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DEVELOPMENT OF ROUBLE EXCHANGE RATE IN RUSSIA

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Foreword

The Northern Dimension Research Centre (NORDI) is a research institute run by Lappeenranta University of Technology (LUT). NORDI was established in the spring of 2003 in order to co-ordinate research into Russia.

NORDI's mission is to conduct research into Russia and issues related to Russia's relations with the EU with the aim of providing up-to-date information on different fields of technology and economics. NORDI's core research areas are Russian business and economy, energy and environment, the forest cluster, the ICT sector, as well as logistics and transport infrastructure. The most outstanding characteristic of NORDI's research activities is the way in which it integrates technology and economics.

LUT has a long tradition in conducting research and educating students in the field of communist and post-communist economies. From the point of view of these studies, LUT is ideally located in the Eastern part of Finland near the border between EU and Russia.

This short report deals with the development of the Russian rouble, which suffered a severe depreciation crisis in 1998. In the aftermath of this event, a strong investment boom started in Russia. The new devalued rouble exchange rate gave price competitiveness to local industry. In addition to that, increasing export prices of Russian oil and natural gas deliveries have contributed to economic growth lately. Amid this boom period, inflationary pressure has remained high. Price increases have been higher than in the EU, Russia's main trading partner. However, rouble/euro (RUB/EUR) exchange rate has remained nominally rather stable in the current decade. This means, that RUB appreciates against EUR in real terms, which is weakening Russia's international competitiveness.

I want to express my gratitude to Mrs. Tiina Tarhonen, who helped me to finalize the book.

Lappeenranta, November 2007

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1 Introduction

The communist superpower, the Soviet Union, collapsed in 1991. This federation was divided into 15 independent states, the largest of which is Russia. About half of former Soviet citizens live in the present-day Russian Federation.

Central planning was dismantled in all post-Soviet states in the 1990s. Market mechanism became the guiding force in all economies of post-communist sphere. The first years of post-communism in transitional economies (TEs) were extremely difficult with rapidly decreasing economic activity combined with very strong inflation. The conversion of the mighty military-industrial complex into civilian use made the Russian transition especially awkward in the early period of post-communist rule.

Russia inherited the big bulk of the vast natural resources available in the Soviet empire. Abundant oil and natural gas deposits are of utmost importance for the long-term economic development of Russia, which has benefited from the high world market prices of energy bearers in the first years of the 21st century. Energy bearing materials count over 60% of the export value of the country (for details, see Tiusanen – Keim: Russian Transition and Oil Price Boom. NORDI publication no. 35).

In the early period of Russian transition, RUB exchange rate (ER) appreciated strongly against USD (and other Western currencies) causing rapid increase in import. In 1998, the RUB exchange rate depreciated strongly. This event was a clear blessing for economic development. It became profitable to invest in import substituting activities in Russia. An investment boom started in the turn of the century.

These two background factors – the oil price development and RUB depreciation – have had a decisive influence on Russian economic dynamism in the early years of the second decade of transition. The latter is the focal point in this short research report. The aim here is not to deal extensively with theoretical issues linked with ER formation, but to deliver a short overview of RUB's external value development in transitional Russia.

2 Economic policy and exchange rates

2.1 Some features of the Soviet system

There are four classical aims in economic policy-making on the national level: economic growth, price stability, relative full employment and equilibrium in balance of payments on current account. In the communist system of central planning it was assumed that permanent economic growth can be achieved by investing heavily in industries producing input goods. All prices were fixed administratively, and thus, price stability was achieved by definition. Creation of new industries absorbed relative overpopulation in the rural economy. Thus, expansion of industrial outlets was supposed to guarantee permanent full employment. Import expenditure was brought in line with export income via state monopoly of foreign trade hindering all spontaneous actions with the external world. Thus, equilibrium in current account was planned in beforehand.

This system of central economic policy-making brought disastrous results from the point of view of living standard. Industries producing consumer goods were neglected. Artificially low input prices caused high material and energy intensity involving senseless waste. Bottlenecks on the market gave huge incentive to start unofficial businesses, and thus, black market was rampant. Participation on international division of labour was clearly sub-optimal. Extensive way of economic growth resulted in ignoring the intensive aspect of growth based on productivity improvement. Plan targets underlined production quantities, while qualitative aspects – including technology development – were of no or at least secondary importance only. Thus, a systemic change became necessary in the 1990s. Marxist ideology was replaced by the market.

In the communist system of central planning, all currencies were non-convertible which was making life complicated. That can be demonstrated with a couple of examples. A car manufacturer in the Soviet Union needed a new machine tool from the West. For one million USD the company was not able to convert RUB into USD, but was forced to apply that “hard currency” amount (USD 1 million) from the ministry of automotive industry. Every industrial branch had a ministry which was responsible for resource allocation to companies in its sphere. The ministry applied hard currency allocation from Gosplan, the state planning committee.

As convertible currencies were scarce in the Soviet era. Gosplan allocated USD to various industrial ministries according to national preferences. If car-making was high up in the list of favorites by central power, it got a bumper allocation of “hard currency”, and the company

mentioned above was able to get USD 1 million for the special machine tool it needed. However, if that purchase was not regarded as a priority, the company did not get “hard currency certificate” allowing RUB conversion into USD in total value of USD 1 million.

When the same car company sold its products to the Western markets for hard currency, the proceedings were income of the Soviet state, and not revenue of the company. The manufacturer received its compensation in non-convertible RUB, not in convertible USD, D-mark or British pounds.

This system naturally gave a disincentive for the car company to export. It exported part of its production, if it was forced to – via the yearly plan. Exporting was regarded by manufacturers as harmful, because higher quality was required from export items in comparison to home market deliveries.

All foreign trade transactions were in the Soviet period enacted via foreign trade organizations (FTOs), which were the backbone of state monopoly of foreign trade. This system was molded according to product categories. Autoexport was a Soviet FTO exporting and importing all automotive branch products. Stankoimport was the FTO responsible for exporting and importing of machine tools. In our example Stankoimport had the final say what kind of machine tool was the best solution for the car-making unit. The end-user and its needs were of secondary importance only.

It is self-evident that under these circumstances of cumbersome foreign trade administration there was no option to make manufactured goods competitive in the global market. However, in the Soviet case the system functioned reasonably well because of the enormous natural wealth of the country. About 90% of Soviet exports to the West consisted of raw materials, including oil and natural gas. Soyuznefte-export and Soyuzgasexport had the highest revenues in the FTO-sphere by exporting oil and gas, respectively.

In this respect, it is worth mentioning that the Soviet economy received windfall profits during two oil crises in the 1970s and early 1980s. Enormous energy price increases enhanced essentially Soviet Union’s ability to import. In the second half of the 1980s oil price decreased clearly which advanced the demise of the communist superpower.

On the personal level inconvertibility of currency naturally had harmful effects in the Soviet era. Traveling abroad was strictly limited, especially to Western “capitalist” countries. Soviet citizens needed a special permit to leave the county to the West, and in this context, received

a minimal amount of “hard currency” just covering their everyday expenses during the trip. Banks in the West did not exchange communist currencies into local money.

In actual fact, RUB was not fully “goods convertible” in the internal market. Soviet consumers had no guarantee that goods would be available at the nominal state price. Uncertainty in supply of goods forced consumers to engage in extensive searching and queuing, both of which were costly. In the 1980s and 1990s the amount of RUB in the hands of citizens increased much faster than supplies in state stores. Thus, fixed price policy caused something which is called “repressed inflation”. As people were forced to save a part of their income, a phenomenon called the “monetary overhang” became into being. Too many RUB were chasing too few goods, pushing up “real” prices (on the black market).

A large variety of goods was available on free markets at prices essentially higher than the nominal prices in the state stores. These free markets included both legal markets, such as the collective farm markets for food (on which peasants were able to sell their surpluses by paying a fee for the sales place), as well as illegal but tolerated black markets. The system allowed for unlimited opportunities of wasting and stealing public resources. The development of unofficial activities eroded the moral of population. The official ideology was contrary to these market-driver activities, but the political elite was heavily involved in illegal economy.

The economic strategy of extensive growth functioned reasonably well in the first decades of Soviet central planning as long as the country had labour reserves in the countryside and relatively high population growth. At the same time, mature industrial societies paid increasing attention to the intensive side of economic growth, in which increasing productivity is the key factor. The aim is to achieve more and more value added from existing capacities by improving technology and developing human skill. The Soviet system failed to go over from the extensive to intensive growth strategy.

Thus, in the two last decades of Soviet rule decreasing growth rates were observed in the Soviet economy. Full employment was achieved because of continuously high investment rates, but the use of labour force was far from optimal. It was advantageous for enterprises to hoard labour, in order to meet plan targets conveniently. Labour force was cheap, and thus, income level gave an incentive to use workers wastefully. Monetary income lost its rationale in allocating labour force, because of the described gap between consumer goods supply and availability of cash. Improving productivity for better pay became difficult in the economy of shortage of consumer goods and private services.

The aim of the economic policy-making in the Soviet system was to maximize economic growth by methods of forced industrialization with continuously high investment. Maximal economic growth did not equal optimal one from the point of view of living standard. Administrative fixing of prices hindered “traditional” inflation, but replaced it with a repressed one: goods were not easily available to official low prices. Official central planning was supplemented with an increasing unofficial market which with time became a predominant factor in everyday life.

Obviously, the communist experiment with central planning was an exciting and complex process. “Normal” or mainstream economic policy-making was rejected and economic growth, price stability and full employment was managed directly from the macro-level without considering properly the effects on the micro-level. Full employment was achieved on the low level of productivity, and consequently, overall living standard remained very modest.

The fourth economic policy-making aim, relative equilibrium in balance of payments in current account, was relatively well achieved in the Soviet Union. The state attempted and succeeded to minimize the external economic influence by controlling foreign trade and international capital movements. By definition, the external balance of the Soviet Union was centrally managed by the state monopoly of foreign trade. Potential current account deficits could easily be cured administratively by cutting imports.

However, in the last years of Soviet power, the state had a debt burden which had come into being by financing current account deficits. Some communist countries became in the 1980s creditunworthy. Poland is the most remarkable example of defaulting of her communist era foreign debt.

All centrally planned economies used fixed exchange rate regimes during the communist era. As no adjustments were made in ERs during that era, currency values became totally alienated from the economic reality. This fact was reflected in black markets of currencies which expanded continuously in the 1970s and in the 1980s. Tourists visiting communist countries were offered very advantageous exchange rates for their Western banknotes in street corners, hotels and restaurants. In the last years of communist rule, it was not unusual to get in the black market ten times more local money for USD, D-marks etc, in comparison to official ERs. Western visitors using “street banks” in communist countries were able to enjoy their trips with really minimal costs, and thus, were actually hurting the welfare of locals. Numerous visitors traded small items, especially Western trendy clothes, with local black

marketeers. All Western goods had high prestige value in the gray environment of communist societies.

One of the very first steps in every post-communist economy after the systemic change was to make local currencies convertible. In the present-day global economy currency policy is of utmost importance for every emerging market, TEs included.

In the recent economic history, many emerging markets have pursued expansionary economic policy linked with low unemployment. This policy often enhances inflationary pressure, which normally has negative effect on international competitiveness of the country. High inflation in international comparison favours imports and hampers exports. Thus, strong growth cycle with rapidly increasing prices may cause disequilibrium in current account. If current account deficits cannot be financed any more, it is said that the national economy is “overheated”. External balance must in that case be restored by adjusting the exchange rate of the currency in a country suffering of overextension of economic activities.

The last decade of the 20th century was a period of frequent devaluations. In the beginning of the decade, currency of Finland depreciated strongly. In 1992, pound sterling collapsed. In the middle of the decade, Mexico’s currency experienced a crisis. In 1997, several dynamic economies of South-East Asia faced depreciation of their currencies. At the same time, the Czech Republic was forced to devalue its currency. Bulgaria’s economy went through a severe crisis with defaulting of her external debt. RUB rate had to be rearranged in 1998. In the same context, also Brazil and later on, Argentina, suffered fundamental shocks in their respective external economies.

The list above is not a precise and complete indication of currency mess in the 1990s. The aim here is to illustrate that in the not so distant past plenty of turmoil took place in the global economy concerning currency issues. Wealthy nations, emerging markets and transitional economies were involved.

In the global economy there is no international monetary system in existence regulating all details of currency policy. Exchange rate policy is made by every individual nation state. This national right of ER policy can be surrendered to supranational level. This is done in EU, in which there is a monetary union (EMU). However, in the eurozone there are only 13 EU members (after Slovenia’s accession in 2007) out of 27 EU member states. Eurozone members cannot by definition have national currency policy. Below, exchange rate regimes

are explained. After that, special attention is paid to development of RUB in the post-Soviet era.

2.2 Exchange rate regimes

Exchange rate is nothing else than the price of one currency in terms of another. Currency values are determined by supply and demand, which reflect trade and other international payments.

In the post-war period it was decided that international monetary co-operation is in need. At Bretton Woods (New Hampshire, USA) the International Monetary Fund (IMF) was created and the major currencies were fixed in relation to the USD. Fluctuations were limited to 1% in either direction. The American government agreed to buy gold on demand at USD 35 an ounce. Thus, gold was indirectly the anchor of the system. ER readjustments were allowed with IMF permission.

The Bretton Woods system broke down by the early 1970s. The Americans suspended the convertibility of the USD into gold at the agreed parity (USD 35 per ounce). The major currencies were allowed to float. Reintroduction of fixed ERs basically failed and plenty of turbulence took place in currency markets in the 1970s and 1980s. This turbulence was partially caused by strongly fluctuating oil prices on the world market.

At that time, it was often argued that fixed ERs, national independence in economic policy-making and international mobility of capital form an “irreconcilable trinity”. Floating ERs were increasingly supported because the market value of a currency acts as a balancing mechanism for the rest of the economy, in other words, flexible ERs protect an economy from disturbances originating in the external economy.

In the traditional system of fixed exchange rates it was dangerous for a national economy to pursue expansionary policy linked with price and wage instability. For example, if prices increased by 6% p.a. in Finland and 2% in Germany, Finland’s competitiveness decreased by 4% against one of its major trading partners.

Weakening price competitiveness causes imports to soar and exports to decline. Current account starts showing deficits.

With continuous deterioration of price competitiveness money starts to move into a more stable environment. Capital flight makes financing of deepening current account deficits

difficult and eventually impossible. The currency with an ever weakening price competitiveness problem with fixed ER must be devalued.

Devaluation of a currency leads to import price increases. Especially countries with high input share in imports are in danger to enter a vicious circle: devaluation is aggravating inflation problem, which is the origin of the declining price competitiveness. Devaluation without harsh anti-inflationary measures offers an interim, but not a permanent solution to the current account problem.

This theoretical case is very close to reality. Empirical evidence can be found in the Finnish post-war economic history before the creation of eurozone. Finnish markka (FIM) was often devalued, while German mark (DM) was several times revalued.

For several decades, Finland regulated international capital movements, which were liberated in the 1980s. Thus, the country started facing “trilemma” or “irreconcilable trinity”: fixed ER combined with inflationary macroeconomic policy on the national level combined with free international capital movements. As devaluation started looking more and more likely in the late 1980s, capital flight intensified. Classical devaluation crisis came into being with extremely high social and economic costs.

Fixed ER regime obviously provides the advantage of relative stability. Decision makers must not deal with erratic swings in ERs. The use of this model presupposes that a strong signal is given in internal macroeconomic policy making: keep your inflation in line with price movements of your competitors. If the economic policy-making fails in this context, a devaluation crisis is likely to occur. Imposing capital controls to alleviate the possible Current account problem is hardly useful in present-day world. Thus, fixed (ER) system has high risks. The application of the begged ER calls for stability-oriented economic policy-making in which the aim ought to be keeping inflation in line with the international trend. Excess inflation (inflation rates exceeding global average) is potentially dangerous because it weakens price competitiveness of the fixed ER country.

In the 21st century, there are three major currencies in the global economy: USD, EUR and Japanese yen. These three currencies float, and thus, exchange rates of them are formed every day on the basis the “invisible hand” of the market. Finland cannot experience a traditional ER crisis of previous decades any more.

However, pegged-rate ER system has not been abandoned altogether in the global economy. Fixed ER provides stability, or in other words, protects the currency against volatility of international currency market. Therefore, the system gives potential advantages to emerging markets.

Fixed ER regime has a very special form called currency board arrangement (CBA). This system has applications in transitional economies, and thus, the main features of this ER regime are worth to be explained here. The CBA was originally a colonial invention designed to make monetary policy in far-off lands manageable. In its classical form, the CBA did away with the need for a Central Bank, and was run by a few specialists from afar.

The CBA system puts monetary policy on automatic pilot and ties local interest rates, and thus, inflation to an international anchor economy (and its currency). The system has three basic characteristics, which distinguish it from a standard fixed ER regime:

- domestic currency is pegged to an anchor currency (typically the USD, the EUR, or a basket of currencies) at a rate that cannot be adjusted
- the amount of local money in the economy has to be fully (100%) covered by foreign reserves
- the currency board cannot lend to the government or the banking system.

The main idea behind the CBA is that it makes policy choices simple by taking most of them out of the realm of the political debate. Governments cannot borrow money from the Central Bank, because the system locks up the money pump. The Central Bank cannot bail out insolvent banks, and insolvent banks cannot continue lending to technically bankrupt companies.

Basically, the CBA system is supposed to create macro-economic stability but cannot guarantee economic dynamism. However, the CBA is in use in several countries. In TE-region, Estonia, Lithuania and Bulgaria use the system.

Argentina used the CBA system in the 1990 by pegging her currency (peso) against USD on one-to-one ER. The aim obviously was to discontinue the Latin American tradition of unstable prices. In the Christmas time of 2001, the system collapsed causing economic chaos and the biggest-ever sovereign debt default. Amid the devaluation crisis citizens had limited access to their bank accounts and suffered enormous economic losses due to forced depreciation of the local peso.

One of the main reasons for the calamity in Argentina was that Brazil caught the Asian economic influenza in the late 1990s. Strong depreciation of the Brazilian currency made Argentinean goods uncompetitive in the neighboring Brazil as the fixed ER system linked with the CBA system in Argentina was not revised in the late 1990s. The collapse of the economy became unavoidable in Argentina.

It is possible to combine elements of fixed and floating exchange rate regimes. This compromise model is called managed floating. In this system ER is set free to let the market decide its value. However, monetary authorities may wish to limit excessive swings in the ER by entering the market to buy the local currency when they think the ER of it is too low, or sell it when its ER is considered too high.

In the context of the managed ER regime it is possible to set certain limits to ER fluctuations. In this model a central rate is fixed and predetermined swings around this central rate are allowed (e.g. 15% up and 15% down). Thus, the market forces have some but not unlimited leeway in determining the ER value. The central rate is the element of fixed ER, while “the corridor” around it ($\pm 15\%$) represents market flexibility.

In this system, the local monetary authorities must determine the central ER of the currency (say $100X = \text{USD } 1$). Local citizens and companies are getting the message that they can buy one USD for 100X, and in the worst case for 115X, but no more. If currency X is in danger to depreciate more than 15%, monetary authorities are supposed to intervene by providing the market with more anchor currency (in this case, USD) in order to keep the set limit (-15%) in tact. In this case authorities must have an adequate anchor currency reserve in their disposal. Otherwise, it is impossible to defend the predetermined borderline of -15% below the central rate ($100X = \text{USD } 1$).

“Crawling peg” (CP) is used in texts dealing with ER issues. This odd expression implies that a currency’s ER is pegged against another, but is permanently (e.g. every month) devalued by a predetermined rate. CP system is used in countries with high inflationary expectations, for example, in Poland and Hungary of the 1990s. In these two cases crawling peg rate (the monthly devaluation) was reduced slowly with decelerating inflation rates and abolished altogether in the turn of the century.

The term “Dutch Disease” is surprisingly used in the sphere of economies, and not in medical science. This expression originates from the 1970s when Netherlands discovered huge natural gas reserves under the North Sea seabed. Export of this special natural resource in the period

of high energy prices brought plenty of extra income into the country and caused a strong appreciation of the local currency (Dutch guilder). As a result, traditional export branches in Netherlands faced deteriorating price competitiveness in the global market. Even since the term “Dutch Disease” has been used in economics to indicate how a sudden export bonanza may be a questionable blessing for a national economy. Occasionally it is maintained that oil-rich Norway suffers of Dutch disease.

In the first years of the 21st century prices of energy bearing materials have been high or even very high on the global market which has benefited Russia’s resourceful economy. Amid the oil price boom in Russia a discussion on catching the Dutch Disease has started.

Obviously, there is no exact definition of Dutch Disease. However, this rather odd term can be used as a starting point in analyzing the external economy of Russia in the second decade of her post-Soviet economic development. Potentially, there are some harmful effects of the high export price of oil on the overall economy.

One of the most important economic policy-making aims on the national level is to keep balance of payments on current account in relative equilibrium. Always, when a country has excess inflation (inflation is higher than in the Rest of the World) her international price competitiveness is potentially eroding. For example, if prices increase by 4% in Canada and 2% in America, Canadian competitiveness appears to have fallen by 2%. If at the same time the Canadian dollar depreciates 2% against USD, the original price competitiveness of Canada is maintained in this two-country model (Canada’s current account is not negatively affected by Canada’s excess inflation). When fixed or semi-fixed ERs are used there is always the danger that equivalent ER adjustment is not done in countries with excessive inflation rates. A severe current account crisis may in this case occur. As mentioned above, several current account crises have taken place in the world economy in the last 15 years.

In the first half of the current decade almost all TEs have had rather high current account deficits, but have been able to finance them mainly with inflow of risk capital. In the TE-group of countries Russia is an exception: it has permanent and high current account surpluses (for details, see Tiusanen: *Transitional Economies and International Competitiveness*. NORDI publications no. 31, Lappeenranta 2006.).

In the early years of the 21st century some symptoms of Dutch Disease have appeared in the Russian economy. Amid the export price boom huge inflows of foreign currency have taken place boosting local money supply. Real wages have increased rapidly exceeding productivity

growth. Increasing household income fuels inflation, which in international comparison is permanently high. RUB ER in real terms appreciates strongly.

These issues are dealt with below. However, first the RUB crisis of 1998 is described in order to provide historical perspective of Russian economic development in the early years of the 21st century.

3 Rouble in transition

3.1 Rouble crisis of 1998

The first five post-Soviet years in the Russian economy can be called the era of stagflation. The overall economic activity measured by gross domestic product (GDP) declined by some 40%. This slump was even deeper than the Great Depression in the USA in the 1930s. Amid economic decline there was a very strong inflationary wave.

Presumably the output decline gives clear evidence of economic deterioration. However, in post-Soviet studies some features of the previous system must be taken into consideration including an overproduction of many input goods, a prevalence of worthless output, the non-existence of some claimed output, and waste of output that was produced. Several Western studies maintain that much of Soviet industry actually destroyed value rather than created it. This value-destroying process takes place when the value of a final product on the world market is less than the value of the raw material that it uses up in the production. Given the very uneconomic nature of this structure with value-destroying activities, systemic change was basically reasonable.

In the very early period of the systemic change, public sector subsidies to industry were cut dramatically which forced many firms to cut production. Facing a steep slump, the officials started pumping money into the economy accelerating the inflation. Solid investment decisions became hard to make since accurate forecasting of economic conditions was virtually impossible. At the same time, a golden era of capital flight was established.

In the early period of systematic change, Russia greatly liberalized the system of foreign trade and simultaneously introduced trade in foreign currencies at market-determinate rates. If the RUB convertibility at a fixed exchange rate had been established, there would have been pressure not to inflate the domestic currency more quickly than in the rest of the world. It is of utmost importance that this option of anti-inflationary pressure via fixing the RUB ER was not used in the early years of Russian transition.

The RUB ER declined dramatically since the onset of the reform, from RUB 22 to USD 1 in 1991 to an average of about RUB 2.200 to USD 1 in 1994. In April 1995 the RUB broke through at 5.000 RUB to one USD. After that, Russia started experimenting with the exchange rate system of “managed floating”. RUB was allowed to fluctuate within a preterminated band. This policy was modified in the second half of 1996, with the adoption of a “crawling peg”, in which RUB was devalued permanently consistent with the expected

inflation rate. This system was applied also in 1997. Abating inflation and the end of economic decline were characteristic features of the Russian development in that year. The difficult period of post-Soviet stagflation seemed to be over.

In 1997, it was obviously assumed that the relative stability allowed the use of semi-fixed exchange rate policy, and thus, a managed floating regime was introduced at the beginning of 1998. In this system the central rate of RUB was fixed at RUB 6.2 = USD 1. Fluctuations of 15% were permitted in that system ($\pm 15\%$ around the fixed central rate) to allow market flexibility.

This system of managed floating collapsed in August 1998. Obviously, it is important to estimate whether a similar currency crisis can hit Russian economy in the foreseeable future.

In the RUB crisis 1998 there were some special factors at work. In 1997–1998 falling prices for Russia’s major exportable (oil) and growing investor doubts about all emerging markets in the wake of the Asian crisis combined delivered a powerful external shock to the Russian economy. In the internal economy, budget deficits were virtually out of control making up roughly 7–8% of the local GDP. The reckless borrowing of the public sector caused interest rates to skyrocket: treasury bills (government bonds) had a real interest rate of 40–50%. As the maximum devaluation risk under the rules of the managed floating was only 15%, the risk taken by foreign investors looked pretty moderate.

The 1998 collapse of the RUB exchange rate can be analysed in the light of some main macro-economic trends, which help to understand the nature of the “bubble”. The chosen indicators cover the pre-crisis period (from 1992 – the first post-Soviet year – to 1997).

Table 1. Main economic indicators (annual change, %)

	1992	1993	1994	1995	1996	1997
GDP	-14,5	-8,7	-12,7	-4,1	-3,5	0,8
Inflation	1.527	874	307	198	48	15
Gross fixed investment	-40	-12	-24	-10	-18	-5
Labour productivity in industry	-17,6	-8,8	-14,4	5,4	2,9	8,6

Source: WIIW.

In the period under review, Russian economy declined by some 40%, while consumer prices increased by factor 200. Decline in investment in fixed assets was even deeper than in overall demand (GDP). Labour productivity (in industry) decreased rapidly in 1992–1994, but in this sphere a recovery started in 1995.

Amid these stagflationary tendencies, average monthly gross wages measured in hard currency (ECU, European currency unit) showed an amazing boom. This development was entirely out of those lines described in the previous table.

Table 2. Average monthly gross wages, in ECU (calculated at official ER)

	1992	1993	1994	1995	1996	1997
	18	53	93	90	119	145
Growth, p.a. %		194	75	-3	32	22

Source: WIIW.

These ECU-based earning figures show that the average monthly pay increased between 1992 and 1997 no less than eight-fold in a period, during which labour productivity clearly declined. It can be concluded that in the period under review the real ER of RUB appreciated extremely strongly, which means that Russian strong inflation was not reflected in nominal depreciation of the external value (ER) of RUB.

In 1995 inflation was still very strong (200% a year), but this rapid increase of the internal price level was only to a small degree compensated for by the nominal depreciation of the ER. Thus, the real effective ER appreciated by almost 70% in 1995. After that, the real RUB ER remained at a rather high level before the 1998 crisis.

In the hindsight it is easy to maintain that the central rate in the managed floating ER regime was set on a too “strong” level (new RUB 6,2 – the equivalent of 6.200 old RUB per USD). The new semi-fixed ER with $\pm 15\%$ fluctuation boundaries was launched January 1st, 1998. The system collapsed in August of that year. The market lost confidence in the correctness of the central rate and the RCB (Russian Central Bank) was unable to defend the set 15% depreciation limit that was in absolute terms about RUB 7 per USD. Panic took over on the exchange market bringing RUB rate in a couple of months to 20 to a USD, or about three times more than the original central rate of RUB 6,2 to a USD.

In fixed and semi-fixed exchange rate regimes officials actually commit to maintain relative stability: they tie their hands not to inflate the domestic currency more quickly than world inflation. The fixed (or semi-fixed) ER serves as a nominal anchor for the domestic price level by restricting official's ability to run inflationary policy. The main aim is to "stabilize expectations": monetary policy makers attempt to convince people that they are committed to a non-inflationary policy.

This background thinking was obvious in the RUB reform in January 1998. New banknotes with less zeros (one new RUB = thousand old ones) symbolized the end of the inflationary period. The new semi-fixed ER of about RUB 6-7 per USD was estimated to be correct from the market point of view.

In the ER system of 1998, the officials actually promised that they are willing to give one USD in exchange for RUB 6, or in the worst case RUB 7. In the managed floating (with 15% borderlines) the government ensured that the "market value" of RUB 7 is not less than USD 1. In every system of fixed and semi-fixed ERs, this sort of promise must be kept; otherwise there will be a "run" on the market, as people start doubting their chances to convert RUB 7 for USD. If there is a feeling that the right relationship is RUB 10, 15 or 20 to USD, the "run" continues: people start to sell their RUB in increasing quantities.

In this situation, monetary authorities can interfere by feeding the market with new USD, in order to hinder the breaking of the set limit (RUB 7 or 15% down from the central rate). In this context it is important to realize that Russian Central Bank (RCB) can print RUB, but not USD. RCB can defend the ER borderline as long as it has hard currency reserve for intervention. If the reserve is exhausted – for one reason or the other – ER defence must be discontinued. If the market still demands more USD, its price (ER) will increase obviously sooner or later breaking the fixed borderline.

The RUB crisis of August 1998 took place because RCB was not able to defend the set borderline with massive interventions. The run against the domestic currency (RUB) was so vigorous that it increased the price of USD three-fold within couple of months. Similar currency crises took place in other countries in the 1990s.

After the strong depreciation of RUB's value (ER) in the autumn 1998, Russian officials did not set a new semi-fixed exchange rate (with certain borderlines for fluctuations). The solution was to move to a floating exchange rate.

Amid the RUB crisis of 1998, Russian government defaulted on its internal debt and gave notice of her need to restructure its external debt. In the year 2000, Russia and its London Club creditors (the association of private creditors) reached a deal offering Russia a combination of forgiveness and restructuring of Russia's debt.

In the second half of the 1990s, there was plenty of turbulence in international financial markets. A long and strong boom period in South-East Asia came to an end. Many countries of the region had disequilibria in their current accounts. A series of devaluations took place in 1997-1998, not only in South-East Asia, but also in Latin America.

There is one oddity in the Russian RUB crisis of 1998. Normally, currency devaluation is closely linked with a deficit in current account. If a country cannot pay its import bill with her export earnings, a deficit in current account is a result. Considerable and long-lasting deficits cannot be financed forever. In that case, devaluation is normally a tool to restore relative equilibrium in the bookkeeping of the external economy. In the Russian case, current account has permanently been in surplus, even in the crisis year of 1998. This peculiar feature has a simple explanation: Russia's resource base is unusually rich, and thus, export of various commodities, especially energy bearers, guarantees a rather high level of export earnings. Under these circumstances, the capacity of export-oriented segments of the economy to benefit from the devaluation has proven limited.

In this context, it is easily forgotten that depreciation of RUB improves incentives for import-substituting activities: devaluation makes locally produced goods price-competitive in comparison to imported alternatives. This statement is especially true in activities, in which the production is based on local materials (with little import content). Thus, theoretically, for example, food-processing industry could profit considerably from the devaluation effect.

In the aftermath of the crisis there was a clear turnaround in the investment activity. Real investment started to grow at the first time in the transitional period in 1999 and the growth accelerated remarkably in 2000. It can realistically be assumed that one important background factor in this new tendency was the depreciation of the real RUB value.

3.2 Recent economic trends in Russia

Economic scene in the early years of the 21st century differ radically from that in the 1990s in Russia. Devaluation of RUB in 1998 created precondition for investment activity which declined substantially in the aftermath of the Soviet collapse. World market price of oil has increase roughly by factor 5 between 1998 and 2006 bringing windfall profits to Russian

export sector. Average annual GDP growth has exceeded 6% in real terms in the second decade of the Russian transition. Amid strong economic boom, inflationary pressure has remained high.

The Russian state has invented several methods to acquire a big part of export income generated by sales of energy bearers. These important currency earners pay considerable export taxes for deliveries to foreign markets. Currency reserves of the country exceeded USD 400 billion in the summer 2007, which is about 20 times more than the equivalent figure in 1998, when the managed RUB ER system collapsed. About one quarter of this sum is separated into a special stabilization fund with which it is possible to even out business cycles when export income potentially deteriorates.

The strong increase in currency reserves reflects permanent and high surpluses in the current account .

Table 3. Current account, billion EUR

	2002	2003	2004	2005	2006
EUR, billion	31	31	47	67	76
In % of GDP	8,4	8,2	10,0	11,0	9,6

Source: WIIW

In the five-year period 2002-2006 the annual current account surplus has increased from EUR 31 billion in 2002 to EUR 76 billion in 2006. In relative terms (current account surplus in % of GDP) the highest figure of the above table is 11% in 2005. In the 5-year period the average annual figure is almost 10%.

One of the most important background factors in high current account surpluses is the clear undervaluation of RUB. This undervaluation was extremely high in the aftermath of the 1998 crisis, but it has become more modest lately.

Table 4. Rouble exchange rate

	2002	2003	2004	2005	2006
A: Official RUB/EUR	29,7	34,7	35,8	35,2	34,1
B: PPP adjusted RUB/EUR	10,7	12,2	14,3	16,7	19,0
A/B: ERDI *	2,78	2,84	2,50	2,11	1,79

Source: WIIW

* Exchange rate deviation index

As the above table shows, the nominal ER of RUB against EUR remained rather stable in 2003-2005 (about 35 RUB per EUR), but appreciated slightly in 2006. The same exchange rate purchasing power parity (PPP) adjusted changed rather strongly between 2002 and 2006.

Exchange rate deviation index (ERDI) figures are calculated above by dividing official ERs by PPP adjusted ones. ERDI values show rapid decline from about 2,80 in 2002 to 1,80 in 2006. As ERDI measures the relative under – or over – valuation of a currency (undervalued currency has ERDI value over one, while overvalued currency has ERDI value less than one), it can be stated here that the undervaluation advantage of RUB is eroding rather fast. It means in actual fact that RUB is appreciating rather strongly against EUR.

In 2000, the equivalent ERDI rate was about 3. It means that the average consumer basket of goods and services had a price tag on it which was only one third of the equivalent in euro-zone. In 2006, Russia's price level was about 45% cheaper than in eurozone measured on the basis of average consumer basket.

Amid the global oil price boom it is occasionally maintained that Russia suffers from a special variety of Dutch Disease. Substantial increases of oil and gas export prices affect Russia's currency and causes it to appreciate in real terms, thus making it more difficult for other branches in Russia to compete worldwide. Obviously, currency appreciation is not only affecting export activities, but import-substituting branches as well.

Economic situation in transitional Russia is obviously paradoxical. RUB is still clearly undervalued, but the undervaluation advantage is eroding. New industries, including consumer durable manufacturing, badly need price advantage. In terms of quality this branch is in many categories not able to compete with foreign brands. Therefore, it is understandable

that officials try to limit the real revaluation of RUB's external value to some 4-5% a year. Amid strong inflow of so called "petro-dollars" this is not an easy task.

Rather strong economic growth is hampering price stability. Inflation rates tend to be much higher than in the Rest of the World (RoW).

Table 5. Inflation (% growth a year)

	2002	2003	2004	2005	2006
Consumer prices (CPI)	16,0	13,6	11,0	12,4	9,8
Producer prices (PPI)	11,8	15,6	24,0	20,7	12,4

Source: WIIW

Consumer price increases show a clear deceleration from 16% in 2002 to 9,8% in 2006. Producer price index shows acceleration path in 2002-2004, but abates in 2005-2006. However, the latest figure (12,4 in 2006) still shows a double digit figure. Obviously, increasing input prices will affect consumer prices negatively in near future. Thus, ultimate relative price stability can hardly be achieved in the near future.

In the second half of the current decade Russia is suffering of a serious wage inflation. Unit labour costs are increasing rapidly. In many urban centres there is labour shortage. Inflow of foreign workers, especially from other former Soviet republics, is in increase. Relative labour shortage puts pressure on wages.

Table 6. Unit labour costs, 2000 = 100

	2002	2003	2004	2005	2006
ULC, RUB	182,6	213,8	247,6	299,3	355,3
ULC, ER adjusted	160,3	160,5	180,0	221,2	271,4

Source: WIIW

Unit labour costs in the RUB based index have grown no less than 3,5 – fold between 2000 and 2006. In the exchange rate adjusted index the equivalent increase is factor 2,7. Even this lower figure indicates that ULC development is very inflationary. Productivity improvement is much more modest, about 5-6% annually. Wage inflation is an important factor in decreasing price competitiveness.

The Vienna Institute for International Economic Studies (WIIW) started to publish index figures on real ER of RUB. There are two EUR-based indexes, one calculated with CPI and the other with PPI. In both cases January 2003 is marked with 100.

The consumer price index (CPI) based exchange rate was 135,9 in January 2007. Thus, it can be concluded that the real RUB/EUR exchange rate appreciated by almost 36% between those two dates, that is in four years. In that period the official ER remained virtually on the same level.

Producer price index calculation shows even higher appreciation of the real ER of RUB against EUR. In January 2006 the index number was 147,6 and one year later 162,5 indicating that RUB appreciated over 60% since January 2003.

In sum, it can be concluded that RUB's real ER strongly appreciates which erodes price competitiveness in Russia. This trend gives clear incentive to import more and a handicap for exports of manufactured goods.

Germany is the most important source of Russian imports. Obviously, the big bulk of German sales in Russia is of high quality goods (cars, machines, etc.) which are not necessarily price-sensitive. Ukraine and China are on the second and third place in Russian import statistics. Both countries have strongly undervalued currencies (ERDI value in Ukraine is close to four and China over four). Ukraine and China sell labour-intensive, price-sensitive goods to Russia in massive scale. Appreciation of RUB is very good news for exporters in these two countries.

Theoretically, appreciation of RUB ER is a disincentive for foreign direct investment (FDI) in Russia. This is the case in the sphere of manufacturing sector: local production (in Russia) becomes less attractive in terms of costs and prices. Obviously, in many cases the main FDI motive is to avoid customs tariffs (e.g. in car manufacturing). It can be assumed that revaluation of RUB is not necessarily deterring car-makers to invest in Russia. In services (e.g. fast food restaurants) really increasing RUB rate is not hampering investment decisions. The same is true in retail trade, a service category which attracts foreign investors in Russia.

In 2002, EUR exchange rate against USD was about one, but has strengthened almost continuously ever since. In the autumn of 2007, EUR was over 40% more valuable than USD. In 2002, the average official RUB/USD exchange was 31,35. The equivalent ER in 2006 was 27,34, and thus, USD was about 15% cheaper than in 2002. EUR was in Moscow about 25%

more expensive than USD in 2006, which reflects roughly the EUR/USD ER in the international arena in 2006.

Since 2006, RUB has appreciated against USD in nominal and even stronger in real terms. WIIW's real ER index (January 2003 = 100) for RUB/USD based on consumer price calculations was 143,2 in January 2006, and 161,5 in January 2007. The equivalent figures calculated with PPI were 153,0 and 181,8. Thus, RUB appreciated in real terms against USD over 60% calculated in consumer goods prices and no less than over 80% in producer price sphere between January 2003 and January 2007.

Traditionally, the USD has been the main reference currency for the RUB. In the early years of the 21st century Russian Central Bank (RCB) used a currency basket with a 10% EUR and 90% USD weighting in measuring overall real effective exchange rate. Recently the content of the currency basket was changed with a 45% EUR and 55% USD weighting. This radical change reflects the fast increasing share of EUR in the Moscow currency market.

Obviously, officials in Moscow are worried about the appreciation of RUB's real value and about eroding price competitiveness linked with it. The RCP has announced that it targets an annual real appreciation of RUB of 3%. Meeting this goal is obviously difficult given unstable currency inflow linked with volatility in the global energy markets.

3.3 Some special features of prices in Russia

In the mature economies of the world inflation rates have been relatively modest for the last couple of decades. The more there is competition the more stable is the price level. Emerging markets have normally no perfect competition, and thus, not high price stability.

In the rich part of the world income distribution tends to be more even than in emerging markets. Income differentials can be calculated on the personal level (or household level) and geographically. Capital cities are wealthier than provincial centers. In big cities earnings are higher than in the countryside. Prices are the higher the more there is demand.

Income distribution in transitional Russia is very uneven, especially in comparison to West European welfare states. Therefore, many upmarket prices (prestigious Western branded goods) may be very expensive in Russia.

In Moscow the GDP is about four times higher per capita than the Russian average figure. Big cities, especially Moscow but also St Petersburg, are more expensive than other places in Russia.

In all transitional economies there has been an invasion of Western firms. Foreign direct investment inflow has increased demand for office space and warehouses. Supply has reacted on that increasing demand but not very fast. Thus, prices paid in this sphere (rents) have odd distortions. Office space in Moscow may be even more expensive than in Paris and London. Warehouses have normally no cheap rents in booming cities in post-communist region.

Increasing foreign business involvement in transitional economies has caused a considerable inflow of Western executives normally called expatriates. This group of people have high purchasing power and special requirements concerning comfort. Therefore, there is a special housing market for expats in capital cities in transitional economies. In this market segment clients are not looking for good bargains, but for quality and space.

Many Western firms which have established themselves in the post-communist world complain that a well-educated personnel is difficult to acquire. There seems to be a special problem in hiring local employees with marketing skills. If there is high demand for certain skills, the price (pay) goes up. The pay received by local skilled people active in foreign companies in transitional economies have in plenty of cases nothing to do with the local average wage level. Blue-collar workers are definitively cheaper in transitional economies than in Western Europe. Western companies active in transitional economies normally pay some kind of premium in order to get the best ones when manual work is getting done.

In 2006, Mercer Investment Consulting published an index concerning relative price levels in various big cities in the world. This index was widely quoted in financial press. Sensationally, Moscow was the most expensive city in this comparison.

Obviously, Mercer looks costs of living from expat community's point of view. Flats available for them in the centre of the city can cost anything between USD 2000 and USD 5000 a month, while one-family houses in the suburbs may have a monthly rent of USD 20.000. As the average salary in Moscow in 2006 was USD 730 per month according to Moscow Statistics Committee, the above mentioned housing costs are affordable only for persons and households with essentially higher than average monthly pay.

On Moscow upmarket virtually everything is available. Foreign branded goods – including cars – are selling well. Foreign retailers have entered the scene. One of them is Stockmann (a prestigious department store in Finland) which in its Kalinka store in Moscow sells, for example, imported ground beef for USD 50 per kilo. Nearby a Russian supermarket sells local equivalent product for USD 4. The difference between these two prices is striking – factor 12,5. Thus, it matters a lot which one of these two prices is included in a consumer basket used as a basis of a price index.

Union Bank of Switzerland (UBS) measures every year living costs in different metropolises in its Price and Earnings Report. The 13th issue (published 2006) comprises 71 metropolitan areas in the global economy. Its price index is composed of 122 items (goods and services most often purchased by consumers). New York functions as the anchor of the UBS price index (New York = 100).

The table below includes 15 most expensive cities in the world plus 12 capital cities in the TE-region, ten of which belong to EU. Moscow and Kiev, the two biggest capital cities of the CIS (former Soviet Union), are also present in the comparison.

Table 7. Prices of an average consumer basket

Rank	City ¹	Excl. rent New York = 100
1	Oslo	121,5
2	London	110,6
3	Copenhagen	109,2
4	Zurich	107,4
5	Tokyo	106,8
6	Geneva	102,9
7	New York	100,0
8	Dublin	98,3
9	Stockholm	98,1
10	Helsinki	97,0
11	Paris	95,6
12	Vienna	95,0
13	Luxembourg	93,3
14	Chicago	92,2
15	Los Angeles	91,6
41	Moscow	65,5
44	Ljubljana	64,4
46	Warsaw	63,7
49	Tallinn	62,0
52	Budapest	58,6
55	Prague	53,8
56	Riga	52,7
58	Bucharest	51,6
59	Bratislava	50,4
61	Sofia	50,1
63	Vilnius	49,4
66	Kiev	47,8

Source: UBS, Prices and Earnings 2006

Methodology:

The cost of a weighted shopping basket geared to Western European consumer habits containing 122 goods and services.

¹Listed according to value of index (price level without rent).

Oslo is the most expensive place to live in, according to UBS. Copenhagen is on the third place, Stockholm in the ninth and Helsinki in the tenth place. Thus, Nordic capital cities have high price levels in international comparison. Oslo is over 20% more expensive than New York. Also Copenhagen scores over 100 points, while Stockholm and Helsinki are slightly below this mark.

Moscow is the most expensive capital city in the post-communist region with an index figure of 65,6 or two thirds of the New York level. Kiev in Ukraine is the cheapest TE metropolis in the table with index value of 47,8. Moscow's rank is 41st and Kiev's 66th. In this comparison, Oslo is almost twice as expensive as Moscow. In the table rents (housing costs) are excluded. The Bank's report under review here provides information on some components of the overall consumer basket. Also in the sub-index figures New York is marked with 100. In the food basket comparison Moscow scores 60,4 points, or somewhat less than in the overall index. The equivalent figure in Kiev is 40,1. Thus, eating in Kiev is about 60% cheaper than in New York. The most expensive food basket is served in Tokyo (130,3).

In clothing category Moscow's index shows 77,5 which is higher than the figure in the overall index. Thus, clothes in Moscow are relatively expensive. Buying clothes in Kiev is advantageous because the index is only 40.

In the category of consumer electronics and household appliances Moscow is a very expensive place with index figure of no less than 128,4. Thus, devices for households are about 30% dearer in Moscow than in New York. Kiev is rather advantageous place in this sphere with index showing only 88,2 points. The highest price level in this context can be found in Vienna (155,5).

UBS's Report contains also index figures on annual net income at purchasing power parity. The best place in this respect is Zurich with 114,1 points. Moscow scores here modest 34,4 points, or about one third of the New York level. Kiev is far away from Zurich but also from Moscow level: index is only 22,2.

This short summary of UBS's report contains certain very interesting points. In international comparison purchasing power parity income level in Moscow is still rather modest. In this context it is useful to bear in mind that the report deals with average figures. In Moscow there is a high concentration of well-off people, local persons and expatriates, with high discretionary income. In the upmarket there is high demand for consumer durables. Therefore, the sub-index covering consumer electronics and household appliances has got a value in

Moscow which is roughly twice higher than Moscow's overall index of consumer prices (including services). Consumer durables are essentially more expensive in Moscow than in New York, which is simply amazing. Foodstuffs have reasonably moderate average prices in Moscow.

Thus, prices in transitional economies have considerable biases. Obviously, the markets in post-communist countries are still in many sense immature. It can be assumed that increasing competition will in the future help to decrease price oddities in Moscow and other locations in the TE-region.

4 Conclusions

The Russian economy has profited enormously from two special factors in the first years of the 21st century. The first one is the RUB depreciation in 1998, which gave clear incentive for local investment. The second one is the oil price boom which started in the turn of the century and continued still 2007. Prices of energy bearing materials are likely to be on a high level for several years to come. Two thirds of Russian exports are in this category. Thus, growth prospects in Russian economy are very good.

Stabilizing prices pose a serious challenge to economic policy-makers in Russia. Inflation rates measured with CPI have decelerated somewhat after the RUB crisis of 1998, but Russian price hikes are essentially higher than in the Rest of the World (RoW).

Money supply has increased by about 35% annually in the last five years. The most important background factor is the continuously strong inflow of money from RoW. Under these circumstances it is very difficult to exercise anti-inflationary policy.

The booming economy of Russia is facing labour shortage. Official unemployment rate of over 7% is still relatively high, but supply and demand on the labour market are not necessarily meeting each others in the vast country. In the most important metropolitan areas labour is in short supply. Immigrant workers alleviate the problem. However, migrant workers face in Russian big cities accommodation problems.

Thus, it is understandable that there is high pressure on compensation. Unit labour costs are increasing rapidly. “Wage inflation” takes place when gross pay increases more than productivity. This can be observed in recent economic trends in Russia.

There is a very clear RUB appreciation tendency in the real exchange rate. RUB ER has appreciated against USD, both nominally and in real terms. RUB/EUR rate has been lately rather stable in nominal calculation, but real RUB value improves rather strongly against EUR. Russian competitiveness in terms of prices deteriorates.

This is obviously good news for Western companies exporting to Russia, and bad news for production units which are active in import substituting branches in Russia. It is highly likely that import boom will continue for several years to come with double digit growth rates a year.

Obviously, economic policy-makers in Russia aim at keeping RUB real appreciation under control, probably about 3% a year. This is not an easy task to achieve, if money inflow remains on a high level due to expensive oil and gas prices.

RUB is still clearly undervalued but the price advantage of currency undervaluation is eroding. Therefore, it can be maintained that Russia is suffering of a variant of Dutch Disease. World market prices of energy bearers have hurt her competitiveness, even though her currency is not generally speaking overvalued yet.

According to WIIW, the real RUB/EUR exchange rate, calculated with CPI, was 138,2 in August 2007, and the equivalent figure calculated with PPI was 181,6. Thus, since 2003, the real ER of RUB has appreciated by almost 40% measured with CPI and over 80% with PPI calculation.

The RUB ER will be in equilibrium, when the official ER equals that one with purchasing power parity adjustment. In that case, it is said that the exchange rate is “in parity” (the official ER equals the PPP adjusted one). In 2006, the calculated exchange rate deviation index (ERDI) was 1,79 in Russia indicating a clear undervaluation of RUB. This undervaluation will disappear, if RUB’s ER continues to appreciate in the same manner as between 2003 and 2006.

In sum, Russia suffers of a very special variety of Dutch Disease. Her currency is clearly undervalued, but the advantage of the low ER is melting away, not rapidly but continuously. The appreciation of the real RUB exchange rate is good news for Western companies exporting to Russia and bad news for firms producing import substituting items in Russia, which are price sensitive.

Moscow is the financial centre of the Russian economic boom. Many prices and wages are really very high in all-Russian comparison. However, Moscow is still rather far away from the most expensive metropolitan areas in the world measured on the basis of a wide range of consumer goods and services by UBS. This price level comparison between 71 cities is brought up in order to show that RUB is still in general terms undervalued.