the number of workers on shortened days and/or compulsory leave, and adjusting capital input for the capacity utilization rate. Even after making such adjustments, one finds that over 1991–96 average TFP growth equaled -4 percent per year, accounting for about half the average output decline of 9 percent per year. Again, even after 1995, average TFP growth was negative. A further refinement involves decomposing aggregate output and inputs into sector-specific output and inputs. Using this approach, average TFP growth over the period 1991–96 equaled -3 percent per year, and again it remained negative even after 1995. Examining the sectoral distribution of inputs, labor shifted away from construction and industry and towards trade; capital shifted away from agriculture and trade and towards services; and resources in general shifted away from the old state firms in construction and

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[16] The elasticities of output with respect to labor and capital are set equal to, respectively, 0.7 and 0.3.

[17] This section draws on forthcoming work by De Broeck & Koen (2000b) and Dolinskaya (2000).

[18] Being a residual, it also includes any bias due to methodological assumptions and measurement errors. However, to the extent that the focus is on contrasting growth before and during the transition, or growth during the earlier and the later transition years, the approach remains valid as long as the computational biases are constant over time. The impact of errors in measuring the capital stock deserves special mention. Estimates of the capital stock are constructed by applying a depreciation rate to the inherited stock, and adding in new investment. The depreciation rate is calculated using the national income capital consumption measures. Especially for the early transition years, these depreciation rates may be under-estimated since they largely reflected the very slow depreciation allowed under the tax system. Given the significant obsolescence which in fact occurred, this imparts an upwards bias to the capital stock. Hence, there is a downward bias in measured TFP growth during the early transition years. However, to the extent that the focus is on contrasting growth across countries at equivalent stages of the transition process, the approach remains valid as long as the bias affected all countries equally.

industry and towards new small-scale service activities. Perhaps surprisingly, this sectoral input reallocation appears to have had a negative impact on TFP growth.[19] The absolute effect, however, was extremely small: most of the aggregate TFP decline reflected the decline in sector-specific TFPs.

39. **Overall, these developments are comparable, and indeed slightly superior, to the average values observed in other BRO countries, but inferior to that of the CEE** (Figure 10).[20] However, the average for the other BRO is sharply lowered by countries which were torn by internal and external conflict (Armenia, Azerbaijan, Georgia, Moldova, and Tajikistan). The Baltics experienced a substantial decline in productivity at the start of transition, reflecting their high degree of openness and the collapse of trade relations among the BRO, but by 1995 their TFP growth had turned sharply positive and sectoral resource reallocation actually acted to raise their productivity. In Poland, which began its transition in 1989, aggregate TFP growth turned positive in 1992 in tandem with the return to growth of the overall economy, and it averaged somewhat less than 4 percent per year over 1992–98.[21] The corresponding figures for Hungary, the Slovak Republic and the Czech Republic were 2.2 percent, 1.2 percent and 0.5 percent, respectively, all significantly above Russian levels.

Determinants of the growth performance in Russia

40. **One view focuses on initial conditions, and specifically on the degree of pre-transition distortions**. It postulates that the transition process involves a breakdown of economic relations among firms; Blanchard & Kremer (1997) call this "disorganization". The old structures that worked under central planning, including supply networks and trade patterns, are destroyed, and it takes time for new ones to emerge. Russia (like most other CIS countries) suffered relatively more because its economy had been under central planning for the longest time, and was more distorted than in other transition countries. In particular, it suffered relatively more from over-industrialization (although this was partially offset by a lower degree of trade dependency with other countries). On this hypothesis, if and when new market institutions and structures are established, Russian productivity growth should soon

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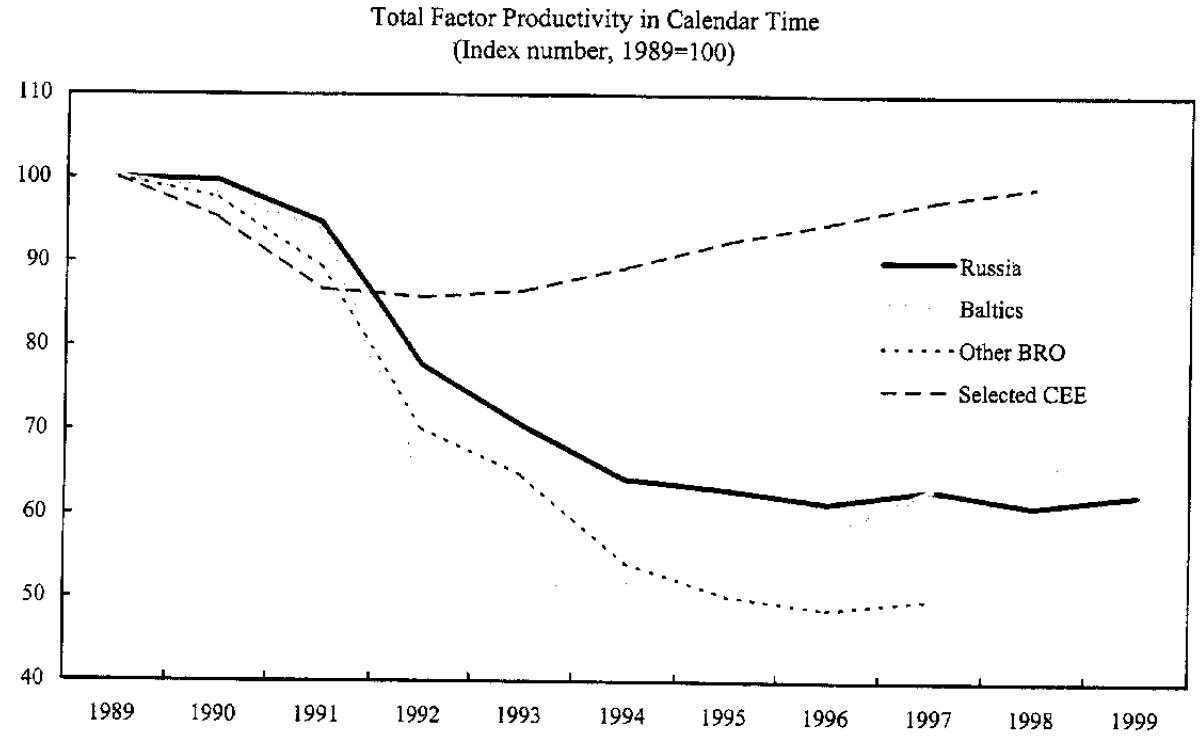
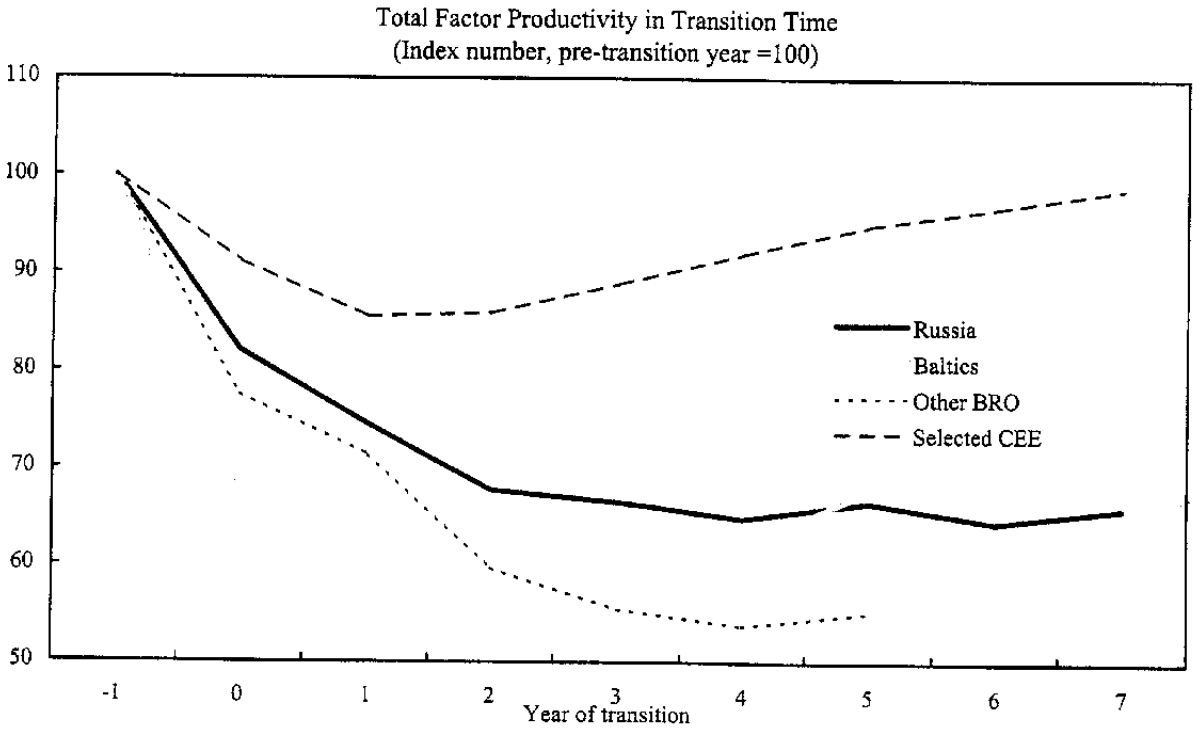
[19] One possible explanation is that value added in trade and services may be underestimated.

[20] All comparisons between TFP growth in Russia and other countries are done using the "standard methodology", unless otherwise stated.

[21] De Broeck & Koen (2000b) point out that "During the initial recovery 1992–93, ... positive TFP growth in excess of overall growth mainly reflected an increase in capacity utilization rates. In the following years, as renewed growth in input of factors, in particular capital, was recorded, the contribution of TFP growth to overall growth fell back to somewhat less than two-thirds."

Figure 10. Economic Transition and Productivity Changes, 1989-99 1/





Sources: De Broeck & Koen (2000b); author's calculations.

and almost automatically rise sharply, so as to equal and possibly exceed the levels observed in the more successful transition economies.

41. **Another view suggests instead that cross-country differences in performance are best explained by the structural reforms pursued by different transition economies**. In particular, several authors have identified the following factors:

- *Financial development*. In Russia, the financial system always engaged in very little intermediation. Banks offered few credits to the production sector, engaging instead in proprietary securities trading. The intermediation has further declined in the wake of the crisis. This has not proved an obstacle to the recent recovery, since existing industrial firms have been able to finance investments from their cash flow. However, these deficiencies in the financial infrastructure constitute a barrier to the entry of new firms and to the emergence of new sectors.

- *Rule of law*. Weaknesses in the rule of law discourage investment and create entry barriers for new firms. In Russia, bureaucratic procedures for business registration and regulation, and the need to obtain various permits and authorizations from various different agencies, create vast scope for rent-seeking, as manifested in corruption and (related to it) unpredictable and discretionary levels of taxation. Government authorities, especially at the local level, are especially keen to use their powers, both in enforcing regulations and in awarding contracts, to protect politically influential incumbents (McKinsey Global Institute (1999)).

- *Privatization and general reform enthusiasm*. Across Russian regions, economic growth is found to have a close correlation with the formation of new legal enterprises. The latter, in turn, is closely linked to the extent of privatization initiatives, and to the general enthusiasm for reform as proxied by the willingness of electors to support pro-reform parties.

- *Internal and external liberalization*. Russia has made significant progress in terms of liberalizing domestic prices, dismantling trading monopolies in domestic markets, and removing trade controls and quotas. However, it still has relatively high tariff rates, and maintains significant foreign exchange restrictions. While these measures may yield short-run benefits, in terms of raising revenue and reducing capital flight, they also represent a large medium-run obstacle to continued productivity growth.

42. **A third view centers on macroeconomic conditions**. It particular, it views macroeconomic stabilization, as proxied by inflation, as a pre-requisite for sustainable growth. While Russia eventually succeeded in bringing inflation under control, its fiscal deficits were never fully confronted until after the crisis. Since these deficits were seen as likely to be eventually monetized, they had a damaging effect on inflationary expectations, and led to periodic crises.

43. **Several studies have tried to test these views using cross-country and cross-regional regressions.**[22] Berg et al. (1999) analyze a sample of 10 CEE countries, the three Baltic republics, the 12 CIS countries, and Mongolia over a period which spanned their transition. Their key results were as follows.

- *Macroeconomic variables*. Increases in inflation have a strong adverse effect on private sector growth. A reduction in the fiscal deficit, however, also has a negative effect on private sector growth. This reflects two factors: first, a fiscal contraction has a negative short-run aggregate demand effect; second, the regression already controls separately for the impact of the fiscal deficit on inflation.

- *Structural variables*. Internal liberalization has a positive impact on private sector growth, in line with standard theory. External liberalization initially has a negative impact on the private sector, possibly reflecting the destructive effect of foreign competition on inefficient incumbents. However, as time passes and the easing of import constraints benefits newly emerging private firms, the sign of the effect is reversed. Finally, increases in an index of private sector entry conditions, which measures progress in privatization and financial sector reform, have significant effects after a one-year lag.

- *Initial conditions*. Higher trade dependency and over-industrialization have an adverse aggregate effect on the initial output decline. Higher urbanization and a lower share of agriculture are associated with faster initial growth of the private sector. The impact of these initial conditions vanishes over time, but slowly (with a "half life" of about 5 years).

44. **These conclusions were refined and qualified by Havrylyshyn et al. (1999).** In reviewing the growth experience of 25 CEE and BRO countries in the period 1990–98, they focused not only on the importance of adverse initial conditions and the role of policies on growth and its sustainability, but also on the magnitude of the trade-offs between them. Qualitatively their most important conclusions were as follows.

- *Macroeconomic and structural factors*. Financial stabilization is a necessary but not sufficient condition for sustained growth. Macroeconomic stabilization needs to be complemented by comprehensive progress on market-oriented structural reforms for growth to be sustained and to attract foreign direct investment.

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[22] Most of these regressions have focused on GDP growth, reflecting considerations of data availability; however, some authors have recently started to analyze TFP growth. De Melo, Denizer & Gelb (1996) and De Melo & Gelb (1997) were the first to quantify and systematically study the role of structural reforms. Fisher, Sahay & Vegh (1996 a,b; 1997) introduced macroeconomic policies. De Melo, Denizer, Gelb & Tenev (1997) studied the role of initial conditions in detail.

- *Initial conditions.* Initial conditions, notably over-industrialization, are not without importance but their impact can be readily offset by strong reform efforts, particularly a more rapid pace of structural reform. Indeed, while bold reform is associated with a greater initial output decline, it is also associated with a faster recovery.

45. **The insights from these two studies can be combined to account for the path of output during transition and to highlight cross-country differences in the transition experience.** In Table 21, the fitted values from the regressions are averaged over time, distinguishing only between two broad time-phases—the earlier and the later transition years. For each phase, the fitted values are shown for Poland, Hungary, the Czech Republic, Slovakia, each of the Baltics, Russia, and the other BRO. There are three key conclusions. First, the model displays a very good fit. Second, a number of countries with "bad" initial conditions (such as Poland, with high degrees of initial trade dependency and over-industrialization), made up for them by reforming faster or having smaller macroeconomic imbalances. Conversely, other countries with relatively good initial conditions often reformed more slowly, partly or wholly offsetting the effect of the initial conditions. Third, Russia suffered from relatively bad initial conditions, including in particular over-industrialization. However, the crucial difference compared with, say, the Czech Republic or the Baltics lay in its failure to reform aggressively. For instance, if Russia had reformed as quickly and thoroughly as Estonia, it might have expected an average growth rate over 1992–96 of about -3.5 percent, or 5 percentage points higher than actually occurred; indeed, Russia would actually have returned to positive growth already in 1995. However, given the relatively few observations available on each country in isolation, all these country-specific results should be interpreted very cautiously.

Table 19. Length and Depth of Output Contraction
(Based on Observations Through 1999)

	Duration of contraction (years)	Peak year	Trough year	Real GDP at trough as percent of peak	Reversion to measured output level of
BRO Countries					
Armenia	4	1989	1993	35	Early 1970s
Azerbaijan	9	1988	1995	37	1960s
Belarus	6	1989	1995	63	Late 1970s
Estonia	5	1989	1994	64	Early 1970s
Georgia	6	1988	1994	23	Late 1950s
Kazakhstan	10	1988	1998	60	Late 1960s
Kyrgyz Republic	5	1990	1995	49	Early 1970s
Latvia	4	1989	1993	47	Late 1960s
Lithuania	5	1989	1994	59	1970s
Moldova	10	1989	1999	31	1950s / 1960s
Russia	9	1989	1998	53	Early 1970s
Tajikistan	8	1988	1996	26	1950s / 1960s
Turkmenistan	9	1988	1997	50	1960s or earlier
Ukraine	10	1989	1999	36	1960s or earlier
Uzbekistan	5	1990	1995	86	Early 1980s
Selected CEE Countries					
Bulgaria	9	1988	1997	63	Early 1980s
Czech Republic	4	1989	1993	85	Late 1970s
Hungary	4	1989	1993	82	Late 1970s
Poland	2	1989	1991	86	Mid 1980s
Romania	5	1987	1992	73	Mid 1980s
Slovakia	4	1989	1993	75	Late 1970s

Sources: IMF, *International Financial Statistics* and *World Economic Outlook*; Yearbooks of National Statistical Offices; Statistical Committee of the CIS; CMEA Yearbooks; Fund staff estimates.

Table 20. Fall in Industrial Output Across Regions During the First Half of the 1990s[1,2]

	Countrywide drop	Coefficient of variation	Maximum	Minimum	Number of regions
Russia	52	25	87	23	87
Ukraine	50	22	74	29	26
Kazakhstan	52	32	73	6	20

Source: De Broeck & Koen (2000b), Table 5.

1. During 1990–95 for Kazakhstan, 1990–96 for Russia, and 1990–97 for the Ukraine.
2. All columns in percent, except for the number of regions.

Table 21. Accounting for Growth in Transition
(Percent per Annum)

	Average Across Transition Years 0, 1, and 2						Average Across Transition Years 3 and 4					
	Growth	Accounted for by					Growth	Accounted for by				
		Macro	Structural	Initial Conditions & Constant	War	Residual		Macro	Structural	Initial Conditions & Constant	War	Residual
CEE	-10.5	-1.0	9.2	-16.5	-2.1	-0.1	2.6	0.9	13.8	-11.8	-0.8	0.5
o/w Czech Republic	-7.2	0.6	9.5	-16.2	0.0	-1.1	3.7	1.0	12.8	-6.8	0.0	-3.3
Hungary	-6.2	0.0	10.6	-17.7	0.0	0.9	1.2	1.5	14.7	-13.1	0.0	-2.0
Poland	-5.3	0.8	12.3	-22.2	0.0	3.8	4.9	0.1	14.4	-14.2	0.0	4.7
Slovak Republic	-8.8	-0.5	10.1	-15.5	0.0	-2.9	6.2	-0.8	13.0	-5.3	0.0	-0.7
Baltics	-17.1	2.0	11.6	-30.8	0.0	0.1	2.3	1.1	14.5	-14.7	0.0	1.4
Estonia	-10.0	1.8	12.8	-29.1	0.0	4.4	3.2	0.8	15.4	-15.3	0.0	2.2
Latvia	-16.4	1.7	11.0	-27.9	0.0	-1.1	1.3	0.7	15.4	-12.3	0.0	-2.5
Lithuania	-25.0	2.5	10.9	-35.5	0.0	-3.0	2.4	1.6	12.7	-16.4	0.0	4.4
Russia	-11.9	0.1	7.6	-17.6	0.0	-2.0	-3.2	4.0	10.8	-17.0	0.0	-1.0
Other BRO	-17.3	-1.7	1.8	-14.7	-2.8	0.1	-3.1	0.0	8.4	-11.0	-0.2	-0.5

Sources: Berg et al (1999); author's calculations.

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II. Public Finances

A. Developments Since the August 1998 Crisis [23] [24]

46. The following contains a detailed description of developments in the enlarged government budget since the August 1998 crisis, including the main determinants of revenue performance (the supporting analysis can be found in Annex II). It also describes the main elements of the recent tax reform and provides an overview of outstanding structural issues in the fiscal sector.

47. The enlarged government's financial position has substantially improved since the August 1998 crisis. Enlarged government revenues rose by about 2 percent of GDP in 1999, with increased federal revenues more than fully accounting for the increase. Enlarged government noninterest spending fell by nearly 4 percent of GDP, mostly due to expenditure compression at the subfederal level, and the primary balance turned around from a deficit of 3½ percent of GDP in 1998 to a surplus of 2½ percent of GDP in 1999. After taking into account the increase in interest obligations due to the depreciation of the ruble, the overall deficit on an accruals basis fell by about 4 percent of GDP between 1998 and 1999.

48. The main structural reforms in the fiscal area since August 1998 were: (i) the reintroduction of export taxes; (ii) changes in the operations of large taxpayer units and the institutional framework for tax administration; (iii) the continuation of implementation of the expenditure control program for 1998, including downsizing of government positions; and, (iv) expansion of the Treasury system to include all earmarked funds, with the exception of the Road Fund, and to broaden the monitoring and controlling expenditure commitments. But substantial problems remain. The proliferation of a large number of small taxes is a source of inefficiency in the tax system, as are the cost of tax administration and the high burden of compliance on taxpayers. The high cost of privileges mandated by the federal government but borne by subnational authorities and subsidies for housing and communal services are a

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[23] Russia has a three-tiered system of government, comprising federal, regional and local governments, plus a number of extrabudgetary funds. The enlarged government concept used in this chapter includes federal, regional and local government, the four main social extrabudgetary funds (the Pension Fund, the Social Insurance Fund, the Medical Insurance Fund and the Employment Fund) and the Road Fund. The Road Fund has federal and territorial elements: the Federal Road Fund is incorporated in the federal budget and the territorial Road Funds are consolidated in the data for regional and local government. For brevity, regional and local governments combined are referred to as "local government" in this chapter.

[24] Unless otherwise stated, figures for expenditures and deficits in this section are measured on a commitments basis, including as expenditure all new civilian federal budget arrears, local budget arrears, and pension arrears.

source of inefficiency in expenditure policy. In addition, there is a need to rationalize government operations, especially in the health care, education, and military sectors. Finally, the Treasury system remains to be expanded to all government agencies and transactions.

Federal government, 1998–2000

49. **Following several years of chronic fiscal imbalances, marked by shortfalls in revenues and recourse to expenditure sequestration, arrears accumulation, and the use of various offset instruments, the federal government's fiscal position has improved markedly in the period since the August 1998 crisis.** Revenues have been bolstered chiefly by higher receipts from the energy sector, centralization of revenues, and improvements in compliance. At the same time expenditure restraint has caused noninterest spending to fall as a share of GDP. The combination of these trends has led to a dramatic improvement in the federal fiscal position, with the primary balance moving from a deficit of over 1 percent of GDP in 1998 to a surplus of 5½ percent of GDP in the first quarter of 2000. Figure 11 shows trends in revenue and expenditure since 1998.

Revenues

50. **Federal government revenues initially fell sharply in response to the August 1998 crisis.** Cash revenues, which were 10½ percent of GDP in the first half of 1998, dropped to just 7 percent of GDP in the third quarter. Receipts rose in the fourth quarter as the payments system recovered and uncertainty diminished, but cash tax compliance remained very low, while substantial offset operations were conducted.[25] For 1998 as a whole, cash revenues were 9 percent of GDP, down from 10 percent of GDP in 1997, while noncash revenues fell slightly to 2 percent of GDP.

51. **There was a steady improvement in revenues through 1999.** Revenues recovered to their immediate pre-crisis levels by the first quarter of 1999, and strengthened further during the year to average 13½ percent of GDP, their highest level since 1993. Profits in the export sector were captured by the introduction, and expansion through the year, of export taxes on energy and other commodities. Federal revenues were helped by the April 1999 increase in the share of VAT accruing to the center, from 75 percent to 85 percent, and the introduction of a federal share of the personal income tax. The strong cash revenue performance also reflected determined efforts on the part of the authorities to improve tax compliance. In particular, the government refrained from new offset arrangements, beyond those conducted in the early months of the year in closing out 1998 accounts. The

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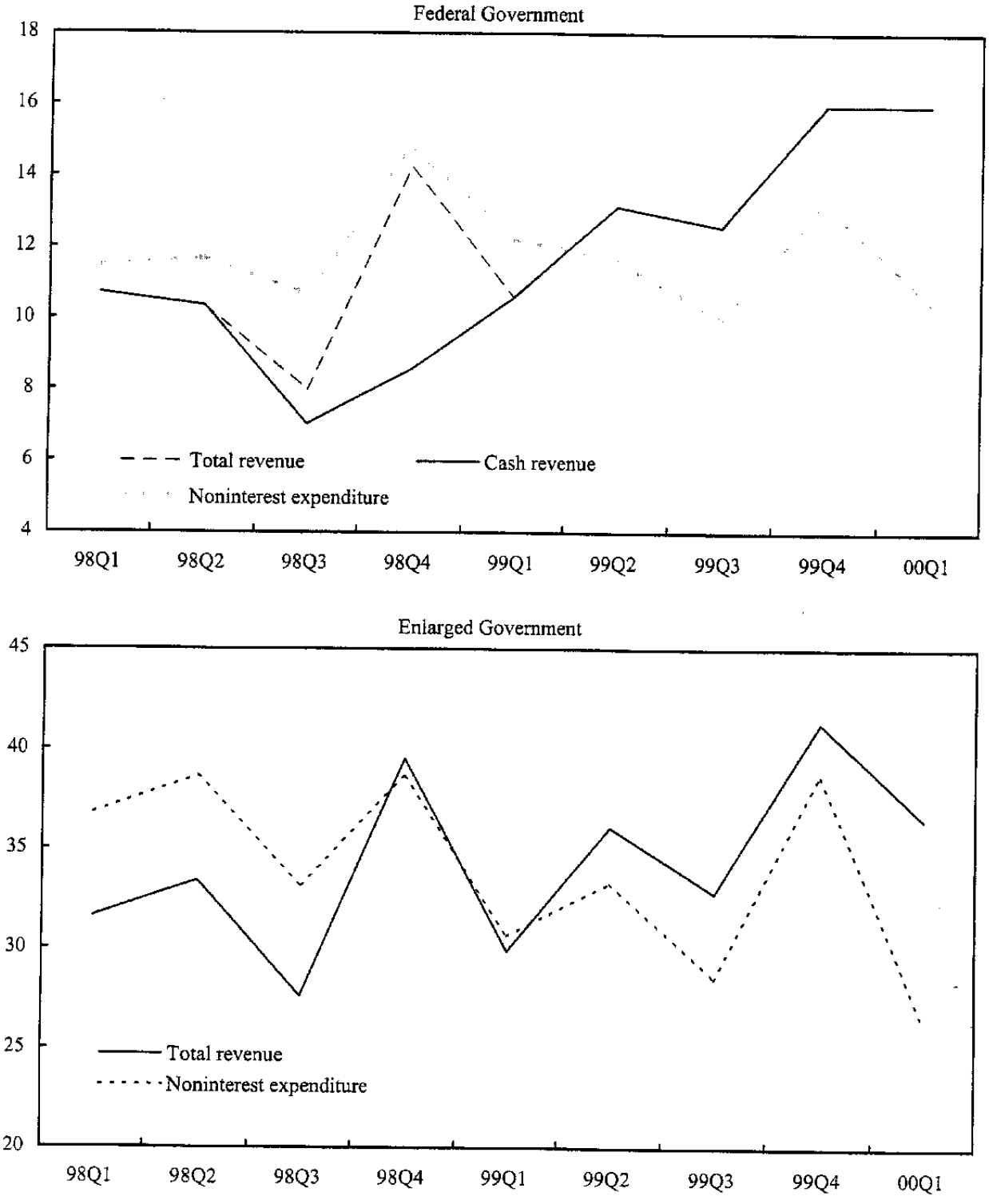
[25] Offsets initially involved the mutual settlement of pre-existing debts. Over time, they have evolved into a variety of different forms, some involving current transactions—for example, the government purchasing goods or services in exchange for writing off tax debt. SM/99/178, July 14, 1999, Box 2 contains an account of the various offset schemes used by the federal government in the period 1994–98.

Figure 11. Russian Federation: Government Revenue and Expenditure as percent of GDP, 1998-2000



Source: Russian authorities and Fund staff estimates.

government also entered into agreements with the oil companies to bring them to full statutory cash tax compliance by the end of 1999, with the threat of disconnection from the oil export pipeline if the agreements were not adhered to. A similar agreement was entered into with Gazprom with the aim of bringing the firm to full compliance by mid-2000.

52. **Revenues continued to strengthen in the first half of 2000**. Revenues were 16 percent of GDP in the first quarter of the year, and preliminary estimates show a further increase in the second quarter, to over 18 percent of GDP. The strength of revenues reflected continuation of the trends discussed above, including further increases in export taxes (due in part to the introduction of an export tax on natural gas) in response to the rise in world energy prices. By the first quarter of 2000, federal energy sector taxes were yielding over 5 percent of GDP, compared to about 2 percent of GDP in 1998 and about 3 percent of GDP in 1999 as a whole. However, net receipts were also increased by delays in paying VAT refunds to exporters, amid fears that substantial fraudulent refund claims were being submitted.

53. **Discretionary policy changes were the most important cause of increased federal revenues since the pre-crisis period** (Annex II). Factors behind the increase in revenues may be broken down into three categories: (i) discretionary policy changes; (ii) changes in the macroeconomic environment (in particular, the depreciation of the ruble and movements in world energy prices); and (iii) other factors, including compliance.[26] Of these, discretionary policy changes are estimated to have been the most significant, accounting for 4 percentage points of the increase by 5 percent of GDP in total federal revenues between 1995–97 and the first half of 2000. Within this, the centralization of tax receipts was responsible for about 1 percent of GDP, and the reintroduction of export taxes for about 2 percent of GDP. By contrast, federal revenues are estimated to have been little affected, in net terms, by shifts in the real exchange rate and the terms of trade. This mainly reflects the fact that the federal revenue base is fairly evenly balanced across the different components of GDP. Improved compliance is likely to have been the main factor behind the residual revenue increase of about ½ percent of GDP.

54. **The contribution of compliance is highly significant when considering the increase in cash revenues alone**. Attributing the elimination of noncash tax receipts to improved compliance, the estimate of the contribution of compliance rises to 3 percent of GDP, out of a total increase in federal cash revenues of 7½ percent of GDP between 1995–97 and the first half of 2000. The 4 percent of GDP contribution from discretionary tax changes remains, however, the more significant factor.

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[26] These factors are strongly interrelated, however. For example, the reintroduction of export taxes, which allowed the government to capture part of the windfall gains from the large real depreciation, was a discretionary measure taken in response to changes in the macroeconomic environment, and similarly compliance is likely to have been affected by changes in profitability due to macroeconomic developments.

Expenditures and government balances

55. **Federal cash expenditures fell in immediate reaction to the August 1998 crisis, reflecting low revenues and the unavailability of financing.** Cash spending fell from 16 percent of GDP in the first half of 1998 to 11 percent of GDP in the third quarter, while budgetary arrears rose by over 3 percent of GDP. However, towards the end of the year the government resorted to substantial use of offsets and continued borrowing from the CBR, as well as raising funds through the sale of Gazprom shares.[27] This allowed total spending to rise substantially in the final quarter, and the clearance of arrears roughly equaled the buildup in the third quarter. Federal noninterest spending fell by 2.5 percent of GDP in 1998 as a whole. This decline more than offset the fall in revenues between 1997 and 1998, and the primary deficit fell from 2.5 percent to 1.3 percent of GDP. With interest spending at much the same level in 1998 as in 1997, the overall deficit showed a similar improvement.

56. **The government maintained firm control of federal expenditures through 1999.** The government's economic program for 1999 targeted a primary surplus of 2 percent of GDP, involving a 2 percent of GDP reduction in noninterest expenditures. This reduction was to be achieved largely by indexing discretionary nominal spending by less than the rise in prices engendered by the depreciation of the ruble. However, expenditure allocations were adjusted upwards late in the year in response to better-than-expected revenue performance. Noninterest spending in 1999 as a whole amounted to 11.8 percent of GDP, 0.5 percentage points lower than in 1998. As set out in Annex II, wages, social transfers and transfers to regions all fell by about ½ percent of GDP, while there were offsetting increases in earmarked budgetary fund expenditures and in nonwage defense spending. Reliable data are not available on capital expenditure outturns; however, indications are that federal government investment may have risen slightly from 1998, but remained very depressed compared to pre-crisis levels.

57. **The government achieved a primary surplus of 1.6 percent of GDP in 1999**, a turnaround of 3 percentage points of GDP compared to 1998. Because of the impact of the devaluation on scheduled foreign interest payments, the improvement in the government's overall balance, measured on an accruals basis, was less marked. However, after taking account of the Paris Club rescheduling agreed in August 1999, the overall cash deficit also fell sharply, from 4.9 percent of GDP in 1998 to 1.5 percent of GDP in 1999.

58. **Federal expenditures have remained close to budget limits in the first half of 2000.** The 2000 budget, passed in late 1999, was predicated on a further increase in the primary surplus and involved a small recovery in federal noninterest spending in real terms, but a slight fall as a share of GDP. The budget projected little change in the composition of noninterest spending. The wage bill was set at 2.6 percent of GDP, close to the 1999 level. Federal social transfers are projected to increase slightly to 1.7 percent of GDP, while

[27] Box 4 discusses developments in budgetary arrears and offsets.

Box 4. Budgetary Arrears and Offsets

Russia has made considerable progress since the August 1998 crisis in eliminating expenditure arrears and offset operations, which have persistently hampered fiscal management during the transition period. Arrears and offsets reflected underlying failures of budgetary planning and execution. Budgets were routinely based on unrealistic revenue projections. As revenues came in below these projections, the government was forced to resort to expenditure sequestration and arrears. Budgetary arrears added to the widespread problem of nonpayment of taxes, both by directly damaging the ability of government suppliers to meet their tax obligations, and by undermining the moral authority of the government in demanding tax compliance in general. As the stock of both tax and spending arrears grew, the government employed various arrears clearance schemes, known collectively as offsets. However, these schemes, which were inherently nontransparent in their administration, only added to the incentives to delay tax payments and further undermined expenditure planning and management.

Reliable data on budgetary arrears and offsets are hard to identify, particularly for local governments, which are likely to have accounted for the bulk of the problem. At the federal level, noncash revenues peaked at 3.4 percent of GDP, or over 25 percent of total revenues, in 1996. By early 1998, the federal government recognized the damaging effects of offsets in a Presidential Decree banning such arrangements. There was also progress in reducing federal noninterest expenditure commitments in the first half of the year. However, arrears rose sharply in the aftermath of the August crisis, and the government again resorted to substantial use of offsets in the final months of 1998 and early 1999. These offsets, which were all booked into the 1998 accounts, totaled about 2 percent of GDP.

1999 represented a watershed year for federal offsets. The budget was based on realistic revenue projections, which were exceeded by the outcome. No accumulation of civilian arrears was recorded during the year. However, the authorities have indicated that budgetary arrears in the defense and security sector, which is not yet fully subject to Treasury control, rose by ½ percent of GDP in 1999. Realistic budgeting greatly aided the government in avoiding the use of new offset schemes. The government conducted an inventory of end-1998 arrears, identifying a stock of Rub 90 billion in arrears, and outlined plans for dealing with this stock. The government also ensured that pension arrears that had built up during 1998 were paid down by September 1999.

While there is reported to have been no net accumulation of local government arrears in 1999, nonmonetary tax and spending transactions remained widespread in subnational government. However, **the government took steps in January 2000 to tackle local offsets.** First, the Budget Code, effective from January 1, explicitly banned noncash transactions at all levels of government. Second, new arrangements were instituted for taxes shared between federal and local governments (including VAT and profit tax) whereby the federal share of taxes would now be calculated on the basis of total tax collections, rather than on the basis of cash receipts only, as had previously been the case. This change eliminated an important incentive for local governments to collect taxes in noncash form, since previously such receipts would not have been shared with the center. The authorities report that these initiatives have been successful in curtailing the use of offsets by local government, from perhaps 30 percent of revenues on average in 1999 to under 10 percent in the early months of 2000.

transfers to the regions are set to fall slightly to 1.2 percent of GDP. Capital expenditure was projected at 0.5 percent of GDP, marginally higher than the 1999 budget allocation. Defense spending was set at a level close to the 1999 allocation, at 2.6 percent of GDP. Noninterest expenditure in the first quarter of 2000 was 10.4 percent of GDP, bringing the primary surplus to 5.5 percent of GDP in the quarter, and preliminary estimates for the second quarter suggest spending remained close to budget limits.

Enlarged government

59. In contrast to the federal government, local government revenues fell slightly in 1999, by 0.4 percent of GDP. This was accounted equally by a reduction in federal transfers and a fall in own revenues. A number of mutually offsetting factors were responsible for the slight decrease in own revenues: centralization of revenues reduced local receipts by about 1 percent of GDP, while the introduction of the sales and imputed taxes raised revenues by 0.5 percent of GDP, and there appears to have been an increase in compliance.

60. **The local government fiscal balance improved in 1999, as expenditures were reduced by 1.5 percent of GDP in 1999**. Health and education spending each fell by about ¼ percent of GDP, while expenditure on housing was cut back by ¾ percent of GDP. The overall local government deficit fell from over 1 percent of GDP in 1998 to zero in 1999. This strengthening of the local government financial position continued in the early months of 2000, with a cash surplus of over 1 percent of GDP in the first quarter partly offset by an increase in arrears.

61. **As with local government, the financial position of the social extrabudgetary funds recorded a significant improvement between 1998 and 1999, as a result of reduced expenditures.** Consolidated revenues of the four main social extrabudgetary funds (Pension Fund, Employment Fund, Social Insurance Fund and Federal and Territorial Medical Insurance Funds), inclusive of transfers, were hardly changed between 1998 and 1999. However, total expenditures fell by 2 percent of GDP, causing a turnaround in the funds' consolidated overall balance, from a deficit of 1 percent of GDP to a surplus of the same magnitude. By far the most significant factor in the reduction in extrabudgetary fund expenditures was the fact that pensions were not fully indexed with inflation: pension fund spending, on a commitments basis, fell by about 30 percent in real terms between 1998 and 1999. The strong performance of the funds continued in early 2000, with the Pension Fund recording a surplus of 2.5 percent of GDP in the first quarter.

B. Fiscal Instruments and Institutions

Tax policy

62. **Reform of the tax system has long been recognized as a priority in Russia.** Serious problems in the tax system have arisen from the way taxes are administered, as discussed in the next section. However, the structure and legislative framework of the tax system also give rise to considerable distortions and inefficiencies in the economy, and themselves contribute very significantly to the difficulties in tax administration (Box 5).

Box 5. Russia's Tax Structure

Russian taxes are often criticized as being excessively high. The overall enlarged government tax burden, at about 36 percent of GDP in 1999, is higher than the OECD average of 33 percent, and the average of the transition countries of 28 percent, and is relatively high for a country of Russia's level of income.[1] Further, these comparisons mask differences in the statutory tax burden and in the incidence of taxes. The Russian tax system is marked by numerous exemptions, which narrow the tax base, and by poor tax compliance. These factors combine to make the statutory tax burden on those companies and individuals that are liable to tax considerably higher than suggested by the comparison of actual receipts. Marginal tax rates are generally quite high. Another problem is posed by the multiplicity of relatively small taxes, which combined amount to a sizable burden both in financial and administrative terms. There is no single estimate for the number of individual taxes that exist in Russia, but it is probably in the range of 50–100.[2] The majority of these taxes are levied at the regional and local level, and many of them are earmarked taxes for particular budgetary and extrabudgetary funds, the most significant of which are the federal and territorial road funds.

In many respects the structure of the Russian tax system is not far out of line with international standards. Receipts of the major taxes are shown in Figure 12. Russia is notably more reliant on taxes on corporate income, and less on taxes on personal income, than typical OECD countries, and, as other transition countries, it is somewhat more reliant on taxes on trade. However, VAT, excises, property taxes and social security receipts are very similar in Russia to both comparator groups.

The most significant disparity between Russia and the country averages shown is in the "other revenues" category. In Russia this amounts to 8 percent of GDP, compared to around 3 percent of GDP in the transition and OECD averages. Indeed, given the propensity for Russian budgetary entities to manage off-budget funds, financed by quasi-tax revenues, the true level of "other revenues" may well exceed the estimate shown.

The general structure of taxes in Russia has not changed very dramatically since the initial transition period. Figure 12 shows the evolution of revenues for the principal taxes over the period 1993 to early 2000. Although still high by international standards, the share of the profit tax in revenues has declined, while excises have risen. Taxes on trade fell moderately with the elimination of export taxes in 1996, when there was some compensating increase in import taxes, but have expanded more vigorously with the reintroduction of export taxes from 1999. The share of other main taxes has remained relatively stable.

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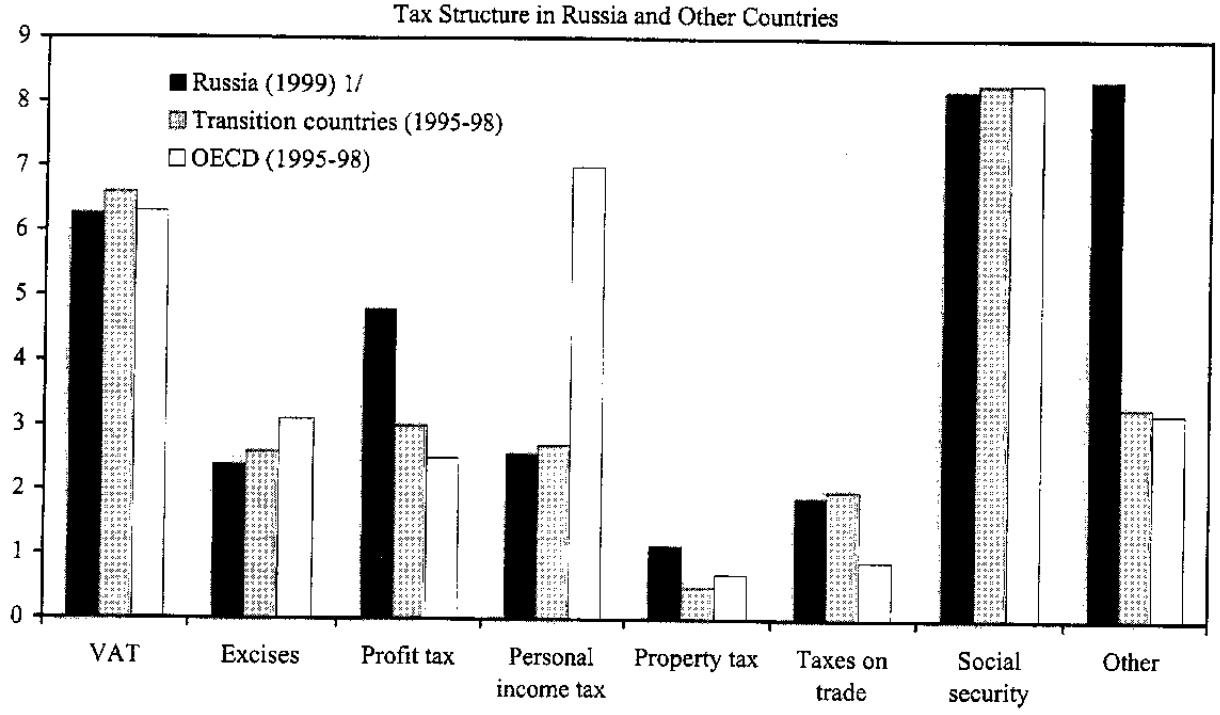
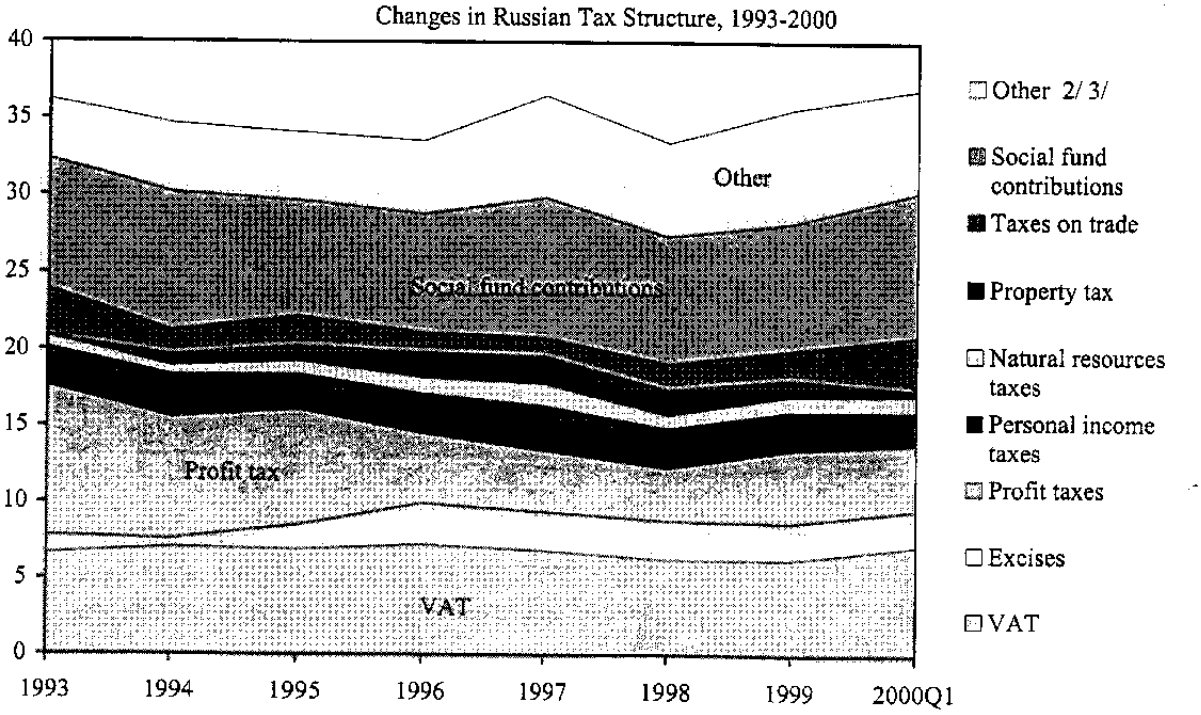
[1]Unweighted averages for 1995–98. Source: Tax Policy Handbook, IMF.

[2]Part of the uncertainty in this estimation arises because it is often difficult to draw the line between mandatory taxes and voluntary or user fees.

Figure 12. Russian Federation: International Comparisons of Tax Structures
(As percent of GDP)





Source: Russian authorities and Fund staff estimates.

1/ Enlarged government, including non-cash revenue.
2/ Based on preliminary information for 2000 Q1.
3/ Composition of "other" revenues changes over time.

63. The most significant change in tax policy in the period following the August 1998 crisis was the reintroduction of export taxes from the beginning of 1999. These taxes, intended to capture windfall gains to exporters from the depreciation of the ruble (and subsequently rising world energy prices), were initially imposed on oil, petrochemicals, metals and other commodities. The export tax base was subsequently expanded, and rates raised, through 1999. Taxes on natural gas exports were added in January 2000, and the scope of the taxes expanded to include exports to other CIS countries.[28] Some other tax policy changes were made in mid-1999, including the introduction of a tax on luxury automobiles and a reduction in the number of goods subject the preferential VAT rate. However, the number of items under the preferential VAT rate was expanded again in July 2000. A new regional sales tax was introduced from the beginning of 1999 to compensate the regions for the rise in the federal share of VAT from 75 to 85 percent.

64. **The new government has proposed a set of far-reaching tax policy reforms, many of which have already been passed into law.** In April 2000, the authorities sponsored the submission to the Duma of comprehensive proposals for Part 2 of the Tax Code, relating to tax policy. The first four chapters of the Code, relating to personal income tax, social fund contributions, VAT and excises, were passed by the parliament in July, as were reforms to turnover taxes. Proposals for other sections of Part 2 of the Tax Code, including profit tax reform, have not yet been considered by the parliament. The reforms are due to take effect from January 1, 2001. The main elements of the reforms are as follows:

- The current progressive structure of the personal income tax, with rates ranging from 12 percent to 30 percent, is to be replaced by a flat 13 percent rate. Standard personal deductions will be raised approximately five-fold and income tax exemptions are to be cut back.

- Social extrabudgetary fund contributions are to be unified into a single social tax, to be collected by the Ministry of Taxation and distributed to the individual funds. The basic rate of the new tax will be 35.6 percent, compared to the current total of 39.5 percent (including a 1 percent employee contribution to the Pension Fund, which is to be abolished). The social tax is to be regressive, with a top rate of 2 percent.[29]

- Apart from for oil and gas trade, VAT on trade within the CIS (which, unlike trade with other countries, is currently levied on an origin basis) is to be moved to the destination principle. Bilateral agreements with other CIS countries are due to be

[28] Notwithstanding the reintroduction of export taxes, it is not clear that the overall tax burden on the energy sector has increased. Staff estimates suggest that export taxes have captured about 20 percent of the windfall revenue gain to energy exporters since the pre-crisis period (see Box 3 and Annex II).

[29] The rate for the highest income bracket is to be set temporarily at 5 percent through 2001.

completed in time to implement this change by July 1, 2001. A significant number of VAT exemptions will be eliminated.

- Turnover taxes are to be sharply reduced, from a total of 4 percent of gross sales to 1 percent. The turnover tax financing local housing expenditures is to be replaced by a 5 percent municipal surcharge on the profit tax, while the turnover tax financing territorial road funds is to be reduced from 2 percent to 1 percent, compensated by a threefold increase in gasoline excises.[30] Other excise rates are also to be increased.

- Under the profit tax reform proposals submitted to the Duma, due to be considered in the fall of 2000, deductions are to be allowed for all legitimate business expenses. Depreciation allowances are to be raised to better reflect the economic costs of the deterioration of capital assets. The current investment allowance is to be eliminated, and various exemptions eliminated.

65. **Notwithstanding the important changes incorporated in Part 2 of the Tax Code, some significant problems in tax policy remain.** In particular, VAT is to remain on a cash, rather than an accrual, basis, and most excises are also to be levied on a cash basis. There also remain a large number of small-scale local taxes and fees, which impose a heavy administrative burden on companies and government, and provide fertile ground for corruption.

Tax administration

66. **Important steps have been taken to improve tax administration over the past two years, although serious problems remain.** The overall administrative costs of tax collection are high and existing laws impose a significant compliance burden on taxpayers. Nonetheless, since the August 1998 crisis, there has been some progress in developing an appropriate legal, institutional and administrative framework for tax administration in the Russian Federation (see Box 7 for discussion of changes to tax administration legislation).

67. **An analysis of arrears developments since the August 1998 crisis shows a marked improvement in federal tax collection.** A key indicator of high tax non-compliance in Russia is the level of tax arrears. As of January 1, 2000, the value of unpaid

[30] See Box 6 for further discussion of issues relating to the road funds.

Box 6. Federal and Regional Road Funds

The Federal Road Fund is an earmarked budgetary fund financed largely by a ½ percent turnover tax on enterprises. Regional Road Funds are in some cases incorporated in local government budgets, as earmarked budgetary funds, and in other instances are extrabudgetary funds, but all are financed mainly through turnover taxes equivalent on average to 2 percent of enterprises' gross sales. Road Funds also receive revenues from a 25 percent tax on the sale of gasoline, diesel fuel, lubricant oil and compressed liquified gas, and a 4 percent share of the imputed tax. In 1999, the most comprehensive estimate of total Road Fund expenditures at the federal and subnational government levels (including the extrabudgetary funds) was Rub 123.5 billion, or 2.7 percent of GDP.

Issues

- The present use of turnover taxes (which tax enterprises based on the volume of goods produced rather than profits earned) to finance the Road Funds represents a significant distortion in the tax system.

- Currently, because the existing Regional Road Funds are not subject to redistribution among constituent members of the Russian Federation, road expenditures are not necessarily dependent on need. Transfers from the Federal Road Fund to Regional Road Funds as equalization grants were only 8 percent of subnational road fund expenditures in 1999. The result has been excessive road construction in surplus regions and under-construction and maintenance in deficit regions. With the 2000 budget, a revised transfer formula was adopted, based on more objective assessments of spending needs and capacity to pay.

- The allocation of Road Fund expenditures is heavily biased towards new road construction against maintenance of existing roads. Data for 1999 show that the Federal Road Fund spent about 22.6 percent of its budget on road maintenance and reconstruction and 49 percent on new construction. In regional budgets, maintenance and reconstruction expenditures accounted for 37 percent, while new construction and capital investments accounted for 47 percent of expenditures. Total expenditures on new road construction amounted to 1.4 percent of GDP. Given that new road construction is more expensive than the maintenance of existing roads, this allocation of resources in the budgets may not be cost-effective, contributing to a net fall in the number of satisfactory roads.

- There is little transparency, monitoring and accountability of the Federal and Regional Road Funds. In particular, substantial tax offset operations have been suspected in Road Fund finances, particularly at the regional levels, which may have led to overcharging of the government by suppliers. The Road Funds have not been brought under the Treasury system.

Box 7. Tax Administration Legislation

A significant development for strengthening the legal framework for tax administration was the coming into effect of Part 1 of the Tax Code on January 1, 1999. This part of the Tax Code includes: (i) administrative provisions regulating relations between, and duties, of the taxpayers and authorities; (ii) general provisions structuring relations between the taxing authority of the federal and sub-national governments and restrictions of the ability of the government to include tax rules other than in the Code; and (iii) and substantive definitions and rules that relate to the imposition of specific taxes. Several amendments to Part 1 of the Tax Code, largely technical in nature, were enacted during 1999. These amendments included, for example, the elimination of the ceiling on interest accrued on overdue taxes. Part 1 of the Tax Code, however, still falls short of addressing several legal issues which affect the effective administration of the tax system. One example is the Constitutional Court's ruling that a taxpayer is deemed to have discharged his tax obligation once a duly completed payment order is provided to a bank. This has led to abuses and counter claims by taxpayers that they have paid their tax obligations even when such funds have not been credited to government accounts. Other issues include the overall balance of rights between the interests of the taxpayer and that of the tax administration; and the adequacy of the audit and enforcement powers granted to the Ministry of Taxes and Fees.

taxes at the consolidated level (federal and local governments) stood at Rub 378.2 billion (8.3 percent of GDP).[31] Of this amount, arrears to the federal government were estimated at Rub 246.7 billion. The increase in arrears to the federal budget was Rub 86.6 billion in 1999 (1.9 percent of GDP) compared to 4.1 percent of GDP in 1998 and 3.4 percent of GDP in 1997. Another key development in 1999 was that there were no reported tax offset schemes, a factor which in the past has provided incentives for the further build-up of tax arrears. The improved economic conditions, together with the tighter monitoring of some key large taxpayers, were factors which contributed to the slower growth in tax arrears. In 1999, some 242 large enterprises which account for 30 percent of federal tax collections (for example, the oil companies, Gazprom, the Railways, and UES) paid 90 percent of their declared liabilities compared to 81 percent for the wider population of all large taxpayers. In addition, with the exception of the oil companies and Gazprom, there appears to have been a decreased use of negotiated tax payments arrangements for some large taxpayers.[32]

68. **During 1999, the Ministry of Taxes and Fees took steps to strengthen large taxpayer unit operations.** The ministry developed formal role statements for each level of

[31] This excludes penalties and interest.

[32] A key feature of the tax payment arrangements with oil companies in 1999 was that they were gradually brought to full compliance with their declared liabilities by August, and the accumulated tax arrears were eliminated by the end of the year.

operation, introduced changes to current legislation to increase the ministry's powers to monitor the affairs of large taxpayers, created inter-district offices to help consolidate large taxpayer administration processes, and developed new registration procedures for the largest taxpayers.

69. **In order to improve the effectiveness of tax administration and reduce the compliance burden on tax payers, the Ministry of Taxes and Fees continued to implement a tax administration pilot project in two regions, Nizhny Novgorod and Volgograd.** The pilots are a precursor to a larger administration reform program and envisage new organizational arrangements based on a functional model, modern self-assessment procedures (including improved taxpayer education and services), increased automation and retraining of staff. The project, however, proceeded slower than envisaged in 1999.

70. **During 1999, the institutional framework for tax administration underwent some reform.** The ministry started establishing inter-regional tax inspectorates to deal with the most important tax administration issues, and closed offices in small regions. Staff positions were reduced from 197,000 to about 160,000, a reduction which accounted for half of all downsizing in the federal government.[33] Nonetheless, there are still over 2,600 local inspectorates (just about one in every local political unit), the majority of which are small and hardly viable. To address this issue, the ministry has started to develop plans for the creation of ten large data processing centers that would consolidate basic information processing tasks presently carried out in local inspectorates.

71. **Notwithstanding these efforts, an number of outstanding issues in tax administration need to be resolved.** The staffing of the Ministry of Taxes and Fees may need strengthening to increase its authority over regional levels. In parallel with the operation of a small and weak headquarters staff, regional and local tax administrations have been heavily reliant on subnational governments for financial support, which leads to dual subordination and accountability, often with conflicts of interest. Finally, there exists in Russia a multiplicity of agencies responsible for government revenue collection and associated enforcement actions (Ministry of Taxes and Fees, Tax Police, Customs Committee, and the Pension, Medical Insurance, Social Insurance and Employment Funds). This excessive number of agencies results in an inefficient and wasteful use of resources, coordination difficulties, and increased compliance costs for taxpayers.

Expenditure policy

72. **The expenditure control program implemented by the Russian government in 1998 represented the first attempt at a comprehensive overhaul of government**

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[33] Reductions in positions do not necessarily equate to reductions in employment, as part of the reduction may be accounted for by eliminations of vacancies.

expenditures. The program called for, among other things, a reduction in the list of direct recipients of federal government funds, rationalization of government employment, the phased elimination of subsidies, an inventory of off-budget funds (see below), fuel and energy consumption limits, an inventory of arrears for 1997 and their elimination, and a stock-taking of federally-owned assets. A comprehensive analysis of the effects of the expenditure plan is still not yet available, but preliminary indications are that there were some successes in several areas. The number of federal executive authorities and other legal entities that are direct recipients of federal money declined from 132 at the beginning of 1998 to 106 in the 1999 budget. In addition, the number of positions in the federal executive authorities was reduced during 1998 by about 79,000 or about 15 percent. In 1999, there were further reductions of 78,000 positions, or about 18 percent. The authorities also reported that military employment fell by around 12 percent in 1999, and other federal budgetary employees fell by about 2 percent. The government also made some progress in setting physical limits for the consumption of energy in the budget sector, and monitoring has been enhanced through the identification of a separate line item in the budget for energy consumption and separate contracts with suppliers based on budget and off-budget sources of finance (see also discussion on contract registering below).

73. **Despite this progress, several fundamental expenditure policy issues remain unresolved.** These include a wide range of mandates for expenditure imposed by the federal government on subnational authorities (typically categorical privileges), and expenditures on housing and communal services, much of which takes place at subnational government levels (see Box 8 for a discussion of fiscal federalism issues). The cost of mandated privileges for war, "veterans of labor," and invalids alone was 1.6 percent of GDP in 1999, most of which was not financed. A draft law suspending unfunded mandates at the federal level during 2000 has been submitted to the Duma. As far as housing and communal services are concerned, limited progress has been achieved since the beginning of the transition process in raising the effective standard for cost recovery for the public provision of housing and communal services. The total cost of subsidies for housing and communal services was estimated at 3.3 percent of GDP in 1999 (2.7 percent of GDP in budget subsidies from local governments). The effective cost recovery rate currently varies between 20 percent and 80 percent across regions and averages 40–45 percent. In addition, there is a need for reform of the health care education and defense sectors with a view to rationalizing government activities in these areas.

Public expenditure management

74. **A key strategy for strengthening budget discipline is the setting up of a system for monitoring and controlling the expenditure commitments that are made by spending units in government.** In July 1999, a system for recording all commitments at the Federal Treasury was introduced for certain spending codes—principally for spending on utilities. However, the pre-registering of expenditure commitments is yet to be extended to other expenditure categories. The move from expenditure registration to expenditure control in Russia is limited by some key factors. First, there is as yet no clear demarcation between spending units that are legitimately inside government, and those that are involved primarily

Box 8. Fiscal Federalism Issues

Throughout the transition period, Russia has suffered from impaired economic relations between different levels of government. These have contributed very significantly to weak revenue performance, poor expenditure planning and management, and broader problems in the economy such as nonpayments and the generally poor business environment. Nevertheless, there has recently been some important progress in this area. Some of the key issues in fiscal federal relations are discussed briefly below.

Russia's federalist tax system suffers from overlapping tax bases and a lack of control on the part of subnational governments over the revenues accruing to them. Competition for revenues between the different levels of government is a factor behind the multiplicity of taxes applying to businesses in Russia. Part of the reason for the expansion of minor taxes is regional and local governments' lack of control over their mainstream sources of revenue. Most regional revenues are from federal taxes, even in the cases (as in profit tax and personal income tax) when most or all of the receipts of the tax accrues to the region. Regions have little formal control over the bases or rates of these taxes. This provides an incentive to exercise informal control through the administration of the tax, leading to negotiated tax settlements and nonmonetary tax payments. In this situation the authorities have faced a choice between giving subnational government greater formal discretion over revenues, and imposing stronger federal authority to contain abuse of the current system. The authorities have generally chosen the latter course. They have outlined steps to prevent regional co-option of federal tax administrations, and instituted new tax-sharing rules from January 1, 2000 which reduce the incentive on regional governments to collect taxes in nonmonetary form (Box 4).

Intergovernment expenditure assignments do not reflect spending needs or financing capacity, and lack an underlying legal framework. During the transition period, expenditure responsibilities have been passed down from federal to regional government in an ad hoc manner, without ensuring that adequate financing capacity is in place, and in the absence of an adequate legal foundation for the assignment. As well as leading to distortions in expenditure allocations, this has resulted in a serious problem of unfunded expenditure mandates, which were estimated by a Ministry of Finance survey to have amounted to as much as 8 percent of GDP in 1998.

in commercial activities and should be classified as enterprises outside the budget. Second, the Civil Code may need to be amended to define and limit the rights of government spending units to enter into contracts with suppliers.

75. **For effective expenditure management in Russia, there is a need to eliminate off-budget activities of budget institutions.** As pressure on their regular budgets have increased since the economic transition began, off-budget activities of budget institutions have

increased. In August 1998, the government issued a resolution which prescribed that all off-budget funds should be consolidated and registered with the Federal Treasury. However, an executive order in November 1999 clarified that as a first step, the requirement would be that spending units should open off-budget accounts only at the central bank, and with the permission of the Ministry of Finance.

76. **Effective federal budget execution in Russia remains limited because of the lack of complete coverage of the Treasury system.** Some progress was made in mid-1999 when the operations of all earmarked funds—with the exception of the Road Fund—were brought under the Federal Treasury. The original timetable was to include the Road Fund in the Treasury by end-1999, but this objective was not met, and the government has now decided to abolish the Federal Road Fund as an earmarked fund from 2001. The original plan to extend the Treasury to the extrabudgetary Employment Fund by end-1999 also proved impractical, largely because the fund uses its own classification system which is incompatible with the budget classification. The Employment Fund is now to be abolished and its functions brought onto the budget (see discussion below on extrabudgetary funds).

77. **The Russian defense establishment has largely operated as an enclave that is effectively independent of the budget and normal budgetary practices.** This is mainly manifested through the traditional use of a separate budget classification system, a large number of social spending units under the defense umbrella, which parallel and overlap with other parts of the budget, and a large number of military-related agencies that have become semi-autonomous or civilian and placed off-budget (for example the Federal Defense Road Building Directorate). Beginning in 1998, the Ministry of Defense and the Federal Treasury have been implementing two pilot projects whereby the Federal Treasury processes the Ministry's payment orders. As of January 2000, the main military budget department of the Ministry of Defense has been executed by the Federal Treasury and starting in July 2000, the budgets of second and third level units of the ministry are being progressively transferred to the Treasury.

78. **The completion of the development of the Treasury system remains a major challenge for the government.** Apart from the establishment of a network of regional and local Treasury offices, the other pillars of a fully operational treasury system are only partially established. A major step in the process was achieved in June 1999, when the Federal Treasury Development Program was approved by government resolution. This resolution called for, among other things, the implementation of a single Treasury account in the central bank, the centralization of all government operations in the Treasury accounts, and the implementation of uniform accounting and reporting systems. As part of the process, a long term Treasury system modernization program, with World Bank support, is also being implemented.

C. The Social Extrabudgetary Funds

79. **The financial position of the four main social extrabudgetary funds (Pension Fund, Employment Fund, Social Insurance Fund and Federal and Territorial Medical**

Insurance Funds) has improved in 1999 and 2000. The funds typically combine insurance with various forms of social assistance programs. However, many problems remain, including low and not well-targeted benefits, inefficiencies in the administration of the funds, and in the case of the Pension Fund, long-term viability is threatened by certain structural features.

Pension Fund

80. **The improved performance of the Pension Fund in 1999 and early 2000 largely reflects the decline in real pensions paid.** This decline amounted to almost 40 percent in real terms in 1999, despite nominal increases of 12 percent in May and 15 percent in November. Due to its improved financial position, the Pension Fund in 1999 could eliminate all its arrears, and make three lump sum payments of 50 rubles. Pensions were increased by 20 percent in February 2000 (with minimum pensions indexed by 27 percent) and 7 percent in May. However, average pensions remain substantially lower at 80 percent of the official subsistence level, compared to about 142 percent in the pre-crisis period.

81. **Currently, the ratio between the maximum and minimum pension is relatively compressed (about 3 to 1) and the Pension Fund has been pursuing a policy of decompression of pensions.** Central to this is the increase in the individual pension coefficient.[34] As of May 1, 2000 the ceiling on individual pension coefficients was increased from 0.7 to 0.8, and a further increase to 0.95 has been announced to take effect from August 1, 2000. According to the present law on pensions, this ratio can be increased to no more than 1.2.

82. **The Pension Fund continues to suffer from a number of structural problems which threaten the viability of the present pay-as-you-go system.** The system dependency ratio is relatively high (around 58 percent) and demographic projections point to a further increase. The current system of indexing pensions to wages may not be viable over the medium term as real growth in the economy picks up, and the present retirement age, 55 for women and 60 for men, remains relatively low. There is also a need to strengthen the link between contributions and benefits and to remove the subsidies implicit in early retirement provisions.

Employment Fund

83. **The Employment Fund, which is due to be abolished, has had a limited ability to provide an adequate social safety net for the unemployed.** In 1999, the expenditures and revenues of the Employment Fund amounted to only 0.3 percent of GDP and only 1.2 million unemployed persons were registered, compared to an estimated actual unemployment of

[34] The individual pension coefficient is defined as the ratio of the ceiling on the individual wage that can be used for calculating pensions and the average wage reported by the Russian Statistical Agency.

8.7 million. In mid-2000, the average benefit was about 30 percent of the average wage. About 40 percent of all registered unemployed receive the minimum benefit, which equals the minimum wage. The Employment Fund as currently constituted mixes insurance with social assistance. Around 15 percent of the registered unemployed have no work history. In addition, another 60 percent of claimants resigned voluntarily from their previous employment.

84. **The inefficiency of the Employment Fund is apparent in other ways.** Despite only serving 1.2 million registered unemployed, the fund employs 35,000 people, 5,000 of whom are directly involved in collecting and processing the 1.5 percent payroll tax. The fund also spends a significant part of its outlays (roughly one-fifth in 1999) on job creation and retraining activities, the former of which in particular may represent ineffective use of resources. Given that 80 percent of the fund's revenues remain in the regions, these expenditures do not always reflect the labor market needs of the localities. As part of the reforms incorporated in Part 2 of the Tax Code, the Employment Fund is to be abolished from January, 2001, and its functions integrated into the federal budget.

Social Insurance Fund

85. **The Social Insurance Fund collected revenues in excess of 1 percent of GDP during 1999, a large share of which was retained by enterprises for the provision of various benefits.** Although the payroll tax earmarked for the Social Insurance Fund is only 5.4 percent, additional insurance contributions were introduced in early 2000 to finance benefits for work-related illness and disability. Such insurance contributions range from 0.2 percent to 10.7 percent of the payroll depending on occupational risk. The average additional insurance contribution is 1 percent.

86. **The Social Insurance Fund has over time always run a surplus and, given that a significant amount of resources is kept at the enterprise level, this has created incentives for expenditures by enterprises and workers that may bear little relationship to the intended functions of the fund.** The fund spends a significant amount of its resources on sick leave benefits. In 1999, these outlays amounted to over 40 percent of all expenditures. Given that this benefit is not borne by enterprises, there is little incentive to ensure that the claims are justified. Second, the fund issues subsidized vouchers for recreation and sanatoria treatment; in 1999, these totaled more than 20 percent of all expenditures. The average full value of a voucher was equivalent to between 1½ and 4 times the average wage. A financial management review of the fund is about to be undertaken, as well as a review of its core functions.

Medical Insurance Funds

87. **The Medical Insurance Funds ran a small surplus in 1999 and collected revenues equivalent to about 1 percent of GDP.** The funds are financed by a payroll contribution of 3.6 percent. The funds consist of a federal mandatory fund and territorial medical insurance funds. Of the 3.6 percent in payroll contributions, 0.2 percent goes to the federal fund. The

bulk of the revenues collected by the federal fund is transferred to the territorial funds as an equalization grant. The operations of the medical insurance funds suffer from a number of problems. In addition to the payroll contributions, territorial funds are supposed to be supplemented by transfers from local budgets, particularly to cover health programs for the unemployed and the elderly. In reality, these transfers are insufficient and the result is that there is a prevalence of informal user charges at medical establishments. The transfer of resources from the funds to medical establishments is still not based on need or a capitation formula, but rather resource indicators, such as the number of beds. In general, there is little transparency and accountability in the spending of the funds' resources. The government is currently contemplating a financial management review of the funds.

Table 22. Russian Federation: Summary Operations of the Enlarged Government, 1994-99

	1994	1995	1996	1997	1998	1999 Q1	1999 Q2	1999 Q3	1999 Q4	1999
					(In billions of rubles)					
Enlarged government balance (-deficit) 1/	-63.6	-94.4	-190.4	-198.8	-215.2	-63.9	-55.3	-16.1	-38.4	-173.8
Revenues 2/	211.5	524.8	719.1	920.0	900.8	249.9	376.0	418.3	574.8	1618.9
Expenditures 2/	275.2	619.2	909.5	1118.9	1116.0	313.8	431.3	434.4	613.2	1792.7
Federal government balance	-69.7	-88.5	-179.6	-179.8	-158.5	-71.0	-69.0	-37.4	-36.8	-214.3
Revenues	72.1	198.1	268.1	310.4	296.3	88.6	136.9	160.3	222.2	608.0
Expenditures	141.8	286.7	447.7	490.2	454.9	159.6	205.9	197.8	259.0	822.3
of which: interest	12.0	54.7	126.8	118.0	122.4	57.5	84.3	70.5	75.3	287.6
Local government balance	3.1	-4.9	-8.1	-21.9	-32.7	0.5	3.3	1.7	-7.7	-2.2
Revenues	110.0	239.7	350.9	466.7	435.9	106.2	172.3	182.7	258.0	719.4
of which: transfers	25.1	28.2	64.3	84.6	53.6	16.8	19.6	17.5	27.4	81.3
Expenditures	106.8	244.7	359.1	488.6	468.6	105.8	169.0	181.0	265.8	721.6
Extrabudgetary funds balance	2.9	0.1	-2.7	2.9	-24.1	6.6	10.4	19.6	6.2	42.8
Revenues	55.3	123.6	174.2	250.9	234.0	77.2	91.8	98.0	123.6	390.6
of which: federal transfers	0.7	8.4	9.9	23.4	11.9	5.4	5.4	5.3	1.6	17.7
Expenditures	52.3	123.5	176.9	248.0	258.0	70.6	81.5	78.4	117.4	347.8
Financing of the enlarged government	63.7	94.4	190.4	198.8	215.2	63.9	55.3	16.1	38.4	173.8
Net foreign financing	0.2	-3.2	14.5	40.3	55.1	0.1	-6.0	1.5	14.6	10.3
Foreign disbursements	5.4	11.0	28.8	50.7	93.9	9.1	8.2	13.1	26.2	56.6
Principal repayment	-5.3	-14.2	-14.3	-10.4	-38.8	-8.9	-14.2	-11.6	-11.6	-46.3
Domestic financing	63.5	92.7	173.0	144.9	89.6	40.6	22.4	-18.7	-8.8	35.5
Domestic banking system	54.3	79.4	157.6	43.9	57.4	32.4	18.9	-8.8	-0.3	42.2
Monetary authorities	49.4	25.6	48.8	30.4	84.9	43.5	19.2	-18.1	-15.7	28.9
Rest of the banking system	4.9	53.8	108.7	13.5	-27.5	-11.1	-0.3	9.3	15.4	13.3
Net credit from commercial b	-6.1	-0.2	170.7	-9.1	42.4	-2.3	-4.6	-2.6	12.4	2.9
Securities held by commercial	11.0	51.1	-61.9	22.6	-69.9	-8.8	4.3	11.9	3.0	10.4
Other domestic financing	9.2	13.4	15.4	100.9	32.2	8.2	3.5	-9.9	-8.5	-6.7
Privatization proceeds	0.7	4.7	2.7	23.5	17.8	1.0	0.0	-2.7	0.7	-1.0
Net proceeds from sale of gold, gems and precious metals	3.9	10.4	18.3	-2.2	6.2	4.9	4.1	6.7	0.7	16.5
Securities held by nonbank sector	5.5	-1.1	-5.0	78.0	8.2	2.3	-0.6	-13.9	-9.9	-22.2
Domestic principal repayment	-0.9	-0.6	-0.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Other financing (including arrears)	...	4.9	2.9	13.7	70.6	23.2	38.9	33.3	32.6	128.0
					(In percent of GDP)					
Federal govt overall balance	-11.4	-5.7	-8.4	-7.1	-5.9	-8.5	-6.6	-2.9	-2.6	-4.7
Federal govt primary balance	-9.4	-2.2	-2.5	-2.5	-1.3	-1.6	1.5	2.6	2.8	1.6
Revenue	11.8	12.9	12.5	12.3	11.0	10.6	13.1	12.6	16.0	13.4
Expenditure	23.2	18.6	20.9	19.4	16.9	19.1	19.8	15.5	18.6	18.1
Local govt overall balance	0.5	-0.3	-0.4	-0.9	-1.2	0.1	0.3	0.1	-0.6	0.0
Revenue (including transfers)	18.0	15.6	16.4	18.5	16.2	12.7	16.5	14.3	18.5	15.8
Revenue (net of transfers)	13.9	13.7	13.4	15.1	14.2	10.7	14.7	12.9	16.6	14.0
Expenditure	17.5	15.9	16.7	19.4	17.4	12.6	16.2	14.2	19.1	15.9
Extrabudgetary funds overall balance	0.5	0.0	-0.1	0.1	-0.9	0.8	1.0	1.5	0.4	0.9
Revenue (including transfers)	9.0	8.0	8.1	9.9	8.7	9.2	8.8	7.7	8.9	8.6
Revenue (net of transfers)	8.9	7.5	7.7	9.0	8.2	8.6	8.3	7.3	8.8	8.2
Expenditure	8.6	8.0	8.2	9.8	9.6	8.4	7.8	6.1	8.4	7.7
Enlarged govt overall balance	-10.4	-6.1	-8.9	-7.9	-8.0	-7.6	-5.3	-1.3	-2.8	-3.8
Enlarged govt primary balance	-8.4	-2.6	-3.0	-3.2	-3.4	-0.8	2.8	4.3	2.7	2.5
Revenue	34.6	34.1	33.5	36.5	33.4	29.9	36.1	32.8	41.3	35.6
Expenditure	45.0	40.2	42.4	44.4	41.4	37.5	41.4	34.0	44.1	39.4
GDP (in billion rubles)	611	1,540	2,146	2,522	2,696	837	1,042	1,276	1,391	4,545

Source: Ministry of Finance, CBR, Goskomstat, and IMF staff calculations.

1/ On a cash basis before 1996, includes wage arrears, arrears in transfers to the Pension Fund in 1997, accumulation of all federal spending arrears and local wage and pension arrears in 1998. In 1999 includes accumulation of civilian arrears.
2/ Consolidated revenues and expenditures (excluding intragovernmental transfers) and including both cash and noncash items.

Table 23. Russian Federation: Federal Government Budget Execution, 1994-2000

	1994	1995	1996	1997	1998	1999 Q1	1999 Q2	1999 Q3	1999 Q4	1999	2000 Q1
						(In billions of rubles)					
Revenue	72.1	198.1	268.1	310.4	296.3	88.6	136.9	160.3	222.2	608.0	221.9
Cash revenue	69.6	168.9	195.7	252.0	242.9	88.6	136.9	160.3	222.2	608.0	221.9
Noncash revenue 1/	2.5	29.3	72.4	58.5	53.4	0.0	0.0	0.0	0.0	0.0	0.0
VAT	31.4	78.0	115.4	117.9	117.4	33.9	46.7	59.8	78.3	218.8	84.6
Other taxes on goods and services	4.5	17.7	51.4	53.4	58.1	22.1	19.3	18.6	30.6	90.6	54.1
Nonenergy excise taxes	...	2.4	5.0	11.7	16.4	3.0	3.4	2.5	5.1	13.9	4.5
Energy excise taxes	...	15.2	44.0	38.7	36.0	17.9	14.7	14.5	23.1	70.3	21.7
Profit taxes	17.1	41.0	34.8	33.1	32.3	8.4	20.1	22.7	27.9	79.1	27.2
Personal income taxes	0.1	3.3	5.1	1.7	0.0	0.0	4.9	7.1	7.9	19.8	4.7
Natural resources taxes	1.0	3.0	4.5	7.0	3.3	1.3	2.3	2.8	4.1	10.5	3.5
Taxes on trade	9.6	29.7	27.6	30.1	45.3	14.4	21.8	19.8	30.3	86.3	48.2
Export taxes	3.2	15.7	8.0	0.1	0.0	2.2	7.9	10.0	18.7	38.8	32.8
Import tariffs	2.7	8.5	14.8	26.6	28.9	9.7	11.8	11.4	14.4	47.4	11.9
Other (excl. gold transactions)	3.6	5.5	4.8	3.4	16.4	2.5	2.1	-1.7	-2.8	0.1	3.5
Budgetary funds	3.0	15.4	22.9	38.3	26.3	4.4	10.7	17.2	22.8	55.2	15.4
Other	5.4	10.0	6.4	28.8	13.5	4.1	11.0	12.3	20.4	47.8	10.4
Expenditure	141.8	286.7	447.7	490.2	454.9	159.6	205.9	197.8	259.0	822.3	219.7
Non-interest expenditure	129.8	231.9	320.9	372.2	332.4	102.1	121.6	127.2	183.8	534.7	144.8
Government administration 2/	14.4	4.5	5.4	9.7	10.3	2.4	3.1	3.1	6.2	14.8	4.3
International activity	...	21.5	20.6	4.3	9.0	4.9	8.7	9.2	13.3	36.1	9.2
Defense	28.0	47.6	63.9	79.7	60.6	16.3	24.3	30.4	45.1	116.1	42.0
Law enforcement and justice	10.8	19.2	28.5	43.7	35.3	7.9	13.8	13.6	25.1	60.4	18.9
Science	...	4.8	6.6	9.5	5.7	1.5	2.2	2.4	5.2	11.2	1.8
Education	5.5	8.6	11.4	14.4	13.7	2.3	5.8	4.1	8.8	20.9	4.9
Health and emergency management	2.3	5.9	8.3	15.5	13.4	2.6	3.8	4.2	7.0	17.5	3.5
Social policy	1.0	3.8	9.9	22.7	36.7	10.9	11.3	14.3	12.5	49.1	17.4
Environment	...	1.3	2.0	2.5	2.2	0.3	0.7	1.0	0.8	2.9	0.6
Culture and mass media	1.7	2.8	2.0	2.5	2.3	0.4	1.0	1.1	2.4	4.9	1.1
Industry, energy and construction	18.2	25.7	26.2	26.6	13.3	1.9	3.1	3.8	8.1	16.9	3.5
Agriculture and fishing	...	6.2	8.5	12.1	4.0	0.3	4.1	0.9	3.7	9.1	0.9
Transportation and communication	...	0.5	0.7	3.8	1.1	0.1	0.2	0.2	0.4	0.9	0.2
Net lending	14.0	22.8	19.6	18.3	9.5	9.6	3.3	0.6	-4.1	9.4	8.7
Intergovernment transfers	25.1	31.0	55.2	55.9	51.4	13.0	16.8	15.9	25.4	71.1	18.8
Budgetary funds	3.0	14.1	16.5	29.1	24.0	4.7	10.6	18.3	21.7	55.3	12.8
Other 3/	5.8	11.7	35.7	21.8	40.0	23.1	8.5	4.0	2.3	37.9	-3.7
o/w accumulation of arrears	...	...	...	10.4	12.1	4.9	7.6	7.1	3.7	23.3	4.2
Interest payments	12.0	54.7	126.8	118.0	122.4	57.5	84.3	70.5	75.3	287.6	74.9
External debt	3.1	16.9	22.8	23.8	41.7	20.2	27.2	16.7	24.7	88.9	24.7
Accumulation of external arrears	0.0	0.0	0.0	0.0	15.0	26.7	34.5	33.3	30.2	124.8	34.6
Domestic debt	8.9	37.8	104.0	94.2	65.7	10.6	22.6	20.4	20.3	73.9	15.6
Primary Balance (deficit -)	-57.7	-33.8	-52.8	-61.8	-36.1	-13.5	15.3	33.1	38.4	73.3	77.1
Overall balance (deficit -)	-69.7	-88.5	-179.6	-179.8	-158.5	-71.0	-69.0	-37.4	-36.8	-214.3	2.2
						(In percent of GDP)					
Revenue	11.8	12.9	12.5	12.3	11.0	10.6	13.1	12.6	16.0	13.4	16.0
Cash	11.4	11.0	9.1	10.0	9.0	10.6	13.1	12.6	16.0	13.4	16.0
Noncash	0.4	1.9	3.4	2.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Expenditure	23.2	18.6	20.9	19.4	16.9	19.1	19.8	15.5	18.6	18.1	15.8
Interest	2.0	3.6	5.9	4.7	4.5	6.9	8.1	5.5	5.4	6.3	5.4
Noninterest	21.2	15.1	15.0	14.8	12.3	12.2	11.7	10.0	13.2	11.8	10.4
Primary balance	-9.4	-2.2	-2.5	-2.5	-1.3	-1.6	1.5	2.6	2.8	1.6	5.5
Overall balance	-11.4	-5.7	-8.4	-7.1	-5.9	-8.5	-6.6	-2.9	-2.6	-4.7	0.2

Sources: Ministry of Finance; and IMF staff estimates.

1/ Includes ruble offsets (decree 71) and tax offset in 1996, ruble offsets (decree 20) reverse monetary offsets in 1997, and targeted financing in 1998.

2/ In 1994 includes science and international activity.

3/ Includes unallocated noncash expenditures in 1996, accumulation of wage arrears and arrears in transfers to the Pension Fund in 1997, accumulation of all expenditure arrears in 1998, and accumulation of civilian arrears in 1999 and 2000.

Table 24. Russian Federation: Regional and Local Government Operations, 1994-99

	1994	1995	1996	1997	1998	1999 Q1	1999 Q2	1999 Q3	1999 Q4	1999
					(In billions of rubles)					
Revenue	110.0	239.7	350.9	466.7	435.9	106.2	172.3	182.7	258.0	719.4
VAT	11.6	28.2	39.7	54.7	51.8	13.2	13.6	14.7	24.4	65.9
Profits taxes	31.7	75.8	64.1	69.0	61.5	14.8	34.4	35.4	54.3	138.9
Excises	3.0	6.5	8.2	12.4	15.3	4.1	5.6	6.3	8.3	24.2
Sales tax	0.0	0.0	0.0	0.0	0.0	2.2	3.9	6.0	7.2	19.3
Personal income taxes	17.4	33.2	51.4	73.4	71.1	19.6	21.7	22.9	32.8	97.0
Natural resource payments	2.0	9.3	16.8	28.6	19.0	3.9	6.1	9.5	14.5	34.1
Property taxes	4.8	16.0	36.6	46.9	46.5	4.3	16.2	13.8	17.5	51.9
Transfers	25.1	28.2	64.3	84.6	53.6	16.8	19.6	17.5	27.4	81.3
Other 1/	14.3	42.5	69.7	97.0	117.1	27.5	51.2	56.5	71.7	206.9
Expenditure	106.8	244.7	359.1	488.6	468.6	105.8	169.0	181.0	265.8	721.6
Education	22.0	47.8	72.4	94.5	84.1	21.2	34.8	27.4	42.6	126.1
Health	17.4	37.4	52.5	67.0	59.5	15.0	21.3	23.0	33.7	92.9
Housing & municipal services	33.9	61.3	89.5	107.5	95.6	16.1	26.1	33.0	49.4	124.6
Social security	6.5	16.9	26.9	32.4	28.0	6.5	10.1	10.4	16.0	43.1
Other 1/ 2/	27.0	81.2	117.8	187.3	201.3	47.0	76.7	87.1	124.1	334.9
Overall balance (- deficit)	3.1	-4.9	-8.1	-21.9	-32.7	0.5	3.3	1.7	-7.7	-2.2
Financing	-3.1	4.9	8.1	21.9	32.7	-0.5	-3.3	-1.7	7.7	2.2
Foreign financing	0.0	0.0	0.0	5.2	4.0	0.0	0.0	0.0	1.0	1.0
Banking system	-3.8	-0.1	1.9	3.1	9.3	-6.5	-9.0	-5.3	7.8	-13.0
of which: monetary authorities	-2.4	1.2	0.0	-1.5	1.5	-2.5	-2.2	-1.9	-0.3	-6.9
Nonbank	0.6	5.1	6.3	13.6	19.3	1.4	3.3	4.8	5.4	15.0
Privatization	0.6	1.3	1.9	4.7	2.6	0.5	0.7	0.6	1.5	3.4
Other	...	3.8	4.4	8.9	16.8	0.9	2.6	4.2	3.9	11.6
					(In percent of GDP)					
Revenue	18.0	15.6	16.4	18.5	16.2	12.7	16.5	14.3	18.5	15.8
VAT	1.9	1.8	1.8	2.2	1.9	1.6	1.3	1.2	1.8	1.4
Profits taxes	5.2	4.9	3.0	2.7	2.3	1.8	3.3	2.8	3.9	3.1
Excises	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.6	0.5
Personal income taxes	2.8	2.2	2.4	2.9	2.6	2.3	2.1	1.8	2.4	2.1
Natural resource payments	0.3	0.6	0.8	1.1	0.7	0.5	0.6	0.7	1.0	0.7
Property taxes	0.8	1.0	1.7	1.9	1.7	0.5	1.6	1.1	1.3	1.1
Federal transfers	4.1	1.8	3.0	3.4	2.0	2.0	1.9	1.4	2.0	1.8
Other 1/	2.3	2.8	3.3	3.8	4.3	3.3	4.9	4.4	5.2	4.6
Expenditure	17.5	15.9	16.7	19.4	17.4	12.6	16.2	14.2	19.1	15.9
Education	3.6	3.1	3.4	3.7	3.1	2.5	3.3	2.1	3.1	2.8
Health	2.8	2.4	2.4	2.7	2.2	1.8	2.0	1.8	2.4	2.0
Housing & municipal services	5.6	4.0	4.2	4.3	3.5	1.9	2.5	2.6	3.5	2.7
Social security	1.1	1.1	1.3	1.3	1.0	0.8	1.0	0.8	1.1	0.9
Other 1/ 2/	4.4	5.3	5.5	7.4	7.5	5.6	7.4	6.8	8.9	7.4
Overall balance (- deficit)	0.5	-0.3	-0.4	-0.9	-1.2	0.1	0.3	0.1	-0.6	0.0
Financing	-0.5	0.3	0.4	0.9	1.2	-0.1	-0.3	-0.1	0.6	0.0
Foreign financing	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.0
Banking system	-0.6	0.0	0.1	0.1	0.3	-0.8	-0.9	-0.4	0.6	-0.3
of which: monetary authorities	-0.4	0.1	0.0	-0.1	0.1	-0.3	-0.2	-0.1	0.0	-0.2
Nonbank	0.1	0.3	0.3	0.5	0.7	0.2	0.3	0.4	0.4	0.3
Privatization	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1
Other	0.0	0.2	0.2	0.4	0.6	0.1	0.3	0.3	0.3	0.3

Sources: Ministry of Finance, CBR and staff estimates.

1/ Including, from 1995, all territorial road funds.
2/ Including, from 1998, local wage arrears.

Table 25. Russian Federation: Extrabudgetary Fund Operations, 1994-99

	1994	1995	1996	1997	1998	1999 Q1	1999 Q2	1999 Q3	1999 Q4	1999
					(In billions of rubles)					
Revenue	55.3	123.6	174.2	250.9	234.0	77.2	91.8	98.0	123.6	390.6
Pension Fund	38.3	85.2	127.3	181.0	161.6	55.8	65.4	71.5	84.2	276.9
Employment Fund	3.0	6.2	6.9	8.8	8.4	2.6	3.4	3.0	4.0	13.0
Social Insurance Fund	7.5	17.6	25.4	31.5	32.5	9.8	12.3	10.9	18.9	51.9
Medical Insurance Fund	6.6	14.6	14.6	29.6	31.5	9.0	10.7	12.6	16.5	48.8
Expenditure	52.3	123.5	176.9	248.0	258.0	70.6	81.5	78.4	117.4	347.8
Pension Fund 1/	37.3	85.8	127.1	176.6	190.2	48.9	58.6	55.2	82.4	245.1
Employment Fund	2.4	6.4	7.1	8.8	8.5	2.6	3.1	3.0	3.3	12.0
Social Insurance Fund	6.6	16.6	24.8	30.4	31.1	8.2	10.7	11.8	13.2	43.9
Medical Insurance Fund	6.0	14.6	14.6	28.9	31.7	8.7	10.3	12.2	15.8	47.0
Float	0.0	0.2	3.3	3.3	-3.4	2.1	-1.2	-3.8	2.7	-0.1
Balance, total extrabudgetary funds	2.9	0.1	-2.7	2.9	-24.1	6.6	10.4	19.6	6.2	42.8
Financing	-2.9	-0.1	2.6	-2.9	24.1	-6.6	-10.4	-19.6	-6.2	-42.8
of which: monetary authorities	-1.6	0.3	-0.2	-2.2	-0.6	-1.4	-1.7	-6.5	-0.2	-9.8
of which: pension arrears	...	...	...	...	26.3	-8.4	-7.1	-10.8	0.0	-26.3
					(In percent of GDP)					
Revenue	9.0	8.0	8.1	9.9	8.7	9.2	8.8	7.7	8.9	8.6
Pension Fund	6.3	5.5	5.9	7.2	6.0	6.7	6.3	5.6	6.1	6.1
Employment Fund	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.3
Social Insurance Fund	1.2	1.1	1.2	1.2	1.2	1.2	1.2	0.9	1.4	1.1
Medical Insurance Fund	1.1	0.9	0.7	1.2	1.2	1.1	1.0	1.0	1.2	1.1
Expenditure	8.6	8.0	8.2	9.8	9.6	8.4	7.8	6.1	8.4	7.7
Pension Fund 1/	6.1	5.6	5.9	7.0	7.1	5.8	5.6	4.3	5.9	5.4
Employment Fund	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3
Social Insurance Fund	1.1	1.1	1.2	1.2	1.2	1.0	1.0	0.9	0.9	1.0
Medical Insurance Fund	1.0	0.9	0.7	1.1	1.2	1.0	1.0	1.0	1.1	1.0
Float	0.0	0.0	0.2	0.1	-0.1	0.3	-0.1	-0.3	0.2	0.0
Balance, total extrabudgetary funds	0.5	0.0	-0.1	0.1	-0.9	0.8	1.0	1.5	0.4	0.9
Financing	-0.5	0.0	0.1	-0.1	0.9	-0.8	-1.0	-1.5	-0.4	-0.9
of which: monetary authorities	-0.3	0.0	0.0	-0.1	0.0	-0.2	-0.2	-0.5	0.0	-0.2
of which: pension arrears	...	...	...	...	1.0	-1.0	-0.7	-0.8	0.0	-0.6

Source: Extrabudgetary funds and CBR.

1/ Measured on a cash basis prior to 1998.

FISCAL ADJUSTMENT AFTER THE CRISIS

Summary

88. At the enlarged government level there has been both a substantial increase in revenues and a substantial decrease in expenditures since the pre-crisis period. The increase in revenues accrued mainly to the federal budget, while the expenditure reductions were shared across the different levels of government. The federal government benefited at the expense of the regions both by increases in the federal share of taxes and by reductions in federal transfers to regions.

89. **Tax policy changes have been the most important factor behind the improvement in revenues.** Changes in existing tax bases due to movements in the exchange rate and terms of trade have had a small negative effect on overall revenues, mainly because the domestic tax base (on which the enlarged government is more dependent than on trade-related revenues) shrank relative to GDP because of the real depreciation. Improved compliance is estimated to have made a positive contribution to revenues, particularly when considering cash revenues alone. Taxation of the export sector has increased since the pre-crisis period, but by much less than the increase in revenues accruing to the sector. The real depreciation has been a far more important factor in the increase in export revenues than changes in export prices. **Expenditure has been reduced, relative to GDP, in almost all spending categories, with particularly large declines in capital spending, housing expenditures, and pensions.**

Revenue overview

90. **Table 26 provides a summary of revenue trends since the August 1998 crisis.** The first column in the table represents the "pre-crisis" revenue situation, defined as the average level from 1995 to 1997. The subsequent columns—for 1998, 1999 and preliminary estimates for the outturn in the first half of 2000—show the cumulative change from the pre-crisis average; the cumulative change is then broken down into the following component factors:

- Discretionary policy changes and adjustments, including changes in tax rates, adjustments in tax shares between levels of government, as well as changes in the coverage of individual taxes or redefinition of the tax base. Some of the most significant changes have been the removal and subsequent reintroduction of export tariffs, the lowering of the profit tax rate, and the reallocation of VAT and income tax shares in favor of the federal government; a full list is provided in Table 30.

- **Exogenous changes due to relative movements in tax bases** as a share of GDP. Most significant here has been the strong real exchange rate depreciation following the 1998 crisis, which raised the share of trade in GDP while reducing the share of domestic activity. Export prices have also fluctuated during the period in question, further affecting the taxable base. In addition to directly affecting the relative shares

of trade and domestic activity, real exchange rate and price movements have also affected profits and real wages, raising the profit tax base while reducing real wage income as a share of GDP.

- **Implicit changes in other factors, including underlying tax compliance**; this is derived as a residual, after accounting for the above identifiable explanatory factors.

It should be noted that there are strong interlinkages between these factors. For example, while the reintroduction of export taxes was a discretionary measure, it was taken in response to the real depreciation. Similarly compliance is likely to have been affected by changes in profitability due to movements in exchange rates and export prices.

91. **Except where noted below, the revenue data refer to total collections, including offset transactions and other types of non-cash collection**. The rise of "cash" collections at the federal level is an extremely important budgetary trend; however, it is not possible to separately analyze the behavior of cash revenues in the economy, since consistent data are not available on a tax-by-tax basis at the federal level, nor are data on cash collections available at the regional and local level.

Enlarged government revenue

92. **Enlarged government revenue fell immediately following the crisis, and has subsequently increased significantly**. Enlarged revenue averaged 35 percent of GDP in 1995–97, and fell to 33.4 percent of GDP in the crisis year 1998. Revenues subsequently recovered to 35.6 percent in 1999, more than half a percent of GDP higher than the pre-crisis average; during the first half of 2000, preliminary estimates show that enlarged revenue has increased substantially, to almost 40 percent of GDP.

93. **The exogenous effect of exchange rate and terms of trade changes on enlarged revenue has been negative in the post-crisis period, on the order of 1 percent of GDP in 1998–2000**. This occurred because enlarged government is relatively more dependent on domestic tax revenues than on trade-related revenues. Reflecting the strong real depreciation following the crisis, the base for the former shrank substantially as a percent of GDP; meanwhile, the positive contribution of import duties was dampened by a sharp decline in import volume. In addition to the direct effect of real exchange rate movements on the relative size of tax bases, real depreciation has also contributed to an increase in real profits, while the share of the wage bill in GDP has shrunk since the crisis; the net effect of these trends on enlarged revenue was negative through 1999 before turning positive in the first half of 2000.

94. **The negative influence of real depreciation at the enlarged government level has been more than offset by increased revenues from new tax policy measures.** These raised enlarged revenue by more than 1 percent of GDP in 1998, 2 percent of GDP in 1999 and over 4 percent of GDP during the first half of 2000. By 2000, nearly half of this increase reflected the reintroduction of export tariffs. Other major factors included the addition of new fees for

earmarked budgetary funds, an increase in turnover taxation for local road funds, and the introduction of local sales and imputed taxes.

95. **The effect of other factors, including tax compliance, was strongly negative in 1998 but became significantly positive by 2000.** The data imply that underlying tax compliance fell strongly in 1998 (accounting for most of the crisis-related revenue decline in that year), before recovering in 1999; by 2000, compliance and other factors led to an increase of nearly 2 percent of GDP compared to the pre-crisis level.

Federal revenue

96. **The federal budget has been the primary beneficiary of positive revenue effects following the crisis.** While revenue at the federal level fell from 12.5 percent of GDP in 1995–97 to 11 percent in 1998, it subsequently rose to 13.4 percent of GDP in 1999 and over 17 percent in the first half of 2000.

97. **On the whole, the federal government has been relatively unaffected by the exogenous effects of real exchange rate changes or terms of trade shocks.** This reflects the fact that trade-based taxes accrue solely to the federal government, so that the federal revenue base is rather evenly balanced between domestic and trade-related sources of income; relative declines in the former are offset by increases in the latter.

98. **At the same time, virtually all tax policy adjustments made through mid-2000 served to increase federal revenue.** The removal of export tariffs (which actually occurred during 1996) meant that 1998 revenue was 0.5 percent of GDP lower than the 1995–97 average; the reintroduction of these tariffs in 1999 had a net positive effect and by 2000 were responsible for an increase of 2 percent of GDP. In addition, in 1999 the federal budget reduced the regional share of federal taxes, introduced new earmarked budgetary funds and increased the coverage of non-tax collections.

99. **As with the enlarged government, other factors (including compliance) resulted in a sharp decline in federal revenues in 1998, followed by a strong recovery in 1999 and 2000.** Compliance and other unidentified factors increased revenues by 0.5 percent of GDP in 1999 and a further 0.8 percent during the first half of 2000.

100. **The federal revenue picture improves even more significantly when offset and other non-cash transactions are excluded.** As shown in Table 26, offset transactions amounted to 2–3 percent of GDP in 1995–97 and 2 percent of GDP in 1998 before disappearing in 1999. As a result, in 1999 federal "cash" revenue was 3.5 percent of GDP higher than in 1995–97, compared to an increase of less than 1 percent of GDP for overall federal revenue; as of the first half of 2000, estimated cash revenue had increased by more than 7 percent of GDP. Attributing the elimination of noncash transactions to improved compliance, changes in compliance and other unidentified factors are estimated to have been responsible for approximately 3 percentage points of this increase.

Local revenue

101. **Local budgets have not fared nearly as well as their federal counterpart since the crisis.** While local budgets (including territorial road funds) recorded revenues of 17 percent of GDP on average in the pre-crisis period, revenue has fallen steadily since—to 16.2 percent of GDP in 1998 and 15.5 percent of GDP by the first half of 2000.

102. **The decline in local revenues since 1995-97 was due to the real exchange rate movement both through the direct effect on the tax base and indirectly through a reduction in federal transfers.** These budgets are heavily dependent on domestic revenues, so that the exogenous relative shrinkage of the domestic tax base arising from the real depreciation resulted in a fall of more than 1 percent of GDP compared to the 1995–97 level. Federal transfers fell because they are traditionally tied to domestic tax revenue of the federal budget; as the share of these taxes shrank as a result of the real exchange rate depreciation, so did the share of transfers.

103. **Discretionary tax policy changes helped local revenues in 1998 and 1999; however, by 2000 this effect had dissipated.** The net effect of policy changes was highly positive in 1998, reflecting increased coverage of a broad range of taxes (especially budgetary funds) together with a shift in de facto tax shares in favor of the regions. In 1999, this effect dissipated somewhat, as increased tax coverage was offset by lower profit tax rates and in particular by a reallocation of tax shares to the federal budget in the latter part of the year. 2000 saw a further reallocation in favor of the federal budget, reflecting the full-year effect of the shift in tax shares together with the introduction of new tax splitting rules by the Federal Treasury to deter the widespread use of offsets at the local level.

104. **Tax compliance and other factors had a negative effect on local revenues during the crisis, but as with the federal budget, made a significant positive contribution in 1999 and again in the first half of 2000.**

Extrabudgetary funds

105. **Revenues of extrabudgetary funds were quite stable through 1999.** They averaged 8.8 percent of GDP in 1995–97 and remained very close to this level in 1998 and 1999, before rising slightly in the first half of 2000, thanks to improved compliance in Pension Fund collections and other factors.

Expenditure overview

106. **Despite the increase in enlarged government revenue, expenditures have fallen significantly as a percent of GDP since the crisis.** Summary expenditure data are given in Table 27; the table shows that, on a commitments basis, enlarged expenditure fell from 43 percent of GDP in 1995–97 to 39 percent of GDP in 1999 and is estimated to have fallen below 36 percent of GDP in the first half of 2000. Non-interest expenditure declined from 38 percent to 30 percent of GDP. The fall in expenditures was concentrated in "core" non-interest expenditures, i.e. excluding extrabudgetary funds, earmarked budgetary funds and

intergovernmental transfers; these expenditures fell by 8 percent of GDP, or nearly one-third in real terms.

107. **The decline in expenditure has been fairly equally split between federal and local governments**. In sharp contrast to rising federal revenues, by the first half of 2000 federal expenditures had fallen by over 3 percent of GDP compared to the 1995–97 average; given that interest commitments as a percent of GDP rose following the crisis, non-interest federal expenditures recorded an even greater decline, of more than 4 percent of GDP. The largest adjustment has been in capital expenditures, which fell from 1.6 percent of GDP before the crisis to only 0.5 percent of GDP in 2000. Transfers to regions and "other" non-interest expenditures were also heavily cut. There has been a more moderate decline in wages and social transfers, which declined by roughly 20 percent in real terms, and defense spending has been roughly constant. The only area which recorded an increase were expenditures of earmarked budgetary funds.

108. **By the first half of 2000, local expenditure is also estimated to have fallen by 3 percent of GDP from the 1995–97 level.** While no breakdown is available for local budgets by economic classification, an examination of the functional expenditure figures shows that the decline has been concentrated in health, education and particularly housing expenditures; presumably this reflects in part shrinkage in real wages and transfer payments. "Other" expenditures have also declined by 0.7 percent of GDP, while budgetary fund expenditures jumped significantly.

109. **Expenditures of extrabudgetary funds, on a commitment basis, have fluctuated over the last six years, but fell significantly after 1998**. Extrabudgetary expenditures rose from 8.8 percent of GDP in the pre-crisis period to 9.6 percent in 1998; however, in 1999 they fell to 7.7 percent of GDP and continued to decline in the first half of 2000. This decline primarily reflects a fall of roughly 30 percent in real pension expenditure in 1999 compared to the 1995–97 level.

Calculation of export windfall

110. **An important question for budgets at all levels has been the size of the revenue "windfall" to exporters from the post-crisis exchange rate and price movements, as well as the authorities' success in taxing this windfall.** Table 28 shows movements in export prices and the real effective exchange rate between 1995 and 1999, and Table 29 provides estimates of the related export revenue windfall and the level of taxation of energy exporters.

111. **Dollar export prices declined significantly in the immediate post-crisis period, before recovering sharply in the first half of 2000.** During 1998, energy export prices fell by more than 25 percent, and non-energy export prices fell by over 10 percent. In 1999, world oil prices strengthened significantly while natural gas export prices continued to fall; overall, energy export prices were still more than 15 percent below the pre-crisis level. The situation had changed substantially by the beginning of 2000, with a 50 percent increase in

world oil prices and a rise of more than 25 percent in natural gas export prices. As a result, the combined export price index rose somewhat compared to the 1995–97 average.

112. **The magnitude of price fluctuations has been overshadowed by real exchange rate movements.** For 1998 as a whole, the real effective exchange rate had already depreciated by 10 percent compared to the 1995–97 average, and in 1999 this indicator was nearly 45 percent lower than the pre-crisis level. The first half of 2000 saw some real appreciation, but the situation was not significantly different from that in 1999.

113. **Thus, in 1999 and 2000, exporters experienced a significantly positive revenue windfall.** In 1998, the negative effects of unfavorable export price movements outweighed the improvement in revenues due to the real depreciation late in the year, so that the total average effect on revenues was –3 percent of GDP. However, in 1999, the full-year effect of real depreciation meant that even with continued depressed export prices, the overall revenue windfall was more than 6 percent of GDP. By the beginning of 2000, with the sharp reversal in export prices, the estimated size of the windfall had risen to 14 percent of GDP.

114. **Care is required in interpretation of windfall estimates.** One caveat to the above calculations is that the figures indicate the change from the average position of exporters in 1995–97. This should not be interpreted as an indication of a change from some "equilibrium" or trend values, but merely as an illustration of the impact of movements in oil prices and the exchange rate (although for oil prices, the average value in 1995–97 would appear to be close to a longer term average). Also, calculations of revenue windfalls do not necessarily equate to changes in profitability, particularly when substantial elements of exporters' costs are denominated in foreign exchange.

115. **Overall tax collections from exporters have followed movements in estimated windfall revenues; however, the magnitude of the taxation response has been muted.** Detailed data on taxation is available only for energy exporters (defined as all energy producers less electricity producers); figures for consolidated government collections are shown in Table 29. The table shows that taxation of energy exporters has moved broadly in line with the estimated windfall, declining in 1998 and then rising in 1999 and again in 2000. In 1998, the revenue position of energy exporters worsened by some 2.5 percent of GDP compared to the 1995–97 average, and total taxation of the sector declined by 2.2 percent of GDP. Subsequently energy export revenues increased by more than 4 percent of GDP in 1999, whereas overall energy taxation increased significantly less, by slightly over 1 percent of GDP. During the first half of 2000, revenues increased by a further 7 percent of GDP, while tax collections rose by less than 3 percent of GDP.

116. **The taxation response to windfall revenues has been much stronger for "cash" collections.** If one excludes offsets and non-cash settlements from tax collections (Table 29), the increase in effective taxation by the first half of 2000 compared to the pre-crisis average was significantly higher, at about 4 percent of GDP.

Table 26. Russian Federation: Explaining Revenue Movements, 1995-2000
(In percent of GDP, unless otherwise indicated)

	1995-97 average	1998	1999	2000 H1 Est.
Federal revenue	12.5	11.0	13.4	17.3
Total change in federal revenue from pre-crisis baseline	0.0	-1.5	0.9	4.8
Due to discretionary policy changes/adjustments	0.0	-0.7	1.1	4.2
Export taxation	0.0	-0.5	0.2	1.8
Other	0.0	-0.2	0.9	2.4
Due to exogenous structural effects	0.0	0.0	0.1	0.2
Real exchange rate/terms of trade	0.0	0.2	0.0	-0.3
Changes in profitability and real wages	0.0	-0.2	0.1	0.4
Due to other factors (residual)	0.0	-0.8	-0.3	0.5
Memo: Federal "cash" revenue 1/	9.9	9.0	13.4	17.3
Local revenue 2/	17.0	16.2	15.8	15.8
Change in local revenue from pre-crisis baseline	0.0	-0.9	-1.2	-1.3
Due to declining transfers	0.0	-0.9	-1.1	-0.8
Due to discretionary policy changes/adjustments	0.0	1.9	1.1	0.1
Due to exogenous structural effects	0.0	-1.3	-1.2	-1.1
Real exchange rate/terms of trade	0.0	-1.1	-1.3	-1.5
Changes in profitability and real wages	0.0	-0.2	0.1	0.5
Due to other factors (residual)	0.0	-0.6	0.0	0.5
Extrabudgetary fund revenue	8.8	8.7	8.6	9.1
Change in extrabudgetary revenue from pre-crisis baseline	0.0	-0.2	-0.2	0.3
Due to discretionary policy changes/adjustments	0.0	0.0	0.0	0.0
Due to exogenous structural effects	0.0	0.3	-0.5	-0.4
Due to other factors (residual)	0.0	-0.5	0.2	0.7
Enlarged government revenue 3/	34.9	33.4	35.6	39.7
Change in enlarged revenue from pre-crisis baseline	0.0	-1.5	0.7	4.8
Due to discretionary policy changes/adjustments	0.0	1.2	2.1	4.2
Export taxation	0.0	-0.5	0.2	1.8
Other	0.0	1.7	2.0	2.5
Due to exogenous structural effects	0.0	-0.7	-1.3	-1.1
Real exchange rate/terms of trade	0.0	-0.7	-1.0	-1.6
Changes in profitability and real wages	0.0	-0.1	-0.3	0.5
Due to other factors (residual)	0.0	-1.9	-0.1	1.7
Memorandum items:				
Exports (in percent of GDP)	22.1	27.7	40.4	43.5
Imports (in percent of GDP)	8.7	11.9	11.7	10.9
Production for domestic consumption (in percent of GDP)	77.9	72.3	59.6	56.5
Exports (in billions of US$)	87.4	74.9	74.7	46.0
Non-CIS imports (in billions of US$)	34.5	32.3	21.6	11.5
Index of export prices (in percent)	100.0	81.6	85.5	106.4

Sources: Russian authorities and Fund staff estimates.

1/ Excluding offset and non-cash transactions.
2/ Figures for local budgets include territorial road funds.
3/ Excluding intrabudgetary transfer income.

Table 27. Russian Federation: Summary Expenditure Indicators, 1995-2000
(In percent of GDP, commitment basis)

	1995-97 total	1998	1999	2000 H1 Est.
Federal expenditure	19.7	16.9	17.6	16.3
Interest	4.8	4.5	6.3	5.3
Non-interest	13.9	11.4	10.0	9.7
Wages	3.2	3.2	2.6	2.5
Social transfers	1.9	1.9	1.5	1.6
Transfers to regions	2.1	1.9	1.4	1.4
Non-wage defense/security	2.3	2.0	2.2	2.0
Capital expenditure	1.6	0.2	0.4	0.5
Other	2.9	2.3	1.9	1.6
Budgetary funds	1.0	0.9	1.2	1.3
Local expenditure	17.7	17.4	15.9	14.7
"Core" expenditure	16.3	15.2	13.4	12.1
Housing	4.2	3.5	2.7	2.4
Health	2.5	2.2	2.0	1.8
Education	3.5	3.1	2.8	2.5
Other	6.2	6.4	5.8	5.5
Budgetary funds	0.0	0.3	0.3	0.6
Territorial road funds	1.4	2.0	2.2	1.9
Extrabudgetary expenditure	8.8	9.6	7.7	7.1
Pension Fund	6.4	6.9	5.4	5.0
Employment Fund	0.4	0.3	0.3	0.2
Social Insurance Fund	1.2	1.2	1.0	1.0
Medical Insurance Funds	0.9	1.2	1.0	0.9
Enlarged government expenditure 1/	42.7	41.5	39.0	35.6
Non-interest expenditure 1/	37.9	36.9	32.6	30.2
"Core" consolidated expenditure 2/	28.2	24.8	22.0	20.4

Sources: Russian authorities and Fund staff estimates.

1/ Excluding intrabudgetary transfer expenditure.
2/ Non-interest expenditure, excluding budgetary and extrabudgetary funds and intrabudgetary transfers.

Table 28. Russian Federation: Export Price and Real Exchange Rate Indicators, 1995-2000

	1995	1996	1997	1998	1999	2000 H1 Est.
	(1995-97 average = 100)					
Energy export price index	94.3	105.2	100.5	74.6	83.3	120.7
Oil exports	90.8	107.5	101.7	69.0	92.9	139.9
Natural gas exports	99.7	101.6	98.7	83.0	69.0	91.7
Non-energy export price index	105.8	98.9	95.3	88.7	87.8	92.1
Total export price index	100.1	102.1	97.9	81.6	85.5	106.4
Real effective exchange rate index	84.9	108.4	106.7	89.5	55.9	59.0
	(In billions of U.S. dollars)					
Total exports	82.7	90.6	89.0	74.9	74.7	46.0
Total exports (constant dollar price)	81.7	89.2	91.4	90.1	87.4	44.3
Non-CIS imports	31.5	33.1	38.8	32.3	21.6	11.5
	(In percent of GDP)					
Export	24.5	21.6	20.4	27.7	40.4	44.6
Non-CIS	9.3	7.9	8.9	11.9	11.7	11.1

Sources: Russian authorities and Fund staff estimates.

Table 29. Russian Federation: Export Windfall Calculations, 1995-2000

	1995	1996	1997	1998	1999	2000 H1 Est.
Total windfall			(In percent of GDP)			
Energy exports	0.6	-0.1	-0.4	-2.5	2.1	8.9
Oil exports	0.2	0.1	-0.2	-1.9	2.3	7.2
Natural gas exports	0.4	-0.2	-0.2	-0.6	-0.2	1.7
Non-energy exports	2.6	-1.0	-1.2	-0.8	4.5	5.0
Total exports	3.2	-1.1	-1.6	-3.3	6.6	13.9
Windfall from dollar price movements						
Energy exports	-0.6	0.4	0.0	-3.4	-3.5	3.5
Oil exports	-0.6	0.4	0.1	-2.4	-0.8	4.2
Natural gas exports	0.0	0.1	-0.1	-1.0	-2.8	-0.7
Non-energy exports	0.8	-0.1	-0.6	-2.2	-3.4	-1.9
Total exports	0.3	0.3	-0.5	-5.6	-6.9	1.6
Windfall from exchange rate movements (using constant dollar prices)						
Energy exports	1.1	-0.6	-0.5	1.0	5.7	5.4
Oil exports	0.7	-0.3	-0.3	0.5	3.1	3.0
Natural gas exports	0.4	-0.2	-0.2	0.4	2.5	2.4
Non-energy exports	1.7	-0.8	-0.6	1.4	7.8	6.9
Total exports	2.9	-1.4	-1.1	2.4	13.5	12.3
Taxation of the export sector			(Total collections, in percent of GDP)			
Energy producers (excluding electricity)	...	6.0	5.9	3.8	5.1	7.7
Domestic taxes (including export excises)	...	5.7	5.9	3.8	4.5	5.9
Export tariffs	...	0.3	0.0	0.0	0.6	1.8
Non-energy exporters	...	...	...	...	...	--
Domestic taxes	...	...	...	...	...	--
Export tariffs	...	0.1	0.0	0.0	0.3	0.8
			(Estimated cash collections, in percent of GDP)			
Energy producers (excluding electricity)	...	3.6	4.2	2.4	5.1	7.7
Domestic taxes (including export excises)	...	3.4	4.2	2.4	4.5	5.9
Export tariffs	...	0.3	0.0	0.0	0.6	1.8
Non-energy exporters	...	...	...	...	...	--
Domestic taxes	...	...	...	...	...	--
Export tariffs	...	0.1	0.0	0.0	0.3	0.8

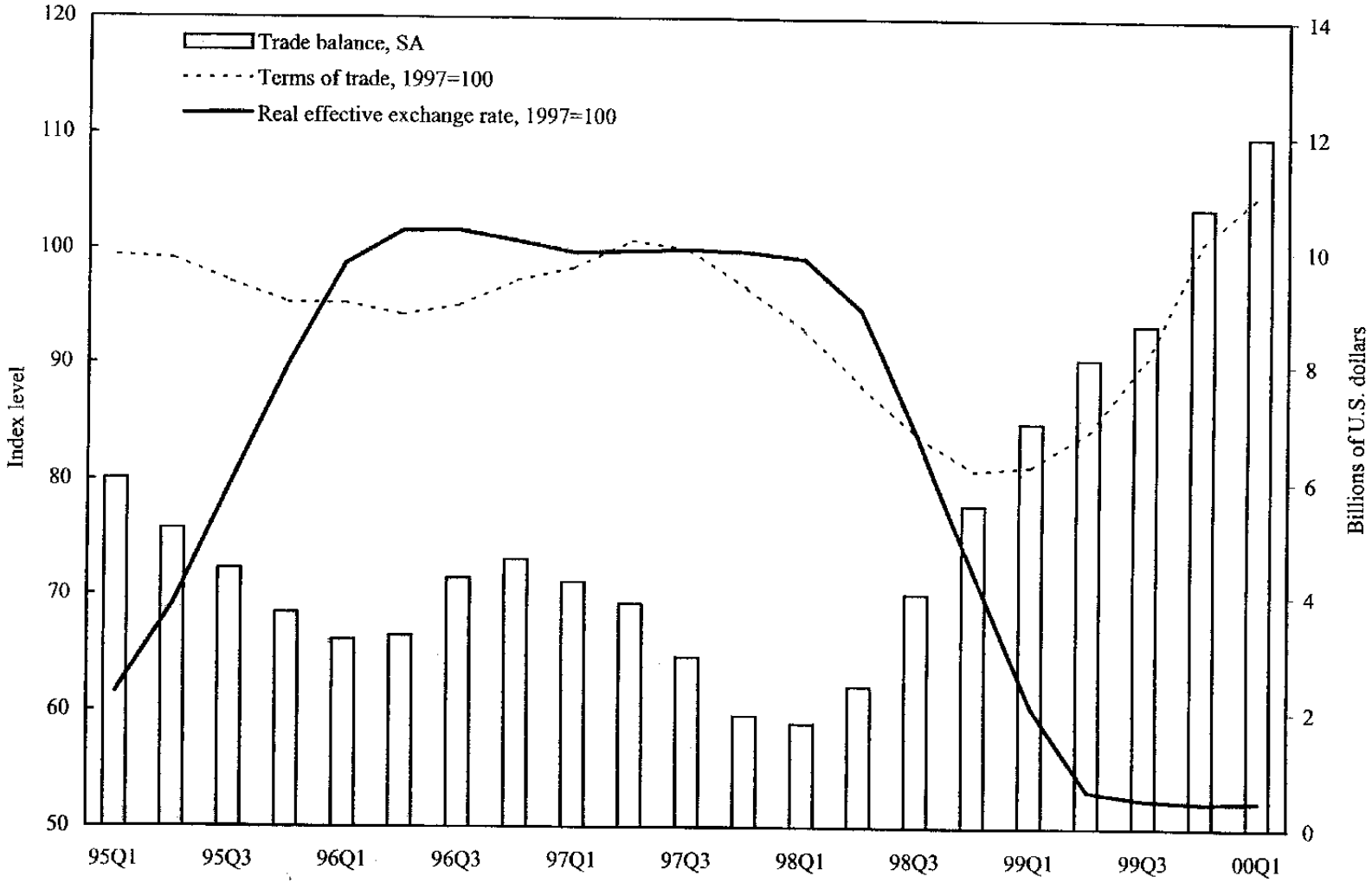
Sources: Russian authorities and Fund staff estimates.

Table 30. Russian Federation: Tax Policy Changes and Other Adjustments, 1995-2000
(In percent of GDP)

	1995-97 total	1998	1999	2000 H1 Est.
Federal government revenue	12.5	11.0	13.4	17.3
Of which policy adjustments	0.0	-0.7	1.1	4.2
Increased export taxation	0.0	-0.5	0.2	1.8
Domestic VAT share adjustment	0.0	-0.4	0.0	0.4
Domestic VAT export rebate adjustment	0.0	0.0	0.0	1.0
Increased import VAT coverage	0.0	0.2	0.2	0.2
Profit tax rate decline	0.0	0.0	-0.2	-0.5
Profit tax share adjustment	0.0	0.1	0.1	0.6
Income tax share adjustment	0.0	-0.2	0.3	0.2
Changes in non-tax revenue coverage	0.0	0.0	0.2	0.2
Changes in budgetary fund coverage	0.0	0.0	0.2	0.2
Federal revenue adjusted for policy changes	12.5	11.7	12.3	13.1
Local government revenue	17.0	16.2	15.8	15.8
Local revenue net of transfers	14.4	14.4	14.2	13.9
Of which: Policy adjustments	0.0	1.5	0.4	-0.5
Memo: Decline in federal transfers as share of domestic taxes	0.0	-0.5	-0.7	-0.6
Policy adjustments net of transfers	0.0	1.9	1.1	0.1
Domestic VAT share adjustment	0.0	0.4	0.0	-0.4
Profit tax rate decline	0.0	0.0	-0.2	-0.5
Profit tax share adjustment	0.0	-0.1	-0.1	-0.6
Income tax share adjustment	0.0	0.2	-0.3	-0.2
Property tax adjustment	0.0	0.3	-0.1	-0.2
Increased excise coverage	0.0	0.1	0.1	0.1
Introduction of sales and imputed taxes	0.0	0.1	0.6	0.7
Changes in non-tax revenue coverage	0.0	0.1	0.1	0.0
Changes in budgetary fund coverage	0.0	0.3	0.4	0.6
Increases in territorial road fund coverage	0.0	0.6	0.6	0.6
Local revenue adjusted for policy changes	17.0	14.7	15.5	16.3
Net of transfers	14.4	12.5	13.2	13.8
Enlarged government revenue	34.9	33.4	35.6	39.7
Of which policy adjustments	0.0	1.2	2.1	4.2
Increased export taxation	0.0	-0.5	0.2	1.8
Domestic VAT export rebate adjustment	0.0	0.0	0.0	1.0
Increased import VAT coverage	0.0	0.2	0.2	0.2
Profit tax rate decline	0.0	0.0	-0.4	-1.0
Property tax adjustment	0.0	0.3	-0.1	-0.2
Increased excise coverage	0.0	0.1	0.1	0.1
Introduction of sales and imputed taxes	0.0	0.1	0.6	0.7
Changes in non-tax revenue coverage	0.0	0.1	0.3	0.2
Changes in budgetary/road fund coverage	0.0	0.9	1.2	1.4
Enlarged revenue adjusted for policy changes	34.9	32.2	33.5	35.5

Sources: Russian authorities and Fund staff estimates.

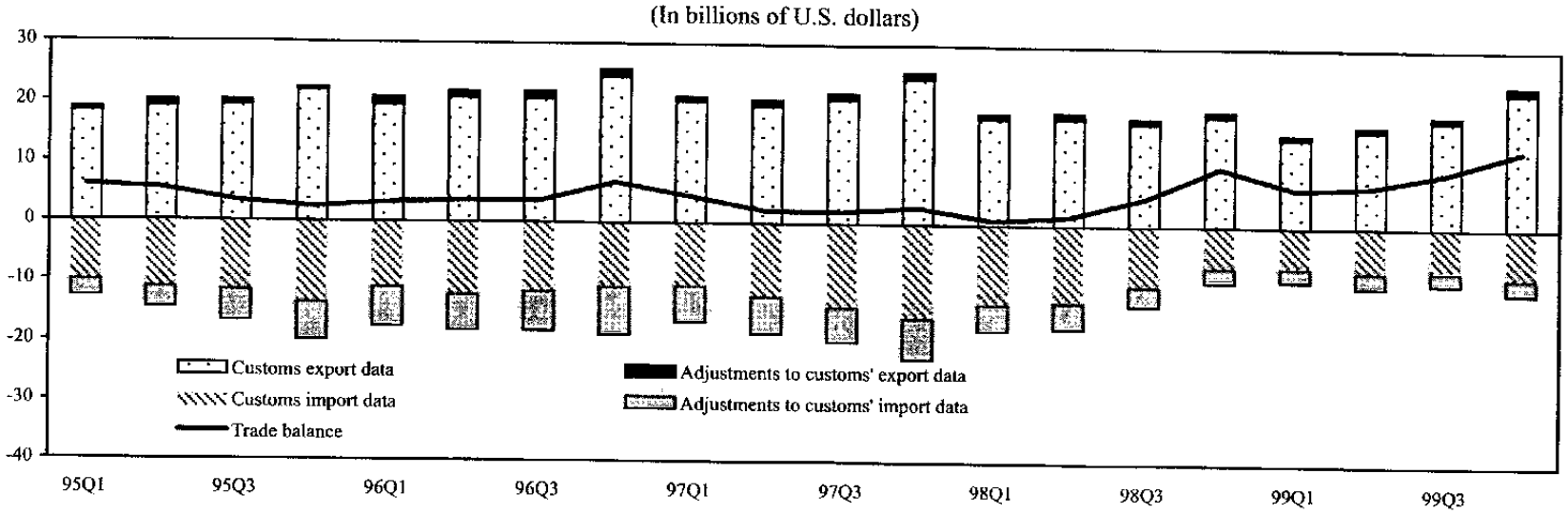
Figure 13. Russian Federation: Merchandise Trade Balance, Terms of Trade, and Real Effective Exchange Rate, 1995-2000 1/

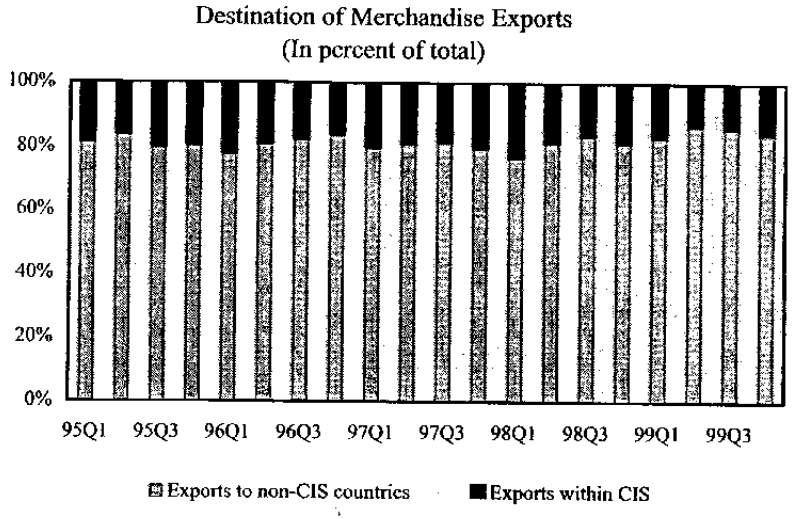


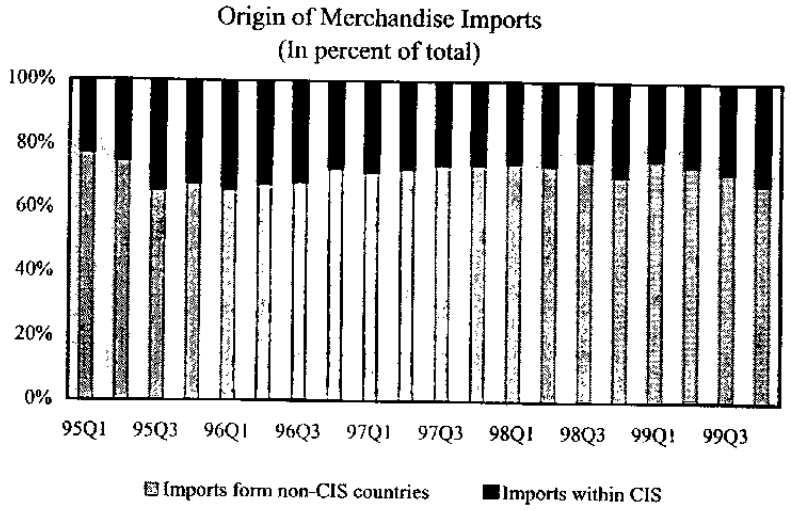
Source: Russian authorities and Fund staff estimates.

1/ Four-quarter moving averages.

Figure 14. Russian Federation: Quarterly Merchandise Trade, 1995-99

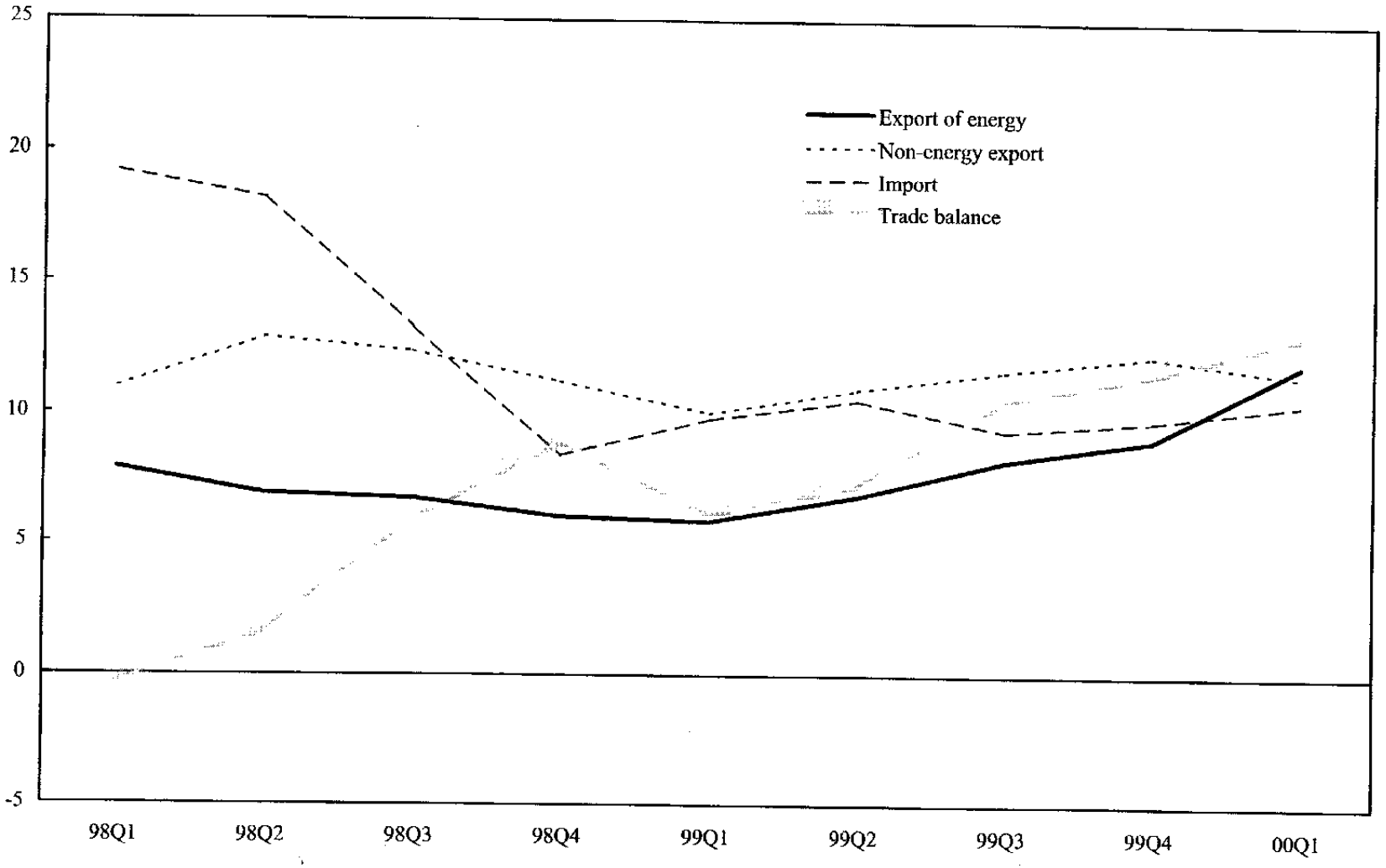






Source: Custom Statistics of the Russian Federation, CBR.

Figure 15. Russian Federation: Foreign Trade, 1998-2000
(In billions of U.S. dollars; seasonally adjusted)



Source: Russian authorities and Fund staff estimates.

Table 31. Russian Federation: Monetary Authorities' Accounts, 1995-2000
(In billions of rubles, unless otherwise indicated) 1/

	1995	1996	1997	1998		1999					2000	
	Dec.	Dec.	Dec.	Dec.	Dec. Revalued	Mar.	June	Sep.	Dec.	Dec. revalued.	Mar.	June
Base money	103.7	130.9	164.5	210.4	210.4	205.9	259.2	259.6	324.3	324.3	318.9	397.2
Currency issued	83.4	108.6	137.0	197.9	197.9	186.5	230.4	228.0	288.6	288.6	268.9	340.5
Required reserves on ruble deposits	20.4	22.3	27.5	12.5	12.5	19.4	28.8	31.6	35.6	35.6	50.0	56.7
Net international reserves (NIR) 2/	35.7	9.5	22.4	-38.9	-204.1	-218.1	-177.4	-146.3	-73.7	-76.5	34.3	204.7
(In billions of US$)	7.7	1.7	3.7	-6.5	-8.4	-9.0	-7.3	-6.1	-3.0	-2.8	1.3	7.6
Net domestic assets (NDA)	68.0	121.4	142.1	249.3	414.5	424.0	436.6	405.9	397.9	400.7	284.6	192.5
Net credit to enlarged government	111.2	162.1	191.8	276.8	276.2	319.7	338.9	320.8	305.1	309.2	240.3	170.9
Net credit to federal government	115.4	166.4	199.9	284.0	283.4	330.8	353.9	344.2	329.0	333.1	301.6	264.6
CBR net credit to the federal government 3/	84.6	112.0	134.7	218.2	177.3	197.4	191.3	185.3	201.7	205.8	196.1	185.2
VEB credit					40.3	85.4	133.5	143.5	137.8	137.8	137.8	137.8
(In billions of US$)					2.3	4.3	6.3	6.7	6.5	6.4	6.4	6.4
Ruble counterpart 4/	30.8	54.4	65.2	65.8	65.8	48.0	29.1	15.4	-10.5	-10.5	-32.3	-58.4
CBR net credit to local government	-2.1	-2.1	-3.6	-2.1	-2.1	-4.6	-6.8	-8.7	-9.0	-9.0	-17.2	-28.5
CBR net credit to extrabudgetary funds	-2.1	-2.3	-4.5	-5.1	-5.1	-6.5	-8.2	-14.7	-14.9	-14.9	-44.1	-65.2
Net credit to banks	-3.2	-11.4	-21.4	-23.4	-23.8	-38.2	-42.4	-38.2	-45.9	-45.9	-91.0	-123.4
Gross credit to banks	11.7	6.4	10.0	15.7	15.8	21.6	25.1	26.8	26.7	26.7	26.9	26.7
Gross liabilities to banks and deposits	-14.9	-17.7	-31.4	-39.1	-39.6	-59.8	-67.5	-65.0	-72.6	-72.6	-117.9	-150.1
OIN	-39.9	-29.3	-28.3	-4.1	162.1	142.5	140.1	123.3	138.7	137.4	135.3	145.0
o/w required reserves on foreign currency deposits	-1.0	-3.6	-3.9	-8.3	-8.3	-15.7	-22.3	-24.3	-28.9	-28.9	-39.8	-41.4
Memorandum:												
Exchange rate (official, end-period)	4.6	5.6	6.0	20.7	20.7	24.2	24.2	25.1	27.0	27.0	28.5	28.1
Gross reserves (US$ bln) 5/	17.3	15.4	17.8	12.1	10.9	9.6	11.1	11.0	12.6	12.5	15.6	21.1
CBR	15.0	14.8	17.2	12.0	10.8	9.5	10.9	10.6	12.1	11.9	15.2	20.6
MinFin	2.3	0.5	0.6	0.2	0.1	0.2	0.2	0.4	0.5	0.5	0.4	0.5
Reserve liabilities (US$ bln)	9.6	13.6	14.0	18.6	19.4	18.6	18.4	17.1	15.7	15.3	14.4	13.5
CBR	0.0	1.1	0.0	3.8	4.0	4.1	4.6	3.6	3.1	3.0	3.0	3.0
MinFin	9.6	12.5	14.0	14.8	15.3	14.6	13.8	13.5	12.6	12.3	11.4	10.6

Source: CBR and staff estimates.

1/ Data are compiled according to program definitions. There are differences relative to IFS in: the definitions of "federal government", "local government", and "extrabudgetary funds"; the treatment of VEB credits extended for debt service; and the coverage of international reserves. Due to the adoption of a new chart of accounts in 1998, data not strictly comparable to earlier periods.

2/ 1995-97 at end of period exchange rates. Dec. 1998 calculated at end-1997 exchange rate. Dec. 1998 revalued to Dec. 1999 calculated at accounting exchange rate of Rub 24.18/US$ and US$ 1.4/SDR. Dec. 1999 revalued onward calculated at accounting exchange rate of Rub 27/US$ and US$ 1.37/SDR.

3/ Beginning December 1999 revalued, includes government securities held by the CBR's pension fund.

4/ Represents the government's use of NIR resources and calculated in flow Ruble terms using the exchange rate in effect at the time of the transaction.

5/ From December 1998 revalued, excludes all amounts held with domestic banks and at CBR-owned banks abroad.

Table 32. Russian Federation: Monetary Survey, 1995-2000 1/
(In billions of rubles unless otherwise indicated)

	1995	1996	1997	1998	1999					2000	
	Dec.	Dec.	Dec.	Dec. revalued.	Mar.	June	Sep.	Dec.	Dec. revalued.	Mar.	May
Net foreign assets 2/	51.9	23.5	-19.0	-184.8	-162.5	-97.1	-20.2	58.7	71.4	230.8	349.1
NIR of monetary authorities	35.7	9.5	22.4	-204.1	-218.1	-177.4	-146.3	-73.7	-76.5	34.3	157.1
NFA of commercial banks	16.2	14.0	-41.4	19.3	55.6	80.3	126.1	132.4	147.9	196.5	183.5
NDA	224.0	341.0	474.3	856.7	851.3	898.2	851.7	905.8	923.5	838.2	821.4
Domestic credit	360.8	527.8	655.6	911.0	946.0	987.5	1008.4	1087.2	1132.4	1087.9	1075.5
Net credit to general government	164.1	300.8	365.4	487.3	519.7	538.6	529.9	529.6	550.8	465.0	399.3
Net credit to federal government 3/	174.4	306.7	370.4	482.2	519.3	550.4	555.8	553.9	574.9	541.4	511.8
Net credit from the monetary authorities 4/	115.4	166.4	199.9	283.4	330.8	353.9	344.2	329.0	333.1	301.6	260.8
(o/w ruble counterpart)	30.8	54.4	65.2	65.8	48.0	29.1	15.4	-10.5	-10.5	-32.3	-52.6
Net credit from commercial banks 4/	59.1	140.3	170.5	198.8	188.5	196.5	211.6	224.9	241.8	239.8	251.0
Ruble credit	...	124.1	147.8	76.7	64.1	70.6	83.7	80.6	80.6	71.8	75.6
Forex credit	...	16.2	22.7	122.1	124.4	125.8	127.9	144.3	161.1	168.0	175.4
Net credit to local government and EBFs 4/	-10.4	-5.8	-5.1	5.1	0.4	-11.8	-25.9	-24.4	-24.1	-76.4	-112.5
Net credit from monetary authorities	-4.2	-4.3	-8.2	-7.2	-11.1	-15.0	-23.4	-23.9	-23.9	-61.3	-82.6
Net credit from commercial banks	-6.2	-1.5	3.1	12.3	11.5	3.2	-2.5	-0.5	-0.2	-15.1	-29.9
Credit to the economy	196.8	227.0	290.2	423.7	426.3	448.9	478.6	557.6	581.6	622.9	676.3
Loans in foreign currency 2/	71.3	77.9	97.4	256.5	230.5	203.0	191.4	206.1	230.2	231.0	240.4
(In billions of US$)	15.4	14.0	16.3	10.6	9.5	8.4	7.9	8.5	8.5	8.6	8.9
Other loans	125.5	149.1	192.8	167.2	195.7	245.9	287.1	351.5	351.5	391.9	435.9
Other items (net)	-136.8	-186.8	-181.3	-54.3	-94.7	-89.3	-156.7	-181.3	-208.9	-249.6	-254.2
Broad money	275.9	364.5	455.3	671.9	688.8	801.2	831.5	964.6	994.9	1069.0	1162.0
Ruble broad money	220.7	295.1	370.3	448.4	473.8	567.7	597.4	704.7	704.7	751.3	831.6
Currency in circulation	80.8	103.8	130.5	187.8	174.1	216.4	212.8	266.6	266.6	251.5	289.3
Ruble deposits 5/	139.9	191.3	239.8	260.5	299.7	351.3	384.6	438.1	438.1	499.8	542.3
Forex deposits 2/	55.3	69.4	85.0	223.5	215.0	233.4	234.1	259.9	290.2	317.7	330.4
(In billions of US$)	11.9	12.5	14.3	9.2	8.9	9.7	9.7	10.7	10.7	11.8	12.2
Exchange rate (official, end-period)	4.6	5.6	6.0	20.7	24.2	24.2	25.1	27.0	27.0	28.5	28.3

Source: CBR and staff esitmates.

1/ Data are compiled according to program definitions. There are differences relative to IFS in: the definitions of "federal government", "local government", and "extrabudgetary funds"; the treatment of VEB credits extended for debt service; and the coverage of international reserves. Due to the adoption of a new chart of accounts in 1998, data not strictly comparable to earlier periods.
2/ 1995-97 at end of period exchange rates. Dec. 1998 revalued to Dec. 1999 calculated at accounting exchange rate of Rub 24.18/US$ and US$ 1.4/SDR. Dec. 1999 revalued onward calculated at accounting exchange rate of Rub 27/US$ and US$ 1.37/SDR.
3/ Inclusive of valuation gains and losses on holdings of government securities. Directed credit in foreign exchange from the CBR to the government through Vneshekonombank included as credit from commercial banks and not from the monetary authorities.
4/ Definitions of "federal government", "local governments" and "extrabudgetary funds" do not fully coincide with IFS definitions.

Table 33. Russian Federation: CBR Instruments, 1996-2000
(In billion rubles)

	Reserve balances			Correspondent accounts			Deposit facility			OBR's	Gross credit to banks				
	Total	Ruble	Foreign	Total	Moscow	Regional	Total	Moscow banks	Regional banks		Total 1/	Lombard	Rehab	Forex (excl. VEB debt service)	Other
1996 Dec	25.9	22.3	3.6	17.7	...	...	11.4	...	...	0.0	6.4				
1997 Dec	36.4	27.5	8.9	31.4	...	...	0.4	...	...	0.0	9.9	6.5			
1998 Jun	38.1	25.5	12.6	14.0	...	...	0.2	...	...	0.0	12.0	7.9			
Jul	37.3	24.8	12.5	13.9	...	...	3.4	...	...	0.0	4.0	1.4			
Aug	32.4	20.9	11.6	10.0	...	...	0.2	...	...	0.0	22.2	5.3			
Sep	20.2	13.4	6.8	20.8	...	...	1.1	...	...	1.5	17.2	1.7			
Oct	18.0	13.0	5.0	22.4	...	...	8.0	...	...	1.9	8.9	1.2			
Nov	19.0	14.1	4.8	27.7	...	...	10.1	...	...	1.9	10.8	0.6			
Dec	20.8	12.5	8.3	32.6	15.9	16.7	4.7	4.7	0.0	2.2	29.1	0.0	7.4	13.3	8.4
1999 Jan	23.7	13.9	9.8	29.1	13.7	15.4	11.1	11.1	0.0	2.6	29.5	0.0	7.4	13.7	8.4
Feb	24.7	14.1	10.7	32.9	15.5	17.4	15.1	15.1	0.0	0.0	33.7	0.0	7.9	14.7	11.1
Mar	35.1	19.4	15.7	44.4	17.0	27.3	15.4	15.4	0.0	0.0	34.4	0.0	9.3	12.8	12.3
Apr	37.1	20.5	16.6	45.1	25.5	19.6	13.6	13.6	0.0	0.0	37.2	0.0	10.0	13.3	13.9
May	40.1	22.1	17.9	59.7	34.9	24.8	21.7	21.7	0.0	0.0	37.3	0.0	11.3	13.3	12.7
Jun	51.1	28.8	22.3	51.8	28.9	22.9	15.7	15.7	0.0	0.0	31.5	0.0	12.2	6.4	12.9
Jul	52.7	30.2	22.5	49.0	27.7	21.4	19.2	19.2	0.0	0.0	33.7	0.0	13.9	6.9	12.9
Aug	53.4	30.5	22.9	49.3	25.4	23.8	23.1	23.1	0.0	0.0	33.8	0.0	14.0	6.9	12.9
Sep	55.9	31.6	24.3	55.2	31.2	24.0	9.8	9.8	0.0	0.0	33.7	0.0	13.9	6.9	12.9
Oct	58.1	32.4	25.7	65.2	38.9	26.3	8.8	8.8	0.0	0.0	33.8	0.0	13.9	6.9	13.0
Nov	61.0	33.9	27.1	65.0	35.8	29.2	18.7	17.7	1.0	0.0	33.8	0.0	13.9	6.9	13.0
Dec	64.6	35.6	28.9	65.9	32.3	33.7	4.3	3.7	0.6	0.0	32.4	0.0	13.9	5.6	12.9
2000 Jan	80.0	45.1	34.9	62.0	32.2	29.8	22.1	21.4	0.7	0.0	32.7	0.0	13.9	5.9	12.9
Feb	83.3	46.3	37.0	67.2	35.8	31.4	25.6	25.6	0.0	0.0	32.9	0.0	13.9	5.9	13.1
Mar	89.8	50.0	39.8	75.0	42.9	32.2	48.1	48.1	0.0	0.0	32.8	0.0	13.9	5.9	13.0
Apr	92.7	52.3	40.5	65.1	35.6	29.5	42.8	42.8	0.0	0.0	32.2	0.0	13.9	5.3	13.0
May	95.5	53.8	41.7	82.0	48.3	33.6	58.8	58.8	0.0	0.0	33.2	0.0	13.9	6.4	12.9
Jun	98.1	56.7	41.4	80.6	47.4	33.2	69.6	69.6	0.0	0.0	33.1	0.0	13.9	6.3	12.9

Sources: CBR.

1/ From December 1998 includes foreign exchange credits to banks excluding VEB for debt service.

Table 33 (continued). Russian Federation: CBR Instruments, 1996-2000
(In percent of base money)

	Reserve balances			Correspondent accounts			Deposit facility			OBR's	Gross credit to banks				
	Total	Ruble	Foreign	Total	Moscow	Regional	Total	Moscow banks	Regional banks		Total 1/	Lombard	Rehab	Forex (excl. VEB debt service)	Other
1996 Dec	19.8	17.0	2.7	13.6	...	...	8.7	...	...	0.0	4.9				
1997 Dec	22.1	16.7	5.4	19.1	...	...	0.2	...	...	0.0	6.0	3.9			
1998 Jun	23.3	15.6	7.7	8.6	...	...	0.1	...	...	0.0	7.3	4.8			
Jul	23.1	15.4	7.7	8.6	...	...	2.1	...	...	0.0	2.5	0.9			
Aug	20.1	12.9	7.2	6.2	...	...	0.1	...	...	0.0	13.7	3.3			
Sep	11.5	7.6	3.9	11.9	...	...	0.6	...	...	0.9	9.8	1.0			
Oct	9.6	7.0	2.7	12.0	...	...	4.3	...	...	1.0	4.7	0.6			
Nov	9.9	7.4	2.5	14.4	...	...	5.3	...	...	1.0	5.7	0.3			
Dec	9.8	5.9	3.9	15.4	7.5	7.9	2.2	2.2	0.0	1.0	13.8	0.0	3.5	6.3	4.0
1999 Jan	11.6	6.8	4.8	14.3	6.7	7.6	5.4	5.4	0.0	1.3	14.5	0.0	3.6	6.7	4.1
Feb	12.0	6.8	5.2	15.9	7.5	8.4	7.3	7.3	0.0	0.0	16.3	0.0	3.8	7.1	5.4
Mar	16.9	9.4	7.6	21.4	8.2	13.2	7.5	7.5	0.0	0.0	16.6	0.0	4.5	6.2	5.9
Apr	16.2	9.0	7.3	19.7	11.2	8.6	6.0	6.0	0.0	0.0	16.3	0.0	4.4	5.8	6.1
May	16.5	9.1	7.4	24.6	14.4	10.2	9.0	9.0	0.0	0.0	15.4	0.0	4.7	5.5	5.2
Jun	19.6	11.0	8.6	19.9	11.1	8.8	6.0	6.0	0.0	0.0	12.1	0.0	4.7	2.5	5.0
Jul	20.0	11.5	8.5	18.6	10.5	8.1	7.3	7.3	0.0	0.0	12.8	0.0	5.3	2.6	4.9
Aug	20.3	11.6	8.7	18.7	9.7	9.1	8.8	8.8	0.0	0.0	12.8	0.0	5.3	2.6	4.9
Sep	21.4	12.1	9.3	21.2	12.0	9.2	3.7	3.7	0.0	0.0	12.9	0.0	5.3	2.6	4.9
Oct	21.5	12.0	9.5	24.1	14.4	9.7	3.3	3.3	0.0	0.0	12.5	0.0	5.1	2.6	4.8
Nov	22.5	12.5	10.0	24.0	13.2	10.8	6.9	6.5	0.4	0.0	12.5	0.0	5.1	2.5	4.8
Dec	19.8	11.0	8.9	20.3	9.9	10.3	1.3	1.1	0.2	0.0	10.0	0.0	4.3	1.7	4.0
2000 Jan	26.9	15.1	11.7	20.8	10.8	10.0	7.4	7.2	0.2	0.0	11.0	0.0	4.7	2.0	4.3
Feb	27.1	15.1	12.0	21.8	11.6	10.2	8.3	8.3	0.0	0.0	10.7	0.0	4.5	1.9	4.3
Mar	28.0	15.6	12.4	23.4	13.4	10.0	15.0	15.0	0.0	0.0	10.2	0.0	4.3	1.8	4.1
Apr	26.4	14.9	11.5	18.5	10.1	8.4	12.2	12.2	0.0	0.0	9.2	0.0	4.0	1.5	3.7
May	26.4	14.9	11.5	22.7	13.4	9.3	16.3	16.3	0.0	0.0	9.2	0.0	3.8	1.8	3.6
Jun	24.7	14.3	10.4	20.3	11.9	8.4	17.5	17.5	0.0	0.0	8.3	0.0	3.5	1.6	3.2

Source: CBR.

Table 34. Russian Federation: Domestic Debt, 1997-2000 1/
(In billions of rubles)

	1997	1998	1999	2000 March
Short-term treasury bills (GKO)	272.6	24.4	7.4	14.1
Medium and long-term government bonds (OFZ's)	163.4	397.5	514.7	509.0
OFZ-PD (fixed coupon)	115.8	290.9	402.2	395.8
OFZ-FK (fixed coupon)	0.0	106.2	112.4	113.2
OFZ-PK (variable coupon)	47.6	0.4	0.0	0.0
Nonmarket bonds (OGNZ)	1.8	2.6	2.7	8.6
Savings bonds (OGSZ)	13.1	14.6	4.9	2.9
Short-term bank loans	0.0	0.0	15.0	0.0
Other 2/	48.7	40.9	39.0	38.9
Total	499.6	480.1	583.6	573.4

Source: Ministry of Finance.

1/ Ruble denominated debt. Includes instruments held by nonresident.
2/ Includes targeted bond issues, various government guarantees, and enterprise/sector debts assumed by the government.

Table 35. Cross-Country Comparison of Financial Sector, 1998-99

	Credit to Private Sector in percent of GDP		Interest Rate Spread (bp)		Inflation (eop)	
	1998	1999	1998	1999	1998	1999
Bulgaria	12.7	14.6	9.5	8.6	1.6	7.0
Czech Republic	58.7	54.3	3.6	3.9	6.8	2.6
Hungary	23.6	...	3.4	2.6	10.3	11.1
Poland	19.5	...	5.9	6.9	8.5	9.8
Romania	11.7	8.4	...	...	40.6	54.8
Slovak Republic	45.9	...	6.5	6.5	5.6	14.2
Slovenia	32.9	...	5.3	5.7	7.5	8.8
Estonia	25.3	26.2	8.6	5.5	4.3	3.8
Latvia	14.9	16.7	9.9	8.4	2.8	3.2
Lithuania	11.3	13.0	6.5	7.4	2.4	0.3
Azerbaijan	3.3	3.4	13.4	15.7	-7.6	-0.5
Kazakhstan	6.2	8.6	3.9	8.0	1.9	17.8
Moldova	12.2	10.6	4.2	7.5	5.6	82.7
Russia	12.8	11.5	16.0	22.8	84.4	36.5
Ukraine	7.6	8.4	36.9	31.2	20.0	20.2
Germany	121.9	...	6.0	6.2	0.4	1.2
United Kingdom	120.0	122.9	1.8	...	2.8	1.8
United States	47.1	47.5	7.8	8.5	1.6	2.7

Sources: International Financial Statistics.

Table 36. Russian Federation: Indicators of Concentration in the Banking System, end-1999 1/
(In percent)

	State banks 3/	Sberbank	#3-20	#21-40	#41-60	#61-80	#81-100
Total assets	38.8	31.8	37.7	12.1	5.1	3.6	2.7
Gross credit to government	81.7	72.8	9.7	4.8	2.2	0.6	0.8
o/w government securities	83.0	72.9	9.1	4.7	1.8	0.4	0.9
Loans to nonbank private sector 2/	30.2	26.4	42.9	16.1	5.2	3.6	2.0
o/w long-term	23.7	19.7	52.1	15.1	4.0	3.8	1.3
o/w short-term	34.2	32.0	35.0	18.0	6.5	3.6	2.7
Deposits of nonbank private sector 2/	51.3	47.4	32.2	8.1	4.0	2.3	2.1
o/w households	83.9	83.3	9.8	3.0	1.5	0.9	0.8
o/w enterprises	26.2	19.8	49.5	12.0	5.9	3.4	3.0
Capital	39.4	22.2	21.6	21.3	6.5	7.5	3.7
Authorized capital	22.8	0.7	40.9	19.8	7.5	5.8	3.2

Source: Interfax and staff calculations.

1/ Data are shares relative to the share of the largest 100 banks measured by assets.
2/ Includes state enterprises.
3/ Sberbank and Vneshtorgbank.

Table 37. Russian Federation: Balance of Payments, 1994-99

(In billions of U.S. dollars, unless otherwise indicated)

	1994	1995	1996	1997	1998	1999
Current account	8.4	4.8	3.9	2.8	1.0	20.8
Trade balance	19.3	18.7	17.8	17.4	17.1	35.8
Exports	67.8	82.7	90.6	89.0	74.9	75.3
of which: Oil	14.6	18.3	23.4	22.0	14.2	18.8
Natural gas	10.6	12.1	14.7	16.4	13.3	11.4
Imports	48.5	64.0	72.8	71.6	57.8	39.5
Services and income, net	-10.6	-13.9	-14.0	-14.3	-15.8	-15.7
Services, net	-6.5	-8.1	-6.4	-4.7	-3.9	-3.8
Net income	-4.1	-5.8	-7.6	-9.6	-11.9	-11.9
Interest, net	-4.3	-5.6	-7.1	-8.7	-11.3	-11.5
Receipts	0.5	0.9	1.1	1.2	0.8	0.5
Payments	-4.8	-6.5	-8.2	-10.0	-12.1	-12.0
of which: Official	-4.8	-6.5	-6.4	-9.5	-10.9	-9.1
Dividends, net	0.0	-0.1	0.0	-0.2	-0.4	-0.4
Other income, net	0.2	-0.1	-0.5	-0.7	-0.2	0.0
CurrentTransfers, net	-0.3	0.1	0.1	-0.3	-0.4	0.6
Capital account	-27.1	-4.2	-10.9	6.3	-7.1	-16.6
Capital flows relating to the federal government	-11.2	-9.7	1.7	15.1	7.7	-1.9
Disbursements	2.7	2.5	5.5	8.8	9.5	2.1
Amortization, net	-14.0	-12.6	-10.9	-4.6	-4.1	-3.3
Payments	-14.0	-12.7	-11.2	-5.3	-4.8	-3.9
Receipts	0.0	0.0	0.3	0.7	0.7	0.7
Purchases of government securities, net	0.0	0.0	5.9	10.9	2.8	-0.3
Other 1/	0.0	0.5	1.2	0.0	-0.4	-0.5
Medium- and long-term capital to other sectors	0.4	1.6	3.8	5.8	2.8	0.2
Foreign direct investment, net	0.5	1.7	1.7	3.6	1.7	0.8
Reinvested earnings	0.0	0.0	0.0	0.0	-0.1	0.0
Other	-0.1	-0.1	2.1	2.2	1.2	-0.6
Other, including short term 2/	-16.4	3.9	-16.4	-14.5	-17.6	-14.9
Errors and omissions, net	-0.3	-7.9	-8.6	-13.6	-9.2	-7.0
Overall balance	-19.1	-7.3	-15.6	-4.5	-15.3	-2.9
Financing	19.1	7.3	15.6	4.5	15.3	2.9
Net international reserves	3.9	-5.4	4.6	-1.4	10.2	-5.4
Gross reserves (- increase)	2.4	-10.8	1.7	-2.5	5.6	-1.7
Net Fund liabilities	1.5	5.4	2.9	1.5	5.3	-3.6
Other liabilities	0.0	0.0	0.0	-0.4	-0.7	-0.1
Arrears/debt under negotiation 3/	2.8	0.7	2.6	2.8	2.3	3.6
Deferral/rescheduling 4/	12.4	12.1	8.4	3.1	2.8	4.7
Memorandum items:						
Trade balance (percent of GDP)	7.1	5.5	4.3	4.0	5.4	19.5
Current account (percent of GDP)	3.1	1.4	0.9	0.6	0.3	11.3
Gross reserves	6.5	17.2	15.3	17.8	12.2	12.6
(months of imports of goods and services)	1.2	2.4	2.0	2.9	2.8	2.9
External debt service payments 5/	19.0	19.4	20.1	15.4	17.5	25.7
(percent of exports of goods and services)	24.7	20.4	19.6	14.9	20.0	30.5

Sources: Data provided by the Russian authorities, and staff estimates.

1/ Receipts and payments on debts denominated in non-convertible currencies net of reschedulings deferrals, including debts to COMECON countries (payable almost entirely in kind), and short-term banking sector flows.

2/ Includes cash-related transactions, enterprise credits, inter-FSU trade arrears, unrepatriated export proceeds, and short-term banking sector flows.

3/ In 1998, includes accumulation of arrears of $1.2 billion to London and Paris Club creditors.

4/ Includes arrears, debt rescheduling, and debt deferrals. Consists of interest capitalization by commercial banks, according to the London Club agreement, and debt reschedulings from uninsured suppliers and non-Paris Club creditors.

5/ Excludes payments on short-term debt.

Table 38. Russian Federation: Destination of Exports, 1994-99 1/

	1994	1995	1996	1997	1998	1999 Q1	1999 Q2	1999 Q3	1999 Q4	1999 Year
	(In millions of U.S. dollars)									
Total exports	63,078	77,595	83,979	85,077	71,389	15,076	16,636	17,973	22,768	72,453
CIS	13,574	14,365	15,452	16,583	13,546	2,492	2,116	2,525	3,556	10,689
Belarus	3,111	2,940	3,046	4,632	4,646	770	887	886	1,218	3,761
Kazakstan	1,662	2,656	2,556	2,472	1,881	255	213	362	392	1,222
Ukraine	6,709	6,898	7,583	7,239	5,531	1,245	809	1,059	1,673	4,786
Other	2,092	1,871	2,267	2,240	1,488	222	208	218	272	920
Non-CIS	49,504	63,230	68,527	68,494	57,843	12,584	14,520	15,449	19,212	61,765
Europe	34,988	42,055	45,803	47,365	38,806	7,687	9,248	10,592	12,801	40,327
Czech Republic	1,378	2,073	1,743	1,823	1,382	236	285	327	475	1,323
Finland	2,028	2,377	2,618	2,774	2,063	472	577	620	710	2,379
France	1,236	1,516	1,611	1,626	1,456	260	291	282	385	1,218
Germany	5,462	6,079	6,734	6,531	5,697	1,191	1,258	1,697	2,033	6,178
Hungary	1,173	1,609	1,802	1,854	1,487	302	318	417	511	1,547
Ireland	1,217	2,552	2,833	2,500	638	63	139	228	169	600
Italy	2,739	3,292	2,808	3,564	3,203	796	791	962	1,143	3,690
Netherlands	2,428	3,183	3,317	4,554	3,930	649	754	1,042	1,074	3,520
Poland	1,129	1,605	2,122	2,514	2,173	510	626	636	835	2,606
Slovak Republic	735	1,194	1,865	1,740	1,368	311	302	334	478	1,426
Switzerland	3,782	3,739	3,952	3,732	3,216	644	1,208	586	1,030	3,468
UK	3,642	3,103	3,176	2,846	2,927	570	640	771	861	2,843
Other	8,040	9,735	11,224	11,307	9,264	1,684	2,057	2,690	3,098	9,529
Asia	7,761	11,432	11,760	10,471	7,579	2,069	2,292	2,154	2,674	9,189
China	2,838	3,377	4,684	3,982	3,144	870	964	650	991	3,476
Japan	2,267	3,173	2,905	2,935	2,171	456	504	541	608	2,109
Other	2,656	4,882	4,172	3,555	2,263	743	824	963	1,075	3,605
Western Hemisphere	4,743	7,270	7,593	6,827	8,104	1,893	2,082	1,768	2,501	8,243
US	3,748	5,092	6,411	4,951	5,995	1,474	1,326	1,490	2,143	6,433
Other	995	2,179	1,182	1,876	2,108	418	756	277	358	1,810
Middle East and Africa	1,453	1,933	2,203	2,124	2,340	516	684	621	949	2,770
Other	560	541	1,168	1,706	1,015	419	214	314	288	1,235
Exports to:	(In percent of total exports)									
CIS	21.5	18.5	18.4	19.5	19.0	16.5	12.7	14.0	15.6	14.7
Belarus	4.9	3.8	3.6	5.4	6.5	5.1	5.3	4.9	5.4	5.2
Kazakstan	2.6	3.4	3.0	2.9	2.6	1.7	1.3	2.0	1.7	1.7
Ukraine	10.6	8.9	9.0	8.5	7.7	8.3	4.9	5.9	7.3	6.6
Other	3.3	2.4	2.7	2.6	2.1	1.5	1.2	1.2	1.2	1.3
Non-CIS	78.5	81.5	81.6	80.5	81.0	83.5	87.3	86.0	84.4	85.3
Europe	55.5	54.2	54.5	55.7	54.4	51.0	55.6	58.9	56.2	55.4
Czech Republic	2.2	2.7	2.1	2.1	1.9	1.6	1.7	1.8	2.1	1.8
Finland	3.2	3.1	3.1	3.3	2.9	3.1	3.5	3.5	3.1	3.3
France	2.0	2.0	1.9	1.9	2.0	1.7	1.8	1.6	1.7	1.7
Germany	8.7	7.8	8.0	7.7	8.0	7.9	7.6	9.4	8.9	8.5
Hungary	1.9	2.1	2.1	2.2	2.1	2.0	1.9	2.3	2.2	2.1
Ireland	1.9	3.3	3.4	2.9	0.9	0.4	0.8	1.3	0.7	0.8
Italy	4.3	4.2	3.3	4.2	4.5	5.3	4.8	5.3	5.0	5.1
Netherlands	3.8	4.1	3.9	5.4	5.5	4.3	4.5	5.8	4.7	4.8
Poland	1.8	2.1	2.5	3.0	3.0	3.4	3.8	3.5	3.7	3.6
Slovak Republic	1.2	1.5	2.2	2.0	1.9	2.1	1.8	1.9	2.1	2.0
Switzerland	6.0	4.8	4.7	4.4	4.5	4.3	7.3	3.3	4.5	4.8
UK	5.8	4.0	3.8	3.3	4.1	3.8	3.8	4.3	3.8	3.9
Other	12.7	12.5	13.4	13.3	13.0	11.2	12.4	15.0	13.6	13.0
Asia	12.3	14.7	14.0	12.3	10.6	13.7	13.8	12.0	11.7	12.8
China	4.5	4.4	5.6	4.7	4.4	5.8	5.8	3.6	4.4	4.9
Japan	3.6	4.1	3.5	3.4	3.0	3.0	3.0	3.0	2.7	2.9
Other	4.2	6.3	5.0	4.2	3.2	4.9	5.0	5.4	4.7	5.0
Western Hemisphere	7.5	9.4	9.0	8.0	11.4	12.6	12.5	9.8	11.0	11.5
US	5.9	6.6	7.6	5.8	8.4	9.8	8.0	8.3	9.4	8.9
Other	1.6	2.8	1.4	2.2	3.0	2.8	4.5	1.5	1.6	2.6
Middle East and Africa	2.3	2.5	2.6	2.5	3.3	3.4	4.1	3.5	4.2	3.8
Other	0.9	0.7	1.4	2.0	1.4	2.8	1.3	1.7	1.3	1.8

Source: IMF Direction of Trade Statistics.

1/ Based on exports according to the Direction of Trade Statistics, which differ somewhat from those compiled by the Central Bank of Russia and shown in Table 37.

Table 39. Russian Federation: Composition of Merchandise Exports, 1994-99

	1994	1995	1996	1997	1998	1999
	(In millions of U.S. dollars)					
Total exports (f.o.b.) 1/	63,285	78,290	84,387	80,365	66,643	68,057
Food, beverage, tobacco and agricultural products	1,410	1,332	1,654	1,407	1,187	762
Stone and ore	641	943	750	784	821	574
Fuel products	27,288	30,440	38,365	38,062	27,649	29,812
Oil and oil products	15,530	17,291	22,056	20,736	...	18,041
Crude	11,335	12,403	14,860	13,821	...	13,413
Oil products	4,195	4,888	7,196	6,915	...	4,628
Gas	10,355	11,410	13,988	15,788	...	10,935
Coal	752	1,012	978	786	...	432
Other	651	727	1,343	752	...	404
Chemicals (including pharmaceuticals and rubber)	5,476	7,453	6,899	6,578	5,588	5,661
Leather	373	307	355	383	372	187
Wood and paper products	2,623	4,320	3,451	3,502	3,406	3,586
Textiles and clothing	1,310	1,071	951	826	726	694
Gems and precious metals	6,458	5,356	3,625	3,145	4,308	4,343
Metals	11,242	15,280	16,107	16,715	14,708	13,925
Non-ferrous	4,895	7,522	7,974	8,713	6,131	5,263
Ferrous	6,347	7,758	8,133	8,002	8,577	8,662
Machines, equipment (including cars) and instruments	6,213	8,333	8,620	8,176	7,317	7,242
Other, including ceramics and glass	251	3,456	3,610	786	562	1,275
	(In percent of total exports)					
Total exports (f.o.b.) 1/	100.0	100.0	100.0	100.0	100.0	100.0
Food, beverage, tobacco and agricultural products	2.2	1.7	2.0	1.8	1.8	1.1
Stone and ore	1.0	1.2	0.9	1.0	1.2	0.8
Fuel products	43.1	38.9	45.5	47.4	41.5	43.8
Oil and oil products	24.5	22.1	26.1	25.8	...	26.5
Crude	17.9	15.8	17.6	17.2	...	17.2
Oil products	6.6	6.2	8.5	8.6	...	8.6
Gas	16.4	14.6	16.6	19.6	...	16.1
Coal	1.2	1.3	1.2	1.0	...	0.6
Other	1.0	0.9	1.6	0.9	...	0.6
Chemicals (including pharmaceuticals and rubber)	8.7	9.5	8.2	8.2	8.4	8.3
Leather	0.6	0.4	0.4	0.5	0.6	0.3
Wood and paper products	4.1	5.5	4.1	4.4	5.1	5.3
Textiles and clothing	2.1	1.4	1.1	1.0	1.1	1.0
Gems and precious metals	10.2	6.8	4.3	3.9	6.5	6.4
Metals	17.8	19.5	19.1	20.8	22.1	20.5
Non-ferrous	7.7	9.6	9.4	10.8	9.2	7.7
Ferrous	10.0	9.9	9.6	10.0	12.9	12.7
Machines, equipment (including cars) and instruments	9.8	10.6	10.2	10.2	11.0	10.6
Other, including ceramics and glass	0.4	4.4	4.3	1.0	0.8	1.9

Source: State Customs Committee.

1/ Excludes shuttle trade and other adjustments to the customs data that are included in Table 37.

Table 40. Russian Federation: Origin of Imports, 1994-99 1/

	1994	1995	1996	1997	1998	1999 Q1	1999 Q2	1999 Q3	1999 Q4	1999 Year
	(In millions of US dollars)									
Total imports	38,600	46,399	44,504	52,400	42,939	6,940	7,629	7,322	8,395	30,286
CIS	10,310	13,450	14,153	14,080	11,122	1,664	1,952	2,065	2,657	8,338
Belarus	2,093	1,957	2,695	4,627	4,514	702	821	747	967	3,236
Kazakstan	1,996	2,742	3,041	2,743	1,877	244	269	360	519	1,391
Ukraine	4,400	6,616	6,256	3,981	3,219	510	593	658	762	2,523
Other	1,821	2,135	2,161	2,729	1,512	209	269	300	409	1,188
Non-CIS	28,290	32,949	30,351	38,320	31,816	5,276	5,677	5,256	5,738	21,948
Europe	20,563	24,670	21,139	26,403	20,527	3,409	3,483	3,419	3,675	13,986
Czech Republic	428	438	531	586	519	86	83	90	85	343
Finland	1,628	2,041	1,666	1,873	1,432	244	206	235	263	947
France	1,004	1,074	1,267	1,592	1,578	276	363	270	271	1,181
Germany	5,682	6,537	5,158	6,640	5,404	1,045	1,047	1,014	1,090	4,195
Hungary	745	842	655	920	607	70	73	88	82	313
Ireland	250	323	316	409	294	27	62	44	57	190
Italy	1,589	1,851	2,316	2,651	1,787	345	256	260	297	1,157
Netherlands	1,610	1,646	1,006	1,206	905	137	169	174	207	688
Poland	946	1,322	919	1,066	1,032	127	145	156	173	602
Slovak Republic	209	294	263	286	193	25	30	25	26	106
Switzerland	563	697	500	535	426	100	67	69	79	315
UK	896	1,100	1,121	1,481	1,205	151	160	185	166	663
Other	5,016	6,507	5,422	7,158	5,146	775	823	810	878	3,287
Asia	3,888	3,543	4,237	4,898	4,298	557	699	722	822	2,800
China	952	865	996	1,261	1,146	170	211	245	263	889
Japan	1,114	763	968	985	810	90	111	128	126	455
Other	1,823	1,916	2,273	2,652	2,341	297	377	349	433	1,456
Western Hemisphere	3,050	3,933	4,275	5,890	6,030	1,113	1,285	917	963	4,277
US	2,071	2,651	2,896	4,061	4,052	636	515	563	673	2,387
Other	980	1,282	1,380	1,829	1,979	477	770	353	290	1,891
Middle East and Africa	489	556	459	802	608	110	145	139	226	620
Other	299	246	241	328	354	88	66	60	51	265
Imports from:	(In percent of total imports)									
CIS	26.7	29.0	31.8	26.9	25.9	24.0	25.6	28.2	31.6	27.4
Belarus	5.4	4.2	6.1	8.8	10.5	10.1	10.8	10.2	11.5	10.6
Kazakstan	5.2	5.9	6.8	5.2	4.4	3.5	3.5	4.9	6.2	4.5
Ukraine	11.4	14.3	14.1	7.6	7.5	7.3	7.8	9.0	9.1	8.3
Other	4.7	4.6	4.9	5.2	3.5	3.0	3.5	4.1	4.9	3.9
Non-CIS	73.3	71.0	68.2	73.1	74.1	76.0	74.4	71.8	68.4	72.6
Europe	53.3	53.2	47.5	50.4	47.8	49.1	45.7	46.7	43.8	46.3
Czech Republic	1.1	0.9	1.2	1.1	1.2	1.2	1.1	1.2	1.0	1.1
Finland	4.2	4.4	3.7	3.6	3.3	3.5	2.7	3.2	3.1	3.1
France	2.6	2.3	2.8	3.0	3.7	4.0	4.8	3.7	3.2	3.9
Germany	14.7	14.1	11.6	12.7	12.6	15.1	13.7	13.8	13.0	13.9
Hungary	1.9	1.8	1.5	1.8	1.4	1.0	1.0	1.2	1.0	1.0
Ireland	0.6	0.7	0.7	0.8	0.7	0.4	0.8	0.6	0.7	0.6
Italy	4.1	4.0	5.2	5.1	4.2	5.0	3.3	3.5	3.5	3.8
Netherlands	4.2	3.5	2.3	2.3	2.1	2.0	2.2	2.4	2.5	2.3
Poland	2.5	2.8	2.1	2.0	2.4	1.8	1.9	2.1	2.1	2.0
Slovak Republic	0.5	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.4
Switzerland	1.5	1.5	1.1	1.0	1.0	1.4	0.9	0.9	0.9	1.0
UK	2.3	2.4	2.5	2.8	2.8	2.2	2.1	2.5	2.0	2.2
Other	13.0	14.0	12.2	13.7	12.0	11.2	10.8	11.1	10.5	10.9
Asia	10.1	7.6	9.5	9.3	10.0	8.0	9.2	9.9	9.8	9.2
China	2.5	1.9	2.2	2.4	2.7	2.4	2.8	3.4	3.1	2.9
Japan	2.9	1.6	2.2	1.9	1.9	1.3	1.5	1.8	1.5	1.5
Other	4.7	4.1	5.1	5.1	5.5	4.3	4.9	4.8	5.2	4.8
Western Hemisphere	7.9	8.5	9.6	11.2	14.0	16.0	16.8	12.5	11.5	14.2
US	5.4	5.7	6.5	7.8	9.4	9.2	6.7	7.7	8.0	7.9
Other	2.5	2.8	3.1	3.5	4.6	6.9	10.1	4.8	3.5	6.3
Middle East and Africa	1.3	1.2	1.0	1.5	1.4	1.6	1.9	1.9	2.7	2.0
Other	0.8	0.5	0.5	0.6	0.8	1.3	0.9	0.8	0.6	0.9

Source: IMF Direction of Trade Statistics.

1/ Based on imports according to the Direction of Trade Statistics, which differ somewhat from those compiled by the Central Bank of Russia and shown in Table 37.

Table 41. Russian Federation: Composition of Merchandise Imports, 1994-99

	1994	1995	1996	1997	1998	1999
	(In millions of U.S. dollars)					
Total imports (c.i.f) 1/	38,616	46,614	45,438	48,258	38,971	26,949
Food, beverage, tobacco and agricultural products	10,700	13,041	11,028	12,715	10,266	7,661
Stone and ore	1,130	1,028	733	764	591	425
Fuel products	1,389	1,584	1,703	1,870	1,416	721
Chemicals (including pharmaceuticals and rubber)	3,802	4,857	6,140	7,019	5,941	4,432
Leather	197	144	144	155	96	58
Wood and paper products	566	1,066	1,427	1,738	1,531	955
Textiles and clothing	2,963	2,345	1,948	1,936	1,268	1,147
Gems and precious metals	87	426	555	105	32	37
Metals	2,524	3,396	3,718	3,310	2,665	1,951
Non-ferrous	562	779	813	952	895	749
Ferrous	1,962	2,617	2,905	2,358	1,770	1,203
Machines, equipment (including cars) and instruments	14,824	18,222	17,434	16,939	13,909	8,707
Other, including ceramics and glass	434	505	608	1,708	1,259	856
	(In percent of total imports)					
Total imports (c.i.f) 1/	100.0	100.0	100.0	100.0	100.0	100.0
Food, beverage, tobacco and agricultural products	27.7	28.0	24.3	26.3	26.3	28.4
Stone and ore	2.9	2.2	1.6	1.6	1.5	1.6
Fuel products	3.6	3.4	3.7	3.9	3.6	2.7
Chemicals (including pharmaceuticals and rubber)	9.8	10.4	13.5	14.5	15.2	16.4
Leather	0.5	0.3	0.3	0.3	0.2	0.2
Wood and paper products	1.5	2.3	3.1	3.6	3.9	3.5
Textiles and clothing	7.7	5.0	4.3	4.0	3.3	4.3
Gems and precious metals	0.2	0.9	1.2	0.2	0.1	0.1
Metals	6.5	7.3	8.2	6.9	6.8	7.2
Non-ferrous	1.5	1.7	1.8	2.0	2.3	2.8
Ferrous	5.1	5.6	6.4	4.9	4.5	4.5
Machines, equipment (including cars) and instruments	38.4	39.1	38.4	35.1	35.7	32.3
Other, including ceramics and glass	1.1	1.1	1.3	3.5	3.2	3.2

Source: State Customs Committee.

1/ Excludes shuttle trade and other adjustments to the customs.

Table 42. Russian Federation: Foreign Currency Disbursements to the Federal Government, 1994-99
(In millions of U.S. dollars)

Creditors	1994	1995	1996	1997	1998	1999
Multilateral	1,931	6,319	4,940	4,776	7,519	1,208
IMF 1/	1,544	5,450	3,758	2,019	6,240	641
World Bank	280	826	1,107	2,699	1,219	545
EBRD	6	43	75	59	60	22
Other	101	0	0	0	0	0
Bilateral	2,057	1,554	3,280	1,375	2,110	1,488
Tied	2,057	1,554	1,090	1,375	2,110	1,063
Untied	0	0	2,190	0	0	425
Bonds 2/	0	0	1,000	3,549	9,615	0
Suppliers/other commercial	507	93	0	1,136	156	0
Total	4,496	7,966	9,220	10,836	19,399	2,696
(excluding IMF)	2,952	2,515	5,462	8,817	13,160	2,055
Memorandum item:						
Minfin bonds 3/	0	0	3,500	0	0	0
Nonresident purchases of GKOs/OFZs (net)	0	0	5,934	10,882	2,767	0
Total including Minfins and nonresident GKOs/OFZs	4,496	7,966	18,654	21,718	22,166	2,696
(excluding IMF)	2,952	2,515	14,896	19,699	15,927	2,055
Total disbursements from nonresidents, including GKOs/OFZs, excluding Minfins	4,496	7,966	15,154	21,718	18,466	2,696

Source: The Russian authorities.

1/ Full amount of Fund purchases. In 1998 part of this amount was disbursed directly to the CBR.
2/ Figure for 1998 includes $3,700 of Eurobonds purchased by residents. Data on resident purchases in other years were not available.
3/ Only Minfin bonds VI and VII, issued in 1996, are included here. Prior Minfin bond issues did not entail any new inflows to the government but were in exchange for foreign currency deposits of enterprises held at the Vnesheconombank. These bonds are recorded at face value; information on discounted amounts are not available.

Table 43. Russian Federation: Nonsovereign Sector Capital Account, 1994-99
(In millions of U.S. dollars)

	1994	1995	1996	1997	1998	1999
Direct investment	539	1,658	1,708	3,640	1,155	1,164
Abroad	-101	-358	-771	-2,603	-1,027	-2,145
In Russia	640	2,016	2,479	6,243	2,182	3,309
Portfolio investment	81	-1,611	2,140	2,223	842	326
Assets	114	-1,705	-172	-156	-256	254
Equity	-145	-144	-75	32	-10	5
Debt securities	259	-1,561	-97	-188	-246	249
Liabilities	-33	94	2,312	2,379	1,098	72
Equity	45	59	2,152	1,265	714	213
Banks	45	47	50	93	33	-10
Nonfinancial enterprises	0	12	2,102	1,172	681	223
Debt securities	-78	35	160	1,114	384	-141
Local governments	0	0	0	897	500	0
Banks	-78	7	76	110	-266	-97
Nonfinancial enterprises	0	28	84	107	150	-44
Other investments	-13,615	1,874	-22,934	-19,342	-16,700	-15,575
Assets	-14,418	6,292	-28,686	-34,009	-14,559	-13,803
Cash foreign currency and deposits	-4,411	4,167	-9,596	-13,122	2,021	-2,817
Trade credit	-3,721	8,040	-9,500	-6,948	-6,810	-5,773
Loans	-1,085	-360	360	-2,639	-334	280
Banks	-1,085	-356	443	-2,164	39	409
Nonfinancial enterprises	0	-4	-83	-475	-373	-129
Arrears	-29	-4	-28	22	-291	-90
Banks	-29	-4	-28	22	-151	-40
Nonfinancial enterprises	0	0	0	0	-140	-50
Changes in the stock of nonrepatriated ...	...	...	...	...	...	
Export proceeds and nonrepatriated ...	...	...	...	...	...	
Import advances	-3,860	-4,928	-9,773	-11,458	-8,625	-5,384
Other	-1,312	-623	-149	136	-520	-19
Liabilities	803	-4,418	5,752	14,667	-2,141	-1,772
Cash foreign currency and deposits	474	1,779	1,427	4,240	-2,759	-283
Trade credit	-978	-8,090	-759	-64	322	5
Loans	984	971	4,203	9,977	300	-1,619
Banks	426	661	1,705	3,840	-3,395	-1,519
Nonbank financial organizations	0	0	1,516	-1,516	3,695	-100
Nonfinancial enterprises	558	310	982	7,653	0	0
Arrears	2	0	0	3	693	337
Banks	2	0	0	3	693	337
Nonfinancial enterprises	0	0	0	0	0	0
Other	321	922	881	511	-697	-212
Total (net)	-12,995	1,921	-19,086	-13,479	-14,703	-14,085

Source: Central Bank of Russia.

Table 44. Russian Federation: External Debt, 1994-99 1/
(In billions of U.S. dollars)

	1994	1995	1996	1997	1998	1999
I. SOVEREIGN DEBT						
A. Russian-era foreign currency debt (post 1/1/1992)	11.3	17.4	27.7	35.6	55.4	51.1
Medium and long term	...	...	...	...	55.4	51.1
Multilateral Creditors	5.4	11.4	15.3	18.7	26.0	22.4
IMF	4.2	9.6	12.5	13.2	19.4	15.3
World Bank	0.6	1.5	2.6	5.3	6.4	6.8
Other	0.6	0.3	0.2	0.2	0.2	0.2
Official creditors 2/	5.9	6.0	7.9	7.6	9.7	9.5
Eurobonds	0.0	0.0	1.0	4.5	16.0	15.6
Minfin bonds (Minfins VI and VII)	0.0	0.0	3.5	3.5	3.5	3.5
Commercial creditors (includes financial institutions)	0.0	0.0	0.0	1.3	0.2	0.1
Short term	...	...	...	...	0.0	0.0
B. Soviet-era foreign currency debt (pre 1/1/1992)	116.2	110.6	108.4	99.0	102.8	103.5
Medium and long term	...	...	...	...	102.8	103.5
Multilateral Creditors	0.0	0.0	0.0	0.0	0.0	0.0
Official creditors 2/	69.9	62.6	61.9	56.9	59.5	58.2
Paris Club	39.6	41.6	42.3	37.6	40.0	38.7
of which: arrears	...	...	...	...	0.8	0.0
COMECON	25.7	16.6	15.4	14.9	14.7	14.5
of which: arrears	...	...	...	...	0.0	0.0
Other, including non-Paris Club bilateral	4.6	4.4	4.2	4.4	4.7	5.0
of which: arrears	...	...	...	...	4.0	4.8
Commercial creditors	36.0	38.3	37.8	33.9	35.2	36.9
Financial institutions	31.1	33.0	32.5	29.7	31.2	32.2
of which: arrears	...	...	...	...	2.1	3.3
Other 3/	4.9	5.3	5.3	4.2	4.1	4.7
of which: arrears	...	...	...	...	4.1	4.6
Eurobonds	1.7	1.1	0.1	0.1	0.0	0.0
Credits contracted by entities other than VEB	1.0	1.0	1.0	0.5	0.5	0.8
Minfin bonds (Minfins III, IV and V)	7.6	7.6	7.6	7.6	7.6	7.6
of which: arrears	0.0	0.0	0.0	0.0	0.0	1.3
Short term	...	...	...	...	0.0	0.0
C. **Total sovereign foreign currency debt (= A + B)**	**127.5**	**128.0**	**136.1**	**134.6**	**158.2**	**154.6**
(In percent of GDP)	**45.8**	**36.8**	**31.6**	**30.2**	**50.1**	**84.3**
D. **Total sovereign debt to nonresidents (= C - E - F + G)**	...	...	...	...	**152.4**	**147.6**
(In percent of GDP)	...	...	...	...	**48.2**	**80.5**
E. Residents' Minfin bonds 5/	...	...	...	...	7.3	7.3
F. Residents' eurobonds 6/	...	...	...	...	3.7	3.7
G. Nonresidents' GKOs/OFZs (ruble denominated) 7/	...	...	...	...	5.2	4.0
II. NONSOVEREIGN DEBT						
Local governments	...	...	...	1.1	2.2	2.1
Medium and long term	...	...	...	1.1	1.9	1.8
of which: Eurobonds	0.0	0.0	0.0	0.9	1.4	1.3
Short term	...	...	...	...	0.3	0.3
Banks 9/	2.6	5.2	9.2	19.2	9.9	8.8
Medium and long term	...	...	...	...	2.8	2.8
Short term	...	...	...	...	7.1	6.0
Nonbank corporations (including arrears)	...	...	...	13.6	19.6	20.2
H. Total	...	...	...	...	**31.7**	**31.1**
(In percent of GDP)	...	...	...	...	**9.6**	**17.0**
III. TOTAL EXTERNAL DEBT (to nonresidents) (= D + H)	...	...	...	...	**184.0**	**178.7**
(In percent of GDP)	...	...	...	...	**55.9**	**97.4**
Memorandum items:						
Sovereign arrears	...	...	...	...	10.9	14.0

Sources: Russian Federation authorities and Fund staff estimates.

1/ Foreign currency values of outstanding external debt have been converted into U.S. dollars at the relevant market exchange rate prevailing at the respective dates indicated.
2/ Includes government to government creditors and official export credits.
3/ Subject to reconciliation.
4/ Arrears on principal are included in the debt figures.
5/ Estimated by the authorities at 60 percent of outstanding issues.
6/ Applies only to Eurobonds issued in July 1998, in the context of the GKO-Eurobond exchange. Data on nonresident holdings of other Eurobond issues are not available to Fund staff.
7/ Equivalent to Rub. 76 billion, valued at the end-1998 exchange rate. The ruble amount is the discounted amount that resulted after the GKO/OFZ conversion. Also includes Rub 75 billion of OFZs not covered by the GKO/OFZ conversion.
8/ Includes interest on arrears.
9/ Figures for 1994-97 include equity. At end-1998 such equity amounted to about $0.5 billion.

Table 45. Russian Federation: Foreign Currency Debt Service, 1994-99 1/
(In billions of U.S. dollars)

	1994	1995	1996	1997	1998	1999
Debt Service Due	18.78	19.15	17.94	11.76	13.01	17.92
Principal	13.99	12.65	11.68	5.84	5.76	8.78
Interest	4.79	6.50	6.26	5.92	7.25	9.14
Principal	13.99	12.65	11.68	5.84	5.76	8.78
Russian-era debt	2.09	2.28	1.60	1.54	3.27	5.72
Multilateral	0.21	0.43	0.74	0.52	1.03	4.43
Bonds	0.00	0.00	0.00	0.00	0.00	0.00
Official bilateral	1.88	1.85	0.86	0.92	1.10	1.11
Commercial	0.00	0.00	0.00	0.10	1.14	0.18
Soviet-era debt	11.90	10.37	10.08	4.30	2.49	3.06
Multilateral	0.00	0.00	0.00	0.00	0.00	0.00
Bonds	0.06	0.80	0.98	0.00	0.07	0.00
Official bilateral and other commercial	11.84	9.57	9.10	4.30	2.42	3.06
Interest	4.79	6.50	6.26	5.92	7.25	9.14
Russian-era debt	0.65	0.94	0.96	1.42	2.29	3.31
Multilateral	0.28	0.40	0.61	0.77	1.10	1.11
Bonds	0.00	0.00	0.00	0.21	0.66	1.64
Official bilateral	0.37	0.54	0.35	0.43	0.47	0.45
Commercial	0.00	0.00	0.00	0.01	0.06	0.11
Soviet-era debt	4.14	5.56	5.30	4.50	4.96	5.83
Multilateral	0.00	0.00	0.00	0.00	0.00	0.00
Bonds	0.12	0.14	0.08	0.00	0.00	0.00
Official bilateral and other commercial	2.20	3.07	2.79	2.62	4.44	5.33
Interest on arrrears	1.82	2.35	2.43	1.88	0.52	0.50
Debt Service Paid	3.66	6.40	6.92	5.89	7.77	9.66
Principal	2.27	3.32	2.86	1.68	3.49	5.90
Interest	1.39	3.08	4.06	4.21	4.28	3.76
Principal	2.27	3.32	2.86	1.68	3.49	5.90
Russian-era debt	2.09	2.28	1.59	1.54	3.27	5.72
Multilateral	0.21	0.43	0.74	0.52	1.03	4.43
Bonds	0.00	0.00	0.00	0.00	0.00	0.00
Official bilateral	1.88	1.85	0.85	0.92	1.10	1.11
Other commercial	0.00	0.00	0.00	0.10	1.14	0.18
Soviet-era debt	0.18	1.04	1.27	0.14	0.22	0.18
Multilateral	0.00	0.00	0.00	0.00	0.00	0.00
Bonds	0.06	0.80	0.98	0.00	0.07	0.00
Official bilateral	0.12	0.24	0.29	0.14	0.14	0.18
Other commercial	0.00	0.00	0.00	0.00	0.01	0.00
Interest	1.39	3.08	4.06	4.21	4.28	3.76
Russian-era debt	0.65	0.94	0.96	1.42	2.22	3.31
Multilateral	0.28	0.40	0.61	0.77	1.03	1.11
Bonds	0.00	0.00	0.00	0.21	0.66	1.64
Official bilateral	0.37	0.54	0.35	0.43	0.47	0.45
Other commercial	0.00	0.00	0.00	0.01	0.06	0.11
Soviet-era debt	0.74	2.14	3.10	2.79	2.06	0.44
Multilateral	0.00	0.00	0.00	0.00	0.00	0.00
Bonds	0.12	0.14	0.08	0.00	0.00	0.00
Official bilateral	0.50	1.40	1.71	1.94	1.29	0.22
Other commercial	0.12	0.60	1.31	0.85	0.77	0.23

Source: Russian authorities.

1/ Debt service in foreign currency.

Table 46. Russian Federation: Import Tariff Regime, 1995-99
(In percent)

Product	Average statutory rates 1/				
	1995	1996	1997	1998	1999
Food, beverages, and tobacco 2/	14.5	15.7	18.7	...	...
Clothing	20.3	29.5	26.2	...	...
Stone and ore	5.0	5.0	5.0	...	...
Fuel products	5.0	5.0	5.0	...	...
Chemicals	9.5	8.4	10.1	...	...
Leather	15.4	15.3	51.3	...	...
Wood and paper products	11.7	7.9	9.3	...	...
Textiles	10.1	12.2	12.2	...	...
Stone and glass	19.7	18.4	18.2	...	...
Gems and prec. metals	50.0	50.0	30.0	...	...
Non-ferrous metals	18.2	10.8	13.2	...	...
Ferrous metals	5.0	16.1	12.7	...	...
Machines and equipment	10.9	11.8	12	...	...
Instruments and other	12.0	12.8	14.3	...	...
Trade weighted average	12.7	13.6	13.9	13.9	13.4
Memorandum items:					
Average effective duty 3/	5.9	11.7	11.9	8.7	8.5
Trade weighted standard deviation 4/	9.6	8.2	8.1	...	...

Source: Russian authorities, World Bank and Fund staff estimates.

1/ Trade weighted average rates. Rates include for some products specific duties which have have been converted into ad valorem equivalents.
2/ Excludes alcoholic beverages.
3/ Defined as the ratio of actual duty collections to imports (fob) from non-CIS countries as as registered by customs.
4/ Measured over the list of individual goods (over 1,300) to which statutory rates apply.

CHANGES IN THE EXCHANGE SYSTEM, 1999–2000

1999

January 1: The export surrender requirement was raised to 75 percent and the period within which the surrender must be effected was shortened to 7 days from 14.

January 1: A temporary export tax was introduced on a number of commodities for a 6-month period.

January 1: A ban on private imports of ethyl alcohol was imposed. Licenses were required for the import of a number of items.

February 11: In the absence of an inspection report for exports, export transactions were prohibited.

March 22: The purchase by residents of foreign exchange for imports was to be effected solely in the special trading sessions of interbank currency exchanges. A 100 percent deposit requirement was introduced by the CBR for all purchases of foreign exchange connected to the prepayment of imported goods.

March 23: The CBR initiated sessions for the sale of foreign exchange to banks which were authorized to open and operate S-accounts for nonresident investors. The exchange rate on these sessions was to be the official rate multiplied by a coefficient determined by the CBR. Nonresident investors could freely repatriate the foreign exchange thus obtained by the authorized banks.

April 5: Nonresident banks having correspondent accounts in rubles with a resident bank were prohibited from converting the balances on these accounts.

April 14: The 100 percent deposit requirement for imports was reduced by the amount of an irrevocable letter of credit by an authorized bank, a guarantee of a nonresident bank, a contract to insure the risk of non-repatriation in case of the default of the nonresident payer, a promissory note issued by a nonresident secured by a nonresident bank, or a special permit from the CBR.

June 9: Resident natural persons were authorized to take out of the Russian Federation foreign exchange not exceeding $10,000. Amounts exceeding $10,000 could be taken out only with the authorization of the CBR.

June 29: The trading sessions of the interbank foreign currency exchanges were unified into a single trading session (UTS). Export proceeds in foreign currency, which were subject to mandatory sale at the interbank foreign currency exchanges, had to be sold in the UTS.

June 29: Clarification by the CBR that remuneration for the deposit to be placed at the time of the prepayment of imported goods was to be market-based.

June 30: Nonresident banks having correspondent accounts in rubles with a resident bank were allowed to convert the balances on these accounts.

July 2: The obligatory export inspection was changed to a voluntary system.

December 30: CBR Directive 721-4 required VEK approval within 10 days for payments of service imports and intellectual property.

2000

February 11: Resident natural persons were authorized to take out freely of the Russian Federation foreign exchange in banknotes not exceeding $1,500. Foreign exchange up to the amount of $10,000 could be taken out upon presentation to the customs authorities of a certificate from an authorized bank. Amounts exceeding this limit could be taken out only upon receipt of an authorization of the CBR.

April 7: A special procedure of confirming purchases of foreign exchange to execute payments exceeding $10,000 for some kinds of services was introduced.

May 17: VEK was abolished as CBR Directive 721-4 becomes inoperative.

CHANGES IN THE EXTERNAL TRADE REGIME, 1999–2000

1999

January 1999: Government Decree 68 reduced the list of goods affected by the Russian Federation's national preferences scheme by approximately 35 percent.

January 1999: Government Decree No. 18 introduced automatic licensing (without any quantitative restrictions) of the importation of valuable species of hardwood.

January 1999: A ban on private imports of ethyl alcohol was adopted. In addition, the obtaining of import licenses for alcoholic products was made more difficult. Further tightening of alcohol import licensing was effected in *March 1999*.

January 1999: Temporary export taxes on a number of commodities were introduced. A 10 percent duty was levied on some varieties of seeds, skins and leather, timber and nonferrous metals scrap. A 5 percent duty was imposed on coal, oil, natural gas, petroleum products, asphalt, and nonferrous metals and products.

January 1999: Government Resolution #83 repealed export duties on natural gas

January 1999: Government Resolution #91 included Bulgaria in the countries subject to GSP

January 1999: amendments to the Federal Law "On production sharing agreements" simplified the operation of foreign investors in Russia.

February 1999: With Government Resolution 155, the Federal Service of Currency and Exports Control of Russia (VEK) was authorized to monitor the quantity and quality of exported goods.

February 1999: Government Resolutions ##183 and 184 approved the procedure for assessing losses incurred by Russian ministries due to dumping, subsidized imports and rising imports of foreign goods.

February 1999: Government Resolution #215 lowered import duty rates on agricultural primary goods and advanced technological equipment and raised duties on some types of manufactured goods.

February 1999: Government Resolution #219 introduced 5% duty rates on fish, alcohol products, some types of chemical goods, non-ferrous metals, and a 10% rate on fine wood.

February 1999: Government Resolution #235 removed the additional 3% import duty introduced earlier to support the balance of payments.

February 1999: Federal Law incorporated exemptions granted to investors under production sharing agreements into the customs and tax legislation of Russia.

March 1999: Federal Law imposed a ban on imports of ethyl alcohol into Russia for a period of 23.5 years.

March 1999: Government Resolution #271 approved a procedure for conducting investigations preceding the imposition of special safeguards anti-dumping, and countervailing measures.

March 1999: Government Resolution #304 lifted the oil export duty.

March 2000: Federal Law imposed sanitary requirements for goods imported in Russia, and specified cases requiring preliminary registration of such goods.

April 1999: Government Resolutions ##441, 442, and 443 imposed a 5% export duty rate on chemical fertilizers, precious stones and metals, and increased export duty rates on scrap and waste of ferrous and non-ferrous metals.

April 1999: Government Resolution #458 prolonged for an additional 6-month period the validity of lower import duties on 92 staple goods enforced in October 1998.

May 1999: Government Resolution #511 introduced higher seasonal import duties on raw sugar for 1999

May 1999: Government Resolution #561 introduced oil export duties at the rate of 5 Euros per ton.

May 1999: A Federal Law was adopted whereby procurement for government needs were to be held on the basis of competitive tenders and auctions.

June 1999: Government Resolution #609 simplified the procedure for licensing imports of tobacco and tobacco products introduced in December 1999.

June 1999: Government Resolution #700 repealed import duties on diamonds.

July 1999: Government Resolution #783 approved the procedure for transporting goods through the customs border by individuals.

July 1999: Government Resolution #766 approve a vast list of goods for which a certificate of compliance may be issued on the basis of the declaration of the producer (exporter), or supplier (importer).

July 1999: Government Resolution #792 approved quantitative restriction on imports of certain types of goods into the Kaliningrad customs free zone.

July 1999: Government Resolution #798 imposed a 5% export duty rate on oil products, non-ferrous metal goods, as well as prolonged the validity of the 10% export duty rate on oil crops and raw hide.

July 1999: Government Resolution #847 approved a procedure whereby the oil export duty rate was set in line with world prices.

July 1999: Government Resolution #866 approved a procedure whereby certain types of oil products could be exported only after domestic demand was met. This procedure expired on July 1, 2000.

July 1999: a Federal Law "On foreign investments in the Russian Federation" is approved whereby foreign investments are subject to the grandfather clause.

August 1999: Government Resolution #902 imposed temporary special safeguards on starch treacle.

August 1999: Government Resolution #911 lowered import duty rates on metallurgical mills.

August 1999: Government Resolution #933 lowered import duties on fodder for fur farming and assembly parts for furniture.

August 1999: Government Resolution #971 lowered import duty rates on primary goods for the meat industry and certain types of furniture.

September 1999: *January 2000*: three Government Resolutions introduced new types of excise stamps and specified the procedure governing their sale.

September 1999: Government Resolution #987 prolonged the validity of export duties on fish, alcohol products, lumber and non-ferrous metals.

September 1999: Government Resolution #988 lowered import duty rates on 150 types of industrial goods.

September 1999: Government Resolution #1036 set the export duty at rate of 7.5 Euro per ton.

September 1999: Export duties on oil products were raised by Government Regulation Number 1036.

October 1999: The effective period of export duties on chemical fertilizers, scrap and waste of ferrous and non-ferrous metals was extended by Government Regulation Number 1198.

November 1999: Export duties on liquefied gas were introduced by Government Regulation 1232.

November 1999: The effective term of import duties on certain types of industrial products introduced in 1998 was extended by Government Regulation Number 1259.

November 1999: In accordance with international obligations of the Russian Federation, quantitative limits on the export of steel products from Russia to the USA were introduced by Government Regulations Number 1261 and 1262.

November 1999: The effective term of the list of products covered by the national preferences arrangement was extended by Government Regulation Number 1271.

November 1999: Export duties on copper and nickel were raised by Government Regulation Number 1274.

December 1999: The effective term of import duties on certain types of agricultural and mineral raw materials introduced earlier was extended by Government Regulations Number 1333 and 1334.

December 1999: *The E*xport duty on oil was raised to EURO 15 per ton by Government Regulation Number 1351.

December 1999: Export duties at the rate of 6.5 percent on mineral raw materials, ores, and concentrates were introduced by Government Regulation Number 1358.

December 1999: The effective term of reduced import duties on hi-tech equipment that had been introduced earlier by Government Regulation Number 215 was extended by Government Regulation Number 1361.

December 1999: The minimum rate of export duties was raised from 5.5 to 6.5 percent by Government Regulation Number 1364.

December 1999: Ad valorem and combined rates were substituted for specific rates of import duties on wine and fish by Government Regulation Number 1365.

December 1999: Export duties on natural gas were introduced by Government Regulation Number 1403.

December 1999: In accordance with international obligations of the Russian Federation, the export from the Russian Federation of agricultural products included into the stock list of products supplied to Russia from the USA and the EU as humanitarian aid was prohibited temporarily by Government Regulations Number 1450 and 1451. The prohibition was to remain effective during the term of the humanitarian aid program.

December 1999: In accordance with international obligations of Russia, control over the export of substances harmful to ozone was increased.

2000

January 2000: Federal Law stipulated that foodstuffs brought to Russia for the first time should be made subject to the mandatory state registration.

January 2000: Federal Law was adopted that made Russian investors subject to the grandfather clause.

February 2000: A new customs tariff of the Russian Federation based on the ten-digit stock list was introduced by Government Regulation Number 148.

February 2000: Export duties on birch-tree timber were reduced by Government Regulation Number 170.

March 2000: Export duties were raised by Government Regulations Numbers 185 and 186.