経済研究
Vol. 55, No. 2, Apr. 2004

特集：ロシアの経済成長
――資源依存から多様化へ――

Sustainability of Growth and Development of Financial System in Russia

Evgeny Gavrilenkov

"We aim above the mark to hit the mark."
Ralph Waldo Emerson

1. Introduction

According to recent data released by the State Statistics Committee GDP grew fast in 2003 (by 7.3%), as did industry (by 7.0%). This eclipses the much slower rate in 2002 of 4.7% for GDP (which the State Statistics Committee recently raised from 4.3% after yet again revising its historical data) and 3.7 % for industry. On the basis of these figures, GDP growth in the post-crisis years (i.e. 1999 -2003) comes to 38%, or an average of 6.7% annually. So, Russia continues to demonstrate a healthier macroeconomic performance than many other countries. Equally important is the fact that Russia financed this growth mainly from its own sources, i. e. without any massive inflow of FDI or external borrowing (albeit the latter did increase in early 2003). Russia for decades was a country that exported capital. Capital flight was not a phenomenon of the 1990es only it was also taking place in the past decades as well. Although for different reasons and through different channels: from the macroeconomic point of view continuous support of the communist regimes all over the world can be treated as capital flight legitimized by the government. It also means that once Russia starts attracting more FDI, which will finance particular projects growth rates may be high even in the case of lack of domestic financing. That said, the well-known task of doubling GDP in 10 years, as was suggested by the Russian president in 2003, in principle looks achievable. Obviously, higher volumes of FDI can not be considered as the only sufficient condition for sustainable and high growth rates. Some of the well-known structural impediments should be removed. In particular one may point on the need of restructuring of the financial system, the issue discussed in the paper.

Not only the growth numbers looked impressive in 2003. More important was that some structural changes became more visible. The macroeconomic performance already in 2002 clearly indicated that the country can no longer rely on the advantages of "easy" growth and a repeat of the same growth pattern which emerged after the 1998 crisis will be impossible (Gavrilenkov (2003a)). A rapid rise in incomes in recent years had shifted consumer demand toward higher-quality goods that could not yet be produced in Russia (Gavrilenkov (2003b)). Domestic manufacturers throughout the market therefore realized that to compete with imports, they needed to offer better (and possibly more expensive) products, which means they need to invest in new productive capacities. Thus increased investment activity was one of the major growth drivers in 2003.

Various other factors were also behind the growth acceleration in 2003, notably: higher oil prices (which caused the money supply to surge), low interest rates and a rapid increase in domestic demand. The latter was largely driven by greater investment activity, which was needed to resuscitate the exhausted growth mechanism that had emerged from the 1998 crisis and was based on increased capacity utilization.

As a result of changing growth model, investment activity in 2003 rose across the board, not only in the oil and gas sector, as had always been the case. Moreover, medium-size companies oriented toward the domestic consumer market set their sights on more aggressive growth. On the back of the liquidity surge in the financial system and low real interest rates, they sought to raise funds by issuing ruble corporate bonds and borrowing directly from domestic banks. According to the Central Bank, the broad monetary base in 2003 expanded by more than 55% (growth of the money supply should be similar). Meanwhile, nominal lending rates in 2H03 dropped to around 12%, the level of inflation reported for the year (and the upper limit of the government's target). Thanks to the zero real interest rates, bank loans to the private sector swelled by around 45% and the ruble corporate bond market by over 90%.

Bigger companies with access to global financial markets raised funds there. In 9m03, domestic non-financial institutions borrowed some $10.3 bln on the world markets, versus the financial sector's $4.5 bln. As a result, Russia's foreign debt in the period rose by $13.3 bln to $165.4 bln. This pushed up the country's total debt by nearly 9% (in dollar terms), which is no real cause for concern given the dollar's weakness and expectations of further ruble appreciation.

Overall, investment grew by 12.5% in 2003. Meanwhile, high oil prices and increased physical volumes of exports bumped up the current account to $39.1 bln, versus $29.5 bln a year earlier. This enabled the Central Bank to collect around $26 bln in international reserves and expand the money supply considerably. As a result, the monetization of the economy exceeded 25%, versus only 22% in 2002. The same pattern of economic development can be expected in 2004 and beyond (this issue will be discussed more thoroughly below).

When the oil price faltered in early 2003 and the economy faced lack of liquidity flow, the burden was partly taken up by the above mentioned increased foreign borrowing, which contributed to growth in investment in 1H03, a time of political stability for Russia, until it was somehow undermined by the YUKOS affair and forthcoming parliamentary elections. All in all, the YUKOS affair seems to have undermined investor confidence, at least temporarily. This brings up once again Russia's dependence on the oil price, apparently still acute, an important issue in view of President Putin's suggestion that Russia should be aiming to double its GDP.

Due to increased foreign borrowing Russia's dependence on the oil price was slightly slipping since the end of 2002 (Gavrilenkov (2003b)), but is still strong (see chart 1). It will remain strong in the future as well. Thus it can be expected that energy exports will

Chart 1. Growth Rates Closely Tied to Oil Price

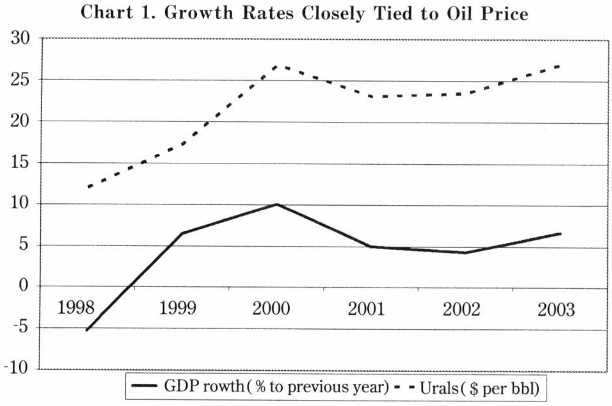


Chart 2. Output of the Five Basic Sectors Outstrips Industrial Production, Seasonally Adjusted, Jan 01 = 100%

remain vital for the country for some years to come. It would certainly take massive investment in the non-energy sector to bring about a change in the structure of Russia's exports and economy in general. This has not happened yet and growth rates appear thus still to be closely tied to the oil price, i. e. the higher the price for liquid hydrocarbons, the greater the investment by oil exporters and the more the money absorbed by domestic manufacturing, leading to higher growth.

As said some positive structural changes took place in 2003. One important feature of industrial growth in 2003 is that it did not originate from increased activity in the export-oriented sectors only. Both the manufacturing and the construction materials sectors grew more rapidly than the oil and gas industry, largely thanks to the increased investment demand. And despite the temporary slowdown of both industrial growth and investment activity caused by the YUKOS affair in mid 2003, the aggregate output of the five basic sectors (a proxy for GDP) continued to rise (see chart 2). This indicates that the YUKOS affair had less of an effect on the service sector. Demand for market services continued to rise in line with the steady growth in real incomes that the high oil prices brought about. As a result, the sector's share in GDP has increased (see Table 1).

The rapid expansion of the market services sector (around 7.5% in 2003) reflects the ongoing structural changes in the domestic economy, which could be liked to the mentioned above changes in consumer demand. On the back of rapid growth in real incomes consumer demand shifted not only toward higher quality goods (as pointed above), but also services. Another sign of change seen in 2003 was the development of small business. According the State Statistics Committee, the output of small enterprises grew by 50% in nominal terms, which means quite rapid expansion in real terms, since inflation in 2003 was only 12%. These

Table 1. The Structure of GDP

	1998	1999	2000	2001	2002	2003
GDP at basic prices	**100**	**100**	**100**	**100**	**100**	**100**
Goods	*43.8*	*45.2*	*45.0*	*43.1*	*40.6*	*40.2*
of which :						
Industry	30.0	31.1	31.4	28.3	27.0	27.0
Agriculture	5.6	7.3	6.4	6.6	5.7	5.2
Construction	7.4	6.1	6.6	7.4	7.0	7.2
Services	*56.2*	*54.8*	*55.0*	*56.9*	*59.4*	*59.8*
of which :						
Market services	44.4	46.0	46.6	47.6	48.4	49.0
Non-market services	11.8	8.9	8.4	9.3	11.0	10.8

figures should not necessarily be attributed to actual growth, as they may reflect the legalization of business. Nonetheless, this itself is a very positive change. Moreover, 9m03 saw total employment fall by 600,000 (0.9%), while the number of small businesses employees rose by 260,000 (3.3%).

Given the uncertain future of Russia's oligarchs, it remains to be seen whether large companies ramp up investment in 2004 and later on. That said, mid-size and state-controlled enterprises might be fairly active, as the recent reduction of the tax on issuing securities has brought down placement costs significantly. Moreover, high money market liquidity, low interest rates and rapid growth of the money supply and domestic credit may encourage all companies to borrow and make fixed capital investments. So, again investment-driven growth can be expected in 2004 and well as in the medium term.

2. Slow Reforms Will Negatively Affect Growth Stability

Clearly, Russia's economic growth of recent years was stimulated mainly by natural market forces. That said, the country has benefited from an extremely favorable external environment. To support growth and economic restructuring, further reforms are required, especially in the financial sector. This issue will be discussed in the next chapter in more details from the macroeconomic perspectives.

Longer term, developments will depend on political stability and this should be restored once the presidential elections are over and a new government appointed. The only way for Russia to deliver high growth rates is to increase its productivity, making the pace and direction of economic reform a matter of increasing importance in the years to come.

Higher productivity has already contributed to high growth rates over the past few years. After the 1998 crisis, it rose through the use of existing but idle capacities. As was said this alley has now been exhausted. Productivity has also been helped through corporate-level restructuring and improved management. In 2003, for instance, industrial output grew by 7% while employment in industry fell by nearly 6%. The inherited excessive labor force was an obvious target in the search for lower costs. Once again, however, this is a road that can only be taken so far. Building new production capacity and installing more efficient technology is going to be the only way of raising productivity further and securing high economic growth. Apart from political stability, a prerequisite for growth, economic reform will play a central role in stimulating further restructuring and creating the incentives for more investment.

A number of reforms were launched during Putin's first term, but little was accomplished. The Duma adopted thousands of bills, but these appear to have had no radical effect on the business climate, outside of some relative improvements. In 2000 the government prepared an ambitious plan covering a broad range of problem areas, among them the natural monopolies and the fiscal, banking and judicial systems.

Most of the reforms were launched, but this did not guarantee a significant impact on Russia's economy. As was shown growth is still heavily dependent on the oil price, while the impact of reform on economic growth is less obvious. Russia is still far behind many East European countries with respect to the implementation of reform (the EBRD's transition index runs through 4 and measures how reforms have progressed in a country). There is also an obvious correlation between progress on reform and S&P's credit rating. If Russia wants to see more positive changes in how it is viewed abroad, more fundamental reforms are needed. H

Some reforms have gone awry. It is, for example, generally accepted that pension reform has largely failed: the system will remain largely under state control and little will find its way into the State Pension Fund.

Meanwhile, reform of the natural monopolies has got off to a very slow start. The restructuring of UES has only begun in 2003 year and will be a very gradual process, assuming that it is not called off completely, given the recent Duma election results and prevailing sentiment in favor of greater state control of the economy and society. A big question mark still hangs over Gazprom's restructuring. Reform of the railroads is now under way but could well result in nothing more than a new state monopoly within rail transportation. The new government will therefore face largely the same reform agenda as its predecessor.

3. Peculiarities of the Financial System in the Low Monetized Economy

This chapter draws attention to several fundamental issues that are important when gauging the long-term prospects for Russia's economy and financial system. It is a common point of view that weak financial system, banks in the first order, should be considered as an impediment for economic growth, or at least for its stability. However, not only lack of restructuring efforts long awaited from the government is a result of such weakness. There are some other facts impediments:

□ **Low monetization**

The Russian economy still suffers from a low level of monetization (money supply to GDP ratio). The M2 to GDP ratio increased from 14% in 1999 to 23% in 2002, and exceeded slightly 25% in 2004, but even this is substantially lower than in most emerging market economies and far below the levels found in developed economies.

□ **Higher monetization cannot be artificially induced**

Monetization is associated with economic growth, earnings, confidence and incentives to save. Cross-country analysis shows that the higher the GDP per capita, the higher the degree of monetization.

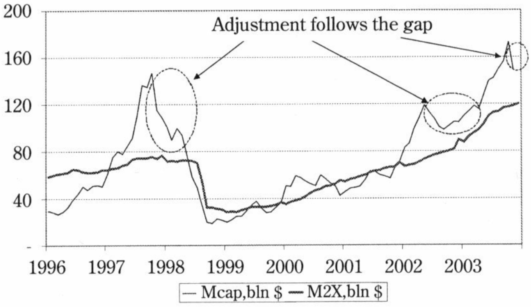
□ **Market performance, or performance of the financial system in a broader sense, should be compared with real money supply**

In economies with a low level of monetization, it is better to compare equity market performance indicators, such as the stock market index or the market's capitalization, with the M2 money supply rather than GDP. In developed economies, there is little difference between the two. The same is relevant to the analysis of the banking system, insurance business, other segments of financial markets.

□ **Market should grow with money supply**

In a similar vein one may assume that the capitalization of the Russian market should, in the long run, increase alongside growth in the real money supply. It should be emphasized that the above statement is true "in the long run". The

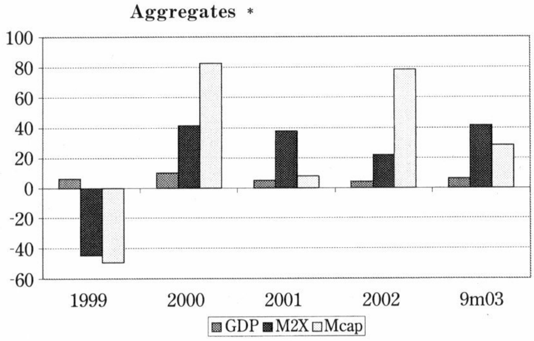
Chart 3. Russian Market Capitalization and Money Supply, $ bln



market is far more volatile than the overall economy and can grow quickly on the back of strong fundamentals and rumor. It can similarly fall swiftly if the news flow is bad (however strong the macro climate). The bigger the gap between the market's capitalization and real capital circulating in the economy, the less likely the market is to grow. This does not necessarily mean a correction, but at least a pause until the gap diminishes (chart 3).

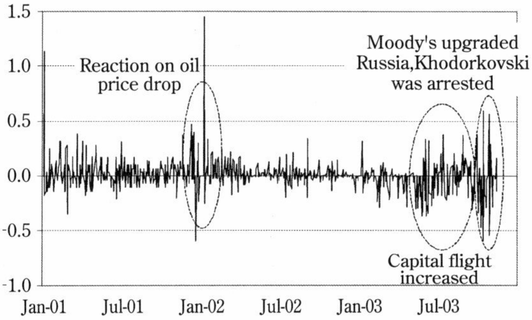
These premises lead to a number of interesting conclusions. The first two imply that the expected long-term economic growth (assuming that the economic reforms continue) will mean growth in monetization, which means that the money supply should grow faster than GDP. In combination with

Chart 4. Y-o-y Growth in Basic Macroeconomic Aggregates *



Note) * GDP is in real terms, M2X is adjusted and market capitalization are in dollars.

Chart 5. Daily Changes in Ruble/dollar Exchange Rate



the last premise, this means that the market can, in the long term, be expected to grow as fast as the money supply. Therefore, economic growth and the ongoing re-monetization of the economy will prompt Russia's stock market to grow far faster than GDP. And this is exactly what has happened over the past few years (chart 4). And fast growth in the market will mean sustainable long-term growth, albeit substantial short-term fluctuations are likely at any given moment. Financial markets may become and important element of the financial system, which can support economic growth in the long run in Russia. Really underdeveloped banking system will be unable to satisfy growing appetites of the corporate sector, which is targeting growth. The fundamental controversy which arises from the fact that the Russian economy is still dominated by big corporations (which to some extent should be considered as a heritage of a Soviet system with) while in the banking sector one may still find over undercapitalized 1300 banks: only 15 largest Russian banks hold over $1bln of assets.

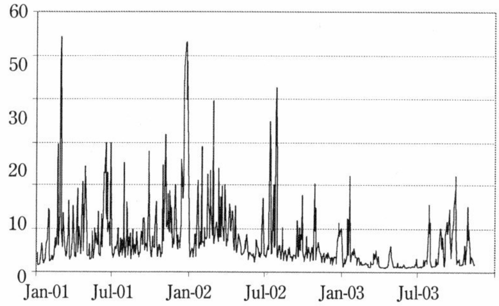
Thus, if the economic reforms continue, Russia's GDP can be expected to grow faster than the global figure and its market considerably faster. This implies that returns on long-term investment in Russian equities may be higher than in many other countries, although the short-term risks of a downward correction, of the type seen after the 1998 crisis and in 2H02, remain high. In 2H02, the 'adjustment' was probably triggered by the change in growth model, as the growth mechanism that developed after the 1998 crisis, based largely on higher capacity utilization, came to the end of its useful life, prompting a slowdown in the economy (as mentioned in Introduction).

Russia's fundamental long-term macroeconomic risks may, in fact, be lower than in many emerging market economies, since, unlike them, Russia's current account should remain strong in the years ahead, largely as a result of the structure of its economy. The floating exchange rate regime and government commitments to run the budget without a deficit should avert the danger of a repeat of the 1998 crisis. Even in the worst case scenario, if the oil price dips low for a prolonged period, any devaluation of the ruble will be gradual.

It is relatively easy to make long-term projections, but it is practically impossible to predict how a stock market will perform during periods of short-term fluctuation. The system is too complicated to be accurately described in terms of the mathematical models available for practical analysis and this goes for other segments of financial markets as well. Markets can be affected by any number of factors, many of which cannot be pinned down per se, let alone measured. The issue is further complicated by their combination. This introduces non-linearities and can lead to the existence of multiple areas of equilibrium, which the system can suddenly leap between. In general similar issues were discussed in Ormerod (1998).

The graph below (chart 5) illustrates the performance of the foreign exchange market

Chart 6. 1-day MIACR(%)



through daily changes in the ruble-dollar exchange rate since January 2001. It shows clearly how periods of relative market stability have been followed by periods of increased volatility. Making projections in the "stable" periods is relatively easy since the system fluctuates within an area of equilibrium. Changes in the external environment, as well as certain homegrown developments, can then increase the general uncertainty for any given economic agent, prompting market volatility and resulting in a chaotic performance. This is usual in a complex system, where the behavior of a group of individuals, for example, can depend on the behavior of one or two of them.

Volatility in the foreign exchange market increased substantially at end 2001, when the oil price dropped to below \$20 p/bbl. It remained high until the oil price recovered in early 2002. The market was thereafter quite predictable over 2Q02-2Q03, since fluctuations were quite small and the trend obvious. After the YUKOS affair triggered capital flight (which reached \$7.7 bln in 3Q03, in contrast with the capital inflows of 1H03), volatility again increased. A number of other events have served to increase it even more, such as Moody's upgrade of Russia's rating, the arrest of YUKOS CEO Mikhail Khodorkovsky and President Putin's meeting with investment bankers on October 30. This

Chart 7. Model of Weak-on-weak Changes in Ruble/dollar Exchange Rate

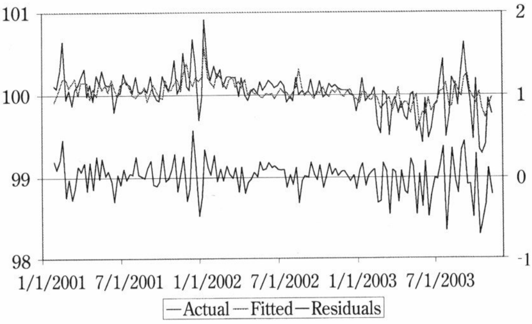
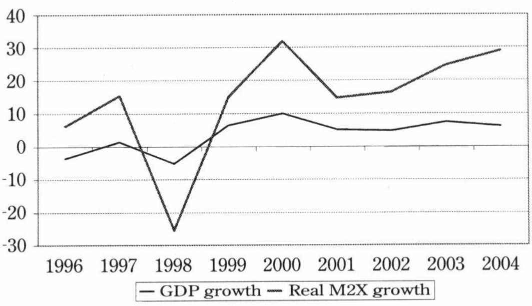


Chart 8. Real Money Supply Grows Faster than Economy

(%)



increase in volatility has been only natural given the mix of good and bad news.

The situation on money markets is almost the same (chart 6). Volatility here has been lower (i.e. less intense fluctuations in interest rates) when the system has been stable. A high oil price, positive current account, steady repatriation of export earnings and growth in reserves have contributed to relative stability and the Central Bank has, during such periods, maintained a reasonable hands-off policy. During periods of increased capital outflow, or a lower oil price (and greater intervention by the Central Bank), on the other hand, interest rates have been more volatile.

Some simple traditional econometric model, linking exchange rate with lagging monetary base, interest rates and certain other measured variables, is sufficient to explain foreign exchange market performance during periods of low volatility (actual and fitted curves are close, residuals are small - Chart 7). When volatility increases due to a number of factors that cannot be measured properly, the reliability of forecasts goes down and more sophisticated tools are required.

When a complex system shifts to an alternative area of equilibrium, the previous econometric model has to be discarded. In this situation any short-term forecast can be little more than a pure guess. However, the long-term trend can be less elusive. Thus, Russia's long-term economic prospects look very positive, and for market performance even more so, but short-term fluctuations will remain highly unpredictable on all segments of financial markets. Thus low monetized economy is potentially less stable and is more sensitive toward capital flows than the economy with higher degree of monetization.

4. Low monetization as an impediment for growth

As was discussed above Russia's dependence on commodities exports clearly remains strong and will not abate much in the foreseeable future, although it has been weakening in the past two years. This dependence, which developed and gathered strength over decades, will not go away overnight. To break it, massive and efficient investment in non-energy sectors is required. Russia has not yet seen such investment on a large scale, for all the 12.5% growth in fixed investment last year. The breakdown of investment by source of finance for 9M03 (Table 2) shows that enterprises continued to rely on their own funds, albeit a little less heavily than before. The data for the whole year are not yet available, but the breakdown is unlikely to have changed much from 9M03.

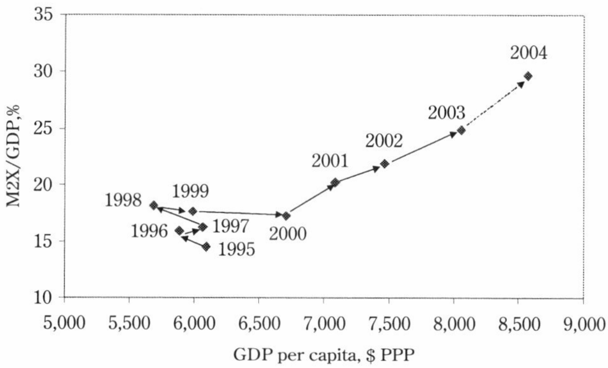
That own funds were the single biggest

Table 2. Sources of Investment Financing : Own Funds Predominate

	9M03	9M02	9M01
Total	100.0%	100.0%	100.0%
Own funds	46.2%	48.6%	48.7%
Bank loans	5.2%	4.3%	3.1%
Loans from other enterprises	8.6%	5.9%	5.2%
Budget	18.8%	19.9%	20.0%
Off-budget funds	1.0%	2.4%	2.8%
Other	20.2%	18.9%	20.2%

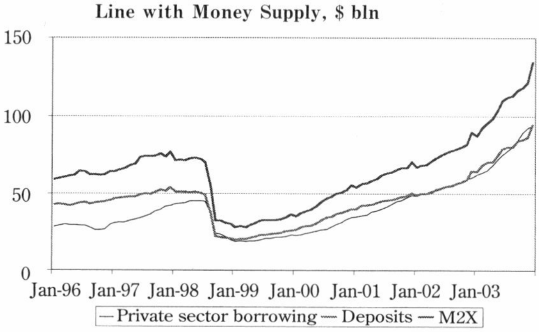
Source) State Statistical Committee.

Chart 9. Economic Growth Fuels Monetization



Note) PPP-based GDP per capita, $.

Chart 10. Credits and Deposits Outstanding Increase in Line with Money Supply, $ bln



source of fixed investment in 2003 means that money stayed mostly in those sectors where it was generated, contributing little to economic diversification. The share of borrowings (bank loans and loans from other enterprises), although increasing, remains low. Generally, the higher this share, the greater the economy's opportunities for diversification (provided that the borrowings are allocated to non-energy sectors).

Unfortunately, one can scarcely expect borrowings to make a higher share of Russian investment at present. Cashflows are concentrated in a few export-oriented industries, while the financial system is too weak to reallocate capital to other sectors. Its "weakness", however, does not stem only from the inadequacy of financial institutions themselves. There are other, macroeconomic reasons, such as a low monetization rate.

Thus low monetization constrains growth, endangers stability and limits the choice of economic policies. As was said monetization cannot be raised artificially but must be fuelled by growing confidence in economic policies, an improving investment climate and higher economic growth, as well as by stronger incentives to save money domestically rather than off shore. Chart 8 illustrates this point. Real money supply expanded much faster than GDP when the economy grew (1997 and from 1999 onwards) and contracted much faster than GDP during the 1998 crisis on the back of high inflation. It is also expected that if the Russian economy keeps growing in the long run, its re-monetization will continue.

Chart 9 highlights the link between monetization and economic growth in a different way. Since Russian economic growth resumed in the late 1990s, PPP (purchasing power parity)-based GDP *per capita has risen from about $6000 to $8,000, and monetization has increased from 14% to approximately 25% of GDP*. This trend is expected to continue into 2004 and beyond, with monetization growing by about 2% of GDP annually for some years to come. Finally, there are the conclusions of cross-country analysis : the richer the country, the higher its monetization rate.

Increasing monetization is good for the

Chart 11. Interest Rates (%, l.h.s.) Plummet as Credits Outstanding Soar in Real Terms (R bln)

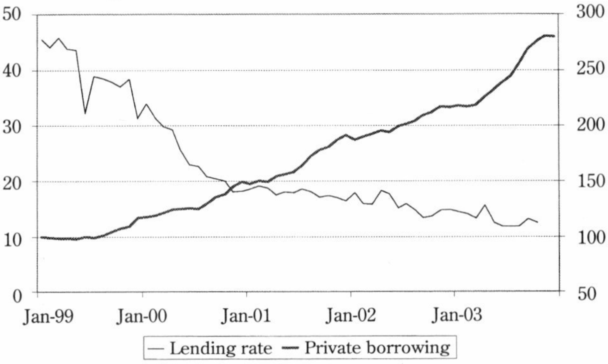


Chart 12. As Deposit Maturity Grows, Monetization Mounts

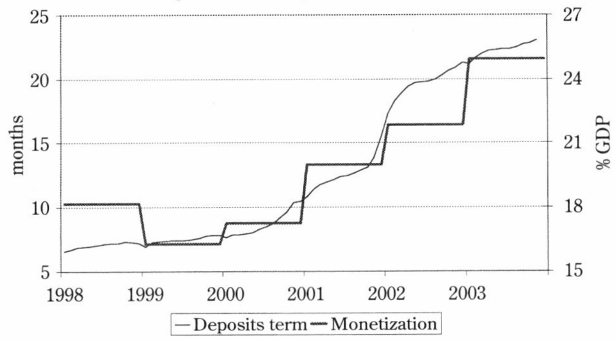
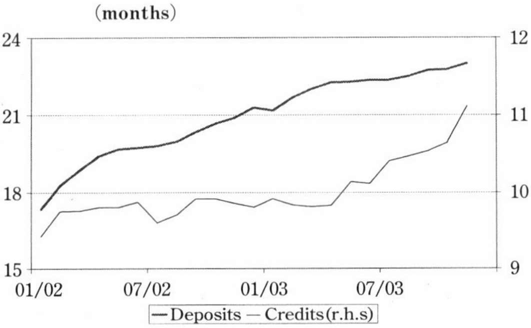


Chart 13. Deposit and Credit Maturities are Lengthening (months)



economy. First of all, it translates into higher capitalization of the banking sector, which in turn facilitates loan issuance. Chart 10 shows that in real terms credits outstanding have been growing as fast as the monetization rate, with deposits also keeping up much the same pace.

Importantly, the lending boom has been fueled by "cheap money" (chart 11), with a steady inflow of foreign exchange into the Russian economy causing real lending rates to drop almost to zero, while deposit rates have been on average negative in real terms. Most likely that credits and deposits outstanding will continue growing in pace with monetization.

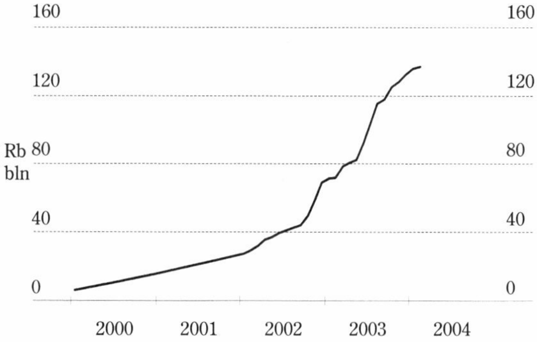
However, it is not only the total volume of credits and deposits that matters but also their maturity. Chart 12 suggests that the weighted average maturity of deposits has grown in recent years in pace with monetization.

Chart 13 shows that loan maturity lengthened in the last two years to reach 11 months at the end of 2003. It is still very short, but par for the course in an undermonetized environment, as low monetization means high velocity of money, and one can scarcely expect banks to issue long-term credits when money circulates too fast. Therefore, it is natural that bank loans should account for a rather small part of fixed investment in Russia. It is also natural that mortgages should be all but unheard-of: there is no "long" money in the country. Clearly, low monetization prevents banks from playing a greater role in financing long-term fixed investments.

It is a widely held view that Russia has been flooded with excess liquidity since 2003. The implication is that banks do have money to lend but none to lend it to. This may be true, but only up to a point. The point is that this excess liquidity is short-term, so how can banks issue? For instance, five-year loans? Consequently, there is a shortage of long-term money to finance investment.

It can be expected that maturities of both credits and deposits to continue growing gradually on the back of rising monetization. Therefore, banks will play an increasingly important role as intermediaries channeling

Chart 14. Ruble Corporate Bond Market is Booming on the Back of Low Monetization, R bln



savings into fixed investment. However, until this happens, that is, until monetization reaches a reasonable level, many Russian companies will continue to borrow abroad, either through Eurobonds or directly from international banks. Naturally, this applies only to companies that have access to global capital markets.

Borrowing from domestic banks is clearly impracticable. Commercial banks did not exist in the Soviet Union. Thus, Russia's commercial banking system is barely a decade old. Small wonder that all Russian banks except Sberbank are very small——they have not had time to accumulate enough assets. On the other hand, Russia has inherited from the Soviet Union an economy dominated by giant enterprises. This highlights one of Russia's fundamental mismatches : it has big corporations that need a lot of money and small banks that have too little money to offer.

Companies that aim for growth but cannot borrow internationally will have to place ruble bonds. Thus they will be able to raise long-term capital piecemeal from several lenders when they cannot borrow it in one chunk from a single one (banks being too small). For this reason the ruble corporate bond market, which has been booming in recent years (Chart 14), will continue expanding rapidly in the medium term. Of course, all our projections will only hold if no major economic upheaval is triggered by an internal or external event, such as a collapse of the oil price (currently a relatively remote possibility).

5. Conclusion

Growth mechanism started to change in 2003 so that investments became the catalyst of economic growth. The Russian producers realized that the repeat of the same growth patterns as was in the early post-crisis period is impossible due to lack of spare capacities and shifts in consumer demand. At the same time dependence on oil price is still strong and will remain strong in the foreseeable future.

Investment in recent years was financed from retained earnings. The role of the financial system in financing investments in productive capacities was low, although started to grow recently. Low monetization of the economy is a fundamental constraint for greater role of the financial system in financing growth. Remonetization of the Russian economy will take place in the coming years, although it will be a very gradual process associated with growing confidence in economic policies, better investment climate, economic growth, higher incomes and higher incentives to save money domestically.

Money is short in the low monetized economy : both with respect to deposit and loan maturity. Loan and deposit maturity will grow on the back of growing monetization. Meanwhile growing monetization means that real money supply will grow faster that real GDP. It means that financial system performance (banks, financial markets) will outstrip the real economy. Strong fundamentals will drive the markets up, while politics may shape the markets. Low monetized economy is sensitive toward capital flows. Thus market volatility will remain strong.

(Tha Higher School of Economics, Moscow)

References

Gavrilenkov Evgeny (2003a): *Macroeconomic Situation in Russia: Growth, Investment, and Capital Flows*, in: Evgeny Gavrilenkov, Paul J. J. Welfens, Ralf Wiegert (editors), Economic Opening Up and Growth in Russia, Springer 2003;

Gavrilenkov Evgeny (2003b): Diversification of the Russian Economy and Growth, paper presented at the International Conference, Slavic Research Center, Sapporo;

Ormerod Paul (1998): Butterfly Economics, Faber and Faber.