Growth in Russia and Economic Diversification

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1. Growth Mechanism Is Changing

Russia's economic performance in 2002, with GDP up over 4.3%, compared favorably with slow growth in Europe and in the US. However, even this represented a slowdown in growth on previous years and on the back of high oil prices, too.¹ High GDP growth rates in 1999-2002 (6.4% annual average) have been achieved on the back of high oil prices, a strong balance of payments, healthy fiscal performance, and increased capacity utilization. Increased fiscal revenues (which largely resulted from high oil prices) easily allowed the government to raise wages in the public sector and stimulate domestic demand considerably. The latter stimulated domestic production, especially in the early postcrisis period.

However, the period of "cheap" growth in recent years has practically come to an end. Higher capacity utilization, which easily contributed to rapid growth in productivity, is already out of the question.² The recorded slowdown in economic growth in 2002 indicates that the existing model for economic growth came to an end of its useful life. The drop in manufacturing on the back of rapidly growing real disposable incomes in 2002 clearly proved that (Fig. 1).

It is well recognized that the structure of the national economy is skewed towards the fuel and energy sector, which accounts for 30% of industrial output, one third of consolidated budget revenues and over half of federal budget revenues. Exports

¹ According to the most recent data, the Russian economy grew 6.4% in 1999, 10.0% in 2000 and 5.0% in 2001.

² Especially in the sectors which are able to produce competitive goods.



Fig. 1. Growth of Output and Disposable Income (in %)

of fuel and energy make up about 55% of total exports (for details see section 3). Russian manufacturing lacks competitiveness and thus the gap between rapidly growing incomes and domestic production was compensated for by increased imports in 2002 and in early 2003. It is important that this happened despite a relatively stable real effective exchange rate. In fact, this exchange rate actually decreased by 1.7% (Fig. 2) in 2002 due to the fact that the ruble slightly gained against the dollar in real terms, but strongly depreciated against the euro.

Fig. 2. Imports Increased on Back of Stable Real Effective Exchange Rates



Growth slowed in 2002 as increased domestic demand saw consumer preference shift toward more expensive, higher quality goods, a sector in which Russian manufacturers are unable to compete with imports. The food industry provides a clear example of how growing incomes have transformed consumer demand. In 1999-2000, when incomes were low, production of cheap foodstuffs (such as vegetable oil, bread, etc.) grew more rapidly. In 2001, as real incomes increased, production of those foodstuffs stopped growing and the focus shifted to more expensive high-protein foods. In 2002 and early 2003, growth in the Russian food industry slowed further from 8.2% in 1H02 to 3.4% in 4Q02. Since demand for food was almost entirely saturated, consumer demand shifted toward more expensive consumer durables and services (Table 1).

Faster growth in services last year should be seen as a sign that the economy did become healthier as it was able to react to rapid growth in real incomes by expanding the services sector and increasing production of consumer goods. However, it is too early to say that economic restructuring is completed. A lot more changes can be expected. Really, the structure of exports has remained relatively unchanged, with energy and semi-manufactured goods still the major source of export revenues, and the economy is therefore still highly dependent on international energy prices (in spite of the fact that in 2003 this dependence seemed to have fallen). In any case, a drop in oil price would mean less oil revenues coming in and a weaker current account and this would weaken domestic demand. Services would be the first to feel the pinch.

At the same time more progress in economic restructuring was seen in early 2003. Productivity seems to have increased considerably. Nevertheless, the problem of diversifying the economy and export basket and further improving the business climate remains as topical as before. More radical structural reforms are also still needed.

In any case, the macroeconomic performance in 2002 clearly indicated that the country can no longer rely on the advantages of easy growth and to repeat the same growth pattern which emerged after the 1998 crisis will be difficult for Russia if not impossible. Growth in the non-interest spending that took place in the past few years was able to stimulate domestic consumer demand to some extent. Now it may stimulate mostly imports. Thus Russia seems to be on the brink of an intense structural transformation. This transition cannot be considered as an equilibrium state.

Table 1. Services	Grew	Faster	Than	GDP	in	2002,	Change	у-
о-у, %								

	2001	2002
GDP	5.0	4.3
Goods production	6.5	3.3
Industry	4.9	3.7
Construction	9.9	2.7
Agriculture	11.2	1.6
Services production	3.5	5.3
Market services	4.2	5.8
Transport and communications	5.4	6.0
Trade and public catering	3.9	8.1
Non-market services	-0.6	2.3

2. He is Able Who Thinks He Is Able (Buddha, 6th Century BC)

In his annual 2003 address to the Parliament, president Putin mentioned that Russia needs to double its GDP in ten years. This means that average annual growth rates should exceed 7%, which does not look impossible at a first glance. Many other countries like China, Korea, and Japan, for instance, demonstrated rather lengthy periods of rapid growth. The Soviet economy was also able to deliver fast growth in the early 1960s, as well as in some previous decades.

After the 1998 crisis, during the period from 1999 to 2002 the Russian economy grew about 6.4% a year on average. In 2003 growth is expected to be of about the same rate, or even higher. How sustainable is this growth? Would it be possible for modern Russia to repeat the success of Asian economies and maintain high growth rates over a decade? If yes, then what are the necessary conditions for it?

Growth theory suggests that three major factors may contribute to economic growth, namely, labor, capital and total factor productivity (TFP). As analysis shows Russia's economic growth in the coming years can be driven by productivity in the first order, i.e. as happened in recent years (Fig. 3 shows labor productivity was rising in line with growing output, or even faster).

Fig. 3. Labor Productivity and Output, Jan 94 = 100%, Seasonally Adjusted



Unlike China or the other Asian countries that demonstrated high growth in the past decades, the Russian population will decline in the long run. Also Russia cannot count on cheap labor moving in large numbers from rural to urban areas as happened in China, Korea and other Asian economies and largely contributed to high growth rates in those countries. The share of the rural population in Russia (about 20%) is still high by European standards, but is much lower than in the Asian economies at the start of the periods of rapid growth. Thus, accumulation of human capital, or more precisely of the labor force, cannot contribute much to economic growth in Russia. Moreover, according to demographic forecasts the situation will deteriorate in a few years since the demographic burden (number of dependents per 1000 workers) will start growing rapidly due to the aging population.

As analyses show, Asian economies in the past decade also grew largely due to capital accumulation. In fact, capital accumulation was the major driver of economic growth in those countries. That was also the case in Soviet Russia. Capital accumulation in the Asian economies was financed both from domestic sources and by foreign capital inflows.

TFP in the Asian economies has also been growing but at a lower pace than capital. Decomposition of growth in developed economies displays a different picture: TFP usually grows more rapidly relative to labor and capital.

The exact meaning of the TFP cannot be specified. In the most general case it incorporates technological change, changes in capacity, knowledge accumulation, etc. It may also incorporate the contribution of such effects as openness to trade and investment regime, progress in basic and higher education, information technology, and research and development. Total factor productivity cannot be measured directly: one needs to estimate it in some indirect way, through growth accounting, for instance. The TFP therefore includes all uncaptured parameters as well as measurement errors.

Decomposition of growth by factors by using growth accounting techniques enables better understanding of where growth originates from, i.e. to estimate quantitatively the contribution of each factor to economic growth. However, there are certain methodological difficulties in carrying out growth accounting, especially in the case of countries like Russia, which demonstrate dramatic structural changes.

Growth accounting usually employs some traditional production functions, namely the Cobb-Douglas function, which assumes constant returns to scale in the two major inputs, labor and capital. In the case of equilibrium and under the assumption that factor markets are competitive, capital and labor shares in the production function are considered as the share of rental payments to capital and the share of wage payments to labor to total incomes. The assumption of constant returns to scale also means that the economy is in equilibrium and that all the variables of the model, such as output, labor and capital essentially evolve together. This usually seems to be the case for many developed countries, but for developing and transitional economies little evidence has been found. It is hard to accept that the Russian economy has ever attained long run equilibrium in the past: econometric analysis shows that there was no equilibrium even before the transition.

It can be seen that over the thirty-year period from 1960 to 1990, Russia's output roughly tripled, while its measured capital stock grew eight times (Fig. 4). At the same time, effective labor increased roughly by one third. In 1990, the capital-output ratio was nearly four times higher than in 1960, indicating strongly diminishing returns with respect to capital for the Soviet period. At the same time, increasing returns with respect to labor should be considered a possibility. That may point out that the economy is operating below capacity not only in the 1990s, but in Soviet times as well. Over-accumulation of the capital stock (part of which can be considered as the "wrong" capital stock that resulted from the misallocation of investments) was not (and could not be) accompanied by the required growth of the labor force. Labor, therefore, became the limiting factor in the economy, which, in spite of rapid capital accumulation, had remained laborintensive. As seen from Fig. 4, output has a N-shaped pattern, which can be roughly approximated by a polynomial function of the third order. If inputs are roughly linear (or can be approximated by a smaller than third-order curve), then returns to scale are most likely non-constant.

In addition, the basic growth model, which is based on a constant returns to scale assumption, neglects such inputs as land and natural resources, which are of significant importance in the case of Russia.

Similar doubts about the reliability of the constant returns to scale assumption are relevant not only for the pre-transition period. Actually, after 1992 many old soviet-type businesses disappeared, while new companies emerged without substantial investments since they were able to rent capital stock from the former state enterprises, though for different activities. Metal processing plants, for instance, located in city centers could have leased office space to the emerging trade companies or banks. Thus, with minor investments, part of that capital stock was put back in operation, perhaps with higher returns. Various substitution and reallocation effects have taken place during the transition period and this is still going on. So, at best, one may consider some local equilibrium in the case of Russia.





In the case that the actual data do not suit the model based on the assumption of constant returns to scale, one should consider two possible ways of dealing with this problem. One way is to adjust inputs, namely, labor and/or capital, by quality so that the adjusted data will fit the model based on the assumption of constant returns to scale. The other way is to specify the model so that it will fit the measured inputs. The OECD's Productivity Manual suggests the first way, developing the methodology for adjusting measured inputs. In the case of labor it refers to a magnitude adjusted by self-employment, by working hours, by multiple job holdings, quality of human capital, etc. Capital inputs should be adjusted by age-efficiency profiles, asset retirement patterns, age-price profiles, efficiency declines due to decay³ of the capital stock, and others. Instead of the gross capital stock, after the necessary adjustments, one derives the concept of the net capital stock. Finally, the shapes of the labor and capital curves become similar to the shape of the output curve, so that some linear combination of inputs – assuming constant returns – gets close to the output curve. It is practically impossible to do this same sort of adjustment of inputs in the case of Russia, however.

Eventually there is no big difference if one attempts adjusting inputs so that some better approximation of the actual curve may be obtained if constant returns to scale are assumed, or if one relies on a non-constant returns model without adjusting inputs (below we denote TFP in those two cases as TFP1 and TFP2). In both cases some closer approximation of the actual curve can be obtained and residuals between actual and fitted curves should become roughly the same. Thus if the nature of growth is understood as a process of structural transformation in which growth itself is becoming unbalanced, then increasing returns should not be rejected.

The correct estimation of the factor shares is one of the major difficulties in growth accounting. The exact values of the factor shares are usually taken as 0.7 for elasticity of output with respect to labor and 0.3 for elasticity of output with respect to capital. In our simulations we vary factor shares within some reasonable ranges and use both constant returns to scale assumption and non-constant as well. In general, we will skip further methodological comments in this paper and for better interpretation of results will rely on sensitivity analysis providing some range of exogenous variables, such as TFP (for more details see Gavrilenkov 2002).

Post-crisis growth in Russia originated largely from changed fundamentals, and should therefore be reflected by changes in to-

³ Decay differs from depreciation since depreciation measures the loss in value of capital goods, while decay is in fact efficiency decline that reflects the loss of productive services delivered by capital goods.

tal factor productivity. As mentioned, average annual GDP growth rate in 1999-2003 will exceed 6%, while both capital stock and labor were growing by 0.5% on average. This means that growth was really driven by higher efficiency.

As econometric analysis shows, in order to increase capital stock by about 0.5% to 1% per year, investments in fixed capital should grow not less than 10% each year. Even in the case that investments will grow faster, capital accumulation will be rather slow, especially in the near future, given the fact that the current level of investments is low, while capital stock is much bigger. The latter originates from the existing structure of the Russian economy, where capital intensive sectors that produce low value added products still dominate in Russia.

It is most likely that employment on average may remain unchanged in the medium run, or may grow not faster than 0.5% per year, i.e. as was seen in 1999-2003. Under those assumptions Russia needs to increase total factor productivity by 5.5% to 6.5%(depending on which type of production function is used) each year in order to secure 7% annual growth rates. To secure 6% average annual growth rates (as was the case in recent years) TFP should rise by 4.5% to 5.5% each year (Fig. 5). In theory this does

Fig. 5. High Growth Rates May Be Secured Only by a Rise in Productivity



not look impossible, however this may happen only if investments will be coming not only in the energy sector, but in the sectors with higher value added, such as services and manufacturing. Simulations show that if productivity remains unchanged, then economic growth is unlikely to exceed 1%.

3. To Change and to Change for the Better Are Two Different Things (German proverb)

The diversification of exports is increasingly being touted as one of the priorities of Russian economic policy. However, producing the goods, as it were, and fulfilling this task over the coming decade looks tricky, if not impossible. The roots of the country's dependence on natural resources exports run deeper than the economic transformation of the 1990s. Indeed, the Soviet economy experienced turbulence during periods of low prices, such as the second half of the 1980s, when a drop in oil prices forced the government to substantially boost foreign debt in order to finance imports.

Table 2 takes countries with different incomes per capita (including developed countries and emerging markets) and compares their ratios of gross and net exports to GDP. As can be seen, both of Russia's ratios are fairly high, indicating that the economy is both heavily dependent on export revenues and unattractive to foreign capital.

Unlike many other economies, particularly those in transition, Russia has managed to generate enough export revenues to finance economic growth in the last few years. At the same time, most transition economies have experienced strong capital inflows, which have boosted not only per-capita income and the import of consumer goods but also the inflow of investment goods. The latter has helped these economies to diversify substantially and East European countries have been able to redirect trade flows to the West.

	Gross exports, % of GDP	Net exports, % of GDP
US (2001)	7.2	-4.2
Japan (2001)	9.3	1.7
Euro zone (2001)	15.3	1.2
China (2000)	23.2	3.2
Mexico (2001)	25.6	-1.6
Brazil (2001)	11.6	0.5
Russia (2002)	30.9	13.3
Poland (2000)	22.8	-7.8
Czech Republic (2001)	58.9	-5.4
Ukraine (2002)	45.3	1.7

Table 2. Gross and Net Exports of Selected Countries (as % of GDP)

Similar developments took place in the Asian economies a few decades earlier. Foreign direct investment (FDI) and/or private foreign borrowing fueled major change in many sectors, the rapid expansion of manufactured exports and economic growth. Many of FDI's well-known spillover effects were also seen, including better business climates and higher production efficiency.

However, as is often the case, Russia is charting its own path. FDI has yet to feature prominently: in recent years, the cumulative FDI per capita has been much lower than in most transition economies (Table 3). On an annual basis, Russia has attracted less FDI than countries like Poland or the Czech Republic, which have a much smaller population.

Meanwhile, the bulk of FDI that Russia did receive went to the oil sector (Table 4), which did nothing to diversify exports. And while the food, retail and finance industries were also major recipients, their goods and services go mainly to the domestic market. Another important factor is that the average annual FDI inflow of around \$3 billion was not enough to change the economy's sectoral composition substantially. Finally, much of the foreign investment was coming from Cyprus and should therefore be treated as repatriated capital.

	FDI, \$ per capita
Russia (2002)	190
Poland	916
Hungary	2,392
Czech Republic	2,761
Slovakia	1,115
Kazakhstan	744
Estonia	2,097
Croatia	1,371
Slovenia	1,021

 Table 3. Accumulated FDI Per Capita in Selected Transition

 Countries, 1990-2001

Table 4. FDI Receipts by Sector

	1995	1997	1999	2002
Total	100.0	100.0	100.0	100.0
Fuel	13.0	5.9	27.9	16.7
Metals	3.0	3.6	1.7	2.1
Machinery	5.0	2.2	3.0	6.5
Wood	4.2	1.9	3.3	3.3
Food	12.4	9.5	22.6	11.0
Construction	10.0	4.8	1.4	2.2
Transport	0.5	0.5	12.1	2.8
Retail and public catering	23.2	8.5	14.0	24.0
Finance	7.9	42.5	0.7	1.4
Other	20.8	20.7	13.3	30.0

As the capital-intensive oil and gas industry generates the bulk of export revenues, it received a substantial part of domestic investment. Manufacturing, however, received little money, so was unable to increase production of competitive goods for export. Furthermore, the reallocation of the export-oriented industries' "excess" capital over the last decade was practically impossible due to a generally poor investment climate, coupled with a weak financial system. The result was capital flight. Most of the attempts to reallocate the capital in major top-down businesses also largely failed. For example, domestic metals producers, who took control of many manufacturing and machine-building companies, were unable to modernize auto manufacturing at GAZ or UAZ.

Admittedly, the situation started to change at the end of 2002 as investment activity increased, followed by the seeming disappearance of capital flight in 1H03. However, the action against YUKOS in mid 2003 has dealt a serious blow to the investment climate and might have indeed ended this trend, although it is too early to judge.

Consequently, as Fig. 6 shows, the volume of exported manufactured goods (in dollar terms) has changed little over the past seven years. Non-mineral exports have hovered around \$44 billion and, despite a slight increase since the 1998 crisis, are still far from dominating the picture.



Fig. 6. Domestic Exports by Commodity Groups (\$ Billion)

The largest increase has clearly been in the export of mineral products, mostly oil and gas, which Fig. 7 reiterates. As seen from these two graphs, energy resources, metals, timber, cellulose and chemical products account for around 85% of exports. Given

the rather small share of machinery and other manufactured products, real exchange rate fluctuations have little influence on exports, unlike changes in metal or energy prices.

On the basis of these statistics, the export structure looks unlikely to change substantially in the coming years. Oil companies' expansion plans, particularly to finance the construction of new pipelines and terminals, will guarantee substantial exports in that sector, even given lower oil prices. The manufacturing sector has no possibilities to increase exports in the medium term. At the same time, metals and chemical products are unlikely to see any major growth, as every time that Russia has tried to boost these exports in physical terms, prices have been falling. This explains the only tiny change in dollar revenues over the years.



Fig. 7. Breakdown of Domestic Exports by Commodity Groups (%)

In the oil and gas industry, the bulk of export receipts are generated by only a few large companies: YUKOS, LUKoil, Sibneft, TNK and Surgutneftegaz. The same is true of the metallurgical industry. In the ferrous sector, most of the export cashflow comes from Magnitogorsk Metal, Novolipetsk Metal and Severstal; in the non-ferrous sector, from Norilsk Nickel, SUAL, RusAl and Alrosa. Given the reasons outlined above, it is hard to envisage how these companies will substantially boost export volumes in the coming years. It can be seen that Russia's export structure closely mirrors its stock market, with only small-cap companies existing outside the oil and gas and the metals industries.

The pulp and paper industry is set to expand rapidly in the future, mainly on the back of more export growth. First, however, all legal problems related to ownership in the sector need to be solved. Admittedly, like the machine-building industry, expansion here will not change the structure of exports massively. However, the greater use of technology will require more investment and know-how.

Elsewhere, in the near future we expect strong companies to emerge in the consumer industries, such as the food, agriculture, retail and service sectors. That said, these are more domestically oriented.

4. Vivat, Crescat, Floreat! (Live, Grow and Flourish!)

In spite of obvious advantages, high oil price and capital inflows create a number of macroeconomic problems and challenges at the same time: it is expected that on the back of massive foreign exchange inflows in 2003 the ruble will appreciate rapidly, thus negatively affecting the competitiveness of the Russian economy. But this is only one side of the coin. On the other hand, massive foreign exchange inflows and appreciation of the ruble creates an extremely favorable environment for the restructuring of the economy.

In theory rapid appreciation of the ruble creates well-known problems – competitiveness of domestic manufacturing falls, and profitability of the exporters also goes down. In principle it may negatively affect economic growth. On the other hand, however, strengthening of the ruble is a challenge: it stimulates more intense structural change, cost reduction in the first order. A Strong ruble is harmful for the "old" economy, inherited from the Soviet period. At the same time, a stronger ruble may stimulate investment activity given the fact that the stronger the ruble, the more investment goods can be imported. As seen from Fig. 8, investment activity was closely correlated with real exchange rate: the faster the ruble was appreciating the higher the growth rate of investments was recorded in the post-crisis period. As a result the Russian economy in the entire 1999-2002 period was growing on the back of real appreciation of the ruble.

Now looks to be a propitious moment for a more active restructuring of the Russian economy. Several factors have converged to provide this moment. A stronger ruble means that more investment goods can be imported. It could, of course, be argued that the ruble was even stronger in 1996-98, a period when investment activity was low. However, Russia now offers a far better investment climate, with improved institutions and a lower tax burden, to cite just some of the advances made. At least some government efforts have paid off.

Due to massive capital inflows and the strong current account, money was also cheap in Russia in 2002-2003 and interest rates were low. The fact that the government has been able to run a budget surplus explains the aridity of the Sovereign bond market and the negative real interest rates on what bonds there are. Deposit



Fig. 8. Real Investments and Effective Exchange Rate (1999=100%)



Fig. 9. Nominal Interest Rates





rates were also negative in real terms most of the time (see Figs. 9 and 10) and ruble appreciation has prompted much turning of backs on dollar savings. Stagnation on global markets means that there was no reason to export capital; on the contrary capital inflows have been massive in the first half of 2003, until the YUKOS affair.

As a result, in 2003 there were more incentives to invest in Russian fixed capital than ever before. Apart from equities, this

may be viewed as the only way for most domestic investors to preserve their money, another major difference from previous years. It is not a surprise to see investment rise by 12% or more in 2003 and it should certainly be a major driving force behind Russian economic growth in 2003.

The fact that money was cheaper than ever before has also triggered a hike in investment activity beyond the energy sector, a prospect which has full government backing; diversification of the economy is indeed one of the priorities laid out in the government's recent medium-term economic program.

Up until now, the Russian economy has been very dependent on world energy prices: i.e. the higher the price, the larger the current account and the higher the rate of growth (Fig. 11). An exception was 1997, the only pre-crisis year when Russia attracted foreign investment on a large scale.

On the back of the expected diversification of the economy and ruble appreciation, the current account is supposed to shrink. Russia will import more investment goods (as well as consumer durables) and should thus be able to move away from linear dependence between the current account and economic growth (Fig. 11).



Fig. 11. Current Account and Economic Growth



Econometric analysis shows that the relationship between the oil price and macroeconomic indicators is not now as strong as it was. The change began in mid-2002, when Russian companies started to borrow more heavily on international markets, and has continued into 2003. The graph below (Fig. 12) shows that y-o-y industrial growth was closely correlated with the oil price until mid-2002 and that this relationship has now all but been broken. Apart from increased foreign borrowing, that has reduced Russia's dependence on the oil price, volume crude exports have also grown steadily, thus contributing to a strong current account at a lower price for crude.





The graph below (Fig. 13) also demonstrates the change in growth model. After mid-2002, a clear positive correlation emerged between the real effective exchange rate and productivity. Since the growth mechanism based on higher capacity utilization (and respectively higher productivity), which developed after the 1998 crisis, became defunct last year, the only way now to grow is through increased investment. This will in turn increase productivity, not through higher capacity utilization, but through modernization. As noted above, a stronger ruble may

stimulate investment, but that stronger ruble (as well as other price signals above) can also thereby stimulate productivity.



Fig. 13. Productivity Started to Grow on the Back of Stronger Ruble

5. Does the Central Bank's Monetary Policy Stimulate Restructuring?

"Necessity Delivers Us from the Embarrassment of Choice" Luc de Clapier de Vauvenargues, French moralist, 1715-1747

Calls to "stop" ruble appreciation, which causes the so-called "Dutch disease," are heard regularly from businessmen and government officials alike. The general view was that "ruble appreciation" over 2001-02 had been a cause of rapid growth in imports and a consequent drop in growth in Russia's own industry. Another commonly held belief is that the Central Bank has changed its exchange rate policy to favor a stronger ruble. In fact, it is most likely that the developments on Russia's foreign exchange market have largely been the result of an unprecedented inflow of foreign currency and changes in the dollar/euro exchange rate. This would leave the monetary authorities with only short-term mechanisms for affecting the market, such as buying and selling foreign currency in an attempt to smooth out the fluctuations. Longer term, the Central Bank has faced the option of printing rubles to buy up oil windfalls, or if growth in reserves was not a priority, simply allow the ruble to appreciate. We think that in choosing rapid reserve accumulation it has opted for the most natural and reasonable policy.

The fluctuations in the ruble/dollar exchange rate are not enough to gauge appreciation or depreciation in the value of the ruble. In fact, Europe accounts for the single largest chunk of Russian trade and the euro, as well as the euro/dollar exchange rate, therefore plays a major role.

Talk of progressing "Dutch decease" is, probably, inappropriate for Russia on an aggregate level (although this is valid for certain markets) for a number of reasons. As was discussed in section 1 the deceleration in growth recorded in 2001 and early 2002 came on the back of a relatively stable real effective exchange rate. The ruble has appreciated against the dollar, but depreciated against the euro, especially in 2002 and early 2003. Statistics show that in 2002, in terms of real effective exchange rates the ruble was 25% below the 1997 level, in contrast to more than 40% in early 1999. However, economic growth accelerated at the end of 2002 and in early 2003, on the back of a stronger ruble.

No one can guarantee that the economy will once again grow as fast as in 2000, even if the ruble should for some reason depreciate back to the level of 1999 or 2000. As was pointed out before, the growth mechanism that emerged after the 1998 crisis and contributed to an economic upturn is largely exhausted. As said, this mechanism was based on increased capacity utilization, but after a number of straight years of growth, most sectors now lack spare capacities. Even a cheaper ruble cannot, therefore, guarantee a return to the 10% economic growth rate seen in 2000.

Ruble appreciation may indeed be causing problems for the "old" economy, but the other side of the coin is that it also acts as a stimulus for economic restructuring: in 2003 increased costs, attrib-

uted to a strengthening ruble, forced companies to cut back where they can, an obvious target being excessive labor. As a result, productivity has again been growing. At the same time, the need to reduce costs and increase productivity forces companies to invest in production capacities. It, therefore, looks only natural for investment activity to have increased substantially in 2003, and not only in the oil and gas sector.

With long-term economic growth expected, ruble appreciation is inevitable, even desirable. Russia's ruble is at the market exchange rate still much lower that at the purchasing power parity (PPP) rate. International comparisons show that the higher the per-capita income in a country, the smaller the gap between the PPP exchange rate and the market exchange rate. Fig. 14 shows that Russia has already moved some way toward diminishing this gap over the past few years, as its economy has grown. This will continue, as a strong current account and repatriation of export earnings, or capital inflows through the capital account, finance economic growth and push the ruble up at the same time.

Fig. 14. Market Exchange Rate Versus PPP: International Comparisons (OECD program of international comparisons, 1999)



6. Banking Sector Restructuring and Growth

But whanne that schal come that is parfit, that thing that is of parti schal be auoidid: "But when that which is perfect is come, then that which is in part shall be done away" 1 Corinthians 13:10, John Wyclif, 14th century

Russia's international reserves reached nearly \$65 billion as of mid-2003, up \$17 billion from the start of the year. This has already surpassed the increase for the whole of 2001 (\$6.6 billion), 2002 (\$13.3 billion) and a record high 2000 (\$15.4 billion).

Growing reserves and rapid money supply growth not only stimulate economic growth but contribute significantly to increasing monetization of the economy and capitalization of the banking system. This happens because the large foreign currency purchases by the monetary authorities cause the money supply to increase. As Russia's M2 to GDP ratio is still low (around 20%), this growth is rapid and even accelerated in 2003.

The problem of low monetization in Russia stems from high inflation in the early 1990s and continuous capital flight. In the 1990s, capital flight was one of the major sources of macroeconomic instability and attempts in recent years by the authorities to stem the flow administratively have, unsurprisingly, failed.

However, the situation changed considerably in 2002 and early 2003. According to the Central Bank, the Russian economy recorded net capital inflow in the first half of 2003. This was largely due to increased foreign borrowing by Russian banks and the non-financial sector. Also, Russia's improved business climate until the YUKOS affair was attracting more foreign investment, some of which can be treated as repatriated capital.

Besides capital outflows, the authorities are also concerned about capital inflows, of which private foreign debt is undoubtedly one of the riskiest types. But this problem should not be overestimated. According to the Central Bank's deputy chairman, the major threats to the economy are accelerating real ruble appreciation and potential problems with the balance of payments. As seen from Fig. 15, private foreign debt was growing on the back of decreasing public debt, so that the country's total foreign debt remained relatively unchanged. At the same time one should admit that at least part of foreign borrowing will be allocated in productive capacities which will increase productivity and efficiency of production. Borrowing internationally is the only way for big Russian companies to raise funds: lack of liquidity in the banking system and its structure remain one of the major obstacles for sustainability of growth and economic restructuring.

Fig. 15. Private Debt Grows on the Back of Decreasing Sovereign Debt



At present, the Central bank lacks the instruments to limit foreign capital inflows and its sterilization policies are quite weak. Therefore, as was the case with capital outflows, the government and monetary authorities want to introduce more administrative restrictions on capital inflows. The new "Law on Foreign Currency Regulation and Control," which has passed the first reading in the Duma, should provide the legislative groundwork needed to limit foreign exchange inflows via additional indirect taxation. However, while both outflows and inflows are obviously a problem for the Central Bank, administrative methods may again not be the right way to solve the issue. In reality, it is impossible to ensure the efficient administrative regulation of capital inflows. A sound macroeconomic policy and stronger market institutions can do this much more effectively, as large amounts of speculative money will not flow in if the necessary instruments are not there (as was the case on the GKO market in 1996-98). Moreover, in Russia today, using foreign exchange inflows to build up reserves seems the only macroeconomically safe way to increase the liquidity of the banking system and monetization of the economy and accumulate capital. In this regard, administrative restrictions aimed at limiting capital inflows may restrict economic growth.

The threat to stability of the balance of payments also seems overestimated. As the decline in public foreign debt offsets the growth in private foreign debt, the overall figure for the country remains stable. Besides, the money that comes into Russia is more or less "long," making the situation on the currency market predictable. All in all, at this stage we consider foreign debt growth to be a positive, as those who borrow do so to increase production. Moreover, given Russia's underdeveloped banking sector and small financial market, external borrowing seems the only way for major domestic companies to raise funds. What is also important, increased foreign borrowing, economic growth and gradual long-term ruble appreciation in the post-crisis period have contributed to the gradual de-polarization of the economy: the proportion of deposits in foreign currency has been falling (Fig. 16).

Due to low liquidity within the banking system, Sberbank and Vneshtorgbank alone are able to extend large loans to the corporate sector. This forces major Russian companies to borrow abroad. Before mid-2002, lending to the private sector was growing faster than banking assets or monetization of the economy, i.e. private sector lending as a percentage of assets was increasing. Since mid-2002, the ratio has stabilized at around 50% and is unlikely to grow as before.

As the balance of payments shows, the corporate sector borrowed around \$12 billion on the global market in 2002 and, as mentioned above, this borrowing continued in early 2003. Together with high oil prices, which have kept the monthly trade surplus at around \$5 bln, this puts pressure on the ruble. Nevertheless, in early 2003, euro appreciation against the dollar caused the real effective ruble exchange rate to appreciate slightly (2.6%), despite slight y-o-y depreciation. A relatively stable ruble therefore makes foreign borrowing quite attractive.

Smaller companies that are unable to borrow on the global markets issue domestic corporate bonds, which allow them to attract capital from small creditors. Table 5 provides a fair overview of Russia's banking sector, despite containing only the top 15 banks.



Fig. 16. The Share of Dollar Deposits Is Falling

As Table 5 shows, the top 15 banks control over 60% of total assets, while the others (over 1,300) control the remaining 40%. Also, the market share of the top 10 or 15 banks grew over 2002, a trend that is likely to continue. Consolidation in the sector looks inevitable, although it will probably take place gradually as there is no clear restructuring plan yet. The two state-controlled banks, which have certain privileges, clearly dominate the market and to some extent distort it. Until the government decides how to restructure them, they will continue to affect the money markets more than the other banks.

As well as remaining a major government creditor, the table shows that Sberbank is the only bank that can extend large loans to major companies such as YUKOS, Gazprom and LUKoil, which need \$0.5 billion or more. However, for very large sums, companies need to turn to global markets. Reforming the financial system should be also considered as a key element of the government policy of economic diversification, which can secure high growth rates in the long run.

		01.07.03		01.01.03		
		Assets, \$ mln	Assets, % of total	Assets, \$ mln	Assets, % of total	
1	Sberbank	42.2	29.4	35.1	29.7	
2	Vneshtorgbank	6.8	4.8	6.0	5.1	
3	Gazprombank	5.8	4.0	4.7	4.0	
4	Alfa-bank	5.6	3.9	5.0	4.2	
5	International Industrial Bank	4.2	2.9	3.8	3.2	
6	Bank of Moscow	3.6	2.5	2.9	2.5	
7	MDM-bank	3.1	2.2	2.8	2.4	
8	Rosbank	2.6	1.8	2.1	1.8	
9	Moscow International Bank	2.5	1.7	2.4	2.0	
10	Uralsib	2.1	1.4	1.4	1.2	
	Top 10	78.5	54.7	66.2	56.1	
11	Promstroybank	1.9	1.4	1.5	1.3	
12	Raiffeisen	1.8	1.2	1.4	1.2	
13	Citybank	1.7	1.2	1.9	1.6	
14	Menatep (St. Petersburg)	1.5	1.0	1.3	1.1	
15	Petrocommerce	1.2	0.9	1.0	0.8	
	Top 15	86.6	60.3	73.3	62.1	
	Total	143.6	100.0	118.0	100.0	

Table 5. Assets of the Largest Banks

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