

ABOUT THE STRATEGY OF RUSSIAN ECONOMIC GROWTH

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Appearing in the context of an ongoing broad discussion on how to modernize and develop our post-crisis economy, this article suggests a systemic, practical and creative approach to the analysis of the situation and development outlooks of the Russian economy in an unstable global environment. This approach is based on a comprehensive understanding of economic realities, including non-linearity, non-equilibrium and uncertainty of social and economic development processes. The authors propose a system of government policy measures to develop and modernize economy on an advanced structural and technological basis. Its implementation will allow accelerating economic growth and adopting an innovative development path.

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This paper discusses a system of measures to achieve the objectives of modernizing and developing the Russian economy, directing it the innovative growth path, and boosting investment activity that have been repeatedly promulgated at the highest levels of public administration and in policy documents of government authorities. However, in the absence of appropriate ways to implement economic policy, these objectives cannot be achieved within expected timelines. The public doubt they can be achieved at all.

We believe that that the objectives of guiding economy to the path of innovative development and stronger investment activity must and can be achieved within 5 to 10 years. Moreover, the objectives of modernizing the economy and reaching the global competitiveness and technological development levels can be implemented on a stage-wise basis within 15 to 20 years, with the first meaningful results obtained as soon as in 3 to 5 years. To this end, social and economic policy must focus on achieving meaningful, i.e. large-scale, results, rather than simply build a favourable environment for modernization in the hope that modernization will come all by itself, driven only by market forces. Such environment is but an intermediate (or an instrumental) objective of social and economic policy, rather than a measure of its efficiency. The objectives of institutional reforms and social modernization must not substitute objectives of structural and technological modernization that determines the technical level and efficiency of economy. For all the paramount importance of institutional reforms, a technologically advanced manufacturing industry with strong export capabilities powered by knowledge-based and actively innovating businesses earning mostly on sales of high added-value products is instrumental for successful development of the Russian economy.

For structural and technological modernization to be successful, the policy and public administration of economy growth need to be systemic, practical and creative, without artificially constraining potential measures with unjustified rules, whose theoretic basis and practicability in the Russian context are quite doubtful. This includes, among others, such requirements as: a deficit-free budget; cancellation of export duties and other protectionist institutions; denationalization of government-owned businesses or interests in such businesses; sterilization of ‘excessive’ money supply; inability to use efficiently instruments for price regulation, foreign exchange control, goal-oriented lending policy and many other dogmas of market fundamentalism based on superficial confidence of its advocates that economy tends to an ideal state of market equilibrium that ensures maximum efficiency through optimal use of resources. Although axioms underlying such approach (and, accordingly, related findings) have been long proved to be far from economic realities both in theory and in practice, this approach is still being used as a reason for removing the government from implementation of economic

growth objectives. Such approach imminently results in regular errors in economic projections, incorrect economic reform objectives, failure to achieve declared goals, a primitive structure and degradation of the technical level of economy, lack of consistency and breakdown of economy into smaller fragments absorbed by better organized external structures. Historically, Russian economic reforms have shown multiple examples of such nature (Glazyev, 2004, 2011; Volchkova, Denisova, and others, 2010).

The method discussed in this article provides for a comprehensive vision of economic reality in all its complexity reflected by non-linear, unbalanced and uncertain processes of social and economic development, and understanding of their logic. Such approach imposes strict requirements to justification of all decisions that must be made through scenario-based modelling of potential implications of such decisions as compared to existing objectives, rather than based on dogmas that are ideologically incompatible with the Russian environment and fail to capture actual feedback relations and logic of economic system behaviour. Such approach is a pre-requisite for successful implementation of social and economic development policy on the back of persisting instability and large-scale structural changes in the global economy.

We have used forecasts of global economic developments and analysis of the state of the Russian economy to discuss its optimal development targets, justify measures that need to be taken to achieve such targets and describe the necessary conditions. We focus on key issues of Russian economic development that cannot be solved within the framework of the market fundamentalism approach.

1. STATE AND DEVELOPMENT OUTLOOKS OF THE RUSSIAN ECONOMY IN THE CONTEXT OF STRUCTURAL CHANGES IN THE GLOBAL ECONOMY

So far, the Russian economy has been regaining its pre-crisis levels without modernizing itself and without overcoming structural constraints for further growth. The pre-crisis decade growth without development, drawing on the production and technology potential left after the 'reformist' 1990s has fully exhausted itself, while its recovery cannot be long and sustainable. This statement is confirmed by the experience of post-crisis industrial recovery that manifests itself in manufacturing industries with a rapid price growth on the back of faint recovery of output that has yet to reach its pre-crisis level.

The extremely low demand elasticity of production (with its growth covered by an increase in domestic output only by 20% (Vedev, Danilov, and others, 2010)) shows that the country has exhausted its free production capacities that bolstered production recovery on the back of a better economic juncture in the mid-1990s and early 2000s. To overcome structural constraints of economic growth, Russia needs to intensify drastically its investment and innovations, which is only feasible if economic growth rates are maintained at a level not lower than 8% of annual GDP growth, 10% of industrial output, 15% of investment in capital assets, and 20% of R&D expenses. At the same time, the innovation and investment sectors of the Russian economy need to grow at accelerated rates. Investment creates both - 'room' for economic growth and builds actual environment for efficient growth.

The need to speed up Russian economic growth is due not only to the desire to 'catch up' with other countries, but also to the logic of building fundamental preconditions for more active investment and innovation for structural and technological modernization to expand social and economic development opportunities in the longer run. The current situation is unique since a relatively high rate of savings in GDP allows us to raise capital expenditure by one and a half time, without lowering consumption levels.

The policy of modernizing and developing the Russian economy needs to rely on a clear understanding of structural changes and outlooks of global social and economic development and identification of national competitive advantages, which, once triggered, can ensure sustainable and rapid production growth taking advantage of the currently emerging economic recovery wave. Global crisis management measures must be brought in line with strategic social and economic development objectives. This is not the case for the moment: immense expenses for implementation of crisis management measures were not linked to the implementation of the Long-Term Development Concept (Directive No. 1121-r of 17 November 2008), with its first stage failed.

The persisting instability of the global financial system and uncertainty of its future architecture, a turbulent global financial market and depletion of resources available to the Russian government complicate implementation of strategic objectives that has been postponed until stable economic growth resumes. As a consequence, investment activity stalls and all efforts focus on maintaining consumption and public welfare levels as the most urgent issues. Such approach does not allow removing structural economic growth constraints.

Evaluation of global economic development outlooks needs to rely on the understanding of the structural component of the crisis that is contingent on the turnover of technological orders and corresponding long economic growth waves (Glazyev, 1993, 2010). The crisis can be overcome through a ‘storm’ of innovations opening the way for a new technological order. Without a drastic increase of investment in a structural economic overhaul based on such new order, the current injection of money in the economy is only building a trap of ‘deferred recession’ at the expense of increasing inflation risks of financial system self-destruction. A new recession wave will surge as soon as the government curtails its emergency government aid programmes (Mityayev, 2009).

Although major world countries have resumed their pre-crisis levels of economic activity early in the year, industrial output levels in major developed countries are far from recovery and show unstable dynamics. This situation will continue until stable clusters of new technological order capacities emerge. Their growth will drive economy out of its turbulent state to a sustainable growth path. Both the technological structure and institutional system of economy will change, as well as the top list of firms, countries and regions. The first to join this growth path of the new technological order and invest in its underlying businesses at earlier development stages will benefit the most. And, vice versa, as new technological paths emerge, the entry will become more and more expensive (Glazyev, 2011).

The new technological order is currently passing from the ‘embryonic’ phase to the growth phase. Its expansion is constrained by both insignificant scale and lack of experience in respective technologies, and the social and economic environment being unready for their wide application. However, despite the crisis, expenses for implementation of leading-edge technologies and their application scale are growing in major countries at rates of about 35% a year (Glazyev and others, 2009). Growth rates of high-tech stock indices are above average. A considerable amount of post-crisis capital left after financial bubbles collapsed will end up in the businesses of the new technological order (Perez, 2011). Once major economies have undergone a structural renovation based on such capital, which will take another 3 to 7 years, a new long wave of economic growth will emerge. The balance of negative and positive effects will be contingent on growth rates of new businesses that will compensate for the shrinking of the outdated part of economy.

As a consequence of long degradation of its manufacturing industry, Russia started playing the role of a ‘commodity appendage’ or commodity supplier to relatively developed countries. Its

share in global exports of goods stands at only 2.5, and in high-tech product markets, about 0.2%. The level of investment activity remains unacceptably low: only about 10% of businesses are engaged in innovations. Russia invests four times less in research and development than China, and forty times less than the U.S. and its allies (NATO countries, the republic of Korea, Japan and Israel (Rogov, 2005).

The Long-Term Development Concept implies that the share of R&D expenses will grow by 2-3% only by 2020, which is absolutely insufficient. Russia should follow technology leaders where knowledge-intensive industries generating an ever increasing intellectual rent develop at accelerated rates, most companies are engaged in innovations, and three fourths of public expenses are used to support and encourage social and economic development processes.

In its current state, the Russian economy, despite its still considerable research potential, is unable to take advantage of emerging growth opportunities drawing on the new economic growth surge. The long economic crisis of the 1990s destroyed the existing mechanisms of large-scale reproduction of R&D results, while no new mechanisms were created. In industrial investment, developers of new engineering solutions and potential investors ceased almost all interaction. At the same time, once foreign advanced technologies became available through investment loans, domestic investment and innovative capabilities lost their attractiveness. Investment has been re-funnelled to foreign engineering capacities, which not only creates a threat that the national economy will lose its self-reproduction ability, but also draws it into a trap of non-equivalent foreign trade. The innovative and investment sectors of the Russian economy need to be 'resuscitated', which implies that research and development processes would be restored, existing developments would be brought to the production stage, and relations with suppliers of component parts and other elements of the research and engineering cycle would be re-established.

Another particularity of the Russian economy that constrains its modernization consists in its deep technological heterogeneity that expresses itself in considerably different profitability levels in different industries. In market environment, low profitability of most manufacturing industries, including its knowledge-intensive sector, sets a barrier on the way to structural and technological economic modernization that cannot be overcome without active government policy. If implementation of such policy is delayed, Russian economy will increasingly lag behind in establishing the new technological order, whose growth will determine the path global economy will take in the next 20 years.

Russia's national riches and remaining research, engineering and intellectual capabilities open a way to opportunities for a breakthrough to the new economic growth wave that offer themselves in the context of a global crisis. In this very period of global structural recession, nations straggling behind global economy majors have a real chance for an 'economic miracle' (a fast rise to the level of developed countries) by rapid development of key industries and factors of the new technological order. As witnessed by global experience in overcoming similar structural crises of the 1970s and 1930s, this requires a rather powerful initial impetus to renovate capital assets on an absolutely new technological basis. Experience of such breakthroughs in emerging industrial countries, post-war Japan and modern China, and even in Russia, demonstrates that the necessary investment and innovation build-up implies an increase in the rate of accumulation to 35-40% of GDP, concentrated in breakthrough areas of global economic growth. To 'stay on top' of the new economic growth wave, investment in the development of new technological order businesses must grow at least by 1.5 a year, and the share of R&D expenses in GDP must reach 4% (Glazyev, 2011).

However, we see that the necessary investment and innovation level exceeds the capabilities of the current financial and investment system of Russia at least twofold. The policy of quantitative

money supply (money base) limitation by the Central Bank was the main constraint of the Russian economic growth throughout the post-Soviet period. The total money supply (M2) created through loans issued by commercial banks was also excessively strictly limited by the Central Bank through banking regulation ratios. As a result, monetization of the Russian economy (the ratio of money supply to GDP), although increased over the last decade from 16% to 45%, remains considerably below monetization levels in developed countries (70-100%) (Ershov, 2000, 2005).

In the 2000s, the structure of the Central Bank's money supply sources degraded as its net foreign assets grew above the optimal level required to ensure reliable operation of the Russian economy and government funds were used to sterilize the dollar-based economy. As a result, mechanisms of economic activity refinancing remained underdeveloped, economy lacks long-term money and internal investment lending sources, while economy evolution is contingent on external demand, which is mainly why it is commodity oriented. The Central Bank almost never (except during the gravest crisis time) refinanced commercial banks and actually discarded its function a 'lender of last resort', which resulted in extremely high risks in bank lending to investment projects in the real sector, while the insurance component of interest rates offered to end borrowers was, accordingly, too high.

As a result of such monetary policy, the capabilities of the financial industry to finance capital accumulation, including by soliciting retail and corporate savings, turned out to be artificially constrained, while the accumulation rate remained one and a half time lower than the savings rate. These capabilities did not meet the needs of real sector modernization, as in the absence of domestic refinancing facilities its profit-making parts were re-oriented to external debt sources, while the rest began to live off their capital assets. The policy of sterilizing 'excessive' income actually meant that cheap long-term money of the government was swapped for expensive short-term loans of foreign banks (Glazyev, 1998). Net annual damage from such policy was measured in tens of billions of US dollars, let alone lost profit from artificially frozen investment and innovative activity. In 2007, the share of foreign debt reached 60% of money supply, while 70% of the interbank market was generated by foreign sources (Ershov, 2011), which resulted in a disastrous collapse of the Russian financial market after international investors fled during the global financial crisis.

The monetary and budgetary policy did not allow the government to launch development of new technological clusters in time and create thereby preconditions for accelerated growth. If this had been done, by the time of the global crisis the economy would have already had growing structures of the new technological order able to absorb capital fleeing from depreciation and to support economic growth. Under such scenario, we would not only have avoided capital flight and output dropdown during the crisis, but would have also attracted international investment in the development of new promising niches for marketing Russian products in the global market. Unfortunately, these opportunities were missed: the inflow of oil dollars were redirected to support the U.S. financial pyramids, while investment in the Russian economic growth remained considerably below global standards.

The results of the pre-crisis policy show that market self-organization mechanisms *per se* are incapable of ensuring an accumulation rate required to modernize the economy. With no government policy encouraging technological breakthroughs, the Russian economy was used as a donor for the U.S. financial system while continuing its stagnation due to the lack of investment that was offset by direct foreign investment and long-term debt only to a minor extent. To build internal sources of long-term investment in economic modernization and growth, the country needs to switch to a tonally new money supply policy powered not by the

Central Bank going long on foreign currency, but by domestic demand for money from the real economy sector and the government as it happens in developed and emerging economies.

Affected by the foreign capital outflow during the crisis 2008-2009, monetary authorities modified their money supply policy, with domestic rather than international sources now playing the major role. However, as soon as the crisis calmed down, they resumed their former practice of money creation against purchase of foreign currencies with its typical drawbacks: lack of connection between money supply and economic policy priorities; its exposure to the global economic and political situation; and continuous commodity-oriented economy. The implications of its resumption are only too well-known: ruined domestic research capabilities and underutilized investment potential, with the range of opportunities narrowed to the servicing of external demand and ability for self-development totally lost (Mityayev, 2009).

This year, the Bank of Russia has been abandoning refinancing tools and reducing its level, extremely insignificant as it is in comparison to developed countries. The Central Bank has raised refinancing rates, requirements to international ratings of securities from the Lombard List, abruptly reduced the list of strategic companies, cut down the maximum term of a 'lombard' loan from 6 to 3 months, and terminated REPO transactions with corporate shares.

If we resume linking money creation to acquisition of foreign currencies in the context of the already started establishment of the new technological order, Russian economy will lose opportunities to gain a place in its structure that can be quite impressive subject to proper engagement of the research and engineering potential of the country. Russia needs to switch to a totally new money supply policy powered by domestic demand for money from the real economy sector and the government so that to build internal sources of long-term investment in economic modernization and growth. Under all global crisis scenarios, growth opportunities of the Russian economy will depend rather on domestic economic policy rather than on external factors. If measures proposed below are implemented, Russia would be able to strengthen materially its position in the global economy by:

- 1) accelerating the rates of building the new technological order and economic growth powered by its long growth wave;
- 2) substantially reinforcing the national banking investment system;
- 3) achieving economic stabilization and setting up a sustainable development area in the Eurasian Economic Community region and, subject to favourable political conditions, in the CIS.

2. DEVELOPMENT POLICY PRIORITY AREAS

The key idea of working out a crisis management strategy consists in accelerating the establishment of basic industries of the new technological order and rapid bringing of the Russian economy to the related growth stage of the new long wave. To this end, resources need to be focused on the development of its high potential manufacturing and engineering components, which requires a goal-oriented national financial and investment policy that includes relevant instruments of monetary, fiscal, industrial and foreign trade policies. They need to focus on building the core components of the new technological order and achieving synergy from new production clusters, which implies that macroeconomic policy must be aligned with long-term technical and economic development priorities. The latter need to be built based on the logic of long-term economic growth, global areas of technical and economic development and national competitive advantages.

From research perspective, the selected priorities must be in line with high-potential areas of the emerging new technological order. From macroeconomic perspective, they must generate an increasing impetus to demand and business activity growth. From structural and reproduction

perspective, priority businesses should, starting from a certain point in time, reach their own path of large-scale reproduction in the global market context and serve as ‘growth engines’ for the entire economy. From social and economic perspective, their implementation must be accompanied with higher employment rates, higher real salaries and qualification of employed population, and an overall growth of public welfare.

Scientific forecasts allow determining key areas in building the new technological order: biotechnologies based on the achievements of molecular biology and gene engineering, nanotechnologies, artificial intellect systems, global information networks, and integrated high-speed transport systems. They should also include other areas that carry the new technological order and represent major demand for its products: space technologies, manufacturing of construction materials with pre-set properties, the nuclear and solar energy industry (Glazyev, 2010). Existing developments in the nuclear, rocket and space, aircraft and other knowledge-intensive industries, in molecular biology, gene engineering and nanotechnologies give Russia real opportunities for accelerating development of the new technological order and changes for leadership in respective areas of the emerging new long wave of economic growth.

It is clear that the choice of priorities not only must be based on cutting-edge technologies available to Russia, but also needs to capture its current position in the global division of labour. In the foreseeable future, a considerable part of Russian industries, including knowledge-based, will operate to support demand for production and processing of raw materials. Modernization of production industries, the energy, chemical and metallurgical industries will bolster development of many related high-tech businesses. There is immense upside potential of technological modernization in agriculture, the tertiary sector, especially in utilities, in transport, and in such welfare industries as education, healthcare and public service.

The new technological order will entail smarter engineering, continuous innovation in most industries and continuous further education in most professions. The large-scale production economy will be replaced by a knowledge-based economy, the large-scale consumption society, by a development society where scientific and intellectual potential and requirements to life quality and green environment will be of paramount importance. Energy and resource consumption in GDP will be drastically reduced. Information, education and healthcare services will prevail in the consumption breakdown. This will predetermine the leading role of science, education and healthcare in economic modernization as fundamental industries of the new technological order.

To be established, the new technological order requires development of new management technologies at accelerated rates, which, along with properly trained human resources, are also a priority of the development policy. We will continue developing automated design systems that will help us to switch to automated management of the entire product lifecycle while minimizing the new equipment implementation and rollout phase.

Basic technologies of the new technological order are unique in that they are highly integrated, which requires a comprehensive policy of their development that would simultaneously provide for clusters of technologically related capacities, relevant consumption environment and human resources.

To overcome a crisis and join the path of successful economic growth, a country must have its own long-term development strategy that provides for systemic research and structural policies to build research and production capacities that underlie the new technological order and a strategic vision in developing and implementing such policies. To be successful, such strategy needs to be based on efficient operation of the national financial and investment system capable

of funnelling capital to the development of new businesses and relying on domestic debt markets. Building such a system requires:

- a strategic planning system capable of identifying economic growth areas with best outlooks, and direct operations of government institutions towards their implementation;
- macroeconomic environment necessary for accelerating growth of the new technological order;
- institutions for financing projects to create and develop manufacturing and engineering facilities of the new technological order and sectors that consume their products.

3. CREATION OF A STRATEGIC PLANNING AND MANAGEMENT SYSTEM

The strategic planning methodology implies availability of long-, medium- and short-term economic development forecasts, selection of technical and economic development priorities, instruments and mechanisms for their implementation, including a system of long-term concepts, medium-term programmes and indicative plans, institutions for organizing respective activities, and follow-up methods and mechanisms of responsibility for achievement of necessary results (Glazyev, 2008).

Certain elements of this system have been set up in the recent years: the government has adopted the Concept of Long-Term Social and Economic Development of Russia until 2020 that sets forth development priorities aligned with high-potential areas of the new technological order development, and put in place federal target programmes and development institutions. The Russian Government has recently adopted a number of large-scale decisions for structural and technological economic modernization that, in their combination, offer significant potential of positive impact on Russian economic growth processes. However, many of them remained unimplemented on the back of the shrinking of public income during the crisis. Moreover, such decisions cannot be efficiently implemented as existing and proposed framework and strategic documents are not aligned under uniform drafting standards and differ in terms of elaboration depth, format and contents. They insufficiently capture the spatial aspect, inter-industry and inter-regional relations, and production and consumption balances in specific territories.

An instrumental component of strategy drafting consists in the structuring of contents of social and economic development programmes already being implemented or drafted. Their targets and implementation measures need to undergo systemic alignment that will require estimating their resource balance, identify potential contradictions between targets and instruments of economic policy, justifying requirements to their synchronization, identifying bottlenecks and setting an objective to complement the existing range of programmes with new ones so that to ensure the necessary level of impact on the course of reproductive processes and to minimize adverse systemic effects. These efforts need to incorporate once again balance methods of planning subject to the limits of scope and forms of their application determined by market mechanisms. Social and economic, industry-specific and territorial strategic planning policies need to make up a uniform system and have a common methodological basis to ensure their alignment and hierarchical interconnections between different elements of the strategic planning system.

At the federal level, such system might comprise the following documents:

- long-term (25 to 50 years) forecasts providing for various economic development scenarios depending on different options of changes in external and internal objective factors, and on social and economic policy options;
- medium-term (10 to 12 years) concept of social and economic development and the general pattern of development and placement of productive forces, aligned with such concept, that determine key goals, tasks and priorities of social and economic

- development of the country and the composition of target government programmes at different levels;
- an indicative three-year social and economic development plan that sets out development targets and a system of measures to achieve them ('indicative' means that such targets serve as benchmarks for non-government management bodies, but are binding on all government authorities, including when explaining directives to government representatives in corporate management bodies);
 - medium-term government (federal, regional and industry-level) programmes aligned between each other and interconnected in terms of investment that ensure achievement of development targets;
 - annual budgets and three-year budget plans (on a rolling basis) that are drafted based on targets set out in the concept, indicative plan and medium-term programmes.

Forecasting is an integral component of building social and economic strategy. Forecasts help to build several aligned variants of social and economic policy and scenarios of Russian economic development to select the preferable social and economic policy. Accurate targeting is a prerequisite for strategic planning, including division of targets: criteria of successful development (fundamental goals and secondary objectives with commensurable macro-indicators) and instrumental objectives.

We also need to introduce standards of responsibility for achievement of planned results by using necessary macroeconomic policy tools, including legal standards of economic liability of entities and administrative liability of managers for achievement of development targets set by the government. To this end, we need to adopt a federal law 'On Strategic Planning' that will define drafting procedures and status of planning documents that will need to be captured in planning budget, monetary policy and other administrative decision-making. It would also be expedient to introduce project economy institutions into the market economy of the type existing in Russia. The notion of project must be legally clarified and set out by law.

Implementation of the development strategy needs to include active industrial policy that will support expansion of the underlying industries of the new technological order and stimulate 'growth points'. Knowledge-intensive industries with high multiplier effect encouraging economic and innovative activity in related businesses are of paramount significance. Bolstering demand for domestic equipment through relevant regulation of government procurement and procurement by government-controlled and government-backed businesses must become another important element of industrial policy along with creation of large government-backed integrated corporations.

The programme- and project-based approach must also underlie regional development policy. Underestimation of the regional and spatial aspects in the public administration system at the federal level leads to loss of financial, labour and natural resources, to excessive concentration of economic activity in one regions and underutilization of the potential of others, and to accumulation of 'critical mass' of interregional disproportions (Fetisov, 2006a).

The multitude of entities conducting regional policy at the federal level results in the need to coordinate activities of federal government authorities with regard to the same administration targets (macro-regions, constituent entities of the Russian Federation, territorial clusters and individual 'growth points') between themselves and with government authorities of constituent entities of the Russian Federation and municipalities. A system of interlinked forecasts of social and economic development of Russia and sub-federal entities and a general scheme for development and distribution of productive forces must serve as tools for such coordination.

The spatial aspect must be clearly designated in all major parts of the uniform strategic planning system. This will help identifying additional constraints to potential economic growth rates, and work measures to speed up such rates by streamlining the regional economic structure. Intensification of innovative development processes requires transition from the regional levelling policy to the creation by the government of an institutional environment that would help building a polycentric spatial structure of the national economy and searching for new territorial sources of competitiveness (Tatarkin, 2011).

A coordinated system of regional policy institutions needs appropriate legal framework. First, we need to finalize and adopt the Concept of Spatial Development of the Russian Federation that would form a system of spatial priorities and would specify the place of territorial development strategies and programmes in the strategic management system. We also need to finalize and adopt a federal law on regional policy that would provide for: a hierarchical system of aligned levels, institutes and powers of regional policy (federation – federal district – constituent entity – municipality); a uniform legal and regulatory framework for drafting and finalizing planning and forecast regional development documents that would allow different levels to remain independent while serving a structural elements of a single management system; mechanisms to follow up compliance with agreed obligations and to ensure respective responsibilities of management bodies.

Development of transport, telecommunication and utility infrastructure is an important element of the strategic planning system.

At present, demand for transport services is only covered by 60-70%, while downtime takes up to 40% of total time of transport services. The transit potential of the Russian territory remains unutilized. A highly developed transport communication system, including high-speed railway and motor transport, a developed network of airlines, transport hubs and logistical centres may become a powerful economic modernization and innovative growth driver.

4. MAINTAINING NECESSARY AND SUFFICIENT MACROECONOMIC CONDITIONS FOR MODERNIZATION AND SUSTAINABLE DEVELOPMENT OF RUSSIAN ECONOMY

The necessary macroeconomic conditions for successful development of Russian economy ensue from the requirements to its radical modernization on an advanced technological basis. They include: ensuring large-scale reproduction in high-potential areas of the new technological order development; maintaining relate favourable price proportions; setting up a system for support of innovative activity; creating mechanisms of long-term lending to investment projects. To implement these conditions, the government has in place instruments of fiscal, monetary, anti-trust and price policies.

A growth-oriented fiscal policy implies a lower tax burden on all types of innovative and knowledge-intensive activities and priority budget allocations to support government expenses that are critical in building the new technological order. Based on its structure and experience of major economies, we need a considerable relative and absolute increase in expenses for healthcare, research, education, support to investment and innovation activities, and infrastructure modernization (Rogov, 2005). Such financing increase must be focused on high-potential areas of the new technological order development in which Russian companies have competitive advantages.

Economic modernization and growth require substantial financial resources that the government currently lacks, including due to the huge scale of criminal turnover and large-scale capital

outflow. In 2010, legal net outflow of resident capital by the private sector (NORCPS) was 40 billion dollars, and illegal, 38 billions, while non-resident capital inflow (43 billion dollars in 2010) does not compensate for the resident capital outflow (78 billion dollars, net of capital outflow by the public sector).

We also should take into account that capital outflow leads to the lack of supply in the debt market, which is covered by foreign loans, which further create large flows of return on foreign investment (in 2010, paid-out income was 86 billion dollars, and received income (mostly by the government) was only 37 billion). A notable decrease in tax income results from the exchange of foreign loans for resident capital outflow (Bank of Russia, 2010).

If we introduce a number of measures restricting free capital outflow, especially illegal outflow related to tax evasion and embezzlement of corporate funds, the government would additionally receive several tens of billion dollars a year. They include: VAT to be refunded to exporters only after export receivables are paid; VAT to be charged on import advance payments to non-resident suppliers; sanctions for overdue payables under import contracts, and criminal and administrative prosecution of bad faith managers who connive at withdrawal of corporate income to foreign countries (Petrov, 2010a).

We need to engage reserves for increasing government income that have not been used so far to maintain government expenses at a level necessary to support economic modernization (Petrov, 2011): by bringing export duties and mineral extraction tax on natural gas in compliance with oil taxes in terms of units of oil equivalent; setting export duties on imports of a limited list of energy-consuming and hydrocarbon-consuming goods (metals, oil products, mineral fertilizers, etc.) *pro rata* to the amount of energy and hydrocarbons consumed to produce them; introducing a tax on capital withdrawal and foreign exchange transactions; transferring all profits of the Bank of Russia to the federal budget; reintroducing a progressive income tax; imposing a progressive environmental tax (charges for environmental pollution with different rates for pollutant emissions within and beyond existing limits, respectively).

Along with mobilization of government income sources to bolster economic activity, we need to expand financial capacities of companies by entitling them to re-assess their capital assets at their replacement costs and apply an accelerated rate of depreciation for newly commissioned equipment; by restoring accumulation accounts in financial accounting for depreciation allocations and introducing mandatory follow-up of their intended use; by relieving companies of property tax payable on the active part of capital assets acquired by them for the first three years of their operation; by providing for refunding rates for profit tax payable in the reporting period with regard to funds used for technical re-equipment.

The chronic lack of funds for development purposes is mainly due to the financial policy being oriented on the existing capabilities of the government budget that do not allow simultaneously solving the tasks of maintaining current social and economic stability and structural and technological modernization. The latter task can only be implemented by developing bank loans. The loan fund has been designed to serve this purpose, but as an instrument of the Central Bank of the Russian Federation, it is not used to implement social and economic policy of the government. To trigger its use and develop the loan market we need apply on a large-scale basis targeted refinancing of commercial banks as part of objectives of fiscal, industrial and structural policies while drastically increasing the role of internal sources of money supply.

Monetary policy instruments should ensure appropriate money supply for large-scale reproduction and sustainable development of economy. At the time being, the monetary system injects less money in the economy that it receives from exports, foreign loans and investment,

thereby narrowing its reproduction and constraining economic growth. To remove such artificial restrictions of the monetary policy run by the Bank of Russia, we need to add tasks for maintaining employment levels to its functions as practiced by many developed and emerging economies.

The economic development theory and practice of developed nations demonstrate that there is a need of a comprehensive approach to money supply generation as part of economic development goals and objectives of fiscal, industrial and structural policy while relying on internal sources of money supply and mechanisms of refinancing of lending institutions (including timely provision of current liquidity; wider long-term debt opportunities; liquidity funnelling to priority sectors).

To build optimal money supply mechanisms designed to lend the real economy sector and investment in its priority development areas in the end of the line, we need to condition access by commercial banks to refinancing from the Bank of Russia by their commitment to use such borrowings to finance production capacities and priority economic sectors. This could be done through a combination of well-known and proven methods practiced by developed economies: indirect (refinancing against pledge of bonds, promissory notes and other debentures of solvent business) and direct (co-financing of government programmes, government guarantees, loans to development institutions) methods of money supply building by the Bank of Russia. The refinancing rate must not exceed the average rate of return in the manufacturing industry, while loan maturities need to be in line with typical durations of research and manufacturing cycle in the real economy sector (3 to 7 years) (Fetisov, 2008). We should not rule out potential money creation to meet government needs as practiced by the U.S., Japan and, partially, by the European Union through central banks acquiring public long-term debt instruments (bonds) (Ershov, 2011).

Another rational way to apply money creation is to refinance development institutions as practiced during the ‘economic miracle’ period and still practiced now in Japan, emerging industrial countries and in China. It would be expedient to build up materially the resource capabilities of existing and launch new development institutions that are not only oriented at investment financing, but also provide education loans, and venture- and micro-loans. In certain cases, pledge requirements may be discarded when loans are issued to implement investment projects approved by the government in line with the approved priority development areas. Development institutions should place such loans on terms of targeted financing of specific projects where money can be drawn down only to cover agreed expenses without transferring cash to the borrower’s account.

The Bank of Russia’s emission mechanism in refinancing commercial banks against their claims to real sector businesses and subject to the increase in financial needs of growing economy priority areas must become the main source of financing modernization and economic growth. The Bank of Russia’s mechanism for refinancing commercial banks and development banks must provide the banking sector both with current liquidity and with opportunities to generate long-term money, and the government, with a source of long-term loans to priority growth areas.

By using such instruments and institutions as various refinancing rates, the Lombard List of the Bank of Russia, development banks and corporations, government guarantees under loans taken by companies to implement priority investment projects, and subsidizing interest rates on such loans, the government may selectively influence monetary flows to ensure both large-scale reproduction by businesses and favourable environment for economic activity growth in priority development areas. The Bank of Russia must fully begin to implement its function of the last instance lender, for which will require important efforts on its side to monitor solvency of

borrowers and will also entail stricter requirements to banks regarding the quality of their analysis and selection of investment projects.

Measures to expand the loan market need to be supported by measures to build an environment for their full-fledged economic coverage. For example, larger financing of home building or infrastructure building needs to be in line with capabilities of construction companies and the potential for building up supply of necessary materials. Market is rarely able to automatically maintain an optimal balance and often constrains potential economically positive multiplicative effects. As a rule, market balances demand and supply in the context of short-term lack of demand of domestic goods and services by expanding imports of similar goods at accelerating rates. Later on, importers attempt to maintain and expand the market sector gained by them as a result of the market juncture by using well proven methods (starting from advertisement and a network of dealers and ending with Russian manufacturers being ousted through provisional dumping, bribes to officials or management of retail chains).

To avoid injection of unsecured money in the economy, the Bank of Russia may refinance commercial banks against pledge of long-term corporate bonds and promissory notes with an adjustment multiple of 50%, or against guarantees by the government and regional government authorities, with adjustment multiples of 70-80%, which will make sale of such debentures of the Bank of Russia by banks unattractive. In such situation, we may drastically expand the Lombard List of the Bank of Russia by including in it promissory notes of solvent companies operating in priorities areas of building the new technological order in line with a list approved by the Russian Government, sureties by corporate customers of federal target programmes, and bonds of development institutions and government-owned corporations.

Clearly, the suggested emission mechanism must only provide cheap long-term loans for investment in Russian economic growth, rather than encourage capital outflow. To this end, commercial banks must only be refinanced against commitments by Russian companies. The Bank of Russia will need to gradually stop accepting foreign securities as security under its Lombard List and other loans.

In the context of structural changes, the size of the interest rate and access to loans become crucial. Production capacities and human resources released as a result of the manufacturing dropdown can be involved in projects for development of new technologies only if there is access to inexpensive loans. The policy that restricts money supply resumed by the Bank of Russia provokes excessive interest rates and hinders access to loans by manufacturing industry businesses. On the back of lower income, they have to reduce their manufacturing capacities having no financial ability to modernize capital assets and upgrade their products. The largest and most profitable companies take foreign loans at interest rates substantially lower than those of Russian banks. Other companies cannot be modernized without a government policy that specifically provides for their financing.

The drastic expansion of the loan market for the manufacturing industry required for modernization and growth of the industry can be ensured by substantially expanding refinancing of commercial banks against pledge of promissory notes issued by solvent manufacturing businesses at a rate not higher than 3-4%, with a cap on the bank margin depending on the amount of loan, availability of government guarantees for such loan, and solvency of the borrower (assessed based on ratings by national rating agencies).

To avoid overflow of cheap loans to the speculative market to generate financial bubbles, return on government bonds must be several times lower than that of the refinancing rates. Moreover, to confine money appreciation and increase its supply to the real sector, the Bank of Russia

needs to stop issuing bonds and make other borrowings, and start stimulating application of low yield loan and deposit schemes (in mortgages, education loans, bank loans to priority industries, projects and enterprises). It would be reasonable to stop refinancing banks against pledge of debt financial instruments that are not used to fund investments in capital assets and innovations. It would be useful to impose a leverage limit not only on banks, but also on non-banking companies, setting a 2x cap on the latter, with the ratio of their financial assets (securities, cash, foreign currency, receivables, etc.) to their equity not to exceed ½. Regulatory authorities must prevent both banks and non-banking companies from accumulating excessive debt (Fetisov, 2009).

In calculating liquidity, capital adequacy and other ratios, the Bank of Russia must not consider obligations of non-residents and foreign countries as more reliable and liquid than similar obligations of residents and the Russian Government. We need to introduce national standards for operations of rating agencies, set up rating evaluation standards and bolster development of domestic rating agencies.

It would be helpful to cancel mandatory provisioning against long-term retail deposits that are subject to mandatory insurance to expand the resource base of the banking system (instead of the current ‘double encumbrance’). Furthermore, the Bank of Russia might provide banks with pledge-free loans in the amount of a part of fixed-term retail deposits in roubles, provided that they are used only to fund investment in capital assets of manufacturing businesses, which will encourage creation of ‘long-term money’ sources. Loan facilities that are subject to ongoing follow-up by the bank must be used to ensure intended use of loans.

To ensure a stable lending environment, we need to prohibit commercial banks from unilaterally revising terms of their loan agreements.

Higher efficiency of foreign exchange control that should prevent illegal capital outflow, which is typically related to tax evasion, is a pre-requisite for a transition to the policy of long-term and cheap money for the real economy sector. To this end, we will need to include the tax and customs services into the system of foreign exchange authorities, build a unified information system of exchange control providing for electronic declaration of transaction passports to be included in databases of all foreign exchange control authorities, and take measures to prosecute management of companies that connive at accumulation of overdue receivables under export and import transactions.

Long-term stabilization of the real rouble exchange rate must become an important element of the growth policy. Otherwise, we will be unable to cut down interest rates and expand loans to the real economy sector to the necessary level as banks might transfer their debt resources to the foreign exchange market attempting to obtain exorbitant profits from rouble depreciation.

We would need to ensure ongoing adjustment of the nominal rouble exchange rate proportionally to the relative decline of its purchase ability, while avoiding excessive pressure on the rouble rate in either direction both by foreign trade players and by speculative capital.

On the back of relatively high global prices for hydrocarbons and other commodities that form the backbone of Russian exports, we would need to charge export duties directly in US dollars and in Euros to cut down thereby supply of foreign currencies in the market so that to avoid opportunistic increase in foreign currency supply and excessive pressure on rouble appreciation, which is fraught with the ‘Dutch disease’. This money should be accumulated in government development institutions and used to import foreign technologies, protect intellectual property of Russian right owners abroad, and substitute foreign loans by government-controlled

corporations. The proposed method of protecting economy against implications of an inflow of 'oil dollars' instead of sterilizing 'excessive' money creation to acquire foreign currency by freezing 'oil income' of the government in the reserve fund will allow avoiding losses and lost profit from investing this money in low yield Western government bonds and other similar instruments quite risky in the context of a global crisis. In the beginning of this decade, with a surplus budget, such losses counted tens of billion roubles each year, which has been skilfully concealed through methodological drawbacks of methods used to evaluate efficiency of the use of public foreign exchange reserves.

If global prices for commodities exported by Russia go down, to prevent opportunistic rouble depreciation, we can increase foreign currency supply required for this purpose by re-imposing the mandatory requirement to exporters to sell a part of their foreign currency receivables. If there is a threat of 'flight from rouble', we would need to constrain acquisition of foreign currency by non-banking entities and individuals for purposes unrelated to payment under import contracts and repayment of foreign loans. To avoid, among other things, that borrowings are used for foreign exchange speculations, only lending banks will be permitted to sell foreign currency for money lent by banks and will be obliged to follow up their use.

To prevent currency speculations against rouble threatening stability of its exchange rate, it would be helpful to introduce ever tightening restrictions to the foreign exchange position of commercial banks to ensure its gradual decrease. Moreover, we may introduce pre-agreed timelines for money to stay in the market by linking timelines for inflow and outflow of speculative capital between each other. In the event of default on such timelines, the government should take respective tax and financial measures. The government may also use such a tool as expanding the spread between the buyer's and the seller's rates under rouble transactions (which will eventually imply exchange rate losses for speculative players when buying foreign currency for roubles). The same approach would also be useful for short-term assets ('hot money') placed in deposits or directed to acquire securities.

To make foreign exchange speculations less attractive to population, it would be helpful to restrict guarantees for retail deposits with all banks included in the deposit insurance system to rouble deposits only, with a simultaneous increase of mandatory provisioning ratios for deposits in foreign currencies.

To prevent further losses of the Russian financial system due to a collapse of financial bubbles and pyramids of foreign issuers, we need to impose restrictions on the amount of off-balance foreign assets and liabilities to non-residents under Russian corporate derivatives; abandon those types of insurance liabilities under which cannot be met in the event of a macro-economic crisis comes. It is also necessary to restrict investment by Russian companies in foreign securities, including U.S. Treasury bonds and sovereign bonds of other foreign countries with high budgetary deficit or public debt. Risk factors for bank provisioning for securities issued by the Russian Federation must be lower than for securities issued by foreign countries and their residents.

The scope of rouble application should be expanded to increase stability and robustness of the Russian foreign exchange and financial system by supporting expansion of national financial institutions to markets related to Russia. For a wider application of roubles in international settlements, we need to increase the share of settlements in roubles in foreign trade on a consistent basis, including exports of commodities, metals, military equipment, ensure rouble loans to exports of Russian goods, and minimize the cost of transactions for exchange of national currencies of countries integrated with Russia. The latter task can be implemented through the Intergovernmental Bank of CIS that greatly reduces transaction costs of foreign exchange

operations drawing on its correspondent relations with central banks of the CIS countries. At the same time, we will need to engage other international financial institutions controlled by Russian capital (IIB, IBEC, EDB). It is expedient to separate recognition of rouble funds in separate accounts subject to respective terms that allow accounting for: 1) roubles for domestic turnover and 2) roubles used in foreign trade turnover (primarily in relations with members of the Customs Union and the Common Economic Space).

Another important area of the crisis management strategy is to expand the domestic market through the Customs Union and later through the common economic space of the Eurasian Economic Community. Integrationist associations expand growth opportunities of Russian economy, increase its resistance to external shocks, and augment the scale of operations and competitive advantages of Russian companies. By implementing a common crisis management strategy, the countries of the Eurasian Economic Community enhance their opportunities to overcome the crisis and join the accelerating growth path.

Once all the above measures are taken, the country can start building up money supply as a prerequisite for maintaining domestic demand, and enhancing investment and innovative activities. The implementation of this objective must not be hindered by monetarist dogmas, generally accepted, though many times disproved by empirical research (Glazyev, 2004; Volchkova, Denisova, and others, 2010), including those that link economic growth to preliminary (preventive) reduction of inflation through quantitative restriction of money supply.

The experience of transition to market economy by Russian and other post-socialist countries has proven the deficiency of the policy of suppressing inflation 'at any cost' rather than in parallel and consistently with cutting down resource-intensiveness of the economy through structural and technological modernization. This policy did not address the main reasons of inflation: lack of competition and low efficiency of economy. Inflation must be suppressed by cutting down specific production costs per unit, including their monopolistic and criminal components. This requires good-faith competition and a modernized economy based on the new technological order that features much lower energy- and resource-consumption of the manufacturing industry.

It should be noted that the proposed money circulation policy does not mean abandonment of inflation targeting. It provides for benchmarks and, where necessary, restrictions with respect not only to the price index, but also to fluctuations of currency exchange rates, interest rates, dynamics of money supply at levels required to ensure economic modernization and development. We will also be able to ensure compliance with the above restrictions (and achieve the main objectives of economic policy: maintain high economy, welfare and employment growth rates), as the number of independent instruments used for government regulation of monetary and foreign exchange sectors of economy exceeds the number of such benchmarks.

The above measures will allow ensuring the necessary level of money supply to increase investment and innovative activity to modernize and develop Russian economy. Unlike current issuers of global currencies, the crisis faced by Russia is a structural crisis generated by low efficiency and commodity exposure of the economy aggravated by its chronic undermonetization, rather than by excessive money supply and related financial bubbles. While suffering from acute shortage of investment and loans, the Russian economy has been depleting its resources for a long time. To recover of the domestic market, enhance innovative and investment activity for modernization and accelerating development, the economy requires a considerable increase in the monetization level, lending capacity and strength of the banking system.

Under the proposed macroeconomic policy oriented at economic development and modernization, money supply must be determined by demand for money by the real sector and government development institutions and regulated by the refinancing rate. This approach does not require quantitative restrictions of money supply that fail to reduce inflation, but rather suppress business and investment activity, as shown by multiple statistic studies of respective dependencies in many countries.

We should highlight once again that the transition to the proposed model is unrelated to the inflation rise, for the increase in money supply is offset by a growing supply of goods, while investment in replacement of capital assets and development of new technologies lead to lower costs and emergence of new consumer properties and, accordingly, lower prices. At the same time, to suppress inflation expectations it is expedient to take well-known measures to stabilize prices, enhance competitive environment and neutralize abuse of monopoly.

Implementation of the above approach to monetary policy providing for a substantial increase in money supply requires a drastically more efficient anti-trust policy as an instrumental factor for containing inflation processes. Along with more intensive application of its standard measures to terminate price collusions, the economy will need a systemic policy relying on legislative limits and procedures of price regulation.

Free prices are efficient in theoretical economic models with free competition. The real economy faces monopolistic pricing processes that need to be combated mostly by using economic rather than administrative measures. Large-scale reproduction of high-tech products assumes that favourable price proportions will be maintained. The government must encourage investment in development of new technologies to cut back costs and improve product quality by granting tax preferences to companies.

Combating monopolization of commodity, food and financial markets is of specific importance in suppressing inflation. To ensure competitive pricing in the commodity sector, we need to create a large exchange-based centre of pricing for export goods that will combine all segments of the commodity and financial markets. Drastic measures must be taken to ensure competition in the retail sector where retail chains are combining with no control. Channels for direct supply of agricultural products to urban markets need to be created by establishing interregional trading and procurement companies with participation by constituent entities of the Russian Federation to demonopolize the food market. To develop competition in the banking sector, we will need to abandon the policy of artificial combination of banks by focusing the Bank of Russia's efforts on enhancing quality of banking and efficiency of the financial intermediation system.

Anti-trust control measures must also be used to protect strategic economic assets and guarantee that welfare products (electricity, fuel, communications, transport, food market infrastructure, etc.) are generated by strategic companies. Acquisition of strategic and critically important national enterprises by foreign capital (or acquisition of their debts), and transfer of ownership rights to them to offshore zones must be prohibited. To protect domestic manufacturers against competition by foreign countries, the country needs to actively apply technical regulation measures, price and non-price restrictions, anti-dumping and special duties by recurring to regulation instruments of the Customs Union. Measures protecting financial markets against speculative attacks and national assets against takeover by organizers of financial pyramids using unlimited support of foreign emission centres acquire special importance in the context of a global financial crisis.

Large-scale crisis management measures taken by the U.S., E.U. and Japan were accompanied by an explosive increase in emission of global reserve currencies, which resulted in excessive

liquidity in the global financial market, new risks that 'hot' capital will overflow to national financial systems for speculative attacks, new bubbles in commodity and stock markets, including due to resumed emission of 'junk' bonds. In the context of growing chaos and turbulence in global markets, a system needs to be put in place to defend against threats to economic security that must have protective contours of financial, distribution and property systems. Measures for protection of the Russian financial market against destabilization threats would need to include measures to ensure transparency and regulation of off-balance operations by banks and companies, to build a general access system disclosing information on issuers and professional market players. To protect financial institutions against destructive fluctuations of the stock market, it is expedient to insure loan risks, ensure stable evaluation of pledges and limit margin requirements in the event of a force majeure situation across the economy, and develop methods for property appraisal at its real value. We also need to provide for abandonment of margin requirements to borrowers by the Bank of Russia, government-linked banks and recipients of subordinated loans. Banks need to be able to transfer securities (shares and bonds) traded by them into their investment portfolios at acquisition cost.

Restoring Russian jurisdiction over ownership rights to Russian assets is of special importance for ensuring national security in the context of global instability. A situation where over 80% of them are registered in offshore zones, with up to 80% of their operations also conducted in offshore zones gives rise to a threat that the Russian economy would be taken over and colonized by foreign capital (Kheyfets, 2010). It will be considerably aggravated due to the above-mentioned ever growing avalanche of dollars dumped by the U.S. monetary authorities to other countries to acquire real assets and dissipate the dollar financial bubble. Urgent measures need to be taken to set up a unified depository for ownership rights to Russian assets by obliging their holders to subject themselves to Russian jurisdiction.

The financial market also needs to be brought in order, including through: enhancing supervision over financial position of professional market players, market pricing and risk levels; creating a national depository and settlement and clearing corporation; introducing prudential supervision and requirements to public disclosures by stock market players; setting up compensation funds of professional players to cover risks of their default on obligations to customers; and regulating operations of financial conglomerates and their aggregated risks.

Abandoning services of major foreign rating agencies that have shown their biased, preferential and unfair approaches in evaluating creditworthiness of borrowers is an important pre-requisite of economic security. They systematically overestimated ratings of U.S. companies and underestimated ratings of companies from emerging markets, which destabilizes the latter, artificially degrades their investment attractiveness, result in gigantic unjustified losses and create a menace to national financial systems. The Bank of Russia should only use ratings of Russian agencies, and results of its own monitoring, including in refinancing bank loans and assessing compliance by them with prudential regulation ratings.

It would be helpful to set up a rating agency for the Eurasian Economic Community that would use a benchmark economy model without budget and payment balance deficit, with a stable low refinancing rate and a reliable financial market regulation mechanism to build its rating system. Domestic financial infrastructure also needs to be set up as soon as practicable, as regards consulting, audit, appraisal and other research agencies. For this purpose, it would be reasonable to oblige government-owned companies to use their services.

5. INSTITUTIONAL SUPPORT TO DEVELOPMENT POLICY

Although Russia has built a market economy on the whole, it still materially lags behind performance levels of the Soviet economy of 20 years ago in terms of efficient use of resources. The reason lies in numerous institutional traps that hinder normal operation of both market and public institutions, including due to the lack of real mechanisms ensuring responsibility of decision-makers. Successful implementation of the above measures for economic development implies that requirements to management needs to become drastically stricter, strict mechanisms ensuring responsibility for achievement of targets and competition for best performance need to be introduced.

Imperfection of the institutional, legal and regulatory framework is not a reason to abandon any efforts for structural and technological economic modernization and reduce economic policy to development and implementation of innumerable reforms. As Russian and foreign experience shows, if the economic development policy is substituted with permanent economic reforms, this will entail changes in criteria for assessment of development results: fundamental indicators that describe welfare growth and employment levels, economic development rates and economy competitiveness are substituted with 'instrumental' indicators that reflect the progress or 'rates' of reforms. A rational trade-off needs to be found in distributing resources between policy objectives of maintaining current social and economic stability and implementing structural and technological modernization.

Improvements to institutions of the government as the developer of 'the rules of the game' and arbitrator responsible for compliance with such rules, a regulator and an owner at a time plays a crucial role in institutional support to development policy. The arising conflict of interests should not be settled by removing any of these functions as the government needs all of them to implement its development policy. As practice shows, privatization of strategic assets deprives the government of its ability to guarantee stability of relevant markets and often results in abuse of monopoly, lower efficiency and decline in respective economic industries. Just like appointment of independent directors to manage government-owned corporations by, such privatization does not secure companies against incompetent governance and even bankruptcy.

Another approach to overcoming such conflict of interests consists in implementing reforms aimed at institutional division of functions of the government as an economic policy regulator and an owner. The regulator's functions in this case remain with executive authorities, while it is advisable to concentrate the owner's functions in the hands of the government-owned system of holding entities.

In identifying an optimal combination of government regulation and market self-organization institutions, we need to capture the humanitarian nature of the new technological order, its strict requirements to the system of reproduction of intellectual potential: science, education and personnel training, and to establishment of cultural and information environment that facilitates a transition to the knowledge-based economy and to the innovative development path. Leaving these sectors exposed to the 'free play of market forces' often leads to their degradation and undermines large-scale reproduction of the key factor of modern economic growth, i.e. human resources. Among other things, reforms of the education system based on the principles of market fundamentalism entail rapid segmentation of the education services market and degradation of universal education.

We need to retain government control, regulation and financing of the educational and cultural system and substantially enhance the role of government institutions in encouraging innovations. The creative component in school curricula must be drastically expanded, the networks of

children art institutions needs to be restored, inventive problem solving methods must be studied in higher and secondary vocational schools, while the purely entertainment model of electronic media needs to be replaced with an informational and educational model.

Implementation of measures proposed above to achieve the objectives of modernizing and developing Russian economy, enhance investment and innovative activities implies considerable changes in the social and economic and research and engineering policy run by the government. In any event, they are associated with more efficient government regulation of the modern mixed economy. Non-systemic economic reforms based on the principles of Washington Consensus (consistent deregulation of economic activities, privatization of government-owned enterprises, and restrictive monetary policy), while retaining a overblown, inefficient and corrupted government administration, high taxes on return on labour and capital, and 'manual' administration methods caused numerous market and government failures. Such failures prevented from efficient implementation of the research, natural and human resources of the country and led to their collapse and degradation. The economic liberty of individuals and organizations in combination with high tax burden and administrative rent imposed by public servants generates large-scale tax evasion, capital outflow, tremendous levels of shadow turnover, criminalization and corruption, which actually entails lower efficiency of market mechanisms and poorer operation of the government regulation system.

The solution to the existing institutional trap does not consist in lower economic liberty or withdrawal of the government from economy. International experience witnesses that successful economic growth assumes availability of, first, a highly competitive private economic sector dominated by capitalistic corporations and banks with efficient market self-regulation mechanisms; second, a system of efficient institutions of economic government regulation; and, third, a developed and also efficient public welfare sector. It also should be underlined that objectives of synthesizing a rational economic regulation system in Russia cannot be achieved by using only existing samples and solutions. The best global practices are insufficient to meet challenges of a globalized economy with a common financial market and with no common government regulation system.

The proposals described above capture both international practice and specifics of Russian economy, as well as the state of its manufacturing technologies, institutional and social subsystems. On the whole, Russia still disposes of sufficient foreign exchange resources and reserves of natural resources to finance new industrialization of Russian economy and to modernize it based on high technologies of the current technological order. The Russian financial system has not been completely incorporated into global financial pyramids yet. This allows us to shut off channels through which the Russian financial system is 'contaminated' with 'toxic' speculative instruments by reorienting it to internal financing sources and by funnelling savings to support innovative and investment activity in the most promising development areas of the Russian economy. The availability of natural resources and defence potential gives us incontestable opportunities to run an independent policy: even under negative scenarios of another global recession, Russia has the necessary resources not only to survive, but also to develop at accelerating rates.

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