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PERMANENT CRISIS IN RUSSIA: SELECTED PROBLEMS OF MACROECONOMIC PERFORMANCE*

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Abstract

It is tempting to attribute Russia's shattered stabilization to external factors, namely the fall of oil prices and changed attitudes toward emerging markets. But fundamental distortions thwart the Russian economy. The financial crisis in Southeast Asia and the drop in energy prices only hastened the failure of stabilization. The paper reviews the failed stabilization program and discusses imbalances in Russia's transformation, including tax collection, capital flight, demonetization, and the collapse of investment.

Keywords: Fiscal imbalance; Tax collection; Demonetization; Capital flight

JEL classification: P27; P47; P52

I. *Introduction*

The Russian experience of reforming the economy in the 1990-es gives an instructive example of mishandling macroeconomic policy which led to the August 1998 crisis, collapse of the financial markets, devaluation of national currency and shattered the myth of stabilization that had appeared in 1997.

There is a quite common explanation, which was quite popular among government economists, that Russia's problems of 1998 were caused mostly by external factors, namely by the fall of oil prices on the world markets and changes in investors' attitude towards emerging markets. This may be accepted, but only to some extent, as a number of fundamental distortions existed and still remain in the Russian economy. Financial crisis in South-Eastern Asia and fall in the energy prices could only speed up the collapse of stabilization in Russia.

At present current situation in Russia remains very uncertain - both in politics and in the economy. After the new government was appointed in October 1998 the cabinet declared the necessity to strengthen "the role of the state" and introduce more regulations in the economy.

* Views expressed in this paper are those of the author and do not necessarily reflect the official position of the institutions he belongs to. The author remains responsible for all judgements and possible errors.

Though it was not clear what sort of regulations had been meant. The outcome can be quite different depending on the preferences: whether it will be strengthening of the legal system, the "rule of law", or in contrast, direct administrative interventions in the economy. This paper is not attempted to present a full coverage of numerous problems, which Russia has to solve. Instead there is an attempt to discuss some of the macroeconomic aspects of Russia's transformation and find out the relationships between them. Major issues, which are covered in this paper, are as follows: fiscal imbalance, tax collection, capital flight, debt service, investment crisis and capital stock.

II. *Background*

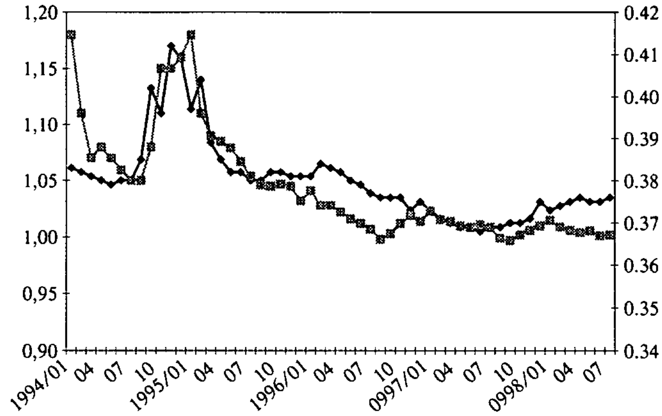
The August 1998 crisis marked an end of the next in turn period of the Russian transformation. The beginning of this period can be identified as mid-1996, the re-election of Mr.Yeltsin. In brief this period can be described as testing the Russian economy on sensitivity and steadiness from the external fluctuations, which originated along with globalization of the Russian economy and liberalization the country's capital account.

From the formal point of view the above mentioned two-year period could be characterized as a period of relative successes of the government policies, as a number of macroeconomic indicators improved substantially relative to the previous years of transformation. Really, after the government was able to bring inflation down in 1995-1996 by introducing the exchange rate corridor and issuing government securities, which substantially reduced the pressure on the ruble on the foreign exchange market, it seemed that in 1997 the economy began growing. Inflation in 1997 was reduced to 11 percent. Moreover, from the mid-1996 to the mid-1998 average monthly inflation went down below 1 percent and consumer prices increased cumulatively by only 21 percent over the whole period. It means that the country escaped from high inflation crisis and some sort of macroeconomic stabilization was achieved. Though there was little success in reforming public finances, various sorts of arrears were growing fast. As will be argued below it was possible to maintain some sort of price stability despite relatively high fiscal deficit until the country's external balance deteriorated sharply.

The exchange rate based stabilization policy that has begun in mid-1995 contributed first to a rapid appreciation of ruble in real terms, but from the mid-1996 to the mid-1998 nominal depreciation of the ruble followed inflation, which resulted in the stability of national currency in real terms. This occurred against the background of re-monetization of the economy and growth in real money supply (by about 17 percent over the same period). So, first appreciation and then the stability of the ruble in real terms, which could be seen through the whole reform period from 1992 to mid 1998 contributed to growth of imports. Imports increased from average 4 billions dollars per month in 1994 to more than monthly average 6 billions dollars in 1997 and in the first half of 1998. At the same time due to the fall of the energy prices on the world markets the 1998 exports decreased to roughly 6 billions dollars per month in 1998 from monthly average 7.5 billions dollars in 1996-1997. Along with growing interest payments to foreign investors the above factors contributed to that current account shifted to negative value (-6 billion US dollars) in the first half of 1998 from positive values varying between 3 to 13 billion US dollars in 1993-1997.

It is seen from regular statistics that from the mid-1996 to the early 1998 the real economy

FIG.1. GINI COEFFICIENT (the right scale) and CPI IN 1994-1998
(times to preceding month)



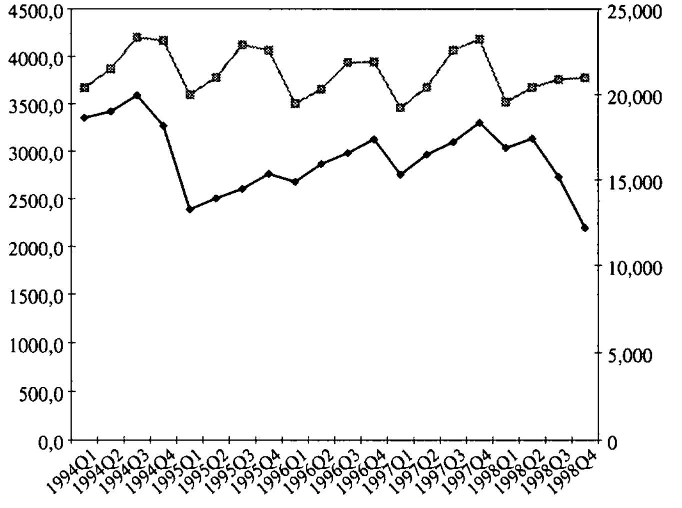
also showed some signs of stabilization. An increase in production could be already observed in the second half of 1996, so that in 1997 real GDP increased by 0.8 percent, and industrial output grew by 1.8 percent. At the same time low inflation affected interest rates which in turn contributed to relative improvement in investment activity: first signs that fixed investment began picking up clearly appeared in the second half of 1997 when lending rates fell down below 30 percent in nominal terms. So, some hopes on the future acceleration of economic growth appeared, and it was reflected in a number of governmental documents of that time and in various public statements by top officials.

Equally important is that social inequality, which was growing rapidly in 1992-1994, began falling since inflation went down. Fig.1 shows rather obvious correlation between inflation and the Gini coefficient. It is also seen from this chart that rise in consumer prices in the second half of 1994, growing pressure on the ruble and its devaluation in October 1994 (the so-called "Black Tuesday") contributed to the corresponding increase in social inequality.

Since the fourth quarter of 1996 real incomes began growing steadily. It happened after the substantial decline, which could be observed in the period of 1995 to the mid-1996, In turn, it contributed to an increase in retail sales, and more generally, private consumption in 1997. So, better macroeconomic performance in 1997 was largely caused by growth in domestic demand, in contrast to that in 1992-1996 most of the positive developments in the real sector were caused by expanding exports.

Consumption continued growing in the first half of 1998 as well, but deep fall in retail sales, caused by the collapse of real incomes after the August 1998 crisis, contributed to that consumption for the whole 1998 decreased substantially. In terms of retail sales decline in consumption for the whole 1998 is seen as -4.5 percent relative to the preceding year. It may be said that during the mid-1996 to mid-1998 some prototype of the middle class appeared in Russia and that the August crisis most seriously affected those social groups, which could be considered as representatives of the middle class. Investment demand also fell in 1998, fixed capital investment decreased by 6.7 percent. As a result, according to official statistics GDP in 1998 contracted 4.6 percent relative to 1997.

FIG.2. LABOR PRODUCTIVITY (left scale, upper curve) AND REAL WAGES IN 1994-1998

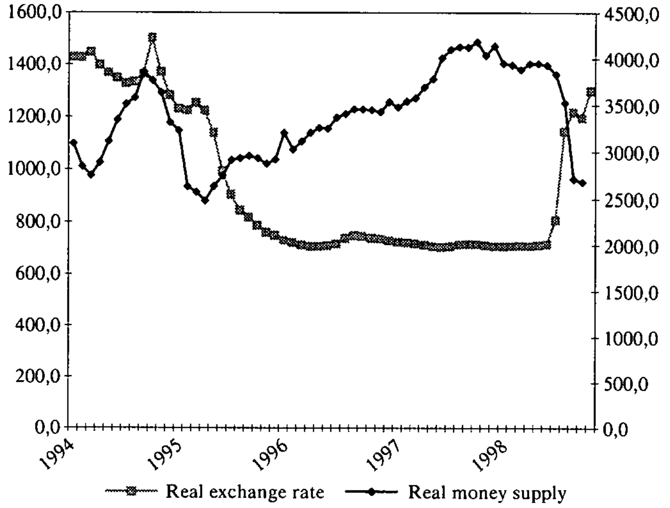


It is important that growth in real incomes in 1996-1998 occurred against the background of falling labor productivity. A downward bias for labor productivity could be seen through the whole reform period. Given the pace of output contraction the most significant decline in productivity could be observed in 1992-1993. Following the end-1994 currency crisis real incomes were falling till 1995 along with the decline in productivity of labor, while from 1995 real wages began growing despite its continuous decline. Fig.2 shows labor productivity (not seasonally adjusted) and real wages quarterly trends in 1994-1998. Econometric analysis shows that labor productivity was falling not only in the period of 1992 to 1993, but during the next period of 1994 to 1998 as well. It is seen from fig.2 that growth in nominal wages apart from seasonal fluctuations was quite stable from 1995 to the end of 1997. At the same time GDP contracted 4.1 percent in 1995, 3.5 percent in 1996 and slightly, by 0.8 percent, increased in 1997. Obviously, such a performance was possible due to an inflow of foreign capital, mostly foreign borrowing by the government. It is also clear that growth in real incomes and consumption could not last for a long time at the background of falling output. So, the August, 1998 crisis and then the collapse of consumption and real incomes was a quite natural result of macroeconomic policy that largely relied on the expansion of public debt.

It is also seen from the fig.2 that the August 1998 crisis contributed to that in the third quarter of 1998 real wages dropped back to the level of the early 1995. Its further decline in the fourth quarter of 1998 reflects the reality and in general goes in the wake of output decline. In other words, after the crisis it became clear that not the government only, which designed for 1999 the toughest budget ever seen since the onset of transition, but population as well, should consume in accordance with the results of their activities. The government should not spend more than they are able to collect taxes, while household real incomes and respectively expenditures in the long-run should also be positively correlated with the output trend.

The collapse of the stabilization has thrown the Russian economy a couple years back in terms of various economic indicators. As seen from fig.3, the real money supply after the 1998

FIG.3. REAL EXCHANGE RATE (left scale) AND REAL MONEY SUPPLY IN 1994-1998



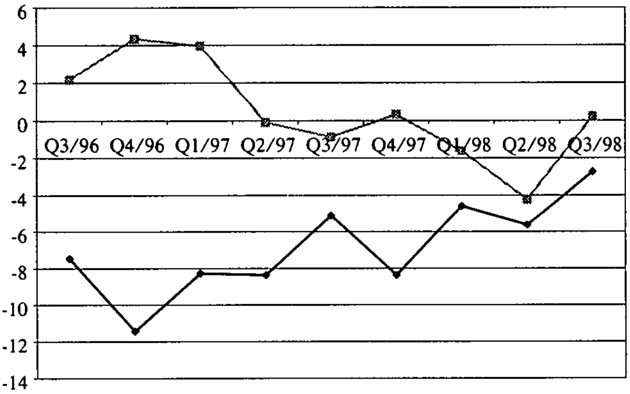
crisis dropped exactly to the level of the late 1994-early 1995, the starting point of the new fiscal policy after the government abolished direct borrowing from the Central Bank, which was largely used before, and monetary authorities tightened monetary policy. After the August 1998 crisis real exchange rate also came back to the early 1995 level. The same trend could be observed for the stock market index.

In this sense, the 1998 crisis contributed to the collapse of the "bubble" in Russia and proved one more time that stabilization based on external sources if not supported by domestic fundamentals is short-lived and fragile. Really, relatively low inflation, some improvements in the real sector, stable currency, growth in consumption and real incomes brought in 1997 an illusion of the macroeconomic stability. At the same time a number of fundamental problems were not solved. There was little change in improving the legal system, implementing de-facto property rights protection legislation. The country was lacking structural reforms and building market institutions. As a result weak banking system, which did not operate as an intermediary between savings and fixed investment, but was pumping money from households to the government when buying government securities (Gavrilenkov [1998]), collapsed after the default on domestic debt.

Mismanagement of public finances, fiscal deficit and continuous government borrowing was one of the permanent problems of the Russian economy. Fiscal deficit remained high, though in general it began decreasing since the end of 1996. For a while it was possible to maintain low inflation and stable exchange rate despite disorder in public finances as internal imbalance (fiscal deficit) was largely compensated for the positive current account. Later, in 1997, current account surplus was temporary substituted by an inflow of foreign capital. As seen from fig.4 Russia plunged into the crisis after both external and internal balances became steadily negative. Confidence in Russia's solvency among investors began falling along with falling current account.

As seen from fig.4 devaluation of 1998 reduced fiscal deficit valued in dollar terms and

FIG.4. CURRENT ACCOUNT (upper curve) AND FISCAL DEFICIT IN 1996-1998
(billions dollars, quarterly)



shifted current account back to positive levels as monthly imports collapsed roughly two times following the degree of devaluation in real terms. So, devaluation acted as a self-regulation mechanism that restored the symmetry between current account and fiscal deficit.

Fig.4 also shows that the urgent need to put public finances in order appeared in the second quarter of 1997, when current account moved close to zero. Instead of structural reforms and fiscal adjustment the government has chosen less painful way, namely expansion of the foreign borrowing. Thus come back of many indicators to the end 1994 - early 1995 levels is a price paid by the country for the delay in reforms and indecisive macroeconomic policies.

III. *Financial Markets and Fiscal Performance*

Fiscal adjustment as a part of macroeconomic stabilization is a key step to be taken in order to catch the mainstream of sustainable growth. It is very important to have low fiscal deficit, or even surplus, in transition economies due to low monetization, which makes domestic borrowing extremely expensive and pushes interest rates up. Really, as M2 to GDP ratio varies around 15 percent, which is more or less typical for Russia and most other CIS countries, then fiscal deficit of about 5 percent of GDP, if covered by domestic credit, increases money supply by one-third, which respectively affects prices. This obviously goes in the wake of the point of view which, as indicated by Heymann and Leijonhufvud says that " high inflation (*which is exactly the case of transitional economies - E.G.*) is typically a symptom of a deep-seated crisis in the public finances" (see Heymann and Leijonhufvud [1995]).

The Russian experience shows that even tight monetary policy, if carried out against the background of poor fiscal performance, can give little success. Really, permanent expansion of the government securities market could bring inflation down, but the effect was short-lived. Russian performance proved that issuing of the short-term government securities can be as inflationary as printing money (though price growth effect may be delayed).

Mismanagement of public finances and high fiscal deficit didn't allow to stabilize interest rates at low levels and keep them stable for a long time despite that the monetary authorities attempted to carry out quite tight monetary policy. Thus there was a fundamental controversy between poor fiscal and tight monetary policies. In order to maintain real exchange rate stable monetary authorities were forced to keep discount rate high. At the same time the Ministry of finance was interested in high price and low interest for the securities issued. High fiscal deficit didn't allow eliminating this contradiction despite that during the short period in 1997 interest rates went down substantially.

As witnessed by regular statistics financial stabilization in Russia in mid-1997 was short-lived and it was achieved due to massive inflow of foreign capital, which penetrated financial markets, but didn't come to the real sector. It was quite natural, that an outflow of foreign capital in 1998 destabilized not the financial markets only, but the entire economy as well. Before the August 1998 crisis ruble money supply in Russia was equal to some 370 billion rubles, which in dollar terms slightly exceeded 60 billion US dollars. Thus, due to low level of monetization and relatively low level of liquid international reserves (reserves excluding gold reached their top level of 20.4 billion US dollars in mid-1997) an outflow of, say, 10 to 20 billion of foreign capital could easily create serious macroeconomic problems, increase pressure on the ruble and harm the entire financial system.

As was said the situation in Russia deteriorated substantially after the default on the public debt in August 1998, liquidation of the government securities (GKOs) market and the devaluation of the national currency. Though first signs of that the situation was going to change to the worse appeared almost a year ago. At the background of falling oil prices and financial crisis in South-Eastern Asia foreign investors became very much concerned on Russia's solvency and its ability to maintain the stability in the economy. Foreigners began withdrawing their assets from Russian markets. Really, already in the fall of 1997 Russia could be seen somewhere in the upper part of the list of the emerging markets, which were put in order by the ratio of the short-term foreign debt to international reserves (Table 1).

Since October 1997 Russian international reserves began falling sharply as the authorities were trying to support the ruble while some of the foreign investors began leaving the country. Due to continuous fiscal problems the government was forced to borrow more and more on markets thus pushing interest rates up. So, already in December 1997 the stock of GKOs in circulation exceeded international reserves (excluding gold) two times. Given the obvious difficulties to expand borrowing on the markets and lacking financial support from the international financial organizations the government seemed to be unable to keep both the exchange rate and interest rates at the same level. That was a clear signal for the rest of foreign investors to withdraw their assets from Russian markets. This process began in the late 1997 and accelerated in 1998. One of the options could be to abandon the exchange rate corridor and allow ruble to float. Equally important was if that could be done in advance, say, in the mid-1997 when the situation was stable. This measure could allow the markets to adjust for floating exchange rate regime in advance, calm investors and make the devaluation of the ruble less dramatic avoiding high inflation.

After in late March of 1998 president Yeltsin dismissed his Prime-Minister Chernomyrdin economic situation changed to the worse more. The new government headed by Mr. Kirienko was unable to improve the situation despite the initially high credibility. Economic policies of the new Kirienko's government were not clear. The evolution of his government, which existed for some four months, was quite impressive: from the support of local producers and

TABLE 1. SHORT TERM DEBT AS A PERCENTAGE OF FOREIGN EXCHANGE RESERVES (Excluding Gold) IN SELECTED EMERGING MARKETS

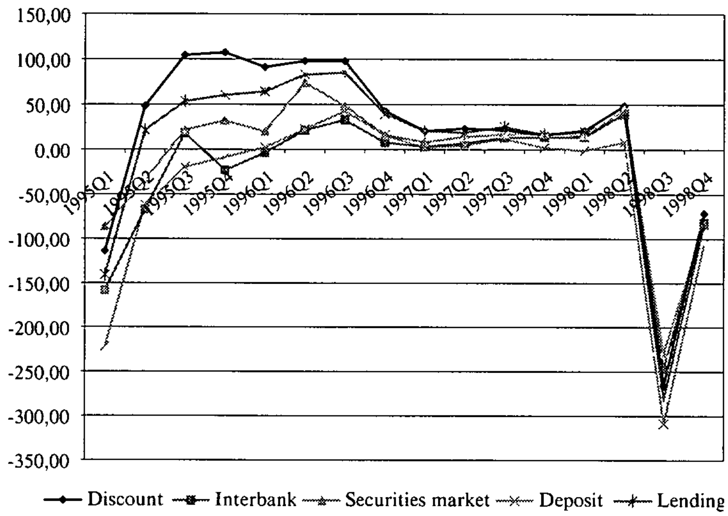
South Korea	224%
Indonesia	184%
Thailand	182%
Russia	180%
Argentina	130%
Mexico	107%
Philippines	82%
Brazil	71%
Turkey	65%
Hungary	48%
Chile	44%
Malaysia	42%
Czech Republic	41%
Egypt	30%
India	27%
Taiwan	20%
China	20%
Poland	20%

forgiveness of tax arrears at the beginning to the intentions to tighten fiscal policy as never before at the end. At any rate those intentions have not resulted in real steps and investors could hear general declarations instead of the specific measures that could prevent further deterioration of the situation. Due to remaining uncertainty, high risks and political instability interest rates rocketed since April 1998 and exceeded in mid-year 100 percent in real terms. Fig.6 shows nominal interest rates in Russia from 1995 to1998 which illustrates that the situation began deteriorating substantially from April 1998, after the dismissal of Mr. Chernomyrdin's government, which, of course, was not the main reason, but one of them. Changes in the cabinet affected the markets by creating additional uncertainty on future economic policies, thus increasing risks of investing in the Russian economy.

As was said the new cabinet members began discussing a number of policy options, which caused very negative reaction of the markets. The new, Mr.Kirienko's government, for instance, being pressed by the oil producers, drafted several decrees on sharp reduction of prices for transportation, electricity and gas (i.e. in the sectors, which are considered as natural monopolies and are subjects for administrative price regulations in Russia). After the fall of the world market prices Russian oil companies decreased exports of oil products as profitability of such exports fell down substantially given relatively high transport tariffs in the country. The discussion was held about two to three fold price reductions on transportation, electricity and gas. This, of course, if happened could undermine the tax system substantially. The decree on price reductions for transportation fees was finally issued, but it was surrounded by several conditions proposed by the Ministry of Finance, which in fact reduced the effect of the implementation of the decree. At any rate even a discussion gave a serious warning signal to the markets and stimulated an outflow of foreign capital from the stock markets and from the country in general (the bulk of the tradable equities were issued by the companies of the energy sector, communication and transportation).

Trends in interest rates can be treated as quite informative indicators of the results of the

Fig.5. REAL INTEREST RATES[1] IN 1995-1998 (per cent per annum)



economic policies. Fig.5 shows the evolution of interest rates in Russia since 1995. As illustrated by this chart the period of stabilization in 1997 was characterized by relatively low real interest rates. Moreover, in 1997 the difference between various interest rates decreased substantially relative to, say, 1995. This naturally limited the possibilities of pure financial speculations through allocating financial resources on various segments of the financial market. So, most of activities shifted to the government securities market, which largely dominated at that time.

At the same time Russian banks slightly expanded crediting the real economy. Really, after real interest rates dropped below 20 percent in 1997 it positively affected fixed investment that began picking up slightly in the second half of the year. It is also seen that in 1998 situation began deteriorating substantially and resulted in that in the third quarter of 1998, after the financial crisis hit Russia, interest rates became negative. Fig.5 also proves that in terms of interest rates the collapse of stabilization, as was also in the case of other indicators, moved the Russian economy back to the period of early 1995.

Again, fig.5 gives an illustration of that the after the re-election of Mr.Yeltsin stabilization ended in the mid-1998. This period was characterized fist by falling real interest rates (in the positive area) and then their stability, which meant that investing in the Russian economy became less risky than before. In 1998 real interest rates began moving up, and they dropped to negative values after the August crisis. It means that the economy, if described as a dynamic system, switched to different regime, namely the period of high inflation and negative real interest rates. It appeared to be exactly the same conditions as was after the "black Tuesday" currency crisis in October 1994 before the government introduced the exchange rate corridor in mid-1995, and at the same time offering GKO's an alternative to the US dollar.

[1] In fig.5 securities market interest rate is defined as GKO interest rate (till the fourth quarter of 1998) and interest on Central Bank's securities (in the fourth quarter of 1998)

FIG.6. GDP (TIMES TO THE SAME PERIOD OF PRECEDING YEAR) AND LENDING RATE (upper curve, in per cent per annum)

Thus the Russian economy entered in the 1999 with very soft monetary policy, expansion of credits at real negative interest rates. On the one hand such a policy positively affected production which began growing in the fourth quarter of 1998 after the devaluation of the ruble. But on the other hand this growth may be suspended if monetary policy becomes tighter and interest rates move back to positive values.

It is also seen from regular statistics that the real sector performance was affected by the developments on financial markets. Really, GDP began falling from the second quarter of 1998 following rise in interest rates. In general inverse correlation between interest rates and real output can be observed in 1995-1998 (fig.6). Low interest rates in 1997 contributed to some expansion of credits to the real sector thus increasing its working capital. And vice a versa, rise in interest rates in 1998 caused new liquidity problems and fall in output.

New wave of recession in the real sector affected tax collection substantially as the corporate sector remains the major tax-payer in Russia: this issue will be discussed below. In turn recession of mid 1998 contributed to an increase in the stock of arrears and created conditions for the new overall liquidity crisis.

As was seen, interest rates in 1998 began growing, thus making new government borrowing rather problematic. From March 1998 expenditures on debt service increased sharply, which was caused by short-term borrowing with high yields at the end of 1997. At the beginning of 1998 the government spendings on debt service accounted to somewhat 16 to 18 percent of the overall federal revenues, while from March debt service expenditures began growing rapidly. Already in January-May 1998 domestic debt service reached 37 percent of total federal revenues, and total debt service (domestic plus external) reached nearly 50 percent of revenues (Table 2). It means that from March the main part of federal revenues was

TABLE 2. DEBT SERVICE IN 1998

	As of 01.02.98	As of 01.03.98	As of 01.04.98	As of 01.05.98	As of 01.08.98
Federal revenues, million rubles	24 257	44 919	60 768	83 031	150 281
Debt service total, million rubles	3 861	11 997	28 456	38 281	75 286
Of which: internal debt, million rubles	3 861	7 923	22 088	30 639	59 194
Total debt service as a percentage of federal revenues	15,92	26,71	46,83	46,10	50,09
Internal debt service as a percentage of federal revenues	15,92	17,64	36,35	36,90	39,39
Nominal GDP, bn rubles	187	371	569	773	1 398
Total debt service as a percentage of GDP	2,06	3,23	5,00	4,95	5,39
Internal debt service as a percentage of GDP	2,06	2,14	3,88	3,96	4,23

spent on debt service. In March 1998, in particular, debt service exceeded fiscal revenues by 3.9 percent. In April and May the government was forced to spend on debt service 44.1 and 63.2 percent of federal revenues respectively. It happened at the expense of other spendings, thus increasing wage arrears in the public sector and social instability in the country.

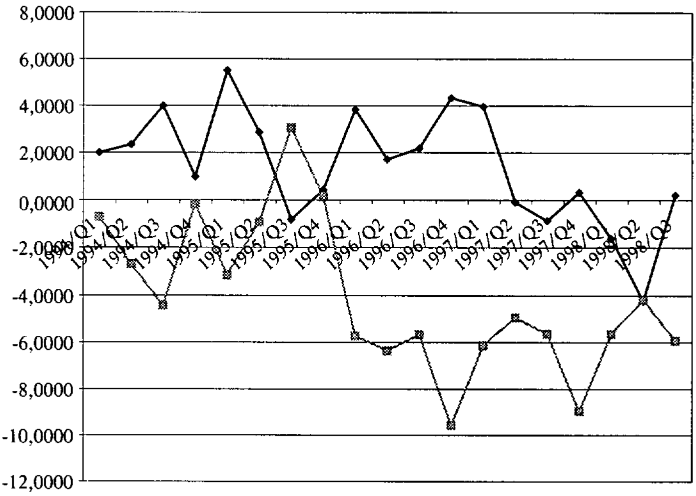
Given the high interest rates in the mid-1998 the government was forced to stop borrowing on the domestic market, but it was too late to restore confidence in government policies. After the Russian population, expecting devaluation, attacked commercial banks attempting to close deposits, get cash and change rubles into dollars the country faced banking crisis which propagated through the rest of the economy. Tax collection fell down more, interest rates went up, and well known difficulties with foreign borrowing caused that in August 1998 the government defaulted on domestic debt, devalued the ruble and was forced to resign.

As can also be seen from Table 2, fiscal revenues as a percentage of GDP have fallen substantially: from 13 percent in January to 10.7 percent in January-July. The country really approached debt crisis as during first seven months of 1998 more than half of revenues were spent on debt service. The situation was going to deteriorate in the near future as in the second half of the year the government was obliged to pay about 190 billion rubles (30 billion dollars) to the creditors. If happened, those payments were nearly three times higher than the country's international reserves excluding gold, which obviously made the payments impossible. In principle debt crisis could unfold in October, as the government was obliged to repay on GKO about 35 billion rubles to creditors. This figure was much higher than monthly revenues of the federal budget, and one should also add external debt service to this figure.

IV. *Selected Problems of Tax Collection and Capital Flight*

Along with fiscal deficit continuous capital flight remains another serious problem for the Russian economy. Both of them have macroeconomic causes and consequences, and also an institutional background as well. Moreover, institutional and macroeconomic problems are closely tied to each other. It is widely recognized that capital flight affects domestic savings

FIG.7. CURRENT ACCOUNT (upper curve) AND CAPITAL FLIGHT IN 1994-1998
(billion US dollars, quarterly)

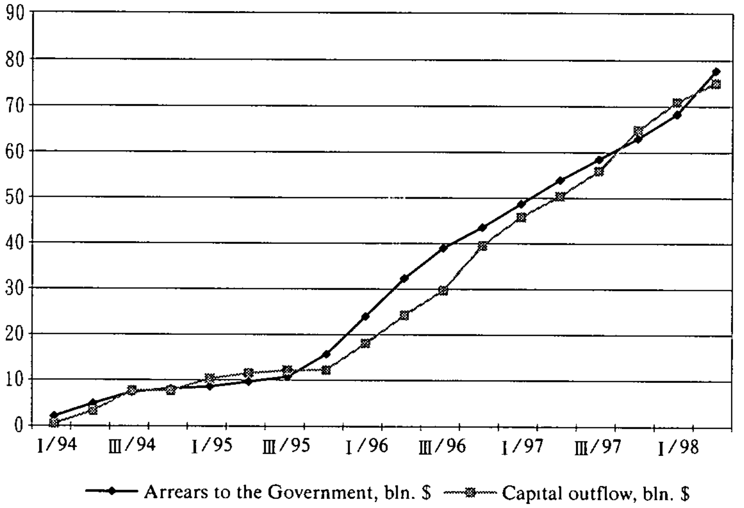


and potentially reduces investments. Empirical analysis shows a number of clear relationships between capital flight and some of the macroeconomic indicators.

Some estimates of capital flight can be picked up from the quarterly balances of payments. There are three major items, which can be treated as capital outflows and we do not make a distinction here whether those outflows are legal or illegal. It is seen from the balance of payments data that the so-called "net errors and omissions" can scarcely be treated as simple errors and omissions. Every year they have the same sign, negative, and are quite essential: 7.8 billion US dollars in 1995, 8.1 billions in 1996, 7.3 billions in 1997 and 5.3 billions in January-September of 1998. Most likely that those are unrecorded outflows of capital. Non-returned export earnings and import advances are another indicators of capital outflow. The sum of those variables varied from 3.9 US dollars billions in 1994 to 11.5 billions in 1997. In January-September 1998 it exceeded 7.4 billions of US dollars. Finally, credits, which Russian commercial sector gives to the rest of the world, quite often without repayments, should be also considered as some sort of capital flight. Obviously, the bigger current account was, the higher capital flight should have been (fig.7).

As seen from fig.7, capital flight exceeded current account since 1996 substantially. It means that export revenues, or more generally, trade surplus was the main resource base for capital flight till 1996. Since 1996, and mainly since 1997, capital flight was also financed through government foreign borrowing. Really, according to the balance of payments statistics change in liabilities of the public sector increased up to nearly 9 billions dollars in 1995, to 14.8 in 1996 and to 21.9 in 1997. The direction of financial flows was as follows: the government borrowed substantial amounts abroad to cover fiscal deficit, after this money reallocated somehow inside Russia and then fled the country. So there was a vicious circle: firms didn't pay taxes, the government borrowed abroad to cover fiscal deficit, money were going back out of Russia, the government was forced to borrow again.

FIG.8. CUMULATIVE CAPITAL FLIGHT AND THE STOCK OP TAX ARREARS PLUS NON-PAYMENTS TO SOCIAL SECURITY FUNDS SINCE THE FIRST QUARTER OF 1994

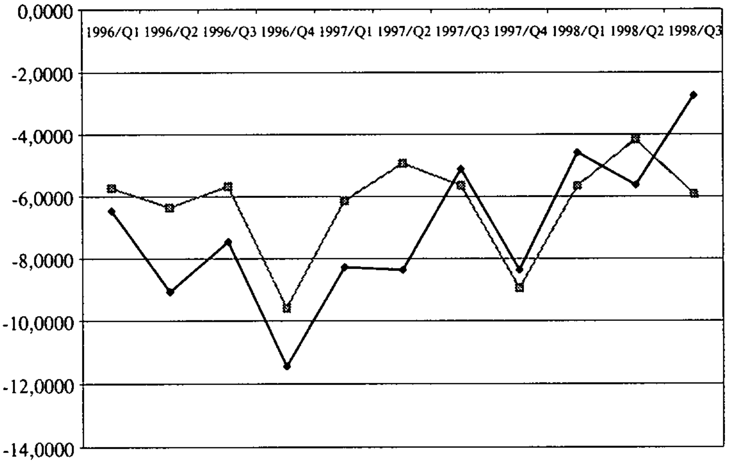


It is widely accepted that cumulative stock of the Russian capital, exported to the rest of the world, is quite significant. Fig.8 shows that cumulative capital flight from Russia is very close to the stock of tax arrears and non-payments to social security funds (calculated in dollars, average quarterly exchange rate is employed), namely the non-payments to general government. The government can concentrate on administrative controls, preventing capital flight, but it is more likely that administrative efforts can give little success if not supported by other policy measures. Among those one should point out on very general and very specific ones. The first set of measures should include guarantees of political stability and clear "rules of the game" in the country, establishing proper legal environment, building market institutions and institutional support of macroeconomic policies, etc. Second set of measures should include reform of the tax system, softening tax burden on the corporate sector and some other.

Empirical analysis shows that in addition there does exist a strong correlation between internal balance, namely the federal budget, and capital flight (fig.9). As seen from this chart, the bigger capital flight was, the more problems it caused for the budget. Until the problem of capital flight is solved the government can scarcely solve fiscal problems and stabilize the economy. This, of course, is related to both immediate problems of tax collection and to longer-term perspectives of savings, investment, and growth. It is more likely that capital flight is not only a macroeconomic problem, one should seek for its roots in an unsettled legal and political environment, poor institutional reform, which Russia was lacking during transition. It will also be impossible to rely on long-term foreign direct investment while Russian money escapes from the country.

If one comes back to fig.8, then it can be seen that potentially tax collection from the corporate sector is much higher, given that level of annual capital flight can be compared with the entire federal budget. Huge capital outflow proves that there are a number of profitable firms in Russia, which generate value added, but avoid paying taxes. At the same time one

FIG.9. CAPITAL FLIGHT (upper curve) AND FISCAL DEFICIT IN 1996-1998
(billions US dollars, quarterly)



should not overestimate possibilities of very rapid increase of tax collection from the corporate sector. Moreover, one should take into account that there are numerous loss-making firms along with profitable companies. Fist group can not pay taxes, second one is not willing neither paying taxes, nor investing in the domestic economy.

As for tax payments by the corporate sector, then it should be pointed out that there remain some rather strict limitations arising from monetary aggregates. Really, as reported by regular statistics firms' bank accounts are not bigger than some 20 to 25 per cent of the entire ruble M2. The rest is household money, namely cash in circulation and deposits with banks. In nominal terms enterprise accounts with banks varied around 70 to 80 billion rubles during the past two years (which is slightly more than 3 billion dollars after the devaluation). This money should be used for paying taxes (about 50 billion rubles per month both to federal and local budgets) to social security funds, and wages. It is quite natural that the ratio between monthly tax revenues and firms' accounts with banks is quite stable (apart from some seasonal peaks at the end of each year). Definitely there is a strong contradiction between available stocks (bank accounts) and flows (tax payments), which is also one of the fundamental causes of arrears.

So, it is unlikely that the improvement of tax collection from the corporate sector can be increased without growth in real money supply. At the same time it should be accepted that remonetization of the economy is a long-lasting process, which should go along with macroeconomic stabilization. Moreover, growth in the real money supply could be achieved in the low inflation environment and preferably in the growing economy. As proved by Russia's practice growth in money supply if not demanded by the real sector is not sustainable. Low fiscal deficit or even surplus is, in turn, the necessary condition to achieve price stability.

Low level of tax collection remains a key problem for the Russian economy. One of the related issues (continuous capital flight) was already discussed above. Preventing capital flight by both introducing more tough tax discipline among the corporate taxpayers and creating appropriate legal environment should be considered as one of the top priorities of the government. There is also some room in increasing fiscal revenues related to taxation of population.

Personal income tax is one of the major sources of fiscal revenues in developed market economies. In Russia it is still not significant. It varied in 1995-1997 between 2.2 and 2.9 percent of GDP. At the same time it was reported that household incomes in 1997 reached 1619.4 trillion rubles or 62 percent of GDP. Subtracting social transfers which are not subjects for taxation, one could get that the rest of household incomes accounted to some 53.2 percent of GDP. At the same time the government could collect only 75 trillion rubles of personal income tax, which is equal to 5.4 percent of household incomes less social transfers. This figure is much smaller than the lowest personal income tax rate.

Tables 3 and 4 show the results of calculations based on financial and demographic statistics as well as on regular household surveys conducted by the Central Committee on Statistics of the Russian Federation. It is well known that social inequality increased substan-

TABLE 3. PERSONAL INCOME TAX (actually collected and its potential collection) by INCOME GROUPS (bn.rubles)

	1995		1996		1997	
	Actually collected	To be paid	Actually collected	To be paid	Actually collected	To be paid
First to Fifth low income groups)	4018.5	16966.8	14134.0	21527.1	23986.7	26059.8
Sixth	3521.7	7318.8	5275.1	9112.6	6881.2	10779.4
Seventh	3966.7	8807.4	6143.2	10167.3	9074.6	14309.7
Eighth	4511.0	11120.1	7423.1	15613.9	10490.2	15869.1
Ninth	5086.2	15413.7	9043.0	20789.9	10877.6	26693.4
Tenth (high income group)	7295.9	38386.6	14381.6	53801.1	13659.7	81858.2
Total	36400.0	98013.4	56400.0	131011.9	74970.0	175569.5
Memorandum item: GDP (trln. rubles)	1630		2265		2613	

TABLE 4. ACTUALLY COLLCTED PERSOAL INCOME TAX AS A PERCENTAGE OF ITS POTENTIAL COLLECTION (in %)

	1995	1996	1997
First to Fifth (low income groups)	23.7	65.7	92.0
Sixth	48.1	57.9	63.8
Seventh	45.0	60.4	63.4
Eighth	40.6	47.5	66.1
Ninth	33.0	43.5	40.8
Tenth (high income group)	19.0	26.7	16.7
Total	37.1	43.0	42.7
Memorandum item: Actually collected PIT as a percentage of GDP	2.2	2.5	2.9

tially during the reform period, so, that at present 20 percent of the Russian population earn nearly half of the current incomes. Those incomes come mostly from the private business, but not from the public sector.

As seen from tables 3 and 4 tax evasion seems to be very high and is very uneven across income groups. Tax evasion is the biggest among richest groups of population. In terms of personal income tax the richest decile paid only 16.7 percent of what they were obliged to pay, while there is practically no tax evasion among the poorest half of the Russian population. It looks as if in 1998 the situation did not change much. So there is some room to increase personal income tax collection more than twice by introducing more tough tax discipline. It can give in addition more than three percent of GDP at least.

In conclusion one should say that weak enterprises and banking sector along with weak government is a main cause of the fiscal crisis. The government can improve the fiscal situation by shifting taxation from the corporate sector to households. But this is the necessary condition only, not the sufficient one. Until this is done there will be little success in attempts to achieve macroeconomic stabilization. In addition the government can improve the fiscal situation through increasing tax collection from the corporate sector given the situation with capital flight.

Fiscal adjustment is also of great importance due to that by the end of 1998, after defaulting on the domestic debt Russia moved close to sovereign default. In 1999 Russia has to pay more than 17 billion dollars to foreign creditors. This money may be equivalent to some 10 percent of GDP. The devaluation of 1998, which occurred in the second half of the year, will affect substantially average annual exchange rate in 1999. So, it is expected that in 1999 Russian GDP, valued in dollars by using current exchange rate, may contract nearly three times from its pre-crisis level in 1997, when it reached 448 billion dollars. The above-mentioned 10 percent of GDP, that should be spend for external debt service, is an equivalent to the entire federal budget. Another constraint on the possibility of that Russia can fully service its foreign debt arises from the balance of payments. So, it is quite obvious that in fact Russia will be unable to pay its debt fully. Moreover, external debt service is not the problem of the 1999 only. Each year in the medium run Russia's debt service (principal plus interest payments) will vary between 14 to 20 billion US dollars. Thus good relations with creditors and further restructuring of the debt is of great importance.

International Monetary Fund and the World Bank for reconstruction and Development are the major Russia's creditors. Along with some private lending, mostly eurobonds, this is purely Russian debt. In 1999, for instance, Russia has to pay more than 9 billion US dollars of such a debt. The rest is the debt of the former Soviet Union (to be paid to Paris and London club members, including previous reschedulings). So, one of the top priorities for Russia at the moment is to negotiate with international financial organizations, to meet their conditions or to find a compromise. Talks with the rest of creditors will depend greatly on the results of negotiations with IMF. By the end of 1998 there have not been reached any clear positive results in such negotiations. Success in negotiations with creditors is a vital necessity for the country. But success in negotiations and new credits is not the only necessary step. Structural reforms that may prevent or reduce capital flight and improve tax collection, fiscal adjustment are more important. Those are mostly domestic issues but if solved they should allow resuming negotiations and help to achieve an agreement with foreign creditors on debt restructuring.

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