ESTABLISHING DEPENDENCE OF “SUPERCYCLES”
AND PROBLEMS OF DEVELOPMENT OF THE DOMESTIC
SOCIOECONOMIC MODEL

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Under the conditions of exacerbation of the crisis, problems of managing cyclic development of the Russian socioeconomic system are gaining special importance as it is necessary not only to level various crisis tendencies, but also to foster accelerated transition of the system to a new stage of development. The article presents the results of research into the conditions of formation of the resource-based model of economic development in Russia, as well as the problems of the economic environment, which has had an impact on the formation and crisis state of the domestic socioeconomic model of development. Basing on the theoretical and methodological analysis conducted, “supercycles” are defined as an undulatory process of industrialization in large countries causing increase in demand for raw materials. The authors’ model of the nature of a modern supercycle is presented, which allows for predicting the main tendencies in the development of technical and economic processes. Dependence of Russia’s participation in the international division of labour on foreign policy factors is substantiated within a historical context. The problems of efficiency of the state participation in economy under the conditions of operation of agreements on production sharing and formation of the anti-crisis programme are considered. It is shown that preservation of the adverse regularity in placement of factors of production and income from them is of stable nature, and in the age of globalization this relation is only becoming stronger. Therefore, for the purposes of economic security, import substitution policy comes to the fore. Introduction of preferences to the practice of profit taxation for the development of production cooperation on the basis of accounting branch profitability is suggested among the key actions. The authors confirm that there is influence of global economic environment on the choice of a country’s model of socioeconomic development. The phenomenon of “resource curse” has to be realized at earlier stages of the development of a society’s socioeconomic model in the developing countries, which play the role of resource suppliers in the international division of labour, lag behind in technological development, have a weak position within international organizations, have no opportunity to influence economic environment and whose financial and currency dependence on the developed countries is rather high.

Keywords: economic environment, industrialization, countries of the OPEC and Russia, supercycles, production sharing agreement, oil and gas complex, reindustrialization, resource curve, socioeconomic model.

The management problems of cyclic development of Russia’s socioeconomic system under the conditions of aggravation of crisis, are of particular importance as it is necessary not only to counter-balance different crisis trends, but to help accelerate the transition to a new stage of development. The process of transformation of socioeconomic system is complex, long-term and structural saturated phenomenon foremost covered by the concept of environment. The emergence of opinions on the nature of cyclical development is primarily due to the synchronization and layering of the negative trends in production and consumption in the process of world development, the increasing of the speed of the crisis trends; moreover, the current counter-cyclical governmental regulation does not cope with the changing objective conditions.

Many authors focus on the definition of the nature of the current crisis. The most common interpretation of the concept: the current crisis is regarded as a natural phenomenon, related to long-term megatrends of global development in all structural elements of the system: the industrial, structural, labor, social, political and geopolitical and characterized as systematic [1, c. 60]. This research aims to evidentiate the actual problems of economic conjuncture that influenced the formation and the state of crisis of socioeconomic development model on Russia. S.S. Gubanov had fairly remarked that the government's
misperception of the idea that it is possible to upgrade the raw materials export model [4, p. 4–7] (the deep historical roots of its formation and cyclical development of its systems were not taken into account) was taken as the basis when developing the "Strategy 2020" in 2008.

The modern scientific community interprets the phenomenon of "supercycle" in different ways, various discrepancies are found in the definition and periodization. "Supercycle" has various rendering from power engineering, raw to the stock exchange [20]. The collation of "supercycles" with the concept of long waves by comparative and factor analysis method had been carried out within this research. It revealed the problems and ways of development of the national socioeconomic model. For a long period of time, since oil shocks of seventies, the source of growth of the domestic economy had been the export-resource model of development that had an objective foundation—the changes in demand for oil and other raw materials in the industrialization process of developing countries, which gained their independence in the process of disintegration of the colonial system of the world. There is a hypothesis that the completion of the process of industrialization in the major countries is the cause of so-called “supercycles” of rising and falling commodity prices; it is verified by the events that took place in the earlier eras. World’s first overproduction crisis was the result of industrial revolution in England, 1825. The interest aroused by research works dedicated to the downfall of the major states [2; 9].

This research work ascertains that most of the authors distinguish four incomplete “supercycles”, among which the final one, which experiences the world in the current period has not yet ended, therefore its feature is the development of trade in the financial markets and futures, which affects the process of its flow and errors in forecasting. Originally, the drop in oil prices was predicted for 2020 [16], however, due to the impact of exchange trade, the crisis caught by surprise countries with hard extracted resources. However shale revolution in the United States also fails at the outset. The recent decisions of the OPEC countries, which have an absolute advantage in the oil extraction, allow them to retain profitability even with the world price of $ 40 per barrel, causing a significant shock of both US and Russian oil and gas production [17].

The oil market has never been entirely vacant or highly regulated, even after the agreement of 1928 between the seven major oil companies, as well as after the creation of OPEC in September 1960, the organization that established the interaction of petroleum exporting countries. The aim of the organization was the approval of the changes in export prices, the creation of national companies. In 1968, OPEC adopted the "Guiding principles for oil policy". Since that time Russia has been repeatedly invited to join the Organization of Petroleum Exporting Countries [2, p. 108–112]. The observer status allowed Russia to attend the meetings of the OPEC and respond timely to the decision of the quota reductions and contrariwise to increase its oil production. For instance, in September 2014 Russia reached its record volume of oil production for the entire post-Soviet period – 10.61 million barrels per day. However, according to the forecast of OPEC the volume of oil production in first quarter of 2015 would be 10.64 million barrels, in the second quarter – 10.54 million barrels, while in the third and fourth – 10.42 million barrels. [17]. The Russian presence at the OPEC meetings ended in 2015, since Ukraine has confirmed its decision to join OPEC, which will lead to further isolation of Russia in global economic problem solving, under conditions of sanctions [7; 18].

The sharp fall of world oil prices in 2014 caused the domestic economy twice more damage than by sanctions. [10]. The reasons for this reliance are explained by the fragmented nature of oil and gas industry, which has been generated by long-term effect of the Federal Law number 225 of 30 December 1995 "Of agreements of production sharing", adopted under pressure of Western countries. Production sharing agreement was a contract by which a business entity was provided with an exclusive right on a reimbursement basis to use natural resources; which are the property of the state according to the constitution. It was mandatory to define in the contract all the necessary conditions that have been associated with subsoil use (a. 2 p. 1 Federal Law number 225 of 30.12.1995).

OPEC constantly advanced the demand of state involvement in the ownership of mining companies, capability to carry out exploration and production of oil, control the declared price. During the period of high oil prices from 2003 to 2013, “supermajors” – private oil companies were forced out from leading positions by national companies (NOCs) of oil producing countries, including Russian companies; for instance by the end of 2013 "Gazprom" and "Rosneft" held 2 and 5 places respectively by production volumes in the international ranking [14, p.10].

Analysts and experts concur that the unfavorable situation on the world oil market remains unchanged; there are even such speculations that the oil age has come to an end, as the prehistoric Stone Age did. In these circumstances, determining the prospects for Russian oil and gas industry, which played the major role in the formation of the state in general for a long time, is vital. The attitude of the management of private companies which are forced to bear the additional costs of participating in a competitive tendering to gain access to the fields is of special interest. This reason has determined the audience of V. V. Putin and the president of "LUKOIL" that became the first Russian transnational company.

V. Alekperov has noticed that the company plans to enter in the operation the maximum amount of assets (more than five billion dollars). The completion of modernization of a refinery in Perm and substantial works in Volgograd [3] necessitate increase in oil production.

The carried out analysis of evaluation of the problems of Russian oil and gas sector development on the basis of public sources of information: official sites,
analytical publications, monographic literature, allowed to build a hypothesis of this research of its prospects despite the speculation of the end of the oil age.

The contents of the hypothesis: the undulating nature of the unaccomplished global process of industrialization, has once again to become the basis for the beginning of a new “supercycle” that affects the political stability and the determination of the terms of agreements in the first regional and then international, forming the parameters of the global oil market for export oriented oil and gas companies of Russia and the OPEC countries.

Illustration 1 in a form of chart demonstrates the author's interpretation of the nature of a new “supercycle”. Neither of the participants of the world oil market was ready for this “supercycle”.

Interdependent factors such as: the conditions of oil production – natural, climatic condition and availability of alternative energy sources are the epicenter of the development of political, economic and technological changes.

The accelerating industrialization of the largest developing countries of BRICS, the commence process of re-industrialization in other developed countries, lead to an increase in energy consumption and the research of alternative sources. It is not possible to ensure the competitiveness of the national oil and gas sector without technological development of extraction and processing, development of transport infrastructure, exploration, and industrial cooperation with companies of machine-building complex, modernization of refineries.

The substantiation of cost effectiveness of commissioning of oil wells, of margins exploration investment and accounting methods of oil production processes are of top priority in scientific researches. Insufficient attention is paid to the elaboration of the terms of the export supply and construction of oil and gas pipelines, which are formed under the influence of political processes [10]. The risks of long-term contracts with China and Turkey are underestimated.

The technological dependence of Russian oil and gas complex on imports developed at all stages of the industrial cycle, from logistical support of production, processing to recycling. It must be assumed that industry mergers proceed in a waveform, their catalyst – a significant change in the industry: political, technological, price.

The volatility of exchange rates in Russia and political instability are escalated by a combination of the processes of industrialization in developing countries, which are oriented on re-industrialization of the developed countries, therefore, no one takes up to predict the duration of the started ‘supercycle’.

Inflation is usually regarded as an indicator of the business cycle; any regulatory impact may drive the economy into a trap of low growth and high inflation. All the above proves the dependence of the welfare of our country and the phenomenon of the "Dutch disease" [18]. Certain sanctions [7] have shown a degree of interdependence between resource abundance and economic growth of the state.

The stability may be reached only by diversifying the Russian economy. Sanctions make it inevitable to organize the processing of raw materials in a greater degree for the domestic market. Import substitution will bring significant structural changes in the Russian foreign trade turnover and weaken the influence of the phenomenon of the “Dutch disease”.

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S. S. Gubanov was one of the first to prove that Russia has no economic growth; however it deserves the progress, which, according to him, is reachable only by the means of new industrialization, what is recognized by all political forces [5, p. 3–4]. He offers to turn the achieved neoindustrial consensus from nonsystematic to system-based, meaning the development of state-corporate ownership. Its development is to be facilitated by Public Private Partnerships, the legislation of which was so inconsistent [19, p.136–137].

The continuous duration of the production sharing agreements contributed to the formation of excess revenues in hands of oil and gas sector supermajors.

The established dependence of exchange rate on petrodollars has led to its high volatility, created the conditions for financial institutions for speculative trading on one hand, and on the other has generated a negative noninvestment trend in the real economy, the transfer of assets into immediately available funds.

The domestic manufacturers had no motivation to operate in the domestic market; therefore they limited themselves to the supply of raw materials and crude products on foreign markets, the conditions for inter industrial cooperation within the country were minimized.

The profitability of manufacture of the end product must regulate the growth of the domestic economy. It is necessary to introduce a system of preferences in the practice of profit taxation, considering on the share of the added value; the greater it is, the lower the income tax rate must be. It is aimed to motivate the producers to operate on the internal market and participate in cooperative agreements as in this case, the VAT is compensated. The fragmented nature of the production activities of domestic companies is considered as one of the major reasons for the increase in import dependence of logistical support of industrial production.

It is very difficult to implement the declared policy of import substitution under current conditions; the level of material and technical basis is inconsistent with the modern technological level [12]. The diversification of the Russian economy must be technetronic, high-tech, digital, what made it necessary to adopt a program of support for investment projects [11]. The criterial requirements for the selection of domestic and foreign lending agencies and investment projects were set and the procedures and conditions for the administration of guarantees were determined according to the program.

The domestic lending agencies require at least 100 billion Rub of internal funds, as well as experience in implementation of at least 10 investment projects over the past 3 years with the amount of not less than 3 billion Rub each. Investment projects should be at least 1 billion Rub and not exceed 20 billion Rub; with the financing of not more than 80% of the total cost of borrowed funds. The form of the passport of the investment project was also developed.

The adoption of the above program of document had a direct impact on the performance of lending agencies, facilitated to relief the stress on the depository market, it has become one of the key indicators in determining the reliability of the bank, which is very important for the society; it creates confidence in the safety of deposits.

There were 267 companies that have a significant impact on the industry allocated [11]. Within this framework, the downgrade of Russian investment ratings by international agencies has not caused social anxiety. The adoption of the program has become the evidence of the security of investment development by the means of domestic sources, despite the complexity of external political and economic situation of the country.

Concluding the research of problems of development of the national socioeconomic model in today's environment, it has to be noticed that the formation of model relies heavily upon the extent and form of Russia’s participation in the international division of labor, which was strongly influenced throughout the history by foreign policy of the county and the availability of natural resources, as well as methods for their distribution among the economic entities, as they were in the state ownership.

The reformation process of system had a cyclical nature; it was predetermined by differing degrees of state intervention in the economy. That was a counter reaction on the challenge of the West, which dates back the period of the creation of the centralized Russian state in the era of Ivan the Terrible. The possession of huge natural resource base is not only the absolute advantage of the country, it acts as a guarantee of its economic security, but also creates big problems in the distribution of income. Russia is ranked number one in the world in terms of social injustice, 1 percent of private households of the country holds 77% of ownership rights of the property registered to private individuals [15].

It is generally accepted that the people making decisions are guided by the following principles: the automatism of thinking, social thinking and thinking on the basis of mental models [6], the latter plays a key role in Russian society. The policy of confrontation promoted the consolidation of domestic resources, primarily human; the striving for independence and repulse of all acts of aggression were reinforced.

The decrease of the influence of oil and gas sector on the economic environment of the country in the context of low prices on energy sources should be regarded as a state of the reproduction process on a global scale. The changes in the economic situation in the world in the XX–XXI centuries became increasingly dependent on the process of formation of independent states, which adopt the path of industrialization, which escalate the competition, forcing to create alternatives to natural resources.

The phenomenon of the "resource damnation" is to get awareness on the earlier stages of the development of the socioeconomic models of society of the developing countries with transitional economy, which play the role of suppliers of resources in the international division of labor, lag behind in technological development, carry a very weak position
in the international organizations; their financial and currency dependence on the developed countries is very high. Even in the context of integration associations they have no chance to influence the economic environment.

The following relation between the increase of the investment and the dynamics of GDP may illustrate the unfolding “supercycle”. Referring to the performance of China, which is an example of a planned economy, and Japan, which has established a mixed model of economy. Both are characterized by a highly export-oriented model of development, therefore they are most to feel the effect of the economic situation of the world market.

A significant increase in the rate of investment in China in 2010 to 46% was aimed at maintaining a rapid growth rate, but the return and level of GDP per capital has been steadily falling; it is impossible to maintain such rate of investment in market economy on long term basis [8, p. 80–82].

The rate of investment and return in Japan in the period of industrialization was high, but in 70s during the period of petro shocks the returns of capital investments fell down from 27 to 10.9%. At the turn of XX–XXI centuries the average annual rate of investments decreased by 5%, which provided a GDP growth rate of 1.1–1.2%, during this period the external debt of the state had increased, what resulted in a reduction in the rate of investment and in the negative GDP dynamics during the crisis of 2008-2011 [8, p. 84–86] (table).

The phenomenon of the decrease in GDP growth in the developed countries has led to the formulation in the scientific literature of the hypothesis of "innovation pause": the intensity of innovations in the ascending wave of big cycle is reduced, but along with this the ascending wave is characterized by an acceleration of growth in comparison with the descending wave; with the greatest intensity of innovation [8, p. 89–92].

Thereby, the "innovation pause" according to the concept of long waves of economic development occurred in 2008. And according to the hypothesis of “supercycles”, the decrease in prices on energy commodities leads to the displacement from market of private oil (raw) companies occupying the leading positions in the capitalization of assets and sales rankings by the national companies, which leads to the formation of a new planned economy.

The opposition of the firm and the market had place in classical economics. The firm was treated as a hierarchical planned structure, and the market as a spontaneous arrangement. It is fair to say that the modern world has entered a new stage of institutional development, the process of indicative planning should be carried out at the state level, but the technology of continuous mid- and long-term planning should be adhered.

The retaining of unfavorable consistent pattern in the distribution of production factors and income from them in the economy has a stable relationship, which strengthens in the context of globalization; therefore the import substitution policy in support of economic resilience moves to the foreground. The relevance of the analysis of challenges in the economic environment within the context of current research work has allowed to reprise the hypothesis of “supercycles”, the present and the past of Russia.

### The average annual rates and factors of GDP growth

<table>
<thead>
<tr>
<th>County</th>
<th>Year</th>
<th>Rate</th>
<th>Accession rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1980-1989</td>
<td>29.8</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>1990-1999</td>
<td>35.0</td>
<td>11.0</td>
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<tr>
<td></td>
<td>2000-2008</td>
<td>38.2</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>2009</td>
<td>32.0</td>
<td>9.1</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>46.0</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>2011</td>
<td>46.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Japan</td>
<td>1965-1973</td>
<td>33.3</td>
<td>9.0</td>
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<tr>
<td></td>
<td>1974-1992</td>
<td>33.4</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>1993-1997</td>
<td>29.5</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>1998-2007</td>
<td>24.5</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>2008-2011</td>
<td>22.0</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

The rate of investment and return in Japan in the period of industrialization was high, but in 70s during the period of petro shocks the returns of capital investments fell down from 27 to 10.9%. At the turn of XX–XXI centuries the average annual rate of investments decreased by 5%, which provided a GDP growth rate of 1.1–1.2%, during this period the external debt of the state had increased, what resulted in a reduction in the rate of investment and in the negative GDP dynamics during the crisis of 2008-2011 [8, p. 84–86] (table).

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УСТАНОВЛЕНИЕ ЗАВИСИМОСТИ «СУПЕРЦИКЛОВ» С ПРОБЛЕМАМИ РАЗВИТИЯ ОТЕЧЕСТВЕННОЙ СОЦИАЛЬНО-ЭКОНОМИЧЕСКОЙ МОДЕЛИ

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Проблемы управления циклическим развитием российской социально-экономической системы в условиях обострения кризиса приобретают особую значимость, так как необходимо не только инвектировать
различные кризисные тенденции, но и способствовать ускоренному переходу системы на новый этап развития. В статье представлены результаты исследования условий формирования в России ресурсно-сырьевой модели социально-экономического развития, выявления проблем экономической конъюнктуры, оказавшей влияние на формирование и кризисное состояние отечественной социально-экономической модели развития. На основе проведенного теоретико-методологического анализа сформулировано определение «суперциклов» как волнобразного процесса индустриализации в крупных странах, вызывающего рост спроса на сырьевые товары. Представлена авторская модель природы современного суперцикла, позволяющая прогнозировать основные тенденции в развитии технико-экономических процессов. Обоснована зависимость участия России в международном разделении труда в историческом контексте от внешнеполитических факторов. Рассмотрены проблемы эффективности государственного участия в экономике в условиях действия соглашений о разделе продукции и формирования антикризисной программы. Продемонстрировано, что сохранение неблагоприятной закономерности в размещении факторов производства и доходов от них носит устойчивую связь, которая в условиях глобализации только усиливается, поэтому на первый план в целях экономической безопасности выходит политика импортозамещения. Среди ключевых мероприятий предложено введение преференций в практике налогообложения прибыли для развития производственной кооперации на основе учета отраслевой рентабельности. Авторы подтверждают зависимость влияния глобальной экономической конъюнктуры на выбор модели социально-экономического развития страны. Феномен «ресурсного проклятия» должен осознаваться на более ранних этапах развития социально-экономической модели общества, в развивающихся странах, которые занимают в международном разделении труда роль поставщиков ресурсов, отстают в технологическом развитии, имеют слабую позицию в международных организациях, не имеют возможности оказывать влияние на экономическую конъюнктуру, очень высока их финансовая и валютная зависимость от развитых стран.

Ключевые слова: экономическая конъюнктура, индустриализация, страны ОПЕК и Россия, суперциклы, соглашение о разделе продукции, нефтегазовый комплекс, реиндустриализация, ресурсное проклятие, социально-экономическая модель.

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