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Introduction.

There are two things which many people try not to think of – that prosperity periods are inevitably broken by crises and that globalization of the World economy will lead to the World crisis sooner or later.

Today`s global economical crisis is developed *under the worst-case scenario*, Warren Buffett said, one of the greatest financiers of the World in the program of CNBC television company. The situation is even worse than during the Great Depression. «I think that the American economy will be all right not earlier than in five years, but I wish it would happen earlier», he said. Buffett estimates today`s economy as *economical Pearl Harbor*. However *it is the war which we must win*, he added. The authoritative American businessman thinks that nowadays *economy goes downhill*.

Buffett also noted that the crisis had changed the Americans` habits and given a fright to his countrymen who stop believing the state and business which is indicated by *changed habits* of the Americans who began to spare on everything. He says, «the system cannot work without people` s trust. It is necessary to overcome the situation like the USA overcame it in the thirties».

The Great Depression of the thirties of the last century in the USA did not only impact on economy of the countries connected with the USA, but touched even the USSR, the country separated from the World with the Iron Curtain and trying to built up a self-sufficient isolated economic model.

Building up of the isolated economy gave rise to great skewed structure in the USSR. The first structural problems appeared evidently in the sixties and the famous *Kosygin`s reform* was directed just to remove them. But the reform failed because of political commitment, and the skewed structure had become stronger by the end of the eighties which to a large extent resulted in the USSR collapse.

Today Russia is an element of the World economical system and becomes more subjected to cataclysms in the World economy under accelerated globalization processes during last years. At least, it has become apparent in today's crisis which has covered the Whole World and touched Russia even to a greater degree than the developed countries. What are the reasons of the crisis and what are ways out of it?

Leading Russian economists' opinions about ways of overcoming today's economical crisis in Russia and about future of Russia have been lately divided. What should we do? To help the Government which, by the way, does not think it is necessary to use somebody`s help, or to fight the Government joining the fierce opposition to the power?

Some, like Andrei Illarionov, the former adviser of President Putin, confirm that *it is not possible to cooperate with the power* (the Government of Prime-Minister Vladimir Putin) *which damages its own country*.

The others, like Egor Gaidar, the former Prime-Minister during President Eltsin`s power, do not agree with it. Gaidar writes, «The matter is that I saw what happened to my own country after the power had greatly damaged its economy. I know what an uncontrolled disorder in a country full of nuclear weapons is. And I will never admit the thesis *The worse, the better*»!

Gaidar is sure that even if the power is imperfect the best way out is if it updates itself than if it just fails. A collapse of Russia will really create awful risks for Russia itself and for the rest of the World.

In process of time different rulers and governments have come to power and been relegated to oblivion or history, but Russia has risen from the ashes and surprised the World again. We would like to believe that our country will come out from today`s crisis to a normal democratic road which will get stronger not only economically [Makarevitch 2006].

In this work we tried to give the analysis of existing works about the crisis in Russian economy, estimate the reasons of crisis development in Russia objectively (a more intensive than in other countries) and present different future models of our country given by different economists and political scientists.

1. Cycles in Economical Processes and Possible Influence of Off-site Factors On Them.

From 1797 up to the latest modern crisis the World economy has come through a chain of economical cataclysms [Zyryanov, 2009] – financial crisis of 1797-1800, financial crisis of 1819-1824 (20 years later), financial crisis of 1837-1843 (18 years later), financial crisis of 1857-1860 (20 years later), depression of 1873-1896 (20 years later), financial crisis of 1893-1896 (20 years later), financial crisis of 1907-1908 (14 years later), great depression of 1929-1939 (22 years later), oil crisis of 1973-1975 (44 years later), crisis of 1987-1991 (14 years later), crisis dot.com of 2001-2003 (24 years later), and, at least, today`s World economical crisis.

Statistical analysis of this information shows that brightly expressed 22-year cyclicity is typical for the cataclysms mentioned above [Libin, 2009]; it is well comparable with other processes on Earth including solar activity behavior.

There is the whole series of theories which connect everything that occurs on the Earth with solar activity cycles, for example, in his theory of ethnogenesis Leo Gumilev pointed to synchronism of *passionarity impulses* with solar activity extremums [Vladimirov, 2003].

In 1804 William Herschel (English composer, musician, mathematician, optician and astronomer, founder of stellar astronomy, member of London Royal Society and St. Petersburg Academy of Science) paid attention to a connection between wheat prices and solar radiation (depending on a number of spots on its surface) on the basis of huge material collected as a result of many year observations. He noted that during the whole century bread prices changed in compliance with the solar activity maximums. So, Herschel became a founder of a new science – heliobiology.

In 1880 William Stanly Jevons, one more great English scientist (one of the pioneers of using mathematical methods in economy), worked out an original theory of an economical cycle in his article *The Solar Period and the Price of Corn*. According to Jevons` theory, *years of rich crops* repeats every ten or eleven years and «it is difficult to believe that trade crises are connected with periodic weather change touching all parts of the World and appearing, probably, as a result of increased hot waves got from the Sun in every ten years on the average». Jevons also supposed that behavior of different groups depended on cyclic phenomena on the Sun as well. It helped him to explain economical cycles not only in the agriculture where they are connected with direct influence of solar activity on crop capacity but also in industry.

Jevons` suppositions were rather reasonably explained – as a number of spots on the solar disk influence the weather, consequently, it influences crops as well. The latter in their turn influence trade condition. That is why Jevons confirmed that the day would come when in the London City they will look for the Sun condition as attentively as they looked for the condition of the English Bank before [Melnikov, 2009].

Henrich von Schwabe, a German astronomer, was the first who discovered ten-year periodicity of sunspot appearance in 1843. And in 1848 Johann Rudolf Wolf worked out a methodology of sunspot calculation – the received number is called the Wolf number – $\mathbf{W}=\mathbf{k}(\mathbf{f}+10\mathbf{g})$, where \mathbf{f} is a number of all separated spots observed on the solar disk at the given moment, and \mathbf{g} is a number of groups formed by them. This index very successfully reflects contribution to solar activity (SA) from not only spots themselves, but from the whole active area, mainly occupied by faculae. (That is why W numbers conform well to the more modern

and more precisely defined index denoted as F10.7, a value a radio-frequency radiation flux from the whole Sun on 10.7sm wave). In 1952 Wolf specified periodicity of sunspot appearance as 11-year arithmetical means of their period, although in reality the cycles last from 8 to 14 years (between minimums) and from 7 to 17 years (between maximums).

Alexander L. Chijzhevsky, a Russian scientist, paid attention to synchronism of solar activity and processes occurring on the Earth in the beginning of 20's of the last century [Chijzhevsky, 1976, 1990, 1995]. Chijzhevsky defined the life as a living thing's capability to let through a flood of cosmic energy, and considered that the biosphere is the place of transformation of cosmic energy emphasizing by it that life is a more cosmic phenomenon, then an Earth's one. Discovering of the cosmic factor's influences on biological, science and social processes is one of the most important contributions to the modern science approach.

He wrote in his work An Earth's Echo of Solar Hurricanes, «Eruptive activity on the Sun and biological phenomena on the Earth are co-effects of one common reason – the great electromagnetic life of the Universe. This life has a pulse, its periods and its rhythms...Life is not the result of a chance game of only the Earth's powers. It is created by influence of the Cosmos creative dynamics on the Earth's inert material. It lives with dynamics of these powers, and each organic pulsation conforms to the cosmic heartbeat, this enormous complex system of the Universe material objects. During a very long period of time of cosmic powers influence on the Earth, definite cycles of phenomena which are correctly and periodically repeated in space and time have strengthened. Everywhere on the Earth we find cyclic processes which are the result of cosmic power influence. In this endless number of cyclic processes one can hear world's pulsation, a great dynamics of nature, different parts of which resound one with another consonantly and harmoniously».

It was found out later that climatic processes – glaciers, warming, recurrence of typhoons and earthquakes, precipitation – are also connected with the Sun. Degree of the Arctic and Antarctic ice coverage, variations of ocean levels, the Gulfstream pulsation, a sea thermal regime are connected with 11-year, 22-30-year and 100-year cycles. Alexander Chijzhevsky also discovered coincidence of solar maximums with periods of pandemic and epizootic and also of accelerated reproduction of some biological species, for examples, locusts.

The largest frequency of pandemic and epizootic was really observed in the second millennium A.D. during the 30-80s of the 14th century when locust plague in Central Europe lasted with a 10-12 year periodicity in 1333-1341, 1353-1363, 1373-1388 and resulted in mass crop failure and hunger. A peak of natural cataclysms fell on the year 1348 when, according to von Megensberg's description [Kuzmenko, 1999; Tzarikov, 2009], a wave of some awful earthquakes with destruction of tens of cities and hundreds of temples swamped the whole Europe from South to North, from East to West. According to Vinario, an Italian scientist, a contemporary of those events, *forests were burning, rivers burst their banks and plague killed millions of people on different continents* with a 11-year periodicity of pandemic outburst.

As a result of many researches in economics and sociology some processes were noted, their phase alteration tells us if not about their cyclicity, but about a wavy character of their behavior. First of all an industrial 7-12 year cycle was found out. In this cycle K. Marks separated four phases which changed each other consequently – crisis, depression, revival, recovery. This cycle was called *a business (classical) cycle of Marks-Juglar*. (K. Juglar, a famous economist, analyzed fluctuations of interest rates and prices in France, Great Britain and the USA and found coincidence of them with cycles of capital investments, change of the gross national product (GNP), inflation and employment. There are 11 Marks-Juglar cycles in the period since 1787 to 1932. By the way, insurance market operates cyclically with a period of 7-10 years).

J. Kitchin`s cycles are cycles of inventory movement with a period from 2 to 4 years.

Simon Kuznets, a Nobel Prize winner of 1971, contributed to the cycle theory in the economy, analysis of production and price dynamics and cyclical oscillations and seasonal changes in industry and trade. He discovered interconnected oscillations of national income,

consumer expenses, gross investment to production equipment, to buildings and installations with long-term intervals of fast growth and deep recessions. His works corresponding to new economical demands gave a grounding for the gross national product (GNP) and its constituent parts estimation by the Federal Government of the USA, influenced further researches of economical growth, permitted to work out the only methodology of national income and the GNP calculation for all World countries. **Kuznets`s cycle** or **long swings** possessing the largest amplitude in building has a 20-year cycle.

N.D. Kondratyev (1892-1938) [Kondratyev, 1928, 2002; Abalkin, 1992; Yakovets, 2005], a Soviet economist, shot in the Suzdal prison, created an economical theory of long waves, large conjuncture cycles (40-60 years). In the World economics he is famous, first of all, as the author of the *long wave* conception in which he developed an idea of <u>plurality of economical cycles</u>. Besides well-known medium-term cycles (8-12 years) Nikolai Kondratyev discovered 58-64 year oscillations of economical activity, which are called now after him. Kondratyev wrote, «The real process of economical activity is single. But if analyzing and decomposing this process to the simplest elements and forms we admit the existence of different cycles in this dynamics, together with it we must admit that these cycles interlace with each other somehow and exert this or that influence on each other».

Kondratyev`s cycle or large conjuncture waves were received from the analysis of statistical materials (price dynamics, rate of interest, salary, foreign trade figures, production outputs of the main industrial production types) for 1780-1920 of such countries as England, France, Germany, the USA and also in whole of the World agriculture. For the analyzed period Kondratyev separated two full large cycles (from 1780s to 1840s and from 1850s to 1980s) and the beginning of the third one (from 1900s). As each cycle consisted of recovery and recession he could essentially predict the Great Depression of 1929-1933 some years before its beginning. Besides, Kondratyev found interconnection of economical cycles with cyclic processes in other spheres of societies.

Today, besides Schwabe-Wolf's cycle, we know *Gansky*'s 72-year cycle, *Rubashev*'s 600-year cycle, *Gnevyshev-Ol*'s 22-year pair cycle. K. Jensen separated 17-year freight cycle – Holland shipwrights played serviceable life of their ships up to it [http://www.ogoniok.com/archive/1998/4580/45-56-61/].

There is a great number of other cycles – super long 390-year and 1800-year cycles, 169-180 year cycle, 80-90 and quasi-two year and also economical 36-40 year ones. At the picture (see below) time behavior of relation between Dow Jones` index value and price of gold is shown. It is easy to notice a well expressed 36-40 year wave even without special measures of separating cyclicities.

Synchronism of solar maximums with war and revolution periods was discovered. It was only necessary to clear up the mechanism of interconnection of society and a human organism with the Sun. The Sun is not a solid body; it rotates so that some parts always move relative to the others. In such systems constant generation of the most powerful magnetic fields takes place. These are magnetic fields on the Sun which interacting with each other cause what we call solar activity. Moreover, solar magnetic fields interact with terrestrial ones. As a result we receive what we call magnetic storms. Just they but not the Sun influence biological and technical systems of the Earth. But the more complicated the system, the weaker the impulse destroying it is and the more difficult it is to estimate consequences of such influence. For the period of 11year solar cycle about 500 magnetic storms happen. Flashes of solar activity are especially dangerous for those who suffer from cardiovascular diseases. Reaction of managers, drivers, operators becomes weaker. Amplitude of magnetic fluctuations increases from south to north latitudes, and, for example, railway accidents happen more often in the Arkhangelskaya region. In 1989 a magnetic field left Canadian capital Ottawa and Quebec without electricity for 8 hours. In 1997 a solar storm cut off television satellite Telstar 401 of AT&T Company. Next year a storm destroyed work of satellite Galaxy IV which managed automatic cash terminals and aviation tracking systems. In 2000 Japan satellite Asko damaged by a solar storm failed and sank

in the Pacific Ocean. Magnetic fields tell on work of mobile phones, arouse failures in the Internet, automatic systems, disturb high-frequency aviation radio communication. On Russian railways there have been accidents connected with failures of automatic devices.

It is interesting that there were no economical crises during periods of increasing solar activity. We should say that similar action of solar minimums and maximums is not something new. So, for example, detailed dendrochronological observations [Dergachev, 2000] fixed not only substantial increase of tree growth during solar maximums but its intensification, although a less one, near 11-year solar cycle minimums. Such peculiarities are connected with the fact that geoactive areas on the Sun cause magnetic storms and other changes in the sphere of the Earth appear during sunspot maximums and minimums as well.

Fast growth of the World economy since the second part of 20th century has led to absence of brightly expressed minimums of the GNP values in the given period of time, which, however, does not mean absence of cyclicity. In the given period of time cycles can be separated according to decrease of the GNP growth rate. Extreme characteristic of solar activity value does not have to lead to sudden change of economical growth indicator; its influence can be manifested with some delay, and the existence of economic crises on descending parts of solar activity cycles can be connected with that.

There are rather reliable data about dynamics of the GNP specific value of the most powerful economical empire of the second part of the 20^{th} century – the USA. The analysis of given data shows that solar maximums are followed by slowdown or fall of American economy growth rate. A maximal yearly average W number for the 20^{th} century falls on 1957. In the same year the GNP specific value of the USA fell [Zyryanov, 2009]. In the second half of the 20^{th} century economy growth retardation during solar maximum was noted practically for all leading economical states of the World. After solar maximum of 2000 in all these countries we observed economy recession or, at least, its growth retardation.

It is necessary to note that in the second part of the 20 century a global economic cycle is not of a sinusoidal character – a relatively short-term economic recession (about 2-5 years) is followed by a much longer period of its growth.

Coincidence of some solar activity cycles (11-year, 22-year, 100-year, 400-year and 900-year ones) in the beginning of 21st century led to the most powerful Sun influence on the Earth, substantial increase in electric activity of the atmosphere (which resulted in more frequent thunderstorms and tornadoes in areas close to the equator, and people became more sensible to magnetic fields than before) and sudden intensification of all helioclimatic, heliobiological and helioeconomical connections.

2. Mathematical Methods of Economic Cyclicity Analysis.

Justification of managerial decision is one of the most important problems of research of social economic processes. In the 20th century substantial complication of management problems promoted their analysis method development. As a result of generalization of saved experience modern methodology of social economic problem research on a microlevel and macrolevel as well based on the systematic approach appeared. Usage of a consistency principle without which effective management is impossible includes application of a mathematical modeling method together with substantial analysis of researched processes.

In research of social economic processes upbuilding of models is very important as a great majority of these processes change in time and that is why, any models should be dynamic. In spite of more than a century long history of mathematical modeling application in this area methodology of dynamic process study has changed only a little. Like a hundred years ago one of the main methodical research technique of micro and macroeconomical process dynamics is using smooth continuous functions and analysis of shifts between processes caused by environmental condition changes. Tangent property of continuous functions provides possibility of using differential calculus apparatus for social economic process analysis. It results in formation of methodological direction in economy called *marginalism*. In the basis of

marginalism there is analysis of differential characteristics of economic indicators of marginal values (ultimate output, marginal costs, marginal yield, marginal utility and etc.), with a help of which economic value increments are estimated and optimal decisions are defined.

As it was said earlier, N Kondratyev thought it important to study social and economic processes in dynamics. Especially he noted a possibility of predicting tendencies of social and economic principally irregular processes or processes without any definite regularity. In this case «the most what existing knowledge of social economic regularities when the predicted event itself is irregular can give is ascertainment of tendencies favouring or, on the contrary, unfavouring to event happening. But it cannot give a basis for its localization in time and space». Meanwhile, these limits are not anything immobile – they are widened together with scientific knowledge grows. So, N. Kondratyev anticipated research urgency of behavior of models working with quasistationary (and sometimes even nonstationary) processes.

Modern methods of spectral analysis include parametric and nonparametric methods. The first are methods in which some model is specified and a problem of model parameter estimation on the basis of observation results of corresponding process in the limited period of time is set. And the original model may be different – an autoregressive model (AR), a moving average model (MA), an autoregressive moving average model (ARMA).

Nonparametric methods of spectral estimation differ from parametric ones as there are no models specified before in setting the problem of spectral estimation. And in this class for estimation of spectral concentration of a specified time series there are a lot of different methods. One of the most wide-spread methods (Blackman-Tukey's) consists in the following – for the observed time series Fourier transforms of a widowed estimate of a correlation function are found.

Vladimir Kravchuk [Kravchuk, 2000] is right noting in his work that the problem of spectral estimation has no single-valued solution. A choice of a suitable procedure, parametric or nonparametric, is determined only by the character of the problem in question and a researcher's skill [Libin, 2009]. In particular, it is necessary to take into account such factors as existence or absence of a priori information about researches process characteristics, possibility of preliminary test of different parametric and nonparametric methods and etc. Attempts to use classical Fourier methods for spectral estimation of a non-stationary process can lead only to defining a general form of spectral concentration, the amplitude of which will be proportional 1/f, where f is normalized frequency. In this case, necessary spectral peculiarities will appear to be eroded.

Among the variety of parametric methods of spectral estimation, especial attention should be paid to the method of maximum entropy firstly suggested by John Burg [Burg, 1967] which permits to get independent estimates for classical spectral estimation and, consequently, to serve as an independent control method for spectral estimation of processes. The basic idea of the method of maximum entropy (MME) consists in a choice of such spectrum which corresponds to the most casual (the least predictable) time series a correlation function of which coincides with specified succession of estimated values. This condition is an equivalent prediction of a sort of a correlation function of the observed time series by minimization of the process entropy in a theoretical-informational sense. That is why MME analysis provides substantial increase resolution of a spectral estimate. MME power spectral density estimate has the same analytical form as spectral power estimate (SPE) got with a help of an autoregressive model (AR) of p order with input white noise $\xi(n)$.

Power spectral density of exchange rate EUR/USD calculated with a help of the method of maximum entropy [Kravchuk, 2000].

On the picture above [Kravchuk, 2000] spectral density of exchange rate EUR/USD calculated with a help of the method of maximum entropy is given (PSD model used in

calculation is equivalent to an autoregressive model of order 150). In the upper part of the picture one can see spectral peaks with periods 13.52 days, 28.51 days and 35.27 days, in the lower part one can see spectral peaks with periods 55.12 days, 107.17 days having maximal amplitude. Analysis of the same data by PSD methods [Libin, 2009] gives a similar picture – peaks corresponding to periodicities with 27 and 18 day duration are well expressed. To separate longer seasonal cycles with one year periods and long-term cycles with two year periods and more spectral analysis of exchange rate weekly data is necessary.

Besides standard methods of spectral and autoregressive spectral analysis [Bendat, 2008] in the work with economic and socially-political processes there is a tried-and-true method of principal components. With a help of this method economic development indexes were built based on data about dynamics of 10 main economic sectors. Built indexes corresponded well to international indicators but in a larger degree were agreed with the structure of the planned Soviet economy of that time [Rozhkov, 1979; Solntsev, Solntsev, 1997, 2003]. Then dynamics of these indexes was analyzed with a help of the Track method. In a result a trend and two precise cyclic components - 10-11 and 4-year ones - were revealed. A trend showed a stable tendency of growth rate slowdown since the middle of the 50s and 4 per cent yearly economic recession since 1986. Further together with slowdown of economic growth rate in the USSR a role of periodic components in economic dynamics became more substantial, as because of growth rate less than 4 per cent per a year (1974-1990) about 35-50 per cent of economic dynamics fell on cyclic oscillations. It is curious that by the beginning of 1970s 4-year cyclicity had dominated, but in a result of its decay and increase of 10-year cycle amplitude 10-year cyclicity took the first place. Further there was more and more promotion of 10-year cycles amplitude of which had reached 3.5 percentage points by the end of 1980. The further analysis of economic dynamics with a help of making forecast and retroforecast with the Track method showed that it is possible to separate two trend components – evolutional (system) and transformational. It was shown that 20-50 per cent of recession of the middle of the 90s fell on the evolutional component. Roots of the system crisis are in the middle of 1970s when slowdown of Soviet economy growth rate beginning since 1950s accelerated suddenly. If in the beginning of 1980 there had not been some stabilization it would have turned a disaster for national economy of the USSR. Only since 1986 when stabilization potential ran out crisis phenomena began to dominate in economy of the USSR.

Analysis of economic process data made by spectral methods and methods of principal components for the 19th and 20th centuries permitted to get *retroforecast* of not only crisis phenomena in the economy of the USSR, bur *retroforecast* of *the Great Depression* of the thirties of the 20th century, its amplitude and duration.

3. Predecessors of Today's Global Crisis.

3.1. Great Depression

On the majority economists` opinion, the main reason of today` s crisis is financial crisis on the stock market. However, the stock market is only an economic barometer determined by a stock price. Long-term decline in stock value only states that state of play in economy becomes worse. Rise of stock (besides some cases) is a so called prepayment of the company.

What were the reasons of the previous World crisis of 1929? Foreseeing inevitability of profit slump and dividend cut stock holders of many companies had begun to sell stocks feverishly by the autumn. As a result stock supply suddenly overtook demand for them which resulted in fall in exchange. In that period stock prices on the largest stock exchanges of the World fell down by 60-75 percent. Fast growth of stock selling was caused by a rush for cash for fulfillment of payment obligations, mass sale of stocks by credit institutions (mainly banks) holding them as pledge loan. As stock is an important part of assets of enterprises and firms (especially credit institutions, mainly banks) and private individuals' crash on the exchange

quickly made their paying capacity worse. Together with it business activity, customer demand and began to go down.

Crash on the exchange of 1929 covered all large exchange centers – London, New York, Tokyo, Paris, Frankfurt on the Main and others. In the 29th of October 14610 thousand stocks changed hands not only on the New York exchange. Crash destroyed a lot of stock wealth, as a result of exchange panic losses were 50 billion dollars. Fall of stock touched from 15 to 25 million Americans. A number of unemployed increased, together with members of their families the unemployed made up about half of the whole population of the country. Industrial crisis interlaced with agrarian one – by 1934 wheat harvest had fallen by 36 per cent, maize harvest by 45 per cent. Agricultural product prices became 58 per cent lower, and about 40 per cent of farmers` income was used to offset of debts and taxes. During the crisis more than 1 million farms broke, they were forcibly sold, and farmers were lost the land property. To control landslide of prices and decrease production supply on the market products were destroyed – wheat was burned in engine and steamship fire chambers, milk was poured out from cisterns to basins, potato and cotton fields were ploughed in.

Becoming a president in 1929 Herbert Hoover (1874-1964) first of all confined himself to imposition of trade protectionism thinking that the crisis would be overtaken automatically and the country would manage it for 60 days. In answer to it other countries also marked up entrance duties. Hoover could not overtake the crisis quickly – the state condition became worse. The country was covered with mass riots; farmers boycotted buying agricultural production and forced selling of farms. In mining, textile, automobile, sowing branches strike movement started. Never before economic shocks had been accompanied by so large-scale social-political consequences. In these conditions for prevention of bankruptcy Hoover made attempts of government lending and borrowing banks, industry, transport enterprises since the end of 1931.

Today it looks as if the World economy repeats this way... And do not Russian Government's actions look like Hoover's probe-tested recipe?

3.2. Crisis of the 70s and Reaganomics.

The capitalist crisis of the 70s of the last century was caused by two reasons at once. Firstly, by this time a problem of capital surplus utilization had appeared again in connection with exhaust of regions for capital export. Secondly, stop of outlet growth had made processes of Scientific and Technical Progress (STP) development much more difficult. It was impossible categorically to tolerate acute crises of over-production and wars in condition of the world socialist system existence, and capital effectiveness started to become lower [Khasin, 2008]. As a result, a series crisis began which was of not a local but a generally-systematic character. In 1971 the USA defaulted on dollar *disconnecting* it from gold, in 1973 oil crisis began. Let us note that in the USSR there were processes of the same content (which were later called *economic glut*), but both sides should have searched for the way out just in the network of solving the problem of increase of capital effectiveness providing the next phase of the STP. As Khasin points, in the USSR the corresponding problem was not solved what resulted, firstly, in *perestroika* and then to the USSR breakup.

The main trait of this crisis was simultaneous existence of depression (or production fall) and high inflation (so-called stagflation). It was connected with the fact that the USA had to continue the race with the Social system and finance innovation processes at any cost. The solution of this problem was found in the end of the 70s and connected with the names of Paul Walker, a head of Federal Reserve System (FRS) of that time, and J. Carter`s advising group of the President of the USA. It consisted in paradoxical conclusion – not to decrease money pumping at the expense of issuing dollars, but, on the contrary, to increase it. But *to direct money not for supporting capital* (with a purpose of what the private central bank – Federal Reserve System – was built in the USA in 1913), but for direct stimulation of final demand, a state one and a private one as well. Realization of this plan permitted to cut inflation, provide direction of expenses to high-tech branches and provide the mechanism of investment process stimulation. In

other words, consumers` money was directed to development, but not to financial speculations. These three problems were solved. The inflation was overcome at the expense of advance in the cost of credit, unique in history. The rate was raised almost by 20 per cent, what changed an economical situation in the country in essence. And surplus liquidity was *utilized* at the expense of sharp increase of a part of financial assets in their general volume [Khasin, 2008]. Just for that reason *Reaganomics* resulted in essential transformation of the world capitalist system, transition of it to the third stage after a classical period and imperialism, the stage of financial capitalism.

Discount Rate and Rate of 30 Year Mortgage in the USA

So, in the medium-term period the burning problems were solved. It is clear, that problems of hypertrophic growth of the financial sector must have an impact on the long-term interval, but by that moment problems of the USA had been solved, and the world socialist system destroy took place.

4. Global Economic Crisis in Russia.

4.1. General Tendencies of the Crisis.

In the opinion of specialists of the informational agency *INFOLine* [Branch review, 2009] crisis phenomena in the economy may be divided into the following groups:

financial crisis (August-November of 2008) is a sharp fall of the stock market and liquidity crisis in the bank sector which led to bankruptcy of a series of banks, which did not have an access to long-term financial resources, and sharp reduction in lending in economy. Moreover, this stage was characterized by large-scale withdrawal of non-residents` (and residents`) funds from Russia and practically full stop of crediting the Russian companies by non-resident banks. And in spite of pumping-in a great deal of public funds (more than 80 billion dollars) to the bank system lending restoration of the real sector did not take place;

industrial and investment crisis (October 2008) is reduction in production output by enterprises of all industrial brunches (especially of export-oriented branches), sharp fall in investment demand in economy, reduction or *freeze* on investment programs. Simultaneously one could observe substantial recession in all segments of the building sector caused by a sales slowdown. Regarding the results of November 2008, industrial production became 8.7 per cent lower, but in December-January the fall has continued and will make up not less than 15-20 per cent (a series of enterprises stops production in December-January because of fall in demand). Moreover, reduction in railway and automobile transportation volumes took place (freight turnover became 11.5 per cent lower in November and 26 per cent in December);

consumer crisis (November 2008) is reduction in effective demand because of fall in consumers' incomes, degradation of indebtedness under consumers' credits (default in payments) and, consequently, decrease of consumers' expenses.

So, since November 2008 a negative effect of decline in employment in economy (especially among so-called *white collars*, prevailing of consumption over incomes financed at the expense of consumer and mortgage credits as well) has stopped being leveled by widening population`s expenses at account of funds taken from the bank deposits. In the 1st half of 2009 reduction of staff continued, and, consequently, for the majority of specialists having lost their job probability to find a new job without salary sag was very little. As a result, a substantial part of consumers could not keep pre-crisis consumption level, and also met problems while repaying consumer and mortgage credits (according to experts` estimations, not less than 20 per cent of Russians have an indebtedness level which cannot be repaid in condition of substantial fall in salary). The measures suggested by the Government of RF and the Saving Bank directed to help borrowers having lost their job (restructuring of indebtedness, transition to payment of only interest on credit and extension on capital repayment) do not permit to lower arrearage and decrease growth rate of a part of overdue indebtedness.

So, since the middle of September 2008 Russia has survived an active phase of the economic crisis. There are reasons to suppose that this active phase of the crisis will minimum last till 2010, and we will be able to observe two nearest peaks of crisis phenomena in October-November 2009 and April 2010. The crisis is touching vitally important interests of tens of millions of Russians

- violation of paying capacity of many banks in which people `s savings are situated,
- breakdown of consumer and mortgage lending systems,
- decrease of production in nearly all branches,
- reduction in salary and shortening of social packages and, in the end,
- mass unemployment (10-15 per cent of active population) by the end of 2009,
- impoverishment of millions of people believing not long ago in the myth about a long-term stability in Russia.

In spite of anti-crisis measures since the beginning of 2008 the Bank of Russia has begun to obtain bank funds for special currency correspondent accounts. The reason of it is limiting of currency buyup – fighting speculative operations of the banks (but not their clients) The Bank of Russia limited currency sums which they could have on their correspondent accounts in other commercial banks. Sum of funds on these accounts made up 20 billion dollars in December, 15 billion dollars in January and 43 billion dollars in the beginning of February, as it was announced at the meeting of economical session of Conception-2020 forum under the motto Crisis as Development. And everything would have been all right if the Bank of Russia had not included Russian bank funds on these currency accounts into international reserves of Russia. By this it violated methodology of Special standard of the International Currency Fund (ICF) for distributing data taken by it and misleads specialists and society exaggerating degree of stability of the foreign exchange market. Scale of this exaggeration grows fast – a part of bank funds on special currency correspondent accounts in the Bank of Russia in international reserves of Russia increased from 4.7 to 9.0 per cent in January and to 11.1 per cent in the first days of February. So, real fall in international reserves of Russia for 6 months of the crisis made up 254.4 billion dollars or 42.6 per cent of their maximal value (598.1 billion dollars).

In the same time population's real incomes falling by 6.1 per cent in November in comparison with the analogical period of the last year became 11.6 per cent lower in December (because of high seasonal salaries in December of 2007), 6.7 per cent more lower in January of 2009, 4.5 per cent lower in April and 5.6 per cent in May. Investment breakdown being in the network of statistical error (2.3 per cent) in December of 2008 reached 15.5 per cent in January, 16.2 per cent in April and 23.1 per cent in May of 2009. So, even the official forecast comes from its depth of 14 per cent regarding the results of 2009. Car production in Russia (including assembly plants belonging to foreigners) became 5 times less in January. Reduction in freight railway transports (as it was noted above) which was 11.5 per cent in November reached 20.9 per cent in December, 32.2 per cent in January – economy stops slowly. Industrial recession (in comparison of the analogical period of the last year) beginning in November and making up then 8.7 per cent reached 10.3 per cent in December, but fell up to 14.3 per cent in May (of maximal level since 1994), and reached depth in 16.9 per cent in April, and became 17.1 per cent lower regarding the results of January-May of 2009. Profits of federal budget became 14.1 per cent lower up to 419.1 billion roubles in May, and budget deficiency payments was realized at the expense of unused remains of budget funds and at the expense of the Reserve Fund as well which was shortened up to 100.95 billion dollars for January-May of 2009. But in 2009 inflation became slower from 8.3 per cent last year to 7.1 per cent this year (for the same period – January-May of 2009). Inflation slowing is a result of unprecedented tough financial policy of the Ministry of Finance which was the first since 1998 decreasing money mass by 8.6 per cent. However, such policy destroys economy much more effective than inflation. As Andrei Klepach, a deputy minister for economic development, showed in June 2009, if for 2009 fall of the Gross Domestic Product (GDP) was not higher than 8 per cent it would be a heroic action for our economy and would correspond to fall of the GDP in 1918 (-7.7 per cent). For you to know, the

largest GDP decline trade in Russia in the 20th century was observed in 1917 (-18.2 per cent), in 1993 (-14.5 per cent) and in 1995 (-12.7 per cent). But today there is no revolution and no post-Soviet ruins. And the crisis does not play here the most important part; the matter is in the economic model made up in 2000-2008 [Krichevskiy, 2009].

4.2. Influence of the Economical Crisis on Retail Trade Condition.

In November 2008 the growth of crisis phenomena in economy of Russia had a substantial negative effect on the growth rate of retail trade turnover (increase made up only 8 per cent in November 2008 in comparison with 14.3 per cent in September 2008). Reduction of staff and salary in Russian companies which caused lowering of consumer confidence was only partially compensated by activation of retailers' marketing activity and withdrawal of rouble funds by the population. As specialists of the informational agency *INFOLine* forecast, the result of crisis phenomena escalation in Russian economy in November was reduction of the growth rate of nonfoods turnover by 10 per cent and retail trade in whole by 8 per cent. Moreover for the first time in the last several years activity decrease of retail trade turnover took place in November in comparison with October. In the fourth quarter of 2008, in spite of sharp growth of demand in retail trade companies' financial resources for replenishment floating assets and refinancing of existing lands crediting was realized only by state banks in the network of the Russian Government program of supporting retail trade, but in the whole around the country about ten from more than 350 retailers could receive credits. As a result, since November-December regional retailers began to close shops up to full stop of operational activity. According to Leo Khasis' prognosis, more than 25 per cents of trade networks of Russia will become bankrupts during 2009. In the same time the growth rate of retail trade turnover in Russia goes on to be on a comparatively high level (8 per cent) what is conditioned by the following factors

- withdrawal of a great volume of rouble funds from the bank system by individuals and sending them to buy durable goods while expecting price rises for import goods because of rouble devaluation;
- redistribution of consumer expenses consisting in increase of a budget part directed to buy foods because of price rises.

In 2009 specialists of the informational agency INFOLine expect slowing of growth rate of retail trade turnover not more than to 5 per cent because of decrease of real income of the population, price rises, decline of consumer demand in the nonfood segment and reorientation to cheaper foods. In November-December 2008 a part of foods in retail trade turnover in Russia went on to be increased what was conditioned by decline of nonfood consumption and also rise of food prices under the conditions of the crisis. In the structure of retail trade turnover unit weight of foods was 51 per cent, 49 per cent of nonfoods in December 2008 (correspondently 44.5 and 55.5 per cent in November 2007). So, under the condition of the crisis and price rise decrease of a part of expenses for buying foods in the structure of population consumer expenses stopped. Growth rate of consumer prices in the 4th quarter of 2008 appeared to be a little lower then during the analogical period of 2007, but in December an index of consumer prices was 100.7 per cent, and 113.3 per cent for the period since the beginning of the year (101.1 per cent in December of 2007, 111.9 per cent for the period since the beginning of the year). And a gradual devaluation of the rouble made by the Bank of Russia formed preconditions of great import goods price rise and, consequently, activation of inflation processes on the consumer market in 2009. According to forecasts of the Ministry of Economic Development, in 2009 inflation growth in Russia will make up 10-12 per cent. So, an effect of reduction in world food prices having conditioned fall in prices for food raw material imported to Russia will be compensated by drop in real rouble rate as a result of devaluation. Fall in transport expenses of producers of consumer goods as a result of petrol price lowering and intensification of competition in the trucking segment will also not very substantial in 2009.

The crisis in Russian economy and full stoppage of credit of regional retail distribution networks by banks substantially worsened their condition. In this condition retail distribution networks continued to be a link of the economical system generating non-payments along the chain *raw material supplier – producer – distributor* in food industry and association good production, and the governmental measures in the sphere of co-action in obtaining credits of state banks by the largest retailers do not allow to make this situation much better, as credits are mainly directed to optimization of credit portfolio, but not to payments to the suppliers.

Lowering of a part of markets in retail trade turnover was accompanied by decrease of their quantity because of elimination of them or restructure to malls – 6.44 thousand markets were in action in Russia on the 1st of January of 2005, 4.7 thousand markets on the 1st of January of 2008, 3.8 thousand markets on the 1st of April of 2008, 3.74 thousand markets on the 1st of November of 2008. Reduction in quantity of markets was conditioned by toughening the government control rules. As a result in 2007-2008 one could observe a tendency of market extension – on the 1st of January at the average there were 204 places in one market, on the 1st of June 228 places, on the 1st of January of 2008 245 places, on the 1st of November 275 places. In this situation in 2008 one bought more than 10 per cent of foods and 16 per cent of nonfoods in retail markets and trade fairs.

In 2008 on the whole in Russia the growth rate of retail trade turnover became 18.3 per cent lower (in comparison with 2007) in Ural federal district, 0.1 per cent higher in Central federal region, 1.2 per cent lower in Volga federal region, 0.1 per cent lower in Far East federal region, 3.7 per cent lower in South federal region, 2.3 per cent lower in North-West federal region. According to the opinion of specialists of the informational agency *INFOLine*, the crisis in Russian economy goes on to have a negative influence on development of the retail trade market of Russia, and in 2009 the situation will continue to be worse.

4.3. Jewelry Market.

The majority of people worry not so much about reasons of the crisis, but consequences and eternal *what to do?* Not everyone can risk speculating for the decline of quotation of blue chips, although maybe nobody doubts that stocks of such gigantic companies as Gasprom, Lukoil, Vneshtorgbank will return to their level sooner or later. Should one convert rouble savings to dollars or euros as soon as possible? To what should one invest savings during the crisis? Estate property? Land? But, firstly, this process is not fast. And, secondly, estate property prices are very high, and there is no guarantee that this financial bubble will have not burst out by the beginning of autumn.

However, there is a quiet harbour where one can wait till the storm is over. And it is not *Russian economy*, as it was proclaimed from the St. Petersburg forum, but precious metals (gold, silver, platinum) and jewelries from them. According to the *RusBusinessConsulting* agency, gold price has risen threefold for the last 5 years. It is not by chance that there are announcements in the *News* that sharp growth of demand for gold coins has been noted in Russia. However, it is not obligatory to invest money just to gold coins. Gold will not fall in price if it turns into refined jewelry necklace or a unique ring.

Jewelries are a form of aesthetic accumulation and investment. There is only one minus – to part with an artwork is always difficult. (The authors wrote in the work [Libin, 2009] about possibility to invest money into silver during the crisis in detail. Let us pay attention to jewelry market behavior on whole and gold in particular). Gold has played a role of money during three thousand years. Certainly, one can invest capital to gold not only buying gold jewelries. Money invested to jewelries will not bring incredible profit, but in the same time they are a means of saving it from inflation. For example, a year and a half ago a price for 1 gram gold was 470 roubles, today one can return the same jewelries to jewelry shops for 550 roubles for a gram. The main thing in this situation is checked quality of stones and metals. It is also possible to invest capital to depersonalized metal accounts (DMA). But investment to DMA is not guaranteed by the state, differing from rouble investment. And DMA profit depends on gold price on the world

market, so this instrument is more probable for exchange players. It is also possible to buy gold bullions, but nobody guarantees that the bank will buy it at the fixed price if it is necessary. It also refers to buying jubilee coins. Buying gold bullions a client looses at once 18 per cent of its cost, as a price includes VAT which this operation is imposed by. So, a margin between buying and selling prices may reach 30 per cent. As they say in China, a rich man does not have a lot of money, but a lot of gold. People raise money to buy material values. And jewelry is such a value by itself. And if there is a necessity to sell jewelries there is a possibility to set a price of it by oneself. So, jewelries are wealth which is always with you. There is one more important argument – jewelry prices are always growing as time passes, and money becomes cheaper. Moreover, jewelry is not only a material value, but a status product.

Jewelries are a cultural heritage of our country not less important than literary or art monuments. Jewelry industry is one of a few industrial brunches production of which live hundreds of years. A lot of ancient jewelries have come to us. And masters of Kievan Rus used such unique techniques of jewelry production as filigree (twisting from a thin gold or silver wire) and enamel (decorating of metal things with enamel drawings). In the crisis beginning the jewelry market demonstrated astounding success. Due to instability of the fund market, the real estate market and the bank sector jewelry market seemed to be the only refuge for capitals – only for the last quarter of 2008 30 per cent growth of sales of jewelries and precious stone bullions was demonstrated in comparison with the analogical period of 2007. Many people perceive buying jewelries as anti-crisis investment. For example, sales volume of super-elite and superexpensive silver table ware of such firms as *Brandimarte*, *Greggio* and *Cesa* in Moscow and St. Petersburg shops has several times grown for the same period. But by January these investments had stopped, the matter is that investors solved their short-term anti-crisis problems, and a traditional buyer who had only begun his shopping to Christmas disappeared expecting development of the situation in economy. A traditional peak of buying jewelries to the 8th of March did not save the situation – there was not any peak. Sales in some large trade networks fell twice. Retailers purchased commodity reluctantly being afraid of a lack of demand. And enterprises were feeling a lack of liquidity. Decline in jewelries, especially in a medium price segment was outlined. In whole they lost 30 per cent. Andrei Ananov, the president of the company Russian Jewelry Art, has commented on the situation, «Everybody knows for sure that to buy a cheap jewelry is easy, but to sell it is difficult, especially to sell loosing nothing. That is why people do not buy cheap jewelries, and, in general, in reality, it is not investment of capital. It is possible to move lower a little making jewelry cheaper at the account of it, but it is not possible to move at a loss». By the way demand on the main jewelry market in the USA has also declined. Export from India and the USA has become 15 per cent lower. Gitanjali Gems Ltd, the largest jewelry producer in India, has already announced that it is going to stop all export to Northern America for a year till stabilization of the situation on the world financial market. In the 1st quarter of 2009 sales of jewelries in retail trade of Russia declined sharply, and a medium check in shops reduced about one and a half times. This situation made the shops reduce their whole sale inventories and range. After that jewelry production began to fall. According to the Russian Assay Office data, in connection with the crisis the jewelry production fall was 38 per cent in January 2009 in comparison with the analogical period of the last year, and gold jewelry production became almost 50 per cent lower. (For you to know, net profit of jewelry producer Tiffany & Co became 62 per cent lower up to 24.341 million dollars in the first quarter of financial year 2009-2010). A little restoration began in April 2009, an ordinary buyer began to perceive gold, silver, precious metal and other jewelries as constant values which were subject to crisis phenomena not much differing from money and stocks. Participants of the jewelry market say that the year 2009 will be difficult for retailers. So, regarding the results of the first three months of 2009 sales volume of gold jewelries in Russia will be 30-50 per cent lower. Sergey Dokuchaev, the General Manager of Russkiye Samotsvety Co.Ltd, predicts sales volume reduction by 40 per cent in 2009. At the same time Olga Mironova, the General Manager of analytical agency RosYuvelirExpert, says about 30 per cent fall. (Participants of the market assure that the largest network 585 has suffered the most. It grew aggressively at the expense of borrowing costs and now the company has difficulties with repayment. Networks of producers have a possibility to set more competitive prices. But participants of the market note that price reduction policy has become old – great price reduction causes questions about quality of production).

In condition of drop in population paying capacity cheap silver jewelries has become more popular. So, according to the estimation of the marketing agency Step by Step, in 2009 growth of cheap silver jewelry market may be 20-25 per cent. But analysts confirm that composite demand will stay lower than before the crisis for a long time. Moreover, share redistribution in jewelry business has been clearly outlined – if such jewelry networks as Adamas, Russkoye Zoloto, 585, Yuvelirtorg, Yuveland, Yashma, Russkiye Samotsvety, Platina and some others plan to open new shops (and regional ones as well) small and medium-sized business is closed. What does it lead to? To appearance of monopolists (and to price rise, correspondently), on the one hand, and supply range contraction, on the other. What expense did small enterprises survive at? As a rule, at the expense of prices and a range, as a small firm maintained relations with some high-class producers (for example, Zarina Group represented in Russia some of the best Italian companies *Brandimarte*, and *Greggio* and at the account of these close connections brought the best in the World unique silverware to Russia). In condition of credit unavailability for the Russian company and its Italian partner as well this business has not been kept in Russia, as it seems. It is more profitable for large companies, such as Adamas, to buy cheap jewelries in South-Eastern Asia.

It is necessary to note that foreign gold jewelries make up 10 per cent and silver ones 30 per cent from general volume of gold and silver jewelries tested by the Assay Office of Russia. Analysis of the home jewelry market shows approximately equal share of realization of silver and gold jewelries. It is clear that about 20 per cent of gold jewelries is illegal production from South-Eastern Asia and Middle East. CIS countries neighboring to us contact actively with foreign producers. Because of a lack of clear policy of the state in this sphere we let other countries pull ahead becoming almost world leaders at the account of our producers. So, Russian jewelry trade is becoming a place for jewelries of low quality. Nowadays a general share of smuggling jewelries on it makes up from 40 to 70 per cent. And what is the most offensive, these jewelries are represented to our buyer as a product of domestic manufacture what does serious moral and material harm to our industry. Pay attention that in none of the shops in Russia you will see jewelries with labels of foreign countries — China, Turkey, Thailand, Hong Kong and the countries of Middle East. Sellers themselves understand that they sell goods of not a very high quality, but labels of Russian producers on them misinform buyers.

But just now under the conditions of the crisis jewelry brunch can clean off from unfair companies. Then it will possess a possibility to become import-replaced and export-oriented. For that it should solve a series of problems which have been saved for tens of years. Firstly, it is a high fiscal load. It does not permit to buy the newest equipment and precious stones which are imposed with rather high duty in quantities necessary for widening production. As a result we have the following – Russia produces 180 tons of gold per a year and processes only 70 tons. Compare – India processes 700 tons of gold producing only 3.5 tons for the analogical period.

That is why, activity program of the Russian Jewelry Guild Association for 2009 in conditions of the global financial crisis include

1. Protection of the jewelry market in Russia from production of low quality. (It is strange, but mainly prohibitory measures are supposed, such as quotation imposition and increasing entrance custom duties for imported jewelries from 20 to 30 per cent. The guild confirms that a supposed size of duty (30 per cent) is not obligatory for qualitative jewelries of famous Jewelry Houses and will probably not cause rise of their retail cost in Russia. In the same time such measure will substantially raise cost of mass cheap things made in China and Turkey which will raise competition of things made in Russia and give them possibility not to admit sharp job destruction).

- 2. Provision of functioning of Russian jewelry industry, keeping national traditions of jewelry art and highly-qualified professional personnel in conditions of negative influence of the global financial crisis on Russian jewelry market. (Suppositions of the guild add up mainly to allocation of 30 (thirty) tons of gold from the state fund to enterprises members of the Russian Jewelry Guild Association during 2009 with delay of payment for twelve months, purpose state credit and granting jewelry enterprises members of Association delay of federal tax payment).
- 3. Support of demand for Russian jewelries. (It is supposed for it with a purpose of drop in cost of production maid in Russia to abolish entrance duties for jewelry stones and small screen diamonds and submit a list of technological equipment analogs of which are not produced in the Russian Federation to the Government of the RF).
- 4. State support of Russian jewelry export. (State support should put into practice the institution of authorized exporters having State support, partial financing from federal budget funds, participation of Russian jewelry enterprises in the leading world exhibitions and urgent return of VAT during thirty calendar days).

According to the Guild's data, from the beginning of the year gold jewelry production has become 44 per cent lower and sales 15 per cent lower. Jewelries with diamonds belonging to a segment de luxe are found in shops for months – people are not in a hurry to buy them. It is important to know that in this situation the crisis did not influence production volume and sales of silver jewelry. For four months of 2009 volume of silver jewelry sales has become 15 per cent higher and continues to grow. An appeal of the guild to the Government of Russia met understanding from the Russian Federation power. By direction of the Government, Prioksky plant of nonferrous metals belonging to the state will grant a part of produced fine gold to jewelry enterprises in a form of credit or with delay of payment since July 2009. Besides, Under the Government Executive Order № 735-P, formation of precious stone fund for 2009 in the volume of 14.46 billion roubles is provided. The funds will be directed to buy rough diamonds and diamonds. This sum includes 3.69 billion roubles which were provided in a yearly plan for buying out precious stones for 2008-2010. So, the Russian State Depositary of Precious Metals will direct 10.77 billion roubles for additional buying out precious stones this year. As it was announced, in 2008 the State Depositary of Precious Metals had directed 170 million dollars for additional buying out diamonds from companies. 17 million dollars from this sum was used to buy out stones from Nizhnelensky, 3 million dollars from Severalmaz, the rest of the sum was directed to the jointstock company ALROSA. Besides, 1 billion roubles were appropriated to buy out diamonds from the Smolensk Production Department *Kristall*. Each month about three million carats of precious stones are bought.

Russia has passed a significant boundary this year – outrun *De Beers* Company as the largest diamond producer in the world. But the world market of rough diamonds in such a depressed state nowadays that the diamond-mining company *ALROSA* 90 per cent of which belong to the Russian Government had not bought a diamond in a free market but begun to collect them instead. As a result, Russia has become an arbiter in the sphere of setting world prices for rough diamonds. Its decisions in diamond production and sales sphere will be determinative for cost of diamonds inserted into rings and sold in jewelry shops for many years, and it is one of the most curious consequences of the observed economic recession. Besides, economic recession coincided with the decision of antimonopoly authorities of European Community which put an end to a long-standing policy of *De Beers* Company which collected diamonds together with the ALROSA directed to price support. In spite of the fact that Russia is a large commodity producer it has never pursued a policy of artificial support of price. For example, in oil sphere Russia gets profits from production reductions of oil cartel but does not participate in them itself.

Diamonds are an exception. Trying to regulate its coming to the world market and not making prices much lower Russia trusts two things – the State depositary for precious stones of the Soviet times built up for keeping jewelries expropriated from aristocracy after the revolution

of 1917 and capital investors who, as the *ALROSA* hopes, will buy diamonds in investing purposes. It is necessary to note that the Russian diamond-mining company took a part of the leader in the period of time full of risks. Rough diamond prices have fallen more – by 75 per cent – since the time of achieving by them their peak on some auctions in July of the last year. These both markets are different from each other. Usually about 60 per cent of rough diamonds are lost as dust and waste while cutting. The *ALROSA* accuses diamond sellers who mortgage them as loan coverage that they are partially responsible for diamond access on the world market. Last autumn when credits were used up banks and other creditors *withdrew these precious stones and sold them flooding the market*. That is why Russia is only saving diamonds but not selling them trying to keep prices. Charles Windham, the former appraiser of the *De Beers* and co-founder of the analytical service of the *Polished Prices* says that yet Russia succeeds in this maneuver – it holds diamonds to make more money at the end, but not to plunge the market into a larger depression.

The ALROSA tries to start up demand selling precious stones to bulk buyers in Belgium, Israel, India and other countries under long-term contracts. Under the terms of these contracts six ones of which were sighed charged prices correspond to a mean value between the price peak reached in August of the last year and the level mounted last winter and are fixed for the several year period. The ALROSA also works with the Moscow investment bank Lider, which is an affiliated company of the Russian gas monopoly Gasprom, at offering diamonds to investors. According to this plan, investors will buy diamonds, but jewelers will get stones only in some years.

In medias res, it is a program which provides transfer of precious stone saving function to investors in exchange for a chance for them to get profit in connection with possible market restoration. Certainly, especially in conditions of the crisis precious metals (except silver) and diamonds are assets and included to gold and foreign currency assets of the states and are assets for private investors.

Plans of Central Banks of developed countries about selling their savings are the main unknown and potentially positive catalyst. These factors in the aggregate point more possibly to a price lowering but not rising tendency. Meanwhile, analysts look at stock perspectives of gold-mining companies optimistically. «They should define gold prices. A long-term trend will unfold mainly because EPS growth must exceed gold price rise while mining expenses are falling. This trend is not noticed anywhere so clearly, as in Russia, where in 2009 expenses for mining of a ton of ore will have to fall. It will influence growth of income substantially», they say in the Alfa-bank.

By 2010 the Russian company *Polus Zoloto* is planning to increase growth of production volume by 15 per cent and to begin mining on deposits Titumukhta, Blagodatnoye and Verninskoye in correspondence with intended years 2009-2011. As analysts think, the other Russian company *Polymetal* will not carry out its mining prognosis in 2010 because of transition to other types of ore, shortage of ore mining volume and delay of the projects *Albazino* and *Kubaka*. Meanwhile, the real price of the *Polus Zoloto* and *Polymetal* is 14-18 per cent higher than their current quotations, that is why analysts recommend investing to their stocks even if prices are falling. In the Alfa-bank they recommend investors to sell gold and buy stocks of Russian gold-mining companies. Only the International Currency Fund (ICF) can run down feverish demand for gold. For example, in Germany demand has grown fivefold and made up 59 tons. Futures contracts for gold also grow. Such a tendency can be explained – in the unstable situation investors always prefer this precious metal. The question is – will this tendency stay for long?

Statistics confirms that in the 1st quarter of 2009 the volume of world demand for gold made up 1016 tons what is 38 per cent higher than the analogical indicator of the last year. During the analogical period of 2008 in comparison with the 1st quarter of 2007 demand for gold among investors became 248 per cent higher to 596 tons. On the whole the data of the World Gold Council indicate that *demand for gold continues to grow among investors, but to decrease*

among consumers. And in comparison with the analogical period of 2008 in the 1st quarter of 2009 industrial demand for gold became 31 per cent lower.

At the same time jewelry producers began to buy 24 per cent less gold metal. Demand reorientation could not but told on precious metal price. While investors increased their assets a price grew and grew, in the end of February of the current year a price of a troy ounce reached 1000 dollars. Reduction in demand from manufacturers had an effect on price fall in March.

In the 1st quarter the world demand for gold jewelries became 24 per cent lower that indicates that consumers reduce expenses for goods which are not very necessary. Other factors also influence gold price, one of the leading factors is inflation. When in 2007 metal price exceeded 800 dollars for a troy ounce many analysts made comparison with the economical situation of 1980 when nominally gold price had been on the same level. Inflation in the USA since the 80s to nowadays has made up about 160 per cent. More than 2.5 per cent reduction in buying power of a dollar should have told on gold price too. If we recount a price of metal of 1980 with account of inflation we will get more then 2000 dollars for an ounce. Possibly that is why, for the 1st quarter of this year gold sales by Central Banks became 55 per cent lower.

As for estimation of silver as asset it is ambiguous in different business cycles. In a family of sold goods silver is a classical *chameleon*, or during inflation it is an alternative refuge for investments raising a price of it as inflation processes become deeper, and in the deflationary medium silver looses a function of alternative money [Libin, 2008]. We should note that after the Second World War almost all world silver resources appeared in the USA, and then silver was sold under priced. On the other hand, The Central Bank of the RF (via authorized banks) sells gold and silver jewelries (mainly coins) absolutely overpriced. If buying silver coins (coins of *proof* quality, silver of 925 standard) in Mexico a buyer paid about 1 dollar for a gram of silver, in Russia this figure (for analogical coins) is 2-3 times higher.

N.B. We also remind that differing from gold, platinum and diamonds, silver is not included into gold and foreign currency reserves of Central Banks, that is why all countries do not announce the reserves of this metal.

4.4. Real Estate Market Behavior in Conditions of the Crisis.

The Russian real estate market reflects all problems of Russian economy and is characterized by uneven development of its segments, imperfect legislative base and low investment activity of people and legal bodies. Together with it this market is a perspective sphere of capital investment. By the means of market mechanism and State regulation the real estate market provides building of new real estate objects, transfer of rights for real estate, charge of equilibrium prices for real estate and, at least, distribution of space between competitive variants of land-utilization.

The most important peculiarity of the real estate market is a limited number of sellers and buyers of real estate objects. As a result of a high market value for real estate objects market capacity may be very high. One more peculiarity of the market is a character of consumer demand. Demand for real estate objects is ascertained and not interchangeable, what makes a process of reaching market balance and proportionality more difficult.

Nowadays on the Russian real estate market supply substantially exceeds consumer demand (especially for commercial real estate). One more peculiarity of the market may be a complex symbiosis of advantages and disadvantages. Its advantages are a possibility to get more profit (then in other markets) for the whole period of operation of real estate objects, enough stability of consumer demand, less subjection to economical cycle oscillations, essence of certain protection from sudden changes of market conjuncture because of a long-term lease and a long period of building competitive objects.

Its disadvantages may be – information in the market is not so open as, for example, on the market of goods what makes a process of substantiation for a volume and a character of investment more difficult; absence of a legislative base in relation to obligatory publication of

information about bargains on the real estate market; tough dependence on outer conditions of architectural regulations, possibilities of a building complex and a specific character of consumer demand; bargain costs (necessity of check juridical purity of a real estate object and also expenses for technical documentation and registration) are substantial if not to say high ones.

Volumes of house building in Russia in the 1st quarter of 2009 made up about 10.2 million m² what exceeds a little an analogical value of 2008, but is connected with decommission of mortgaged real estate. In the Moscow region building volumes of living areas showed a negative dynamics, meanwhile in absolute indexes in the past period the region was still the leader among regions of Russia in real estate building. For the 1st quarter of 2009 in the Moscow area about 1 million m² and in Moscow 716 thousand m² were put in commission. And theoretically perspectives of new building in the Moscow region are rather optimistic – new building is possible at the account of integrated development of rather a great quantity of free territories in the Moscow region, and at the account of municipal program realization in Moscow.

However, the crisis has corrected plans of Moscow building business. As Alexander Kuzmin, the main architect of the capital, announced in the beginning of December, building of a series of important city objects planned before, such as a mayor`s office or a concert hall, is undecided today. Building business feels difficulties of today`s crisis situation more and more. As Alexander Kuzmin has noted, objects which are in building business already will be completed without any doubt, but questions of erection the objects planned for 2009 are very complex, although some large participants of building business are sure that their capacity will allow them to survive in the crisis even realizing investment projects.

The crisis situation also ruins the plans of metro and road builders – budget expenses in these spheres are reduced by a pair of tens of millions. Although clerks and deputies suppose that a part of investments in these spheres can be increased in 2009. According to the latest data, in whole the Moscow budget was decreased by 200 million roubles. Some participants of building business are still reservedly optimistic – project *Moscow-City* is put into operation on time but with less squares then it was declared before. Such large projects in building business may be influenced by the crisis but in a very distant future – in this moment investors have provided some funds for themselves selling/leasing beforehand trade and office complexes as part of projects in the end of 2007-the beginning of 2008. The situation with small and medium-sized business is very sad – all over the country arbitrages are tied to bankrupt medium-sized and small companies occupied in building business. As the main Moscow architect confirms, today in an architectural branch of Russia in whole one can observe substantial reduction of commercial contracts with participants of building business. And if regional project institutions are going to fight this problem reducing personnel Moscow architects rely on a possibility of surviving at the account of formation of a municipal order portfolio in building business.

Today the cities (especially, Moscow) require building and projection of objects of urban and social infrastructure. But again everything will depend on funds appropriated by the urban budget. There is only one hope left that while there is not a large quantity of private orders for projection of trade and office complexes architects will pay more attention to work at school and hospital projects. Although prices for the latest projects themselves are less attractive then, for example, a price for working out an architect project of a private multifunctional complex. That is why, according to the data of statistic authorities, on the Moscow housing market a supply volume and consumer demand reduction was noticed in the 1st quarter. For the 1st quarter reduction in price made up about 12-15 per cent, and middle prices fell to 5 thousand dollars for a square meter on the primary market and 4.7 thousand dollars for a square meter on the secondary market. In the nearest time, first of all, in summer new reduction in price is in store.

As for elite housing there were no any substantial changes on the market of elite real estate in the 1st quarter of 2009. And if on the secondary market one could notice positive supply dynamics, the market continued to expect output of new objects in the segment of a new-built quarter. A low activity of elite housing buyers led to high quarter reduction in price (at the

average by 10-15 per cent); in connection with it investors began to sell *investment* flats. A price falls even for Moscow square meters, and building business participants state stagnation of a branch.

According to a series of analysts' data, supply on the real estate market will approximately become 20-30 per cent higher in the beginning of October. A part of this percentage will belong to investment housing which will be got rid of as an asset practically not bringing profit. It will not influence demand somehow. That is why sharp disproportion is expected by the autumn – today supply grows much quicker then demand. This is the reason of further reduction in price for a square meter. On the other hand, specialists do not notice yet mass panic among investors in building business. And it gives hope that the situation in building business will be stable. Partly specialists explain retention of real estate by investors as a means of decreasing a risk to lose one`s money – to invest capital to stock today is much more risky then to real estate. On the background of real economy and the fund market in distress building business seems to investors a more acceptable niche for investment in the given moment.

Private investors have a lot of additional reasons to doubt in reliability of building business – for long building business participants have avowed that credit funds are difficult to access, about stoppage of building and about disposal of the projects declared before. Credit money seems expensive to some building business participants – for the last two years banks have increased credit interest rate threefold (now it varies from 18 to 25 per cent). As a result, Oleg Deripaska, an owner of the holding *Bazovy Element*, is searching for buyers for his building business or a part of it which is united in the *Glavstroy* corporations. He is searching for buyers for the whole building business *Bazela*. Experts note that the main business for Deripaska is an aluminium one, but building and development are secondary ones. In the situation when the main business is in hazard (debts of *Bazela* companies reach 20 billion dollars), Deripaska has to sell secondary assets. In connection with the crisis Oleg Deripaska has to get rid of realization of development projects in Russia and abroad.

Today only a quarter of building projects in Russia is realized under a planned schedule. Because of difficulties with attraction of financing almost 75 per cent of regional developers had either to freeze their projects or to postpone their date of realization. Today in different regions of Russia from 30 to 70 per cent of building are frozen, and about 10 per cent of building projects are frozen on the stage close to completion. In today conditions we can expect for move of the main activity of the market to regional developers of a middle size, as all large market participants have appeared to be highly dependent on credit attraction for realization of their projects, small regional companies have got a possibility to buy at a cheap price and complete large developers' frozen projects. On COMINT director's opinion, yearly average rate of new housing commissioning in 2009 can be 10 per cent lower than indexes reached in the year 2008. In this situation in case if the government does not take necessary support measures in time scales of reduction in housing commissioning volume can be more noticeable. That is why the government intends to work out a series of measures to support construction industry in the whole. On the government's opinion, just construction industry is one of the first-priority brunches of economy and is the first that needs support—construction growth can condition development of other industries, such as production of business materials, communal resources, traffic growth, etc.

We should say that real estate market as a constituent part of market space of Russia possesses classical conditions – economical recessions and rises. Cycles in the real estate market development do not coincide with cycles in other economic brunches. Recession on the real estate market precedes economic recession in whole, and, correspondently, rise on the real estate market begins earlier then in economy.

Residential property market in 2009 and its short-term perspectives. The Builders` Association of Russia (BAR) has estimated scale of price reduction – in the beginning of the year in Moscow residential space became 1.8 per cent cheaper in terms of roubles, while over the country price collapse in some regions reached 14.5 per cent. For example, flats became 15 per

cent cheaper in Krasnoyarsk, 14 per cent in Sochi, 10 per cent in Perm, 7.2 per cent in St. Petersburg. According to experts, the fact that Moscow recession rate lags behind other regions can be explained by the capital status of the city in which a great part of money, influxes of people of other cities and countries, is concentrated.

But there are reasons which do not let us accept the fact that a square meter of floorage in the megalopolis resists the crisis and general tendencies so persistently. For example, common building materials became 7 per cent cheaper since January till April and 15 per cent since the beginning of the crisis. According to the BAR data, reduction in price for building materials led to 5.3 per cent reduction in cost for January-March of 2009 and 12 per cent reduction in cost since the beginning of the crisis in September of 2008. So, under economic laws, a meter price should fall, not to speak of catastrophic demand fall and reduction in real profit.

Olga Viner, an analyst of the company *Bureau of Investment Informational Support*, says, «It seems that Moscow is a phenomenon which the market laws do not act on. Reduction in price for a housing square meter fixed by the residential property market experts has appeared to be three times less then reduction in price for building itself, what, in principle, can be called only nonsense. But it is a fact. And it proves a clear thing – a price of each square meter is determined by corruption but not work».

Certainly, we can exclude the fact that everything is more expensive in Moscow, including guest workers' work. A square meter cost in the capital is the most expensive in Russia – 57.7 thousand roubles. But we know one more thing – *builder margin before the crisis was estimated in 300-500 per cent, today is only in 100 per cent.* Account and proofs are simple and clear – an average price for a meter in an economy class new housing is 115 thousand roubles or twice higher than a prime cost. It means that builders put about 57 thousand roubles from each meter to their pocket.

As builders` accounts show, if the margin is 100 per cent, it is distributed as following – 5-10 per cent is expenses for salary, 7-8 per cent is building material cost, 20-23 per cent is network connect, 20 per cent is infrastructure construction, 30 per cent belongs to the city. As they say, all the rest – about one third – is used for document agreement, buying out of land, preparation of the project and technical and economic assessment (TEA) and...inpayments to clerks` mutual benefit fund.

In other regions of the country builders cannot boast of super-profits – for example, builders of the Moscow region have 25 per cent, in Novosibirsk difference between a prime cost and a selling price for a housing meter is the least one -12 per cent. In St. Petersburg this difference reaches 69 per cent, in Samara – 62 per cent.

The BAR specialists give objective reasons of different depth of prices on cities and regions. First of all, we should take into account, that fall of production level and real profits of the population increase price reduction potential; that is why larger reduction can be in cities which have suffered more from the economic crisis. And we cannot say that about the capital now. Price reduction potential is also increased by high volume of building per head.

If we take into account an average temperature of prices before the crisis and today, according to the BAR statistics, it looks like the following – prices for the secondary residential space in the regions of Russia have become on the average 8.9 per cent lower since the beginning of the year. An average price for a new building has become 4 per cent lower. On the average, a meter of a new economy class flat costs 39.3 thousand roubles, an old one 43.9 thousand meter. A prime cost of building is 33.5 thousand roubles. So, on the average all over the country difference between the prime cost and the market price in a new economy class building is 5.79 thousand roubles.

In Moscow in May one could buy a flat in a new building at the price of 134.1 thousand roubles for a square meter (4034 dollars), 140.5 thousand roubles on the secondary market. In this situation a prime cost of a meter stayed twice cheaper than a selling price – 57.438 thousand roubles (1727 dollars). A square meter behind the Moscow ring highway (MKAD) today costs 58.9 thousand roubles on the primary market, 67.3 on the secondary market. In St. Petersburg

flats are much cheaper – in May a meter of a new flat cost 78.4 thousand roubles at the average, of an old one 91 thousand roubles. The cheapest housing is on Taimyr – one can buy a square meter in a new building for 26.4 thousand roubles. A prime cost in this region is the lowest over Russia – 19.9 thousand roubles for a meter. In Buryatia, Evenkiya, Ingushetia and Kalmykia a housing price is a little more expensive. According to the BAR analysts` forecasts, price restoration can begin not earlier than in the end of 2010.

Country real estate market. Quantity and a price of country real estate grew constantly during the last year – 2008. Only in the second half of 2008 in the Moscow region about 600 cottage settlements were built. In that time rise in price for country real estate was 20 per cent in terms of dollars and 15 per cent in terms of roubles. In categories prices have become 5 per cent higher in economy class, 10 per cent in business class, 25 per cent in elite class. Crisis phenomena of the last 5 months led to moving of developers' activity to economy class, mass freezing of the projects, increase of number of the projects without contracts and price reduction by developers by 30-45 per cent. Moreover, the nearest border of cottage settlements moved away from the MKAD to 80 km. Besides, the crisis stopped building of about 60 per cent new settlements, and demand fell two-threefold dependent on the object price and direction. An average price of a cottage square meter was 70.5 thousand roubles in 2008. Today a country square costs about 50-52 thousand roubles. Business class has suffered the most – buyers' activity has become 60-70 per cent lower, and a meter price has fallen by 40 per cent. Correspondently, today they cannot figure on momentary profit from investment to country real estate. In a long view real estate will be still one of the most profitable investments. And first of all it refers to elite real estate and ground areas. The land, on which they planned to build business class settlements earlier, will come to the market with great discount.

In the present moment buyers' activity on the country real estate market of the Moscow area is nearly absent. As the market analysts think (in case of continuation of land price reduction), it will become more brisk in autumn or winter 2009. According to data of analysts of the Podvorye Proekt Stroi Company, in new cottage settlements object prices varies today from 3 to 270 million roubles. Since autumn prices have become approximately 30-40 per cent *lower*. Earlier experts predicted that the peak of the crisis on the country real estate market in the Moscow area would fall just in spring of 2009. It was announced that by this moment up to 50 per cent of built settlements could be frozen. According to data of the VSK Group Company, in February the whole supply volume of country settlements on the primary and secondary markets was about 4300 objects regarding the results of February. Among them only 1800 buildings are situated in the range of 20 km from the MKAD. An average cost of a house with a ground area here is about 30.5 million roubles if an average square of the house is 450 square meters and of the ground area is 14.8 hundred square meters. 1700 houses more (an average square is 340 square meters, a ground area is 15.2 hundred square meters) are situated in the range from 20 to 45 km from the MKAD. The VSK Group experts note that 720 objects on the country real estate market belong to economy class. Cottages of this class are situated mainly in the range from 60 to 100 km from the MKAD. Their average cost is 6 million roubles if a square of the house is 200 square meters and of the ground area is 16 hundred square meters.

The situation with a lease of houses and cottages in the Moscow region has seriously changed too. Since the beginning of the year it has become 30-33 per cent cheaper. According to data of the *DOKI* Agency, nowadays supply substantially exceeds demand on the country lease market. About 4-7 supplies fall on one leaseholder. Economy class houses with a rent price up to 60 thousand roubles and located up to 30 km from the MKAD and also business class houses with a rent price up to 128 thousand roubles and located up to 20 km from the MKAD are in demand among clients. An average cost of a house lease in the Moscow region is 108 thousand roubles which is 35 per cent less than the last year number for the analogical period. Earlier realtors of the country market confirmed that in comparison with March of 2009 demand on the country lease market in April grew threefold and exceeded supply. Experts noted that in the structure of demand consumers` orientation to more expensive country objects was clearly

traced. Cottages with a lease price from 1000 to 3000 dollars are mostly in need. Demand for country houses with a rate up to 1000 dollars in April fell greatly in comparison with March.

At the same time since April demand for a house lease in Moscow has fallen by 25-30 per cent. In comparison with that in the nearest 3-4 months in the segment of urban housing lease fall in demand and a lease price will continue. A volume of residential space leased in the capital only in summer (from the middle of spring to the middle of autumn) has increased threefold since the beginning of April. Nowadays about 3.2 thousand such flats are leased for summer in Moscow. Experts do not think that the situation on the country market is finally formed and predict that a price for cottage meters in the nearest months will continue to reduce by 10-20 per cent and for ground areas by 15-25 per cent. It is possible that by autumn country housing lease for a winter season can additionally become 15-20 per cent lower than today`s level of supply.

Reduction in price gap between expensive housing and economy class housing. Dynamics of fall in price for a square meter of business class and economy class housing for the last two months shows sharp reduction of difference in prices for flats of these two categories. This fact has already allowed some experts to make a conclusion that the crisis can obliterate price difference completely. The account is simple – economy class housing is the first that has fallen in price and it is the first to be sold; simultaneously more and more business class flats which become cheaper without demand appear on the market.

According to statistics of sales after the default of 1998 up to today's crisis, if the demand is high the economy class grows in price quicker. If the demand falls sharply the expensive housing reduces in price quicker than the cheapest, in other words expensive housing market reacts to the change of economic phenomena the longest.

An analogical process has been observed during the last months beginning with the moment of price fall last autumn when cheap flats became cheaper very quickly. Now it is turn of business class flats. An average cost of an expensive housing now is on the level 6000 dollars for a square meter, of a cheap one 3500 dollars, and realtors confirm that a price gap for expensive and cheap housing will be reduced more. In fact developers have got rid of cooperation with the state and decided to sell built housing by themselves. Let us remind you that in the beginning of March the first Prime Minister Igor Shuvalov suggested developers lowering a price for a square meter up to 30 thousand roubles, then companies could figure on support of the government. But it means that accepting the terms of the government developers should have agreed with 50 per cent discount. Even regarding that sales volume had substantially fallen it was more profitable for developers to sell a less quantity of square meters but at their price. It should be said that this suggestion was a shock for the developers. And it seems that developers' refusal to cooperate on such a price level was not less unexpected for the government.

A price for square meters has been falling for 5 months already giving birth to more fantastic forecasts and opinions. Where is the bottom of the market and if prices become lower is an open question, and experts' opinions are absolutely different. Elena Baturina, a president of the building company *Inteco*, thinks that in the second half of 2009 prices for capital real estate will begin to grow. «Why am I against the prognosis that prices in Moscow will fall substantially? Because when the market has fallen all over the country, when there are no alternative mechanisms of investment all money has come back again to capital housing. And practice shows that I am right. There has not been price collapse. Besides, I think that in the second half of the year prices will begin to grow, and substantially, but maybe not as fast as earlier».

Konstantin Kozlov, the leading analyst of the Centre of Macroeconomic Researches of the Saving Bank, notes that it is difficult to foresee the depth of fall in real estate prices in Russia, as there has not been a crisis like that in history. According to the expert`s prognosis, the crisis will last 4-5 years in terms of macroeconomic analysis of the latest crises in the World. «There is no need to expect correction or termination of falling price for real estate», Konstantin Kozlov sayd. On the other hand, Grigory Kulikov, a Chairman of Board of Direction *Miel*,

confirms, that in Moscow without regard to elite objects since October of 2008 prices for real estate on the secondary market have lost 43 per cent. «Prices of real bargains are lower, or fall in price for Moscow real estate has made up about 50 per cent in terms of dollars», he thinks. According to the data of this company, on the market of the Moscow region the fall in price in terms of dollars had been 51.5 per cent from summer supply by the middle of March. To get real prices it is necessary to subtract 5-7 per cent more from declared prices which are usual for making bargains, experts say.

It is necessary to note that, according to the data of the analytical centre *DOKI* Real Estate Agency, only from the 9th till the15th of March a square meter in economy class did not hold its ground on the level in 4500 dollars and stopped on the level 4493 dollars falling by 0.5 per cent for a week. It is interesting that reduction in dollar prices takes place even in the background of falling in American currency exchange. Supply in this class has increased by 4.1 per cent and made up 24.3 thousand flats. Alexei Kudrin, a Minister of Finance, also said earlier that housing prices would not come back to a before crisis level in the nearest 5-10 years. In particular, he thinks that before the crisis flats in not the most elite buildings were sold for 15-20 thousand dollars for a square meter. «There will be no such prices any more». Prices were *whipped, overheated*, the clerk says.

Analysts of the market note that today there is no market, as there is no demand and supply is not active. Besides, mortgage is not moving, and, according to an anti-crisis plan of the government, there is no money in the budget for support of it too. It means that it is early to expect activity on the market which realtors like to talk about. From 318 cottage settlements which are on the active stage of sales now about 25 per cent from them in the Moscow region are frozen in the given moment. According to estimations of the INCOM Real Estate Company which were read on the First Brunch Conference of Land Market Participants sales have become 1.5-2 times lower in a result of the crisis. There are no new contracts on the market of the Moscow region. Prices of supply on the market of country cottage real estate continue to lower smoothly, mainly at the account of inflation and currency movement, the president of the company notes. According to analysts' forecasts, real bargains in the majority of villages will be made by 10-40 per cent discount depending on the object liquidity. As a result of saving delayed demand and supply deficit appearance prices for country real estate will go up next year. Up to 40 per cent borrowers will not be able to restore their payment capacity during 12 months and can be evicted. Andrei Yasykov, the General Manager of the Agency for Credit Mortgage Restruction (ACMR), thinks that up to 40 per cent borrowers will have lost housing by the end of the year. We say about owners of mortgage real estate having granted a credit restructuring application to the ACMR, says Yasykov. Discussion of this question took place at the round table mortgage meeting in the Council of Federation. According to Yasykov, the voiced prognosis is based on the international experience going out of the fact that in 2009 the ACMR plans to send 30 billion roubles for mortgage credit restructuring, 300 thousand roubles for each one asking for state support.

Alexander Semenyaka, the General Manager of the Housing Mortgage Finance Agency (HMFA), thinks that in Moscow, the Moscow region and St. Petersburg non-payments of currency mortgage credits can appear for which one third of lends are used, and problems will grow together with rouble devaluation. The second risk group is regions where an interest rate was actively subsidized; the third is single-industry cities where mass job destruction takes place. Now according to the ACMR data, one third appeals to the Agency all over the country fall on the Volga federal region. Financial problems of regional operators arouse worries of the HMFA (they buy out standard mortgages from banks and give them to the agency). The head of the ACMR has not excluded that the majority of operators in the regions can appear in the before bankruptcy condition, and they need local powers' support. According to the HMFA statistics for payment discipline obedience on the 1st of January of 2009, the worst situation is in the Saratov region where untimely payment of mortgage credits issued under the HMFA standards reached 31.8 per cent in the beginning of the year, in Kostromskaya region (27.7 per cent) and in

Stavropol region (26.4 per cent). The Central Bank of the RF in its turn announced that it was going to soften a series of measurements for banks in relation to mortgage credits. In particular, it is offered to make lower so-called risk-benefit ratio of mortgage credits issued under the HMFA standards from 100 to 70 per cent.

A half from 2.8 billion meters of housing stock of Russia is in emergency condition. And 500 million meters have not been repaired from 10 to 40 years, 600 millions are condemned houses of the Khrushchev era. According to the Rosstat (Statistic Agency of Russia) information, in our country there are about 19 million dwelling houses including block of flats. And more than a half of them had been built before 1970; it means that they will need rebuilding, destruction or reconstruction in 10-15 years. About 6 per cent of houses more have more than 65 per cent deterioration in the given moment and subject to immediate capital repairs.

Housing availability ratio during the crisis. The main indicator of the market condition from the point of view of possibility of buying flats by people is so-called a housing availability ratio (HAR). It is calculated by comparison of population`s profits and market ones and equal to correlation to the average cost of a standard flat (total square is 54 m²) to annual income of the family consisting of three members. A HAR shows how many years such a family on a certain level of profit needs to buy a flat. Housing availability indicator is one of the key indicators widely used in the World practice. In particular it is used in the UNO Program of community development (Habitat). According to data for 2007, the value of this indicator was 3 years in Seattle, 4.7 years in London, 3.5 years in Edinburgh, 2.7 years in Hew-York, 6 years in Stockholm, 5.6 years in Tokyo, 7.8 years in Amsterdam. Housing availability indicator was 2.85 years in the USA in 2000. If we base on official statistic data of a square meter price in Russia and average salary level it appears that, for example, in 2003 a Russian family could save money for a flat less than for 9 years. But in 2006 the same family needed more than 10 years. In 2009 it needs from 14 years. Experts of the STK Company note a clear tendency to growth of saving time - for 10 years (2003-2013) a housing availability ratio will increase minimum twice as much. The reason is clear - high prices and constancy of difference between incomes and expenses (saving size) of the Russians. According to the Rosstat data, for the period of 2004-2008 population's income increased every year by 19 per cent at the average, and expenses by 17 per cent. So, the Russians' possibility to buy a flat at the account of their own savings becomes less probable every year which is a very important argument for benefit of adoption of different credit instruments on accessible condition. A way out from a deadlock condition can be only one – a sudden increase of built housing volumes at the account of active participation of the State in building and development of institutions of accessible credits.

Real estate market – optimists and pessimists. Practically when the year was over since the moment of the beginning of the economic crisis in Russia everything related to the real estate market was divided to two groups – optimists and pessimists. Optimists (they are mainly real estate sellers and developers) think that the crisis on the real estate market has reached the bottom and a price for real estate will go up again in September. The General Manager of Paul`s Yard Company confirms, «In 2010 a large deficit of qualitative supply is possible conditioned by what the majority of building is frozen and new projects are not developed because of absence of financing. Prices can return to their before crisis level». However, buyers (pessimists) do not react somehow to mass campaign in the media from realtors, as they think that the second wave of the crisis will begin in autumn, and the real estate market will collapse finally. Both sides hold their ground, and global compromise on the market is not observed. This situation is proved by a very low quantity of bargains on the market. The condition is worsened by what a substantial part of real estate (the primary market) is directly concentrated in financial organizations (up to 30-35 per cent from general supply) which do not want to lose invested money and they are waiting. On the other hand, a large part of real estate sector (about 30 per cent of the primary market) belongs to sellers and building companies which do not hurry up to lower prices too. And although in these companies practically all real estate is a subject of pledge (as it is constructed for credit money), the majority of companies` credit repayment period (in connection

with seasonality of building business) begins in the middle of autumn. Consequently, the market collapse can begin closer to winter.

4.5. Crisis in Agriculture.

The economic crisis covering the country has told on agriculture too. If in 1990 117 million hectares of land were scattered with seeds in all economic sectors, in 2008 about 71 million were (in 2009 there are no data yet). So, according to the Rosstat data, 46 million hectares of the most valuable croplands are left to the mercy of fate. This is square exceeding croplands in France, Italy and Spain taken together. Never for the whole history of agriculture, even in the most severe war time Russia have left so much untended land. We are not talking about hayfields and pastures covering 93 million hectares. They were forgotten first in the 90s when annihilation of cattle began. But croplands were taken care of up to the end – for grain. Now grain area has suffered great changes. For less than 20 years it has been shortened by 19 million hectares, or it has been decreased at the average by 1 million per a year. For the first time areas appeared where farmers almost stopped to grow the main crop. Before the reforms the Novgorod region had scattered 151 thousand hectares with cereal and leguminous crops, 7 thousand – 4.6 per cent of squares cultivated earlier – last year. Before 1990 in the Pskov region they had grown about 300 thousand hectares of grains, last year 22 thousand hectares, almost 7 per cent. The analogical situation is in Smolensk, Tver, Yaroslav, Ivanovo, Kostroma and other regions. 30 regions of Russia have decreased crop sowing by 50-80 per cent.

In these conditions no State agricultural development programs will change the economic model mainly based on raw material, fuel export and fantastic food import. «The country needs a program analogical to the program for virgin and long-fallow lands worked out in the 50s of the 20th century. Only now such wide-scale work in the great majority of Russian regions is in store, especially in non-chernozem area. Only a national program will revive agriculture. Its fate is a fate of Russia. Jean Jacque Russo wrote, «If you possess all wealth of the World but nothing to eat you depend on the others. Trade creates wealth, agriculture provides freedom» [Semin, 2009]. Building of the national agriculture revival committee is necessary. And taking into account Russian reality it is necessary that President Dmitry Medvedev becomes the head of this committee. «Why? First of all, for two years he has been occupied with national project the Agro Industrial Complex (AIC) Development, restored long-term crediting of agricultural objects and managed to realize the plans. Secondly, all the leading people in the regions will be directly engaged in agriculture. Thirdly, there will be requirement for responsibility for the economic condition but not only for mobilization of investment, up and down requirement but not only talks before the TV camera. And adoption of laws about food safety, trade, approval of the program of import substitution, mechanical engineering development for the AIC, about preparation and assignment specialists and mechanization experts in the village will not be delayed; creative potential of agrarian science will be reinstated quicker. Or self-annihilation of Russian agriculture will be stopped. There have never been such unique possibilities for solving national problems as now - uncalled young people, essence of money in financial funds of Russia, tens of millions of Russian people longing to leave CIS countries and come back to Russia, fantastic building capacity of regional centers, creation of urban-type villages in agriculture like in Moscow or, to be exact, agro towns with industrial shops in them and so on. So, we must hurry up. Moreover the year 2010 – a year of high solar activity - is coming. What will happen to the country if 2010 is the same as years with high solar activity, such as 1963 and 1972?» [Semin, 2009].

Russian economy is merging into the crisis deeper and deeper. According to preliminary data, fall in the gross domestic product (GDP) in March was much quicker than in February of 2009. It is indicated by quickly growing unemployment and the data about conjuncture fall. In

this situation not industry but service sphere on which fall in population`s incomes was reflected in the most negative way can appear a recession engine.

4.6. Crisis in Industry.

The data for the first three months of 2009 point to clear recession in the first quarter of 2009 after a sharp recession in growth rate in the last quarter of the last year. It is early now to speak about recession turn, according to economists' estimation, as some positive signs in separate brunches can be caused by reduction in production supplies and short-term effect from governmental measures to stimulate economic growth. Some slowdown of railroad freight activity and also power generation recession fill us with some optimism. But economists do not give much importance to slowdown of freight turnover and power generation recession. «Some changes in transport and energy production tendency do not always correlate with monthly dynamics of industry and economy in whole», says Valery Mironov, the leading economist of Development Centre. According to him, regarding the results of the year, yearly rate of industrial recession can rise from today 16 to 30 per cent minus. «As likely as not that in the crisis we can lose up to one third of industry», the economist thinks. Speed of economic recession can be increased at the account of pressing of service sphere where some overheating sighs were noticed before the crisis. People's incomes fall, and it is reflected on their service consumption. One of the signs of further fall in this sphere can be sharp reduction in international tourism in Russia, which can reach 20-25 per cent year on year. Such gloomy prognosis was given yesterday by Anatoly Yarochkin, the leader of the Federal Tourism Agency, who announced a sharp fall in demand in a tourism sphere.

And as a result in March the Government decided to stop saving the majority of Russian enterprises. The State would not enter into commitment to sink debts of Russian corporations but was ready to negotiate with their creditors, Igor Shuvalov, the first Vice Prime Minister, said to journalists on the 10th of March regarding the results of meeting devoted to rising Russian economy stability. He said, «If it is necessary to meet with creditors we are ready, if it is necessary to grant letters which will explain the governmental position we are ready to send such letters». But Shuvalov accentuated that these letters would not be written from the position we are ready to enter into burden of commitment which corporation should bear, as the Government thinks such an approach incorrect. As an exceptional case, the State can come into share of the Rusal and some other large companies, but such decisions will come through public discussion and admitted once, the ITAR-TASS says. In this situation the State understands that «companies cannot cancel credits up to the end, and in connection with it is necessary to hold the summit about granting the same credit course or some other on the new terms, and we provide such support», Shuvalov said. Simultaneously he admitted that the majority of borrowers are not able to serve those credit relations on those terms in the given moment. Regarding the statistic data for January and February of 2009, the Government decided that honest borrowers should hold negotiations to grant possibility to sink a debt in a certain period of time, grant their programs of financial improvement and suggest real possibilities for getting the money back or they would ruin.

However, as Egor Gaidar [Gaidar 2009] says, differing from the crises of 1991 and 1998 there is working market economy in Russia today [Haddad 2009]. Certainly this economy is not perfect, but it is much more adaptive to existing conditions of the World, then a Soviet one. It is more integrated to the World what, certainly, creates risks but makes it more stable. Today`s economy has what the Soviet Union did not have – substantial gold currency reserves, which permit to adapt to existing situation, and a flexible exchange rate. In connection with it (taking into account that this crisis is the most tough and difficult for the last decades) there is possibility to adapt to it.

Moreover, the crisis gives birth to some consequences which can be thought positive, in particular [Belkovskiy 2009]- obvious demonstration of inefficiency of the Soviet Russia

economy model; making up conditions for application of worked out models of development and a new national strategy for Russia; forming preconditions for qualitative modernization of Russian elites.

These are what important positive meaning of the crisis for further historical development of Russia consists in.

4.7. Influence of the Economical Crisis on the Educational System of RF.

- 1. According to expert estimations, in a result of fall in population`s paying capacity up to 25 per cent students studying on a non-budget basis in public and private educational institutions will not be able to pay for their education. Considering the fact that 4 million 616 thousand students of higher educational institutions study on a non-budget basis not less than 1 million 150 thousand young people will have to give them up. In its turn, income reduction will ruin material base of not only private, but the majority of public higher educational institutions.
- 2. Nowadays budget financing of public higher educational institutions decreases about 7 per cent under the item *Increase of price for general media* what directly tells on general level of their profits.
- 3. At the account of off-budget financing resources investments into innovational development of higher and professional educational institutions have sharply fallen.
- 4. The private educational sector has the roughest time. Budget financing is absent here. And reduction of a number of students in a result of fall in population`s paying capacity may be higher, up to 30 per cent according to expert estimations. As a result, continuation of other students` education will be unprofitable; correspondently, a procedure of institution bankruptcy will be more effective from an economical point of view. Accounting the fact that nowadays in private higher educational institutions 1 million 253 thousand students study, up to 70 per cent from the whole number or 875 thousand students can lose educational places.
- 5. As reduction of a number of students will take place on the background of the unemployment growth, and young people having lost access to education will land on the street level, there is every reason to anticipate their mass movement to criminal, to radical young groups and also to participants of mass protest actions organized by parliamentary and especially extra parliamentary opposition. According to expert estimations, as a result of action of above mentioned and some other factors in 2009 about 2.5 million young people can land on the street level (or without possibility to work and study).

A made up escalation of the economic crisis by the means of educational policy is inadmissible, as it can turn it into a social crisis, and then to a political one. This can be proved by experience of Greece, Bulgaria and partially the Baltic states. International experience shows that it is the students who can play a role of *detonator* of a political process in unstable economic situation.

As crisis overcoming experience in other countries beginning since a *new course* of F. Roosevelt shows, this part of population can and must be busy in the educational system during the crisis. But, as economist Nikita Krichevsky [Krichevsky, 2009] writes in his work, in spite of implanted opinion educational and scientific potential of Russia has constantly become lower since 2000. We can talk about economy of knowledge where Russia is situated as much as we can, but, mainly, these are talks. All real actions of the Government during the last decade lead to regular annihilation of science and the system of higher education. It is enough to remember how one of the leaders of the Ministry of Science and Education of the RF said that Russia needed workers, but not scientists and engineers.

Unfortunately, during the last decade besides oil, gas and other resources Russia thoughtlessly and *successfully exported* its intellectual elite to the developed countries. But if we think and analyze what welfare of the USA consists in even in conditions of the crisis, it will neither in automobile industry and finances, nor even export armament production. The real reason of the welfare of America is complex intellectual production of any type and purpose,

technologies and innovations. The best industry of America is higher education – 34 from 50 the best and prestige universities are situated in the USA. Maybe we also need to return Russian young people`s stimulus to get worthy education while the system of education and science of Russia are not annihilated yet. As for operatives, new technologies and innovations should help here.

4.8. Logistics Market in Condition of the Crisis.

The logistics market in Russia is one of the youngest and most dynamic in Europe. In 2009 a series of important events took place on it – integration of the largest firms – STS-Logistic and Russian Logistic Service. The Raven company set into operation the terminal Vostochny in the Moscow area, Megalogics-Novosibirsk and Megalogics-Rostov. But because of corruption and bureaucracy the IKEA, the Sweden retail concern, froze all investments to Russia what scared away much the rest of foreign investors from the Russian market.

Since October 2008 the logistic market in Russia has decreased twice as less, but, mainly, those brunches have suffered which developed actively due to credits. Because fall in demand for consumer goods and decrease of sales in automobile sales centers demand for services of 3PL-operators (trucking, warehouse logistics, customs services) has fallen sharply. And if in Moscow this fall was not very noticeable (10-15 per cent), it was much deeper on the other territory of Russia (30-50 per cent). This year commissioning of 500 thousand square meters of storage rooms more is expected in Moscow, but volume of vacant squares in the city will hardly exceed 10-15 per cent. In case of economy restoration Moscow will be the first among Russian regions which will restore its logistics market if the authorities do not make adequate decisions.

Now by the order of the Federal Customs Service of the RF (№1621 from the 17th of December, 2008) and the Moscow mayor`s decision 58 customs stations were closed in Moscow in March of 2009. Because of that customs logistics of import and export cargoes to the Moscow regions has changed, queues to regional customs stations have appeared (some of them reach 10-12 km), price for customs brokerage services has substantially increased. The situation in regions is much worse than in Moscow. In St. Petersburg a great deal of just built storage rooms are empty and bring great losses to owners of storehouses, as nobody wants to buy and lease these new storehouses. If before the beginning of the 4th quarter of 2008 a part of free squares in the Moscow region had been practically equal to a zero (the majority of qualitative storage rooms had been leased before setting objects to operation) in the end of the second quarter of 2009 it was on the 13 per cent level. It is necessary to note that in the end of the second quarter the general volume of modern storehouses market in the Moscow region was 2.6 million m². Today about 30 thousand m² modern storehouses offered to direct lease exist on the market. And these indicators increase constantly, as at the present moment a very weak demand for storage real estate is observed on the market.

As a result a minimal lease period of modern storehouses has fallen from 5-7 to 1-3 years, and lease rate has fallen by 30-60 per cent in comparison with the analogical rate of the previous year. If in the beginning of the 3^d quarter of 2008 an average lease rate on the market was \$150 for a square meter per year, in the 2nd quarter of 2009 it fell up to \$100 and less. Today any owner is ready to offer discounts to reliable leaseholders which have become less in conditions of the crisis. A positive side of the crisis is growth of competition between storehouses projects what became especially noticeable while low-temperature storehouses lease. The crisis made large owners of storehouses increase sharply the advertisement budget for internet and media to attract potential leaseholders of free storehouses.

Expert opinions relative to future market have been divided – some experts think that development of the sublease segment will continue on the storage market, and new square commissioning rate will become lower; the other think that the market will probably sink much, and large foreign companies will come to it and press much Russian operators. What all experts agree with, in the beginning of winter of 2009 a great absorption wave will probably begin on

the logistic market, because those who will stand their ground will get pleasure to buy bankrupt competitors for one third of the price.

4.9. Economic Crisis in Russia – an Expert Point of View [Analytical report, 2009].

On the 9th of February of 2009 in the Institute of Modern Development a group of authors represented a report named Economic Crisis in Russia - an Expert Point of View. In the work an authors' point of view on development of the economic crisis in Russia, possible scenarios of the State economic policy were given, and anti-crisis suggestions necessary for a way out of the crisis and building future post-crisis economy of the country were formulated. Among the authors of the report there are Anna Belova, the Manager for strategy and corporate development of the company SUEK; Leonid Grigoriev, the President of the Fund Institute of Energy Production and Finances; Evgeny Gontmacher, a member of the board of the Institute of Modern Development, the leader of the Social Policy Centre of the Economy Institute; Oleg Pertsovsky, an adviser of deputy President of the board of RAO UES of Russia and etc. Representing the main theses of the report Igor Yurgents, the President of the board of the Institute of Modern Development, noted, «It is necessary today to build up a bridge from today's situation to a new quality of economy which will be on coming out of the crisis. And first of all, we speak about conversion of Russian market economy to a new balance. The crisis is not only challenge, not only a shock, not only losses; it is a new corridor of possibilities. Breaking the system it clears the place for a new system architecture of which we only have to create. And we have to think seriously about correction of not only clear defects of the World financial system, but of those not less clear skews and deformations which had hindered development of Russia long before the beginning of the World crisis».

Speaking about problem spots of the Russian crisis the authors of the report note that «by the beginning of 2009 Russian economy had come to industrial recession accompanied by rouble depreciation, growth of unemployment and stoppage of investment programs». According to them, uniqueness of the situation is that *domestic economy goes through... its first full-blown market crisis, burdened by weakness of the financial system, easily importing shock from abroad.* Simultaneously they warned the Government of the country against a series of actions, and, first of all, competition limitation and drew attention to necessity of *reformatting the State regulation – its attitude for construction of conditions for further economic growth.*

In the report a series of measures is given realization of which, according to the expert opinion, will permit to *resist the most adequately to revealed challenges*

Regulative measures in financial sphere. Noting the essence of some forks in monetary authorities` actions (including those connected with inflation control, ability of regulators to consolidation of the bank sector, status quo keeping or transfer to the bank sector reform, direction of resources to financing the budget or outer corporative debt) experts draw attention to that whatever the decision could be, advancement of private business to the main moving role in overcoming recession leaves in fact no alternative...Accentuated measures to strengthen competition and defend private property are very important.

Support for real business. In the framework of this purpose realization the report offers to complement and/or make more precise existing measures

- stimulating of demand by means of more active realization of infrastructure projects;
- change of a choice criteria of priority companies to get access to State financing (guarantees, interest rate subsidies);
- stimulating of investment demand by means of granting access to state financing (guarantees, interest rate subsidies);
 - providing demand for production of separate brunches.

Counteraction against negative social consequences. Here, besides a series of measures formulated and realized by the Government, first of all, necessity of sharp rising of resource using effectiveness appropriated for professional retraining is noted.

Crisis management regulation on the regional level. According to experts, comparison with the crisis of 1998 shows that in spite of specificity of today's situation relations of the federal centre with regions has become the key problem in the sphere of state regulation. It is noted that the central power has prepared to the crisis better then regional ones. It is necessary to think about possibilities of redistribution of social and economic obligations before population and business groups for leveling, minimization of appearing threats distributed about the country regions.

Relationship with regions. Touching the problem of the anti-crisis measures of regions and actions of the federal centre the authors have come to the conclusion that on the terms of the crisis fundamental revision of regional development strategies is needed – regional strategies should be built up in such a way to minimize regional competition for human, investment and other limited resources and to provide complementarities of strategies of different regions. Modernization of economy of any region is noted as the main factor of rising investment attractiveness.

Analyzing the condition of the modern Russian society the authors came to the conclusion about the essence of modernization powers in the society and drew attention to the fact that «restoration of social dialog...demands the beginning of the dialog between the State, business and all political and social powers of the country».

The economic crisis of 2008-2012 is a classical challenge of history to Russia and its elites. «If elites find an adequate system answer to this challenge the State will be able to be developed and grow further, get back a worthy place as a powerful geopolitical subject. If answers are not found we will have to say about the crisis of Russian civilization itself» [Belkovskiy, 2009].

5. Crisis Anatomy in Russia.

The modern economic crisis is of a global character. The main reasons of it are

- corruption and irresponsibility of management of the largest corporations;
- primacy of the financial sphere over the production sphere and a habit to advance growth of consumption;
 - disregard of regularities of economy cyclic development.

It is necessary to note that these reasons are characteristic practically for all countries of the World, the difference was observed only in the depth of the crisis and its dynamics in each country. Meanwhile, by May-June 2009 (against the background of speculative price rise) not clear and not well-grounded reviving had overcome the leaders of many countries – from high tribunes confirmations were heard that the main fall had been coming through and in future there would be one more rise, although against the background of recession so clear today. Certainly, without paying attention to economists` and politicians` warning including even that of Russian Minister of Finance's about approaching the second wave of the crisis the leaders of Russian Federation also began to show reserved optimism relative to prospects of ways out of the crisis.

What was more here – an understandable wish to see light at the end of the tunnel or misunderstanding of cyclicities in the World economy, misunderstanding of its development laws? So, the day the 22nd of June 2009 became more unexpected for these leaders. That day stock markets all over the World sank into abyss. This collapse was provoked by a new forecast from the World Bank stating that *recession would be deeper than it had been expected*. Fund Russia did not stand aside from general recession and, moreover, became the leader in collapse of indexes

The USA. Regarding the results of the day, American indexes lost about 3 per cent. In particular, the *Dow Jones Industrial Average* index became 2.35 per cent lower, *Nasdaq Composite* one 3,35 per cent, *Standard & Poor's 500* lost 3,06 per cent for a day. In this situation *S&P 500* fell lower then 900.77 point, an average level for the last 7 months. «Alarm is still kept. Nobody is ready now to beat the drum and celebrate the end of recession», says John Wilson, the main analyst of *Morgan Keegan & Co*. Moreover, economist Nouriel Roubini, famous for his

prediction of today's financial crisis, gave negative forecasts. According to him, the next recession is in store for the World economy because of simultaneous influence of rising oil price and increasing deficits of the State budgets. And Roubini fears that oil price speculations can raise prices for oil up to \$100 in a short time. But earlier the same expert noted – this year oil for \$100 would be a negative shock for the World economy. Regarding the results of sales the stock of the largest World oil producer *Exxon Mobil* lost 3.1 per cent of price, stocks of the aluminum giant *Alcoa* became 3.5 per cent lower. Stocks of the largest second-hand car company of the USA *CarMax Inc.* fell by 8.3 per cent after the *Deutsche Bank* had worsened appraisal of its stock. The stock of *Apple Inc.* lost 1.5 per cent because of fears connected with health of its General Manager Steve Jobs. A banking sector did not stand its ground too. The stock of the *Bank of America* lost 9.7 per cent after checking out two members of the bank directors committee. The stock of two other banks *Wells Fargo* and *JPMorgan Chase* lost more than 6 per cent.

Europe. On Monday, the 22nd of June 2009, the fall in indexes in Europe was 2.6-3 per cent. And this fall became the first for three trade sessions. In particular, *Dow Jones Stoxx 600* indexes lost 2.8 per cent for a day demonstrating the maximal fall for two months and coming down to the minimal value since the 14th of May. Kevin Lilly, a fund manager of *Royal London Asset Management* says, «A stable inflow of negative news makes investors much more careful. They want to see much more persuading restoration proofs». The stock of European oil companies went into the red after substantial fall in price for *black gold*. The stock of *Royal Dutch Shell* lost 4,7 per cent, *StatoilHydro* - 7,8 per cent, *Total* - 3,3 per cent. Stock price of *Xstrata* lost 6,7 per cent after announcement that *Xstrata* had suggested *Anglo American merger of equals*. But the stock of *Anglo American*, on the contrary, became 4.6 per cent higher. Lowering of *Renault* rating by the *Standard & Poor's* agency resulted in 7.9 per cent fall in the stock of the car producer. But last week *Renault* stock lost 11 per cent. The stock of the third largest air company of Europe *British Airways* lost 7.8 per cent after <u>Richard Branson</u>, a billionaire and owner of *Virgin Atlantic Airways*, had said that he was not sure that BA would survive recession.

Asia. An echo of forecasts of the World Bank reached Asia only in Tuesday, on 23^d of June – recession rate of fund indicators of Asia became the quickest for one and a half months. So, a composite fund index of *ATP MSCI Asia Pacific* lost 2.5 per cent, and its recession had become the sharpest since the 14th of May. Japan *Nikkei* 225 lost 2.7 per cent, South Korean *Kospi* 2.4 per cent, Australian *S&P/ASX* 200 2,9 per cent. «The World bank overturned a bucketful of icy water to those who figured on restoration of economic growth all over the World», said Tim Schroeders, a representative of *Pengana Capital Ltd*. The stock of the leading mining concern of the World *BHP Billiton Ltd* lost 4 per cent in price. The stock of the firm *Mitsubishi Corp* became 5.5 per cent cheaper. The stock of the second largest oil company in Australia *Woodside Petroleum Ltd*. fell by 2,6 per cent, and the stock of *Honda Motor Co*. lost 2,5 per cent in price.

Russia. In their recession Russian indexes managed to exceed its western colleagues. Regarding the results of sales the Russian Trading System (RTS) index fell by 50.34 points (4.98 per cent) to 961.04 points, and the Moscow Interbank Currency Exchange (MICEX) lost 7.8 per cent up to 937.98 points. It is clear that external negative has told on the Russian market, but, moreover, on Monday oil prices demonstrated a tendency to recession. Regarding the results of sales on the New York stock exchange NYMEX cost of July futures for oil of Light Sweet Crude Oil mark became \$2.62 lower (-3.8 per cent) up to \$66.93 for a barrel. On Tuesday collapse on the Russian stock market continued – by 10.54 (for 1 hour) of Moscow time the MICEX index had lost 4.92 per cent more, and the RTS dollar index lost 5.45 per cent. And no one can see the bottom of this abyss... What is the reason of such unreadiness to a quickly changing situation? But the leaders of the USA, France, Russia and many other countries have serious groups of analysts and businessmen... Partially, the answer to these questions is given by Joseph Stiglitz, an economy Nobel Prize winner, who is sure that one of the main reasons of the World financial

crisis is incompetence and self-assurance of leaders of many countries and corporative corruption of fantastic scale and a bonus system for bankers stimulating them to very risky operations. Michail Khodorkovsky, a businessman and public figure, also sees one of the reasons of the crisis in *social and national irresponsibility of managers*` *corporations, moral erosion among people making key economic decision* [Khodorkovsky 2008]. Khodorkovsky says, «For the past 25 years managers have become an isolated case in fact dependant neither on society, nor even on results of its managing activity. In result, behind the facade of prospering (for a long time) market building cracks matured which began to tear in 2008».

But together with global reasons it is also necessary to speak about fundamental inner (specifically Russian) reasons of an acute economic crisis covering our country.

Such fundamental reasons are two

- a. Irresponsibility of Russian elite that is absolutely not interested in Russian national priorities and
 - b. The model of Russian economy which assumes
- stake on superiority of utilization over modernization. The main purpose of the Russian leading elite is using of Soviet inheritance not assuming formulation of long-term strategies of social economic development;
 - stake on export raw material as the main moving power of economy;
- priority development of raw material complex capable to grow due exclusively to external conjuncture;
- priority orientation to substitution of own production by import of goods, and also to production services and technologies;
 - planting and cultivation of informal social and corruption taxation.

Today economy of Russia, unfortunately, is characterized by practically full dependence on outer factors, in particular

- world prices for energy recourses and crude oil, firstly;
- prices for food imported by the Russian Federation
- (in 2007-2008 yearly food price rise exceeded 15 per cent, and in some commodity groups up to 70 per cent. On the average the part of imported food is about 42 per cent in Russia, and exceeds 75 per cent in large cities. In comparison with 2007 import of fresh and frozen meat became 22 per cent and fish 25 per cent higher in 2008);
- level of foreign short-term speculative capital in the financial system of the Russian Federation
- (in 2005 Russian credit organizations and enterprises of the real sector obtained \$72 billion of foreign funds, and a specific weight of direct investment was 18 per cent, correspondently, \$104 billion and 29 per cent in 2006, \$216 billion and 20 per cent in 2007, in 2008 an inflow was changed by outflow of \$108 billion, in 2009 a flight of capital from the country will probably be about \$110 billion);

Economic policy of the state in today's conditions is formed mainly on behalf of real owners and beneficiaries of large corporations, firstly, of raw materials. Today Russian leading elite has imposed a burden of responsibility for ruling the country on population taking care just of saving their own funds invested abroad.

Moreover, a burden of national expenses under today's Russian conditions is imposed on population, mainly, on its poor and the poorest layers.

Today's Russian social system suppose

- abolishment of a system of national benefits and free public services for people;
- full payment of social services for full market value by people independent on their wealth;
 - absence of real indexing pensions and other social pays-off with account of inflation;
- absence of people and organizations' State savings and investment protection guaranties;

- redistribution of financing social function from the federal authorities of public administration to regional and local levels.

6. Conditions of the Economic Crisis in Russia.

The economic crisis broke out in Russia in the moment when

- speculative money on financial markets of the Russian Federation was reduced sharply (because of problems on the mortgage market);
 - quick fall in world prices for rough oil began;
- leading elites (including many members of today's Government of Russia) did not pay attention to recession in economy of the country in May-June of 2008 because of their irresponsibility and incompetence. In such a case an exclusive economic situation which Russia had got during 8 years of Putin presidency was not used for diversification of Russian economy. High prices for oil caused unjustified euphoria among the Russian power and Russian and World elite relative to development prospects of Russia. Although if we look at statistics of the last years we can see that production in processing industry of Russian economy grew much quicker than production in mining industry. Or diversification process took place. Egor Gaidar [Gaidar 2009] wrote, «The fact that it collided manifold on variations of oil, oil products, gas and metal price level is *another pair of shoes*. That is why if you banally look at a share of anything in export, under oil price variations from 20-to 140 you become *cluttered* just by variations of oil profits».

Behavior of oil (upper curve), silver (middle curve) and gold (lower curve) prices.

But the beginning of the crisis was followed by oil price fall, and the Russian power began to search for people responsible for the crisis abroad instead of correcting the situation as soon as possible. It was an awkward try to discharge themselves for 8 years of low activity. «The Government hides persistently the true situation, and in such a situation it is really better not to write any plans» [Polikhin 2009]. At the same time speaking at the joint meeting of the Upper and General Counsel of the Party United Russia Boris Gryzlov, the Chairman of the State Duma of the RF, said that reasons of the economic crisis in Russia were abroad. According to the speaker, foreigners use the crisis specially to undermine the political situation in Russia. According to him, just because of a catastrophe of the virtual foreign economy (?) oil price falls three-fourfold per year. He also reminded that because of the crisis phenomena in the 4th quarter of 2008 industrial recession had been 6.1 per cent and 14.6 per cent in January-February of 2009. A number of the unemployed in Russia just officially registered has already exceeded 2 million people. (In the same time, according to Russian President Dmitry Medvedev`s estimations, a number of the unemployed is 6 million). All these confirmations of a series of representatives of the Russian elite that only the USA is guilty in our crisis are absolutely unfounded. Michail Kasyanov, the former Prime-Minister, thinks that the main reason of the crisis is the state model built up in 2005-2007 under the direction of the former President Putin – sovereign democracy with capitalism. It is a model, based on cheap money from abroad and high oil prices. It seems, the authorities think that such situation will exist for ever.

But it is clear now that this period is over. And dependence of Russian economy on external conjunction has not decreased but increased for the past 4 years, because the authorities did not do anything for economy diversification. As Kasyanov confirms, the Russian crisis is caused by incorrect and even harmful policy of our authorities for 80 per cent and by outer factors only for 20 per cent [Kasyanov 2009]. Academician Avel Aganbeyan thinks that Russian authorities missed all last 8 years of economic conjuncture profitable for Russia having done nothing either for real economic sector or inflation decrease. Aganbeyan writes, «If the crisis begins during high inflation period it is very bad because that time it grows into stagflation. Only hyperinflation can be worse. That is why for us a way out of the crisis will be exclusively distressful. In general in all the countries prices fall, interest rates go down. But we have not managed to suppress inflation for ten years. It is a shame for us. The main reason of high

inflation is growth of budget profits higher than possible. These profits have grown by 35 per cent during the last years. And certainly, we have huge monopolization. In fact, effective monopoly control is absent. Oil price have fallen up to the level of 2004 when petrol cost twice as cheaper, and now it has lost only 20 per cent. Air tickets have become more expensive, although flight cost has decreased

Our second week point is *short* money. We do not have *long* money. That is why only the Russian fund market has collapsed fivefold while in the USA and other countries it has collapsed twofold. Now we need to fight monopolistic tendencies what demands great rigidity and mobilization of law machinery, discharge of monopolistic leaders. But I do not think that the Government will do it. Not because it is weak. But we do not understand up to the end what hole we have got into and, in what way we will come out of stagflation.

And thirdly, we must not meet the crisis with great debt to foreigners. At the present moment debt of banks, enterprises and organizations to foreign investors is more than 500billion dollars more than a half of which fall on *Gasprom, Rosneft* and other State structures. The most interesting thing is that 600 billion gold currency reserves *were on the shelf* that time. Investing them into stock we got 3% interests per annum, while our enterprises took credits at 7-8% interest rate. Was not it better to give them reserved money at 6% interest rate and control these debts? It would be more profitable for the state and there would be fewer debts».

We did not diversify economy. We were on the *gas and oil hype* and had advantages from it while prices grew. But when prices fell we appeared to be hostages of our one-side economy. Since 2000 Russia has got 2 trillion dollars only by means of export. «All these money could be used to build a new State», Aganbegyan continues in his new interview to the *Novaya Gazeta*.

In Russia they have not created modern petrochemistry and modern wood processing where we had conditions in the World. They have not developed electrical engineering which could be the largest brunch of the country. They have not reached the level of 1989 in housing and infrastructure building and, at least, have not updated technological base, hopelessly outdated funds in the majority of brunches left with equipment with an average 18 years of service life. The worst which can be in development is to lose time. All the rest is possible to return. Russia has lost many years during which it would have been possible to upgrade all economy.

Consequently, the main reason of the economical crisis covering the Russia is principle weakness and vulnerability of the Russian economic model and the Russian elite`s irresponsibility.

Today this elite`s priority is providing their own financial interests. Mainly, it is safety of off-shore assets of the Russian elite formed as a result of capital export from Russia. It can be explained as Russian oligarchs who not long ago thought themselves Russian Rockefellers and Carnegies can lose their great wealth. Andrew Kramer, an observer of American newspaper The New York Times, writes, «The World financial economic crisis threatens to throw away them to the dustbin of history. They have managed to avoid prison and nationalization differing from Michail Khodarkovsky, they have not had to go abroad to the voluntary exile, as Boris Beresovsky and Vladimir Gusinsky. But their business empires have appeared critically endangered for only several months». In 2008-2009 many oligarchs could not pay credit debts of western banks. And then the Government granted them short-term loans for industrial assets not to appear in foreign hands. But credits should have been repaid by the end of 2009, and additional loans in foreign banks have added to them since. If debts cannot be paid many assets on which money was given in the end of the last year can become the State ownership. Olga Kryshtanovskaya, a sociologist of Russian Academy of Science, said to The New York Times edition, that the rest oligarchs would be annihilated by the crisis. The international rating agency Standard & Poor's published a research in which today's situation in Russian economy was compared with the epoch of pledge auctions of 1990s. It is noted in the Standard & Poor's, that methods of quasi nationalization have lately changed, State banks which are practically the only

resources of refinancing accumulate now holdings of stock of the key companies of the country. «If in 1990s oligarchs accredited the State and got the key assets of the country as a pledge for a very low price, now the same assets come back to the State – as a pledge now but with certain control possibilities», is said in *Standard & Poor's* research. The authors of the research emphasize, that, in particular if the media data are correct, and *Interros* deposited 17 per cent stock of *Nornikel* to the *VTB* bank as a pledge, the general number of stock of Nornikel deposited as a pledge to banks connected with the State is close to the control stock. One more example given by the Standard & Poor's is depositing 71 per cent of Sistema Gals which is an affiliated company of JSFC Sistema to the VTB bank as a pledge. «It seems that the State is interested not so much in property, but in power and control. But now State banks do not hurry to raise demands of additional provision or buy out assets directly – for that they seem to need a directive from the State authorities», make the conclusion the Standard & Poor's.

But if Russian borrowers do not get access to international financial markets at least for one year more, State banks will have possibility to impose penalty on pledged assets, and in fact it will mean denationalization. Analysts of the Standard & Poor's note that criteria under which the State grant support are not always clear. «We do not exclude that some decisions can be made out of private and group interests», they say in the Standard & Poor's. The agency does not quite understand economic suitability of buying of Russian Railway and the ALROSA of the Kit Finance Bank, «It seems that both companies are clients of the bank and have private connections with its owners; and size of losses is still unknown». In connection with that after announcement about the bargain the Standard & Poor's impaneled ratings of the ALROSA and RR in Credit Watch list (rating for review) with a negative forecast. Evgeny Gavrilenkov, the chief economist of the Troika Dialog Company, agrees with estimations of the Standard & Poor's that now assets move backwards. «But I would not blame the State, as nobody made oligarchs take high risks borrowing capital on the external markets without accounting of currency risks. I think that if owners of companies do not manage to pay the credits taken to repay external debts, the State structures will probably take these holdings of stock to ownership. The other way will hardly go», says Gavrilenkov.

7. The Elites` Irresponsibility and Anti-Crisis Measures of the Government of the RF.

As professor Nikita Krichevsky [Krichevsky 2009] writes, «The Russian anti-crisis *Putin*'s *plan* was taken in November of 2008 and since that time it has not practically been edited. The domestic anti-crisis program consists of 55 points including four (!) measures in the sphere of the labour-market and social support. What are these measures? We *hardly* have the heart to call weakly monitoring of workers discharge, organization of before discharge consultations, edition of booklets and brochures anti-crisis measures—more probably, these are functions of the Ministry of Health and Social Development. Increase of financing regional measures of employment, the main parameters of which had had to be passed in November of the last year met local clerks' non-professionalism. By the end of February 44 from 78 regional programs had been passed.

The only measure of *Putin`s plan* which does not demand institutional assessment and, therefore, is realized without any problems has become increase of unemployment pay. But in the governmental plan there are no measures for medicine, education, science support, help to socially unprotected layers of population. Practically zero effectiveness of a few social actions of the Government is illustrated by overcoming a yearly level of 2.2 million registered unemployed in the middle of March (under the Government methods, the author`s comment) and also by delay of setting into operation 14 advanced technology centers of medical aid each of which will cost to the budget only 1.2 billion roubles».

Anti-crisis measures which were taken by the Russian Government in 2008 were directed mainly to provide vitally interests of some tens of the ruling elite representatives, but not to stabilization of the financial economic situation in the country.

In fact, Russian authorities have started unpublished free privatization of State financial reserves appearing as a result of raw material sensation of 2002-2007. The main measures taken by the Government of Russia since the moment of beginning of the Russian economic crisis on September of 2008 are

- granting of financial *aid* (\$150 billion) to a bank sector of the country. As further development of events showed, State funds were spent by bank structures to buy currency and exported.
- the Government's granting (additionally) \$50 billion for refinancing international debts of Russian corporations. This money was partially directed to off-shore accounts of corporation owners, partially to repayment of debts to foreign creditors.
 - lowering of taxes, mainly, to mining enterprises.
- organizational and financial support of non-effective economic subjects (monopoly corporation and state enterprises).

So, all measures were directed to satisfaction of large corporation owners' needs to the prejudice of interests of the great majority of population of the RF. And large corporation owners could defend their assets from confiscation by creditors without the State (the Russian Federation) help, as their assets exported from Russia permitted to do that. Such behavior reflects one of the main principles of the Russian ruling elite`s behavior – capitals invested abroad cannot be used to solve any problems appearing in Russian economic space.

The elites` irresponsibility, alienation from general national problems grow like a snowball, become an independent factor of the crisis deepening in Russia and transfer the crisis to an uncontrolled condition.

8. Results of Struggle with the Crisis.

- *Reduction in international reserves of Russia*. International reserves of the country reached its maximum on the 8th of August of 2008 \$598.1 billion. For the first four months of the crisis reserves reduced by 27.2 per cent.
- *Crisis of bank liquidity* transformed to credibility gap in the bank sphere and in a real sector of economy.
- *Collapse of the fund market*. A maximal value of a fund RTS index 2498.1 point was shown on the 19th of May of 2008. In March 2009 the RTS index became more than 4.9 times lower.
- *Crisis of mortgage and consumer crediting systems*. In a number of banks consumer credit rates rose up to 30-35 yearly interest rates (half a year ago rates in the same banks were 16-18 yearly interests).
- *Production recession and the beginning of recession*. Regarding the results of 2008 in comparison with November of 2007 industrial recession was 8.7 per cent, according to Rosstat data. Metallurgical and automobile industries appeared in an especially difficult condition.
- *Mass discharge*. According to official data, in the beginning of December of 2008 a number of factual unemployed in Russia was 5 million people (6.6 per cent of economically active population) increasing by 400 thousand people for November. Up to 50 per cent of Russian enterprises say about their intention to start to reduce personnel in the first months of 2009.
- *Problems of financing current expenses of Russian regions*. 25 from 89 Russian regions will meet them.

It is said in the report of social economic development of Russian subjects prepared by the Ministry of Regional Development of the RF. In the document necessity to review parameters of the regional budget and reduction in their expenditure part before the end of the first quarter of 2009 is stated. It is noted that on a priority basis investment projects will be dismissed on grounds of redundancy. Among the most problem regions pointed in the report are Krasnoyarsk, Moscow, Nizhegorodsk, Vologodsk, Ryazan, Tver, Tula, Kostroma, Orel and

Novosibirsk regions. 33 regions more can finance capital investments partially. Problems with fulfillment of expenses obligations are not present only in 14 subjects.

- Loss of the country population trust to actions of the Government. At the meeting with members of the Government for economical problems Dmitry Medvedev, the President of Russia, noted that it was necessary to work out a new anti-crisis plan <u>understandable not only to State clerks</u> and economists, but to population.

In connection with that it is worth supposing that Medvedev is anxious about population's admitting an anti-crisis plan and a falling rating of the Government. According to the President of Russia, the existing anti-crisis plan of the Government`s actions looks like a spontaneous reaction to the economic crisis, analogs of which there have not been in modern history.

Firstly, trust to the anti-crisis policy leaves much to be desired among the population and economic authorities.

Secondly, the Government has not managed to do the main thing or to help a real sector, what directly appeals to problems of unemployment, salary level and economic condition in whole.

Thirdly, financial and administrative systems have demonstrated absolute ineffectiveness – in the financial banking sphere so-called *thrombs* have appeared which make credits inaccessible – money misses addressees, the administrative system has proved one more time its low mobility and unproductiveness.

Legitimate of the anti-crisis policy of the Government of Russia does not have analogs in modern Russian history – the population does not understand the meaning of rouble devaluation, allocation of huge funds to a banking system and many others. Such uncertainty leads to intensifying peoples` anxiety and fears about their future, stand surety for which Vladimir Putin has been for several years [Delyagin 2009]. It has reflected on the Prime-Minister`s rating without any doubt. Regarding the results of inquiry of Levada-centre, trust to Putin has fallen from 62 to 48 per cent. Moreover, 40 per cent of interrogated people think that the country goes the wrong way. In such situation legitimacy of the anti-crisis plan possesses an additional meaning, besides saving minimal trust to measures and authorities, it can suppress uncertainty growth and, consequently, social discontent.

- Absence of real opposition capable to make the Government act for benefit of the population. No one of powers in opposition is capable to become the leader, among registered political parties, only the Communists try to become leaders of population`s protests. Especially it refers to regional party organizations, often more radical than the compromise central authority of the Communist Party of the RF trying to minimize its political risks if possible. At the present moment the authorities have enough money to opposite population protests and enough possibilities to make the society not to know about these protests.

But we could have prepared to the crisis. Long before the crisis Victor Maslov, a Russian mathematician and academician, predicted the date of the crisis beginning precisely. Maslov managed to show that those phenomena in economy had much in common with some processes in physics. «Such processes are well famous in physics and described with formulas. And formulas like those can be applied in economy too. For example, it is possible to predict precisely if the crisis will burst out or not, and even to name its date», the mathematician said.

But the Government stayed calm for a long time – in March of 2009 Dmitry Peskov, a press-secretary of the Prime-Minister of the RF, said that the crisis in Russia was taken over the control to a large extent, that, *unfortunately, the crisis cannot disappear traceless – the unemployment level rises, salary is reduced*, the crisis influence was not fully overcome. The Government would take necessary measures, said the press-secretary of the Cabinet Council Head noticing that for it there were enough reserves in the country and we would manage quickly enough accounting the growth of the World fund markets.

The majority of leading economists of Russia and even some members of today's Cabinet Council absolutely disagree with the Government.

There is no need to flatter ourselves with the growth of the World fund markets and possible oil price rise, says the Prime-Minister Alexey Kudrin. Deeper recession is in store for global economy, and the second crisis wave in the financial sector is in store for Russia. In the nearest 10 years our country will not manage to provide medium 6.5 per cent growth rate of economy which the Ministry of Economic Development counted on earlier. Alexei Kudrin, the Vice Prime Minister, the Minister of Finance of Russia, has notified that the growth of the World fund markets and oil prices is a short-term phenomenon, and a new wave of problems is in store for the banking system.

He has explained that in some industries demand for goods has fallen substantially, storage rooms are full of goods for 6-12 months, that is why, enterprises will not be able to pay the credits. According to Kudrin, Russia will not have achieved medium 6.5 per cent growth rate of economy till 2020. «It is an excessive, very optimistic value not only in economic conditions but also accounting demographic challenges which are in store for us since 2012 till 2015. We will not manage to hold such growth rate with such reduction in active population», said the head of the Ministry of Finance. Andrei Gangan, an analyst of the financial newspaper Kalita-Finance, thinks that in the end of February the level of non-paid lends was a little higher than 2 per cent. However, continuing recession in industry which became almost 16 per cent lower for the first two months of 2009 (in comparison with indicators of 2008) caused a new wave of nonpayment. «Under the conditions of narrowed demand the real sector can not in fact serve its debt instruments and, consequently, it will either proclaim technical and then quite real defaults or negotiate installments and lend prolongation with creditors», the expert said. Michail Delyagin, the Director of the Globalization Institute, is sure, that wishing to smooth the situation in the country the Russian Government lowers the real economic recession in its speech. According to the Government's official documents, in 2009 it will expect for a relatively small economic recession – 2.2 per cent. Even if common price growth in 2009 is lower than officially expected inflation (13 per cent) and makes up 10 per cent, on condition of zero economic growth the GDP must be 45.69 trillion roubles in 2009. Comparison with this value of the GDP expected by the Government on the basis of which the federal budget for 2009 is calculated (40.42 trillion roubles) shows that the real economic recession taken into account into the federal budget 2009 by the Government is not 2.2 but 11.5 per cent. So, trying to decline responsibility for durative inactivity the Government has lowered economical recession more than fivefold.

In his speech at the round table meeting of the Russian Economic Society Sergey Glazyev, a famous Russian economist, academician, accentuated that in reality the crisis covering the World economy which was called the financial one was manifestation of the deep structural crisis caused by a process of substitution of an old technological structure by a new one [Glazyev 2009]. To overcome such a crisis measures for saving the banking system of the financial market reanimation are not enough. We can see that money does not simply enter economy, but enter in huge quantities. But in spite of the country leaders' tough installations about reduction of allocated resources to the real sector they do not reach it. The Central Bank of Russia gives huge money. Commercial banks send these funds to the currency market. And as a result, the Central Bank of Russia loses its currency reserves. Measures taken today are not effective enough and fraught with inflation acceleration. The financial market reanimation measures must be added by programs of stimulating growth of a new technological structure which will promote creation of a new long wave of economic rise [Derivados 2008]. But to spend trillions of roubles for saving banks today is not worthy, because saving them is not an end in itself. Formation of a domestic investment system and structural rebuilding of our economy on the whole are necessary. The main problem today is absence of a clear system connection between anti-crisis measures and long-term purposes of structural rebuilding with modernization of domestic economy. The matter is that the period of technological structure substitution gives possibility for a breakthrough for poor countries, Glazyev thinks. Nanomaterials, telecommunications, agriculture, biotechnologies, laser technologies, instrument engineering and some other brunches can give Russia possibility to leave behind developed

countries in structural rebuilding of economy and *straddle* a new long wave of economic rise [Glazyev 2009].

As a result, the main problem – prevention of production recession - is not solved; but to solve it allocated money would have been quite enough.

9. Possibility of the System Crisis in Russia.

According to Michail Delyagin, today there is no crisis; there is depression in Russia and in the World. But we should take it into account that depression has come for many years. Russia has come through the first wave of demand pressing (credit demand). Delyagin writes, «On this first wave already all this praised...stability appeared to be on the verge, and on the 18th of November only several hours separated us from attack of saving banks by depositors. If our leaders had not gathered at night on 18-19th of November there would have been nothing to save». But the second wave connected with export pressing is in store for us. Then there will be the third one connected with the state expenses pressing. *The system crisis was in store* for Russia, as Delyagin said at Khodorkov's reading.

The only sane purpose in the system crisis is softening it and transfer from a collapse and chaos regime to an institutional transition regime. But for that it is necessary for the State to be responsible to people [Vorozheykina 2007]. It is impossible to get guarantees in the State which is not responsible to the society and where there are no any representation systems. Vorozheykina writes, «As Latinoamericanist by profession I know it very well and in detail. Meanwhile, just development of experience of Latin America in situations sometimes even more difficult than ours (in Mexico, Chile, Brazil, Uruguay) shows that it is possible».

Now there is an acute stage for reforms in the country. First of all, it is necessary to lower inflation as much as possible. There are good conditions for that today – fall in wholesale prices and budget expenses, fall in bank credits volume, absence of a huge currency inflow (as before), the Central Bank does not print money. Besides, dollar and euro rate has risen sharply, consequently, prices for import goods have become 20-40 per cent higher, it means, import has reduced by 50-60 per cent, and, consequently, ways for domestic production promotion will be opened.

But in condition of the crisis our import replacing enterprises do not have enough money for that. That is why the Government should help the main import replacing enterprises with credits, give them tax vacations and, at least, partially, eliminate customs duties on foreign components and goods important for them, intensifying antimonopoly control for that, certainly. Rouble devaluation has raised export profitability, and the State could stimulate export enterprises, especially those which supply ready goods and services on the world market, granting them effective credits, tax and customs facilities.

It is necessary to make conditions for prevention a flight of capital. (Today such conditions are not made in Russia – in 2008 a real flow of capital was 129.9 billion, in January-February it exceeded 33 billion dollars). These are short-term measures connected with overcoming the crisis. In a global aspect it is necessary to solve problems of economy diversification (with a bias to innovation branches), creation of *long* money instruments and, certainly, of social reforms.

Today economy of underdeveloped countries (Mexico, China, India, Brazil) comes forward, more and more they take old traditional brunches, firstly, from the USA and Europe. But in the USA a powerful innovation economy is absent. It means that they have mastered a growth factor which will prevail in the 21^{st} century. Russia is in the much worse condition, especially relative to China, India and other underdeveloped countries. As E.G. Yasin writes, «And what is Russia with its falling population? It cannot keep up with China, but it cannot keep up with America too. Innovation economy cannot live in non-democratic society. It is possible if a lot of people with certain mentality, culture, with certain ideas, in what condition they can create, work. In the society some special atmosphere should be. If anybody of you was in American universities you could see such atmosphere».

It means necessity of creation of the only scientific and educational space and very powerful integration with the western community for Russia. It is not real to count on an eternal profit flow from oil and gas. Developed countries will come out of the crisis earlier then we because of absence of inflation. But now we suffer the most from the crisis – the crisis will throw Russia 3-5 years back. «It seems our growth rates will not be restored up to 2013-2014», says academician Aganbegyan. It is necessary to search for real ways for the country development. It is really so, unfortunately, in Russia the key problem of overcoming the crisis – raise of innovational activity – has not been raised. To solve it, it is necessary to tie anti-crisis measures and realization of a concept of a long-term development of the country before 2020, which was preliminary approved but has not got a legislative status. And we need new people to prevent the moving system crisis...

As Michail Khodarkovsky said about people capable to take out the country out of the crisis – they are not left-wingers, not right-wingers, not Westernists, not Slavophils, they are professionals of different political convictions with knowledge and experience. For eight years today`s Government has lived in conditions of high oil prices, but this group cannot work in crisis conditions, consequently, they need specialists. Time of sharashkas has passed – if Russia thinks about the future we need a wide democratization of Russian life on all levels.

10. International Crisis and Russia in 2010 – Dynamics of the Crisis, Challenges, Risks, Prospects.

Influence of the crisis on economy of Russia, prospects of its economic development and position of Russia in the World seems mixed today, in the beginning of the year 2011. And although full official data about behavior of Russian economy in 2010 will appear not soon, meanwhile, today we can make some conclusions and estimate prospects for the nearest future.

10.1. Behavior Tendencies of Russian Economy Real Sector in 2009-2010.

A yearly recession of *industrial production* relative to the same month of the previous year observed since November, 2008, was changed by production growth in November, 2009, which was intensified in January, 2010 – 101.5 per cent in November, 2009, 102.7 per cent in December, 2009, 107.8 per cent in January, 2010. The level of January, 2009, is exceeded by all kinds of production, except transport facilities and equipment production (decreasing by 16.1 per cent) which is conditioned with gradual coming out of the crisis and the lowest basis (since the beginning of the crisis) of January, 2009.

Conjuncture surveys of enterprises carried out in January by the Institute for the Economy in Transition (IET) showed that positive estimations of demand began to prevail over negative ones – after it was cleaned off from seasonality demand for industrial production stopped to decrease for the first time during the crisis what promoted improvement of production plans of enterprises. A stock of orders began to be filled actively; provision with orders returned to the before crisis level. 40 per cent enterprises were satisfied with current sales amounts in January against 32 per cent in December, 2009.

The largest production growth in January, 2010, in comparison with January, 2009, is provided in processing productions (by 31.7 percentage points) including leather, leather goods and footwear production (by 63.3 percentage points), chemical production (by 67.0 percentage points), machinery and equipment production (by 60.6 percentage points), electrical equipment, electronics and optical equipment production (by 62.9 percentage points).

10.1.1. Fuel and Energy Mining.

According to calculated data of the Ministry of Economic Development of Russia, in January of 2010 *production of basic primary fuel and energy resources* became 9.9 per cent higher in comparison with January of the previous year.

In January, 2010, a production index of fuel and energy mining was 106.7 per cent in relation to January, 2009.

In January, 2010, *oil production volume* including gas condensate (see oil further) became 3.1 per cent higher relative to January, 2009, and reached 42.6 million tons. We should note keeping a tendency of yearly oil production growth relative to the same period of the previous year observed since March, 2009. Oil companies and independent producers produced 13.2 billion m³ of gas, and a share of their production in the total volume of gas production increased to 20.6 per cent (exceeded the level of the relevant period of 2009 by 2.4 per cent). Oil production growth is conditioned by cold weather conditions, continuing export restoration and increase of domestic consumption.

In January, 2010, an oil production index was 108.7 per cent in relation to the same period of 2009. For that period 20.7 billion tons oil stock was processed in Russian petroleum refineries, 106.6 per cent relative to January, 2009. A share of oil processing in production volume grew from 47.1 to 48.7 per cent relative to the relevant period of the previous year. In January, 2010, 3.0 million tons motor petrol (98.0 per cent relative to January, 2009), 5.9 million tons diesel fuel (103. 7 per cent), 6.0 million tons residual oil (108.1 per cent) was produced.

According to the information of the Ministry of Energy Resources, on the 28 of January, 2010, prices for oil products on the World market had grown by 6.9 per cent for motor petrol, 5.2 per cent for diesel fuel, 5 per cent for residual oil in comparison with December of 2009. In this case on the domestic market cost for oil products is 64.2 per cent (motor petrol), 63.6 per cent (diesel petrol), 58.0 per cent (residual oil) of the prices on the World market (under the same tax conditions). However, if to take subtraction of export duties into account, difference between average prices for motor petrol, diesel fuel, residual oil on the domestic market and World prices (according to the information of the Data Analytical Centre *KORTES*, ltd) was for benefit to the domestic market, and deliveries of mentioned oil products to the domestic market were more profitable than its export.

In January, 2010, an index of *production and distribution of energy*, gas and water was 108.4 per cent in relation to the same period of the previous year. For January, 2010, 103 billion kilowatt per hour of electric energy was output, 107.2 per cent relative to January, 2009. In comparison with the level of the previous year growth of electric power production is conditioned not only with production growth rate in a series of energy intensive kind of activity, but with cold weather conditions in the heating season.

In comparison with January, 2009, in January, 2010, electric power production decreased (by 9.7 per cent) on hydroelectric plants, but increased on heat and nuclear power plants (by 10,3 and 10.2 per cent correspondingly).

Substantial reduction of energy generation on hydroelectric plants in comparison with the same period of the previous year is conditioned by the accident on the Sayano-Shushenskaya Hydroelectric Plant and an unfavourable hydrologic situation on some rivers in the European part of Russia. So, in comparison with January, 2009, in January, 2010, energy generation decreased by 0.74 billion kilowatt per hour (20.4 per cent) on the Volzhsko-Kamsky cascade, by 1.07 billion kilowatt per hour (14.8 per cent) on the Angaro-Yenisei one.

A share of electric power produced by heat power plants in total energy production grew from 70.4 percent in January, 2009, to 72.4 per cent in January, 2010, produced by nuclear power plants from 14.4 to 14.8 per cent correspondingly. A share of electric power produced by hydroelectric plants decreased from 15.2 per cent to 12.8 per cent correspondingly.

In January, 2010, *a chemical production* index was 134.1 per cent in relation to January, 2009. In comparison with the same period of 2009, in January, 2010, production growth was noticed in the majority of basic kinds of chemical production – mineral or chemical fertilizers, synthetic rubbers, plastics in primary forms, organic synthetic dyes, coloured (pigmented) lacquers and compositions on their basis, synthetic fibres and man-made threads and fibres, paintwork materials on the basis of polymers.

In January, 2010, an index of *production of man-made and synthetic fibres* was 162.9 per cent relative to January, 2009. Among domestic producers of chemical fibres producers of capron technical and cord threads appeared to be in the worst situation in connection with substantial fall in demand. The global financial crisis has influenced negatively on the car market and, consequently, on work of tire plants which are the main consumers of these kinds of threads. In this case in comparison with January, 2009, the situation in this branch is becoming stable.

Production volumes of organic synthetic dyes, coloured (pigmented) lacquers and compositions on their basis had grown and reached 121.7 per cent by January, 2009.

In comparison with January, 2009, in January, 2010, a production index of rubber and plastic goods was 120.9 per cent which included production of rubber goods – 2.8 times. In this case, production of tires, tire casings for lorries, buses and trolley-buses increased tenfold, tires, pneumatic tire casings for new cars – threefold, tires, pneumatic tire casings for agricultural technics, other new tires, tire casings – 6.1 times. In comparison with January, 2009, in January, 2010, a production index of plastic goods reached 111.8 per cent.

In January, 2010, *machinery and equipment production* increased by 14.7 cent in relation to January, 2009. It is necessary to note that among others this increasing was conditioned with a low level of production volume in January, 2009. In this case in comparison with December, 2009, production volume was reduced by 7.2 per cent.

In relation to the level of January, 2009, in January, 2010, *home appliances production* growth was noticed (by 12.5 per cent) which was conditioned by increase of persons' expenditure share to home appliances of long usage.

Reduction in building volumes continues to influence production of machinery and equipment used in housing construction and highway engineering negatively.

In consequence of *reduction in investment programs* of industrial enterprises, engineering tools production continues to fall (by 23.2 percent), which includes metal cutting equipment (by 34.5 per cent) and press-forging machines (by 31.5 per cent). In January, 2010, an index of electrical equipment, electronics and optical equipment production was 115.8 per cent relative to January, 2009. In this case in comparison with 2009 it was reduced by 47.5 per cent.

In connection with the fact that the given sector is a deliverer of components for other economic sectors, improvement of the situation in separate sectors-consumers of electrical equipment, electronics and optical equipment production (which is connected with increase of enterprises and persons' effective demand among others) provided production growth in all product classes of the given section.

In comparison with January, 2009, in January, 2010, *production of lorries* was reduced by 27 per cent which was connected with substantial reduction of leasing sales of automobile engineering and difficulties of domestic enterprises (producers and consumers of automobile engineering) in getting credits to increase floating assets, realize an automobile park renovation projects and repay current credit obligations. Realization of measures of the Russian Government to stimulate demand for automobile engineering and stabilize financial and economic situation of automobile enterprises in the nearest future will promote reduction of falling rate of automobile production volumes.

In January, 2010, (according to the operative information data) *a production of defense industry complex* was 98.5 per cent relative to January, 2009. In this case defense production became 3.5 per cent lower and civilian production 3.8 per cent higher. A share of civilian products in the total production volume was 44.4 per cent.

In comparison with the corresponding period of the previous year growth of production volumes was observed in *rocket and space industry* (by 58.1 per cent), shipbuilding industry (by 34 per cent), ammunition and special chemistry production (by 22.3 per cent) and radio-electronic complex (by 5.2 per cent). Substantial decrease of production volumes was observed in two branches – production of conventional armaments (by 30 per cent) and aviation (8.5 per

cent). In January, 2010, growth of civil-purpose products was observed in the majority of branches of the complex, except aviation and shipbuilding.

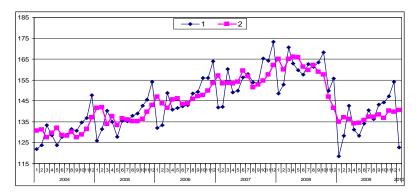
In comparison with January, 2009, production of *railway equipment and rolling stock* became 12.5 per cent higher, *optical devices* – 18.8 per cent higher, cartridges, pyrotechnics, gunpowder - 7.9 per cent higher, sporting, hunting weapon – by 7.9 per cent higher.

In January, 2010, an index of *metallurgical production and production of finished metal fabrics* was 106.5 per cent in relation to January, 2009, including metallurgical production – 125.2 per cent, production of finished metal fabrics – 84.2 per cent.

Demand of the domestic market for metal of ferrous metallurgy is provided by rate of development of metal consuming economic sectors. In January, 2010, 4.0 million tons cast iron (145.5 per cent relative to January, 2009, 96.9 per cent to December, 2009), 5.0 million tons bullions of other primary forms and semi-finished products (136.4 and 94.6 per cent correspondingly), 4.0 million tons finished steel of ferrous metals (124.7 and 92.0 per cent correspondingly), 604 thousand steel pipes (158.5 and 78.6 per cent correspondingly) were produced on metallurgy enterprises of Russia. In 2009 a physical volume of ferrous metal export was 89.9 per cent relative to 2008 (39.5 million tons), which included export of rolled metal – 102.8 per cent (28.5 million tons). In this case export of rolled sheet reached 119.0 per cent (10.4 million tons), rolled section (without intermediates for rolls – semi-finished products) 117.7 per cent (4.1 million tons), semi-finished products 90.4 per cent (14.0 million tons) in relation to the year 2008.

In 2009 import of ferrous metals in tonnage became 33.5 per cent lower what was conditioned by decrease of finished steel deliveries (by 36.8 per cent) which reached 85.3 per cent deliveries in tonnage in the structure of ferrous metal import. Import of rolled sheet became 29.0 per cent lower (reached 2.4 million tons), rolled section 50.6 per cent lower (reached 0.9 million tons).

The given data indicate that capacity of the metal-roll domestic market is restored slower than production volumes are. If to take widening of export deliveries of rolls while import is reduced substantially in the given period into account, we can make a conclusion about decrease of possibilities of the domestic market in 2009 up to 75.1 per cent (calculating) relative to the previous year or up to 25.7 million tons.



Dynamics of industrial production in Russia

Production of the basic types of pipes reached – 173.2 per cent of pump-compressor pipes, 85.3 per cent of casing pipes, 87.5 per cent of drill pipes in relation

to January, 2009. In 2009 import of steel pipes was reduced up to 60.5 per cent in relation to the previous year and reached 612.6 thousand at the account of reduction of deliveries from foreign countries (up to 46.3 per cent or 184.2 thousand tons) and from the CIS countries (up to 69.6 per cent or 428.4 thousand tons).

10.2. Situation on the Financial Markets and the State of the Banking Industry.

In January, 2010, under the conditions of outflow of private capital which was equal to about 13 billion dollars, according to estimation, the international reserves were reduced – their volume became 3.204 billion dollars lower for a month (in January of 2009 reduction by 40.186 billion dollars was observed). In this case negative currency revaluation of reserves in euros,

pounds sterling and yens was equal to about 5.4 billion dollars, operation of the Russian Bank of buying currency – 2.2 billion dollars. As of the first of February of 2010 the volume of international reserves reached 435.83 billion US dollars.

According to preliminary data of the Ministry of Finance of Russia, in January of the current year, surplus of the federal budget on cash basis was 66.1 billion roubles or 2.2 per cent GDP to 376.5 billion roubles (14.7 per cent GDP) for the analogical period a year before. In this case the budget income was 737.6 billion roubles or 25 per cent GDP (771.98 billion roubles or 30.2 per cent GDP in January of 2008), and the budget expenses (on cash basis) – 671.4 billion roubles or 22.8 per cent GDP to 395.5 billion roubles (15.5 per cent GDP) for the first month of the previous year. Non-interest expenses were equal to 654.4 billion roubles or 22.2 GDP (380.7 billion roubles or 14.9 per cent GDP in January of 2008), and servicing the state debts (interest cost) reached 17.2 billion roubles or 0.6 per cent GDP to 14.8 billion roubles or also 0.6 percent GDP in January a year before.

As of the first of February of 2010 the total volume of the Reserve Fund was 1823.26 billion roubles what was equivalent to 59.91 billion dollars (26.03 billion dollars, 18.30 billion euros, 4.21 billion pounds). Besides, a part of reserve position of the Russian Federation in the International Currency Fund formed at the account of money of the Reserve Fund was 991.94 million SDR. The total volume of the National Wealth Fund was 2757.89 billion roubles or 90.63 billion in terms of dollars (32.64 billion dollars, 24.70 billion euros, 4.49 billion pounds on separate ledgers of the NWF in the Bank of Russia and 434.02 billion roubles and 2 billion dollars on deposits in the *Vnesheconombank*).

10.3. Regional Development.

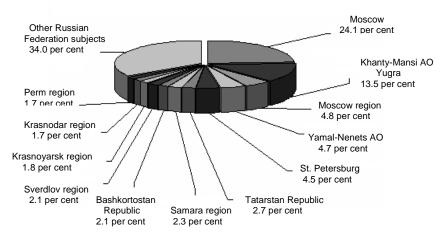
In January, 2010, in the majorities of subjects of the Russian Federation and also in all federal districts of the Russian Federation growth of industrial production volume (with account of estimation of production volume of small enterprises) in comparison with January of 2009 was observed.

In comparison with January, 2009, in January, 2010, an industrial production index in whole in Russia reached 107.8 per cent. The most substantial growth of separate kinds of industrial production such as *mining operations, processing productions, production and distribution of energy, gas and water* was noticed in January, 2010, in the Central and Volga federal districts in comparison with January, 2009 (by 12.9 and 13.2 per cent correspondingly).

A retail trade turnover in the Russian Federation in whole reached 1185.2 billion roubles in January, 2010, what was 100.3 per cent in commodity bulk relative to January, 2009. Together with that in 37 subjects of the Russian Federation this value became lower. The largest decrease of it (by 12.2 per cent in comparison with January, 2009) was noted in the Perm region.

In January, 2010, an index of consumer prices was 101.6 per cent including that for foods – 101.4 per cent, non-foods – 100.2 per cent, services – 103.9 per cent. In January, 2010, in 5 subjects of the Russian Federation (except autonomous areas included to the district) a growth of consumer prices was 2.4 per cent and more. For a month an index of consumer prices reached 102.2 per cent in Moscow, 102.0 per cent in St. Petersburg. In January, 2010, an index of industrial producers' prices was 99.0 per cent, according to the preliminary data.

A Share of the Russian Federation Subjects in Total Ammount of Taxes and Dues as of the 1st of June, 2010.



A group of regions which mainly form tax returns of the consolidated budget includes Moscow, St. Petersburg, Moscow, Sverdlov, Nizhegorodsk and Samara districts, Perm and Krasnodar areas, Bashkortostan and Tatarstan Republics, Yamal-Nenets and Khanty-Mansi Autonomus Districts. In January-November, 2009, they raised 64.6 per cent of all taxes and dues.

10.4. Foreign Trade.

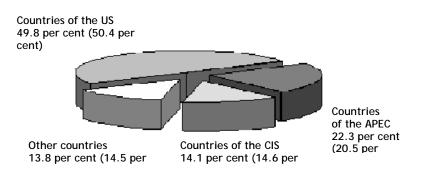
According to an estimation of the Ministry of Economic Development of Russia (based on methodology of payment balance), in January, 2010, a foreign trade turnover reached 39.5 billion US dollars. Increase of a trade turnover by 38.9 per cent in comparison with January, 2008, can be explained with a low level of export and import volumes in January, 2008 (*effect* of the base). Increase of export price more than one and a half times in comparison with January, 2009, was connected with rise in prices for the basic goods of Russian export, first of all, for oil.

During the year 2009 gradual increase of a foreign trade turnover was observed. In this case speed of export growth exceeded substantially import dynamics. But for a long time import balanced on one level, approximately, growth began only in the second half of the year.

Development of foreign trade is still characterized by a substantial gap in dynamics of export and import physical volumes. In 2009 physical volumes of export became 3 per cent lower in comparison with 2008, as soon as import in physical expression for the discussed period became 36.7 per cent lower. In connection with deeper fall of export prices in comparison with prices for import purchases trade conditions were in whole very unfavourable for Russia in the period under report. An index of trade conditions (the same period of the previous year = 100) reached 67.1 (116.0 in 2008).

In a geographical structure the largest foreign trade partner of Russia is still the European Union (EU) – in 2009 50.3 per cent of Russian trade turnover fell on the US (52.1 per cent in 2008). The leading positions among the countries-the US members belonged to Germany, the Netherlands and Italy, a share of which was 47.8 per cent of foreign trade turnover with this group of countries. In comparison with 2008 in 2009 trade turnover with the countries-the US members became 38.3 per cent lower, export – 39.6 per cent lower, import – 35.3 per cent lower.

Structure of Foreign Trade Turnover of Russia (Group of Countries) in January-July, 2010 (January-July, 2009)



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A specific weight of the countries of the Asian and Pacific Economic Cooperation (APEC) in Russian foreign trade turnover grew by 0.4 percentage points. Among the APEC countries the main foreign trade partners were China, the USA, Japan and Korea, more than 85.3 per cent of foreign trade turnover with this group of countries fell on their share. Trade turnover with the APEC countries became 35.0 per cent lower, export -24.7 per cent lower, import -41.9 per cent lower.

A share of the CIS countries increased a little. A specific weight of the countries of the European and Asian Economical Cooperation grew from 8.2 per cent to 8.7 per cent. Dynamics of trade with the CIS countries and with foreign countries became almost equal (fall by 36.3 per cent against 35.5 per cent correspondingly).

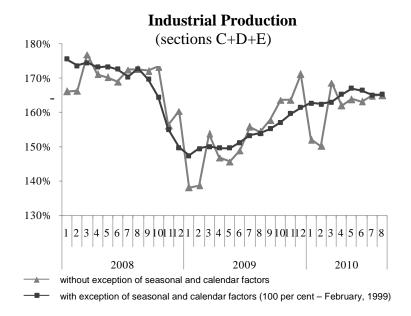
Reduction in foreign demand and price fall on the World commodity markets influenced Russian export dynamics in 2009. In 2009 export of goods (according to customs statistics data) was reduced by 35.5 per cent relative to 2008 and reached 301.6 billion US dollars. Export to the US countries decreased the most substantially – by 39.6 per cent (by 43.6 per cent to Germany, 40.3 per cent to Italy, 36.3 per cent to the Netherlands). Export to the main APEC countries decreased – by 31 per cent to the USA, 29.7 per cent to Japan, 21.2 per cent to China. Among the CIS countries export decreased mostly to the Ukraine (by 41.5 per cent) and Moldova (39.4 per cent).

In 2009 fuel and energy goods were the basis of Russian export, a share of them was reduced by 2.1 percentage points to the level of the year 2008. A specific weight of metals, metal goods and chemical products decreased too. But simultaneously a share of wood, pulp and paper goods, foods and agricultural raw materials (except textile ones), machinery, equipment and transport facilities grew.

10.5. The Basic Tendencies of Social and Economic Development of Russia in 2010.

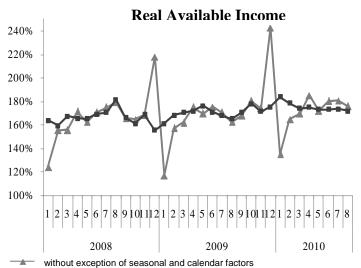
The main conclusions of analysis of social and economic development are the following.

- Economic revival which began in the middle of the previous year after positive growth dynamics during the first two quarters of 2010 was changed with a pause. In August as well as in July the GDP dynamics decreased by 0.4 per cent with exception of seasonality, according to estimation of the Ministry of Economic Development. The main contribution to dynamics decrease was made by agriculture which provided about 60 per cent of the GDP dynamics decrease. Low rate in transport in August and in July were noted. Positive factors of economic development in August could be continuation of investment and building growth. Processing production continues to be developed with high rates. When a factor of influence of abnormally hot weather decreases in the rest of the months, restoration of investment growth and continuation of consumer demand growth can promote restoration of positive dynamics of the GDP growth. According to estimation of the Ministry of Economic Development, in comparison with August of the last year the GDP grew by 2.4 per cent, and for 8 month in whole its increase reached 3.7 per cent in relation to the same period of the last year.
- In August a substantial acceleration of investment activity was observed investment growth (with exception of a seasonal and calendar factor) was estimated on the 4.3 per cent level in comparison with July. On an annualized basis growth reached 10.9 per cent in comparison with August of the last year. (According to the Rosstat data, in August, 2010, a sharp growth of investment activity was observed increase to the same period of the last year reached 10.9 per cent which is the highest value in 2010). For eight months since the beginning of the year investments have grown by 2.8 per cent in comparison with the same period of the last year and reached 4668.3 billion roubles.
- In September, 2010, the volume of commercial transportation of goods was 258.2 million tons (increase by 1.2 per cent to July, 2010). And a tendency to increase of transportation range was kept, as a result of which commercial freight turnover had grown by 1.1 per cent by July, 2010, and growth reached 2.2 per cent to the same period of the last year.



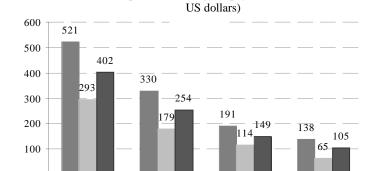
- In August, 2010, the volume of building works was 1.7 per cent higher than the July value. Dynamics to the same period of the last year returned to the sphere of positive values. In August growth of work volume by 3.3 per cent was fixed (in June there was decrease by 2.5 per cent). Commissioning of blocks of flats reached 3.8 million m² in August which was 22.4 per cent higher than the level of the previous year, with exception of seasonality growth reached 8.4 per cent.
- Increase of investment demand told on industrial production dynamics in August a little growth of production by 0.1 per cent was observed which included that by 0.5 per cent in processing production. In comparison with August of the last year growth of industrial production was 7 per cent for 9 months of the year 2010.
- Consequences of summer drought influenced dynamics of agricultural production substantially. Regarding the results of August, 2010, agricultural production became 19.1 per cent lower in comparison with August of the previous year and reached 80.9 per cent from the level of August of the previous year. According to the information of the Ministry of Agriculture of Russia, harm worked to domestic agricultural sector by drought is estimated in 32.7 billion roubles 11.15 million hectares of crops died what was about 26 per cent of all cultivation areas. Dynamics of cattle stock decrease in all sectors was kept by the end of August of the current year total decrease had been 2.4 per cent to the correspondent period of the previous year (the lowest value since the beginning of the year), and a total number of cows became 1.6 per cent lower.
- Since the beginning of 2010 steady rising of a growth rate of retail trade turnover has taken place. In comparison with August of the previous year retail trade turnover has increased by 6.5 per cent in comparable prices, and by 1.4 per cent in comparison with July of the current year. Regarding the results of January-August, retail trade turnover has increased by 4.3 per cent in comparison with the same period of 2009.
- A more favorable economic situation than in the previous year has promoted a certain revival in the market of paid services to population in comparison with values of 2009. In August volume of paid services increased by 3.1 per cent in comparison with August, 2009, and demonstrated the highest value since the beginning of the year.

- Concerning economically active population the unemployment level decreased from 7 per cent in July to 6.9 per cent in August. However, with exception of seasonality the unemployment level increased a little from 7.5 per cent in July to 7.6 per cent in August.
- Growth of real salary continues in comparison with the last year values. In August growth reached 6.6 per cent to August of 2009. With exception of a seasonal factor it decreased by 0.1 per cent in comparison with July of the current year.
- Population's real available income with exception of a seasonal effect became 1.2 percent lower in August. Relative to August of the previous year growth reached 7.9 per cent, real salary by 6.6 per cent. In whole for January-August of the previous year growth of them reached 5.6 and 5.1 per cent correspondingly to January-August of 2009.



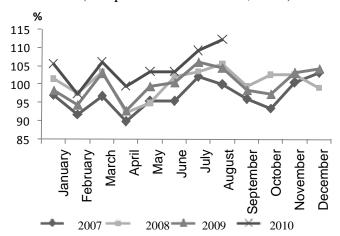
- with exception of seasonal and calendar factors (100 per cent in January, 1995)
- Consumer expenses of the population keep positive growth rate in comparison with the least year values in August growth reached 6.5 per cent to August of 2009. Together with it with exception with seasonality retail trade turnover became 0.5 per cent lower in August in comparison with July of the current year. In August inflation on the consumer market reached 0.6 per cent. For eight months prices grew by 5.4 per cent (8.1 per cent for eight months in 2009) and by 6.1 per cent for a year.
- According to the estimation, in August, 2010, export of goods reached 31.8 billion US dollars (116.4 per cent to August of the previous year and 99.5 per cent to July of the current year). According to the estimation, in January-August, 2010, export grew 1.4 times in comparison with January-August of the previous year and reached 253.5 billion US dollars, which included that by 43.9 per cent (216.2 billion US dollars) to foreign countries and by 29.6 per cent (37.3 billion US dollars) to the CIS countries.
- According to the estimation, in August, 2010, import of goods reached 23.5 billion US dollars (151.1 per cent to August of the previous year and 111.9 per cent to July of 2010). According to estimation, in January-August, 2010, import grew by 30.6 per cent in comparison with January-August of the previous year and reached 148.7 billion US dollars, which included that by 27.5 per cent (127.0 billion US dollars) from foreign countries and by 52.3 per cent (21.6 billion US dollars) from the CIS countries.

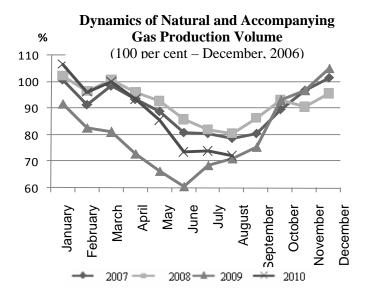
Foreign Trade of the Russian Federation in January-August, 2008-2010 (with a help of methodology of payment balance, billion



Dynamics of Runs to Stills

(100 per cent – December, 2006)





In January-August, 2010, gas consumption in Russia (according to the preliminary data of the Central Dispatching Department of the Fuel and Energy Complex of the Minenergo of Russia) reached 239.6 billion m³ or 107.8 per cent from the level of January-August of the previous year which included 101.7 billion m³ (1.6 per cent) by boiler and heat plants of the UES of Russia. According to the Rosstat data, in August, 2010, producers' average price for gas reached 712 roubles for 1000 m³ or 95.5 per cent to the previous month and 128.8 per cent to December of 2009.

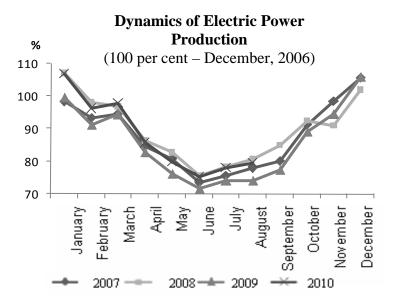
According to the operative data of the Minenergo of Russia, in January-August, 2010, gas export reached 111.4 billion m³ (118.2 per cent to the same period of 2009). In this case 68.8 billion m³ (97.6 per cent) was delivered to foreign countries and Baltic States, and 42.6 billion m³ (1.8 times) to the CIS countries. In January-August, 2010, a share of export in the total volume of gas production increased by 0.4 percentage points and reached 26.4 per cent. We should note that since May, 2010, a tendency of decrease of gas deliveries to foreign countries has been observed in comparison with the same period of 2009, in August, 2010, decrease

reached 45.4 per cent to the level of 2009. Besides, in August, 2010, gas deliveries to the CIS countries decreased by 5.7 per cent (to August, 2009).

According to the Rosstat data, in January-July, 2010, a share of gas in commodity composition of export decreased up to 12 per cent against the same period of 2009 (13.9 per cent) which was connected with decrease of the level of average export prices for gas by 1 per cent (from 267.7 to 264.9 US dollars for $1000 \mathrm{m}^3$). In the framework of the project *Sakhalin-2* (according to the data of the Federal Customs Service) more than 2.6 million tons of liquefied natural gas was exported in January-July, 2010, which included 0.98 million tons in June.

In January-August, 2010, coal mining reached 205 million tons (110.2 per cent to January-August, 2009) which included 24.9 million tons (100.1 per cent) in August, 2010. In this period growth of coal mining was connected with increase of demand for coal on the foreign and domestic markets and improvement of the foreign economic conjuncture.

In January-August, 2010, an index of production and distribution of electric energy, gas and water reached 105.2 per cent to the same period of the previous year which included 104.4 per cent in August. In August, 2010, with an exception of a seasonal and calendar constituent growth of production and distribution of electric energy, gas and water reached 0.3 per cent to the previous month. For January-August, 2010, energy output reached 673 billion kilowatt per hour (105.4 per cent to January-August, 2009) which included 76.6 billion kilowatt per hour (107.6 per cent) in August.



In January-August, 2010, an index of chemical production reached 117.9 per cent to the same period of 2009 which included 114.7 per cent in August. In August, 2010, with an exception of a seasonal and calendar factor growth of chemical production reached 0.8 per cent to the previous year.

In January-August, 2010, an index of machinery and equipment production reached 116.7 per cent to January-August, 2009. The main contribution to this growth was made by increase in machinery and equipment production (by 17.9 per cent), its production dynamics is characterized with substantial fluctuations connected with a specific character of a production cycle in the given group of goods (in August, 2010, a production index of the given commodity subclass reached 104,3 per cent in relation to July, 2010). So, production of steam turbines increased 2.4 times. Together with that decrease in production of gas turbines by 57.3 per cent was observed in the given period.

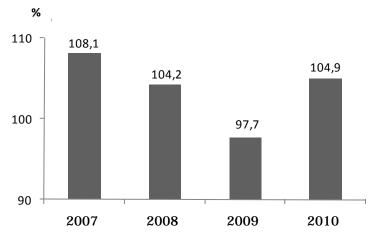
We should note that in August, 2010, an index of machinery and equipment production reached 101.9 per cent in relation to July, 2010. With an exception of seasonal and calendar constituents machinery and equipment production increased by 1.7 per cent. The given dynamics was conditioned by increase in production volume in the majority of commodity groups of the

given section (except production of machinery and equipment for agriculture and forestry and production of other special purpose machinery and equipment).

In January-August, 2010, production growth in defense industry complex (DIC) reached 112 per cent to the same period of 2009. Production growth was observed in all branches of the complex. Production in the radio-electronic complex (by 15.2 per cent), industry of conventional armaments (by 14.8 per cent) and aviation (by 13.8 per cent) increased the most. In January-August defense production increased by 18.5 per cent, civilian production by 1.2 per cent. A share of civilian production in the total production volume reached 33.8 per cent.

In August, 2010, an index of food production reached 106.9 per cent in comparison with the same period of the previous year, in January-August – 104.9 per cent. Keeping of positive dynamics of food production for January-August of 2010 in relation to the same period of the previous year was promoted by production growth of meat and meat products (111.4 per cent) at the account of increase in volumes of fresh, cold, chilled and frostbitten, frozen, deep frozen and defrost pork by 27.5 and 12.4 per cent correspondingly, meat and by-products of poultry by 16.3 per cent and also chilled meat products (containing meat) by 21.4 per cent.

Dynamics of Food Production Including Drinks and Tobacco in January-August, 2007-2010 in per cent to the same period of the previous year



- For August of the current year the volume of international reserves increased by 0.959 billion dollars against 14.106 billion dollars a month before (in August of 2009 growth by 7.638 billion dollars was observed). In this case negative currency revaluation of reserves in euros, pounds sterling and yens reached 6.8 billion dollars for August because of weakening of the rate of the single European currency and an English pound in relation to the US dollar, an operation of the Russian Bank operation of net-purchase of exchange reached 1.3 billion dollars, positive change of monetary gold cost reached 1.9 billion dollars, other changes reached 4.5 billion dollars. On the whole for January-August growth of reserves reached 36.816 billion dollars (in January-August a year before decrease reached 16.735 billion dollars). As of the first of September, 2010, the volume of international reserves reached 476.266 billion US dollars.

According to the preliminary data of the Ministry of Finances of Russia, in January-August of the current year deficit of the federal budget on cash basis reached 645.81 billion roubles or 2.3 per cent GDP against deficit of 1151.94 billion roubles (4.7 per cent GDP) for the analogical period a year before.

In August of the current year (like in May-July) money of the Reserve Fund to provide balance of the federal budget was not used. As of the first of September of 2010 the total volume of the Reserve Fund reached 1228.93 billion roubles what was equivalent to 40.08 billion dollars (17.26 billion dollars, 13.73 billion euros, 2.47 billion pounds). Besides, a part of the reserve

position of the Russian Federation in the International Currency Fund formed at the account of the Reserved Fund money reached 991.94 SDR.

The total volume of the National Wealth Fund was 2671.54 billion roubles or 87.12 billion in terms of dollars (31.86 billion dollars, 24.67 billion euros, 4.48 billion pounds on separate ledgers of the NWF in the Bank of Russia and 434.02 billion roubles and 2.75 billion dollars on deposits in the *Vnesheconombank*).

Volume of State inner debts for August increased by 71.65 billion or 3.1 per cent (in whole for the first eight months of the current year by 275.05 billion roubles or 13.1 per cent) and reached 2369.79 billion roubles as of the first of September. Volume of the State stock on the formal stock market increased by 66.89 billion roubles or 4.3 per cent for August (by 168.09 billion roubles or 11.4 per cent for January-August) and reached 1637.835 billion roubles or 69.1 per cent of the volume of State inner debts of the Russian Federation as of the first of September of the current year while 68.4 per cent as of the 1st of August and 70.2 per cent as of the 1st of January of the current year.

- According to the estimation of the Ministry of Economic Development of Russia, for August of the current year increase of money supply in national definition (M2) reached 2 per cent. In this case increase of active cash money (M0) reached 0.6 per cent, when increase of deposits in national currency reached 2.5 per cent (rouble deposits of population grew by 1.7 per cent, deposits of non-financial organizations grew by 3.5 per cent). On the whole for January-August of the current year increase of money amount reached 12.6 per cent against decrease by 1.4 per cent in January-August, 2009. For the first eight months M0 increased by 11.2 per cent, deposits in national currency increased by 13.1 per cent (rouble deposits of population grew by 25.4 per cent, and deposits of non-financial organizations – only by 1.7 per cent).

In August, 2010, consumer inflation was accelerated up to 0.6 per cent (up to 0.4 per cent in June-July, 0.0 per cent in 2009) and had become the highest since 2001. Since the beginning of the current year price rise had reached 5.4 per cent against 8.1 per cent for eight months of the previous year. Year on year after it reached its minimum (5.5 per cent) for the whole post-Soviet period in July an inflation indicator increased up to 6.1 per cent in August.

According to the data of the Central Bank, regarding the results of 10 months of 2010 21 billion dollars flew away from Russia. But for the first 9 months 6.7 billion dollars flew away from the country, 14.3 billion for October.

The market won back a verdict to Khodorkovsky beforehand. But figures of the Central Bank do not reflect real processes. For example, for nine months of 2010 foreign assets of Russian companies grew by 40 billion dollars. And it was called not *flight*, but *investment* and *growth of assets cost*. To estimate, at least, an order of capital flight it is necessary to estimate scale of Russian corruption. Here there is a low border of estimations and an upper one.

A low border of estimations is very simple. President Medvedev and the Control and Revision Department of the President of the RF estimate volumes of theft in the system of State purchases in 1 trillion roubles or 20 per cent, as total expenditure volumes are 5 trillion roubles. The Chamber of Accounts has estimated volumes of theft in building the first train of the Eastern pipeline (16 billion dollars) in 4 billion dollars or 25 per cent.

To estimate an upper border is very simple too. He first train of the pipeline mentioned above (4 thousand km) has cost 16 billion dollars, the China gas pipeline from Turkmenia (2 thousand km), similar in difficulty, has cost 2 billion dollars. Let us subtract 4 from 16, we get 12 billion dollars or 75 per cent.

Cost of commercial real estate in any country of the World is usually equal to 1-2 monthly average salaries for 1 m². In Moscow it is equal to 4-8 monthly average salaries. Fourfold difference is a result of the market overheated by bribes. In principle, corruption in Russia reaches about 50 per cent of the GDP or 20 trillion roubles, and a half of stolen money or 25 per cent of the GDP flies to West.

- Brain drain. For 10 years of perestroika and reforms since 1989 till 1999 more than 1 million people emigrated from Russia. A part of this emigration was *postponed* – people went

away who had wanted to leave for the country of their forefathers for a long time. It concerned, first of all, Germans, secondly, Jews. Since 1992 till 1998 about 600 thousand people left for Germany, and 450 thousand from them were ethnic Germans. Since 1990 to 1997 about 215 thousand people left Russia for Israel. (Statistics indicates paradoxically, that German emigration was, at least, twice higher than Jewish). By the beginning of 2000 immigration scale had begun to fall. After 2003 – the year of Khodarkovsky's arrest, it began to grow again. Since 2004 till 2008 about 440 thousand people left Russia. A character of migration changed sharply. In the 90s people left for Germany more often (fourfold more often than for the USA), Israel took the 2nd place. Now the first three countries are the USA, Germany, Canada. It is almost impossible to determine a real percentage of emigration, as nobody slams the door – people just live and work in the other country being Russian citizens. In one of his latest columns Igor Svinarenko gives a large, but unbelievable figure – in 2010 40-50 thousand graduating students left. In August, 2010, 73 per cent of people polled by sociologists said that they would have desired to leave Russia.

- Dmitry Medvedev, the President of Russia, resumed the year on 29th of December, 2010. He said, «Last year we had practically 10-per cent fall. This year we will have practically 4-per cent growth». The main thing which we have managed to reach is the situation on the market which the Government could stabilize. Unemployment has fallen by 6.7 per cent, and these are millions of people who have returned to their working places. «Salaries continue to grow. Actually, it exceeds, in fact, the before-crisis period», the President said. And, possibly, what is the main thing under the conditions of our social State, we have managed to keep social stability. «I think that the scenario is not the worst», the President said and added that it had been spoiled with only structural vices of Russian economy and dry summer. «And we could not retain inflation in prefixed parameters. The forecast has had to be raised practically up to 8.5 per cent, but inflation can exceed it. Yes, we have managed to overcome the crisis consequences, we have helped people to solve the problem of unemployment, we have kept social obligations, and in this sense conscience of the Government can be clear», Dmitry Medvedev said.

But in 2010 the Russian Government will have to solve what the President is not content with. It firstly concerns investment climate. «If to speak of my subject estimations, unfortunately, in our country investment climate leaves much to be desired. It is bad. And maybe it is just what the Government will have to work on next year», the Head of the Government said. Investments to economy are restored very slowly. For January-August, 2010, growth reached only 2.8 per cent. The Head of the Government reminded that he had held a meeting devoted to this subject, some measures were already taken. But yesterday he came to the conclusion that «we probably need extraordinary measures».

«We judge from the fact that in 2012 we will return to the before-crisis level of the GDP, if we do not meet unpredictable difficult phenomena in the World economy and natural cataclysms», Igor Shuvalov, the first Vice Prime-Minister, said at the meeting of the State Duma on the 24th of September (quotation from Russian Information Agency *Novosti*). According to the Vice Prime Minister, preliminary forecasts of the Government about restoration of economic growth rate have come true. Now the primary problem of the Cabinet Council is *to realize high expectations of qualitative growth in economical life for two years left till return to the before-crisis level of the GDP*, Shuvalov added. But, as practice showed, it was easy to review forecasts and statistics if necessary. So, on the 23^d of September the Government officially admitted that the crisis had begun much earlier than we thought till nowadays. As Elvira Nabiullina, the Minister of Economic Development, said to journalists, according to the précised data of the Rosstat, the GDP fall had already begun in the middle of 2008. In this case during several months high-ranking officials continued to speak about *a quiet harbour* in which Russian economy stayed.

The bottom had been reached in the second quarter of 2009, but by the middle of 2010 we had managed to win back about a half of the crisis fall, Nabiullina said. Now, according to

the Minister, there is a purpose to achieve the main growth at the account of qualitative changes in economy, but not due external economic factors.

What conclusions from these official data have the leading economists of Russia come to?

In the short term a share of Russia in the World economy will fall, saved currency and finance reserves will be inevitably reduced and possibilities of Russia to modernize its own economy widely publicized by Russian authorities will decrease every year (because of lack of real steps).

In the medium term risks from the crisis and possibilities of Russia correspondingly will depend on development of the World crisis. Results of 2010 show a possibility of short-term restoration of before-crisis positions of Russia in the World economy in a series of industries.

However, abnormal summer heat of 2010, series of non-anthropogenic catastrophes (connected with a common tendency of global warming) and, at least, unwillingness of the power to the real modernization of economy and absence of fight with corruption in top echelons of power covering the country will probably lead to exhaustion of resources of further support of status quo regarding the results of 2010 and further worsening of Russian economy situation. A series of Russian superior leaders' hopes to quick overcoming of recession and new rise of World prices for energy resources will be delayed for a long time.

Today only two industries of Russian economy suffering the most from the crisis are included into the World economy – energy industry and finances. Economic growth and increase of gold currency reserves observed during the last years in Russia were provided by export of energy resources and a great volume of external borrowings of Russian private and public corporations.

The domestic market has not become a support for Russian economic growth and could not provide stability of Russian economy amid the crisis. Moreover, the Government did everything to stop the growth of small and medium business for benefit to large corporations controlled by authorities, as *a power vertical* built for eight years of Vladimir Putin presidency cannot regard small and medium business as a team-mate as cannot control it.

This skewed structure of Russian economy can be explained by a series of economical, social and economical and, first of all, political factors. All these factors are outrageous level of corruption in Russia in all power levels, administrative and political pressing to business (for example, Khodorkovsky's case), high taxes, insufficient effectiveness of State and public institutions work, corruption in law-machinery, absence of transparency in laws and decisions made by the power.

Besides, to a substantial degree the crisis has showed excessive dependence of Russian economy on energy resources export, as, on one hand, under the condition of fall of World prices for energy resources deliveries of them are not able to provide economic and political benefits to countries-exporters, on the other hand, searching for alternative energy resources by all countries-consumers becomes the main tendency of the World energy industry development.

We do not pay attention to insufficient development of the Russian financing banking industry incapable to provide inflow of long-term direct investments (*long-money*) to Russian economy without financial support of the West, and, consequently, to provide development of real economy which works for domestic market. To come out of the crisis we do not need tough methods and instruments of economic ruling with *a manual mode*, but variety of them. But *closing* a significant number of Russian economy sectors for foreign capital and a model of a *manual control* of economy, support to producers (like endless financial inflows to the Volga Automobile Plant), but not to demand will lead to economical collapse and technological delay of Russia as a result.

It seems that the main Russian win in the World economy amid the crisis can bear a domestic character – making of competitive economy and system modernization of the country,

development of the domestic market and domestic demand together with address support to 100-200 producers in the sphere of energy industry (especially nuclear one), metallurgy, mechanical engineering, chemical industry and transport which are in demand on the domestic and foreign markets. Stimulating of domestic agriculture, especially its processing industries [Libin, 2010], especially grain crops, poultry farming and pig breading [Kustov, 2010] can also be a promising direction of economy modernization.

The crisis demands sharp rehabilitation and improvement of the State management, rise of effectiveness of the State institutions work, a real (but not intended as a showcase) judicial reform and reforms of law machinery, complex of property rights enforcement measures, reforms of local self-government.

Actually, today's situation causes acute necessity of domestic and foreign economic transformation for many countries of the World, including Russia. *To sit snug and wait till the crisis is over* till new rise in price for energy resources will not do. The Russian Government has got the purpose to carry out a complex of economic, social and political reforms. We cannot say that Vladimir Putin's Government does not see this problem and does not understand its necessity. However, one more thing is clear to today's Russian elite – carrying out of such complex of reforms will inevitably lead to change of this today's elite. A Chinese mode of solving the problem (modernization of economy, but permanence of the ruling regime) is inadmissible for modern Russia.

10.6. Economic Forecast for the Year 2011.

The year 2011 will become the year of the World economy restoration after the financial crisis. Its common characteristic will be growth of production, investments, decrease of inflation and growth rate of consumer prices, unemployment decrease, stabilization of currency rates and prices for raw materials and energy resources. In different places of the World these processes will take place with different intensity which will depend on economy flexibility, its ability to quick restoration. In theory, first of all, developing markets including Russia should possess such flexibility. However, the forecast for 2011 for Russia from World experts is rather pessimistic; it predicts relative recession of the GDP growth rate next year.

According to forecasts of the World Bank, in 2011 the World GDP will grow by 3.2-4 per cent against 2.7 per cent in 2010. In 2011 growth rate of the Russia GDP is expected on the level 4.2 per cent against 4.9 per cent in 2010. Specialists from the Organization of Economic Cooperation and Development (OECD) agree with possibility of such decrease. For you to compare, in the USA 3 per cent growth is predicted, in China the GDP will increase by 9 per cent.

In 2011 inflation in Russia will decrease to 5.6 per cent (6-7 per cent in 2010). Investment will become 8.8 per cent higher. Oil price is predicted on the level 75 dollars per a barrel, on the basis of this figure the budget for the coming year will be made up. Experts also predict strengthening of a rouble in relation to a dollar, an expected rate is 29.3. In whole Russian economy comes out of the crisis slowly, but for sure.

According to the theory of cyclical development, crises are an essential and inevitable constituent of the World economy. After the crisis reaches its peak, active growth of economy always begins. For rather a short period economic values must not only reach the before-crisis level, but exceed it substantially. The crisis eliminates all disadvantages from the system and leads to more effective distribution of resources in economy. As the saying is *every cloud has a silver linen*. The question is when will the crisis reach its peak? If to believe the most pessimistic forecasts, the World economy can be covered with new waves of recession, and current restoration is only temporal. However, such pessimistic economic forecast for 2011 is unlikely.

The most expected events in Russian economy in 2011 are the following.

- The most global expected event of 2011 for Russia is entering the World Trade Organization (WTO) where it has tried to enter for 17 years. In 2010 all questions at issue with the most authoritative members of the Organization – the USA and the European Union – were

settled. Russia has discussed long periods of transition for basic industries and industrial sectors, but officials state that measures of defense of car and aviation industries will have to be reviewed.

There is not a single opinion concerning influence of membership in the WTO on Russian economy – some are expecting for *golden rain*, the others predict crisis to high-technologic branches basing on the State support now.

- By the end of 2011 the Reserve Fund (where super profits from oil export were put) will have been practically exhausted. Firstly it was supposed that it would happen in 2010, however, oil prices which have appeared to be higher than primary forecasts have permitted to economize a part of reserves. From 40 billion dollars which were in the Reserve Fund as of the end of November 15-20 billion dollars is supposed to be spent in December to cover the budget deficit, 10 billion dollars more will be spent in 2011. The National Wealth Fund (NWF) which is about 90 billion dollars is planned to be spent not much, on the contrary. Moreover, in spring, 2011, the Ministry of Finance intends to suggest the Government additional resources of its filling.
- Another resource of covering the budget deficit is a so-called second wave of the State property privatization the basic stage of which will begin in 2011. According to the program, approved by the Government of the RF, in the nearest three years a part of the State holdings of stock of ten largest companies will be realized due to which it is planned to raise management effectiveness. In 2011 the State plans to sell 10 per cent of the VTB and 7.6 per cent of the Saving Bank, but time-frame can vary. In whole for 2011-2013 the State plans to bring about 1 trillion roubles from privatization. Income is expected on the level 300 billion roubles from federal privatization-2011, several tens of billions of roubles from regional one. The second wave of privatization will last till 2015, for 5 years income from it will reach 1.8 trillion roubles.
- One of global consequences of drought and crop reduction has become embargo on grain export since the 15th of August till the end of 2010 imposed by Russia, later prolonged till the middle of 2011. It has permitted to avoid export of 12 million tons grain what would make deficit tangible. Before drought the Russian Federation had taken the leading positions on the World grain market, and authorities intend to abolish an embargo as soon as the situation with the crop-2011 becomes clear.
- In 2011 the contract between *Gasprom* and *Beltransgas* is over, but since the 1st of January deliveries to Byelorussia should bring income equal to European ones'. So, in 2011 Russian gas will have to become 13-18 per cent more expensive for the Western neighbour. However, Minsk insists on price reduction or, at least, keeping on the level of 2010, pleading to reduction in gas price on the spot market and in the US.

In September, 2011, launch of the first train of the gas pipeline *Severny Potok* with capacity of 27.5 billion m3 gas per year is planned. It is a principally new route of Russian gas export to Western European markets via the Baltic bottom. At the end of 2011 about a half of the track was built ahead of schedule a little. Filling of the tube will begin in May, for that a special gas pipeline is built, which will be put into operation synchronically with the *Severny Potok* building rates. Gasprom has already signed long-term contracts of gas delivery along a new route, in particular, with Germany, Denmark, the Netherlands, Great Britain, Belgium and France. The latter is even ready to add 1.5 billion m³ gas to defined 4 billion m³ since 2015.

- Russia diversifies oil export to East since January, 2011, commercial deliveries via the China branch of the oil pipeline *Eastern Siberia Pacific Ocean* (WSPO) will begin. Earlier the Russian Federation exported oil to China by railway. At the end of 2010 it was announced that *Transneft* had finished building of a branch and begun technological pumping. According to agreements, China gave Rosneft 25 billion dollars on the nod, and the RF obliged to deliver 15 million tons oil per year via oil pipeline during 20 years. Oil will be delivered for a market price.
- Since the 1st of January, 2011, a rate of insurance contributions which employers of the RF make for their cooperators instead of a single social tax increases for the majority of enterprises from 26 to 34 per cent of the labour compensation fund, some other taxes will also

rise. Small production and social enterprises will be exclusion – for them a rate of insurance contributions will not rise in 2011.

- One more expected event of 2011 is return of federal and regional road funds since the 1st of January, through which road engineering and repair must be financed. Such system existed in the 90s, but in 2001 it was eliminated. In 2011 a volume of the federal road fund will reach about 400 billion roubles. Its formation resources will be budget fund, excises for petrol and diesel fuel, a series of other payments, such as rental payment for placing of road objects.

Meanwhile, analysis of reasons of the crisis appearance in Russia and dynamics of economic development in 2010 indicates that the country cannot overcome it without solving two problems

- Changing of an economic development model
- Radical modernization of the elites.

The new elite can be formed only at account of people who are qualitatively different from the elite with their life philosophy and ready to participate not in the final part of the utilization program, but in long-term modernization of the country supposing the elites` responsibility for the result. Such people are out of modern ruling elite or on the fringes of it.

Crystallization points of the new elites can become [Belkovskiy 2009]:

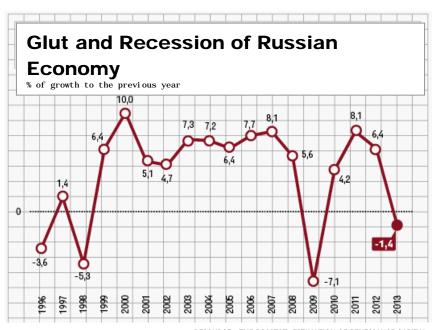
- a. The President of the RF; without any doubt, being the part of the ruling elite the President of Russia is not interested in radical modernization of the elites; but the all-absorbing crisis cannot make the Kremlin, as a centre of final responsibility for the country fate, review its approaches in this question partially and step by step;
- b. *The Russian Orthodox Church*; nowadays political and social influence and a role of the Church are limited; but we do not have to exclude that under the conditions of falling of the Soviet power authority a role of the Church as an alternative *assemblage point* of a socially active and intellectual part of society, its desires and aspirations, can rise;
- c. *Protest actions*; the year 2011 can become an activation period of national protest actions, which begin already under social and economic slogans (in general) but can possess a politic character soon. The protest medium formed today can put forward new leaders, capable to turn into political figures of a national-wide scale very quickly. Till today the ruling elite has tried to use contradictions in the society. The Russian ruling corporation is still managing to keep the system which survived its time long ago due to contradiction game. This game lets the system change colour and imitate movement to different direction. The trick is in the following it is necessary to appeal to different layers simultaneously, neutralize their dissatisfaction and make semblance of development while you stand still.

The first of such rings troubled for the society was heard in the centre of Moscow in December, 2010 – some thousands of young people paralyzed the centre of the Russian capital for several hours. As Lilia Shevtsova writes in the *Novaya Gazeta* on the 12 of January, 2011, «Young people came to the street with xenophobia slogans who frightened seriously Kremlin puppeteers as it seemed. Putin's generations revolted who had grown up during *up kneeling* period and felt hopeless of the future by intuition. Putin, who usually kept a pause during last ordeals and who saw a way to demonstrate his power and self-control in this pause, reacted with lightning speed that time. It confirms the power's consciousness of a threat of falling out of an important element which helps to balance oneself. But will the Kremlin be able to tame a genie appearing out of the bottle? Probably, what has happened to imperia game will happen – just it has given a stimulus to Russia breakup».

Russia is still on the 143^d place in the rating of the World countries with free economy. (Our nearest neighbours are the Seychelles and Ethiopia, on the top of the rating there are Hong Kong, Singapore, Australia and New Zealand, the USA is on the 9th place). As the *Wall Street Journal* writes – corruption and property disrespect prevent from development of economic activity, free from the State control and influence.

Is a healthy variant of a way out of the economical and political crisis possible in Russia without a really serious review of what is called the political system?

As Egor Gaidar writes, «There is world experience of the last two centuries. It only shows, if you have a right to private property reliably guaranteed and everything connected with that – free markets, legal system which you trust – you develop widely. But if you do not have that you have problems, early or late, but without any doubt. Do you know, when the English armoured fleet came into the Black See (in 1856, the authors` comment), it was resisted by our sailing vessels? It was a verdict to the regime which did not want to be changed. We learned one lesson from Napoleon wars and then from the Decembrists` uprising – that we should not change. We should build up a vertical of the power, and then everything will be all right. It has not been all right (for Russia, the authors` comment). We may criticize reforms of Alexander the



Russia radically between the year 1861 and the beginning of the 20th century without shocks. We came out even from the revolution of 1905 big problems, without full-scale regime collapse. So, there has been everything in our history. We are not damned here. And there cannot ever be regime changing without breaking down in Russia. But what nobody guarantees them is another pair of shoes».

2nd, but then... we changed

RESOURCE - THE ROSSTAT, ESTIMATION OF RENESSANCE CAPITAL $\ensuremath{\mathsf{R}}$

11. Variants of Russian Future.

11.1. Scenarios of Future Development.

The prognosis prepared by the Ministry of Economic Development partially answers the question what scenarios are possible in 2009. According to the optimistic scenario, in 2009 the GDP of the country will become 7.7 per cent lower, and industrial production will be 8 per cent lower. But economic growth or recession scale is not only determined by oil price and world economy condition, but depends much on effectiveness of measures which the Government applies, reminds Andrei Klepach, the Deputy Minister of economic development. For example, the budget deficit is planned to be compensated from the Reserve stock (on the 1st of January of 2009 its volume was more than 4 trillion roubles), under each scenario it is enough to fulfill social obligations of the State in 2009 and 2010, says Arkady Dvorkovich, an Assistant to the President. As experts noted, just high inflation makes financial mechanism work in Russia difficult, because of it there are no normal credits, financial problems appear even in the most favourable economic sectors. And moreover, sequences of inflation become apparent in the social sphere, shaking of faith in the banking system takes place. That is why drawing the next anti-crisis plan the Government will have to work out anti-inflationary measures. Moreover, according to economist Evgeny Yasin, our inflation is hand-made, it was caused to a large extent by a great quantity of money deposited to economy, and it could not digest it.

One more important constituent of the forecast is oil price on the World market. Taking as a basis 50 dollars per a barrel, the Ministry of Economic Development calculated all the rest

values. This is the reason of more pessimistic variants, up to the GDP reduction by 0.5 per cent. Principally foreign economists are oriented to the same price. In the Ministry of Energy Production they suppose that recession up to 30 dollars is possible, but for a short time. Meanwhile, general production recession in the World reduces demand for fuel too, so, nobody can say how long price fall will last. Besides, there are some more reasons of lowering oil profits – a new way of calculation of export duty, changes in taxation stimulating oil industry workers but cutting assessments to treasury. It is also important that a gas price falls after oil prices. It is supposed to sell gas for 240 dollars per 1 thousand cubic meters in the second half of 2009, although in 2008 an average price exceeded 400 dollars. In connection with it amount of trade balance will be reduced. According to the forecast of the Ministry of Economic Development, it will be only 18 billion dollars in 2009 or become negative, according to a pessimistic variant. And earnings reduction and stoppage of reserved funds growth is also a blow on the budget.

Possibility of an optimistic scenario is not large. Paul Krugman, an American professor, the Nobel Prize winner in Economics for 2008, predicts depression to the World economy for, at least, three years, the *France Press Agency* announces. The professor of Preston University said to journalists in Stockholm where he had got a prestige award, «We can easily suppose that the World economy will be in depression up to 2011 or maybe more».

If the events in the World and Russia develop under a negative scenario (long and difficult crisis), exhaustion of the existing creditworthiness of the power is possible what can result in political chaotisation in condition of absence of competent opposition. Whatever we do, economic rise will be restored in the country not earlier than external raw materials markets begin to revive. And it means, we have absolutely no chances to keep today`s stock of political stability in a state of nature. Its size is in a tough inverse relation from the crisis duration – the more the crisis will rage, the higher is the possibility that economic disorders will turn into political ones.

During the crisis the majority of Russians are oriented to realization of individual strategies of different character. We can differentiate four types of such strategies.

The first is participation in protest actions; now it is chosen by the minority of Russians either politicized ones or driven to despair.

The second is initiative show, raise of labour productivity, searching for new job up to changing activity sphere (In this case a social mobility resource is used which a part of society has had since the 90s).

The third is relying on the authority (on a corporative or State level), passiveness, desire for drifting.

The fourth is passive degradation, cultivating a failure complex. If events are developed unfavourably the third type can evolve to the fourth.

Individual strategies are transformed to collective actions only in case if peoples` really meaningful interests are concerned. A substantial role in this question will be given to the crisis duration and depth and, as a result, the power`s capability to fulfill effectively its own social obligations and suppress disturbances mainly with a help of financial resources.

A recipe of our national political dish was always based on unvoiced agreement between the upper and lower layers – people agreed with limitation of political liberties in exchange of continuous grow of salaries and pensions, dividends and profits. The crisis placed in doubt this wonderful pact what was confirmed by protest actions in Primorye, Pikalyovo, Altai and Irkutsk regions. It seems that the upper layers have understood that they could not rule as before – almost none of the President`s speeches go without appeals to a wide national dialogue and large freedom. But it is also clear that the power is not ready to serious changes of construction (see V.V. Putin`s speech before the State Duma on the 6th of April of 2009). We can understand the logics of the Kremlin and the White House – not every country can survive political reconstruction together with the economic crisis as our historical experience shows.

Besides, 450 billion reserves and 80 per cent ratings give space for a maneuver to the power and permit to manage with *the problem-2009*. But what should we do if it is followed by

the problems 2010 and 2011? Anyway, independent on the crisis duration the problem-2012 – the new Presidential elections – is in store for us. To solve it using an old algorithm will hardly do. One of the famous (but not the most pro-opposition ones) economists has recently said, that if the authorities of the State do not do silly things, financial reserves to keep the head of the country above water will really be enough for about a year and a half. However, many experts think, that today`s financial economic crisis will not be finished for one year and a half, and, consequently, the political crisis will become aggravated inevitably.

Certainly, we cannot exclude a slow scenario of its development which some analysts, for example, Vladimir Milov, consider the most probable. Together with it, it is clear that a slow scenario (when the authorities try to keep status quo with money and propaganda) can last so long how much gold currency reserves are enough for, or maximum about one year and a half. After that either sharp changes as in February of 1917 in Russia (February revolution) or great shocks such as eight months later (October revolution) are inevitable. (But, as Osovtsev, a famous Russian journalist, writes, any scenario non-catastrophic for Russia will be *a February one* anyway, as the other variant of future is chaos – the country breakup, civil war or something like that).

The expert community discusses intensively development of the crisis in Russia and its possible results. According to the authors speaking at the round table meeting in the All-Russian Economic Society (ARES), there are two utmost scenarios limiting space of possible events – soft and tough.

The soft scenario. The crisis will be relatively short-term and non-deep. And that is why only a small part of population will lose a substantial part of means of subsistence. Prices for energy resources on the world markets will grow earlier than financial resources of the Russian Government will be exhausted. There will be no mass protest actions. In this case Putin`s Government has all chances to stand its ground. And, as the last eight years have showed persuasively, this administration is not capable, moreover, does not intend to pursue a policy of national development. Successive realization of a soft scenario causes inevitable loss of competitive ability of Russia. And a very probable final of it is the next disintegration of the State, as it was said above by Osovtsev, Belkovsky and others.

Russian experience of the 20th century shows – the political regime cannot provide the national development has no historical perspective and has to go away. How large should conflicts be to accompany this going away? Will it be a full-scale civil conflict, as in the beginning of the 20th century, or a series of local ones, as in the end of the 20th century? In both cases disintegration of the State was accompanied by numerous human victims.

The tough scenario. Many experts predict, the crisis will be long and deep. In connection with it a large part of population will lose a substantial part of means of subsistence, and financial resources of the Russian Government will be exhausted much earlier than prices for energy resources will begin to grow. Mass and acute protest actions will take place. According to the Rosstate data, in May of 2009 a number of the unemployed was 7.5 million people which is 10 per cent from economically active population. It is higher than in the USA (8.5 per cent in March), EU and Japan (7.9 and 4.4 per cent in February). February monitoring of the Ministry of Region Development fixed, in St. Petersburg profits of the population had reduced by 24.1 per cent, in Moscow arrears of wages had increased twice as much. According to the VTSIOM (All-Russian centre of Public Opinion Study) data, in the beginning of April of 2009 a share of the Russians trying to survive and make ends meet somehow in conditions of the crisis was 26 per cent. Only one fourth of the Russians hope that the Russian Government will find a way out of the crisis and life will improve. In the beginning of April actions took place in some regions of Russia with demand of resignation of Putin's Government. When the crisis becomes deeper we may suppose that the Government will be retired, and the ruling elites will prefer to sacrifice the Head of the Cabinet – for benefit of their own security. The closest historical example is Khrushchev`s fate. Probable development of events under a tough scenario is further growth of protest actions.

11.2. Perspectives of Creation of Crisis Management Government.

When the USSR was broken up after the economical crisis an acute phase of which began in 1990 the ruling crisis began. In this situation the most important thing is not to admit chaos. But under such development of events the politically amorphous *United Russia* having proved persuasively its disability to resist large scale corruption cannot be entrusted to form new government. However, to create the anti-crisis government on a personal basis is quite a real challenge. There are serious professionals. Among them one can find a prime-minister with working experience in this position.

But what politically organized powers of society will such government be able to base on? Will clerks obey or sabotage passed anti-crisis laws and new government `decisions? To fail an anti-crisis program of the new cabinet and then to impose responsibility for the chaos appearing on it is political classics. Why do not clerks take advantage of such tactician to restore its government and its undivided political domination? Return of the *United Russia* authority will inevitably bring back the situation to the first scenario – conservation of uncompetitiveness with very clear results of it.

Is there a means to add political stability to the anti-crisis government? It is well-known in the World practice. Pre-term parliamentary elections are called and, in case if the opposition wins, its authority will have possibility to base on the parliamentary majority. Under an analogical scheme events in France were developed in the crisis years 1957-1958. Being at war in Algeria generals threatened with a military coup. General de Gaulle, elected as a Prime-Minister, preparing constitutional amendments and pre-term elections to the National Assembly, creates his own political party. And it won long-term elections. It permits to make necessary constitutional amendments through the Parliament, intensifying authority of de Gaulle elected as the President. Surviving several attempts on his life de Gaulle managed to restrain the country within the boundaries of a political and legal process preventing chaos.

The example of France shows a role of a political leader in the crisis situation. This is a very great role for Russia, three fourth of population of which are carriers of semi-patriarchal traditional values and citizenship political culture. There are no reasons to expect, that the Russians are capable to support political opposition the leaders of which do not have to population`s credit today.

11.3. The Possible Leader of the Crisis Management Government.

There is a question – what a State rank of the leader of the party competing with the United Russia should be to provide equal conditions of election campaign conduction for the party? There is an answer - only a possessor of the first State status, or the President of Russia can be the leader of an alternative party in Russia (the Modernization Party, conditionallycalled) can be. Only this will permit to come to the regime of the real political competition instead of fictitious pluralism – the only one providing a choice of the best people for the higher echelons of public administration. In a medium-term prospect political competition will promote establishment of independent court and, therefore, limitation of corruption. [In the report of the Federation Council of 2007 About Legislation State in Russian Federation it is said, «The corruption level in Russia is compared with the State budget and is estimated in 240 billion dollars every year». (FC edition, M., 2008, P. 295)]. The latest circumstance is especially meaningful, as the corrupt State apparatus is principally disable to pursue nationally responsible policy. Venality of the state apparatus and national interests of Russia are not compatible. To hope that such State apparatus is capable to take Russia out of the crisis means to be sincerely mistaken at the best. But according to the Constitution, the President is a guarantor of national prosperity, but not a guarantor of corruptionists' unpunished well-being.

High rating of President Medvedev and the Russians' trust kept in conditions of rising crisis say for the discussed variant. Not least of all, the reason of it is the President's anticorruption laws. With a help of them he opposed himself to corrupt officialdom on the declaration level. On the intention level Medvedev opposed himself to Putin's government beginning to attack his priority financial project - State corporations. The Presidential Council for Codification and Perfection of Civil Legislation patronized by Medvedev made a suggestion to abolish state corporations as a form of corporate bodies. But it touches directly commercial interests of Putin's closest surrounding. But why would the president make the next step and intensify his positions in an organizational and political sense? Creation of his own party would permit Medvedev to consolidate his supporters in the whole political space of Russia, but not only in Moscow. The President of Russia has lately begun to make up his own political and administrative vertical, first of all, taking sight at the president elections of 2012 – the liberal party *Pravoye delo*, ideologically close to him and created mainly by him must nominate Dmitry Medvedev for the second term (possibly in the nearest future headed by Igor Yurgens, a member of the governing bureau of the Russian Union of Manufacturers and Businessmen (RUMB), the Director of the Institute of Modern Development, a man close to Medvedev). As Alexander Chudodeev writes in his article *Reloading* [Chudodeev, 2009], «The majority of analysts say that the *Pravoye delo* project is quite viable, as there is a space for a liberal idea and the party expressing it in Russia. Experts are also sure that liberal traits in Dmitry Medvedev`s policy become more and more apparent... In particular, the future parliamentary campaign will give an answer to the question - does the country need a right vertical which Dmitry Medvedev tries to build? We should not forget that oil prices can rise by that time. And then maybe necessity of inner defrosts and reloading with the West will fall off. But if it does not fall off, then we will be able to talk about real renascence of liberalism in Russia».

These Medvedev`s steps will not be unnecessary, especially if to take into account public warning of the bureaucracy made by it to President Medvedev`s address. So, Sergey Markov, a deputy of the State Duma from the United Russia said in his interview to the Novy Region on the 20th of November of 2008, that the President insists constantly on fight with corruptionists, but in different structures they think that this notice is strange and enforced. It is said more than frankly. The process of political modernization of Russia needs a leader. Are President Medvedev`s courage, political will and state responsibility enough for clear and unequivocal break with corrupt bureaucracy? Future of Russia depends on it to a large extent. But it seems that in the nearest future the Provisional Government will appear in Russia, formed out of specialists on a non-party basis (or without accounting of his members` possible belonging to these or those political groups). It will have to solve a series of the most complex social and economic problems reformatting the whole State policy. Among the primary tasks there will be

- 1. Revision of credits and other resources from the State property illegally and unreasonably granted to oligarchic structures (independent on their formal membership) and returning of what is possible to return.
- 2. Maximal stimulation of all forms of people`s economic activity up to tax vacations for several groups of enterprises and production sectors.
- 3. Creation of the system of the target social support only and exclusively to the miserable for reasons independent on them [Gallegos 2008].
 - 4. Implementation of innovation technologies.

Moreover, multiple inquires and switched on observations for different productions show – in January Russian economy adopted in the whole to the crisis conditions after the November fall. The general situation reminds the year 1993 – if the State can give circulated assets to economy and at least partially control the usage of them, tendencies will be broken and production will begin to be restored slowly [Auzan 2008].

11.4. Signs of Positive Changes in Russian Economy.

Signs of positive changes in Russian economy which have lately appeared do not mean that the crisis has already been overcome. Igor Shuvalov, the first Vice Prime Minister of the RF, said it in the interview to TV channel *Russia* in the end of May. He said, «We observe the other situation than in the end of 2008, it changes positively. But we should not cherish illusions. We do not relax and watch attentively what is going on. It is our work». He asks, «Why do I say about it? » And he answered, «When you read different analytical materials and comments, some of them try to represent it in such a way that there are two points of view existing in the Government – one is optimistic, the other is pessimistic. It is a wrong idea in whole». Shuvalov said, «In the past years budget expenses were unreasonably increased under the influence of high prices for energy resources». Such extravagancy was very dangerous, the Vice Prime Minister said. He said that he was not a supporter of swift restoration of high prices for energy resources and other goods of Russian export. Shuvalov warned that we must not calm down, «if prices change very quickly for the best, price for our export groups – metal, oil, gas, etc will go up sharply». Because in this case calming down will cause *preserving of sicknesses of our economy*.

The crisis in Russia will reach its bottom when Russian banks and companies finish restructuring their debts. It can happen in the middle of summer or by autumn, thinks Arkady Dvorkovich, the Assistant to the President of the RF. «Nothing will prevent finishing debt restructuring process by the middle of the year finally, but autumn is a more real prospect», he said noting, that finish of this process would be a bottom of the crisis. Corporate debts of Russian companies were 480 billion dollars in the beginning of the year. The Assistant to the President of the RF agreed with the estimation of Alexei Ulyukaev, the first deputy Chairman of the Central Bank of the RF, that the acutest phase of the crisis was over. Beforehand the banker said that an acute phase of the economic crisis in Russia has passed, and as for the bottom of the crisis, *it was not a flat spot, but an oozy medium*, in which economy could be for the closest year or two. Together with it, according to him, there was always possibility of recurrence.

Alexander Shokhin, the head of the Russian Union of Industrialists and Entrepreneurs (RUIE), predicts that 90 per cent of Russian banks can be in jeopardy in the period of the second crisis wave which can begin in autumn of 2009. According to Shokhin, one of the reasons of the second crisis wave will be the following – the banks are busy with their problems, but not financing the real sector. The head of the RUIE is sure that the Government should restore trust between banks and the real economic sector. He also accentuated necessity of working out a series of actions in case the crisis develops in the other way than it was supposed in the anticrisis program of the Government. According to him, there are no measures to fight the inflation in the anti-crisis program. «Among measures which I would like to see in this program and which are absent these are measures to fight the inflation», he said. Meanwhile, according Evgeny Gavrilenkov, the chief economist of *Troika Dialog*, Russia has all chances to restore economic growth faster than other countries in the nearest future. «First of all, Russia is, mainly, a piping energy resources exporter, and this export type is less elastic than, for example, automobile export».

In his interview to the *Forbes* magazine Michail Khodorkovsky wrote about mistakes of the Russian Government in development of Western Siberia resources, «The State decided to make gigantic capital investments immediately without confirmation of stocks before the beginning of real development of them». It is really so, two thirds of Russian oil is produced in Western Siberia. In ten years when production in the region begins to fall deposits of Eastern Siberia would have to change it. The YUCOS had its own program of development of Western Siberia resources adopted 10 years ago. Khodorkovsky`s debate with Vladimir Putin`s surroundings was about who and on what terms would produce oil in new deposits after impoverishment of the old ones. The YUKOS granted to Kasyanov, the Prime-Minister of that time, and President Putin its own concept of development of Eastern Siberia deposits difficult to access with financial and technological help of transnational companies *Exxon* and *Chevron*. *Then the State had an alternative strategy to produce oil in the region at the account of a tax*

payer. «It is a pity that famous events have stopped the Eastern Siberian project at all. State clerks have other priorities and other motivation, that is why, we probably have to expect for other results», Khodorkovsky says.

«Oil companies cannot impose such costs on their small volumes of Eastern Siberian extraction. That is why it is not surprising that the State has to make such subsidizing deliveries as abolition of taxes», the ex-head if the YUKOS writes. Meanwhile, Khodorkovsky is still sure that development of remote regions of Eastern Siberia can be very profitable, without subsidies, but on producing oil and gas simultaneously, on gas conversion into liquid and transportation them through one tube, on development of a regional, industrial potential... Instead of investment into geological survey the State is building a gold tube, the Forbes comments on Khodorkovsky`s notes. The first turn of the Eastern Siberia - Pacific Ocean oil pipeline with capacity of 30 million tons per a year will be set into operation in 2010. But there is nothing in the nearest future to fill it, according to the most optimistic forecasts; oil production in Eastern Siberia will be maximum 18 million tons next year. Sergey Bogdanchikov, the General Director of the Rosneft, said, that a prime cost of production of 1 barrel oil and its transportation up to Transneft pipeline was 80 dollars. Production will be profitable only on condition that world prices rise up to 137 dollars. Now the Government intends to remove export duty on oil produced in the largest deposits of Eastern Siberia at all. It means on systematic loading of the ESPO pipeline the State will lose 4.2 billion dollars every year, the Forbes makes a conclusion to the researches.

In other words, Russian economy has suffered mainly from foreign-trade prices fall and, to a lesser degree, from reduction of export delivery volumes. Correction of exchange rate which has finished on the given stage has to promote stabilization of balance of payments and money markets. To a larger degree recession in Russia was conditioned not by external, but internal factors including a little delayed reaction of the State authority to external changes».

11.5. About Cardinal Measures of Ways out of the Crisis.

In the interview to *The New Times* in May of 2009 Michail Khodorkovsky wrote about reasons and consequences of the crisis. «We need a practical transition to a new economic model which would demand not yet misappropriate intellectual and technological potential of Russia. Here new alternative energy production can play its role». Khodorkovsky predicts that this energy production «will lose a flavour of alternativeness and turn into global mainstream. And here it is very important for Russia not to be backward. Now I am busy with problems of new energy production every day». Khodorkovsky thinks that the main reasons of the crisis in Russia consist in the crisis of «regulation systems which are stayed local when markets have become global, in irresponsibility of corporations which have stopped thinking about national and social interests and a pyramid of hyper consumption which should have been ruined sooner or later». As Khodorkovsky thinks, «accounting the essence of oil and gas stocks and on today's terms Russia will be able to keep a today's economic model based on raw materials resources up to 2015 However it will demand large investments. A peak level of mining operations is already practically achieved. If the Russian economic model is not reviewed soon, we will come to the year 2015 with old economy and an archaistic political system. But if only raw material resources are used the country will not manage any more to cover its demand in a social sphere and in infrastructure sphere. I think that Russia should diversify its economy as soon as possible while it is not too late and while all savings formed at account of oil sensation are not finally spent. Russia still has money, scientific and technical potential and highly-qualified specialists. I do not see any alternative to innovational economy, but realization of this possibility is problematic without political reforms».

Unfortunately, it seems that the Government will not manage to help restoration process, as the logics of circulation assets restoration policy demands not only high professionalism from all Cabinet members, but... substantial limitation of corruption. Today`s Cabinet has no anti-

crisis strategy and no real program to fight corruption. Its actions are «chaotic series of actions to provide interests of companies and people directly close to the Prime-Minister» [Belkovskiy 2009]. Meantime the crisis is aggravated, and very often the Government behaves as if it has ten years more of economic stability and still high oil prices. The country needs an effective anti-crisis strategy, and therefore, a new executive authority. The Federal Government is the upper collegiate authority under the constitution of the RF. Michail Delyagin thinks, that we do not have either time for dawdling nor right to a systematic mistake, or collapse is in store for Russia. If we keep today's economic policy the enterprises will eat up circulating assets till the middle- end of March, and after that a new wave of collapse will begin in May, which will cover different sectors from civil mechanical engineering to small business. «In autumn under the influence of financial collapse of housing and communal services and local budgets, production stoppage and a new wave of gradual and controlled rouble weakening activation of political life of the country will take place, first, as slackening of interclan bureaucratic fight, and then as the state restructuring and recovering» [Delyagin 2009]. As Mirina Selivanova writes in the article Economic in Free Fall [Selivanova, Reuters, 2009], «The Ministry of Economic Development (MED) has reviewed its forecast for 2009 and made a new one for 2011 and 2012. Industrial production and trade will fall much deeper, and oil and investment prices will be restored much slower than clerks thought before. New values of the GDP fall and inflation look more realistic than the previous ones and correlate with unemployment statistics. The MED has lost its optimism after three significant events - the Prime-Minister's report in the State Duma, preliminary data for the 1st quarter and the Russia forecast of the International Monetary Fund». According to the forecast of minister Elvira Nabibullina's department, in 2010 and 2011 the GDP growth will be not 6.6 and 6.2 per cent, but only 3.8 and 4 per cent correspondently. In 2012 the Ministry expects for the GDP growth by 4.9 per cent. For the current year the MED has agreed with the forecast of the IMF – the GDP reduction will be 6 per cent, but not 2.2 per cent, as it was supposed. Fall of industrial production will be more substantial, than it was predicted – 9.1 per cent instead of 7.4 per cent in 2009. In 2010 this value can become 3.2 per cent higher, in 2011 2.4 per cent higher, but not 6 and 5.3 per cent correspondently. Clerks think that this year yearly average price for oil will exceed 41 dollar per a barrel, for which the budget is composed, by 4 dollars. For the next three years the MED expects the growth of the oil barrel price by 10 dollars per year on the average. Inflation will be lowered, but lowering rate will not be enough. For 2009 the MED keeps the prognosis of growth rate of prices in 13 per cent. In 2011 6 per cent price growth predicted before will be not enough, and inflation will be 7-8 per cent. Clerks hope to achieve 5 per cent value not earlier than in 2012. They have confirmed in the MED that a new prognosis till 2012 is worked out. The fact, that the MED has reviewed prognoses with a help of which the Ministry of Finance will begin to prepare the budget for the next year, is regular. Clerks had to correct prognoses when last week preliminary values of the first quarter were voiced (the GDP had become 9.5 per cent lower against expected 7-8 per cent). Serious recession in economy increases probability of the fact that the budget deficit will exceed 8 per cent planned for 2009.

As Michail Kasyanov, the former Prime-Minister of the RF, said in the interview to *Radio Svoboda* on the 25th of March 2009, because of discharges and rising costs each Russian`s standard of living is falling, and the authorities` efforts are directed not to support the population, but to support gigantic corporations and clerks` apparatus (in 2009 expenses to support the FSB became 22 per cent higher, the Ministry of Internal Affairs 11 per cent higher, prosecutor office 20 per cent higher, television propaganda 20 per cent higher). In this situation, according to him, expenses for culture and health care, road construction are reduced, on the contrary. According to Kasyanov`s forecast, by the end of 2009 economic and social situation in the country will worsen – a number of the unemployed can reach 10 million people, inflation will be 17 per cent, a dollar rate will rise up to 40 roubles. Kasyanov also forecasts the budget deficit on the 11 per cent level of the GDP. «All over the World if production stops, prices for foods, transport, medicines fall, but in Russia they, on the contrary, grow enormously», Kasyanov said.

According to him, people should be given possibility to create working places themselves under the conditions of the crisis, but for that it is necessary to support small business and give freedom to enterprise. What should opposition wish in these conditions? «First of all, it should explain the reasons of the situation and help people to survive. The main recommendations are to reduce expenses, to abstain from spending, without which one can manage, and not to count on the power anyway – there will not be real help from such power. Secondly, what democratic opposition should do is to prepare for spring, to the situation which will appear» [Kasyanov 2009].

There are two possible scenarios. «The first – if the power is very persistent – is a very negative scenario, in the end of which there is economic collapse with all social and political consequences. The other scenario is the following – if suddenly the power realizes the crisis depth and fallacy of its way the opposition will have to prepare to pre-term elections to take the responsibility for bringing out the country out of the crisis. The spring of 2010 is that fork after which maybe nothing will depend on today's power. And we must be ready to it».

12. Innovational Technologies as a Way Out of the Crisis.

12.1. Science and Technologies in Russia in the Period of Economic Crisis.

Opinions of the majority of defenders and opponents of modern world order coincides in the fact that the main progress engine is Science and Technologies, because without Science and Technologies, without understanding their history and laws of their development no country is able to develop intensively it is even not able to exist normally [Perez-Peraza, 2009].

12.1.1. A Role of Science and Technologies in the Human History.

As it is said earlier, it is clear that Science and Technology play the main decisive role in the modern society. However it has always been so. In spite of their love to philosophy the Ancient Greeks looked at technologies as occupation unworthy of a real scientist. World religions appearing later firstly rejected science at all. Tertullianus, one of the fathers of the Christian Church, said that after the Gospel there was no need in any other knowledge. The Mussulmen thought in the same way. When the Arabs captured Alexandria, they burned the famous Alexandrian Library - caliph Umar said that if there was the Koran there was no need in any other books. This dogma had dominated up to the beginning of the Modern Age. In the 17th century in the epoch of knowledge revival the Inquisition chased Galilee and burned Giordano Bruno on the fire. Understanding of a role of knowledge came only in the Age of Enlightenment, when Jean-Baptiste Cobert, the famous minister of Louis, the 14th, built the first Academy. Since that moment science began to get organizational and financial support of the State. Industrial revolution changed suddenly people's life, a new industrial society changed traditional country life, surprising discoveries and inventions followed one by one, and the World changed quickly in the face of one generation. After the industrial society the post-industrial, and then the technetronic one were born. So, the human history is divided into two periods – the first is the traditional society before industrial revolution, the second is the period after industrial revolution, the *industrial society*. In the *industrial society* a role of science and techniques is clearer than in the traditional one, but in reality development of the traditional society was also determined by development of Science and Technologies. In this situation a role of Technology is very difficult to overestimate.

For a long time reasons of success of the Aryan nations expansion in the 18-16th centuries B.C. were mysterious (the Aryans captured a part of India and Iran, Middle East). And the reason was simple – development of tactics of chariot battle usage. A battle chariot was a *fundamental discovery* of the Aryans. One more example of the fundamental discovery of new technologies was iron metallurgy development. In the middle of 8th century Tiglatpalasar, the 3^d, the Assyrian tsar, applied tactics of using iron in war purposes – *the tsar regiment* was armed with iron swords. This fundamental breakthrough was followed by a wave of Assyrian conquests

and distribution of Assyrian traditions including tsars` autocratic power. The Assyrian empire died in a result of the Medes and the Scythians` invasions. The Scythians were the first nation who managed to use archery at full tilt and passed horse tactician to the Medes and the Persians. The cavalry appearance was *a new fundamental discovery* causing a wave of conquests, the result of which was birth of the World Persian Empire. The Persians were changed by the Macedonians applying a new method of war conducting (*Macedonian phalanx*), against which the Persian cavalry was helpless. The phalanx demonstrated visually what *a fundamental discovery* was – a small nation conquered a half of Asia. Conquests of Alexander the Great gave birth to Hellenistic civilization – the Macedonians brought Greek culture about the Middle East on the edges of their sarisses. In the beginning of the 2nd century B.C. the Macedonian phalanx was crushed by the Roman legions – the Romans created maneuver tactics of field battle – it was *a new fundamental discovery* which made Rome the head of the Mediterranean. At least, victories of legions gave birth to a new cultural World which was called *Pax Romana*.

Essentially history is a chain of technological breakthroughs, and we talk about *technological interpretation* of a historical process that historical events are determined by development of technics and technology, and especially *war technics*. But a role of Science and Technology was not limited only with war spheres.

12.1.2. Importance of Science, Technology and Innovations Connected with Them.

For the country to be competitive, to achieve economic and social progress it is necessary to implement and move science and technology; to achieve it there is no any other mechanism. There is no country which would achieve competitiveness advancement, improvement of economic and social conditions without using these two terms. We know that the country cannot solve all nation problems, but also we know that science is the only means of advancement. There is no powerful society which would not include these two subjects (Science and Technology) into its policy and every day practice [Peres-Peraza, 2009]. We may understand its importance in terms of birth of knowledge, technologies, technical achievements in all social spheres from humanitarian to exact sciences such as physics and more abstract sciences. Knowledge is the first which is formed in the mind, then strength appears, and in its turn (in good hands) it generates resources and improves life quality and development of all country sectors, as is responsible for property, patents, rights, services and others. From an economic point of view, knowledge is a totality of important factors which determines their value with a help of productivity of different sectors getting profits from innovations and promoting development of the region and the whole country. Importance of any scientific research is fundamental – those who do not direct their resources to these spheres or do it in deficiency appear to be dependent on the others as, for example, in case with oil producing countries having limited and insufficient technology for continuous development [Libin, 2009]. Research of Science and Technologies gives the society the best knowledge and wide control over the situation. Due to research of Science and Technologies we can improve education quality, promote progress of critical literature, get in contact with reality. It promotes development of creative and intellectual activity, helps to increase interest in solving problems. Different bonuses are in store for us if we find the only form for different sectors for advancement and estimation and practice it. From the point of view of knowledge, to develop programmed and organized searching for technological innovations means to promote process of knowledge production and generation of one's own ability to make decisions in the sphere of technologies – access to general technological knowledge for all participants of an innovation process, in particular, for small enterprises which cannot support their own laboratories of Research and Development increases.

Science, borderline technologies and technological innovations are important parts of the mechanism of economic development where answers are located and it is possible to solve structural problems, strengthen industry, build enterprises and form a canal for an access to new knowledge for those societies which were based on a straight and logic policy of the State, chose

spheres of planned strategies as a priority with straight definite purposes and concrete programs. Scientific discoveries and practicing them permit to promote industrial development and social achievements. Researches, innovations and new technologies influence economic, social, political and even ethnic changes in the modern society. That is why every day it demands more attention from people making important decisions. Those states, which have not managed to get in the process as they did not realize that role which science and technological achievements play in the making competitiveness and development and what wealth is traditionally based on primary substances, will have to meet problems sooner or later, for example, to diversify its economy and generate new resources of work – they will have to define strategies in which such terms as Science and Technology will become centers of political decisions of the country.

- 12.1.3. Status and Problems of Science, Technology and Innovation in Russia. The Main Organization and Institutions Determining Development of the Science, Technology and Innovation in Russian Federation.
- 1. The Russian Academy of Science (the RAS) is a higher scientific organization of the Russian Federation, the leading centre of fundamental research in natural and social sciences in the country. The main purpose of activity of the Russian Academy of Science is organization and making fundamental research directed to getting new knowledge about development laws of nature, society, human and promoting technological, economic, social and spiritual development of Russia. The Russian Academy of Science is a non-commercial scientific organization formed as a State academy of science. The Academy (July 2008) includes 470 scientific departments, 55 thousand scientists, among which 522 academician and 822 correspondent members.
- 2. <u>The Russian Academy of Medical Science</u> (the RAMS). In accordance with the resolution from June, 30, 1944, the Council of People's Commissars of the USSR formed the Academy of Medical Science of the USSR at the People's Commissariat for Health Care of the USSR, passed the Charter of the Academy and the first list of 25 lower institutes.
- 3. The Russian Academy of Education (the RAE, the Academy of Pedagogical Science of the USSR before 1991) is a State academy united scientists working in education and pedagogics. The Academy of Pedagogical Science of the RSFSR was founded in 1943; in 1966 it was reorganized into the Academy of Pedagogical Science of the USSR. The RAE became an heiress of the union academy in 1992. The RAE includes 278members (academicians and corresponding members).
- 4. The Russian Academy of Agricultural Science (the RAAS). The history of development of the Russian Academy of Agricultural Science began on the 25th of June, 1929, when the Council of People's Commissars of the USSR adopted a regulation about organization of the All-Union Academy of Agricultural Science After V.I. Lenin (the VASHNIL). In 1979 the All-Union department of the VASHNIL was organized, then in 1990 turned into the Russian Academy of Agricultural Science (the RAAS). After the USSR breakup, in accordance with the Executive Resolution from January, 30, 1992 №84 the VASHNIL and the RAAS were united into the Russian Academy of Agricultural Science.
- 5. The Russian Academy of Architecture and Construction Sciences is one of the industry state <u>academies</u> of the Russian Federation, the aim of which is coordination of fundamental research in <u>architecture</u>, town planning and construction sciences. The Academy is a legal successor of <u>the Academy of Architecture of the USSR</u> (1934-1956) and <u>the Academy of Construction and Architecture of the USSR</u> (1956-1964).
- 6. The Russian Academy of Arts. In the end of 1690s Peter the Great expressed the thought about foundation of the Academy of Sciences and Arts in Russia. The Academy of Arts was founded by the decision of the Senate on the 6th of November, 1757, in the reign of Elizabeth in St. Petersburg at the initiative of M.V. Lomonosov, a great Russian scientist, and I.I. Shuvalov, a famous enlightener of that time.
- 7. The Russian Academy of Natural Sciences (the RANS) was organized by the founding convention on the 31st of August, 1990, in Moscow. Today it consists of 24 central

sections, more than 100 regional and subject departments, scientific centers united to 8 blocks working in corresponding scientific directions.

- 8. The Russian Academy of Social Sciences (the Academy of Social Sciences before the 11th of January, 2001; the Academy of Social and Humanitarian Sciences before the 28th of November, 2002) was founded on the 12th of November, 1993, and unites competent scientists, public figures (sociologists, political scientists, demographers, economists, lawyers, ethnologists).
- 9. The Petrine Academy of Sciences and Arts (PASA) was founded by the convention of Russian scientists in <u>St. Petersburg</u> on the <u>7th of December</u>, <u>1991</u>. Today it includes about 4 thousand members including more than a thousand academicians and corresponding members. About 50 regional departments have been organized.
- 10. The Ministry of Education and Science of the RF was founded on the 9th of March, 2004, in accordance with the Executive Resolution №314. The Ministry got functions of the abrogated Ministry of Education of the Russian Federation (adoption of standard legislative acts in the certain activity sphere) and functions of the abrogated Ministry of Industry, Science and Technologies of the Russian Federation (adoption of standard legislative acts in science). The Ministry also got functions in adoption of standard legislative acts in the certain activity sphere of the reorganized Russian Agency of Patents and Trademarks.

The Ministry of Education and Science of Russia is a federal executive body which functions state policy making and standard and legal regulation in the following spheres – education; science, scientific and technical and innovational activity; development of federal centers of science and high technologies, state scientific centers and science cities; intellectual property; additional education, upbringing, tutelage and trusteeship, juvenile neglect and delinquency prevention, social support and social defense of students and educates of educational institutions.

The Ministry of Education and Science of the Russian Federation realizes coordination and control of activity which is under the charge of the Federal Service for Intellectual Property, Patents and Trademarks, the Federal Service for Supervision in Education and Science, the Federal Agency of Science and Innovations and the Federal Agency of Education.

11. The Russian Fund of Fundamental Research (RFFR) is a self-directed state non-commercial organization in the form of a federal institution under the authority of the Government of the Russian Federation. The RFFR is founded in accordance with the Executive Resolution from April, 27, 1992 №426 About Urgent Measures for Keeping Scientific and Technical Potential of the Russian Federation. The aim of the Fund is to support scientific research in all direction of fundamental science, to promote further training of scientists, to develop scientific contacts as well as to support international scientific cooperation in fundamental research.

Problems of the Russian academy of Science. According to scientists` opinion, among academician problems there are insufficient financing of the science, personnel and equipment becoming older year by year and a legal framework in which to regulate problems of intellectual property is impossible. In his speech on the General Meeting of the RAS on the 26th of May, 2009, Yury Osipov, the President of the Academy, noted that technical re-equipment of institutes of the RAS was necessary, that realization of housing building problem for young scientists was very necessary. According to academician Alexander Aseev, the Chairman of the Siberian department of the RAS, if in the nearest future the housing problem for young scientists is not solved Russia will meet the second wave of emigration. «We remember well that last year Putin spoke and gave us and the Government to solve this problem. A year has passed, but the solution is not found. But meanwhile, the USA, China, European countries have substantially increased financing science. In Russia all talks about transition of the country economy to the innovational way of development, about high technologies are only talks not supported by actions. The main problem is relation of the Government of the country to science which is expressed, first of all, through material factors…». But we have less and less time, and if in the nearest future Russia

does not begin to relate seriously to its scientific potential it will not ever manage to catch up with the leading countries. Today after 8 successful years of President Putin there are less than 393 thousand researchers in the country what is less six fold than a number of scientific workers in the USA (if to take into account that population in the USA is twice as much than in Russia). But America can count money, but pay to its scientists much more than Russia. As for fundamental discoveries, definition of future development trends, technological breakthroughs, innovational decisions, America is the leader. In all World ratings the American society is the freest and ready to any innovations and the most attractive for scientists of the whole World, regarding immigration flows, what is a factor of constant rejuvenation of the country (in the rest of the World the population becomes older) and the future of it. Is it may be necessary to develop our own science, finance our own scientific research, make conditions for our own scientists' successful work and, therefore, think about future of our own country, but not prepare personnel for development of other countries?

12.1.4. Programs of Science and Technology Development in Moscow.

In Moscow there is 7 per cent of the population of the Russian Federation (about 11 million people), and 20 per cent of the Gross Domestic Product is produced. The value of the Gross Regional Product (the GRP) and investment volume per head in Moscow prevails more than twice the whole value in the Russian Federation. Being the largest trade centre of the country Moscow provides 21 per cent of retail commodity turnover, 30 per cent of food wholesale turnover, 14 per cent of foreign trade turnover and renders 25 per cent of general volume of paid services to the country population. A share of Moscow in common volume of Russian investments to the stock capital is 12 per cent. A level of development of science intensive productions and innovational activity types is substantially backward from the World values. Stimulating mechanism of using and developing scientific, educational and cultural potential of the city is not worked through. Scientific and educational potential of Moscow is used on a very low ineffective level. Out of it the most important problems in development of industry, science and scientific potential of the higher school for the nearest future are

- to intensify potential and competitiveness of the city industrial complex at the account of renewal of the main production funds, accelerated development of science intensive and higher technological productions by forming large scientific and innovational centers on the basis of scientific institutions of the RAS, industry scientific and research institutes, higher educational institutions and technical parks, territorial and production complexes (clusters);
- to increase a number of innovational active enterprises to raise a share of innovational production in the common volume of industrial production;
- to develop innovational sector of industry providing production of biotechnologies, nanotechnics and nanotechnologies, cosmic technics, fine chemistry production, microelectronic components for electronic and computer engineering, technics for fiber optics, software, telecommunications, robots, information services (technologies);
- to provide development of industrial zones and formation of new forms of interactions between organizations of industry, science, small business on their territories as production and technological clusters oriented to realization of an innovational cycle;
- to provide accelerated development of scientific and technological potential in priority directions of science, technology and technics development;
- to realize priority directions of science, technology and technics development on the basis of large projects of technology commercialization defined by the Federal task program Research and Working out in Priority Directions of Scientific and Technological Complex of Russia for 2007-2012;
- to make conditions for functioning of scientific organizations on the territory of the Moscow city;

- to use potential of scientific organizations of the city to make high technologic competitive production commercially profitable for economy and the city life on the basis of placing the city order for research and working out;
- to strengthen and widen commercial, production and scientific and technical cooperation between scientists and entrepreneurs, scientific and industrial organizations independent on forms of ownership;
- to support development of scientific and innovational activity infrastructure, including modernization of informational funds of scientific libraries, forming centers of collective use, etc:
- to support formation and development of special economic zones of technics implementation, scientific centers providing solution of the city and its population problems, corporate unions of an innovational type on the basis of scientific, industrial and financial organizations on the territory of Moscow;
 - to attract young people and talented scientists to scientific organizations of the city;
 - to participate actively in scientific working out of a higher educational sector;
- to widen possibility of making scientific research by students of Moscow higher institutions on the modern experimental basis of academic institutes;
- to keep the leading role of Moscow in preparation of highly-qualified personnel for the country;
 - to develop and improve modern system of continuous professional education;
 - to raise investment attractiveness of education;
- to implement innovation educational programs supposing integration of fundamental science, training and production;
- to provide organizational and financial support and development of higher institutional science for making fundamental and applied scientific research;
 - to perfect material and technical basis of the upper school.

The mayor of Moscow thinks support of the Russian Academy of Science and industry economy by the State an obligatory condition of a way out of the crisis [Luzhkov, 2009], «We will find a way out of the crisis if we solve problems of the real sector and science, if go away from still existing *catching up psychology*, find breakthrough decisions for our <u>technics and technologies</u> to be really leading. If we do not restore potential of economical science in the RAS, if there is not a leader who will declare about needs of science, out crisis will last long, and the real economy sector will *surface with his belly up* without getting oxygen. It touches the whole science in Moscow and in the State».

12.1.5. Science and Technologies in Russia (Prognosis till 2010).

This chapter is devoted to the forecast in the sphere of science and innovations and is based, firstly, on program and forecast documents of the Ministry of Economic Development and Trade, the Ministry of Finance, the Ministry of Industry, Science and Technologies of Russian of the economic research institutes department [http://atlas.iot.ru/_stat/sci_in_russia/analiz.htm]. A well-grounded estimation of perspectives of scientific and technological development in Russia is impossible without taking into account world tendencies connected with globalization processes gathering pace constantly. Scientific achievements and advanced technologies form a basis for international integration in economic, political, social, cultural, ecological and other areas. At the same time establishment and formation of the world scientific and innovational complex are characterized with their own regularities which will be inevitably apparent in Russian practice. Characterizing modern globalization processes in a scientific and technical sphere we should separate a series of aspects. First of all, these tendencies are directly reflected in contents of research and designing direction.

Fundamental science which is international at bottom overcomes interstate barriers and becomes a universal means of knowledge, forecast of the world development. Research of global problems demanding an international and interdisciplinary approach of the World Ocean, World

air shed, wood and soil resources of the planet, etc. – takes a larger place. In the sphere of applied research and design one can see clearly orientation to making technologies of world-wide appliance (with further adaptation to national peculiarities), technologies having promising outlets of international scale, technologies integrating different production and social systems of countries and regions of the World. In the World there are effective formal and non-formal coordination mechanisms in the sphere of scientific and innovational activity. International technical programs and projects are worked out and realized in the framework of interstate and inter-firm agreement, regional integration institutes (EU, ATE, etc) under the aegis of competent international organizations – UNO, OECD, UNIDO, UNESCO and others.

The main directions of the further scientific and technologic globalization in the forecasted period are the following

- priority working out of technologies providing information interaction between countries and transition to information society;
 - working out of global technologies integrating technological and social innovations;
 - intensification of international mobility of intellectual resources;
- inclusion of small and medium science intensive business into international scientific and technologic infrastructure;
- development of internet-technologies and companies accumulating intellectual resources of developed countries.

Regarding this we may try to give estimation of Russian prospects in the World. Whatever variant of development of events is Russian science will be influenced by global tendencies interacting with foreign scientific and innovational systems. But scale and depth of international integration and, what is the main thing, its economic and social consequences will depend on many objective and subjective factors. In particular, a character of projection of internationalization and globalization tendencies of a scientific and technological sphere on Russia will be to a large extent determined by a social and economic model formed in Russia [Libin, 2009]. A degree of integration of Russia to global scientific and technologic processes will be connected with development of the international situation, a choice of defense doctrine, geopolitical and geoeconomical strategy. Probable aggravation of ecological problems in our country connected, in particular, with environmental pollution and climatic changes [Libin, 2009] may become a catalyst of widening and deepening participation in international scientific and technologic integration. Hypothetical large-scale enlargement of fuel and raw materials base is capable, on the contrary, to weaken a bit integration motivations by reanimating hopes for favourable existence at the account of earnings from natural resources export. In this case compensating influence can be exerted by expansion of financial possibilities of participation in international cooperation, necessity to follow international ecological norms in fuel and raw materials complex, as well as possibility of raising export effectiveness as a result of deeper processing of raw materials on the basis of advanced technologies [Libin, 2009]. On the basis of them it is possible to build three basic scenarios principally different from the point of view of forecasting trajectories of science development and innovational sphere

An inertial development scenario. This scenario supposes keeping the system of narrowed reproduction which is characterized by a very low investment level, concentration of profits in export (raw materials) sector and bringing a substantial part of profits formed in it abroad. In this variant we may expect further degradation of processing industry, keeping a low demand level inside the country, aggravation of the budget problems. An inertial scenario of economic development will probably have very negative consequences for development of a research and designing sphere.

An export-oriented development scenario. This variant comes from a precondition of keeping and strengthening in prospect a role of export sectors of economy (fuel and energetic complex, metallurgy, chemical industry). It is supposed that these industries will provide the budget and economy in general with necessary financial resources what, in its turn, will demand substantial investments. Potential of non capital intensive development of these industries is

practically exhausted. Further prospects of them are connected with substantial investments to reconnaissance and development of new deposits, reconstruction and expansion of pipeline transportation net, replacement and modernization of acting production capacities of producing and processing raw materials. Estimating a role and place of science in this scenario we should note that differing from the previous inertial variant an export-oriented development will give possibility to keep financing of science from the budget on today's level. Meanwhile, like in the first case, this scenario will not cause radical changes in a scientific and technical sphere and, as a result, will lead it to degradation.

An investment scenario. The key peculiarity of this scenario is that it is conditioned by forced increase of investments even under the conditions of the crisis. Today possibilities of non capital intensive growth are very limited because of the crisis and the Government's unsuccessful policy. It is important to note that the third scenario is the only one from mentioned above which makes conditions not only for keeping, but for restoration of scientific and technical potential of Russia. In realization of the scenario conditions possibilities of science (first of all, fundamental one) State support and demand for researches and design from industrial enterprises rise. Experts' estimations show that in this scenario variant investments to Science and Technology in Russia can and must have been increased by 2010 up to 4-4.5 per cent GDP. To say it in other words, existing resource possibilities (only under the other policy of the Government) will permit to increase volume of capital investments to science and innovations twice as much in 2010. Certainly, in this situation scientific and technical policy will demand more cardinal changes because goals of scientific and technical regulation are changed here.

Organs of science State regulations will have to depart from negative tendencies retaining practice in scientific and technical complex of the country and concentrate efforts on leading decisions and actions in relation to processes of wide-scale renovation of production apparatus in industry.

12.1.6. A Special Role of Science in the Condition of the Crisis.

In his work published in 1995 [Kara-Murza, 1995] Sergey Kara-Murza says, «Nowadays Russia is living in a period of instability, crisis and transient processes. This time science possesses special problems which to a very small extent can be solved at the account of foreign science, and more often they cannot principally be solved by anyone, but only our scientists». Under the conditions of the crisis densities, accidents and catastrophes really appear in social and technical spheres. Only the science which participated in formation of this technosphere and this social system and led them on the stable stage can find out early symptoms of risks and dangers, study reasons and find better methods for their prevention [Libin, 2008]. If scientific capacity during the crisis is not enough a number of anthropogenic and social catastrophes will rise, and expenses for consequences elimination will rise in unpredictable scale. «In condition of an acute crisis it is necessary for a substantial part of domestic science to change decision making and organization criteria and to become activity not for *favour increasing*, but for *damage reducing*. It gives a special direction in effectiveness estimation».

A difficulty of transition to other criteria is the following – utility of research directed to damage prevention is principally not only damaged, but even not realized just when this function is fulfilled by science effectively. Science dealing with a changing structure of risks and dangers cannot base on such collective memory. «Nowadays Russia is surviving a period when researching groups, laboratories and even centers, leading Research and Development activity (R&D) in tune with formation science must be formed quickly. Meanwhile, inertia of thinking and power and science system itself is such that existing laboratories cannot switch over to another type of criteria. Conscious scientific policy of the State should have induced and stimulated them, but there is no such policy nowadays. But there is not such a policy while the scientific community itself does not see structural and functional differences between these two parts of science» [Kara-Murza, 1995].

Russia has inherited the best schools in the World in the sphere of formation science from Soviet science. Our scientists made great contribution into development of fundamental mathematic and physical theories, catastrophe study, critical phenomena. Many of these modern fundamental theories have found practical application in research and working out of burning and explosion processes, chemical reactions, aero and hydrodynamics, oceanology, etc. Russian scientists looked through terms of order, chaos and self-organization not only at natural and technical phenomena, but social processes as well. These ground work and handy knowledge are not turned however by themselves to complex scientific projects and programs solving the problems appearing before the society and approaching. These projects and programs are built up, mainly, in the old way. For transition to a new level the State authorities' political will expressed in money or administrative decisions is needed. We have no time left to think. We cannot but admire Sergey Kara-Murza's foresight [Kara-Murza, 1995], «The main criterion of the country science state estimation is possibility of its reproduction (restoration) after coming out of the crisis, but not capability of it to create competitive technologies». Today the existing system is insufficient in scale and structure. Changing tendencies of this system is unfavorable while continuation of processes. However the situation has not been worsened irreversibly, the main components of scientific potential are kept, while restoring a social order compatible with life of the country, Russia will be still able to restore and develop domestic science up to the necessary level in a short period of time.

A wonderful analysis of the situation of Russian science is made in the work [Yurevitsch, 2009]. In this book the authors describe today's situation of the Russian scientific community and its interrelation with society. They analyze reasons of Russian scientific crisis, the main symptoms of it (material, psychological and functional crisis) and potential consequences. They estimate such phenomena typical for today's Russian science as emigration of scientists (external brain drain) and their going away to business and policy (internal brain drain). They describe the main forms and results of Russian science commercialization, market ways of organization of it (scientific parks, etc.), give different proofs for benefit of the fact, that, contrary to existing stereotypes, it is not Russian science which is insufficiently adapted to market economy, but it is a domestic variant of market economy which is not adapted to assimilation of scientific and technical progress achievements. Answering the main question of the book the authors show that Russia needs scientists and science as well very much, but our society underestimates it, without realizing that domestic science degradation can result in consequences, such as degradation of the higher education system, deintellectualization of the society, etc. They suggest for Russian science and our society together with it a way out of a long crisis and saving science from today's misery situation of it.

Maybe this miserable situation of Russian science was, at least, understood by the power. «The State will continue to support actively scientific research, fundamental and practice-oriented. Large State investments are to provide our scientists with the most up-to-date high-technologic base and wide possibilities for self-realization, to raise welfare and prestige of a scientist profession», the press-service of the Ministry of Education and Science quotes Fursenco's words on the 8th of February, 2009. According to the Minister, in spite of the World financial crisis covering all society spheres, the State authorities understand that just science and innovations will let Russia manage consequences of the crisis and fill economy with new contents, providing for the country the leading positions in the World.

12.1.7. In What Way Will the Economic Crisis Influence the Scientific and Technical Sector Development in Russia?

Will the budget manage all declared goal-oriented programs in science and innovation spheres as the Government promises it? What should economic and scientific policy be for the crisis to become a trigger of technological renovation of Russian industrial enterprises? Answers to these questions must be given very soon, as nobody has abolished either industry strategies

where innovation is declared as the main purpose of development of industrial clusters, nor concepts in the long-term economy development sphere (for example, <u>A concept of long-term social and economical development of Russian Federation</u> - CLD), where science and technics are awarded a status of *new economy* main links. Let us notice, that macro- and microconcepts suppose substantial expenses of budget money for achievement of so-called innovation indicators with advance rate in comparison with a series of other State expenses.

In June, 2009, the City Council of the People's Republic of China appropriated 4.8 billion dollars for financing priority scientific programs. By 2010 a sum of additional investments will have been almost 8 billion dollars. There are 11 indicated priority programs which will be realized with accelerated rate – working out of passenger wide-body air-liners, modern machines, new communications, nuclear power plant reactors, medical substances. The UNO experts call China the only country for which the crisis has become a borderline of innovation rebuilding of economy. Even in the crisis China continues to be the leader in the World in rate of new technologies and high technologic production implement and in volume of scientific and technical research. A share of science and technics intensive production in Chinese export cost is one of maximal ones in the World – more than 40 per cent. The Russian anti-crisis budget foresees reduction of investments into science – so, expenses for fundamental research has become lower from 84.5 billion roubles to 76.5 billion roubles (2.3 billion dollars), for applied research by 2 billion roubles, for defense research by 11 billion roubles. Investment of the rest of the budget resources of financing is minimal – so, the whole Federal Target Program Research and Working out in Priority Directions of Russian Scientific and Technological Complex Development for 2007-2012 is 19.5 billion roubles (600 million dollars). Budget inflows to corporations are sequestrated – the Rosnano which effectiveness the President of the RF doubted in will return 85 billion roubles to the budget. In the same time the Upper Economic School reminds in the person of its first pro-rector Leonid Gokhberg, that «we have the situation with undeveloped demand and absence of adequate and perspective offer from the scientific system». Any specialist who understands what the Russian research sector is and in what conditions industrial production is growing will agree with that... Moreover, when transnational producers' sales are reduced substantially in the USA and EU, certainly, they will enter the markets of the third countries including Russia. Import goods of an innovation character and wide (sometimes, a socially important one) non-elastic demand will become cheap sharply what will make domestic production non-competitive. But in this case, it is clear that meeting the reality not coinciding with forecasts of the Ministry of Economic Development the Government in the person of the Ministry of Finance will cut the budget without paying any attention, firstly, to innovation, secondly, to social directivity, as there is nowhere to borrow. And what should the State do to assume those necessary measures under these conditions which will let science and technologies come to the crisis through those reforms which they refused from several years ago?

Certain suggestions were made by Konstantin Kiselev, the Executive Manager of the Center *Open Economy*, «We have formulated several suggestions a part of which are already worked out on a normative level, let us do justice to the Government.

- 1. To subject directions and structure of financing the State academies of science to thorough revision paying special attention to the Program of fundamental researches of the RAS;
- 2. With a help of analytical and expert procedures to find out groups of financial organizations which are the leaders in separate spheres of scientific and technical activity, to organize competition among them with the aim to get a status financing directed to building a network of federal resource scientific and technological complexes performing functions of head organizations;
- 3. With a help of analytical and expert procedures to check out all industry (departmental) goal-oriented scientific and technical programs by efforts of the Ministry of Education and Science;

- 4. To pay primary attention to development of public-private partnership (PPP) between public scientific organizations and private business in areas of a strategic State meaning (aviation industry, nuclear industry, shipbuilding, medicine, wood processing, pharmaceutics, agriculture, etc.).
- 5. To legalize and implement practice of *constraint to innovations* with a help of contracts between the State and groups of companies (the market leaders) obliged to launch certain volume of competitive innovational production on the domestic market in exchange for corresponding benefits and preferences;
- 6. To widen and distribute practice of functioning of technical parks at technological universities (for example, MIFI, MIET) and to build technical parks at federal universities; by the end of 2009 to solve a problem of commercialization of scientific research results including those got with attraction of State financing for benefit to stimulating business activity of scientific organizations and executors;
- 7. to make suggestions to change current legislation in the part of decrease of tax load for stimulating innovation activity of enterprises;
- 8. to make suggestions to change customs legislation for stimulating innovation activity and enterprises of a high-technological sector including enterprises with science intensive activity;
- 9. to re-orient a part of programs of the Russian Fund of Federal Property together with simultaneous increase of its part in the budget up to 12 per cent to civil science, to conducting R&D by scientific and educational organizations of all property forms.

12.2. Bases of Innovational Technologies.

The crisis is extreme aggravation of contradictions in the social and economic system threatening its viability in the environment. Reasons of it can be objective, connected with cyclic demands of modernization and restructuring, and subjective, reflecting mistakes and voluntarism in ruling, also natural, characterizing climate, earthquakes, etc. Results of the crisis are closely connected with two factors – reasons of it and possibility of managing the crisis development processes. Social crises appear when contradictions aggravate or interests of different social groups or educations – workers and employers, trade unions and businessmen, workers of different professions, personnel, managers, etc. – meet. Often social crises are as if continuation and addition to economic crises, although they can appear by themselves, for example, because of management style, dissatisfaction with labour conditions, relations to economic problems, patriotic feelings. A political crisis takes a special position in the group of crises. It is crisis in political organization of society, crisis of the power, crisis of realization of different social groups and classes' interests in managing the society. Political crises, as a rule, touch all sides of society development and turn to economic crises.

The best entrepreneurs know that crisis is possibility to renew and restore oneself, one's enterprise and even industry. There is no better moment for innovations and invention than crisis. As Michael Maddock writes in his essay <u>Don't Let a Good Crisis Go to Waste</u>, «In 1923 Walter Cannon Bradford, a famous American psychologist, published results of his research of animals' reaction to stress *Traumatic Shock*. According to his theory, all animals including a human react to stress wish two ways – either resist it with a help of fight, or turn round and run in the opposite direction like mad».

Under the conditions of today's economic crisis large companies freeze production, conserve cash and delay new projects. Small and medium entrepreneurs behave differently – they try to rebuild their business and even industry in which they work to succeed. They try to put their ideas into practice, turn them, if it goes, to many-million business. Under the conditions of the current economic situation any person is necessary to try to think like an entrepreneur – to research and search for new possibilities constantly, possibilities which nobody notices. «Adaptability is a characteristic feature of a great entrepreneur. Entrepreneurs know that

deviation, delay, freezing are those strategies which do not work, these are failure strategies. They will more probably lose risking than they will just sit accepting everything and expecting their end» [Maddock, 2009].

Innovations are an inevitable engine of economy. When basis innovations reach a saturation phase economy enters the crisis, while new innovations transforming an economic structure are not realized. A transitional period can be painful usually possessing a recession form. It is also reflected on the real economy. The situation is becoming threatening when on this background collapse of collected speculative financing bubbles begins. Sorting out a financing mess is an essential problem of a political will. But to overcome the crisis of the real economy it is necessary to realize basis innovations which create new production methods, new products and working places [Liebig, 2009]. It is expected, that regarding the results of the year 2009, German goods export will become 9 per cent lower, and the German GDP 5 per cent lower. That is why, companies specialized in technologies, especially small and medium enterprises, know that innovations are the only way to save business. (On the Hanover fair of 2009 participations presented more than 4 thousand inventions in the sphere of engineering tools, electrical engineering, automation and energetic technologies). As Michel Liebig, a collaborator of the Analytical centre of Schiller Institute (Germany), writes, «When production firms, like today, meet reduction of orders and profit from realization, they have to economize on costs. What is more reasonable to sacrifice? In compliance with a liberal theory, the first that a company in the recession situation should do is to discharge a part of personnel and cut investments. However, the majority of companies specializing in technologies are not ready to take these measures. One of the reasons is the following – they have managed to save a large financing base due to a great profit growth within the last years. Another, more important reason is a habit to think with longterm categories – if to reduce costs, there is competitiveness and possibilities to grow production volume for it do not lead to constant damage for working efficiency as soon as the situation is changed for the better». The solution of the problem consists in improvement of efficiency of production mechanisms, perfection of their utilization, minimization of defects and reduction of expenses to logistics and other overhead charges.

12.3. Fundamental and Additional Innovations.

An activity review of 1600 German production firms has shown that the best productivity indicators are demonstrated by the firms with maximal integrity of internal production, and hired personnel qualification is an important factor creating advantages in working efficiency. In the period of the crisis it is reasonable to concentrate just on these efficiency reserves; or to reduce production expenses on the basis of reproduction it is necessary to invest to new technologies and production involving high-qualified (and expensive) work force. As you know, innovations are product change (product innovations), production modernization (technological innovations), a company restructuring (organizational innovations). We should qualify the majority of types of such investments to economy as additional innovations – as opposed to fundamental innovations, creating new technologies and materials and their supplements in different branches.

Additional innovations can create a basis for manufacturing production development and, therefore, such innovations become an important element of an effective anti-crisis strategy, although they are not enough to overcome the economic crisis.

Fundamental innovations is an obligatory condition for *prosperity cycles* in economy, and their dynamics fading is the main reason of appearance of a depressed phase of development.

A role of fundamental investments was researched by two great economists of the beginning of the last century – Joseph Alois Schumpeter (1883-1950) and Nikolai Kondratyev (1892-1838).

Nikolai D. Kondratyev (<u>March, 4, 1892 – September, 17,1938</u>) is an outstanding Russian and Soviet <u>economist</u>; since 1905 <u>a Socialist revolutionary</u>, was a member of the last group of the <u>Alexander Kerensky's Provisional Government</u> as a comrade of the Ministry of Provision; a founder and Director of <u>Conjuncture Institute</u> (<u>1920-1928</u>); a founder of the theory of large cycles of economic conjuncture (<u>long wave crises</u>); was repressed in <u>1930</u>, put into prison in 1932, shot in 1938; was rehabilitated in 1987.

William Stanly Jevons (<u>September, 1, 1935 – August, 13, 1882</u>) is an English <u>economist</u>, <u>statistician</u> and <u>logic philosopher</u>, Professor of <u>logic</u>, <u>philosophy</u> and <u>political economy</u> in <u>Manchester</u> and <u>London</u>, a founder of <u>a mathematic school</u> in political economy, one of the founders of <u>the marginal utility theory</u>. He saw the main problem of <u>economics</u> in studying <u>consumption</u>, the main law of which he thought <u>the decreasing utility law</u>. He was one of the first who tried to apply mathematic means to an economic analysis.

Joseph Alois Schumpeter (<u>February</u>, 8, <u>1883</u> – <u>January</u>, 8, <u>1950</u>) is an Austrian and American economist, sociologist and historian of an economic thought, studied in <u>Vienna University</u>, hold a post of the Ministry of Finance in Austria in <u>1919-1920</u>, was a Professor of <u>Rein</u> (<u>Bonn</u>, 1925-1932) and <u>Harvard Universities</u>, a President of <u>the Econometric Society</u> (1940-1941) and American Economic Association (1948).

Schumpeter worked out an innovation theory (*creative destruction*) and established that innovational dynamics all and all led to saturation and stagnation, and then to painful and complex removals and reorganizations as soon as new innovations were adopted and economy was transformed. Crises have always played the key role in capitalism success. In socialist command economy we managed to avoid cyclical crises and recession, but it happened at the cost of technological stagnation. Socialist economy fell, because it could not keep pace with innovation dynamics of capitalism. And it was in spite of the fact that the Soviet block showed results of the World level in many brunches of science. Under the conditions of today's crisis we need building a favourable medium for accelerated innovation implementation, especially fundamental ones, as they influence economy and its transformation in general.

Today's modern programs of fiscal stimulating from buying out banks' debts, tax reduction and car sales subsidizing to infrastructure repairing are at the best restraining measures. In 1975 Gerhard Otto Mensch, a German economist, the Chairman of the International League of Strategic Management, Estimation and Account, published a book Technological Deadlock – Innovations Overcome Depression. Basing on Kondratyev's long wave theory, Mensch perfected Schumpeter's general theory of innovations making difference between fundamental and additional innovations. He accentuated that fundamental innovations did not create a wave, but a shock wave or a pulse transforming economy in general. In accordance with Mensch's theory, nowadays the World economy is in the phase of a technological deadlock. Fundamental innovations of the last years based on informational technologies are fading.

Nature of scientific and technical progress is the following – in the majority of cases technological breakthroughs need a rising inflow of intellectual powers and material resources to fundamental and applied researches and to development. Consequently, necessity in concerted actions of the State (or states) and private players appear.

13. Innovation Technologies in Russia.

13.1. Innovation Technologies in Russian Enterprises.

It is clear that innovations in making the new production for many Russian companies are a burning topic now. The major part of production produced by Russian industry was worked out in Soviet times, or 15-20 years ago, and in the leading World companies an innovational cycle of alteration of production generations is 3-7 years on the average. Besides, in old elaborations necessary attention was not paid to such parameters as a management system, energy consumption, ergonomics, mass, size. From an innovational point of view while product making there are two approaches. A part of companies try to give this process a certain order, put

innovations in a development strategy. However, in many Russian enterprises this process is chaotic and subjective [Duka, 2009].

In this situation many Russian companies miss three things.

The first one – as a rule, Russian production is worse than western one in operating characteristics and competitive only at the account of lower cost of energy resources, work force and small investments to elaborations and production technologies in Russia.

In several years resources prices in Russia and in the World will be equal. For the reason of physical wear of equipment plants will have to invest more to production. Russia will enter the World Trade Organization (WTO) and possibilities to conduct a protection policy will become much less. That is why, because of old technologies production prime cost in Russia will be higher than in developed countries of the World.

The second one – in the list if 500 largest companies of the World there are only the *Gasprom* and *Lukoil* (in the 4th hundred). All the rest Russian companies are not large in comparison with their western competitors. That is why western competitors have a possibility to invest much more funds to food and technological innovations than Russian companies.

The third one – an intensive globalization process continues in the World economy in spite of the crisis (the latest example, the Saving Bank of the RF and *Magna* have bought *Opel*). The largest companies of the World are interested in this process as globalizations increase outlets.

It is impossible to stop this process, it is necessary to adapt to it, but the Russian Government does not let foreign companies work in the majority of Russian industries. To achieve success Russian business should stop being only Russian. A lot of Russian companies will inevitably enter the international market of junctions and absorptions. And this process has begun. Regarding the results of 2008, export is the leader in recession rate among largest sectors of Russian economy. Reduction of it was 8.9 per cent for the last 4 months of 2008 (41.5 per cent year on year) and about 16 per cent for the first four months of 2009.

13.2. An Innovation Role in Silver Brunch in Russia.

Meanwhile, today even under the conditions of the global financing and economic crisis on the Russian and World markets there is cash silver deficit, and price for it is still on a rather high level for about 11 dollars for an ounce. Mexican and American experience of silver industry organization shows that it will be more logic for producers to be enlarged. Due to innovational technologies transition from the American-Canadian company Pan American Silver to its Russian affiliated company IST, this company has become absolutely competitive on the Russian market.

So, according to the words of Alexander Nesis, the President of the Russian company group *IST* (it includes the Russian *Polimetal* and the American-Canadian company *Pan American Silver*), the company has prepared financial statements under international standards, conducted a financial, geological and juridical audit and *is ready to enter the World marker of precious metals even in conditions of the World economic crisis.* On the whole, deliveries of Russian silver can appear very useful on the World silver market for which a typical trait is that it has functioned under the conditions of chronic silver deficit for the last 15 years.

Unfortunately, in comparison with the USSR Russia is not the leading empire in silver production any more. Today about 1.5-2 per cent of the volume consumed in the World every year is produced in the country. Just that is why, and also taking into account, that the *IST* possesses new western innovation technologies, and growing orders from nanotechnologies industry, the Russian *IST* group plans to increase sharply silver production, besides, analysts predict some (even if not substantial) rise of silver prices. Now foreseeing great profits in future, silver exporters in Russia speak for abolition or lowering of the State export duty on this precious metal. If silver price really rises silver sellers will get super incomes even in spite of this export duty [Libin 2008].

We would like to speak more about silver industry. Explored silver stock in Russia is still large, but difficult to access. According to official data, yearly silver mining for the last decade is 20 thousand tons or 600 million troy ounces exceeding yearly gold mining eightfold. For the last 50 years about 3 billion troy ounces of gold and 27 billion troy ounces of silver have been produced. Nowadays silver is spent widely, mainly, to war industry development, and it is not surprising if to take into account that about 130 kg silver is used for making one modern torpedo or missile. Just that is why, silver stock has continuously decreased for 50 years already and will decrease up to full elimination of it if to take growing demand for this metal into account.

When accessible silver stock is over, a lack of accessible silver stock will lead to rising of demand for it, according to the Supply-Demand law. In its turn it will inevitably lead to rise in this metal price, which in this case will be tenfold or maybe one hundred-fold higher than today's price for it depending on circumstances, and it is without accounting inflation and the raging World economic crisis which will result in general price rise.

In 1990 accessible silver reserves were equal to 2200 million troy ounces, in 2001 – 1000 million, and in 2004 they fell up to 400 million troy ounces. For you to compare – accessible gold research were equal to 2000 million troy ounces in 1990, 1800 million in 2004 with all consequences coming out of it. In 2012-2015 these reserves will be over, and if they are replenished in time at account of new deposits, large industrial enterprises in the whole World will meet silver deficit for production of many goods, and it will cause reduction in price difference between gold and silver.

When accessible silver stock is over industrial enterprises will have *to raise price for it manifold* to make private silver owners to sell it.

As soon as people prefer to buy goods prices for which grow than to sell them, silver price needs to rise very high to provoke mass sales of this metal. But if to take into account that development of modern technologies to a large degree depends on silver, fall in demand for it will not be observed in the nearest future.

There is a short note. It happened that gold and silver prices were analogical to their ground reserves. To determine necessary correlation of gold and silver prices we need to know general quantity of their ground reserves, but, according to different researches, they are equal to 5 billion troy ounces of gold to 5-6 billion troy ounces of silver. It means, that gold price in relation to silver price should be, at least, 1 to 2, but not 1 to 50, as now.

So, a half of World silver reserves is not processed, and a metal price is not only strained to the prime cost limit, but should be objectively, at least, several times, higher. Sooner or later, but very soon production deficit and economy demands will make price rise.

Great Warren Buffett, the head of the *Berkshire Hathaway*, the most successful investment company in the World, *has kept about 150 million ounces silver bullion up to nowadays*. George Soros believes in silver too. The richest man in the World Bill Gates has also jointed them. His company *Cascade Investment* has possessed more than 10 per cent stock of the company *Pan American Silver (PAS)* which is a co-owner of practically the whole Russian silver industry. Analysts confirm that today attractiveness of silver as means of safety from financial shocks increases. Rise in demand for precious metals is conditioned by fast recession of a US dollar rate in relation to a euro. According to experts, this is added by enormous price rise (up to 130 dollars), and then the same enormous fall (up to 40 dollars) of a barrel of oil.

Today one third of the World silver supply is sales of *secondary* silver. According to the data of *The Silver Institute*, silver supply in the World was about 900 million ounces in 2008, and about 650 million silver ounces was taken from the ground depth, all the rest was silver waste, sales of state reserves, etc. Because of constant deficit, world reserves of silver produced earlier are practically run out. Current prices (having fallen lately in connection with the World crisis) do not promote increase of world production of this metal.

The situation when consumption exceeds production cannot continue forever. Today's world silver reserves are on a record low level. That is why, silver price rise is expected not only in a short-term, but in a long-term prospect. It will happen as soon as irregularities with

deliveries of this metal to consumers begin. It will probably happen in 2010. But in the same time a great quantity of silver, gold and other precious metals are in used dumps saved for many decades, especially in Russia. While a silver ounce cost varies around 10 dollars, dump processing can be unprofitable. But when price rises manifold, financial problems will stop being basic. First of all, fundamental innovations and new processing technologies will be necessary and in demand. And such situation is observed in many *reviving* brunches of Russian economy, where *innovational hunger* takes the second place after *financial hunger*.

13.3. Innovational Variants of Development for Russian Companies.

Consequently, different innovational variants of development for Russian companies come out of it

- 1. to develop production and engineering by oneself;
- 2. to refuse from a larger part of their own production and concentrate on product engineering;
 - 3. to refuse from their own engineering and adopt only a platform of a producer.

Research made by a group of cooperators of the *Alt* Company has shown that the most important indicator characterizing innovation activity of any company is a share of a turnover fund directed to finance R&D. The leading World companies spend 7-12 per cent of their income to R&D (for largest World corporations it is about several billion dollars per a year). In Russian companies this indicator is 0.5-3 per cent of the income, as a rule. It can be explained by the fact that many Russian companies have not realized up to the end the importance of innovations as a keystone of the company existence in the future. Meanwhile, in some Russian companies an innovation process is successfully developed with a quicker rate then in western ones.

In Soviet Union a larger part of innovational elaborations was made in industry research institutes. In the beginning of the 90s public financing of many institutes stopped. A basic part of enterprises had not matured yet by that time to order elaborations to specialized organizations. As a result, a larger part of research institutes did not get financing and, to a large extent, lost its potential. Now, when we realize importance of scientific elaborations, we understand that delay from foreign science is almost catastrophic in some positions. To save the situation with innovations, at least in Moscow, a resolution of the Moscow Government № 781-ПП About City Goal-Oriented Complex Program of Making A New Innovation System In Moscow For 2008-2010 was passed on the 2nd of September of 2008. The resolution was passed in compliance with the Moscow Law from the 7th of July, 2004, No45 About Innovation Activity In Moscow and a resolution of the Moscow Government from the 5th of September, 2006, № 658-IIII About the Concept of Moscow Innovation Policy. The resolution is also based on the main directions of the Russian Federation policy in the sphere of the innovation system development for the period till 2010 (adopted by the Chairman of the Government of the Russian Federation on the 5th of August, 2005). The Moscow Government has established, that expenses for realization of the Program activities must be financed at the account of the city budget (in the framework of funds provided in the Moscow budget for the corresponding financing year under the Moscow Department of Science and Industrial Policy to build the innovation system in Moscow). Obligatory placing of not less than 15 per cent of the yearly general volume of public orders to make research and development (R&D) among subjects of small and middle entrepreneurship has been also provided.

Today enterprises try to overcome a catastrophic delay from West in different ways. They buy elaborations or the whole design organizations, copy, cooperate with institutes capable to work, build plant laboratories closed ten years ago again. Buying a license, an enterprise as if gives food for thoughts to its constructors and technologists. Plant designers get a possibility to see the development level of a World engineering idea and compare it with those elaborations which the enterprise possesses. It will permit to determine the company place on the World

market and will possibly teach something new, advance constructors and technologists' thought. But today companies, to a larger extent, are preoccupied with applied elaborations, or with those which they will be able to put on the conveyor tomorrow. Business does not need fundamental science, and public financing lets it only survive, but not develop.

An interesting tendency is noticed. <u>Training institutes begin to be occupied with science and even fundamental science more and more</u>. It corresponds to the World practice. Abroad large corporations make fundamental research in cooperation with training institutes very often. A substantial part of fundamental research is made by companies also in cooperation in developed countries, but they make applied elaborations by themselves. It is so because fundamental research demands large capital investments with a long repayment term.

In development of innovation ideas Russian companies keep abreast of world tendencies in general –

- 1. a share of research institutes is lowered;
- 2. influence of educational institutions is intensified in science;
- 3. Russian enterprises have begun to buy more licenses;
- 4. many companies have managed to reduce elaboration terms much.

Fortunately, there is a wide range of existing and appearing technologies today (in Russia too) corresponding to criteria of fundamental innovations which are on different levels of commercial appliance. They include nanotechnologies, hydrogen energetics, leading ecological technologies, nuclear synthesis and socially organized technologies not less meaningful, although not belonging to technics, such as increase of service life duration.

These appearing technologies need generous public and private financing to become commercially applied. And it is just they which will make Russia come out of the crisis.

13.4. Attempts to Form the National Innovation System in Russia.

As it has already been said, innovation economy become apparent in national wealth rising of a share of constituents which were referred to non-economic earlier; in increasing expenses of the State, businessmen and people to human capital saving. However it would be a mistake to suppose that to develop innovation economy in Russia, for example, to increase investments to R&D is enough. There is no linear dependence in this case, because to get the real effect the essence of some factors is necessary, first of all, economy of a corresponding technological level, necessary infrastructure, demand in innovations. In our country they are absent. So, technological base of Russian economy does not get renewed in fact. As for Russian economy structure, the main investments and financial statements are concentrated, as a rule, in export-oriented sectors. A capital inflow to brunches determining modern economy is not enough. Essentially, corresponding infrastructure has not been built.

Business does not need innovations. In Russia only 8-10 per cent on innovational ideas and projects are used (62 per cent in the USA, 95 per cent in Japan). More than 70 per cent of all inventions are directed to supporting or little perfection of existing, mainly old types of technics and technologies. Only one third of made models of new car and equipment types possess protective documents to industrial property, 75 per cent do not possess quality and safety certificates. Credit resources are used ineffectively. Simple rise of volumes of science financing is not able to change conditions of scientific sphere functioning cardinally, solve problems without which a social and economic progress is impossible, specialists of the Chamber of Accounts of the RF have come to this conclusion. It seems that a sphere of science and scientific activity needs a substantial reforming. Bureaucratization of management is very high. It increases transaction costs and limits participation of medium and small business in an innovation process, aiming it to less risky spheres. The majority of researchers admit that Russian economy is insensible to an innovational type of development. And the main thing here is uncertainty of the State strategy in this area. The authors of the report made by the Ministry of Economic Development *Diversification of Russian Economy – Modern Problems and Tasks* also

agree with this conclusion. «Absence of effective methods of predicting new perspective economic sectors is fixed in it. And even if one manages to prove in a scientific way a perspective of development of this or that industry, a choice of priorities cannot be grounded only by economic accounts, as such decisions are taking on a political level». It means that it is not only because of a lack of finances, but because of uncertainty of the strategy of the State innovational policy, inability of the State to provide an innovational process making organizational, economic and legislative conditions for it.

It is very bothersome really to use instruments connected with management of investment processes and providing tax and other market advantages to innovations. It needs daily laborious work of specialists connected with R&D, but servicing the whole complex *chain* from invention to practical usage. «The Soviet system was replaced by the functionally analogical management system, typical traits of which are, firstly, economic and political domination of natural monopolies, with 100 per cent and even more (accounting a shadow sector) profitability; secondly, limited activity of institutes (including judicial ones) capable to break practice of stagnations reproduction (in particular, primary development of a raw material sector to the prejudice of other brunches). Like in the Soviet period, rules of the game dictate non-formal institutes and connections» [Valentei, 2005].

In the World practice there are four main schemes of overcoming *market failures* in R&D. They are

- the State's direct participation in knowledge production
- the State order to scientific centers
- granting non-payable subsidies to make fundamental scientific research to scientists working out of the State laboratories; accountability of the research (open publication of received results);
- making favourable conditions to produce scientific knowledge and technologies in non-public sector, providing tax, property and other benefits to enterprises and organizations occupied with science and innovation activity.

What role must the State play in Russia for Russia to be developed in a world-wide innovational trend? Just that is why, Dmitry Medvedev, the President of the Russian Federation, named governmental social and economic problems for a prospect at the meeting of the State Council, «Now we have a problem to use saved experience and resources effectively for the next absolutely another stage in the country development. Now we have to look below the horizon...at least, ten years before. That is why today we are talking about a long-term strategy till 2020». In the beginning of 2009 the President of Russia set the problem to make up a new type of economy based on innovation technologies which will give a new quality to today's key brunches of industry and agricultural complex. We talk about development of deep processing natural resources, expansion of using energetic, transport and agricultural possibilities of the country. To widen this problem the Government should conduct large-scale *modernization of existing productions in all economic spheres*, renovation of almost the whole car and equipment park.

In this situation, according to Prime-Minister V.Putin, development of new sectors of competitiveness in aerospace industry, shipbuilding, energetics, informational, medicine and other newest technologies must become *the most important* direction. The Ministry of Economic Development has already started to form a strategy of social and economic development of the RF up to 2020 in which the basic priorities of the Government's actions for a long-term period will be reflected – to make conditions for substantial growth of labour productivity, to form the national innovation system of consolidation and expansion of the country advantages in the sphere of energy resources, transport and technologies.

Change of Goods and Services Production Rate in the 1st Quarter in 2005-2008 in Percent To an Analogical Period of the Previous Year.

The results of the last year have shown that the economic growth dynamics was determined by slowdown of industrial development rate in the beginning of the year. Slowdown

of growth rate is fixed practically in all types of industrial production, except transport facilities, rubber and plastic goods and wood processing and goods from wood. According to experts, such slowdown is connected with two main factors among the others – demand in substantial renovation of material and technical and technological base and providing modern Russian production with personnel. Labour market feels the acutest deficit in specialists with higher and secondary professional engineering education. In the same time specialists – lawyers, economists, managers - graduate from more than a hundred of higher educational institutions of the country with many brunches and can appear not in demand [Kyreev, 2008]. Misbalance in personnel structure is connected not only with conjuncture of educational service market and high demand for modern specialties, but with less expenditure of preparing humanities in comparison with technicians [Kyreev, 2008].

«For innovation economy to get its chance, we must refuse from illusions about our *great* innovational recourses and possibilities. We should admit – as soon as national economy does not need saved knowledge, research institutes and construction departments funds they are only potential wealth. A specific character of a human capital is that increase or decrease of expenses to education or health care do not prove aggregate capital growth by themselves. That is why, it is impossible to explain, for example, increase of a number of specialists with secondary and higher specialized education as a human capital growth» [Valentei, 2005].

14. Are There Ways Out Of The Deadlock?

Certainly, innovations themselves are not a panacea. According to a series of experts, the period has already begun in the country, when playing the new rules of the game we will get new economy after the crisis. (And all old companies are kept – they will conduct business in the other way). It is much better than a period of expecting during which it is typical to postpone problems till tomorrow. Today there are clear signals to investors which bought Russian assets for higher prices. When they did it they took risks including investment ones. It was a conscious decision for creditors, and also for companies which are presented on the market. Today there are new rules of the game that is why if we obey them we will see another economy. The Russian power has to learn a lesson of the crisis and stop interfering into business as it has always done.

However, there is a chance – coming back to a socialist model of Russian economy (what will inevitably lead to change of the existing regime in Russia). As Michail Khodorkovsky, the former owner of the *YUKOS*, wrote in his article *Left Turn 3*, «Now at the end of the first decade of the 21 century neosocialism will become a winner. But it will not total socialism of the Yalta World any more – with much in itself it is obliged to that neoliberalism of Reagan and Thatcher. The further globalization will be a little slow [Khodorkovsky 2007], but will not stop. *Gold billion* will have to refuse from hope for better improvement of its consuming status, but high consuming standards appearing at the end of the last century will stay in the whole a norm.

Craving for political freedom and open competitiveness of persons and ideas will not disappear. Fukuyama's prognosis [Yasin 2004] has not come true formally, but his estimations were correct to a large extent, and we could not but mention it, entering the period of a worldwide left turn. And on the next history round – probably in 12-15 years – after neosocialism clears up blockage of the global crisis and harmonizes the World economy, a new stage of liberalism approach will begin. After a left turn a right one will appear again. But it is already an agenda of tomorrow».

But the first ring was heard at the end of the 90s, when Modesto Seara Vazquez, a famous Mexican scientist, academician, published his warning book *Critical Time. Analysis of the Global Crisis* [Seara 1995], where he warned the World elites (especially of such countries, as Russia) about closing danger. Unfortunately, the Russian elite is not ready to reveal backbone problems and resources of probable crises. But it should have done it beforehand, long before these problems became critical for Russia. Khodorkovsky writes, «in other words we should have understood where we are, where a historical road leads us to, what will be around some

closest turns and in what way we intend today to neutralize problems which will become apparent in full only tomorrow, or even a day after tomorrow».

Getting all national heritage of the country practically free, the majority of representatives of the Russian elite and today's power have believed in their own fallibility and omnipotence and begun to rule the country in such a way as if no economical and moral laws and norms exist. Just it led Russia to the situation that we observe today. If lessons of economic and power crisis in Russia are not accounted by the power and society [Conception 2009], Russia will probably not survive as an integral whole till the year 2020, which today many analysts think a so-called borderline and key point.

(By the way, for the first time the year 2020 was called so in Michail Khodorkovsky's article *Left Turn 2* in November, 2005). We hope only for the power and society wisdom.

Conclusion.

In the end of March, 2009, the magazine *Forbes* made a rating of 127 countries of the World in reliability and attractiveness of their economics. «The financial crisis has broken the World economy – fund markets are in ruins, national currencies are devaluated, a banking system comes apart at the seams, unemployment will reach threatening scale soon».

All countries have suffered, but some countries have suffered less, and, as observers of the magazine *Forbes* predict, just they will manage to get out of the crisis earlier than others, but not only due to good economic indicators, but because of attractiveness for investors and good conditions for business development. The stable interpolicy situation and the country policy in international relations and relation to their own business played not the last role.

The first ten of a rating of the most reliable economies include

- 1. **Denmark**. In 2008 Denmark was at the head of the list of the countries the most favourable for business development. This year it is still the most economically stable and strong State. It is at the top of the list due to excellent economic values and legislation favourable for market growth.
- **2. The USA**. In spite of the fact that the crisis began just in the USA, observers of the magazine *Forbes* think that just this country has almost the best chances. Business freedom and high maturity of small and medium entrepreneurship have let the USA take the 2nd place.
- **3. Canada**. It has also been situated at the top of the rating for several years already for the same reasons as the USA.
- **4. Singapore**. Economy of this country has been widely developed for the last decade and has not stopped its growth in the crisis.
- **5. New Zealand.** This country is traditionally in the head of lists of the countries in the life level.
- **6. Great Britain.** In spite of the fact that Britain was one of the first after the USA which felt the crisis influence, it has a wonderful potential for growth.
- **7. Sweden**. Sweden, Norway and Finland are countries which have always attracted a large inflow of immigrants. And it is not surprising, as they have a high living level and a wide legal space for business.
- **8.** Australia. Australian cities are included into the first ten of the World cities the most comfortable for living.
- **9. Hong Kong**. This Chinese region is considered to be one of the most capital regions of the World economy of Hong Kong is based on principles of free market, low taxation and non-interference of the State to the market.
- **10. Norway**. Norway is on the tenth place because of strict (to business) legislation and limited possibilities of development of agriculture economical values of which are best in the whole rating.
- **103**. Russia is on a non-honorable place because of high risks in economy (also because of the power activities), high risks, corruption, low living level and legislation tough for businessman.

Is not it time to move up to the top of the list?

«Crisis in Russia is a reliability crisis», this statement was heard at the scientific conference *Russian Alternatives* (Khodorkovsky's fourth readings) on the 28th of May in Moscow. The conference was devoted to the analysis of modern economic and social and political situation in Russia and possible ways of influence on this situation. The conference worked in a *brainstorm* regime – during the whole day at the round table the leading scientists, economists and public figures discussed questions concerning the economic crisis and possible ways of influence; the position of the elite, its capability to take measures; society and its capability to collective actions. Almost all leading scientists, politic scientists and analyst of Russia took part in the conference. Concerning the problem of the financial economic crisis in Russia and in the World the participants were unanimous in opinion that the crisis appeared to be much tougher than it had been seen in October, 2008, at Khodorkovsky's third readings *What is Waiting For the Country*?. A lot of critics in the address of the existing power was heard in connection with the fact that *the power does not demonstrate clear policy, but does what it always does – camouflages problems with money, which is fraught with hard social consequences as far as resources are exhausted.*

Michail Khodorkovsky addressed to participants of the conference, said about his vision of a way out of the crisis and formed several tasks without which it would be very difficult to save economy. These are institutional changes making basis conditions for innovation development (independence of courts, financial dependence of local self-government, limited political competitiveness of the media, investments to infrastructure under control of independent courts, the media and political structures). Besides, it is necessary wider involvement of the elites into a process of concrete decision making and lively political competitiveness which will only permit to get corruption under control. Without this effectiveness of using the country resources is minimal and the country approaches to a catastrophe.

Modesto Seara Vazquez wrote in his book Critical Time. Analysis of the Global Crisis, «The only way out of this catastrophic road is appearance of new ethics, new economy, new elites, new State and public institutes and institutions, new understanding of the World which breaks ideological anachronistic forms.

An alternative is very clear – not to do anything to promote stagnation of today's public and economic institutions and an active civil position of each of us not to permit the World to go on its way to the Apocalypse».

Gratitude Words.

Books, like people have different fortunes. This book was born in March of 2009, firstly, as a report *Economic Crisis in Russia (Analytic Review)* prepared for deputies of the Mexican Senate by request of our friend, assessor Mario Reci Mantiel. Together with Doctor Jorge Perez-Peraza we prepared the report to *Casa del Sol* and *Universidad del Mar* in Huatulco for about a month during a visit of *MAOK* delegation to Mexico. Coming back to Moscow we began to check and precise data used in the report, discuss our own and other conclusions with economists, analysts and friends, analyze different positions, write missing chapters... In other words, usual research work began, which moves quicker, if its result is interesting to everybody.

The book was greatly influenced by reports at the International Scientific Conference *Russian Economy in the Condition of the Crisis* which took place in *MAOK* in May of 2009. Certainly it would be easier to write a book about the crisis after its end, in this case all data would be a priori correct, and results absolutely checked. But we decided to present the book just now when it is not clear what will be with today's crisis in conclusion for Russia (for Mexico too) and what will be in store for our countries in the nearest future.

We tried to give an objective (from the point of view of different positions and different authors) analytical review of Russian economy situation under the conditions of the crisis, give

an idea about other researchers' works and views, tried to talk about our vision of the crisis reasons and possible ways out of it.

This book was published, first of all, due to International Academy of Estimation and Consulting (MAOK), the System of the Oajaka Public Universities (SUNEO), *Universidad del Mar* in Huatulco, National Autonomous University of Mexico (UNAM) and the Senate of the United States if Mexico, which we are very thankful to.

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