

Income Regulation as an Instrument for the Development of Human Capital

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Abstract— The article is devoted to the limitations for the development of human capital associated with income inequality. Income differentiation in the modern Russian economy is analyzed. In particular, the emphasis is placed on the problem of wage disproportions as the main income. The unreasonable inertness of the state policy of income regulation is noted. The factors for the growth of investments into human capital by households and firms are identified. Special attention is paid to motivation of investments into human capital. The high degree of income inequality is considered as a negative factor from the point of view of human capital development, economic efficiency and social stability of the economic system. Measures are proposed to strengthen the state regulation of incomes in order to increase motivation and reduce barriers to the development of human capital: increasing the volume of budgetary financing of the social sphere, the introduction of progressive income taxation, ensuring the functional viability of the minimum wage, etc.

Keywords— *human capital, income inequality, wage differentiation, investment in human capital, motivation, higher education, state regulation.*

I. INTRODUCTION

The relevance of the topic is associated with the strengthening of the role of human capital in the system of factors of the latest technological structure, the development of which is necessary for the Russian economy. The institutional conditions of this process include the specifics of the people's mentality, the most significant of them being the rejection of social injustice and high degree of income inequality. The relevance of the topic is also determined by the increased scientific interest in the problems of human capital development, poverty and income inequality, to the problems of the formation of modern income policy in Russian Federation. Among the authors writing on these problems we should mention such as [1],[2],[3],[4],[5],[6]-[11] et al. Most publications focus on income management in terms of raising living standards and overcoming poverty, taking into account the impact of poverty and income inequality on the stability of the economic system and possible social conflicts[2],[3],[5],[7],[10].

At the same time, the issues of state regulation of incomes in terms of human capital development, the purpose of

regulation and appropriate tools to be used, seem to have been insufficiently worked over[9]. Taking into account the institutional factors of the Russian economic development, the most important in regard to human capital is studying income inequality and income regulation in terms of reducing this inequality. The goal of modernizing the Russian economy, new industrialization, transition to the digital economy, requires increased attention to the study of income regulation from the point of view of human capital development, which is vital for modernization. It is necessary to analyze the trends and develop appropriate mechanisms and recommendations.

II. HUMAN CAPITAL, INCOMES AND INCOME INEQUALITY

In economic theory and practice, nowadays in many cases there is a shift of emphasis from physical capital to the human capital. The founders of the theory of human capital T. Schultz and G. Becker were awarded the Nobel Prize, their ideas were recognized and developed. Human capital implies the accumulated knowledge and professional skills, health, mobility, motivation of the individual, which provide the subject with income, and give additional opportunities for growth to the economic system [12]. The competitiveness of the national economy and enterprises in the innovative economy depends mainly on the quality and conditions of using and developing the human capital, rather than natural resources.

Since human capital is inseparable from its individual carrier, its formation and return are determined by a variety of economic, social and psychological factors. Like physical capital, human capital needs investment for its formation and development in the relevant areas. In economic theory, there is no complete list of the areas of development. Nevertheless, clearly recognized ones are, above all, spending on education that helps to improve the skills and productivity of workers, investment in health, including health care costs, which increases the duration and effectiveness of the working age, contributes to improving working abilities. The importance is given also to ensuring the labor mobility, raising the culture of the people and other[12],[13].

The formation and increasing of human capital requires significant financial expenditure. Investments in human capital are made by households, firms, the government, public funds and organizations. The government can make a

significant share of these investments, thus providing economic regulation and exercising the social function. The trend is not only an increase in public spending particularly on education, but also a change in the proportions of expenditure, taking into account the prospect of structural changes of production and, respectively, the labor market. The structure of expenditure in the most efficient economies is changing in favor of spending on the system of higher and postgraduate vocational education[13].

The role of the state in human capital development is not limited to the direct financing of the appropriate sectors. It is equally important to create a public policy that creates conditions encouraging investment in human capital by companies and the public. To develop human capital in the economy it is necessary to provide basic changes in the public expenditures and effective measures to create a favorable environment for accumulating the human capital.

In terms of activation of human capital and its role in modernizing the economy investments of households are particularly important. Investment in human capital from households is possible only if there is reproduction and recovery of the labor resources. This requires an appropriate level of current consumption from which savings can be generated to be invested in education and skills development, the situation when decisions can be made to get loans for education or medical treatment. The salary as the price of work and the factorial income of the owner of a labor resource has to perform a number of functions: reproductive, stimulating, regulating, distributive, and informative[14]. If these functions are not performed, it is not possible to preserve and expand the resource potential, to use the income for developing the human capital.

The average salary and average per capita disposable income are the basis for assessing the reproductive capacity of households. The dynamics of average salary in Russia was accelerated at the beginning of this century. In 2008-2014, in general, the growth of real income and real salaries continued. In 2015 - 2017, the situation somewhat worsened. Both real income of the population and wages were falling (as the data analysis shows in the table 1). The level of wages in the Russian Federation can be considered low in terms of its reproductive function. It is especially clear, if the average salary is compared with the price of 1 sq. m of housing. The reproductive function of such income is particularly weak in the families having children due to the increasing commercialization of education and healthcare. In the long term, there was little change in the income distribution: 62 to 70 % families had monthly per capita income below average (62% of households in 2017)[15],[16]. Per capita income in 2010-2017 increased from 18958.4 to 31477.4 rubles. It was 66 percent growth. Besides, the average salary is not a reliable estimate when there is a big pay differentiation[18]. Almost 50 per cent of the total accrued wages is distributed among 20 per cent of employees, with 10 per cent of the highest paid being about 30 per cent. As a result, about 70% of working Russians earn below the average [15]. Although the decile coefficient (coefficient of funds) and the Gini coefficient in 2014-2017

slightly decreased, in 2017 the incomes of 62.5 % of the population were below the average[16].

TABLE 1. The Incomes Indicators in Russian Federation

The Incomes Indicators	Years				
	2000	2005	2010	2015	2017
Average monthly nominal wage of employees, RUB.	2223	8555	20952	34030	39144
Average monthly disposable income per capita	2281.1	8088.3	18958.4	30466.6	31477.4
Average monthly real disposable income per capita, percent to the previous point	100	170	141	105.1	92.6

Source : based on the data of Federal Statistics Service of Russian Federation [17].

The results of sociological studies confirm that the majority of the Russian population perceive the existing income inequality as a social injustice, as a barrier to their development and self-realization. Regular surveys of the Public Opinion Foundation show that the majority of respondents (61% in 2017) hold the same opinion. Describing the main effects of social injustice, most respondents named inequality in the distribution of income (16%), 1-5% respondents noted other manifestations of injustice (corruption, lack of law, rising prices, lack of access to education and healthcare, privatization etc.). Especially many respondents emphasize the injustice of the uniform income tax rate (74%) and the unfair distribution of income from the sale of the country's natural resources.(72%).[19].

Income inequality, taking into account its high degree and people's attitude to it, does not motivate economic entities to improve the quality of labor, develop labor abilities and skills, realize the potential. It is a constraint to the development of human capital. None of the modern concepts of state regulation denies the redistributive function of the state. Only the question of redistribution degree and the hierarchy of objectives is discussed. In this regard, emphasis is placed on certain forms of regulation. In national economies with strong trade unions, the state may for some time limit itself to progressive income taxation, increased budget expenditures on social programs, introducing and adjusting the minimum wage, participating in arbitration agreements, controlling observance of labor rights. Taking into account the lack of this factor in the economy of modern Russia, the state should use a more systematic approach to the issue of income regulation and the development of the relevant concept. We should be talking about a range of long-term goals of such regulation, and the specific measures to be taken.

The public sector in Russia in the sphere of labor relations is a reference point for private sector enterprises, since the role of trade unions is insignificant. During the transition to the market economy in the 1990s, trade unions were almost destroyed, and in the last 15 years they have not

been able to regain their lost positions. Analyzing the ratings of Russian regions by the level of social tension, the Federation of independent trade unions of Russia fairly connects the causes of social conflicts in the most problematic regions with violations of social justice in the sphere of and with the appropriation of income and property of enterprises in the process of deliberate bankruptcies[20]. In the Russian economy, this function of the state is underrepresented. This applies to the strategy of socio - economic development, as well as to the current economic and social policy. We can note positive changes made in 2018: namely, bringing the minimum wage up to the subsistence minimum. This step is an important information signal for the labor market, it drives a significant part of the workers to the level of labor resource reproduction. However, income regulation should realize the social nature of the Russian economy, as it is set out in the Constitution of the Russian Federation, showing the state orientation to interests of the majority of the population. This will help create a strong motivation for self-realization, for the development of own resource potential based on real improvement of educational and qualification level, adaptation to new technological conditions, to the expected structural changes.

III. MOTIVATION AND INVESTMENT OF HOUSEHOLDS IN HIGHER EDUCATION FROM THE POINT OF VIEW OF HUMAN CAPITAL DEVELOPMENT

This kind of motivation, motivation for self-realization, itself is an element of human capital, along with education and qualifications and labor skills acquired. The Russian Federation is among the countries with a very high human development index because of education development indicators: 0.804 with the world average 0.717 in the UN Report for 2016. However, the human development index for inequality is much lower: 0.705, with a world average of 0.688. In terms of prospective transition of the Russian economy to a new quality of economic growth, it is worth highlighting such elements of human capital as motivation, knowledge and professional competence. This means investment in education, especially higher education, and skills development. As an element of human capital, motivation determines the morale and energy of employees [12]. Dissatisfaction with income leads to negative socio-economic and psychological consequences: falling creative activity of employees, low prestige of higher education, increasing migration of highly qualified specialists abroad, low self-esteem and pessimism. This becomes a barrier to economic growth and stability. According to expert estimates, 1/3 of the employed perform work that does not require previously acquired knowledge [13]. Only 54% of workers have jobs related to their education [21].This gives rise to passive individual elements of human capital whose contribution is very little. Economic resources are being used irrationally. Thus, there is a need for fundamental changes in the structure, quality and adequate assessment of the labor, which are associated with income regulation.

The all-Russian center for public opinion studies shows

that the majority of respondents (81% in 2016) want higher education for their children and grandchildren; the share of such answers has increased by 1,5 times in 25 years - from 53% in 1991[22]. However, the majority of respondents (53%) do not assume that higher education will allow them to earn more and have higher incomes. Respondents (53%) consider higher education to be less accessible than in the Soviet period [Ibid.]. At the same time, the number of employees with higher education and the specialist graduates has increased dramatically over the past 15 years: from 28.8 to 82.5%, that is, 2.86 times (as shown by the data in the table 2) [21].

TABLE 2. Higher Education Indicators in Russia^a

Education indicators in the Russian Federation	Years			
	2000	2005	2010	2015
General government expenditures for education, billion rubles	214.7	801.8	1893.9	3034.6
General government expenditures on higher education, billion rubles	24.4	125.9	377.8	517.1
General government expenditures on higher education, per everyone student, thousand rubles	12.1	26.5	48.7	53.0
General government expenditures on higher education, percent of Gross Domestic Product	0.33	0.6	0.8	0.6
Households expenditures on higher education, per household member, RUB	71.5	604	1098	813
Coefficient of output of specialists with higher education	28.8	45.5	60.2	82.5
The ratio of wages of workers with higher education and secondary general education, percent	no data	147.3	161.4 ^b	167.1

Source: a.Based on the data of [21], b.Data is according to 2011.

Thus, sociological studies show the strong orientation of households in the Russian Federation (high school graduates and their parents) to getting higher education. Household expenditure on educational services and their share of expenditure increased in 15 years (as shown by the data in the table 2). At first it may seem that the findings of sociological surveys and analysis of statistical data show contradictory trends. In our opinion, this is due to the institutional specifics of the Russian labor market. We must note the formal nature of household investment in higher education and training, the desire to obtain documentary evidence of education without real development of human capital. This is explained by the mandatory requirement of such a certificate for entering the labor market. At the same time, the wages as the main income are not connected to the development of human capital resulting from education and skills development (see table 2).

The return on investment in human capital, income from these investments, is related to other factors, primarily institutional, not resource.

Among these factors are: lack of necessary regulation of income including wages as the main income, slow development of the strategy of structural changes, irrational reforms in the wage system, lack of redistributive orientation in tax policy, the formation of specific labor markets in Russia under the influence of liberal concepts of state regulation, globalization of world labor markets, expansion of labor migration. Employers, including the state as an employer, link higher education and skills development to retaining the job as such, rather than wage increase. There is no motivation to invest in human capital with the aim of getting a return on investment. On the contrary, people are given strong incentives to formalize education and skills rather than develop their own human capital. Such incentives appear to be even less effective when compared with income from the investments of the respective household funds in bank deposits. At the same time, there are incentives for emigration of active skilled workers who can activate their accumulated human capital and get a return from it in other national economies. The income policy does not take into account that, unlike physical capital, human capital does not have a geographical connection.

Regulation of income, primarily wages as the main income, should be focused on creating motivation for the development of human capital, strengthening incentives for investment in human capital by households and enterprises. Certainly, this is not about reducing the volume or share of the public expenditures on education. Quite the opposite, it is necessary to increase them. This is especially true for spending per student. Stimulating investments in human capital by households simultaneously affects the development of individual motivational sphere, the accumulation of knowledge, labor and creative skills as elements of human capital. Despite the fact that the share of household investments in the total volume of investments is the smallest one, decisions on investments determine enhancing human capital. As a result, the problem of poverty will also be addressed faster as the change in the quality of labor resources increases the chances for a new type of economic growth. This approach allows better taking into account the opportunity cost and training related payments.

The increase in wages due to better education and skills mean the return, income from investment in human capital. This type of relationship must be used in the system of remuneration in the public sector. It is necessary to establish this dependence more clearly and strictly within payment regulation in the public sector. After the reform of the centralized tariff system in the sphere of labor remuneration which remained in the public sector for some time after the transition to the market economy, there were no systems of formation and regulation of wages created, which should be adequate to modern conditions and effective for enterprises and organizations of the sector.

IV. CONCLUSIONS

Income regulation can be the most effective tool for the development of human capital in the Russian economy, considering its institutional specifics. In this regard, the main focus of income regulation should be on wages regulation to increase its reproductive capacity, provide the functional content of wages. The regulation of income with an emphasis on redistribution and return on investment in human capital will partially solve the problem of finding budget sources to be spent on the development of human capital. At the same time, the households motivation to invest in human capital is increased. Reducing inequality in income distribution and overcoming poverty is not only of social importance, but also increases the potential for human capital development, which means that it increases the efficiency of the economy, accelerates structural reforms and economic recovery on a new qualitative basis. Regulation of wages as the main income source should be focused on motivation for the development of human capital, strengthening incentives for investment in human capital by households and enterprises. In the public sector, wage increases and wage reforms need to be linked to education and skills development. Income from investments in human capital should be included in the system of wage formation and regulation.

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