Chapter 4

Capital Flight from Russia

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INTRODUCTION

The transition of the Russian Federation to a market economy has one outstanding characteristic in comparison with other transition countries of Eastern and Central Europe. The difference is that Russia has achieved a tremendous current account surplus in its balance of payments since the collapse of the previous regime, whereas the other transition countries have had deficits in their current accounts for most years since 1989.

The amount of Russia's current account surplus reached 18.4 percent of its GDP in 2000, which is four times that of Japan in the 1980s.[1] From the point of view of accounting, an increase in the current account surplus indicates that an increased amount of a resident's financial resources would remain in a non-resident country. Russia is no exception. In fact, the Russian residents have accumulated much financial resources in non-residents' countries. The problem is that some part of the surplus has fled Russia and it is very unlikely that those resources will soon be returned to Russia.[2] This is the capital flight problem of Russia.

The above situation is different from that of sudden capital flight from a country where a balance of payments crisis is occurring. Continuous capital flight, rather than sudden capital flight, is the focus of this study. Although mainstream economists regard sudden capital flight as a troublesome problem, they less alarmed about continuous capital flight.

[1] Calculated using the data of *Natsional'nye* (2002), *IFS*, *RTs*, and the website of the CBR.

[2] As is mentioned later, the financial resources once fled the country has been returning recently.

This is so because, when capital flight is sudden, the market power is overextended, and, as a result, unexpected problems occur. On the contrary, the economists believe that continuous capital flight is the result of a rational economic behavior of the market. The economists assume that capital that has fled a country will return when the economy becomes sound. If it did not, preventing capital from fleeing a country using administrative means would spoil the financial resources.

Nevertheless, the contention held here is that continuous capital flight from Russia has damaged the economy and that government efforts to prevent capital flight would have been worthwhile. The objectives in this chapter are to explain the process of continuous capital flight in Russia and evaluate the attitudes of individuals who have invested abroad.

CURRENCY CRISIS AND CAPITAL FLIGHT

1997 East Asian Currency Crisis and 1998 Russian Currency Crisis

On August 17, 1998, the Russian government made the three following decisions: (1) to widen the exchange rate band (Corridor) to the limits between 6 and 9.5 rubles to one US dollar; (2) to suspend the repayment of the external debt for 90 days; and (3) to suspend sales and refunds of governmental bonds (see, for example, *Rossiiskaia gazeta*, August 17, 1998, p. 1). The first decision affecting the exchange rate led to the acceptance of a floating rate and the depreciation of the ruble. The second and third decisions are, in effect, moratoriums. Therefore, these government decisions are essentially admissions of failure of international macroeconomic policies that have been in effect since 1995.

Although the economic crisis was reported as a shock in Russia and abroad, the details of the crisis remain unclear today. It is noteworthy that the facts indicate that the crisis did not seriously affect the Russian economy. Furthermore, it appears to have triggered the subsequent economic growth. For example, although the monthly index of real consumption of goods and services of Russia declined during the crisis from 107.4 (the average level in 1995 = 100) in August 1998 to 75.5 in February 1999, it rapidly recovered, reaching the 1995 level in December 1999. The trend in the unemployment rate was the same. It was between 11.3 percent and 11.7 percent until the end of August 1998, and it increased to 14.1 percent

at the end of February 1999. However, it declined steadily to 12.9 percent at the end of November 1999. In the end, the decrease of the real GDP in 1998 from 1997 was −5.3 percent, and the real GDP increased in 1999 in comparisons with 1998 and 1997.[3]

This was caused by the fact that the Russian banks that were seriously damaged by the crisis had not been doing business without any close connection with the real (that producing goods and services) economy of Russia. Toshihiko Shiobara pointed out that this structure is reflected in the low degree of the financial deepening of the Russian economy (Shiobara, 2004, pp. 191-200).

Table 1 shows the real GDP growth rates of East Asia and Russia before and after their respective crises. In East Asia, the currency crises started in the summer and autumn of 1997, and the effects of the ensuing depression continued through 1998. The Russian crisis started in August 1998, and a rapid recovery has been in effect since the middle of 1999. Therefore, the GDP growth in Russia in 1999 must be regarded differently from that in East Asia in the same year, which reveals that the economic recession in Russia did not last as long as that in East Asia. Light industry in Russia was destroyed before the crisis by the high exchange rate of the ruble; however, it was revived with the currency depreciation after August 1998. In that sense, the crisis can be considered to have triggered the recovery.

Capital Movements of East Asia and Russia during and after the Crises

The amount of capital flight from Russia and countries in East Asia is considered here. Table 2 presents the capital movements of East Asia and Russia taken from the statistics of the balance of payments. The most interesting fact in the table is that four countries in East Asia have experienced capital outflow since 1997 from a category described as "other investment." Net receipts had been recorded in this category until the crisis. Three of four countries, except Malaysia, have lost financial resources from the liabilities entry in the "other investment" category. In other

[3] Here, the statistical data cited are from various issues of *Russian Economic Trend: Monthly Update*, October 11, 2000; *Russian Economic Trend*, **11**, 4: 90 (2002); the website of Rosstat [http://www.gks.ru/bgd/free/b01_19/IswPrx.dll/Stg/d000/i000020r.htm].

words, capital that had been invested for bank loans and other lending, including trade credit, was suddenly withdrawn from East Asia after the 1997 crisis. With regard to Indonesia, capital outflow there first occurred under the "other investment" category, followed by portfolio investment and direct investment. These phenomena illustrate that the crisis in Indonesia was more severe than elsewhere.

Russia did not experience such a movement of capital. The structure of the capital movement of Russia was much more complicated. First, securitization was carried out in 1997 to reschedule the former USSR London Club debt (see *Finansovye Izvestiia*, August 11, 1998, p. 8). In this securitization arrangement, the debt of 28.2 billion dollars was supposed to have been repaid and deducted from the liabilities side of the "other investment;" at the same time, an identical amount was supposed to have been borrowed again and added to the liabilities side of the portfolio investment. Therefore, if it had not been for the securitization, the net balance of the portfolio investment in 1997 would have been 17,575 (million dollars), the liabilities of the "other investment," 12,999, and the net balance of the "other investment," −7,634 (see the figures in parentheses).

In 2000, the governmental long-term debt was repaid and re-borrowed under the London Club agreement. The large negative net balance of the portfolio investment in 2000 represents the difference between the repaid amount in the booking record and the re-borrowed amount. Formerly, the difference or the negative figure in the book must have been paid by the Government, but, in reality, the amount was exempted by the decision of the London Club.[4] If it had not been for this arrangement, the net balance of portfolio investment would have been −907 (million dollars) instead of −10,334. As for the negative amount of the liabilities side of the "other investment" in 2000, one half of it was payment of overdue interest on governmental bonds.[5]

Considering all of the conditions reported above, there was no significant capital outflow from the liabilities side of the "other investment. Similarly, the portfolio investment was not withdrawn in a massive scale as in the case of Indonesia, though the new inflows of portfolio invest-

[4] The exempted amount is reflected in the positive figure of "capital transfer" in the balance of payments of 2000.

[5] All these facts can be traced in the balance of payments published on the website of the CBR (see the detailed pdf version).

ment decreased.[6] It is true that if we take the residents' capital that fled Russia after the crisis into consideration, the whole amount of capital outflow reached a considerable amount (Uegaki, 2004, Table 5). However, the repatriation of non-residents' capital, a typical phenomenon of countries undergoing a balance of payments crisis, occurred in Russia not as much as in East Asia.

The capital outflow from the liabilities side of the "other investment" for the three years during and after the crisis (from 1997 through 1999 for East Asia and from 1998 through 2000 for Russia) is shown in Figure 1. The capital outflow from the liabilities side of the "other investment" represents the repatriation of the once-invested financial resources of non-residents, such as bank deposits, bank loans, and other trade-related credit. Figure 1 shows that there was a large repatriation from Indonesia, South Korea, and Thailand but not from Russia.[7]

There are obviously many examples of financial and non-financial sector repayments of debt, and there was a large decrease of reserve assets during the crisis in Russia. However, they were overshadowed by other large flows of financial resources. A tremendous amount of the current account surplus before and after the crisis (that is, the years except 1997 and 1998) exists behind the problem.

Table 3 shows the net capital outflow from the private sector of Russia. The net capital outflow means the increase of claims of Russian residents against non-residents or the decrease of claims of non-residents against Russian residents.[8] It is true that the capital outflow from the banking sector increased since the crisis, but the amount was not as big as the outflow from the non-financial enterprises and household sector. The outflow from the household sector remained high even before the crisis.

A similar phenomenon was observed in the movement of the reserve assets of the central bank.[9] The trend of the net change in the reserve as-

[6] It must be noted that, in the balances of Eastern Asian countries except South Korea, the active side of the portfolio investment is negligible.

[7] It must be noted that the massive capital outflow from the liabilities side of the "other investment" occurred also in Russia, but it did not occur right after the crisis.

[8] The figure includes the delay of repayments of non-residents' debt to Russian residents.

[9] Precisely, we must use the term "Monetary Authority" which includes other governmental financial institutions. However to use the term "Monetary Authority" is too rigorous and would lead general readers to complicated images of the events. Therefore the

sets of Russia is shown in Table 2. It is noteworthy that the negative figures indicate an increase in the reserve assets of the central bank. Indeed, the Central Bank of Russia lost more than 5 billion dollars from its reserve in 1998; however, it is not easy to determine whether the amount was large enough in comparison to other items in the capital movement. For example, the average annual capital outflow through a category labeled "net errors and omission" had been near 9 billion dollars from 1995 through 2000 and always fluctuated, regardless of the crisis. The loss of the reserve is attributed to the exchange of Russian rubles for US dollars by non-residents who sold ruble-nominated government bonds. On the contrary, the net outflow in the category "net errors and omission" may be, for example, a result of false and illegal statements. Table 2 clearly shows that the absolute value of the capital movement through the category titled "net errors and omissions" was far in excess of that in the category titled "net change of the reserve assets."

The First—and Second—Generation Model of the Balance of Payments Crisis

Paul Krugman once insisted that the "first-generation model" of the balance of payments crisis could easily explain the 1998 Russian crisis (Krugman, 1999, p. 2). According to Krugman, a standard balance of payments crisis proceeds in the following manner:

> A country will have a pegged exchange rate. At that exchange rate, the government's reserves gradually decline. Then at some point, generally well before the gradual depletion of reserves would have exhausted them, there is a sudden speculative attack that rapidly eliminates the last of the reserves. The government then becomes unable to defend the exchange rate any longer. The government is, sometimes, able to weather the crisis by calling on some kind of secondary reserves and the capital that has just flowed out may return and the government reserves may recover. However the reprieve may only be temporary. Another crisis may occur, which will oblige the government to call on still further reserves. There may be a whole sequence of temporary speculative attacks and recoveries of confidence before the attempt to maintain the

author uses the Central Bank instead.

exchange rate is finally abandoned (Krugman, 1979, pp. 311-312, with some omissions and modifications).

The first-generation model emphasizes the role of the budgetary deficit, which appears as a result of printing money to finance the currency market intervention to maintain a fixed exchange rate. The model insists that the expectation of inflation leads private investors to withdraw the excess money from circulation by trading it for foreign money at the exchange window. The conclusion is that pegging the rate ultimately becomes impossible if the budget is in deficit regardless of the size of the initial reserves (Krugman, 1979, pp. 315-319).

The first-generation model was criticized by the developers of the second-generation model (Obstfeld, 1986; Obstfeld and Rogoff, 1995), insisting that currency crises can be a self-fulfilling event in which the crisis itself creates the economic pressure under which the government caves in (Obstfeld and Rogoff, 1995, p. 86). According to these researchers, in the financial collapse of Mexico in 1994, there was nothing in the country's underlying fiscal situation to suggest that government was insolvent (ibid., p. 84). They reported that Mexico's pegged rate policy was complemented by a remarkably successful effort to reform other facets of the economy. Nevertheless, the December 1994 currency crisis quickly escalated into a wholesale government liquidity crisis, leaving inflation on the rise and the peso sharply depreciated (ibid., pp. 81-82). This opinion differs from that of the fundamentalist Krugman, who believes that the outcome is a natural result of the rational behavior of investors. Obstfeld and Rogoff hold a slightly more complicated post-modern view. If the dichotomy of sudden capital flight and continuous capital flight is adopted in the present study, the Krugman theory could be interpreted to mean that even a sudden capital flight is rational and unstoppable when the fundamentals within a domestic economy are unsound.

It is noteworthy that the framework of institutions and policies before the Mexican crisis was similar to that of Russia. In both countries, the exchange rate was pegged with a crawling peg system or band system[10], the

[10] In Mexico, a pre-announced crawling peg system was first introduced, and then a band system replaced it. On the other hand, in Russia, a band system was first introduced and then replaced by a crawling band system. In the last several months before the crisis, it was returned to a band system once again. The crawling band system is a system in which the highest and lowest levels of the exchange rate are settled at a point in time and another

capital market was deregulated, state-owned enterprises were privatized, and the budget deficit was curtailed before the crisis (Obstfeld and Rogoff, 1995, p. 81; Uegaki, 1999; Uegaki, 2004). Therefore, if the theory of Obstfeld and Rogoff is applied, Russia's crisis cannot be explained by the simple application of the first-generation model.

After the East Asian crisis, Krugman wrote, "I was wrong; Maury Obstfeld was right." He developed a model to explain the East Asian crisis, in which he deliberately considered (1) contagion, (2) the transfer problem, and (3) balance sheet problems of enterprises. Though it is uncertain whether he intended to call it a third-generation model, he persisted in the view that the new model is a reconciliation of the first and the second (Krugman, 1999). Ryuzo Miyao conducted econometric tests of the financial performance of the three East Asian countries and concluded that the crisis in Thailand was mainly caused by fundamental factors, whereas those in Indonesia and South Korea were caused by financial panic (that is, the former can be explained by the first-generation model, and the latter, by the second-generation one) (Miyao, 2003, p. 80).

Although Krugman applied the first-generation model to the 1998 Russian crisis, it is our view that a different model should have been used because of the complex features of the crisis. In particular, it must be noted that the situation of the budget deficit just before the crisis was not as simple as portrayed in his model. In July 1995, the Russian government introduced the ruble-nominated bonds, and the budget deficit was paid by using these bonds rather than by printing money. In addition, the government introduced a new exchange rate identified as "corridor" as a nominal anchor to stop inflation. These policies were strongly recommended by the IMF and foreign advisors. It was true that the reserve assets of the Central Bank of Russia were declining before the crisis; however, it is doubtful that the level of the reserves had reached a risky limit.[11]

However, the second-generation model is not necessarily applicable to the Russian case because of its uniqueness. At least in the following four points, the Russian crisis is not similar to those in East Asia or Mex-

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set of the highest and lowest levels at a later period (for example 6 months later) is also settled beforehand. The tunnel has a downwards slope, representing the fact that the domestic currency gradually depreciates.

[11] However, it must be admitted that the government bonds market was almost out of control just before the crisis. The first-generation model is applicable to the Russian case in this regard.

ico: (1) The crisis did not strongly affect the real economy, which did not have a close connection with the financial sector; (2) On a net basis, the repatriation of financial resources from Russia did not occur on a massive scale, as it did in East Asia; (3) One-way capital outflow had been occurring through errors and omission before, during, and after the crisis; (4) The current account was in surplus after and before the crisis.

These points would lead to the consideration of the macroeconomic structure of Russia in a wider context.

CONTINUOUS CAPITAL FLIGHT

Current Account Surplus

Among the four points mentioned above, the current account surplus is the basic problem that makes the Russian economy unique. Here, the problem is analyzed from a formal macroeconomic viewpoint.

As is well known, Japan and Russia have had a large current account surplus, whereas the current account of the USA has been continuously in deficit, and the deficit became historically large in the late 1990s and the beginning of the 2000s. As for the budgetary balance, Japan and Russia had large deficits until the late 1990s. Since the turn of the century, however, Russia has dramatically improved its budgetary balance. The USA improved its budgetary balance in the late 1990s, but it is again deteriorating. These phenomena can be formalized by the following equation (see, for example, Krugman and Obstfeld, 1991, pp. 299-303):

$$CA = (S^p - I) + (T - G),$$

where I=Investment, G=Government expenditures, CA=Current account, S^p =Private saving, and T=Tax.

This equation means that the current account of a country is the sum of the excess of private savings $[S^p - I]$ and the budgetary surplus $[T - G]$. Table 4 shows how these items (annual average in billions of dollars) are related to each other in several countries.

The table and the equation reveal that there was a large excess of private savings in Russia in the periods of 1995–1997 and 1999–2001. Here, it is noteworthy that the "private savings" includes not only indi-

vidual household savings but also un-invested company funds, which would go to foreign and domestic financial markets. The amount in excess of 30 billion dollars compares with the German figure in the period of 1995–1997. Although most of the private savings was used to cover the budgetary deficit in the period of 1995–1997, there was still a certain amount left to be invested abroad (including the reserve assets of the central bank). The current account surplus of 7.1 billion dollars equals the amount forced out of the country.

After the currency crisis of 1998, the Russian economy recovered rapidly because of high oil prices and currency depreciation. Interestingly, the economic recovery was not accompanied by a reduction in the current account surplus. On the contrary, it has increased since the crisis. In other words, the excess in private savings is not decreasing.

The continuous existence of an excess in private savings means that the income produced in Russia has not been spent by households or invested in domestic enterprises. Here, an important point is that a considerable part of the income has come from natural resources, including the oil and gas industries. The total share of exports from oil, gas, and petroleum products was 36.6 percent to 50.3 percent from 1995 to 2001 (Tabata, 2002, p. 611). Therefore, the problem lies in the income distribution among the workers in the natural resources sector as well as in the input-output structure surrounding that sector. In addition, the situation is suggestive of a weakness of the Russian financial system that allowed for the transfer of financial resources from capital excess sectors to capital shortage sectors.

On the other hand, from the viewpoint of international balance, the positive current account of a country indicates an outflow of financial assets from the country. Taking this into account, a comparison of current accounts of the listed countries leads to an interesting finding. Russia, together with Japan, funnels financial resources into the world market, whereas the USA, Germany, and Brazil absorb them. Although the amount of financial resources provided by Russia is not as large as that provided by Japan, it was enough to cover the financial shortages of Germany and Brazil in the period of 1999–2001. As the Russian fiscal deficit disappeared in the period of 1999–2001, the excess in private savings was absorbed exclusively by the external financial market, including the American market. It is easy for a country with a healthy financial system, a large middle class, a balanced industrial structure, and a functioning

democracy to be a capital provider. The capital once provided for other countries will return with fruits someday. Anyway the situation may be a result of time preference of the people. Is Russia such a country?

Contents of Continuous Capital Flight

As far as the current account records surplus, there must be a certain amount of financial resource outflow to counterbalance the surplus. This is because current account + capital and financial account + errors and omission = 0 by definition according to the 5th version of the balance of payments manual of the IMF. If we bear this in mind, it is interesting that the following three items have been recording minus figures for most of the period from 1992 through 2004. The three items are (1) the increase of foreign cash currency circulating in Russia, (2) export charges not received on time (or import goods and services not received on time), and (3) errors and omission. From an accounting viewpoint, these three items "used" up the current account surplus. Capital flight can be defined in many ways; however, for the purposes of this research, it is defined as the sum of the three items listed above and referred to as "continuous capital flight," when applied to Russia. This is so because the minus figures for the three items mean that the financial resources have fled the country through a route that would not put the resources back into the country in the near future.

The idea that the continuous capital flight includes the increase of foreign cash currency circulating in Russia might be disturbing to many. Some researchers would insist that such circulation should not be included in the category of capital flight because it remains in the country. According to the author's view, however, foreign cash currency had the same effect as capital flight because it was hoarded and hidden rather than taken to financial institutions. The main point is that the foreign cash currency was not a resource for investments. Furthermore, foreign cash could be easily smuggled out of the country.[12] It is also noteworthy that foreign currency escaped tax collection.

Export charges not received on time take the following form in Russia. A Russian national delivers goods to a foreign country, and this activity is registered as an export in the statistics for the balance of payments.

[12] Of course, some resources may be secretly repatriated.

This Russian national, however, presents a statement to officials claiming that export charges have not been obtained for some reason. In this case, a certain amount of export charges not received on time is recorded in the debit side of the balance of payments (resulting in the negative figures in the balance). Sometimes, this is a false statement to the effect that secret payments are made to the exporter's account of a bank, for example, in Bahamas. This is a typical case of illegal capital flight. It is also true that there might only be a technical problem that has caused the delay in the payment. But negative figures in the item of export charges not received on time caused by a technical problem would be counterbalanced by positive figures in the same item in the long run. In reality, export charges not received on time have recorded a considerable negative amount every year since 1994 through 2004, which reveals that artificial and continuous capital flight has been occurring.

A case of errors and omission is recorded when a transaction is made and registered in the credit (debit) side of the balance of payments; and at the same time, the counter transaction, which must be registered in the debit (credit) side, is not reported to the statistical office.[13] What is important is that a case of errors and omission can appear in positive as well as in negative figures. Nevertheless, in the Russian case, the balance of payments has recorded cases of errors and omission in large negative figures every year from 1992 through 2004 (except 1994). These incidents rarely occurred in other transition countries, and, when they did, they reveal artificial and sometimes illegal capital flight.

Not all the transactions reflected in these three items are necessarily illegal, but some of them are. We have no exact information to decide which is legal and which is not. Therefore we call them "gray" transaction. Regardless of whether the transactions are legal or illegal, the sum represents a reduction in the level of welfare of the Russian people. In this sense, this continuous capital flight harmed the Russian economy.

This opinion is based on an evaluation of the macro-economy of Russia. As reported above, there has been an excess of private savings in Russia. However, this excess is not a reflection of an affluent society, as it is in Japan, which has large private savings. Russia is still a poor country,

[13] In 1992, "export charges not received on time" could not be identified separately. Thus, they were combined with "errors and omission" whenever they occurred (see Table 5).

and there are many consumer goods that people would buy if they had money. It is well known that the social infrastructure is poor in Russia. For example, per capita calorie consumption in Russia is lower than that in Poland and Romania and 80 percent of that of the people in Portugal (2002, *RSM*, 2004, p. 97).[14] The so-called Engel's coefficient (share of the expenditure for food, beverages, and tobacco in the total expenditure of a household) is 38.7 percent, which is 1.5 times higher than that of Mexico (1999, *RSM*, 2004, p. 107). The number of personal computers per 1,000 inhabitants is 89 in Russia, whereas it is 431 in Germany, 106 in Poland, and 82 in Mexico (2002, *RSM*, 2004, pp. 255-256). Therefore, there is potential demand in Russia, but it has not been realized because of the uneven distribution of income. In such a situation, if the income earned by the oil and gas industries had not been kept abroad but, rather, had been spent in the domestic market, it would have resulted in economic circulation in Russia. In addition, only a fair tax payment would have contributed to an earlier reinforcement of the infrastructure.[15]

Placing a Figure on Continuous Capital Flight

The three items of capital flight, as they are defined in this research, are shown in Table 5; the sum increased until 1997, then stagnated, and later grew again. According to the table, from 1992 to 1998, the capital flight exceeded the current account surplus every year (except 1993) or recorded a considerable amount even when the current account itself was negative. It is surprising that the amount more than the trade surplus of goods and services[16] had fled the country via the three routes.[17] The shortage was covered by capital inflow. In fact, the net receipts of the real aggregate net capital transfer,[18] which can be called "legal capital inflow", had been recorded until 1998 (Uegaki, 2004, pp. 39-43). Therefore the

[14] Of course the high calorie consumption does not necessarily mean a highly civilized life, according to modern nutritional sciences.

[15] Here, the problem that the Russian Government is a very inefficient player in the field of economics is ignored.

[16] Other items in the current account ("current transfer" and "net receipts and payment of interests, dividends, and wages"), are minus or negligible.

[17] A causal relationship of time is not necessarily assumed here.

[18] It includes disbursements of banks and other organizations, long-term trade credit, portfolio investment, and direct investment, considering interest receipts and payments.

sum of the trade surplus and the legal capital inflow streamed out through the gray routes (see Figure 4).

After the 1998 currency crisis, the structure has changed, and the fled capital was covered thoroughly by the current account surplus, though the total amount of the capital flight did not decrease. Here, the tremendous current account surplus corresponds with the gray and legal outflow of capital (see Figure 4). The 1998 currency crisis represents a divide in the history of the international financing of Russia. It is true that the depreciation of the ruble after the crisis made importing unfavorable, which promoted the current account surplus and triggered the rebirth of light industry in Russia. However, this effect did not last long. The real impact on the Russian economy was given by the rapid rise in oil prices, which had nothing to do with the 1998 crisis. The rise in oil prices lifted the current account surplus to a historically high level. It stimulated domestic investments in several sectors[19] of the economy. It has also helped to resolve the fiscal deficit problem, which, in turn, encouraged the reliance on the ruble in the domestic market. The latter point is reflected in the fact that the foreign cash currency circulating in Russia began to rapidly decrease (the positive figures in the table indicate a reduction) in 2003. Nevertheless, the continuous capital flight remained significant until recently. The 1998 currency crisis did not leave any effect in the trend of the continuous capital flight.

The Reasons for the Continuous Capital Flight

The correspondence between the movement of continuous capital flight (the total of the three items) and that of the current account is shown in Figure 2. The larger the current account surplus, the more the capital flight emerges. As each of the three items varied in the degree of correspondence with the current account, the results indicate that the three items are complementary. However, several exceptional periods must not be ignored. For example, from the second to the third quarter of 1995, the capital flight grew, while the current account decreased. In addition, from the second to the fourth quarter of 1997, the capital flight grew, while the current account was in deficit. On the contrary, from the third to the fourth quarter of 1998, although the current account grew, the capital flight de-

[19] The oil- and gas-related industries.

creased. In all these periods, irregular movement of the "foreign cash currency circulating in Russia" was evident and caused irregular movement of the total amount of the capital flight (see Figure 3). The irregular movement of the "foreign cash currency circulating in Russia" was brought about by attitudes of the Russian residents in the foreign exchange market and the Central Bank's intervention into the market to keep the exchange rate level, right before, during, and immediately after the Corridor period.

In spite of the above-mentioned exceptional examples, the general tendency towards more capital flight in relation to more current accounts is undeniable, as shown in Figure 2. Here, the following assumption can be made. A certain percentage of financial resources gained from trade activities (the main source of the current account surplus) was not exchanged into rubles but often remained in foreign currency (dollars) or was transferred to foreign countries via a gray route. In particular, before the 1998 currency crisis, the source of the capital that left the country was not only the trade surplus, but also the capital that had once entered Russia legally (see Figure 4).

This stems from the fact that any Russian national or legal resident of Russia can hold foreign currency in cash or in the form of bank deposits in Russia. To keep property in the form of foreign currency means to have property with an internationally recognized value. In such a case, the property can be easily moved from one place to another. This is a result of the liberalization of the foreign monetary and financial system at the beginning of the reform. In Russia, liberalization policies for capital movement were carried out to introduce capital from abroad. Such policies were effective, especially in 1996 and 1997. This is, however, one side of the coin. The other side is a simple liberalization policy of foreign currency, which promoted the outflow of financial resources from the beginning (see Uegaki, 2004, pp. 24-33).

The Rationality of the Behavior

Focusing on the behavior of the economic players of Russia, capital flight is not necessarily an evil thing. Some of the investors, after examining the world financial situation, might have decided to maintain their investments abroad while knowingly accepting the danger of incurring the

accusation of the tax offices or other government authorities. It is a persuasive argument that to invest money into the Russian land is risky business and that to keep money in safe places abroad is profitable even for Russians as a whole in the long run. In fact, we see much investment coming back from the so-called "tax haven" such as Bahamas, Luxembourg and others recently. This suggests that the capital that once left Russia is now returning. Whether these investments and decisions were rational from an economic point of view should be examined.

To investigate this problem, it will be necessary to study the trend of the exchange rate of the ruble because capital flight by the Russians reflects their will to have financial resources in foreign currency. The exchange rate should work as a key determinant. The relationship between capital flight and the real exchange rate is shown in Figure 5. The real exchange rates are plotted as dollars per ruble[20] indexed by the consumer price index (the value on the first quarter of 1994 is 100). The rising trend indicates an appreciation of the ruble, and the decline indicates depreciation.

The relationship between the two lines raises an interesting problem. In the "Corridor" period (from the second quarter of 1995 through the second quarter of 1998), the real exchange rate of the ruble was kept at a high level, whereas capital flight occurred on a massive scale. In this period, the Russian Government sought to attract foreign capital by the route of ruble-nominated government bonds and the system of the Corridor. In fact, many foreign investors agreed with this policy and invested in Russian bonds. In contrast to the foreign investors, some of the residents preferred to leave their financial resources abroad through the gray route under the high ruble exchange rate. If they had been rational players, they might have accumulated money abroad (after exchanging rubles for dollars or euros) expecting the collapse of the Corridor system and the decline of the ruble exchange rate. As it turned out that the Corridor system in fact collapsed, those who left their money abroad made a good decision. However, whether they were rational in the sense of Krugman's first-generation model is not easy to answer because the inflation subsided in 1997.[21]

[20] Period average.

[21] If we take the mechanism of trades between residents and non-residents into account, the situation becomes more complicated. Especially, if we consider derivative trad-

The time since the first quarter of 2000 also needs to be examined because capital flight increased again as the exchange rate began to increase. It is not rational to invest in foreign currencies when the domestic currency is expected to appreciate. In this period, although the Government had been intervening in the market, its purpose was to prevent the domestic currency from appreciating. To outwit the Government as in the crisis period, the Russian investor should have invested in the ruble. Curiously, some Russians did not.

Besides the exchange rate, the interest rate is an important factor for investors who have alternate ways of investment in domestic and foreign markets. The relationships between capital flight and the risk premium are shown in Figures 6 and 7. Here, the risk premium equals the "domestic real interest rate per annum in Russia" (nominal interest rate indexed by producer inflation rate) minus "LIBOR" (per annum, in euros). Therefore, if the risk premium is higher than 0, there is a chance to earn additional interest by investing in the Russian domestic market rather than in the foreign market.[22] Of course, the risk premium also indicates a high risk of failure and may be a factor discouraging someone from investing. Nevertheless, many foreign investors invested in the Russian high-interest market, accepting the high risk before the crisis. It is natural to think that resident-investors would invest in the Russian market rather than leave their financial resources abroad when the risk premium was high.

Figure 6 indicates that some of the residents acted not as expected by "theory." In the first quarter of 1995, the risk premium jumped from the previous quarter; whereas the capital flight increased (the increase of the capital flight is plotted in minus figures according to the system of balance of payments). In the second quarter of 1995, the risk premium decreased to 0, and investing in the domestic market became less profitable. However, the outflow of capital via the gray route stagnated. In the third quarter of 1995, the risk premium increased again, but more than 4 billion dollars left the country via the gray route. From the second quarter of 1996 to the fourth quarter of 1997, the Russian Government pursued ac-

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ing, it is not easy to identify who has rational behavior. Alexei Medvedev found that residents and non-residents behaved differently in the governmental bonds market during the crisis (November 1997–August 1998) and that non-residents were more sensitive to negative external news and some domestic news. He asserted that non-residents strongly contributed to the negative developments (Medvedev, 2001, p. 19).

[22] Here, we simply assume that the inflation rate of foreign countries is 0.

tive measures to introduce foreign capital in the domestic governmental bond market under the relatively low rate of inflation. Therefore, the risk premium was stable at 10 to 25 percent. However, a considerable amount of capital left the countries during this period.[23]

Figure 7 shows that the very unprofitable risk premium (in fact, minus rate) caused much capital flight in the period from the fourth quarter of 1998 through the second quarter of 2004.[24] Generally speaking, those who invested abroad via gray routes after the crisis were rational players in the international financial market. If the fluctuations are carefully observed, however, their rationality is doubtful. There are many cases in which the upward (downward) trend of the risk premium is synchronized with the increasing (decreasing) trend of capital flight.

The latter phenomena are also observed in Figure 6. Those who participated in capital flight may be rational economic players in some cases, but their actions did not correspond with subtle changes of the economic environment.

As shown in Figures 5, 6, and 7, it is clear that a certain amount of capital flight occurred when the source for it, current account surplus and in-coming capital, existed. These findings suggest the pessimism that some of the Russians felt for their economy. In the end, when they obtained financial resources in foreign currency, they would prefer to keep some of it in foreign currency regardless of economic indicators, such as interest and exchange rates. It is interesting to find this pessimistic attitude even in the prosperous economy driven by high oil prices since 2002.

CONCLUDING REMARKS

The financial crisis of 1998 did not cause sudden large capital repatriation from Russia, whereas that occurred in East Asia in the 1997 crisis. The crisis in Russia did not affect the real sectors of the economy seriously, which is, again, not similar to the situation in East Asia. Therefore, neither the first-generation model of balance of payments crisis nor the

[23] Some would assert that more capital might have flown into the country by the legal route. However, this was not the case (see Figure 4).

[24] As for the third quarter of 1998, it was a period of chaos after the crisis when the nominal interest rate was still extremely high but the inflation rate was not as high as in the subsequent three periods. Therefore, the real interest rate was still high.

second-generation model is applicable to the Russian case. If we investigate the financial flows of Russia from a longer-term perspective, however, we find that capital flight occurred on a massive scale almost every year after the collapse of the USSR. This capital flight was continuous. According to the definition presented here, this continuous capital flight occurred through three routes, which are not necessarily illegal but are potentially harmful to the welfare of the Russians, at least, over the short term. It is debatable whether those who participated in capital flight were acting rationally; however, it is clear that they were not expert financial strategists with the skill to respond to subtle financial indicators. The activities of the Russians indicate pessimism towards their economy; regardless of the degree of prosperity of their economy, they will always keep some of their earned foreign currency abroad.

Our task hereafter is to investigate the relationship between capital flight and the domestic economy in a more numerical way. For example, the problem of whether capital flight caused a reduction in GDP, maybe with a time lag, has not been answered in this paper. The problem of the relationship between capital flight and tax revenue is also a difficult issue. Rigorous econometric tests could be used to answer these questions.

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Table 1. Real GDP Annual Growth (in percent)

	1996	1997	1998	1999
Indonesia	8.0	4.5	-13.0	0.3
Malaysia	10.0	7.3	-7.4	5.6
Korea	6.8	5.0	-6.7	10.7
Thailand	5.9	-1.7	-10.2	4.2
Russia	-3.6	1.4	-5.3	6.3

Sources: Rosstat website [Russia] and *World Economic Outlook*, October 2000 [other countries].

Table 2. Capital Movement of Eastern Asia and Russia (millions of dollars)

Country	Item	1994	1995	1996	1997	1998	1999	2000
Indonesia	Current Account	-2792	-6431	-7663	-4889	4096	5785	7985
	Direct Investment, Net Balance	1500	3743	5594	4499	-356	-2745	-4550
	Portfolio Investment, Net Balance	3877	4100	5005	-2632	-1878	-1792	-1909
	Other Investment Assets					*-44*	*-72*	*-150*
	Other Investment Liabilities	*-1538*	*2416*	*248*	*-2470*	*-7360*	*-1332*	*-1287*
	Other Investment, Net Balance	-1538	2416	248	-2470	-7404	-1404	-1437
	Net Change of Reserve Assets	-784	-1573	-4503	5113	-2090	-3342	-4851
	Net Errors and Omissions	-263	-2255	1319	-2645	1849	2128	3637
Malaysia	Current Account	-4520	-8644	-4462	-5935	9529	12604	8488
	Direct Investment, Net Balance	4342	4178	5078	5137	2163	2473	1762
	Portfolio Investment, Net Balance	-1649	-436	-268	-248	283	-1025	-2532
	Other Investment Assets	*504*	*1015*	*4134*	*-4604*	*-5269*	*-7936*	*-5565*
	Other Investment Liabilities	*-1909*	*2885*	*533*	*1912*	*272*		
	Other Investment, Net Balance	-1405	3900	4667	-2692	-4997	-7936	-5565
	Net Change of Reserve Assets	3160	1763	-2513	3875	-10018	-4712	1009
	Net Errors and Omissions	154	-762	-2502	-137	3039	-1273	-3221
South Korea	Current Account	-3867	-8507	-23006	-8167	40365	24477	12241
	Direct Investment, Net Balance	-1651	-1776	-2345	-1605	672	5135	4284
	Portfolio Investment, Net Balance	6232	11712	15101	14384	-1224	9190	12177
	Other Investment Assets	*-7369*	*-13991*	*-13487*	*-13568*	*6693*	*-2606*	*-2289*
	Other Investment Liabilities	*13632*	*21450*	*24571*	*-8317*	*-13868*	*1502*	*-1268*
	Other Investment, Net Balance	6263	7459	11084	-21885	-7175	-1104	-3557
	Net Change of Reserve Assets	-4614	-7039	-1416	11875	-30968	-22989	-23790
	Net Errors and Omissions	-1816	-1240	1095	-5010	-6225	-3536	-561

Thailand	Current Account	-8085	-13554	-14691	-3021	14243	12428	9313
	Direct Investment, Net Balance	873	1182	1405	3315	7185	5757	3389
	Portfolio Investment, Net Balance	2481	4081	3544	4528	356	-111	-706
	Other Investment Assets	*-1027*	*-2738*	*2661*	*-2555*	*-3407*	*-1755*	*-2203*
	Other Investment Liabilities	*9839*	*19383*	*11876*	*-17343*	*-18243*	*-14964*	*-10914*
	Other Investment, Net Balance	8812	16645	14537	-19898	-21650	-16719	-13117
	Net Change of Reserve Assets	-4169	-7159	-2167	9900	-1433	-4556	1608
	Net Errors and Omissions	87	-1196	-2627	-3173	-2828	33	-685
Russia	Current Account	7844	6963	10847	-80	219	24616	46839
	Direct Investment, Net Balance	408	1460	1656	1681	1492	1102	-463
	Portfolio Investment, Net Balance	21	-2444	4410	45775 (17575)	8618	-946	-10334 (-907)
	Other Investment Assets	*-19556*	*-154*	*-27663*	*-20633*	*-14463*	*-13219*	*-17659*
	Other Investment Liabilities	*6968*	*14021*	*16080*	*-15201* *(12999)*	*9029*	*-889*	*-4172*
	Other Investment, Net Balance	-12588	13867	-11584	-35834 (-7634)	-5434	-14108	-21831
	Net Change of Reserve Assets	1896	-10386	2841	-1936	5305	-1778	-16010
	Net Errors and Omissions	9	-9113	-7708	-8808	-9817	-8558	-9156

Sources: Website of the CBR [Russia] and *IFS* [other countries].

Table 3. Net Capital Outflow from the Private Sector of Russia (billions of dollars)

	1994	1995	1996	1997	1998	1999	2000
From the Banking Sector	-2.0	6.8	1.3	7.6	-6.0	-4.3	-2.1
From Non-Financial Enterprises and the Household Sector	-12.4	-10.7	-25.1	-25.9	-15.7	-16.5	-22.8
Total	-14.4	-3.9	-23.8	-18.2	-21.7	-20.8	-24.8

Note: Minus figures mean capital outflow from Russia.
Sources: Website of the CBR.

Table 4. Annual Average of Macro Statistics (billions of dollars)

		CA = Current account	T - G = Budgetary surplus[a]	S^p-I = CA - (T - G) = Excess of private savings[g]
Russia	1995-1997	7.1	-23.3[b]	30.4
	1999-2001	35.4	4.4[b]	31.0
USA	1995-1997	-123.6	-86.5	-37.1
	1999-2001	-395.5	167.9	-563.4
Japan	1995-1997	90.1	-192.8[c]	282.9
	1999-2001	104.3	-291.5[c]	395.8
Germany	1995-1997	-9.9	-40.2[d]	30.3
	1999-2001	-10.9	-7.4[d]	-3.5
Brazil	1995-1997	-24.0	-59.1[e]	35.1
	1999-2001	-24.1	-4.7 [f]	-19.4
South Korea	1995-1997	-10.4	2.2	-12.6
	1999-2001	9.3	-3.2	12.5

Notes:

[a] Converted from each national currency to a US dollar value by exchange rates [yearly average] quoted in *IFS*.

[b] Excluding Social Security funds and extra-budgetary spending.

[c] Calculated from newly issued state bonds in every fiscal year [April to March].

[d] Including special spending for the unification.

[e] Figure in 1997.

[f] Average of 1999 and 2000.

[g] Calculated as a residual [CA - (T - G)] rather than calculated from indigenous sources.

Sources:

Calculated by the author using the data of *IFS*, No.2, 2002 and Data of the Economic Planning Agency of Japan [for Japan's budgetary surplus].

Table 5. Continuous Capital Flight (millions of dollars)[a]

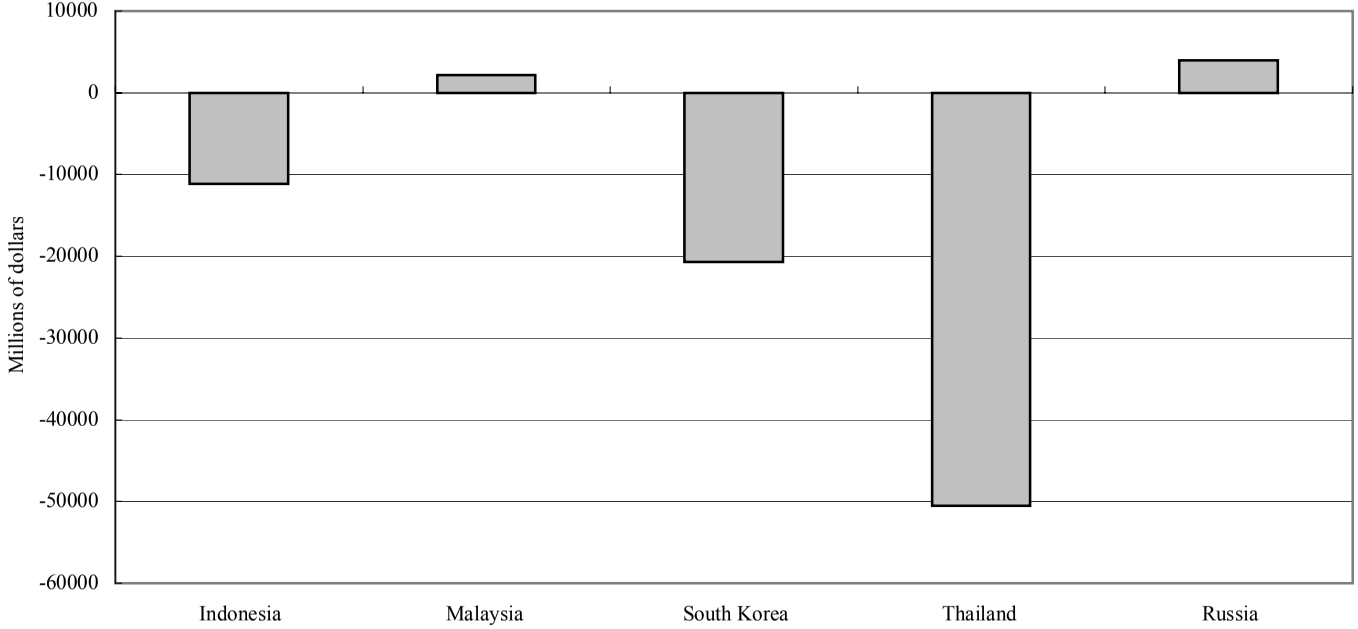
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
1. Increase of foreign cash currency circulating in Russia[b]	-1489	-2751	-5740	134	-8740	-13444	824	921	-888	-1123	-1080	5911	3323
2. Export charges not received on time (or import goods and services not received on time)	--	-3600	-4085	-5239	-10119	-11591	-7959	-5051	-5293	-6388	-12244	-15435	-25903
3. Errors and omission	-386	-1167	9	-9113	-7708	-8808	-9817	-8558	-9156	-9481	-6501	-7199	-8385
Continuous capital flight (**1** + **2** + **3**)	-1875	-7518	-9816	-14218	-26567	-33843	-16952	-12688	-15337	-16992	-19825	-16723	-30965
Current account	-69	9013	7844	6963	10847	-80	219	24616	46839	33935	29116	35905	59935

Notes:

[a] Positive and negative figures are used according to the system of balance of payments. Therefore, the negative figures mean the outflow of financial resources from Russia.

[b] Minus signs mean increase.

Fig. 1. Outflow of Capital from the Liabilities Side of the Other Investment in the Three Years during and after the Crisis



Sources: Same as Table 2

Fig. 2. Capital Flight and Current Account

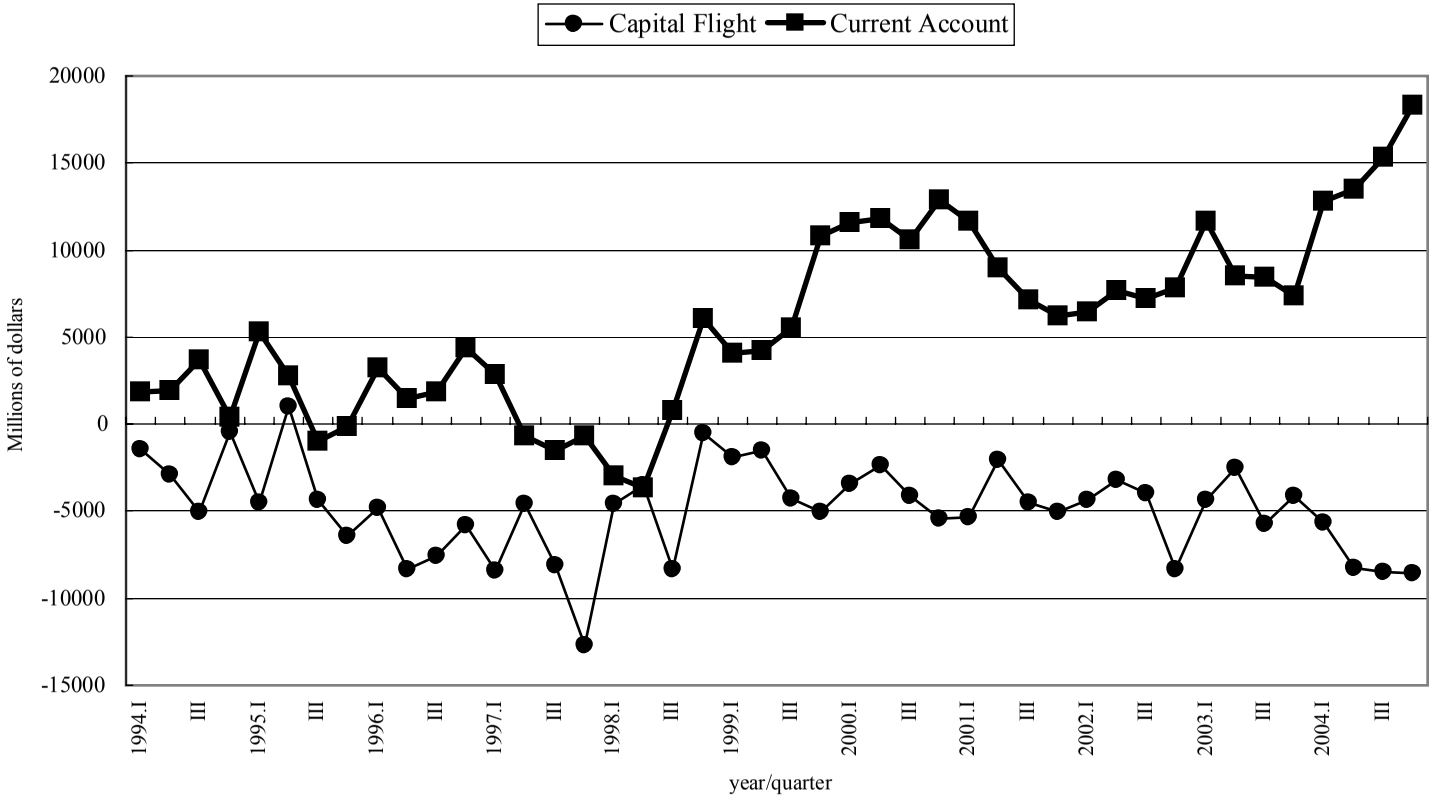


Fig. 3. Three Routes of Capital Flight

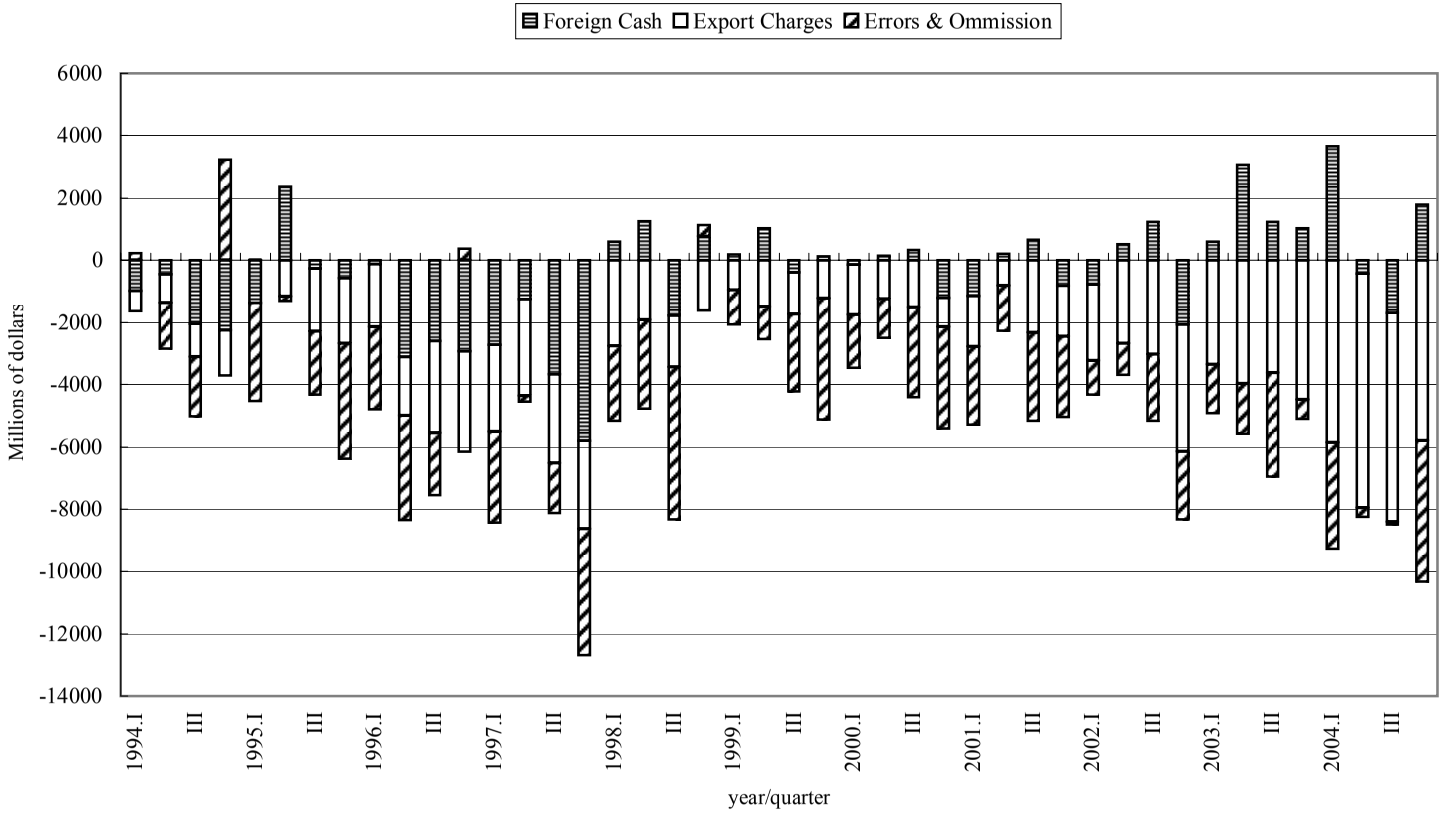
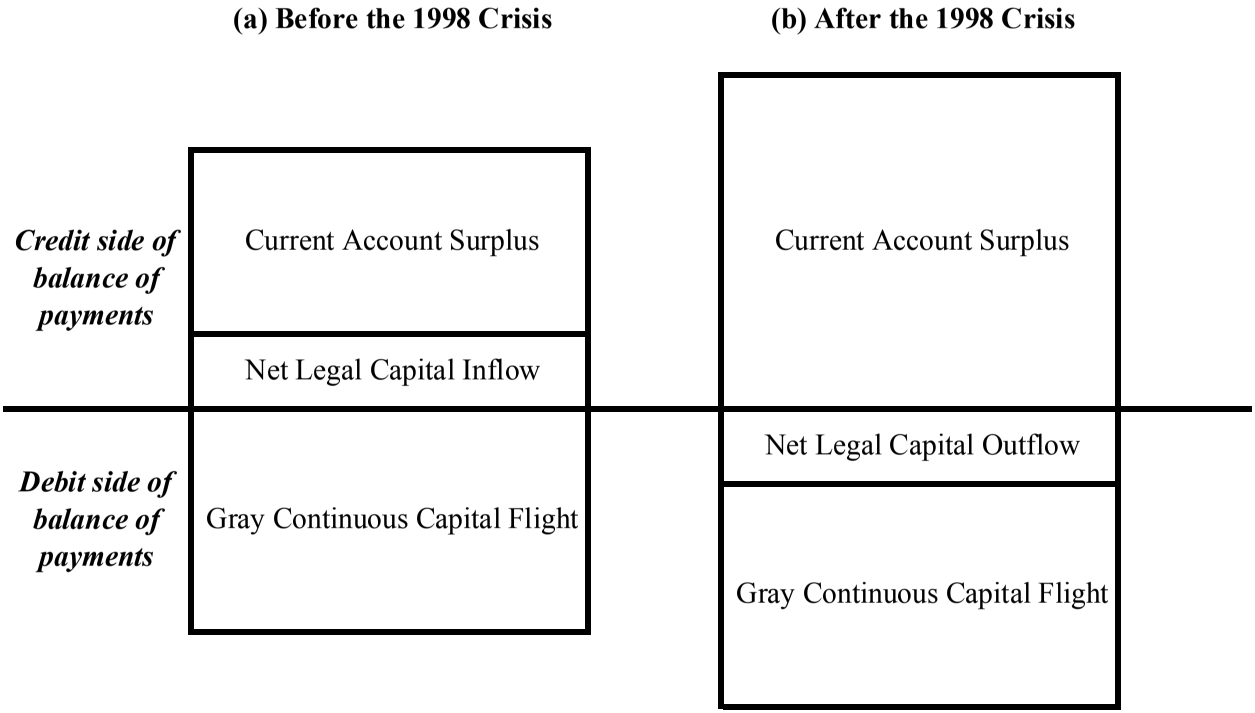


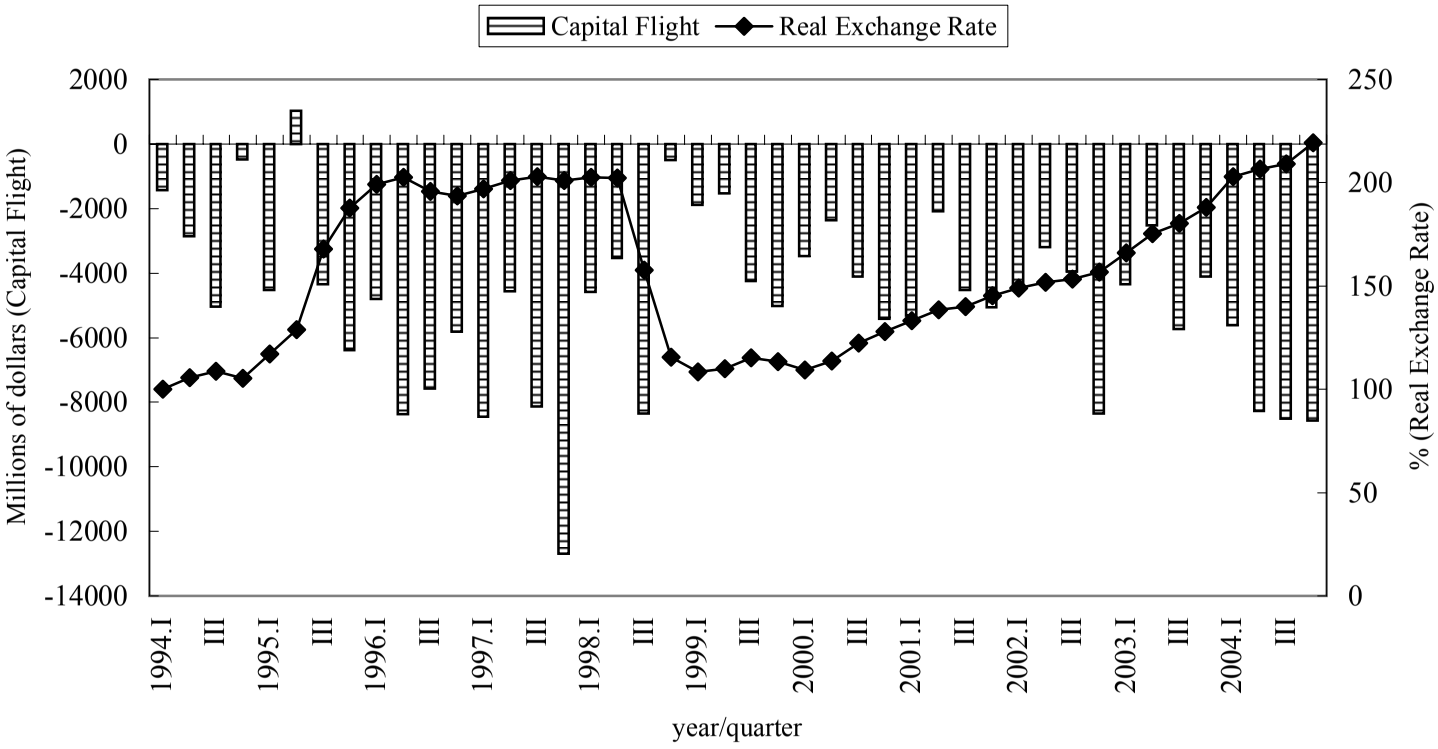
Fig. 4. Structure of the Russian International Financing



Note: Reserve assets, short-term trade credit, and other miscellaneous credit are omitted from the figure.

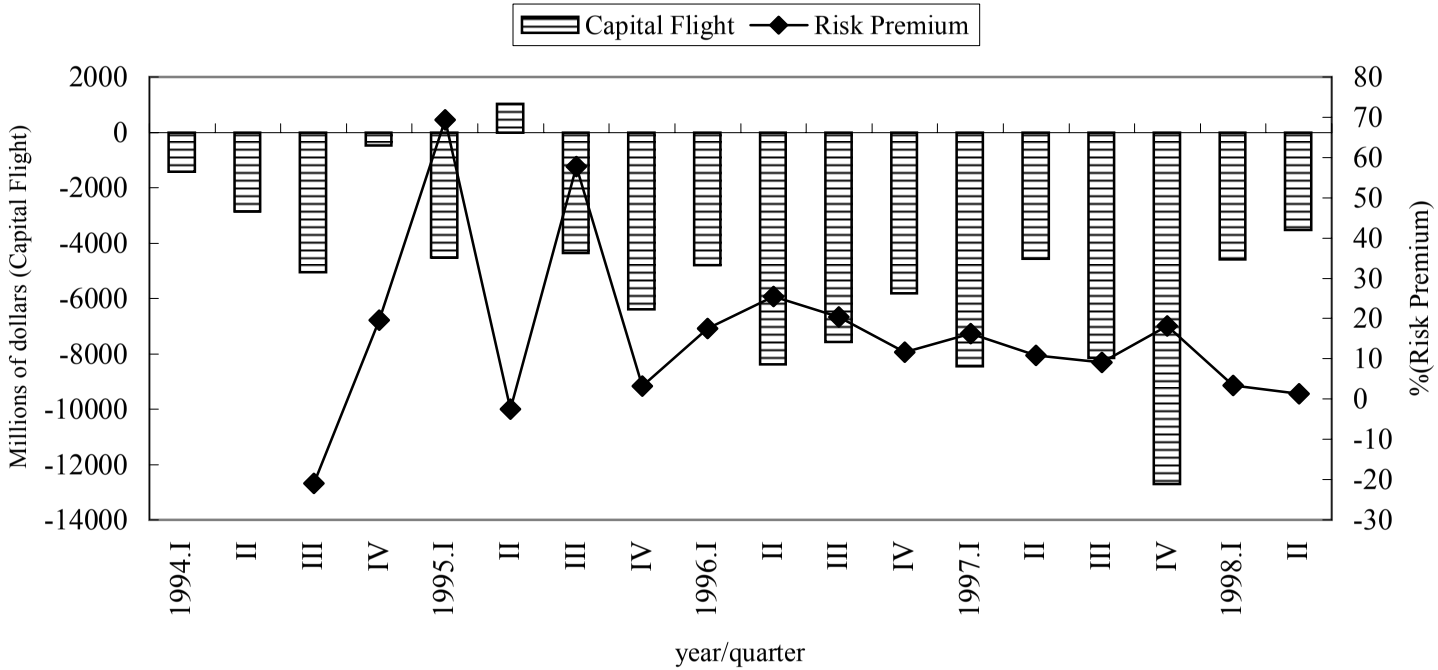
Sources: The author's original figure.

Fig. 5. Real Exchange Rate and Capital Flight



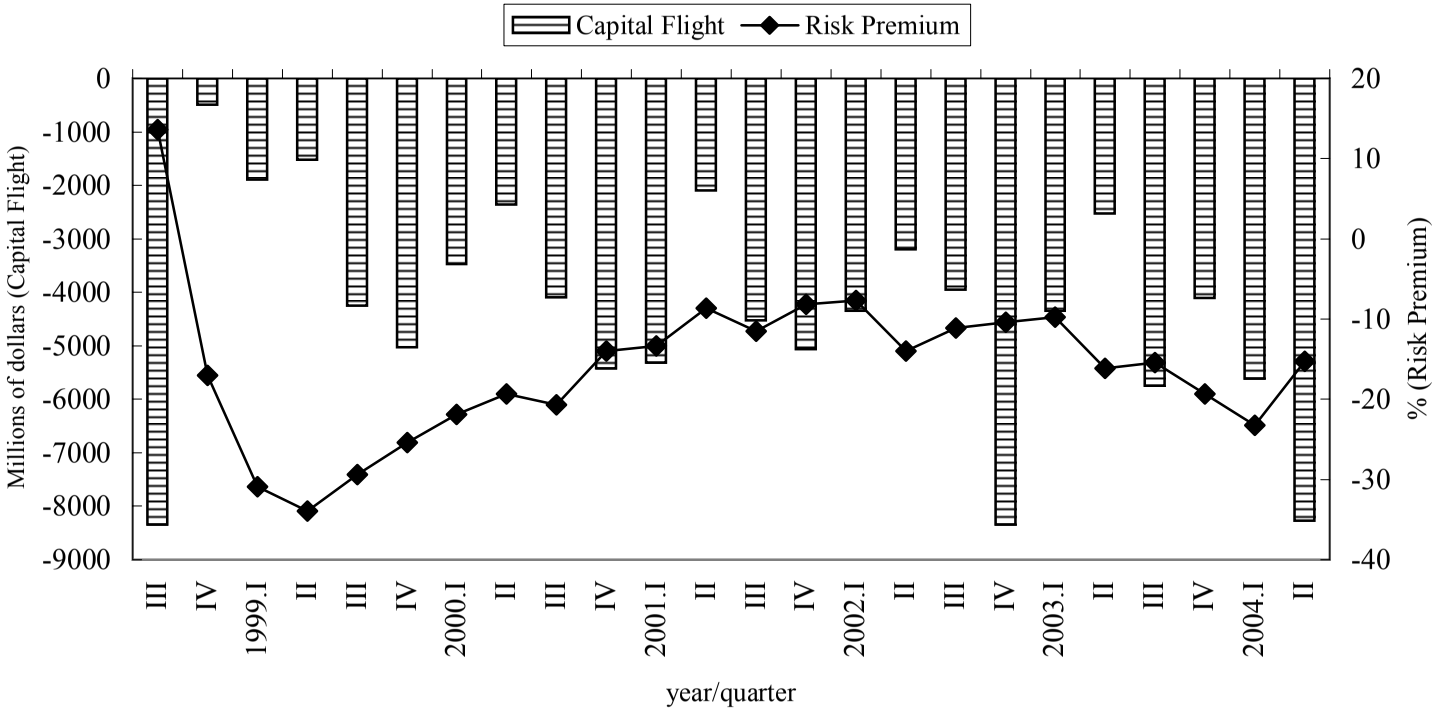
Note: Real Exchange Rate: US dollar per ruble indexed by consumer price index (1994/I = 100).
Sources: Website of the CBR and *IFS*.

Fig. 6. Capital Flight and Risk Premium (before the Crisis)



Note: Risk Premium = Real Interest Rate in Russia – LIBOR (per annum).
Sources: Website of the CBR and *IFS*.

Fig. 7. Capital Flight and Risk Premium (after the Crisis)



Note: Risk Premium = Real Interest Rate in Russia – LIBOR (per annum).
Sources: Website of the CBR and *IFS*.