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## 1. INTRODUCTION

Russia is the country of huge territory, long history, beautiful culture, vast natural resources, and enormous potential of human and physical capital. Russia is the country of Tsars, cold winters, vodka and white bears. Russia is the country of Peter the Great, Y. Stalin and V. Putin. One could say, all that characteristics is our pride and glory. For me the answer is not so easy.

We have a territory, which we do not know how to use; history, which we are not always proud of; culture, which is actually great, if we would not destroy it during the XX century. We are proud of the level of education in the country and the potential of our human capital, but in reality two of the most difficult professions – doctors and teachers – are the least paid.

This work is going to concentrate on the specifics of the economic development in Russia. One other interesting characteristic of Russia, or Russian people, is the mentality. One would say how the mentality is connected with economic development of the country. But “mentality” as the key antagonizing factor of the development of Russian economy was named in the conference about Russian economic developing in April 22th 2013.

There is a chance, that mentality plays a significant role. But obviously, it does not deserve much attention. The real problems are hidden in the structure of Russian economy, in the structure of Russian social life, in the structure of the Russian government. That is why analysis of the economy cannot be separated from understanding of some basics of political system.

The goal of this work is to outline the specifics of the economic development in modern Russia. Just two decades ago Russia experienced a total change in the political and economic structure of the country. USSR fall, together with all its successes and failures. Russia went to the path of building a market economy, while the rest of the developed world was already living in such economy and using its benefits. With the heritage of the USSR, Russia had a huge potential to be successful in that road. The goal of this work is to answer the question, whether or not we were able to use it.

In the first part of the work I will analyze the Financial crisis 1998. Even though these events are not recent, I would like to attract the attention for this topic, because the outcome of that crisis was the first stone for further development of the country. Financial crisis 1998

was a huge shock for Russian society. Sharp jump in prices, accompanied by absence of food in the market reminded people of the not so far USSR times. The general view of the crisis was that the new reformers, financed by oligarchs, destroyed the economy and led the country to the crisis. The Financial crisis of 1998 caused a political crisis, which resulted in total change of the political and economic course in the country.

The second part of the work covers the New era of the development, starting with the first presidency of V.Putin. There is no doubt, that his first presidency is the beginning of modern Russian development. This part will include the analysis of political structure, the relationship between government and business, the program of the development by G.Gref, an analysis of the position of Russia in the world.

The third part of the work contains an analysis of specific areas such as investment climate and oil dependency of the Russian economy. We cannot say that these are the only important areas of the economy, which needed to be discussed. But in my opinion – these are two main issues for today. At least for the possibility of healthy economic development, Russia urgently needs investments. Considering the orientation of the economy mainly on natural resources industry, investments in that industry are needed even more. The other issue is the ultimate concentration on the natural resources industry itself, knowing the fact, that country has incredibly high productivity potential.

The fourth part is Quantitative analysis of main GDP drivers for Russian economy. The analysis is concentrated on pointing out the main variable, influencing GDP growth and how it differs from other countries. In order to do that, firstly I analyze a group of countries to find the main driver of GDP growth. Secondly the model for “Russia only” is performed to find possible differences. And finally industrial production is analyzed in order to understand endogenous powers of its development.

The last part is the prospects for the future. I will discuss possible scenarios for the further development of the Russian economy.

## 2. FINANCIAL CRISIS 1998

(Latin: nanos gigantum humeris insidentes)<sup>1</sup>

Dwarfs standing on the shoulders of giants.

The Financial crisis of 1998 was a huge shock for Russian society. Sharp jump in prices, accompanied by absence of food in the market reminded people of the not so far USSR times. General view of the crisis was that the new reformers, financed by oligarchs, destroyed the economy and led the country to the crisis. The Financial crisis of 1998 caused a political crisis, which resulted in total change of the political and economic course in the country.

### FINANCIAL CRISIS AS A RESULT OF REFORMS

There is an opinion, that the reforms at the beginning of the 1990s (liberalization, privatization, financial stability) led the country to the crisis. The Liberalization of prices and the opening of the Russian economy caused a decrease in production and decline in the demand for Russian products. Another aspect is wrong monetary policy: the suppression of inflation due to decrease in money supply resulted in lack of money in the economy. In other words, the government decided to fight with budget deficit through debt, not through the emission of money. And in the end, privatization was seen as a total failure, which did not meet the society's expectations. All money was concentrated in a small number of hands, which controlled areas of political and social life in the country. The Economy suffered from all-embracing shadow activities and defects in fiscal framework.

However, there is another point of view, which deserves attention. According to Y. Yasin<sup>2</sup> (Former Minister of Economic development - 1994-1997, today Academic supervisor of High School of Economics in Moscow), a decrease in the production was a vestige of planned economy in the first place, where 40% of GDP was in the military sector. In addition to that, after opening the economy, people stopped to consume bad quality products from Russian companies, which they consumed before due to absence of anything else. This led us to the problem of import, which indeed captured the Russian market. But import in its turn helped the country to overcome production deficit and undermined monopolies. One of

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<sup>1</sup>Bernard of Chartres – XIIth century

<sup>2</sup>Y. Yasin, "New era - old alarms", New publishing house, Moscow, 2004.

the factors, which a lot of people mention, is that the government did not intervene in the economy in times when it was needed. That is not correct formulation – the government did not intervene in the economy in the correct way (law enforcement, contracts discipline etc...), but it did intervene in matter of subsidies in not necessary areas.

Considering the monetary policy, not everything is clear here as well. Russian monetary policy in the 1990s was following some kind of cycle in order to increase the share in money supply in GDP: in order to fight high inflation monetary policy was toughened, and then weakened again. This should lead to slow increase in money supply. But the crisis broke the cycle. The real reason for bad tax discipline and low demand for Rubles was the lack of institutional framework.

There is a reasonable argument, that the first reforms increased inequality in country. But still there were other important factors, such as negative interest rate and preferential loans of the Central bank.

#### CHRONOLOGY OF EVENTS

The process, which ended up as a crisis in 1998, started in 1994 - “black Tuesday” (October 11<sup>th</sup> 1994), when the government officially renounced the idea of financing budget deficit through emission. The problem was that before making the decision, the government did not prepare the fiscal sector and just after the course was changed, tax collection at once became a problematic area. The idea was to finance budget through borrowings. During this period the government planned to decrease inflation, stabilize the Ruble and decrease the interest rate. This should lead to the revival of productivity, improvement in tax collection; increase in investment and in the end reduction of the debt. But in reality we witnessed a ballooning debt. After the fall of the USSR, the country inherited a debt of \$150 billion. Until August 1998, this debt increased to \$180 billion, considering, that \$50 billion was due in 1999. In addition to that, on the eve of the crisis, the projected increase in Debt – to – GDP ratio was 23%.

One of the factors, which led to the crisis, was the weak banking system. Just before the crisis, the banks were highly exposed to devaluation. In 1995 there was a peak of government's T-bills (known as GKO) market. Around 2/3 of tax profits were collected in bonds. Each year the turnover of GKO was increasing on 3-5%. In 1997 the GKO market was liberalized and opened for non-residents. Very quickly, the share of non-residents reached

30% and interest rate decreased sharply. The Economic situation improved, but at the cost of accepting very high risk from the “hot money”. It is interesting to mention that people normally blame the GKO market for the crisis of 1998, but most of them do not know what it means. For the media and for the government itself it was the easiest explanation for the society – the GKO pyramid crashed. Exactly in that period the War in Chechnya started, which cost the country \$10bln.

In 1997 the era of new reformers starts – A. Chubays, B. Nemcov. And the first step was sequestering of the new budget for 30%. The main goal was to restore wage and pension payment system. But unfortunately this step moved the country closer to the crisis. In addition to that, in 1997 a war between government and oligarchs started, which were blamed for the crisis. Generally said, we can agree, that huge corporations, which were created in the 1990s, had their influence on the crisis, but not as big as the structural disproportion in the country and uncompetitiveness of the economy as a whole. In the end of 1997 the first reactions on the Asian crisis occurred in Russian economy (“contagion effect”) – share prices decreased for 20%, oil prices fall sharply (see Table 1).

The exchange rate policy was based on an attempt to peg the Ruble to the Dollar within the corridor. According to Paul Krugman<sup>3</sup>, such a policy is possible only if the country waives its monetary independence and adopts the currency-board system. But these conditions were not held in Russian example. In order to keep the Ruble stable, CB did not support GKO market; the interest rate sharply increased and started a rapid outflow of capital from the country. Problem of the borrowing revived, supported by crisis in the oil market. On January 1<sup>st</sup>, 1998 the CB denominated Ruble (x1000) and introduced a new currency band ( $\pm 15\%$ ). As a result, all the resources were spent to support the Ruble.

On May 12<sup>th</sup>, 1998 the financial market crashes. The Government takes a new loan for much higher interest rate, this time from the European market. The Ruble was getting weaker day by day. On August 13<sup>th</sup>, in the “Financial times” George Soros proclaimed that Russia stepped into the last phase of the crisis and devaluation is inevitable. It was a straight signal to the investors. Those who were willing to take the risk were asking for higher interest rates and short-term lending.

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<sup>3</sup>Paul R. Krugman, “Target zones and exchange rate dynamics”, The quarterly journal of economic, August 1991

## DEFAULT AND CONSEQUENCES OF THE CRISIS

The decisions that were taken on August 17th changed Russian economic history:

1. Floating exchange rate in the corridor 6 – 9.5 Rubles/USD.
2. GKO with expiration date before 31/12/1999 should be reissued.
3. Moratorium 90days to call in credits for non-residents.

The People, who made those decisions, would be forever blamed by society. But in reality, the default was inevitable, and people who made that decision just took all the weight on their shoulders. In the end, the new government could blame them and use all the advantages of the decisions made on August 17<sup>th</sup>.

However, firstly the country suffered from short-term consequences: distortion of payment system, decrease of import, 45% price increase, absence of the food in the shops. Liberalization of the Ruble caused huge devaluation. Devaluation in its turn caused a decrease in import (see Table 2) and increase in export. But the main effect of devaluation was at the banking sector and through it on the economy in general. The situation on the investment field was hopeless: panic, distortion of the market of government bonds, disablement of macroeconomic instruments. As medium-term consequences we can name the huge inflation (see Table 3), the decrease of GDP of 6%, the decrease of real income, the crisis of banking sector (complete paralysis, which caused “overnight impoverishment of the middle class, which is ... the driving force behind economic growth”<sup>4</sup>) and the default in external debt (17.5 billion Rubles in 1999). In addition to that, 30% of the population was below the official subsistence level.

At the same time, the crisis had some advantages for the Russian economy. Firstly, the crisis forced to restore the banking system. Secondly, the political influence of oligarchs decreased. And lastly, the devaluation of Ruble restored the economy as a whole. Shortly after October 1998 the first improvement was noticed – budget problems reduced due to default, wage and pension policy restored due to cheap Ruble. The GDP growth in 1999 was 52%, investments increased by 5%. The Second wave of growth (1999 – 2000) brought an increase in export and investments in oil industry (especially motivated by increase in oil prices up to \$35/barrel). In 2000, the Money base increased by 150%. Generally said, the

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<sup>4</sup> Elli Malki, “The Financial Crisis in Russia”, Financial-Tip, January 17, 1999



Financial crisis of 1998 ended the era of the first economical transformations, and the country took a new economic course. As we can conclude, V. Putin came to power in a very good time for Russian economy.

#### ANTI-CRISIS PROGRAM

There were two main goals of the anti-crisis program: liquidation of budget crisis and support of the real sector. Considering the first goal, such measures have been taken: cancellation of all normative acts financing of which was stipulated in budget, limits in budget spending, imputed taxes for a number of industries, strict control in the alcohol market and gradual ceasing of subsidizing of non-effective industries. In the real sector two measures were planned – decrease of taxation, decrease of prices and tariffs in natural monopolies, restricting of companies debts. But, as we can conclude, this program did not play a big role in the end. In general it was just a program, reflecting the problems in the economy, which needed to be solved, but did not give real solutions.

#### CONCLUSION

The consequences of the crisis and general results of the actions of the first reformers had a crucial effect on the further development of Russian economy. As it was mentioned, the crisis was not a fault of the first reformers. Actions that were taken in the beginning of the 1990s got a start for market economy in Russia. But still there were a number of mistakes.

1. Inefficient budget policy: the reformers were not able to limit budget deficit and allowed enormous debt level.
2. Privatization: too fast privatization in the infrastructure area and aviation.
3. Political area: loss of democratic power in the elections 1995, which caused dependence of reformers on the president and, in general, anti-reformative Parliament.

In the end of XX century there were several main objectives for further economic development of Russia: to overcome budget deficit, to regulate the external debt (\$158 billion), fiscal reform, stabilization of the Ruble, fighting the poverty, social reform, support of private sector and competition, and regulation of property rights.

### **3. NEW ERA**

The first presidency of Vladimir Putin started in a time when the country was tired of the political and economic system of the 1990s. By that time people got used to the idea, that “communism” is in their past and the word “democracy” has already appeared in the society. But in reality, the country was ruled by a number of oligarchs and the attempt of recent reforms was really unsuccessful. In addition to that, the financial crisis of 1998 showed the inability of the government to handle economic difficulties.

In this atmosphere, people displayed interest to a new leader. V. Putin was young, full of energy (in comparison to the previous president B. Yeltsin) and ready to start a new era in Russian history. People were waiting for this change to happen; because the time of transformation had already passed and the country needed a new leader to start its way towards democracy.

The financial crisis of 1998 changed the economic structure of Russia. Devaluation and default played a big role in strengthening the power of national corporations due to decreased costs and lower pressure of imports. Accumulation of capital in industrial sector has markedly increased. On the other side, due to high inflation, the real income of the population has decreased by one third.

In 2000, the Minister of Economic Development, German Gref issued a program of future reforms, which was informally called “Gref's program”. The main goals of the program were: sharp decrease in the level of bureaucracy within the country, fiscal reform to decrease the tax burden, and a general reform in areas like –but not limited to- natural monopolies, agriculture, labor, pension, education and the health system.

The next steps were flat tax rate on income, general decrease in income taxation, reform of patents. But the main focus of the plan was the energy sector. In 1999 there was a sharp increase in the prices of oil, which improved the situation in the labor market by paying the salaries and pensions on time. This helped increase the tax collection and even created a budget surplus. In 2000, the GDP growth rate was 10%, and the external debt decreased. All these changes created a good reputation for the new president.

The course which was taken by president Putin was one of “Stabilization”. Until that point Russia has already been familiar with the word “democracy” (at least on some level). We

should understand that after the Soviet regime even the understanding of the Private sector as a “good thing” was already a big step for the country. In 2000, the country stood up on the road to stabilization, which could be reached (in the opinion of the government) only by strengthening the power of the state. The main steps of this road were building the chain of command, creating a new electoral system, gaining control over the media, and suppressing the businesses.

#### BUILDING A CHAIN OF COMMAND.

As soon as V. Putin took the highest position in the state, he warned the government that he was planning to build a chain of command. We should mention though, that nobody understood it as a system of government resembling the Soviet type. He started with one main change in the regional policy - the creation of 7 federal areas in the country governed by representatives of the president. It basically means that from that point these representatives were keeping an eye on regional governors. In addition to that, the share of the regions in the budget decreased from 50% to 41%.

After the terrorist act in Beslan in 2004 V. Putin suggested to abandon the elections in the regions, in order to counter terrorist attempts. A new committee was created, governed by D. Kozak, which was supposed to improve the law structure concerning regional governments. As a result, local governments were responsible only for local problems, such as municipal property, local budget, education system, employment and urban constructions among others. All activities should be financed by the local budget, which, in turn, was financed by local taxes. In general we can conclude that the new changes exterminated any attempt to build democracy in the regional policy, which started during the 1990s.

#### ELECTORAL SYSTEM

The main characteristics of the democratic state are: representation of people, separation of power and political competition. The Country which presents itself as a democratic state, is supposed to have at least two parties, which have equal chances to win the elections. In Russia, political parties exist from 1993. In 1999 the favorite for the win was the party led by the Mayor of Moscow, U. Luzhkov. The right wing (SPS – Union of Right power) did not have enough supporters, because in general they were blamed for the default of 1998. In that period a new party appeared - “Edinstvo” (Union). This party would become the president's party in a very short period of time and up until now it has the vast majority in the elections.

But in its first election the party took only 24,3%, which was not enough for the government. Kremlin made two very strong moves in order to gain total majority: compromise with the communistic party (which has a very strong percentage in the elections) and to unite with Luzhkov's party. That is how “United Russia” (Edinaya Rossiya) was created. From that time Kremlin was totally controlling the parliament.

From the year 2000, the Russian electoral system sustained a number of changes. The First period of changes was before 2004, when the government was still trying to make just small changes due to their effort to build control over the parties. The second wave came when president Putin changed the electoral system to strictly proportional. The main result of these changes was that executive power was subordinated to the state and the president himself. One example of that is the proposal of the president of the law against demonstrations, which was strongly supported by the Parliament in 2004. In the end, the president decided to cancel the proposal, only to bring it back later until it was officially adopted on 9<sup>th</sup> June, 2012.

We should mention though, that in the beginning of the 2000s we cannot declare that Russia did not have freedom of elections. From 2003 though, the main question in the government was the question of “heritage of the throne”. In 2005 E. Yasin in his book “Will democracy get accustomed in Russia”<sup>5</sup> mentioned three possible ways for V.Putin to stay in power:

1. V.Putin will become a president for the third time and the Constitution rule will be violated.
2. A different president will be elected, who is a close partner with V. Putin, probably his former colleague from the secret services.
3. Change of constitution and Russia becomes a Parliament republic, where the leader is prime minister.

As we can see today, E. Yasin was right in the second perspective.

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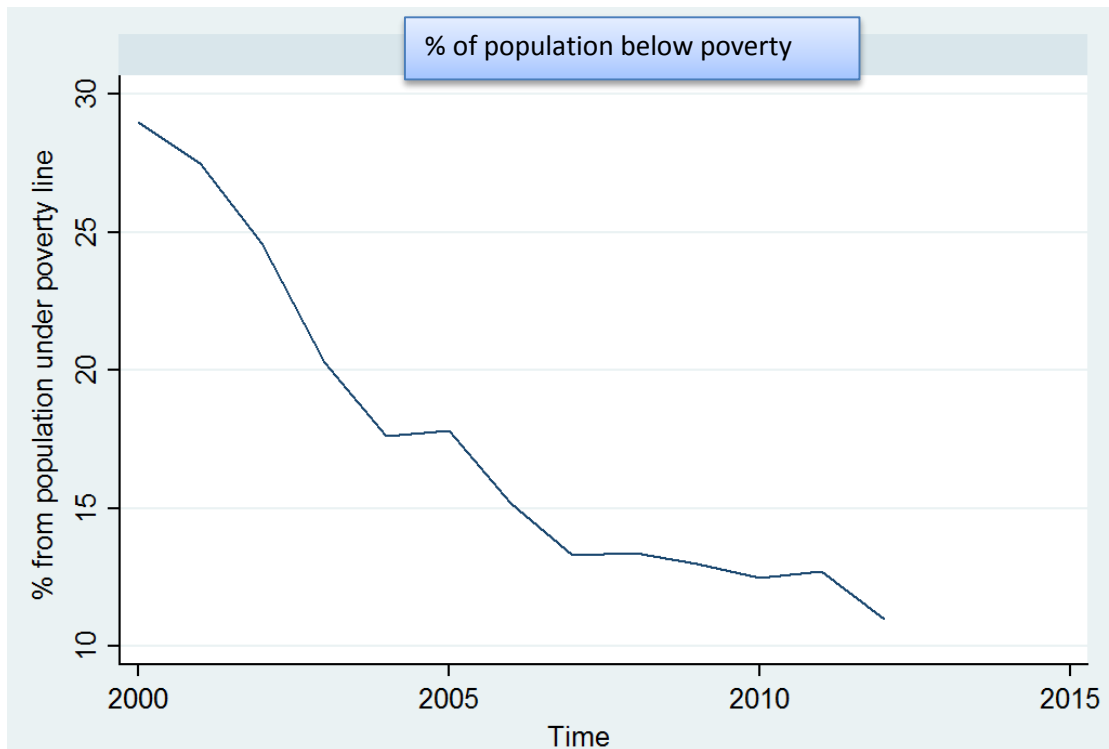
5Y.Yasin, “Will democracy get accustomed in Russia”, “New publishing house”, Moscow, 2006

## 4. GREF'S PROGRAM

In 1999 in Moscow, the Center for Strategic Development was created under the direction of G. Gref and its goal was to create a strategic plan of development for Russia till 2010, which was unofficially called “Gref's program”. The main postulate of the plan was to ensure the macroeconomic stability in basic indicators, which should be followed by modernization. “Modernization”, as it was meant in the new strategy, was a consistent systematic financial development, especially of institutions. Simultaneously with that process, it was planned to ensure technological modernization. This type of modernization was supposed to have immediate effect on the productivity. In order to gain the correct level of modernization, the share of innovations in the market needed to reach 10-15% of GDP.

The strategy had two parts: economic modernization and modernization of the power in state, particularly judicial reform. Considering this, Y. Yasin mentions, that during the first years of the realization process of the strategy the second part of the plan was not a priority.

On the way to realization, the program encounters some difficulties: poverty and technological lag. For all these years after the fall of the USSR we can see the cycle in the question of poverty – sharp fall after economic crises and slow improvement afterward. To speak by numbers, 13% of the population is below poverty line (see Figure 1), but unofficial statistics mention 16%. If we follow the history, the level of living standards is strongly correlated with inflation. In the times of inflation booms (1992, 1994, 1998) – the budget deficit and devaluation of the Ruble would cause the real income of the population to decrease and inequality to jump up. Talking about the technological progress – this is the one of the main problems in Russia today. It's important to mention, that Russia has tremendous potential in technological development, at least due to natural resources. The danger is not only not-development, but losing the existing technology areas. The reasons for that is lack of accumulated capital and low level of investments among others. In the last few years the Russian government made steps in order to gain competitiveness in the market of innovations. But hardly can it be called successful. Other aspects, which made the Strategic program much slower than it was expected was the non-profit sector, shadow economy and the weak banking system.



**Figure 1:** Percentage of population below the poverty line

Source of data: [www.gks.ru](http://www.gks.ru) Software: STATA

#### NON-MARKET SECTOR

The non-market sector of the economy is such a sector, which combines ineffective activities on the market, such as companies with negative balance and other unprofitable economic activities, which was kept from the USSR economy. The main problem for the Russian economy is that such business through years created surviving mechanisms, such as hidden subsidies, barter trades and some types of tax evasion. Usually, the reason for the existence of such companies is private interests of particular groups of people. As a result, the non-market sector creates huge obstacles for economic development of other sectors due to the unnecessary use of resources for its activities. Nowadays the share of unprofitable businesses in Russia fluctuates between 28-30% (with an almost 10% decrease compared to year 2004).

There are two points of view in that subject. The first group of economists believes that the non-market sector does not deserve much attention anymore, due to the obvious improvement in this area during the last decade. The best parameter of that change is the sharp decrease in barter trade during the 2000s. But there is a different group of economists which believe that

in reality, old mechanisms were just replaced by other mechanisms, and the situation is still dangerous for the economic development. The main instrument which is used is hidden subsidies, mainly due to the lowered electricity or gas prices, low transportation costs and so on. In addition to that, due to the low level of openness of the books, there is still a high level of hidden barter transactions. According to E.Yasin, both points of view make sense. The real problem is that the non-market sector captures around 20% of labor force, which could be a problem in a situation of total elimination of it from the market.

Going back to the Gref's program, cleaning the economy from non-market activities was one of the goals. Here again we meet with the usual problem in Russian economy – we are ready to make huge economic decisions, but we forget what we are going to do with the employment level after that. As an example of such a decision could be the elimination of the huge open-air market in Moscow - Cherkizovsky Market – in June 29, 2009. This elimination was proposed as a fight with illegal market activities, which is partly true, because the market was like a small town with all possible products, prices and services offered. This market was one of the biggest wholesale suppliers around the country. Elimination of the market caused 100,000 people to lose their income (including the income of my family).

Obviously, the problem with the non-market sector should be solved, but it cannot be done in one day. The renewal of technology, production quality, financing should be made – which is a long and slow process of the restructuring, which needs a strong reliable banking system.

#### SHADOW ECONOMY

Shadow economy is another leftover from the USSR economy and is closely connected with non-market economy. In addition to that, shadow economy is closely correlated with government intervention in the economy and bureaucracy. According to statistics, shadow economy covers around 20% of the GDP. It is important to remember, that shadow economy is so historically absorbed in Russian mind, that in my opinion it is probably already part of the mentality. That is why we mention here some type of institutional trap and to eliminate shadow activities in the economy is almost impossible, even though it is one of the strongest forces preventing healthy economic development.

Considering the last events in the economy, one piece of evidence of the level of the shadow economy in Russia is the proposal of the tax for deposits in Cyprus in March 2013. Around 30% of deposits in Cyprus were in the accounts owned by Russians. In addition to

that, Cyprus was used for the transfers of huge financial transactions through the years. It is not a secret, that from the 1990s Cyprus was the biggest off-shore zone used by Russian investors. The situation in March caused a panic and shock in the Russian investor's society. There even was a rumor, that some Russian politicians had amounts reaching 4-5 billion Euro in their accounts in Cyprus. The overreaction of Russian economists and politicians only proves the level of Shadow economy in the country.

#### WEAK BANKING SYSTEM

The aggregate capital of all Russian banks nowadays is around \$6 billion, which is not even comparable with the levels of the First 100 banks in the world. The interbank market is really weak and increases in the bank resources lead only to the increase in bank accounts, not to increase in credit level. Our previous topics, shadow economy and non-market economy, are very important causes for ineffectiveness of the bank system. Interconnection between the banks and the shadow sector has two impacts: it works against foreign investments (for the reason of absence of reliability) and creates a bad reputation for the Russian banks in general (due to financing of shadow sector and non-market economy).

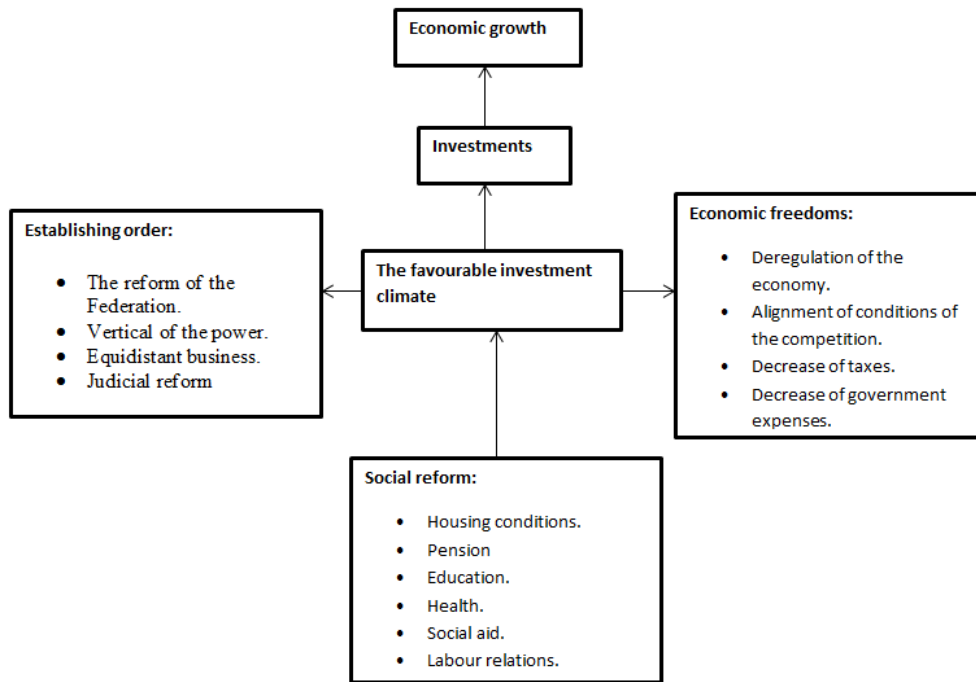
Absence of a reliable banking system makes it impossible to develop a strong financial market and, as a result, makes it impossible to create a positive investment climate in Russia. As the logic continues, with the absence of financial markets the government will take their place and continues with subsidies of the corporation. And it is just a vicious cycle.

According to the president of the Center for Strategic Development M. Dmitriev<sup>6</sup>, for the year 2010 we can say that the program is fulfilled for just 40%. From all the goals that were set (see Figure 2) the most successful was the reform in budget and fiscal sector. Flat rate on income tax (13%) was adopted in 2002. As a result, tax income has increased on 20%. Some changes were made in levying excise taxes on alcohol production. Almost zero success, according to M. Dmitriev, was seen in Custom policy (tariffs and quotas).

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<sup>6</sup>www.opec.ru – Conference of M.Dmitriev ( in Russian language)





**Figure 2:** Gref's program

Source: "New era - old alarms", Y.Yasin, "New publishing house", Moscow, 2004.

There was an improvement in the educational system – Uniform state exam was accepted (even-though it did not have much support from the population). In my personal opinion, it has just changed the way of corruption flows – before it was to universities, now it starts straight from schools. Some changes were made in the pension area: some level of PAYG system was reached (24% from the salary). But unfortunately there was no improvement in the creation of a system of Investment companies and pension funds in order to support pensioners. Considering the social security system, almost nothing was done in that area.

Generally said, from all the goals only three were reached rather efficiently: increased standard of living, GDP growth and paying capacity of government. The main goal, competitiveness of the economy in the world perspective, was not reached.

## **5. GOVERNMENT VS. BUSINESS**

### OLIGARCHIC CAPITALISM

The biggest problem in the relationships between Russian businesses and the government is the level of bureaucracy. It is a strong hierarchy which in a sense gives absolute executive power to the government. But each country has it as insurance for the government. The Problem starts when the absence of social control and bureaucratic interests become the interests of the country. From the one side, the desire of the government to ascertain its power and be respected in the world map is encouraging. From the other side, it brought Russia autocracy in its pure form.

Market economy and private property are basic factors of democratic development. In Russia, at the beginning of the 1990s both these factors were at zero level. And it is very logical, that in such a country, the movement in the economy was started by “big businessmen” or oligarchs. It is obvious, that in the beginning their way of making business was mostly illegal and corrupted. But it is probably a normal step in transformation economy, especially in an export oriented country with such a vast number of natural resources. The situation is supposed to change step-by-step and new institutions are supposed to be created, in order to make the framework profitable and for these big corporations. The time was supposed to come, when the businesses would become a guaranty for economic and social freedom in the country. But this did not happen in Russia.

The First big corporations, which were created in the beginning of 1990s, were totally supporting the new reform strategy of the government. But surely, the main goal was to maximize their profit and capital. The rule of decreasing returns of capital will apply, when the first capital would be accumulated and the market mechanisms would start to rule the economy – there would be a time for investments. That is what was expected to happen. In reality it was different.

Russian businesses were born from nothing. There were a number of conditions, which were used by small group of people, later being called “oligarchs”: economic freedom after the fall of the USSR, weak government, and old habit of survival by using shadow economy. The speed of development of these corporations could be explained by the fear of losing these freedoms. The Businesses were built on the disruptions of socialistic economy, and only some of them could sustain competitiveness in a world-wide level: oil, gas, metallurgy,

chemistry. Ineffective behaviors in the environment of chaos were one of the reasons of the financial crisis of 1998. In 1992 15.2% of corporations in Russia were officially unprofitable; in 1998 the percentage rose to 53, 8% whereas in 2004 the percentage dropped 39.5%. Just to mention - today (year 2012) it was officially measured at 31%. This could either mean that the Russian businesses were inefficient in general, or that a big part of their profits was hidden for tax evasion reasons. There was number of ways to do that: hidden cash payments, offshore accounts etc... What is Important to mention here, is that after the default in 1998, the businessmen and population in general stopped trusting banks and financial institutions. More to say, statistics show that the third part of labor force was working in the shadow sector. In general, 30-40% of small business was in the shadow, medium corporations were more opened, but still a big part of the profit was hidden. However, the government focused its attention particularly on the big corporations and holdings.

#### CONFLICT

The period from 2000 to 2003 was relatively quiet in the matter of the conflict between the government and business sphere. It is important to mention here, that exactly at that time Russian businesses started to “clean” their business activities – respecting the law, opening financial statements and creating a good reputation in the world markets, became trends for Russian companies. According to E. Yasin<sup>7</sup>, if the relationship between business and government would continue like that, the Russian economy would grow significantly. Export income from natural resources would transform in increase in demand on the inside market, increase in banks’ capital and saving rate and a sharp increase in investments. The share of money supply (M2) in GDP till 2003 increased till 25% and it was expected to increase to 45%. In order to compare with other transformation economics, in Poland this indicator was 38 % and in the in Czech Republic – 60%. In addition to that, Russia had a favorable environment due to high oil prices and high increase in money flow into the country. If we consider 6-10% inflation, this percentage could ensure economic stimulus for the next 3-4 years. But in 2003 the relationship between the government and businesses took an opposite direction.

In the beginning of his presidency, V. Putin proclaimed the main goals: strengthening the government institutions, limitation of bureaucracy in regions, and the suppression of

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7Y.Yasin, “Will democracy get accustomed in Russia”, “New publishing house”, Moscow, 2006

separatism. At that time it seemed like the right direction to take. But at once the first step was very controversial – defeat of the media Chanel NTV (governed by V. Gusinsky) and war against B. Berezovsky. But at that time it looked like pressing the media, not the business itself. The next step was accusing V. Potanin for creating an estimated state loss of \$170 million, after the privatization of Norilsk Nickel. After that, the business sphere understood that the former way of interaction with the government (lobbyist, corruption) will not be possible anymore. In order to protect their interests, oligarchs and owners of big corporations created an organization called “The Russian Union of Industrialists and entrepreneurs” (RSPP). A lot of initiatives of this organization influenced government decisions in such areas as bank reforms, fiscal policy, energy market and the WTO, to name a few. In one of the meetings of that organization with the President V.Putin M. Khodorkovsky offered a presentation about the corruption level in Russia, which had initiated a war between the government and the oligarchs. The first casualty of this war was M. Khodorkovsky’s company “UKOS”, which was taken away by the government and M. Khodorkovsky himself was arrested in October 25<sup>th</sup>, 2003. Arrest of M. Khodorkovsky was a perfectly planned performance in order to scare away the remaining oligarchs and showing to the ordinary people, that “finally” all this high-income class got their punishment. In reality, from 2003 government has obtained total control over the oil industry in the country. M. Khodorkovsky in his turn became “The prisoner N1” – first political prisoner in modern Russia.

December 20<sup>th</sup>, 2013 M. Khodorskovsky was released from prison and sent away from the country.

#### BUSINESS ACTIVITY

The main achievement of the reforms of the transformation period in the 1990s was market economy. Although, we cannot call it effective yet. The choice of the government to get rid of oligarchic capitalism and move to bureaucracy worsened the process of market economy creation in Russia. By that I don't mean, that oligarchic capitalism is a correct way to be. But it was a necessary step in order to create market economy in Russia.

The last twenty years of Russian economic history could be separated in two phases. The First half was just a transformation period with all its consequences. The second half was a modernization period, supported by capital inflows and investment revival. But along with that there are still activities, which slow the process of modernization. In order to gain competitiveness, a lot of corporations were kept alive by huge subsidies from government

and excessive tariffs on import. As we know from antitrust concepts, these activities do not have actual results for the competitiveness of the country. The problem of competitiveness should have been solved by Russian businesses. But the government chose the opposite direction and started pressing big corporations, which caused the logical answer on that from business sphere - lowering the levels of investments.

The Economic growth of the first years of Putin's presidency was the main argument in favor of the new president. However, we cannot say for sure if it was his achievement. In general, the public opinion was that the Oligarchs and the big corporations plundered the country and led economy to the crisis of 1998. Putin, however, brought the country to a stable road. In reality, the economic growth was a result of the reforms of the 1990s. The Devaluation of the Ruble and the sharp increase of oil prices led to an increase in money supply and productivity. Businesses finally had ground to perform.

I will use the definition of "natural business activity", as it was used by Y. Yasin. It means stable demand on the production, supported by stable positive interest rate on deposits. Inflation should not exceed 2-3%. In Russia, business activity sharply decreased after the government started activity against businesses in 2003. It was a period of increase in the oil prices and the country's economy was full of liquidity. Still interest rates on deposits were negative and the level of saving was only around 18-20%. GDP growth in 2004 was 6.8% in comparison to 7.3% in 2003 (see Figure 3). Investments fell. Capital outflow increased by half. Money multiplier increased from 2.28 January 2003 to 2.60 January 2005, i.e. banks needed to find placement for additional money resources. Banks did not do it properly, which increased risks of assets. As a result, the country was supporting artificial business activity, which was leading the economy straight to the crisis. We should mention that Russia survived the first wave of crisis due to financial reserves. Generally, until 2008, Russia had a GDP growth of around 6-7%. Around 2% of that growth was due to increase in labor force, other 5% due to productivity increase. During the crisis, the labor force almost stagnated and it is expected to decrease. So the main power should be concentrated in keeping the productivity growth (which is complicated, considering that the industrial production is not developed enough)<sup>8</sup> or increase of the income from the oil export. According to A. Belousov<sup>9</sup>, the GDP growth is losing around 2% due to lowering of exports and 3% due to

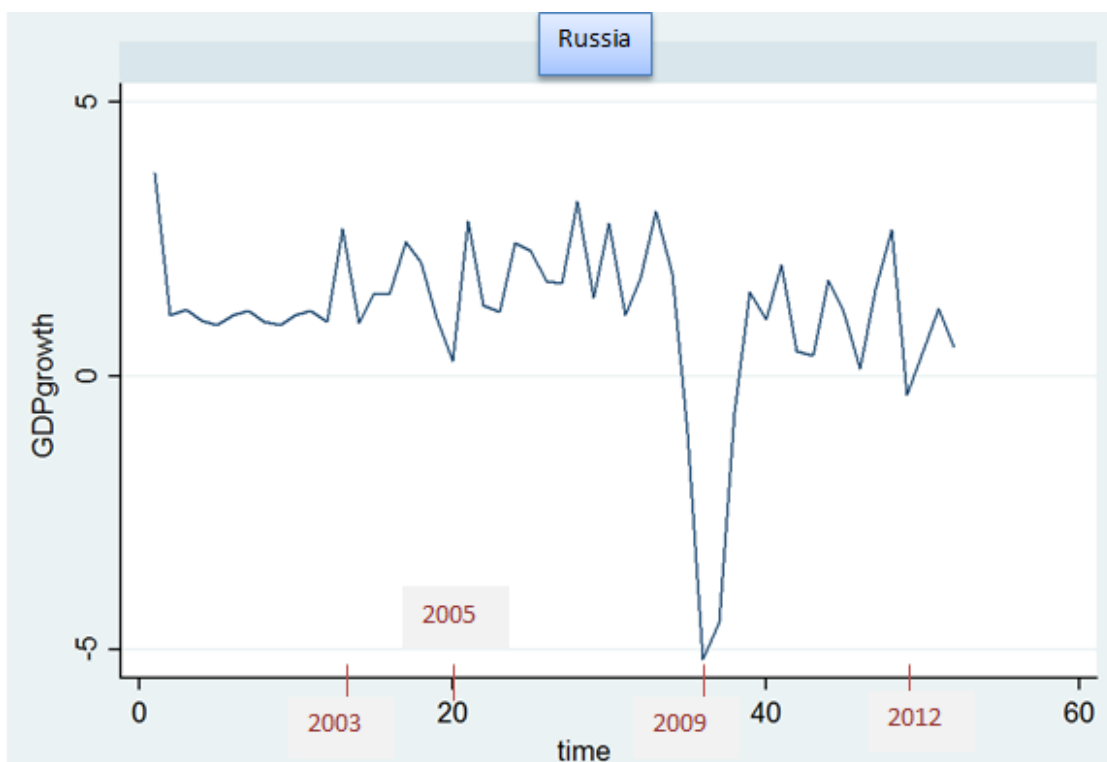
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<sup>8</sup> See Quantitative analysis

<sup>9</sup>A. Belousov – Minister of the Economic development in Russian federation.

decreasing the consumption growth. In addition to that, next year a sharp decrease in investments is expected.

According to Y. Yasin<sup>10</sup>, the only possible mechanism to save the economy is the institutional reform and strengthening business sphere. Big corporations should be in private hands and the level of competition inside the country should be reached. It will lead to innovations, industrial development, and possible limitation of dependence from natural resources export and growth of the economy in general.



**Figure 3:** GDP growth for Russian Federation

Source of data: [www.hse.ru](http://www.hse.ru) Software: STATA

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<sup>10</sup>Y. Yasin, “Scenario for the Russian development in the long-term perspective”, Liberal Russia, Moscow, 2011

## 6. RUSSIA AND THE WORLD

In his book “New era - old alarms”<sup>11</sup> Y.Yasin uses a comparison of Russia with the Dinosaur, which during USSR period was effective due to small specialization, mass production, economies of scale and was self-fulfilling somehow. After the fall of the USSR the Dinosaur died, but we still kept its ambitiousness. In the 90s, a huge amount of resources were spent just to keep this “dinosaur machine” alive and creating the visibility of enormous power and strength, which was just an illusion. As a result, the country did not use the advantages of the market economy and just went back in time due to the lack of energy and economical productivity.

Russia is the country with a huge territory and very low developed infrastructure. Due to high transportation costs and disproportion in the economic development, structural reforms need very heavy investments. But, again due to the undeveloped economy, all main money flows skip us, as they see us as unattractive field. In order to get a higher position the Russian government uses “big guns” as natural resources, instead of solving the “simple” problems as living standards and inequality.

Another interesting aspect is the protection of home production. It is a very good course, when the country actually produces. In our case it looks like performance more than real production<sup>12</sup>. So the main goal should be to integrate to the World economy, not to support your own undeveloped production. The fall of the USSR and the introduction to the Market economy is just the ticket to participate in the World economy, not the certificate for the power. This huge territory has enormous potential for the production and export, but till now we rely on the resources and the weapons.

In order to gain competitiveness in the world market, Russia needs to build relationships with other countries. In contradiction to that, we try to prove our power and superiority. The main goals should be integration and partnership in international trade.

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<sup>11</sup> Y.Yasin, “New era - old alarms”, “New publishing house”, Moscow, 2004.

<sup>12</sup> See Quantitative analysis

## 7. INVESTMENT CLIMATE

The main parameters to evaluate the investment climate in the country are inflow/outflow of the capital, inflation, interest rate and saving rate. In addition to that, there are other parameters for consideration, such as natural resources, ecology, quality of labor force, political stability, macroeconomic stability, legislation system, property rights, quality of banking system and many others. The generally accepted view is that Russian competitive advantage is natural resources, high education level and high intellectual potential. It does not even make sense to speak about other parameters. It is important to mention that high education does not mean quality labor force in that case. According to Beri<sup>13</sup>, Russia is one of the countries unfavorable for placing factories due to low quality of labor force. Another practical example is that for a Russian citizen to become a doctor in a developed country one needs to apply for the job just after university, with no experience in Russian hospitals (due to low ethics in Russian hospitals). Unfortunate to admit, but that is the correct approach.

To undo the knot of problems in Russia – social, economic and political – we need to have a stable long-term economic growth (at least 4-5% for the next 10 years). This problem could be solved only by the attracting of investments. There are two ways to increase investments: concentration of the resources in the government hands and increase in government investments or attraction of private investments. The second way is more logical for Market economy development.

Unfortunately, for the last decade Russia was not successful in that area. Only for the years of reforms (after financial crisis 1998) according to Fitch IBCA capital outflow was \$136 billion<sup>14</sup>. There was a period just after the reforms, when investment appetite increased (due to high expectations from the reforms), but after that the investment level decreased very quickly again. The situation has worsened after the arrest of “UKOS” owner M.Khodorkovskiy in 2003. It made it obvious that there is no protection of property rights and the world started speaking about state capitalism in Russia.

There are two main parameters of investment decision: profitability and risk. Nowadays, Russia has enormous resources for the highly profitable projects, but the level of risk is overwhelming. In order to invest in a Russian project, the investor is supposed to take into

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<sup>13</sup><http://www.beri.com/>

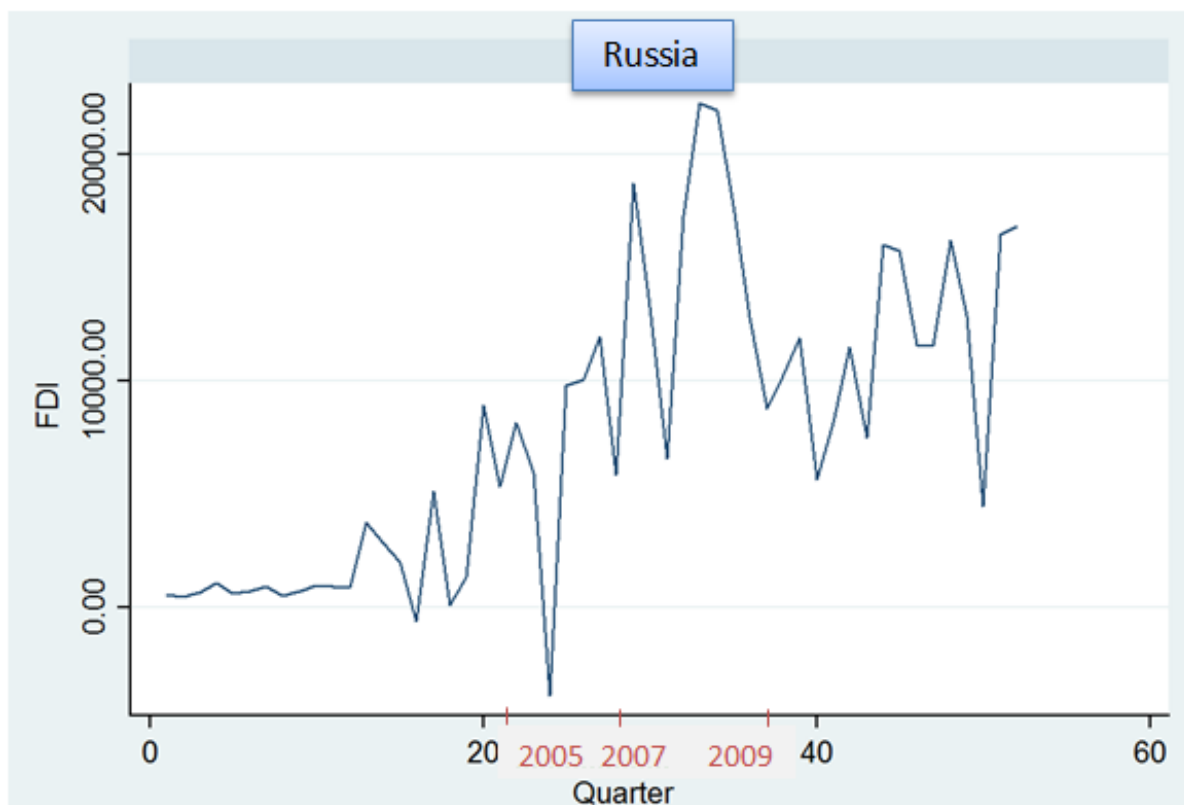
<sup>14</sup><http://www.fitchratings.com/web/en/dynamic/fitch-home.jsp>



account not only high taxes, but the level of corruption and in general the character of Russian business (shadow economy, unnecessary subsidies for home producers etc.).

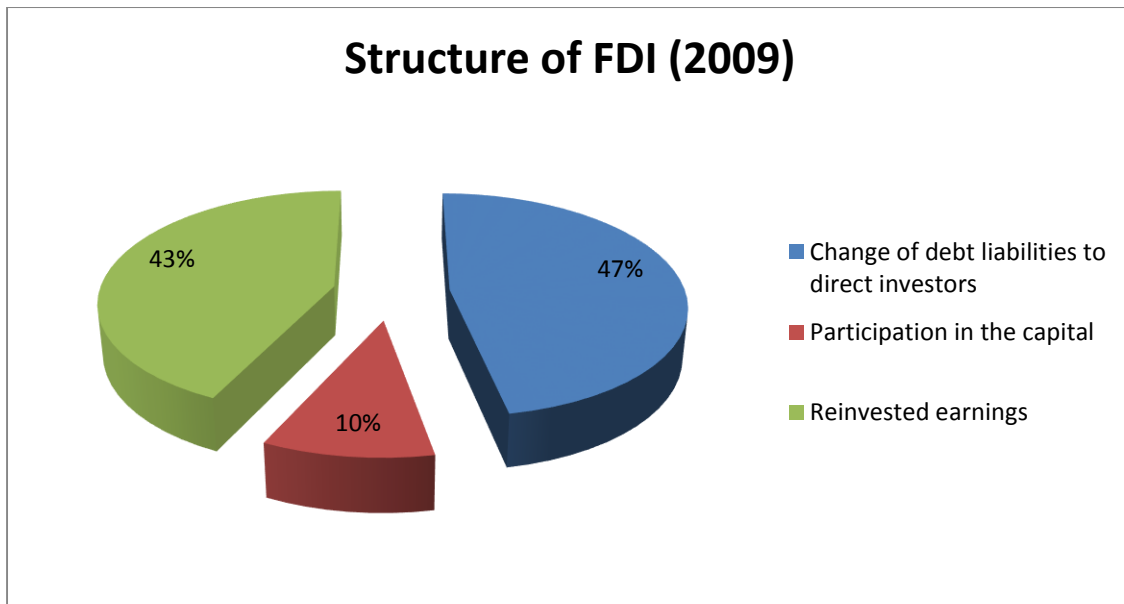
#### BASIC STATISTICS

From 1992 to 2005 Russia had relatively low levels of FDI inflow. In 2005 we can see a sharp fall and immediate increase in the inflow level, which is followed by a 50% decrease in 2008 due to the Global financial crisis (see Figure 4). The structure of FDI for the year 2009 is shown in Figure 5. Figure 6 shows the percentage share of industries in the investments. As we can see, the biggest share belongs to the manufacture industry. Figure 7 shows factors which are restricting the healthy development of the business according to the corporations. Generally said, 2009 started the period of deterioration, with the exception of the Tax administration area.



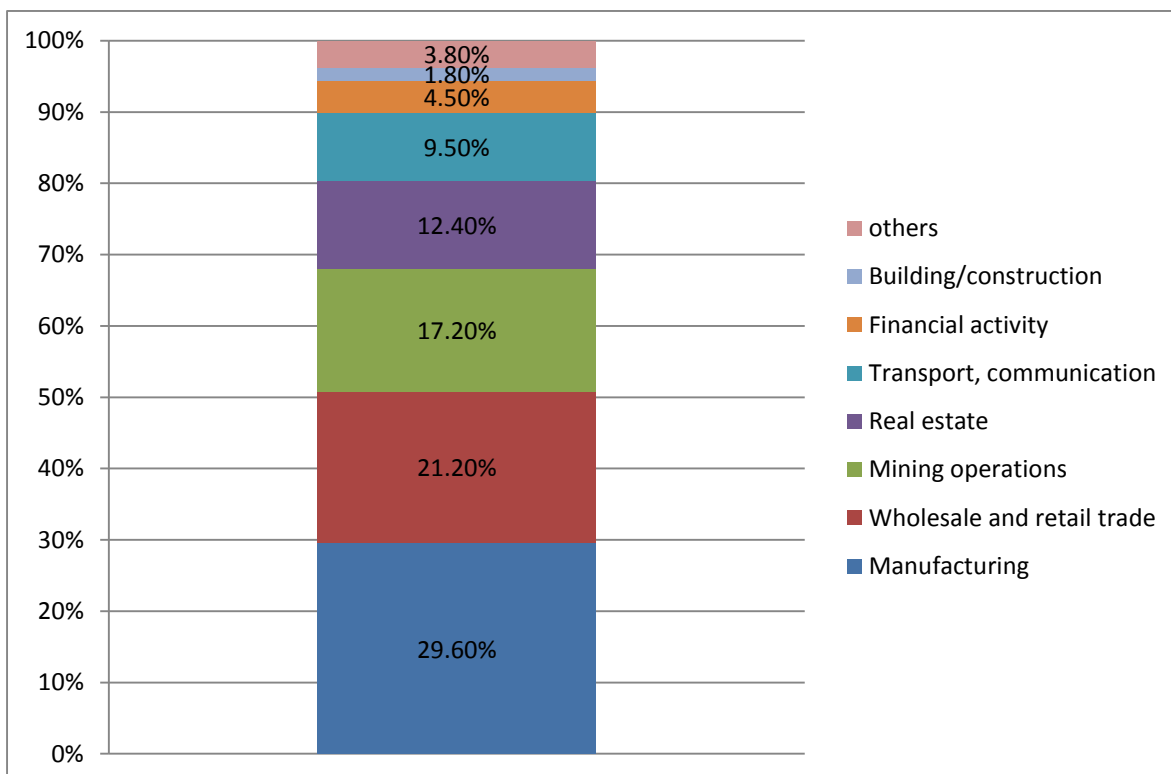
**Figure 4:** FDI for Russian Federation

Source of data: [www.hse.ru](http://www.hse.ru) Software: STATA



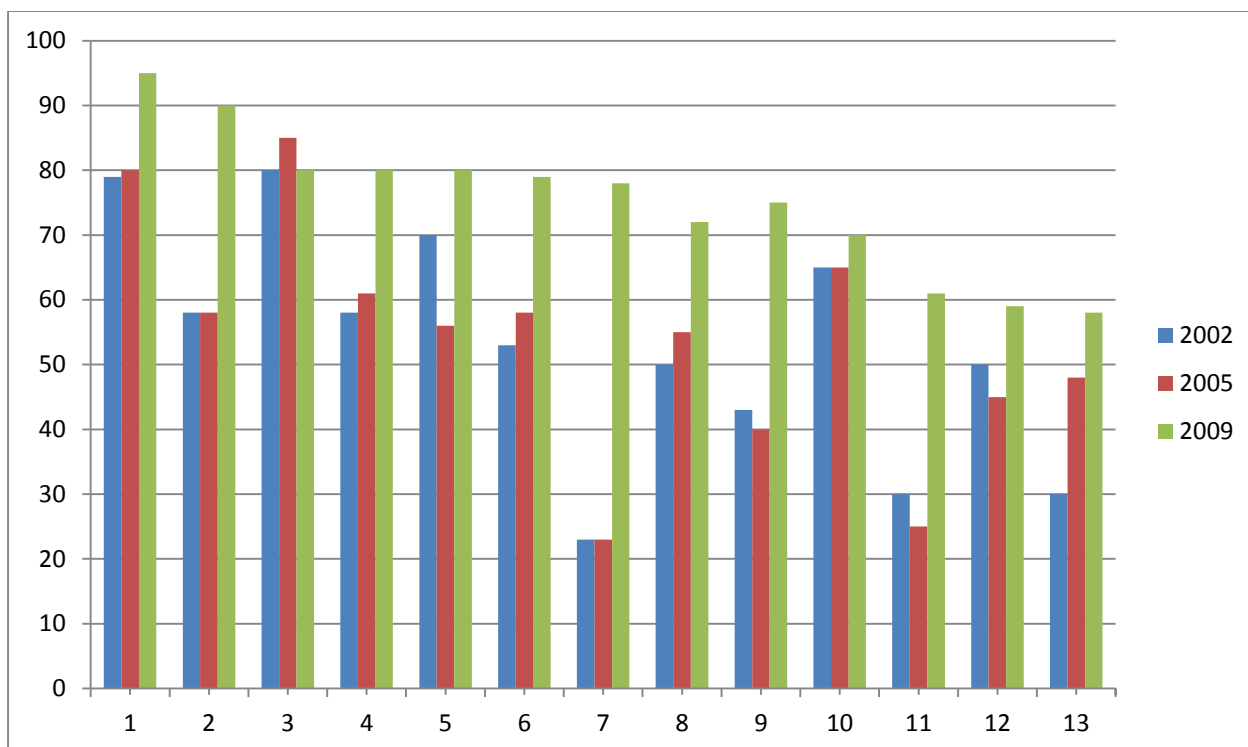
**Figure 5:** Structure of FDI 2009

Source of data: <http://www.cbr.ru/> Software: Microsoft Excel



**Figure 6:** Accumulated Foreign Investment (2009)

Source of data: <http://www.gks.ru/> Software: Microsoft Excel



**Figure 7:** The main restrictions for the development of business, % of corporations

Source of data: <http://www.nes.ru/> Software: Microsoft Excel

1. Tax rate
2. Educated work force
3. Tax administration
4. Corruption
5. Access to financing
6. Crime level
7. Electricity
8. Functioning of the judicial system
9. Access to the land
10. Licensing
11. Transport
12. Custom service
13. Labor regulations

For the period from 2007 till 2011 the main investors in Russian economy were USA (16%), European union (44%). As for separated countries, Germany has the first place among European countries to invest in Russia.

## PROPERTY RIGHTS

An important aspect of the unwillingness to invest in Russia is the violation of intellectual property rights and falsification of products. For example, around 80% of software used in the offices is a pirate version. I cannot say for now, but five years ago you could easily buy the Microsoft Office Suite for just 10 Dollars in the subway. Protection of property rights is a highly undeveloped subject in Russia today. The same we can say about enforcement of contracts. This concept, which is a necessary part of a functioning market economy, is not fully adopted in Russia. Obviously, it ruins the reputation of Russian businesses and antagonizes foreign investors.

## “VIRTUAL ECONOMY”

As I already mentioned before, a big part of Russia business uses the so called “virtual economy”<sup>15</sup> – economy of barter and underpayment. A huge part of Russian corporations is in debt and in reality meets the bankruptcy level. But due to subsidies, barter trade and other government interventions, these companies still survive and produce on the market. In other words, investing in a Russian corporation is like playing the lottery in the end. That is another reason not to invest. Needless to say, that one of the main antagonizing powers for making investments in Russia is the level of corruption. Even though western media overstates the level of corruption in Russian business, still, in reality, the level is far from the ideal.

## TAX BURDEN

There is a common view that one of the reasons for unwillingness to invest in Russia is excessive tax burden. In reality, the tax burden is not much higher than in other countries. The real problem is the definition of taxable base. In other words, there is a lack of deductions, for example, for training the staff, advertisement, charity etc. In addition to that, incompleteness and inconsistency of the fiscal policy in general makes it difficult to avoid illegal activities from the economic agents, as from the government as well. Simply put, the Russian fiscal structure is not ready to operate correctly with a strong inflow of investments.

## TRADE POLICY

Nowadays trade policy in Russia consists of licensing on capital import and free capital export. It causes mass outflow of capital, especially in turbulent time, which does not benefit

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<sup>15</sup>Clifford G. Gaddy, Barry William Ickes, “Russia’s Virtual Economy”, Brookings Institution Press, 2002

the investments in any way. Another important aspect is that Russia needs to increase its export of products. Due to the lack of quality of home production, Russia cannot concentrate on the western market, but there are still countries from the Commonwealth of Independent States (CIS). An important step in that area was made in 2001; when the Russian Federation issued the law about 0% VAT for exporting the products to the CIS, with the exception of the Republic of Belarus. Foreign investors, in their turn, could help to restore export to those regions.

#### JOINING THE WTO

After 18 years of struggling, in the summer of 2012, Russia finally joined WTO. It is expected, that membership in the WTO will help to improve GDP growth, increase the demand for labour, increase the consumer income, and other main indicators.

It is expected, that a decrease in tariffs will lead to a decrease in prices. With an expected increase in real wages (0.5% average growth is expected), the price change should lead to an increase in consumption. Another expectation is a sharp increase of incomes in export-oriented sectors.

The Agricultural sector was named as the most vulnerable sector after the ascension. According to some economists, joining the WTO could destroy this sector. Historically, having such a huge territory, Russia was not able to manage its agricultural sector. Nowadays, there is a constant attempt to decrease the consumer prices for agricultural production. But, due to the lack of technology, costs are not going to be decreased any time soon. In the end, the agricultural sector is mostly in debts (which are much higher, than the revenue from the production). Eventually, this problem has always been solved by the subsidies from the government. That could not be possible after joining the WTO. But there is an optimistic view. According to another group of economists, the government has other tools than subsidies to support the agricultural sector, so joining the WTO will not cause much harm.

Another possible danger is the increase in unemployment rate. If the Russian regional business will not stand the competitiveness, some regions will lose their only factories and sources of employment.

As it usually happens with Russia entering some international organization, the first goal is to circumvent some rules. One of the examples was with the motor-car industry. According to the rules, till 2019 the custom tariff for car import should decrease from 30% to 15%. In September 2012 the recycling duty on the imported cars was applied in Russia. The formal explanation given for this measure was the protection of the environment, but this duty only applies on imported cars. And this is just one example of the many.

Either way, now it is too early to speak about the results of joining the WTO. All the advantages and disadvantages of such a decision can be valued only after some years. Coming back to the investment climate, obviously the membership will cause an increase of foreign investment in the country. But it does not mean that all the problems mentioned above will not matter anymore. On the other way around, it will matter today even more, because the harm from imperfections of the economy and administrative procedures will be much more obvious.

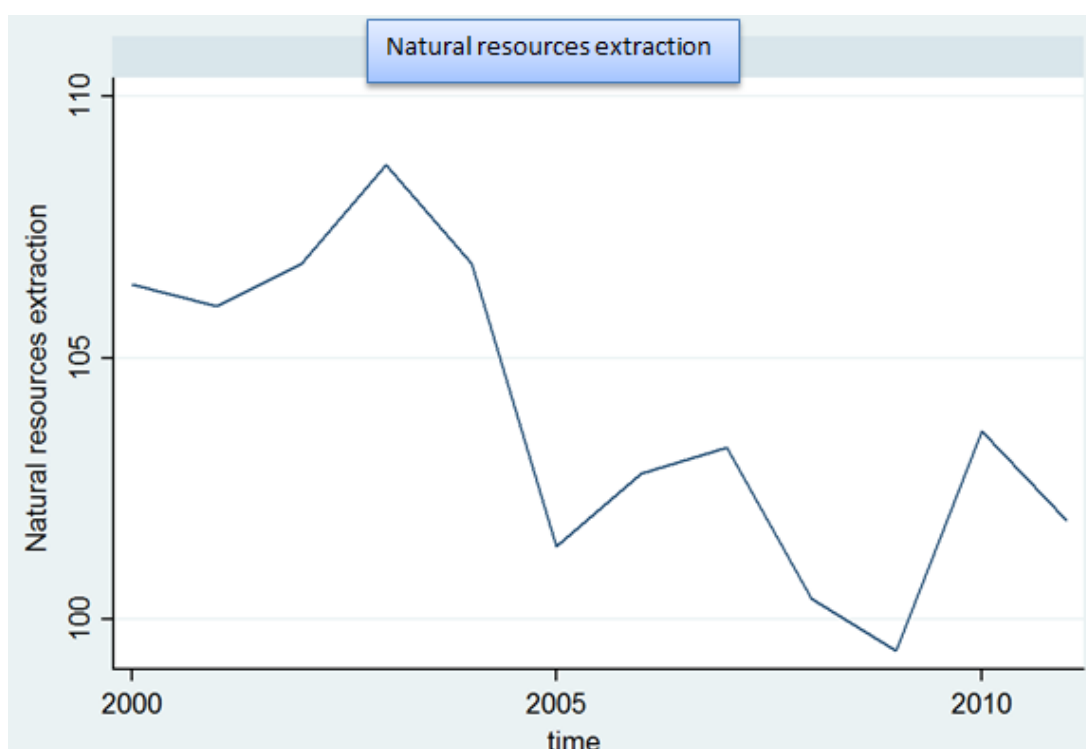
#### POSSIBLE MEASURES TO IMPROVE THE INVESTMENT CLIMATE

1. Improvement of the administrative procedures (building factories according to western standards, custom administration, reduction of sector barriers, improvement of security system).
2. Optimization of migration regime.
  - a. The practice of the submission of declarations in electronic form, to establish a ban on refusal to accept the Declaration.
  - b. Simplification of the procedure of temporary import of high-tech equipment.
  - c. Elimination of the requirements for confirmation of the customs value of the export of goods, in respect of which the customs duty is not set.
3. Decrease of the role of government.
4. Improvement of infrastructure.
5. Improvement of labour administration.
  - a. Preferential regime for highly qualified specialists: mutual recognition of medical certificates between countries, simplification of rules for the recognition of academic degrees and diplomas issued by foreign educational institutions.
  - b. Reduction of terms for the issuance of work permits and visas, increase of their term of validity up to 3 years in a relevant contract with the employer.

6. Optimization of judicial system.
7. Increase of the investment image.
8. Reduction of terms of realization of investment projects.
  - a. The transfer of functions on the formation of land plots, organization and execution of trades on their sale, as well as the submission of the land without a tender to the special agents.
  - b. Simplification of the requirements to the documents of territorial planning.
  - c. Reduction of terms of carrying out state expertise of the project.
  - d. Establishment of liability for unjustified refusal to issue permits for the construction and object exploitation.

## 8. OIL DEPENDENCY OF RUSSIAN ECONOMY

In 2011 the Fuel and energy complex produced 49.3% of budget revenues and 20% of GDP. The budget deficit, with the exception of oil incomes, increased up to 13, 7% in the period from 2009-2011. Until 2012, this share dropped till 9, 5%, due to the budget expenses decrease. According to some estimation, until 2014-2015 the export of fuel and energy is expected to decrease for up to 0.5%. From the year 2004, the extraction level of resources is continuously decreasing (see Figure 8). For example, on January 2013 this decrease was estimated on 0, 7% in comparison to the previous year.



**Figure 8:** Natural resources extraction

Source of data: [www.cbr.ru](http://www.cbr.ru) Software: STATA

Today, Russia is one of the largest oil producers. First post-communism peak was in 2007 and followed by 2009 – 10 million bbl. per day. In addition to that, Russia plays a significant role in the world export of natural gas and other petrochemical products.



Historically, the export revenues from oil and other energy products had a significant share in the GDP (20-25%) and the total export revenue (65% in 2008). According to Daniel Fjærtøft<sup>16</sup>, “the price of crude oil is a key driving force behind Russia’s trade flow”.

#### OIL DEPENDENCY

Government revenues and expenses are highly dependent on the level of oil export. Until 2009 the share of the fuel and gas sector in the budget revenues was constantly increasing. That increase was supported by the growing oil prices and growing volumes of extraction. In those conditions the economy has experienced constant growth and was followed by growing government expenditures respectively. Due to the sharp improvement in the economy, there was not much effort from the government to find alternative sources of financing the economy. But due to specifics of the Russian demographic structure (big share of old population), imperfections in the social security system and the shadow sector of economy, government expenditures did not have immediate effect and were expected to grow in the future. Such needed growth expenditures make the Russian economy even more volatile to the changes in oil prices, especially to its decrease.

According to D. Fjærtøft, a decrease of oil prices will immediately lead to decrease in energy export, government revenues, prices level; and will lead to the weakening of the Rubble. In addition to that, the investment level will decrease sharply. A decrease in oil prices will also affect unemployment and will cause a decrease in the wages. Weaker Rubble, in its turn, will have its effect on the inflation and interest rates.

As we can see, all the economy of such a huge country is basically dependent from one economic indicator – prices of oil. Due to the lack of effort in searching for alternative sources of financing, and the increasing motivation of western countries to find alternative energy sources, such dependency is dangerous and very unstable. Foreign investments are highly needed in the energy sector to develop new fields, due to the lack of technology development in Russia today. But here we meet with an ethical problem. For the last few years the Russian government is trying to use oil export as a tool for manipulation. That is obviously a correct way if you are trying to become an “owner” of the world. But this is not supposed to be a goal in the first place. Needless to say, that Russia just lucked out in terms of location and resources. But, unfortunately, we do not even have the industry sufficient

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<sup>16</sup>Andreas Benedictow, Daniel Fjærtøft and Ole Løfsnæs, “Oil dependency of the Russian economy: an econometric analysis”, Discussion Papers No. 617, May 2010 Statistics Norway, Research Department

enough to exploit the potential. Cooperation is the key, not an energy war. Having such an enormous amount of resources and not having tools to extract them efficiently should provide the motivation for coordination with other countries in order to attract investments in the sector. In contradiction to that, we prefer to play with prices in order to increase the revenue.

I do not want to have a discussion in my thesis about the problem of private property in the energy sector. This subject truly deserves a whole new analysis. I just want to mention, that the arrest of M.Khodorkovskiy and the extermination of “UKOS” put a final accord for the private property of resources in Russia. Even based on the simple economic logic, killing the competition will lead to stagnation in development.

## 9. QUANTITATIVE ANALYSIS.

### INTRODUCTION

In the previous chapters I gave the overview of the economic situation in modern Russia. If we do not take into consideration political and institutional imperfections, from the economic perspective there is the main highlighted problem – lack of investments and urgent need for them. The second issue is ultimate dependence on the export of oil and gas. And both these problems end up in one intercept – underdeveloped industrial production: there is nowhere to invest, except natural resources industry, and there is almost nothing to export, except natural resources.

In that work I develop two models. First is classic panel data modelling over number of countries to prove the hypothesis, that the main influencing power of GDP growth is Industrial production. The same dataset is used to run the model for “Russia only”. After comparison the results I obtained some controversial conclusion, that for “Russia only” Industrial development indicator still has really high influence for GDP growth, even though our theoretical evidence state opposite. In the next part of the analysis I built other panel data for regions of Russia in order to inspect endogenous powers inside of Industrial production indicator.

### MODEL 1

#### DATA

The main sources of data for the Model 1 are "Main Economic Indicators - complete database" (Copyright OECD reprinted with permission), International Monetary Fund (reprinted with permission), and database of High School of Economics in Moscow<sup>17</sup>.

I used quarterly data for 11 variables for 11 countries (BRICS countries, USA, Germany, United Kingdom, France, Italy, and Norway) for the period from 2000 till 2012 (see Figure 9).

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<sup>17</sup><http://stat.hse.ru/hse/indexn.html>

1	Russia
2	Brazil
3	India
4	China
5	S.Africa
6	USA
7	Germany
8	GB
9	France
10	Italy
11	Norway

The goal of this model is to find the major drivers of GDP among these indicators. The result should point out one main indicator, which influences GDP growth in the group of countries, among which there are emerging economies with the potential and developed strong players.

For the purposes of my analysis I am going to use classic Panel data analysis. Software used – STATA: Data Analysis and Statistic Software.

<b>GDP</b> – growth to previous period
<b>CPI</b> – growth to previous period
<b>Direct investment</b> – million USD
<b>Export</b> – growth to previous period
<b>Import</b> – growth to previous period
<b>Exchange rate</b> – per 1 USD
<b>Long-term interest rate</b> - %
<b>Industrial production</b> – growth to previous period
<b>Production tendency indicator</b> – net %
<b>Business tendency indicator</b> – net %
<b>OECD recession indicator</b> - dummy

**Figure 9:** List of variables

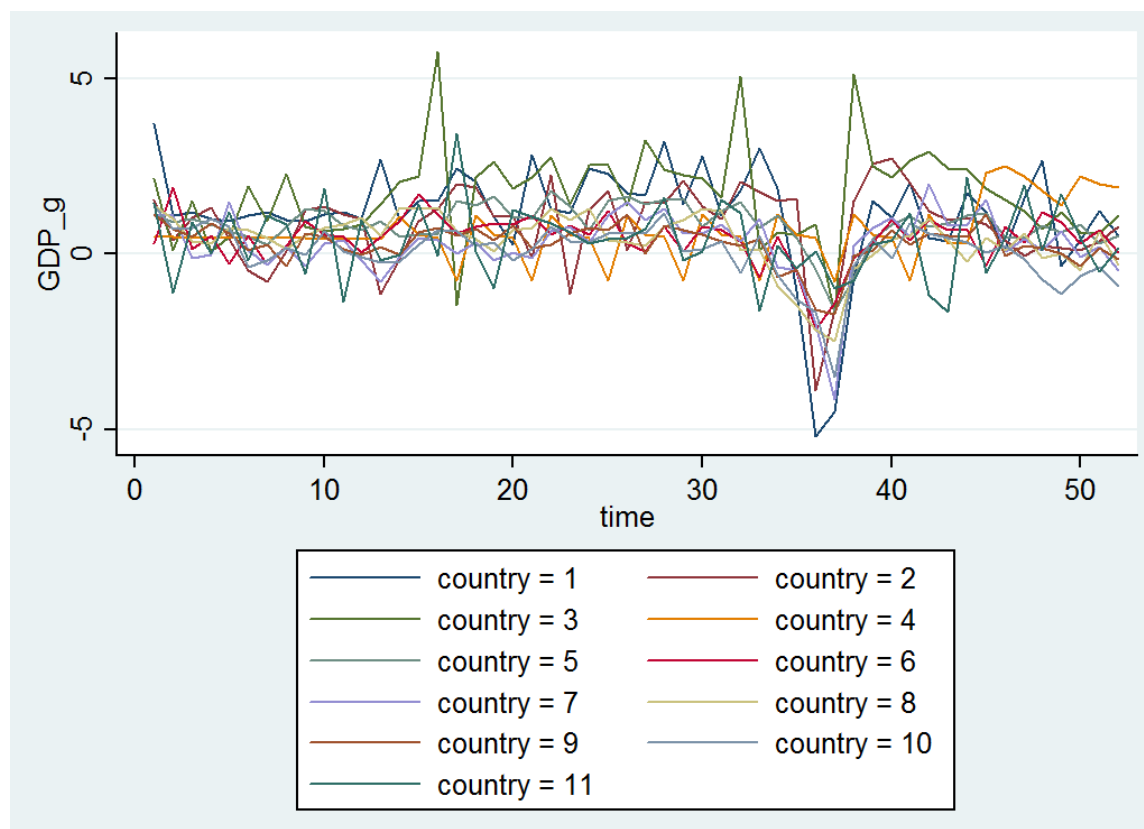
## METHODOLOGY

I follow basic Panel data analysis. The dependent variable is GDP growth and Figure 10 presents GDP growth of all countries in observation through the period of time 2000-2012 (52 quarters).

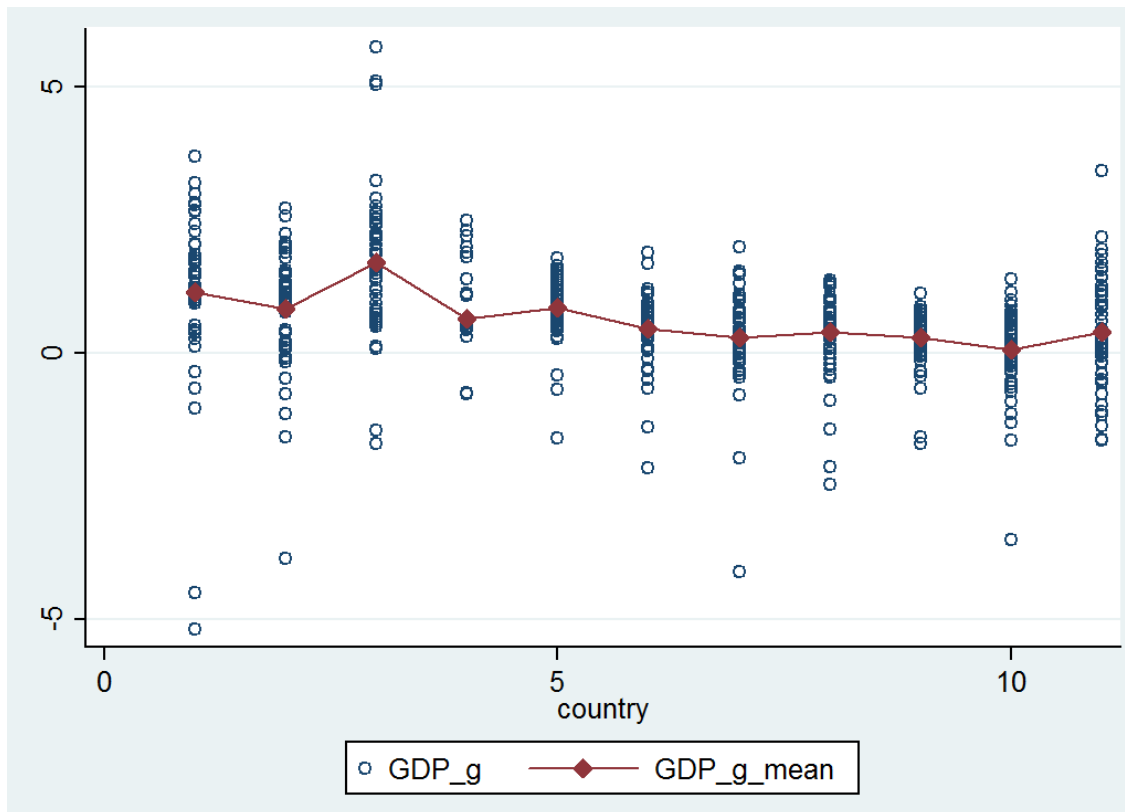
All countries witness sharp fall of GDP growth indicator in around 35-40 quarter, which is consistent with recent Global financial crisis.

Figure 11 illustrate heterogeneity between countries of our analysis (using mean of dependent variable):

Firstly, according to the Panel data analysis steps, i need to choose between Fixed and Random effects. In order to do that, i run Hausman test for the models (see Test 1). Based on the p-value, I reject the null hypothesis of Random effects and choose Fixed effects model.



**Figure 10:** GDP growth



**Figure 11:** Heterogeneity, using mean of dependent variable (GDP growth).

In order to choose suitable model for the analysis, I tried several techniques - I needed to choose between OLS, LSDV (least squares dummy variable model)<sup>18</sup>, Fixed effects and N-entity specific intercepts model (areg command in STATA) (see Test 2).

Due to the fact, that some variables are significant in OLS, but not significant in other regressions, I am just going to keep OLS results in mind for some comments in the interpretation part, but in general LSDV and Specific intercepts models are preferred. In addition to that I am going to keep the variable Import in mind, even though it is not significant (to have the contrary for the export variable).

Even after choosing Fixed effects, i still need to check for compliance with general assumptions. Firstly, I check for the presence of heteroscedasticity. I do it by applying Wald test (xttest3, STATA code). By running Wald test i can conclude, that heteroscedasticity is present. Heteroscedasticity will not cause a problem for concluding the coefficients, but it can

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<sup>18</sup> The least square dummy variable model (LSDV) is a good way to understand fixed effects. The effect of explanatory variables is mediated by the differences across countries. By adding the dummy for each country we are estimating the pure effect of variables (by controlling for the unobserved heterogeneity). Each dummy is absorbing the effects particular to each country.

affect standard errors. To solve this problem model can be adjusted with robust standard errors.

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Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (11) =      1069.94
Prob>chi2 =      0.0000
```

Presence of the autocorrelation can be controlled by applying Wooldridge test (xtserial, STATA code). This test is normally applied for long Panels, which i have due to the use of quarters.

```
Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
      F( 1,      10) =      0.222
      Prob > F =      0.6478
```

Null hypothesis in this test is “No serial correlation”, and we obviously fail to reject it.

```
Correlation matrix of residuals:
      __e1      __e2      __e3      __e4      __e5      __e6      __e7      __e8      __e9      __e10      __e11
__e1  1.0000
__e2  0.2500  1.0000
__e3 -0.1301 -0.1646  1.0000
__e4 -0.2327 -0.4035  0.1979  1.0000
__e5  0.2920  0.1012  0.0228 -0.0728  1.0000
__e6 -0.1274 -0.2181  0.0656  0.0655 -0.0438  1.0000
__e7 -0.0213  0.1259  0.1843  0.0872  0.0538  0.1421  1.0000
__e8  0.2808 -0.1563  0.0771  0.0527 -0.0053 -0.0471  0.1597  1.0000
__e9 -0.1633  0.0833  0.0446 -0.0392 -0.3031  0.1520  0.4584  0.0535  1.0000
__e10 0.1036  0.0960  0.1512  0.0446  0.1716 -0.0197  0.2651  0.1425  0.1754  1.0000
__e11 0.1053  0.1232 -0.0680 -0.0174  0.0842  0.0957  0.1176  0.1805  0.0835  0.4722  1.0000

Breusch-Pagan LM test of independence: chi2(55) =      85.482, Pr = 0.0053
Based on 52 complete observations over panel units
```

**Figure 12:** Breusch-Pagan LM test

Variable	ols	fixed	ols_dum	areg
CPI	-.00185235	.00555862	.00555862	.00555862
Dir_inv	1.909e-06	2.749e-06	2.749e-06*	2.749e-06*
Bus_tend	-.00004682	.01597031*	.01597031***	.01597031***
Prod_tend	.00871006***	.00046612	.00046612	.00046612
ER	.01316737**	-.06371445	-.06371445	-.06371445
Export	.02281486**	.02407744*	.02407744**	.02407744**
Import	.00526562	.00180044	.00180044	.00180044
Ind_prod	.21290356***	.21157411***	.21157411***	.21157411***
LT_int_rate	.01003505	.01109965	.01109965	.01109965
oecd_reces~c	-.31236833***	-.25920972	-.25920972***	-.25920972***
_Icountry_2			-2.1563191*	
_Icountry_3			1.0594613	
_Icountry_4			-3.3552845***	
_Icountry_5			-2.4652665**	
_Icountry_6			-2.2682901*	
_Icountry_7			-2.2793283*	
_Icountry_8			-1.8920302	
_Icountry_9			-2.1583847*	
_Icountry_10			-2.4140567*	
_Icountry_11			-1.8647196*	
_cons	.35059281***	.91485238*	2.7143268**	.91485238**
N	572	572	572	572
r2	.57262311	.51741728	.6021727	.6021727
r2_a	.56500498	.50881509	.5877325	.5877325

legend: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

**Figure 13:** Regression Results. Dependent variable – GDP growth.

According to Baltagi<sup>19</sup>, long Panels are also should be checked for cross-sectional correlation. For that purposes i use Breusch-Pagan LM test as it's plotted in Figure 12.

I can conclude that there is no cross-sectional dependence and now I can start interpreting the results depicted in Figure 13.

#### INTERPRETATION

As it is mentioned in most econometric literature, even though the coefficients are the same between LSDV, FE and AREG regression, it is better to report R2 from LSDV or AREG. My R2 is 0.6021, which stands for appropriate result. In addition to that, F test shows that the model is OK (see Test 3).

Now we can look at the coefficients.

<sup>19</sup>Econometric Analysis of Panel Data, Badi H. Baltagi, Wiley, 2008



### Industrial production (0.2115).

As it was expected, the highest coefficient we get for Industrial production (0.212), which is obvious winner among variables influencing GDP growth. It means that increase of Industrial production by 1pp will lead to the increase in GDP growth indicator by 0.2 pp.

### Business tendency indicator (0.016).

It tells us, that 1 pp improvement in Business tendency indicator brings 0.016 pp increase in GDP growth. Business tendency indicator is a collective survey, concluded by OECD.

### Export (0.024).

1 unit change in Export indicator will lead to 0.024pp increase in GDP. Interesting to mention, that Import indicator did not achieve any significant result in that analysis.

### OECD recession indicator (-0.259).

Obvious results we found for Recession indicator dummy<sup>20</sup> - in the period of recession (value 1) GDP<sub>g</sub> decrease is expected.

Very small and with the weakest significance is indicator Direct investment. For us it is important to state positive relationship between Direct investment and GDP growth. It means that if direct investments increase – slight GDP growth can be expected.

That model did not provide significant results for the Production tendency indicator and Exchange rate. But as I already mentioned before, we could use the results from OLS for that purposes.

Results from OLS show obvious positive relationship between Production tendency indicator, Exchange rate indicator and GDP growth.

The main conclusion from the MODEL 1 is that the main influencing factor for GDP growth in these 11 countries is Industrial Production. This is the fact, that Industry boosts the economic growth. The problem is that with all its potential, Russia does not explore its Industrial production possibilities, so for Russian economy itself the main driver is Export income, particularly from Oil and Gas export. We concluded this fact in the theoretical part, in order to prove my point from practical point of view, following models were developed.

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<sup>20</sup>A value of 1 is a recessionary period, while a value of 0 is an expansionary period.

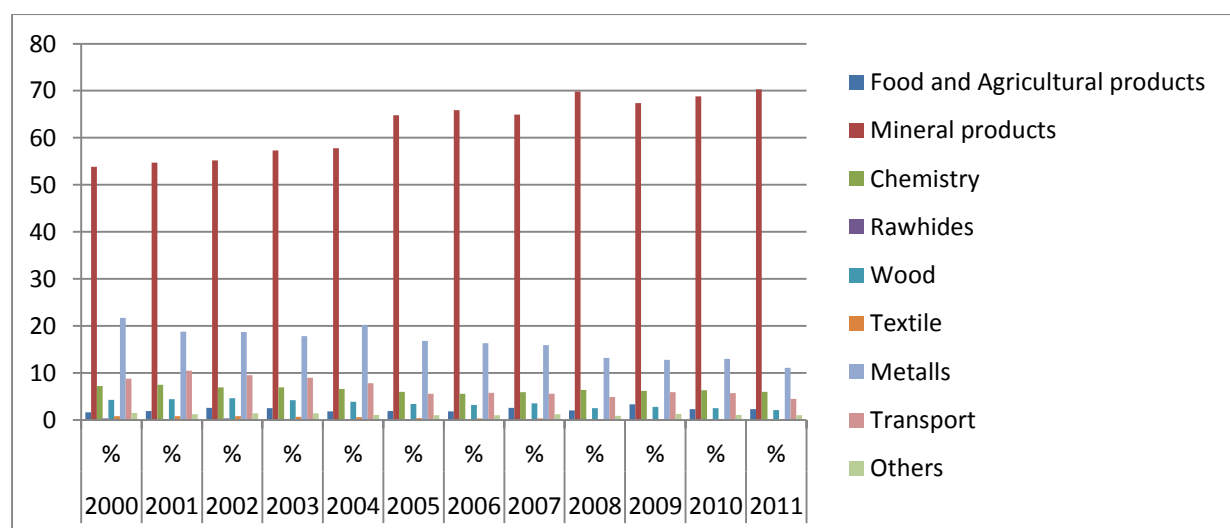
## MODEL 2 (INDUSTRIAL PRODUCTION)

Firstly I run the regression for “Russia only”. OLS modeling is preferred. Normality is confirmed (see Test 4). Homoscedasticity is confirmed by Breusch-pagan test (see Test 5). No multicollinearity is found (see Test 6). R2 of the model is 0.7949.

Variable	ols
CPI	.03259054
Dir_inv	-.00004243
Bus_tend	.01708591
Prod_tend	.04841177
ER	-.02374854
Export	.04488872**
Import	.00480316
Ind_prod	.22359355*
LT_int_rate	-.00608776
oecd_reces~c	-.13966715
_cons	.61322138
N	52

legend: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Model shows, that the most significant indicator in the model for “Russia only” is Export (0.044). But we can see, that Industrial production still has big influence in GDP growth indicator.

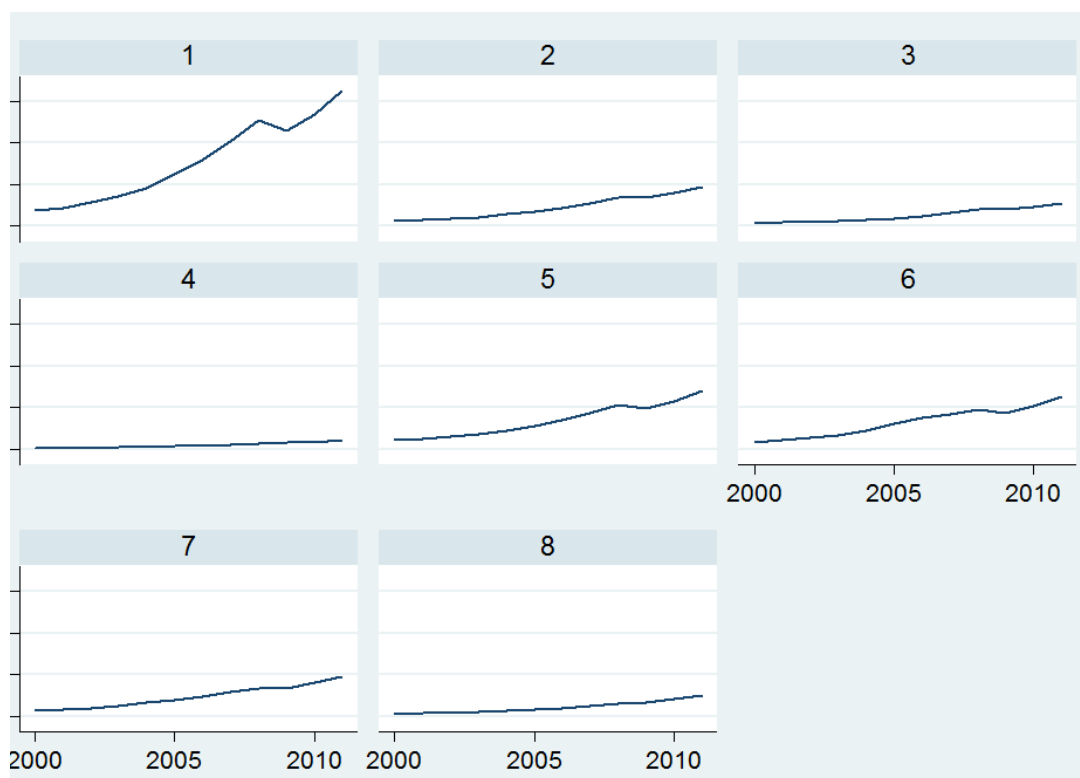


**Figure 14:** Structure of Export

Source of data: [www.gks.ru](http://www.gks.ru) Software: STATA

Central region	North-West region	South region	North-Caucas region	Volga region	Ural region	Siberia	Far-eastern region
Belgorod	Karelia	Adygea	Dagestan	Bashkortostan	Kurgan	Altay	Saha (Yakutia)
Bryanks	Komi	Kalmykia	Ingushetia	Maria El Rep	Sverdlovsk	Buriatia	Kamchatka
Vladimir	Arkhangelsk	Krasnodar	Kabardino-Balkaria	Mordovia	Tyumen	Tyva	Primorie
Voronezh	Neneckiy reg	Arkhangelsk	Karachaevo-Cherkesia	Tatarstan	Hanty-Mansiysk	Hakasia	Khabarovsk
Ivanovo	Vologda	Volgograd	North Osetia	Udmurtia	Yamalo-Neneckiy reg	Altay region	Amur
Kaluga	Kaliningrad	Rostov	Chechnya	Chuvashia	Chelyabinsk	Zabaykalie	Magadan
Kostroma	Leningrad		Stavropol	Perm		Krasnoyarsk	Sahalin
Kursk	Murmansk			Kirov		Irkutsk	Jewish aut region
Lipeck	Novgorod			Nizhegorod region		Kemerovo	Chukotka
Moscow region	Pskov			Orenburg		Novosibirsk	
Orel	Saint-Petersburg			Penza		Omsk	
Ryazan				Samara		Tomsk	
Smolensk				Saratov			
Tambov				Ulianovsk			
Tver							
Tula							
Yaroslavl							
Moscow							

**Figure 15:** List of regions of Russian Federation



**Figure 16:** Regional GDP growth

Source of data: [www.gks.ru](http://www.gks.ru) Software: STATA

Structure of Export is shown in Figure 14 and it is obvious, that mineral resources (especially Oil and Gas) are prevailing.

But we still have quite powerful indicator Industrial production. I decided to look deeper in that indicator in order to understand, if the Industrial production is really one of the driving

forces of GDP growth in Russia. I believe that the only industry somehow working is Natural resources extraction industry, which aims for Export. Other industries are not really developed enough to improve GDP growth.

#### INDUSTRIAL PRODUCTION

I took data from Federal Government Statistics<sup>21</sup>. I cannot be sure, that this source of data truly reliable, but I was able to obtain balanced data on Industrial production for regions of Russian Federation, so I decided not to doubt. I took Yearly data (2000-2011) for 8 regions and 4 subgroups of Industrial production (Natural resources extraction, Manufacturing industry, Production and distribution of electricity, gas, water and the rest). For the list of regions see Figure 15.

The analysis is following the same steps with Model 1.

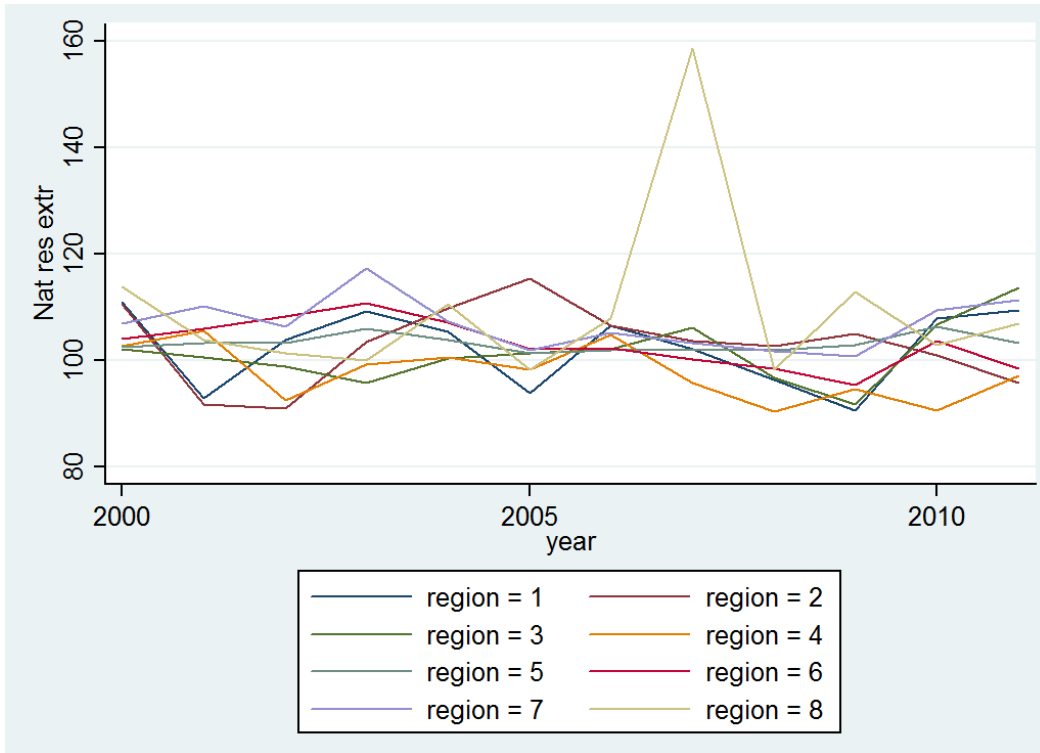
Figure 16 (above) illustrates the regional GDP growth. We can see that mostly developed is Central region of Russia (region 1), and the least developed is Caucasus region (region 4 - due to the long lasting war in Chechnya).

Other simple overlay graph (xtline command) can give us some ideas about Natural resources extraction industry. From Figure 17 (below) we can see that Siberia region (7) is constantly on the upper part of the graph. This result is significant, due to the fact that Siberia region contains 85% of total reserves of lead and platinum, 80% of coal resources, 71% of Nickel, 69% of copper, 44% of silver and 40% of total gold reserves. But the most important fact about Natural resources extraction industry in that region is that together with Ural region (6) Siberia (especially western Siberia) is the main source of Oil and Gas extraction. Other important region is Far-eastern region (8) – this region is truly rich with natural resources, including Yakutia's diamonds and significant part of coal resources.

Figure 18(below) depicts development of manufacturing industry, and we can see that Global financial crisis 2008-2009 caused huge fall in Manufacturing production in all regions.

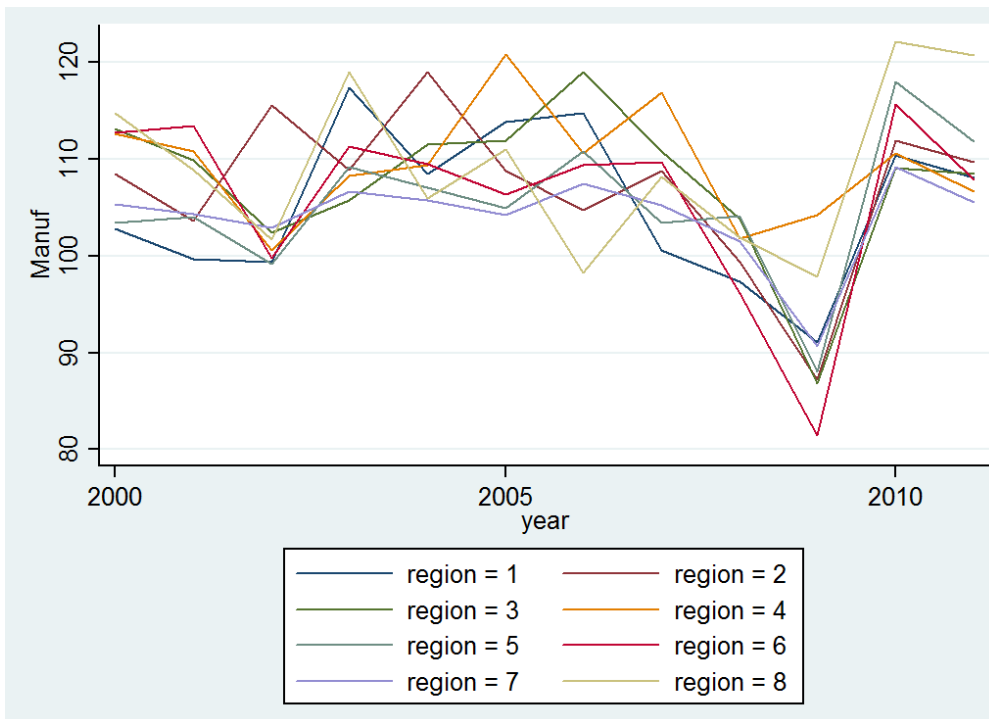
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<sup>21</sup><http://www.gks.ru/>



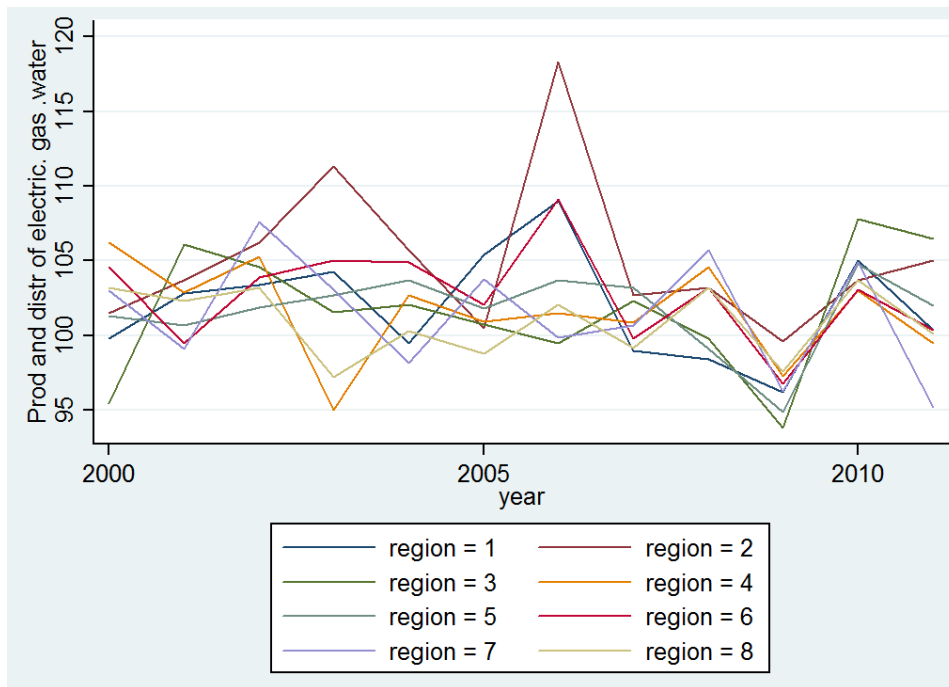
**Figure 17:** Natural resources extraction industry

Source of data: [www.gks.ru](http://www.gks.ru) Software: STATA



**Figure 18:** Manufacturing industry

Source of data: [www.gks.ru](http://www.gks.ru) Software: STATA



**Figure 19:** Production and distribution of electricity, gas and water.

Source of data: [www.gks.ru](http://www.gks.ru) Software: STATA

In case of production and distribution of electricity, gas and water obvious winner is North-west region (2) – (see Figure 19 above).

Running the OLS and LSDV regressions we can see, that Pooled OLS is not really suitable for the analysis (see Test 7).

We choose LSDV model. Normality is confirmed (see Test 8). Heteroscedasticity is present (see Test 9), so I adjusted it with robust command, as in panel for countries. Autocorrelation is present (see Test 10). In order to fix that problem, I applied other method of estimation (xtivreg command in STATA) in order to produce HAC<sup>22</sup> (see Test 11).

Now we can interpret the results of the regression.

<sup>22</sup>Heteroscedasticity and Autocorrelation Consistent standard errors

Variable	ols
Natresextr	128548.66*
Manuf	148374.94*
Prodanddis~s	-17671.034
otherind	-327791.81**
N	96

legend: \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

Dependent variable – GDP.

As we can see, the second-best significance have variables Natural resources extraction industry (128548.66) and Manufacturing industry (148374.94). It means, that with 1 unit increase in these variables (1% increase) GDP increases in 128548 and 148374 million Rubles (with average Exchange rate for USD for that period 27.8 rub per USD – amounts are 4624 million USD and 5337 million USD). It basically means that these areas of Industry have almost equal influence on GDP and this influence is quite small.

The biggest result we obtained from Other industries (-327791.81), which means that 1% increase in that indicator causes -327791.81 million Rubles change in GDP (- 11791 million USD). Other industries mainly include agricultural production. Agriculture is suffering from lack of financing, low level of infrastructure and high levels of disposal in high seasons. In addition to that, we already discussed in theoretical part, that Agricultural sector is over subsidised. But generally, result was very surprising and I suppose it again proves inefficiency of Industrial sector in Russia.

Production and distribution of electricity, gas and water has no significance at all.

The main conclusion of that model is that if we look closer to the Industrial production, we can see that Industry, which captures all the hopes for GDP growth (Natural resources), is not really performing well. Knowing, that Manufacturing is in a very low level of development due to lack of investments and absence of healthy business climate in Russia, obtaining the same results for Manufacturing and Natural resources industry is quite depressing.

## CONCLUDING REMARKS

In this chapter i made the analysis of factors influencing GDP in Russian Federation. From the first model I concluded, that for the group of countries the main driver of GDP growth is industrial production. After running the regression only for Russia we found out, that in case of Russia Export indicator is stronger. But Industrial production still maintained significant power. The second model is based on data from regions of Russia Federation and i was able to show some relationships inside the industry sector. But some results ended up quite surprising. I was expected to find out, that the strongest power has Natural resources extraction industry, which could not be proven in my model. Opposite I found out, that manufacturing has almost the same power, as extraction industry – and both of them are quite weak. Even more interesting result I found for the Other industries indicator, which showed negative relationship with GDP.

As it was pointed out in the beginning of the work, after the fall of USSR Russia was left with incredible amount of Natural resources and undeveloped system of their extraction. In addition to that, no other industry was alive, except War industry. After Financial crisis 1998 financial market was ruined, industries were still in the beginning of development, resource extraction was the only hope. In 2000 GDP growth was caused by sharp jump in oil prices – nothing more. Today export of natural resources is still the only real source of income, but even that industry is not functioning efficient enough.



## **10. PROSPECTS FOR THE FUTURE**

In the beginning of the 1990s, Russia started the process of developing the market economy, which the developed world had started in the XVIII century. The transformation period was very long and difficult. Conflicts of interest between accustomed power of state and the business sphere was the main antagonizing power in the development of a healthy market economy. As a result, in the beginning of the XXI century Russia went to the path of building a government regime with the main goal of increasing the power of the state and decreasing the freedom of the private sector. The good start of the 1990s was basically ruined by the new regime.

Probably, we can say, that this development is logical in some way. It looks like the oligarchic capitalism followed by some level of state capitalism is the first and second stage of the developing Russian economy after the fall of the Soviet regime. We cannot truly confirm that there is state capitalism in its pure form in Russia today. But it needs to be mentioned, that the role of the government in the economy is very high, and that prohibits the normal functioning of the market economy. In addition to that, as it seems, state capitalism is not the real danger today. In fact, for the last years there were a number of activities, which looked like supporting the private sector (for example, lowering the taxes). And here lies the real danger. The government is willing to control the economy by informal tools: it supposed to be private sector, controlled by secret (special) services – as FSB (former KGB) or their representatives. The main goal today is to make the Market economy to be the third stage in Russian development and not to let State control over the business to be a prospect.

### **RECENT HISTORY**

The year 2003 brought the breaking point in the relationship between business and the government. The owner of the second biggest oil corporation “UKOS” and one of the oligarchs of 90s was sent to Siberia for imprisonment. Remaining oligarchs have left the country. The conditions for running private business were becoming worse and worse, which put further development of the market economy in danger. Luckily, for the government, this period was characterized by growing energy prices, which ensured growth in the economy. Growth of the real income of population was higher than the GDP growth in that period. Generally said, just before the global financial crisis, the situation in the economy was quite stable and positive.

During the years 2003-2007 the average GDP growth was 7.3%. According to E.Yasin, around 2.2% in general was due to the increase in labor force, which is proven by the demographic analysis of the labor market. Another 5% was due to an increase in productivity. Nowadays a sharp decrease is expected in labor market growth, so this 2% is not expected to be in the economic growth due to that factor. Obviously, productivity and labor force growth are closely correlated. So, according to E.Yasin, the best case scenario is a 4% growth (in contradiction to the announced expected 5%). But this 4% is possible only with institutional changes in the economy and social structure in general.

An even more pessimistic forecast is given by the Minister of Economic Development A.Belousov. He said that Russia has only 3-5 years to proceed with structural reforms in the economy. In 5 years he expects the distortion of world energy balance and a sharp decrease of the oil prices. If the country will stay as dependent as it is now to the oil prices, stagnation or even recession is inevitable.

We can add our prognosis for situation, based on our analysis. If the oil price will grow in the near future – we will rely on it due to dependency of GDP on export incomes from natural resources. From the other side, natural resources industry urgently needs investments, because the level of development of the extraction industry is not good enough (we obtained almost equal results with manufacturing industry). But still, if the price of oil goes up, Russia and its president will be lucky one more time. But if A. Belousov is right and we expect decrease of oil prices and increase of use of alternative sources of energy around the globe – Russia has nothing to rely on and country will enter very deep recession.

Official forecasting publications and conferences state 3 main goals in order to keep the economy stable today.

1. Keep balance in the economy in short-term horizon

In the beginning of 2012 Russia experienced a significant economic growth, but already in the second half of the year this slowed down. As the main reason of the change, official authorities name the decrease in domestic demand. In addition to that, the economy experiences an increase in the inflation rate due to new tariffs, growing price level and weakening of the Rubble. The main goal today is to keep the balance of the economy, due to keeping down budget expenditures and accumulation of capital from the oil incomes.

## 2. Preparation for the future external crises

In June 2012 the decrease in the oil prices reminded, how volatile the Russian economy is due to its dependency on the oil prices. According to the authorities, there are three main areas for restructuring. Firstly, there should be a proper goal for the budget policy, especially for decreasing non-oil deficit and decreasing unnecessary budget expenditures. Second goal is increasing the floating of the exchange rate of the Ruble. This should lead the CB to switch to the inflation targeting in 2014. In addition to that, floating exchange rate can be a buffer against volatility of the oil prices. Third goal is to increase monitoring in banking sector, especially in the interbank market.

## 3. Increasing potential of the growth

The only way nowadays to increase potential of the growth is to increase productivity. Due to that fact that there is not going to be an increase in labor force, productivity could be reached only by increasing working conditions and attractiveness of working places. In order to do that, the private sector is supposed to exist in its correct form. It includes a sharp decrease of the share of government ownership in the economy (privatization).

### SCENARIOS OF DEVELOPMENT

First possible scenario of development is called “inertial”<sup>23</sup> – is characterized by no significant institutional changes. If the oil prices will stay above 100\$ for the next years, but there is not going to be significant growth in price, it will not be able to keep up Russian economic development, as it happened before, due to increasing development in energy saving technologies ( which were not so popular in the beginning if 2000s). Considering no institutional change, oil and gas are the only sources of Russian economic growth. The Ministry of Economic Development announced a 5% needed growth of the GDP till the year 2020 in order to sustain a healthy economic development. In order to gain that growth, there should be high productivity growth, followed by strong investments. As we already discussed

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23Y.Yasin “Scenario for the Russian development in the long-term perspective”, Liberal Russia, Moscow, 2011

before, such investment improvement is not possible in the current situation with property rights and the high level of corruption. According to the World Bank statistics, the Gross fixed capital formation for the period 2008-2012 was 21% of GDP, with needed 25-30% minimum. That is going to be difficult to reach without institutional changes as well.

According to E.Yasin, in that scenario we can reach a maximum of 2% GDP growth for the next 40 years and in the best case \$26000 GDP per capita<sup>24</sup> in 2030. One can say that this prospect is very pessimistic due to the fact that in 2010 Russia actually witnessed a 4% growth. But it is important to remember, that in order to sustain stability during the crisis of 2008-2009 a significant amount of the budget resources was spent to keep up the economy. In addition to that, based on the assumptions of the scenario, the government will continue to finance huge projects and forcibly attract financing from big business – such an economy cannot produce higher growth.

Another possible scenario is gradual modernization. It means that at one point of time in the near future (2018 was taken as example) some liberal changes will happen. It will start from the change in public mood and followed by significant institutional changes. As a result the state ownership should decrease till 15-20%. This process is expected to be long and slow, with a possible decrease in the GDP growth during this transformation. But the expected results are positive – increase of trust to the government (not only from people, but from the business sphere in the first place). That should lead to an increase in FDIs. That scenario's results are estimated in a 3% growth and \$36000 GDP per capita in 2030.

In order to complete the picture, we need to discuss the possible negative scenario, which could be caused by a decrease in oil prices. It will cause the outflow of capital and institutional changes cannot be expected in that scenario for the reason that in order to stabilize the economy, the government will not risk entering the transformation period. In other words, only high and growing oil prices could give a chance for modernization in Russia, if the chance will be taken. By saying that I mean, that we already had the moment (in the beginning of 2000s), when the prices of oil were growing sharply and during that period some modernization steps could be made. But a totally different direction was chosen by the government back then.

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24Y.Yasin "Scenario for the Russian development in the long-term perspective", Liberal Russia, Moscow, 2011

## 11. CONCLUSION

In comparison to the transformation of the world economy based on the development of new technology, the Russian economy remains behind. The potential of the growth is slowing down and the economy lost the ability of reproduction. The government, in its turn, does not pay much attention to the structural reforms.

During the period of high oil prices, the government lost the opportunity to use oil incomes to modernization. Instead of that, the country experiences a high outflow of money, degradation of human capital and constant decrease of the potential in research-and-production area.

One of the popular practices, which are used in the government level, as well as on the level of small business, is taking money out from the turnover. But in addition to that, there is no functioning credit market in order to support domestic production. Not enough effort to improve investment climate as well. The only sector which looks attractive for the investment inflows is the energy sector. Financing that sector is the ultimate goal of the government, at the expense of decreasing the income of the population and a lack of financing in social sphere. But even that does not help energy sector to be productive on its potential level. Foreign investments are highly needed in that area (as well as in any other), but it will not be possible as long as Russia will not build healthy international relationships.

Nowadays we are on a crossroads. After a period of quite stable economic growth until 2007, and then facing the consequences of the Global financial crisis and understanding of the interconnection between the Russian economy and the World, Russia should now choose the strategy of development and be ready for its consequences. If we remain, as today, export-oriented and highly dependent to oil prices (with undeveloped industry and technology and a level of life comparable only with developing countries) it will lead to the loss of current resources of growth and an inevitable recession of the economy in the near future.

The other scenario is based on the significant improvement of the investment climate and attractiveness of Russian corporations. In addition to that, there should be a constant stream

of financing to the industrial sector, supporting competition, improvement in government regulation structure, supporting working potential.

Theoretical outcomes were supported by Quantitative analysis, which concluded, that generally in the developed world Industrial production is the main driver of GDP growth. However, for Russia is different – Export income is the strongest driver. Industrial production has power as well, but when we looked at the Industrial development in the regions, we found out, that Natural resources and Manufacturing industries have the highest influence (the influence of that factors are almost same and sufficiently small).

Even in the situation of the backwardness of the economy, as we have today, Russia still has a number of advantages:

- High level of education of the population.
- High potential for the research-and-development projects.
- Huge territory with high potential for the development and the consumption needs of all kind.
- Natural resources.
- Significant reserves.
- Historically stable position in the world (due to the size of the country).

We need to achieve decentralization of the economy to avoid the danger of collapse due to lowering prices on energy resources. But, as it was already mentioned in this work a number of times, to do that, institutional reforms are needed. And I would say that the government today understands the need for restructuring the economy much more than we do. But probably the ruling clique will try to find the trade-off between structural reforms, which are highly needed and institutional reforms, which are highly unwanted. That is why my main conclusion is, that the best scenario for the development of the Russian economy is not going to be possible with the existing government.

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