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COMPARATIVE ASSESSMENT OF THE FACTORS AND CONDITIONS OF THE FORMATION OF THE NEOINDUSTRIAL SOCIAL STATE IN RUSSIA AND GERMANY¹

Russia and Germany are traditionally considered to be countries with the social orientation of the economy. These countries are also close in terms of the share of real sector of economy in their GDP. And, although it is in Germany that the social market economy originated, which largely determined its leadership in the global economy, in the context of today's crisis of the welfare state, the search of a new development model is as relevant for it as it is for Russia which has set off on the way to modernization and the neo-industrialization. The article suggests a hypothesis about the formation of a new development model which combines the social orientation of economy, the processes of the neo-industrialization and globalization. At the same time, social orientation is the main goal of socio-economic development, neo-industrialization is the way to achieve it, and globalization is the criterion that provides for more efficient use of resources.

It is provided a summary of the theoretical basis for the development of a "social state" in the works of the German and Russian scholars who laid the foundations of economic humanism, which allowed to prove the futility of modernization which is implemented without due consideration of the deep mental bases and the civilization codes of the nation's development. The methodological approaches to the formation of a new model of neo-industrial social state have been developed, which identifies several levels: global, national, local, individual, and suggested a methodology to assess the factors and conditions of its development. The method is tested on the example of Russia and Germany. The conducted comparative analysis allowed to come to the conclusion about the common nature of the targets, initial conditions, problems and the ways to their solution in these countries, which has to be taken into consideration in the development of the socio-economic strategy and policy of the countries, as well as in the cooperation between them.

Keywords: neo-industrial social state, economic humanism, social market economy, social progress, social responsibility and motivation, socio-economic development strategy and policy

The Crisis of the Welfare State Model as the Imperative for the Search for a New Development Model

Although it was only in September, 2013 that the king of Netherlands made a statement about the end of the "welfare state", which is to be replaced by "the participation society" [1], in Germany, the country of origin of social market economy, the erosion of the term "social market economy" has been the subject of discussion for quite a while. Some experts believe that the most expensive and loss-making product in Germany is its social services. In 2012, the ratio of the welfare benefits to GDP (social budget) in Germany was 28 % [2]. The so-called "participation society" involves the reduction of social public spending and the increase of the citizens' responsibility for their own welfare.

German scholars believe that the true sense of the notion "social market economy" exhausted itself in the course of the historical development, and now it is high time to introduce reforms, but the directions of their implementation are different. The reason for these difficulties is the emphasis on "socially-oriented" or "market-oriented" economy. The leaders of the Federation of German Industries have repeatedly criticized the policy of state interventionism. Its chairman, H. O. Henkel, wrote in his book "Now or never": "We have approached the line which separates us from an economic paralysis." In his opinion, the German model of socio-economic structure has undergone such dramatic distortion since the times of L. Erhard that it requires not a facelift but major repairs, and in its current kind of condition it cannot serve as a role model for any other country [3, p. 175].

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But if Germany's challenge is not to lose its leading positions amidst international competition, Russia is struggling to fulfill its social guarantees in complex external (positioning of the country in the context of the ongoing geo-economical shifts), as well as internal conditions (urgent need for neo-industrialization). All this makes it necessary to revise the drivers of development which provides an adequate level of social protection for the countries with the traditional social orientation in the modern conditions.

The new model of a social state must be adequate to the challenges of the neo-industrial society, which requires solutions to the social, fiscal and investment problems, on one hand, and the achievement of global competitiveness, on the other. The basis of the formation of a neo-industrial social state (NSS) must include a combination of the two most important components of socio-economic development: the key objective, which is to increase the level of well-being of the population, and the means of the achievement of this objective, first of all, by global competitiveness of the economy of the country, and the achievement of such level of technological, innovative and scientific / educational development of the country which could make it possible to provide the social guarantees for the citizens.

Both Russia and Germany have rich traditions of high-quality industrial production [4]. In Russia, the current events have made the transition to neo-industrialization indispensable, it has become "the most urgent problem of the present day" [5]. G. Vechkanov characterizes the present stage of Russia's development as a situation when "the country has to make a historically responsible choice of how its future is to unfold" [6, p. 128]. H. Kagermann, the president of the German Academy of Science and Engineering, believes that industry is the backbone of Germany's economic success. The Industry 4.0 Concept, which is currently being implemented in Germany, involves the redesign of production systems and the organization of labor in the context of the development of the new form of production automation dubbed Digital Factory [7, p. 3-6], which marks the fourth wave of the industrial revolution.

Both Russia and Germany have traditionally regarded science as an integral and most important component of culture, and the contribution of some distinguished Russian and German scientists established the image of the countries in the world. The question on keeping by a country of a top position in world of technologies is considered in Germany significantly broader than simple support of advanced research and advanced developments. The key role during the formation of German innovative and research and education policy is given to the High Technology Development Strategy, High School Pact, Cluster Initiative, the Pact for Research and Innovation [8].

Due to the demographic processes, especially the ageing of the population, both countries are facing a challenge related to retirement age. In the recent decade, a derived problem has developed: both Russia and Germany are now experiencing a shortage of technical specialists and workers with secondary vocational education. The realization of social policy and the search of a social compromise in both Russia and Germany are also severely complicated by an intensive inflow of immigrants, whose adaptation requires investment of significant resources before they become active citizens and are able to find employment. Along with physiological medical diagnostics and insurance for migrants, another important issue has emerged, that of the social health of migrants [9, 10, 11].

Germany has also become a slave to globalization, in particular, in terms of its departure from the country's richest classical traditions of higher vocational education. The country was compelled to recognize that the adherence to these centuries-old traditions was, to a certain extent, an obstacle to the achievement of global competitiveness, as the training in German higher schools took longer, as well as due to the limited use of German language in the world of research, which remains predominantly English-speaking. As a result, many programs began to be offered in English, and even today's slogan of the country: "Germany — the Land of Ideas" is declared in English.

The theoretical foundation of a social state in the works of German and Russian classic scholars

Despite the fact that the discussion about the essence of a social state has a broad geography, involving scholars from different countries, our point of view is based on the fact that it is the works by German and Russian scholars that present the principles of economic humanism, which can become the methodological basis for the development of the new neo-industrial social state model.

It is generally believed that the notion of "social state" was introduced in the academic discourse in 1850 by L. von Stein, a famous German statesman in accordance with fundamental views of which striving for self-realization, as well as for increase of benefits is the main motive of activity (which

corresponds, first of all, to principles of citizen individualism, including in Germany) and the state must turn with it into the instrument of total utility, «top union» where all the strata and the classes of the society respectively interact [12, page 9].

The essence and nature of the state was interpreted in keeping with the spirit of Fichte's and Hegel's works by one more German scholar, — philosopher, historian and economist F. Lassalle, who believed that the state must be an institution above classes which provides “upbringing and development of the human spirit for freedom”. The society of the epoch of F. Lassalle, from his point of view, failed to implement its purpose and did not comply with its inherent nature, because bourgeoisie subordinated the state to the “crude matter of money”. With help of the property qualification at the elections, it actually turned the state into a servant, a guard, a “night watchman” [13].

These ideas were developed in the works by the founders of the “social market economy”, A. Muller-Armak and L. Erhard, the Economy Minister of Germany in 1949–1963 and its Federal Chancellor in 1963–1966 who is called “the father of the German economic miracle”. A. Muller-Armak wrote in his “Principles of Social Market Economy”: “The goal of the policy of the social market economy is the establishment of a triangle between economic growth, freedom and initiative of individuals, while the social equilibrium must cover all the welfare complex, from full-time employment to personal assistance. This is a peacekeeping concept, a strategic idea in the context of the conflict between different target situations. This is a lifestyle formula, in accordance with which the attempt is made to bring the key objectives of our society to a new, practical harmony which has never been achieved before” [14, p. 243].

For L. Erhard, this was not merely a moral postulate but a fundamental principle requiring tough institutionalization. Otherwise, as L. Erhard warned, the social market economy will degenerate into the system where under the slogan of “social justice” there will be prospering parasitism and egalitarianism. The decrease of economic efficiency and the transition to distribution instead of “welfare for everyone” are only a matter of time. The main task in the process is to provide a moral, spiritual and material orientation to the economy [15, p. 236].

Russian economic thought has also never narrowed the concept of efficiency down to economic parameters only. For representatives of Russian intelligentsia, inter alia, Russia and Russia economist scientists the matters of economic policy are inseparable from sociocultural aspects and moral-ethical aspects. Throughout the period of its development, Russian economic thought has been distinguished by the use of the principles of economic humanism as its methodological approach. This is proved by the works of the distinguished Russian scholars and philosophers, including M.V. Lomonosov, V.S. Soloviev, N.A. Berdyaev, S.N. Bulgakov, V.I. Vernadsky, A.A. Bogdanov and others.

In his description of human beings with their needs and aspirations, Lomonosov stated that these human qualities can be refined by education and enlightenment. His treatise “About the Replenishment and Multiplication of the Russian People” contains some well-founded opinions about the development of domestic production and training the population in crafts.

The theoretical system of V.S. Soloviev has some deep ideas of sociophilosophical nature. A crucial place in Soloviev's philosophy belongs to the human being as a spiritually free creature acting upon its free will. Soloviev stated that a society meant internal free agreement between all the people. To understand the essence of history of the human society, it is necessary to outline its foundation, its core. Such foundation is not economics or politics but a human being as a creature spiritually connected to God [16, p. 116].

Economy, according to N.A. Berdyaev, is also the creation of human spirit. They depend directly on the character of the spiritual world of the person who is taking action. Berdyaev warned that the domination of the technical, rational, indifferent world can lead to the distortion of personality and turn it into an automatic machine.

S.N. Bulgakov understood economic activity, work as creative activity of rational beings, which is based on freedom manifested as creativity. He made attempts to examine economic activity as a significant aspect of the sense of human life: “Creativity becomes possible if two conditions are satisfied: first, there is an idea, the freedom of will, and, second, there is a power, the freedom to perform” [17, p. 108].

The valuable contribution of V.I. Vernadsky is that he actually introduced a new criterion into the analysis of relationships in the system of “a human being and the nature”, that of “mankind as an integral whole”, thus bringing social analysis up to the global level. According to V.I. Vernadsky's

study about the noosphere, simultaneously with the accrual of public wealth, the society accumulates aggregate useful knowledge, which is the global information environment constituting the intellectual surroundings of the planet. The global information field of the Earth is gradually turning into a powerful planetary force of evolution.

A.A. Bogdanov developed a comprehensive systemic theory called tektology (from the Greek 'tekton' – "builder"), i.e., a "science about structures". Having predated the conceptual framework of the general theory of systems developed by L. Bertalanfi, it also contained several important ideas which were formulated four decades later by N. Wiener and R. Ashby as the key principles of cybernetics.

The traditions of the Russian economic thought found their worthy continuation in the research of the modern Russian economists, academicians of the RAS L.I. Abalkin, O.T. Bogomolov, D.S. Lvov, B.L. Makarov, A.I. Tatarkin, S.S. Shatalin, Yu. V. Yaryomenko and others.

Thus, the special significance of the spiritual component and various elements of human capital was emphasized in the works of Russian scholars for centuries, although it was generally not taken into consideration to the extent it should have been in the practice of the economic reforms in the country. We believe that this can be seen as the fundamental contradiction of the economic theory and practice both in the Soviet times and in Russia in the period of the reforms, or, in other words, this is the incorrect relation between the use of the "Russia's two great assets: its human capital and its natural resources" [18, p. 111] and the outcome of such use. The patterns revealed show that modernization is doomed to fail if it is implemented without due consideration of the deep mental fundamentals and civilization codes.

Methodological approaches to the establishment of a new model of NSS

The formation of a new model of neo-industrial social state has to be based on the following methodological approaches and principles:

1. The fundamental aspect in the drafting of any model is the question about goal setting. On the level of the global socio-economic space, there is no universal opinion as to what the social progress actually is. Traditionally, the economic growth is accompanied by the growth of resources consumption and the emergence of environmental problems, more and more people disagree with the reasonableness of any further growth in this direction. As academician A.D. Nekipelov noted, there are a number of disadvantages to measure economic development only on the basis of the GDP growth rate. It ignores the quality of economic growth, the limited amount of natural resources, the differentiation of the income of the population, the types of economic activity which do not become a subject of any market transactions (such as subsistence economy or environmental damage), the change of the price level and the structure of the production [19].

An increasing number of economists, in particular, the experts of the Commission on the Measurement of Economic Performance and Social Progress established by the EU in 2008, come to the conclusion that in the consideration of the potential of the GDP it is necessary to shift the accent from the evaluation of the economic production to the evaluation of the people's well-being. Thus, along with the economic quality of life, it is recommended to take into consideration the indicators of health, education, personal activity. Besides current GDP growth, it is proposed to take into consideration the prospects of sustainable development of the economy, as well as the evaluation of the environmental resilience aspects [20, p. 12].

In the sphere of the evaluation of growth and sustainability, the statistics service of Germany chose a relatively trouble-free and efficient method, which is the creation of "satellites" for the GDP indicator. One of such satellites is the Human Development Index used in the framework of the United Nations Development Programme, which takes into consideration the level of education and the expected lifespan.

As one more alternative to the GDP, UN experts recommend using the adjusted net savings index, or the genuine savings index. It involves broader consideration of the human potential, the energy factor and the environmental factor and is the result of the adjustment of gross domestic savings.

Thus, trends have emerged in the academic community for the need to adjust the key indicator of economic development, but the way to do that still remains to be found.

2. The overall social progress has to be balanced by free economic initiative of individuals. Muller-Armak noted that "the goal of an economic order is the synthesis of economic competition, technical and social progress" [14, p. 248]. The idea of balancing led to establishment of the German balancing

bank in the Western Germany (“Deutsche Ausgleichsbank”), whose main goal is reaching an equilibrium of the needs of a human, the environment, and the conditions of functioning in a competitive market. But due to the changeable nature and complexity of development it is impossible to know all the factors that influence economic policy, and, therefore, it is difficult to take their influence into consideration; in addition, these factors change, too, all this complicates the implementation of the desired economic policy.

Therefore, it seems useful to search for social consensus which would provide for the collective financing of the “investments into the future” [21], which may require significant expenditure at the initial stage (for example, the cost of vocational education). The state itself is not able to react in a quick and competent manner. To cope with this task, it needs to cooperate closely and arrange networking with economic actors (entrepreneurs), because they have a direct contact with the spheres which are difficult to predict and are constantly changing. This can be achieved with the help of a broad range of forecasting, programming, planning, and quick reaction tools.

3. The concept of “social expenditure” is a complex category based on the consideration of many parameters, including quantitative, qualitative and temporal ones. The state cares for the social module of the welfare of individuals, which includes the level of living, level of employment and employment opportunities, living conditions, as well as social service and social support of the population. The social expenditure of the state is aimed at protection of the nation’s physical, mental and spiritual health, as well as at the provision of social tranquillity among the population. The quantitative estimate of the social expenditure of the state can include the method of alternative costs, which involves the calculation of the cost of possible social unrest for the economy. In this context, one can emphasize that although the reforms of the Russian economy did not result in the transition to the much heralded breakthrough economy based on innovations and modernization, but nevertheless their core achievement was the provision of social stability for the society and the performance of social guarantees by the state. Besides the fact that the calculation of this expenditure is a methodologically complex task, the effect of this expenditure is postponed and cannot be measured based on the current situation only.

4. The main social task of the economic policy of the state must be not the distribution of the necessary benefits but the provision of the conditions for the activity of individuals who consume these benefits. The role of the state is to create the conditions where everyone has a possibility to get an education, vocational training and job. The state is also interested in the positive social results from each investment project with its participation, in other words, each project is to improve the quality of life of the population [22, p. 20]. At the same time, due to the rapidly changing situation in the neo-industrial society, the state alone cannot determine the number of jobs or the character of work. But it can stimulate and support the continuous dialogue in this sphere.

This is particularly obvious in the sphere of vocational education policy. Traditionally, the German state accounts for only about a half of the strategies and tools aimed at the continued implementation of changes in this area. The changes have many aspects and are mainly interdisciplinary and interconnected within a common system. Therefore, the enterprises take on responsibility for the second part of the implementation of the changes in the education policy. This is done in the framework of dual education [23], where the students trained at enterprises are being immediately oriented towards the new market and industrial conditions by the means of social programs aimed to recruit best professionals (from both physical and moral perspective) in the context of competition and retain them in the company, and through investments into R&D which is conducted by enterprises rather than by the state, and these are the most interesting elements of the Industry 4.0 concept, as they allow companies to enhance their outcome and improve their image and thus to have better resources for the implementation of efficient personnel policy.

5. The implementation of a socio-economic policy must be based on the recognition of the fact that no community can be considered a homogeneous set of economic entities. Each person has economic individuality. In this connection, unconditional welfare for everyone can lead to stagnation, lack of motivation and discourage entrepreneurial activity. At the same time, the opportunity to realize their own initiative is a goal of only some individuals and not all of them. Due to both these aspects, it is important to base the socio-economic policy on the enhanced awareness and more expedient use of the capacities, objectives, and motives of individuals, which may be very different in nature.

Methodology for the Assessment of Factors and Conditions for the Establishment of the NSS

The approach we propose for the formation of the NSS is based on the combination of the two most important components of the socio-economic development, which are the key objective (the enhancement of the well-being of the population) and the method for its achievement, which is mainly based on the increase of the global competitiveness of the economy in the context when neo-industrialization becomes indispensable. This concept was thoroughly characterized in the article by A.I. Tatarkin and E.L. Andreeva [24]. In the development of the methodology for the assessment of the factors and conditions for the NSS formation, we propose a model consisting of 4 trends within the ongoing changes (in the global market, the real sector, the entrepreneurial sphere and the social sphere), 3 spheres (innovative, investment and organizational spheres) and 12 blocks that emerge at the intersection of the trends and spheres (Fig.).

The directions outlined above allow us take into consideration the following aspects:

- the development of global markets of goods and services, capital and labor, which provide global competitiveness and full inclusion into the whole spectrum of the global economic relationships;
- the conditions necessary for both the modernization of the economy (changes in the industry markets and financial markets, as well as in fiscal sphere of the country) and the development of entrepreneurship (sufficient number of specialists, banking and insurance markets, acceptable level of bureaucracy) because it is the state that can and must provide the necessary framework for that;
- the provision of the social security of the population and the increase of the level of its well-being which stimulates the increase of personal responsibility and initiative of individuals who use such social guarantees as medical support and pension provision, as well as the guarantees of labour market.

Let us examine each of the 12 basic elements, or blocks, of the model separately.

The first block deals with the foreign trade indicators which are regarded as the evidence of the recognition of the country's products by the global market and the evidence of the competitiveness of its economy. As the evaluation it is used the indicator, based on the export intensity, which is examined both as a whole and for some product groups, in particular, cars and equipment.

The product structure of export is determined by the industry structure of the economy of the country and the level of the development of the branches of "new economy", which is the second block of the innovative sphere. To evaluate it, we will use the indicator of expenditure for the ICT as a percentage of the GDP.

The development of the most promising industries that correspond to the requirements of the "new economy" is dependent on the availability of properly qualified staff, the level of their training and further training; these are the specialists most demanded by the market and contributing to the structural transformations of the economy of the country. This is what the third bloc is devoted to. The indicator of this is the percentage of education expenditure in the GDP.

The state of health care market (the fourth block) is assessed by a consumer's opportunity of free choice of the level, quantity and quality of services based on the sufficient level of the consumer's income or the provision of loans on acceptable terms by lending institutions. The indicator is the share of expenses for health care provision as a percentage of the GDP.

The next four blocks (5–8) represent the investment sphere.

The import and export of capital is one of the sources of financing and at the same time a criterion of the level of development of the domestic financial market and the institutional environment.

The fifth block is directly related to the sixth, the one characterizing the situation in the world financial market, which is an additional source of resources, especially when there is a deficit in the domestic market. This component, in its turn, is complemented by the seventh component, the level of development of the banking market and the insurance market.

An additional possibility to promote the accrual system is the use of pension funds which guarantee pension provision to the citizens, which refers to the eighth block.

The indicators for the assessment of these blocks in the investment sphere are the share of the FDI in the GDP, the level of stock market capitalization, the share of bank loans in the economy, and the share of the pension contributions in the GDP.

The ninth bloc characterizes the openness of one more market — the labour market. The availability of free labor market is a natural regulator of the labor cost and quality, as well as one of the most important organizational parameters. An important role for the labor market is played by the tax

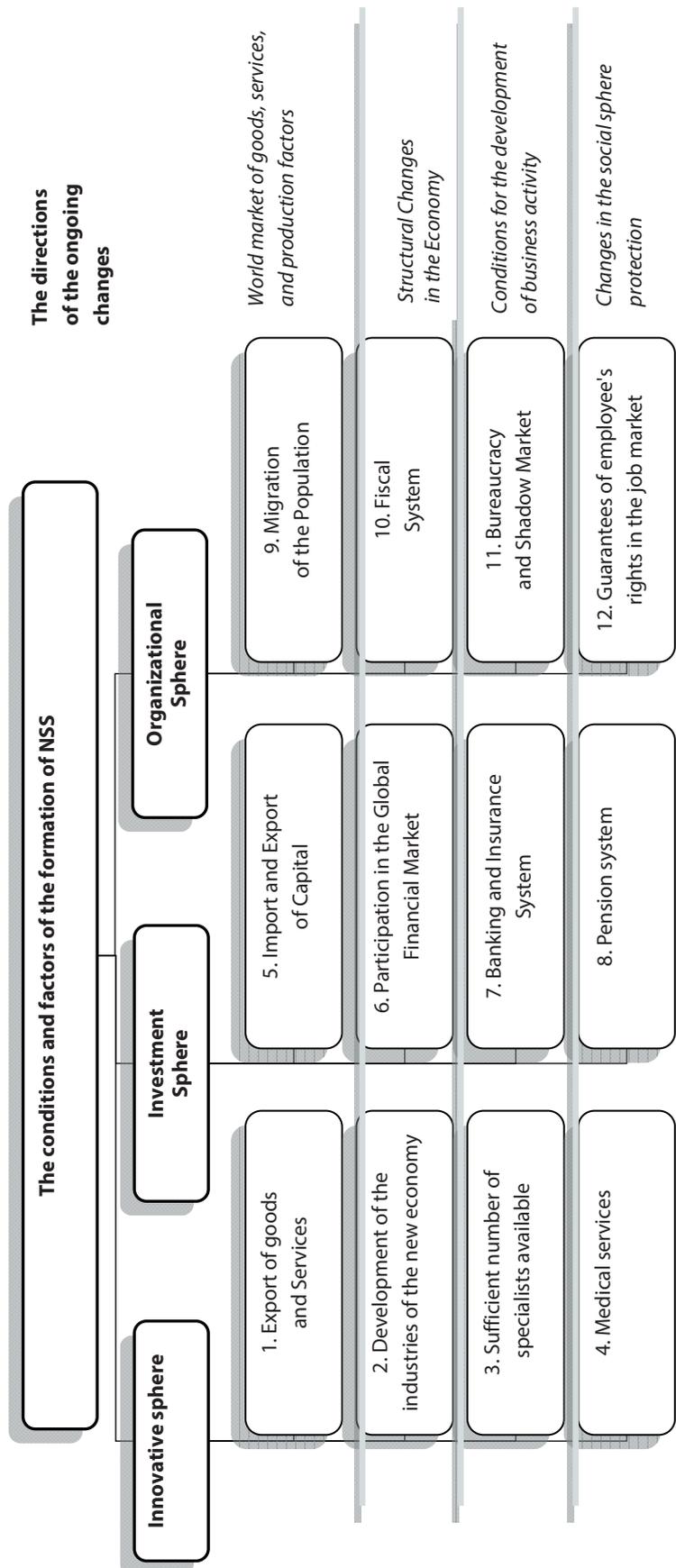


Fig. The typology of the main trends and spheres of the assessment of conditions and factors required for the formation of the NSS

system and corporate management system, represented by the tenth block. The eleventh block – the level of bureaucracy and corruption – has an influence upon almost all the components, including the twelfth block – the market guarantee of employment and provision of benefits.

Underestimation of a factor or a condition leads to negative consequences, including those of systemic nature.

Therefore, the novelty of the proposed assessment methodology includes the following aspects:

an integrated and systematic approach that is based on the complex of factors and conditions which provide for the combination of a global level of competitiveness of the country's economy and the national level of socio-economic development, which establishes the basis for the social welfare of citizens;

the approval of the principle of economic humanity as the fundamental criterion of development, which involves basing the evaluation of the degree of participation in the global economy both the level of the well-being of the population and the development of the proactive position of a responsible, self-motivated and entrepreneurial citizen of the country in the protection of its national and strategic interests;

the specifics of the selected group of countries with the socially oriented market economy is that it includes countries with different level of economic development (developed Germany and the Russian Federation with its transition economy), but with the common need to search for a compromise between the provision of global competitiveness and social protection for their population.

The comparative assessment of the factors and conditions of the NSS establishment in Russia and in Germany

The object of the research is Russia and Germany, two countries with the traditional social orientation. At the same time, one can notice both common features and differences in the conditions in which NSS is being formed in these two countries (Table 1).

As it was shown in the valuation model, the problem of the formation of NSS consists of three components:

- achievement of global competitiveness;
- overcoming structural deformations of the economy and the development of the sectors of “neoindustrial economy”;
- the improvement of social wealth and the quality of life of the vulnerable groups of the population (those with insufficient education or other obstacles to optimal job placement). This does not apply to the most well-off strata of the population and the middle class, which is numerous in Germany, but is especially relevant for Russia due to the low proportion of the middle class.

The results of the comparative assessment of factors and conditions of the formation of NSS in Russia and Germany for the period from 2002 to 2012 are presented in the Table 2. For a more detailed

Table 1

The conditions of the establishment of the NSS in Russia and in Germany

Factor	Similarities	Differences	
		Russia	Germany
The goal set	The compromise between global competitiveness and the level of well-being of the population	Human capital is not taken into account and its evaluation is not adequate to its contribution	Competitive disadvantage due to high labour costs, including due to the social benefits expenses
Economic conditions	Deformation of the economic structure of the former socialist countries	Preservation of the existing structure by the environment of a raw material market	The share of the real sector is larger than in other developed countries.
Financial conditions	High costs required for modernization	A gap between the declared and actual results	New lands are dependent on the old ones (on the group corporations that make investments)
Sociocultural conditions	Significant gaps between the level of life quality in various territories	To a certain extent, people have lost their values and their faith in the comprehensive protection that they may expect from the state	Self-perception as second rate Germans in the new lands, mainly among socially vulnerable groups

Table 2

The evaluation of the factors and conditions of the establishment of the NSG in Russia and Germany in the period from 2002 to 2012 (% of the GDP)

Block	Year			
	2002		2012	
	Russian Federation	Federal Republic of Germany	Russian Federation	Federal Republic of Germany
1. Export intensity	37	35	33	41
2. Expenses on the ICT	1.55	5.88	1.69	4.8
3. Expenses on education	3.1	4.6	4.1	6.7
4. Expenses on public health	3.7	8.1	2.7	11.3
5. Direct foreign investment inflow	0.95	2.6	1.16	1.11
6. Stock market capitalization	43	43	40	44
7. Bank lending to legal entities and individual persons	30	145	45	91
8. Pension provision	6.1	6.6	10.9	10.1
9. Expenses on Research and Development	1.2	2.5	1.4	3.0
10. Aggregate tax burden	30	55	22	23
11. Shadow economy	30	16	16	13
12. Social allowance	1.2	20	1.6	28

Note: For Germany, item 3 is indicated for 2011, items 8,12 — for 2010; for Russia, item 11 is for 2010.

Sources (for 2012): for Russia: Russian Regions. Socio-economic indicators. 2013: Statistical Book, Moscow, 2013; The Data from the website of Federal State Statistics Service (http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/accounts/#; http://www.gks.ru/free_doc/new_site/finans/fin23.doc); website of the Central Bank of the Russian Federation (http://www.cbr.ru/statistics/print.aspx?file=credit_statistics/ex_rate_ind_12.htm); Russian Business Newspaper (No. 897 (19) of 21.5.2013); Gazeta.ru (1.4.2011); for Germany: Statistisches Bundesamt (<https://www.destatis.de/DE/ZahlenFakten>); Statistik-Portal (<http://de.statista.com/statistik/daten/studie/20063/umfrage/entwicklung-des-umfangs-der-schattenwirtschaft-seit-1995>); World Economic Outlook Database (April 2013); Focus-Online (26.06.2013); Digitale Wirtschaft 2012 (Monitoring-Report); Web-Seite vom Firma "Afinu" (<http://www.afinu.de/informationen-zum-thema-kredite>); Index Mundi (<http://www.indexmundi.com/facts/germany/market-capitalization-of-listed-companies>). The date of access for all web pages: 20.5.2014; The Analysis of the Dynamics of Public and Private Expenditure on Health and Education in Modern Russia. / Ivanov V. N., Suvorov A. V., Balashova E. E., Treshchina S. V. // Forecasting Problems. 2014. No. 6. p. 31-43.

assessment we certainly have to consider a set of several indicators in respect of each block, which we are planning to do in the future. The results of the comparative evaluation of factors and conditions for the establishment of the NSS in Russia and Germany for the period from 2002 to 2012 are presented in the Table 2.

On the Table 2, one may notice that the two countries are quite close in respect of some blocks and very different in respect of the other. The consolidated data on the positions of Russia and Germany on the selected factors of assessment are presented in the Table 3.

Upon the analysis of the contents of the Table 3, we can distinguish the factors which have similar values in the two countries, in particular, the blocks 1, 3, 6, 8, 10, 11:

1. Export is very significant for the economy of both countries, and there is also the need to introduce changes to the structure of export by increasing the share of high-value added products (of course, it has to be taken into consideration that in Germany this share is incomparably higher than in Russia).

3. The expenditure for education is similar, as well as its upward trend, but in Germany it is additionally funded or co-financed by enterprises (apprenticeship in enterprises, shared investment into occupational training and advanced training, monetary incentives and other types of stimulation of student achievement).

6. Low capitalization of the stock market in both countries is expressed by the equal value of the indicator, and in case of the Russian Federation, this indicator went down in the last decade.

8. The two countries have the same ratio of the payments to the pension fund and the GDP, and another common feature is the upward trend of the indicator during the last 10 years.

10. The heavy tax burden is similar for the two countries.

11. A relatively large share of shadow economy, although a downward trend is observed in both countries.

Common Features and Differences in the Establishment of the NSS in Russia and Germany

The Factor of Assessment	Similarities	The Specifics of the Russian Federation	The Specifics of Germany
1. Foreign trade	High export intensity and positive balance	Export of raw materials and low-added value products	Export of machine engineering and chemical products
2. "New economy"	Understanding of the significance of the sector	Brain drain	Engaging specialists (in industry, internet technologies and medicine)
3. Specialists	High level of education and conservatism	IT specialists leave the country	Shortage of specialists
4. Education and medical services	Some reforms have been planned	Partly paid by patient	Free and provided under the Compulsory Health Insurance
5. Export and import of capital	There is a capital flight	Investment climate improvement	More profitable investment abroad
6. Global Financial Market	Insufficient use of advantages	Underdeveloped institutional structure	High expenditure for the social needs
7. The banking and insurance market	Binding of the industry and banking sectors	The country lacks global-scale banks	High dependency of the German economy on the banking sector
8 Pension provision	Some reforms have been planned	Monetization of benefits	Retirement age increase
9. Labour Market	Immigration of workers from less developed countries	Labour migrants from the former USSR republics	Foreign IT specialists
10. Tax system and corporate management	The task of compliance with the international reporting standards	Depreciation policy has to stimulate investment	Tax burden reduction
11. Bureaucracy	High level of bureaucracy	A great number of participants and levels	A great number of standards, including environmental standards
12. Guarantees and Benefits	Numerous benefits and authorities responsible for them	Low level of the minimum wage and, therefore, of the benefits	Activity of the labor unions; social measures to keep valuable talent

Significant differences are observed between Russia and Germany in respect of a number of indicators (blocks 2, 4, 5, 7, 9, 12):

2. Even in comparison to Germany, which does not belong to the world leaders in the ICT market, Russia's share of expenses for this sector is low and does not allow to turn the branches of the "new economy" into one of the priorities of neo-industrial economy. It is noteworthy that many interdisciplinary approaches are practiced in Germany for this purpose, because Industry 4.0 cannot be based on web technologies alone. It is necessary that specialists from various areas cooperate, or the specialists need to receive additional education in several other fields.

4. The share of health care expenditure in the Russian Federation was less than a half of the corresponding indicator in Germany in 2002, and in 2012 the gap became even wider (more than 4 times).

5. Russia, which was lagging behind in terms of the import of capital and in 2002 had the corresponding indicator almost three times lower than in Germany, in 2012 overtook Germany, which confirms the productivity of the measures aimed at the attraction of investment to the Russian economy, but the absolute amount of investment in the Russian Federation remains incomparably low.

7. In 2012, the trend of lagging behind in terms of the ratio of the bank loans to the GDP remains, but their share is growing in Russia, which shows the development of the banking sphere in the country, and it is also worth mentioning the positive downward trend of the dependence of the German economy on the banking sector, which used to be too high (from 145 to 91 %).

9. Over the last decade, research and development costs in both countries increased, but in the Russian Federation these expenses still remained twice lower than in Germany.

Specific features in the directions of the development of NSS in Russia and Germany

Goal	Direction	The Specifics of Germany	The Specifics of Russia	Joint decisions
Support of global competition	Improving competitiveness due to the establishment of favourable environment for doing business	Maintaining the leading position in the field of innovation, reduction of the share of social payments	Creation of the conditions for the financing of modernization and import substitution	Joint developments in the field of energy, environmental protection, medicine
The requirements of the neo-economy	Increasing significance and role of the human capital in the context of the reduction of total costs	Implementation of Industry 4.0 concept, personnel training and retraining	Neo-industrialization of the economy, vertical integration in the industrial complex	Joint training of specialists, carrying out joint scientific and research projects
Development of socially orientated economy	Creation of the conditions for the development of human potential	Enhancement of the proactive position and responsible attitude of the population	Increase of estimation of the Human Capital contribution	Establishment of new organizational forms involving intersection of interests

12. The large gap in the amount of welfare benefits is also explained by their low level in the Russian Federation and shows the excessive number of various welfare benefits in Germany, which are a burden for the country's budget (during the last decade, this indicator has increased from 20 to 28 %) and result in parasitic attitudes among some groups of its population (undereducated or under-adapted citizens) [25]. At the same time, when considering the situation in Germany, one has to be aware that the social policy there is implemented not only by the state and the labor unions. The enterprises also take an active part in its implementation in order to enhance their image as employers.

It is implemented in the form of bonuses for the employees in addition to their salary/wages. According to personnel specialists (research entitled "Fringe Benefits" by A. Hewitt, 2013), the employees of German enterprises prefer company cars and catering provisions (meals allowance, coupons for meals). In some cases, the employees of German enterprises have a choice among different types of bonuses. In this case, the most commonly offered options are the following: social security based on the age (56 %), an official car (43 %), life insurance (48 %), health insurance (39 %). In addition, employees particularly value the following perks:

- company laptop or smartphone (95 %), which can also be used for personal purposes;
 - meals allowance (84 %);
 - time off work for an advanced training course (80 %);
 - opportunities to do fitness activities (78 %).
- Besides, there are other benefits, e.g.,

94 % of enterprises provide a disease prevention or health care programme, 75 % of them have their own doctor, give inoculations against influenza (84 %), conduct periodic health examinations (52 %);

– medical counselling services, such as advice on giving up smoking (48 %), nutritional science (42 %) [26].

The reduction of health care expenditure is also possible due to the reinforcement of health-promoting programmes in enterprises and municipalities, as well as due to the fact that a company's sickness benefit fund is also used to pay bonuses for healthy lifestyle and exercising.

Based on the common and different factors and conditions outlined here, the authors suggest the main directions for the establishment of NSS in Russia and Germany, which are recommended to be taken into consideration in the design of the development strategies and policies in both countries, as well as in the international cooperation (Table 4).

Major Findings

In our consolidation of the findings it is important to emphasize the similarity of the conditions in which the new models of NSS are being established in Russia and in Germany.

First, the pressure of the global competition appears in the fact that in order to keep their product competitive, countries have to, on one hand, catch up with innovative leaders or keep up with them,

that is, to increase the expenditure on R&D, education, development of science-intensive and high-tech sectors, while on the other hand it has to continue cutting costs, including costs of labor remuneration and welfare benefits. In this connection, one of the possible win-win options for both parties is to cooperate in the way that the strengths of each country complement those of the other.

Second, the requirements of the neo-economy are shown in the fact that the low cost of labor is increasingly losing its role as a source of competitive advantages in the global market. The problem involves not only raising the issue of cost-cutting, including labor costs cutting, but the qualitative redistribution of the costs for the training of specialists that the market needs, and retraining people employed in disappearing jobs, which is done by using various resources, including new infrastructural forms of organization.

Third, the presence of intellectual capital, which is a prerequisite for neo-economy, is the only possible subject to consistent striving towards the goals of socially oriented economy, on one hand, particularly in respect of the socially vulnerable groups of population, but, on the other hand, it has to be possible to use the capacities of different nature, the objectives and motives of individuals which stimulate the activity and initiative of citizens.

Thus, the common characteristic of Russia and Germany is the richest traditions of high-quality industrial production and engineering education in these countries, where science is the integral and most important component of culture and the image of these countries in the world is to a large extent formed with due consideration for the contribution of the most prominent representatives of Russian and German science. Based on the findings of the comparative analysis of the evaluation of factors and conditions of formation of the new model of the neo-industrial social economy in Russia and Germany, we come to the conclusion that the countries are similar in respect of the objectives, initial conditions, problems and ways of their resolution, which, in turn, is the initial prerequisite for the establishment of the economic development policy for the future for each country individually and for the cooperation between them as well.

References

1. Ratnikov, A. Tyulpan zavyal. Korol Niderlandov obyavil o zavershenii epokhi «vseobshchego blagosostoyaniya» [The tulip faded. The king of the Netherlands declared the end of the “general welfare” era]. *Lenta.ru*. Available at: <http://lenta.ru/articles/2013/09/19/netherlands> (date of access: 15.1.2015).
2. Sozialbudgetleistung. *Statistisches Bundesamt Deutschlands*. Available at: https://www.destatis.de/DE/ZahlenFakten/GesellschaftStaat/Soziales/Sozialbudget/Tabellen/SozialbudgetLeistung2009_2010.html (Zugang: 21.5.2014).
3. Henkel, H.O. (2008). *Jetzt oder nie*. Berlin.
4. Kartsev, D. (2011, November 27). Vtoraya promyshlennaya revolyutsiya [The second industrial revolution]. *Russkiy reportyor [Russian reporter]*, 42.
5. Arkhangelskiy, Yu. (2014). Neoundustrializatsiya. Nekotoryye polemicheskie soobrazheniya [Neoundustrialization. Some polemic thoughts]. *Ekonomist [Economist]*, 5, 3.
6. Veshkanov, G. (2014). Demagogiya protiv novoy industrializatsii, ili popytka s negodnymi sredstvami [Demagogy against new industrialization, or an attempt with improper means]. *Ekonomist [Economist]*, 7, 3.
7. Hirsch-Kreinsen, H. (2014). Wandel von Produktionsarbeit — „Industrie 4.0“. *Soziologisches Arbeitspapier*, 38.
8. Schoessler, M. (2013). Welche Innovationspolitik brauchen wir in Deutschland? *Zukunft der Innovation*.
9. Seeber, S. & Vassiliadis, M. (2013). Die Zukunft der Arbeitswelt — Auf dem Weg ins Jahr 2030. *Bericht der Kommission «Zukunft der Arbeitswelt» der Robert Bosch Stiftung mit Unterstützung des Instituts für Beschäftigung und Employability IBE*.
10. Abschlussbericht des Staatssekretärsausschusses zu «Rechtsfragen und Herausforderungen bei der Inanspruchnahme der sozialen Sicherungssysteme durch Angehörige der EU-Mitgliedstaaten». *Bundesministerium des Innern, Bundesministerium fuer Arbeit und Soziales*. Available at: http://www.bmi.bund.de/SharedDocs/Downloads/DE/Broschueren/2014/abschlussbericht-armutsmigration.pdf?__blob=publicationFile (Zugang: 13.1.2015)
11. Kuzmin, A. I., Lavrikova, Yu. G., Neklyudova, N. P., Struin, N. L., Ilinbayeva, Ye. A. & Tretyak, A. N. (2014). Mezhranovyy obmen mneniyami po problemam sotsialnogo zdorovya inostrannykh trudovykh migrantov [Intercountry exchange of opinions on issues of social health of foreign labor migrants]. *Zhurnal ekonomicheskoy teorii [Journal of economic theory]*, 2, 150-152.
12. Stein, L. von. (1850). *Geschichte der sozialen Bewegung in Frankreich vom 1789 bis auf unsere Tage*. Leipzig.
13. Biryukov, S. Klassik gosudarstvennogo sotsializma. Sintez Lassalya [Classic of the state socialism. Lassal's synthesis]. Available at: <http://www.apn.ru/publications/article17656.htm> (date of access: 13.1.2015)
14. Mueller-Armack, A. (1981). Soziale marktwirtschaft. 1956. Handwörterbuch der Sozialwissenschaften, wieder abgedruckt. *Wirtschaftsordnung und Wirtschaftspolitik*, 3. Aufl. Bern und Stuttgart, 243-249.
15. Erkhart, L. (1991). Blagosostoyanie dlya vsekh [Well-being for all]. Moscow, *Ekonomika [Economics]*.
16. Solovyov, V. S. (1990). *Sochineniya: v 2-kh t. T.1 [Essays in 2 vol. Vol.1]*. Moscow, Mysl.
17. Stozhko, K. P. (1995). *Ekonomicheskii gumanizm v Rossii [Economic humanism in Russia]*. Yekaterinburg, Izd-vo Ural. gos. prof. ped. un-ta [Ural State Professional and Pedagogical University Publ.].
18. Bogomolov, O. T. (2003). Razmyshleniya o nasushchnom [Considerations on vital]. Moscow, *Ekonomika [Economics]*.

19. Nekipelov, A. D. (2013). K voprosu ob ekonomicheskom roste i ekonomicheskom razvitiu [To a question of economic growth and economic development]. *Zhurnal ekonomicheskoy teorii [Journal of economic theory]*, 4, 10-12.
20. Doklad Komissii po otsenke ekonomicheskikh rezultatov i sotsialnogo progressa [Report of the Commission on the assessment of economic results and social progress]. *Voprosy statistiki [Questions of statistics]*, 11, 12-21.
21. Mast, K., Schurer, E. & Kapschack, R. Arbeits- und Sozialhaushalt 2015: Investitionen in die Zukunft. SPD — Bundestagsfraktion. 27.11.2014. Available at: <http://www.spdfraktion.de/presse/pressemitteilungen/arbeits-und-sozialhaushalt-2015-investitionen-die-zukunft> (Zugang: 13.1.2015)
22. Kozlova, O. A., Shelomentsev, A. G. & Petrovskaya A. A. (2014). Metodicheskie voprosy otsenki sotsialnoy rezultativnosti proektov gosudarstvenno-chastnogo partnyorstva v sfere zdravookhraneniya [Methodical questions of an assessment of social productivity of projects of public-private partnership in the health sector]. *Vestnik Orenburgskogo universiteta [Bulletin of the Orenburg University]*, 8(169), 20-23.
23. Bax, M. Wie funktioniert eine duale Ausbildung. *Bildungsexperten*. Available at: <http://www.bildungsexperten.net/wissen/wie-funktioniert-eine-duale-ausbildung/> (Zugang: 13.1.2015)
24. Tatarkin, A. O. & Andreyeva, Ye.L. (2014). Formirovanie postindustrialnogo sotsialnogo gosudarstva: vektor razvitiya chelovecheskogo potentsiala [Development of the post-industrial social state: vector of human development]. *Problemy teorii i praktiki upravleniya [Problems of the theory and practice of management]*, 7, 24-31.
25. Fuchs, T. *Arbeit & Prekariat. Ausmaß und Problemlagen atypischer Beschäftigungsverhältnisse*. Hans Böckler Stiftung. Available at: <http://www.boeckler.de/pdf/S-2005-722-3-2.pdf> (Zugang: 13.1.2015).
- Hevitt, A. (2013). Die Bedeutung freiwilliger Nebenleistungen beim Gehalt steigt. Lohn- und GehaltsPROFI aktuell. Ausgabe 2. [Elektronische Quelle].

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