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## Identification of Institutional Traps of Wellbeing in De-industrializing and Structural De-socializing Conditions

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### Abstract

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The key role of social wellbeing in the development of modern economy is determined by the requirements that modern society brings to the government. These requirements regard to the constitutive institutions and form the basis of state-and-society contract. They include: the creation of conditions for human development, self-realization in profession, business or art, a lifetime social security guarantee, the right for benefit from investments, etc. In order to meet these requirements at the level of the 21st century society the national economy should be based on the latest technologies which form its structure so that high-tech industries producing a product with high added value dominate in it. This is the only way to maximize social wellbeing for all citizens. However, in Russia the innovative development of economy is constrained by a complex of resistant negative rules which do not allow initiating the industrial sector's recovery on a new technological basis. These rules form the "institutional traps" which are able to reproduce themselves even in changing environment conditions, giving place to de-industrialization and structural de-socialization of economy. Overcoming these institutional traps requires the state to create the institutional foundations of economic policy, in which the technological modernization and innovative development of the industry will be linked to the imperative of social wellbeing growth.

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**Keywords:** Neo-industrialization; social wellbeing; institutions; institutional trap; de-industrialization; structural de-socialization.

### 1. Introduction

The Russian economy has its inherent uncertainty as a consequence of negative structural shift in 1990-2000-ies. It led to the structural degradation of economy and society. It includes collapse of intellectual elite and shrinking of highly intelligent social groups (innovators, inventors, scientists and



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academic scholars); diminishing the role of investments in human assets as a factor of the long-term soaring; wellbeing decreasing of those who are engaged in intellectual labor opposite to “Gründerzeit”; slowing social mobility related to education, scholar activity, inventiveness, venture business; replacement of the intellectual and high-tech elite with bureaucratic and resource one.

## **2. Problem Statement**

Structural degradation of Russian economy now is the most negative factor of social wellbeing (Zhironkin et al., 2016; Baryshev, & Barysheva, 2016; Alartartseva, & Barysheva, 2016; Barysheva, & Novoselova, 2016). Today Russian household's income weakly enough depends on such important modern values as higher education, scholar degrees, and inventions. The most highly paid employees in Japan, North America and Western Europe are the scientists, innovative companies' managers. Their incomes exceed earnings in industry in 1.5-3 times. In Russia, they get 1.5-2 times less than the engineers and managers of industrial enterprises (British Petroleum, 2011). On the contrary, a considerable part of wages in Russia is concentrated in all kinds of administration. In 2014 there were 2.4 million state and municipal employees in the country, compared with 11 million employed in industry and 0.6 million in research and education sector (Rosstat, 2014).

The growth of Russian industry lagging behind the advanced countries in technologies has led to the fact that more than 10 million Russians are employed in hazardous raw materials production based on technologies of the 20th century. As the result occupational diseases kill 180 thousand Russians annually that is 3.5 times higher than in Western Europe. In Russia the average life expectancy is on the 129th place in the world - 66.5 years in 2013 (Tyulenev et al., 2016).

Preserving social wellbeing problems increases the risk of forming in Russia a special social structure which can be close to the caste (such as in India last century), when social lifts of modern society (education, science, business) act only nominally for the citizens far from high-ranking officials and oligarchs. This is fully contributed by the prevailing institutional structure of Russian economy, in which most of the formal and informal institutions are being formed around the state and the oligarchic raw materials business, fixing their relations by laws, rules of their use, contracts (Koshanov, 2010; Tolkathev, 2010; Glaziev, 2012). Conversely, governmental stimulation of innovative business and manufacturing industries in Russia is still de-institutionalized, and the rise of social mobility remains at the declaration level stated by the government representatives. Therefore, the growth of Russians' social wellbeing also remains declared only.

A bunch of structural problems emerging at pre-reform stage led to the de-industrialization of Russian economy. It means negative structural changes in the national economy as a whole (mainly due to the investment concentration in primary industries and the destruction of scientific and technical complex – structural degradation). We define the de-industrialization of Russian economy, on the one hand, as the share reduction of industrial production in GDP (for 1996-2014 years from 48% to 33% of the gross value by the method of industrial production), and in the industry itself – as the reduction of processing sector (2006 - 42%, in 2014 - 35% of GDP, according to the method of added value) (Rosstat, 2014).

On the other hand, the de-industrialization of Russian economy during market reforms (1990s, 2000s) was caused by the technological degradation of the industry, deprivation of its not only international but also domestic competitiveness. In particular, in Russia during the twenty years of market reforms up to 2015, the share of high-tech industries (instrumental, electronics, pharmaceuticals, modern plastic materials, etc.) had decreased from 20% to 10% of GDP (in the United States it increased from 50 to 60%), manufacturing industries (machine-building, organic chemistry, the production of plastics, metal, etc.) – had fallen down from 60 to 50%, the most modern production facilities (biochemistry, microelectronics, nano-material producing, etc.) - had not exceeded 0.5% of GDP (reached 6% of GDP in the USA). The share of raw-materials producing industries (emerging in the second half of the 19th century) increased from 20 to 34% of GDP in Russia, in the USA - fell to 10% (Word Bank, 2014).

The most massive negative structural shift occurred in the sector of innovation activity and technological development, throwing Russia back to the level of 1950s. The government withdrawal from funding of science and the lack of businesses' interest to it has led to the fact that the number of companies involved in R&D in Russia was decreased by third (from 4.5 to 3.3 thousand), and the number of design organizations, creating prototypes ready for being produced was decreased in 13 times (from 495 to 37) for the 1992-2012. At the end of 2013 Russia's contribution to world research activity made only 2.2% of new researches, and only 6% of research organizations had been involved in innovative activities (in the USA - 75%) (World Bank, 2014; Rosstat, 2014). As for business there is almost no innovation activity in Russia in this area. Less than 1% of large Russian companies are engaged in R&D (in the USA - 65%). As a result, from 1998 until now the competitiveness of Russian economy on the world market has fallen in four times. For example in 2013 the total output of biochemical, microelectronics, nano-materials, software products in Russia amounted about 1.5 billion dollars (in Korea Republic - 350 billion dollars) (World Bank, 2014).

### **3. Research questions**

We have identified the root reason of Russian economy de-industrialization as the absence of government structural policy directed to the industry's adaptation to new market economy conditions, to preservation of inter-firm relations, to reproduction of highly qualified staff, to preserving innovation activity of the industrial companies. Other reasons of deindustrialization reflected the elemental essence of the emerging markets: the lack of necessary institutions, financial crisis and the rise of speculations, high costs and the lack of competitiveness of most industries, a rupture of inter-firm ties in the specific conditions of former Soviet Union society (Zhironkin, 2002; Grandberg, 2002; Kurnysheva et al., 2008).

Thus, the relationship between de-industrialization and decrease of social wellbeing in Russia means that the technological degradation became the dominant form of structural changes of national economy. This relationship is manifested not only in the reduction of industrial output and the crash of its competitiveness but also in reducing the share of people employed in industry, in the waves of mass layoffs at unprofitable enterprises, in increase the capital-intensive extraction of raw materials for export using old technologies and labor force with the competencies of the early 20th century instead

of processing industries development. The latter ones can be characterized by high labor capacity and by a high skill level of workers with modern competences. That defines more prosperous life of processing industry employees in modern industrialized countries, compared with the people engaged in extracting raw materials.

The de-industrialization of economy has similar negative consequences, both for industry and for the formation of social wellbeing:

- structural de-socialization - continuing destruction of social groups that can provide innovative development of Russian economy and its neo-industrialization, build up the groundwork of a positive structural shift (Barysheva, & Novoselova, 2014; Zhironkin, & Guzyr, 2016). Such destructive social process is compounded by the failure of Russian government social policy. These social groups, in fact, are the target elite of carrying out structural reforms (scientists, innovation managers, employees of high-tech companies etc.), around which the new social ties (between the state, business and science) and the new social roles (innovative entrepreneurs, researching "freelancers", private venture capital investors - "business angels") should be formed. However, from the beginning of the 1990s target elite social groups that can provide a positive structural shift in Russian economy have not received the sustainable development. On the contrary, the destruction of "intellectual heritage" of the USSR is still going on;
- de-institutionalization of the structural policy of the state in Russia - the preservation of the institutional "vacuum" of formal and informal norms and rules of interaction between the state and business in the areas of venture investments, funding fundamental and applied researches, promotion high-tech production in the world market.

Institutions (from the Latin "institutum" – construction, establishment) represent a stable set of rules, norms, and attitudes related to various aspects of human activity. This set of rules covers various areas of social life, including economy. The founders of the institutional school (Veblen, 1919; Commons, 1983, Mitchell, 1923) looked at the institutions as the models and standards of economic behavior, as well as the ways of thinking, influencing on the choice of economic activities' strategies (in addition to the motivation of rational economic choice). The institutions are also considered as public mechanisms for implementation of collective goals. Unlike "traditional" institutionalists, supporters of neo-institutional school (Coase, 1960; North, 1989; Williamson, 1975) gave broader concept of the institutions, regarding it as an important factor of economic interactions. This factor is defined as the "rules of the game" and human interactions and mechanisms for their implementation based on them.

#### **4. Research methods**

Social wellbeing in conditions of economy de-industrialization is unstable and does not have a certainty, even during the active lifetime of one generation. The key problem for that is the structural de-socialization, which overcoming is constrained by strong institutional traps in Russia. Institutional trap is a complex of inefficient, but robust and self-replicating rules which can hardly be cancelled by a subjective decision. According to D. North, the hardness of an institutional trap is caused by a "blocking effect" of market socio-economic transformation.

V. Volchik (2011) highlights the main, in his opinion, institutional trap of Russian economy - the trap of property rights uncertainty. On the one hand, there are objective tendencies of the administrative redistribution of property rights dictated by economic inefficiency and social illegitimacy of their structure, established at the beginning of the 2000s in Russian economy after privatization of national assets. On the other hand, today Russian government attempts of forcible redistribution of property rights within formal and informal institutions of the market will not solve the problem of attracting investments in processing sector of national economy. On the contrary forcible redistribution of property rights leads to the aggravation of investments. Therefore, the future wellbeing of processing industry employees will be indefinite until Russian economy is withdrawn from the institutional traps.

Some Russian authors consider institutional traps of Russian economy development and its modernization as a complex of entrenched destructive regulations. According to S. Silvestrov and I. Rykova (2011) the "trapping" rules are highly effective for the members of certain groups, but are opposite to strategic interests of the nation. Indeed, the examples of such groups in Russian economy can be considered oil and gas, iron and steel, financial oligarchy, associated with them state representatives, conducting economic policy, fixing raw materials export model of national economy development. De-modernization of oil and gas producing sector of Russian economy put it aside from shale oil production technology development, from investments in the production of modern exploration equipment, from the processing of hydrocarbons in modern fuels, plastics, composite materials and carbon fiber.

## 5. Findings

More detailed institutional traps of wellbeing in Russian economy, caused by its de-industrialization, include the following:

- the trap of distrust the state and contempt to legal institutions, which prevents to develop "rules of the game" in the area of investing innovations, import of technologies, highly skilled workers training and hiring in high-tech manufacturing industries. We come over to opinion of A. Auzan (2013) that unlikely in competing innovative economics of North America, Western Europe and Southeast Asia countries, in Russia there are no mechanisms to control the innovation risks, which is unacceptably high for major investors, which "contract ability" is still insufficient. As a result, huge transaction costs of investing innovations and import substitution for manufacturing industries become an insurmountable barrier for high-tech employment and wage growth, for the increase of productivity and added value of final consumption goods. And the orientation of Russian government on the model of oligarchic capitalism of South Korea of 1960-1970's relying on government-controlled corporations and the supremacy of bureaucracy in politics could not be adapted to the new reality with a high degree of uncertainty. So, Russian corporations being under government control are still unable to respond to problems caused by technological degradation of industry (Gasnov, & Zhironkin, 2016). Therefore, the "dispenser" model of social wellbeing in modern Russia is not workable, mainly due to catastrophic reduction of its main resource – the natural rent, redistributed by the state;

- the "resource curse" trap manifesting as the whole economic and social life dependence on the global natural resource market. The collapse of the world market of hydrocarbon resources has shown that governance actors can assign nature rents only under the weak institutional conditions. Consequently, with an increase in revenues from the exploitation of natural resources, governments are attempting to prevent the strengthening of economic and political institutions of emerging market, which slows economic growth as profit from raw material exports reducing. As a result, resource-rich countries fall into the "trap of development" - a vicious circle of underdevelopment of the market institutions and the lack of incentives to improve them. So the solution of social wellbeing problems is postponed indefinitely – till the institutional conditions for the development of competitive processing industries that can replace the import of finished products will be formed in Russia. The "investment trap" hinders to reverse this current vicious trend - the dominance of investment with short-term effects associated with the situation on the commodity and financial markets. On the contrary the long term effect of investments in new technologies leads to a change of national economy structure. And without the creation of appropriate conditions of neo-industrialization, investment demand will gravitate to the commodity and financial sectors of Russian economy, hindering the creation of new well-paid jobs in the processing sector with high added value;
- the trap of copying technologies created abroad instead of investing in the domestic R&D sector. This institutional trap is associated with lower efficiency of public investment in comparison with the private sectors. Forming of Internet-based technologies and know-how market during last two decades made it attractive for private investors. In 2014, transactions of the world information technologies market reached 3 trillion dollars (World Bank, 2014). In Russian economy the government is the main investor in R&D sector. However, the effectiveness of these investments is rather low, as is evidenced by the reports of the Accounts Chamber of the Russian Federation. Production for the domestic market, organized in Russia by large international companies, is based on retiring technologies or already quitting in the leading countries. In addition, foreign companies bring to Russia technologies of the final stages of production, while modern technologies are being created for the sector of products' design and upgrade, as well as for non-material goods. This "technological vacuum" of Russian economy leads to the fact that the one employed in R&D sector in Russia is accounted by 7500 directly engaged in the production, while in the USA - 500, in the Netherlands - 450, in Germany - 650, in South Korea – 1200 (World Bank, 2014). All of this is summed up in the extreme shortage of a social group necessary for neo-industrialization of the economy (IT specialists, staff of biochemical, radio-term and industries, aircraft manufacturing and instrument-making enterprises workers, the staff of the MIC enterprises with dual-use technologies, scholars involved in research activities, private venture capital investors) in Russia. Today this social group is a leader in the income of employees in the developed countries, surpassing industrial employees by 35-40%. This group is meant when we are talking about the necessity to create 20 million high-tech job vacancies in Russia.

- the trap of human capital quality, associated with a number of researchers discussing “path dependence problem”, based on the previous experience. It refers to the contradiction between the public interest, related to the development of human capital (with social wellbeing growth as a result of reaching a new level of technological development), and the interests of individual economic entities interested in obtaining maximum income from the existing raw material production. In such a conflict of interest the government should be on the side of society, fully contributing to the development of human capital and the growth of wellbeing. However, declaring it in words, Russian government actually represents the interests of oligarchic raw holdings and state-controlled corporations. Their interests are connected with the obtaining of natural resource rents and capital export, fixing the position of Russia in the international division of labor system as a resource provider. As a result, the "window of opportunity" of Russian economy neo-industrial development was not used either during the "oil boom" of 2000s or at the beginning of ruble devaluation in 2014-2015. Regarding to the problem of social wellbeing, it means exhaustion of the drivers of its growth in the long-term period.

Preservation and enhancement of these institutional traps in Russian economy is being used by the groups interested in domination of the raw-material sector in national economy for effective implementation of their own interests, but do not allow fulfilling the strategy of innovative development of national economy. Accordingly, the more rules defining relationships with the government's representatives in a business environment, the smaller background is left for neo-industrialization of Russian economy. It increases the probability of a new negative structural shift, which effects will significantly slow down the innovation development of national economy.

Therefore, in order to prevent the disastrous impact of the negative structural shifts on wellbeing of Russians it is necessary to create new social situations, to ensure the profitability of intellectual property, to eliminate all administrative barriers for investors in innovations and know-how, to promote lobbying of high-tech companies' interests. This requires the institutionalization of IT product market, the development of formal and informal institutions of reproduction of intellectual capital, information and technology ideas.

## **6. Conclusion**

So overcoming the institutional traps of social wellbeing is essential for acceleration of neo-industrial economy transformation. On the other hand, the "starting point" of expected institutional changes assumes conditions of human capital development and the structural de-socialization overcoming. To bring it to life, the government and business need to work together within the framework of neo-industrial partnerships to enhance the prestige and motivation of intellectual work, research and innovation activities, changes in the social role of scientists and innovators, specialists in information technologies. They should move from the role of raw-material production servants to the initiators of the convergent technologies implementation in producing goods with high added value. It requires activation of social mobility associated with the development of information technologies, modern higher education and research activities. Without formation of a "critical mass" of national

intellectual capital and its carriers the structural convergence associated with the formation of new super-modern, digitalized industries is impossible.

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