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THE DOMESTIC ECONOMY IN THE CONTEXT OF NOOTRANSITION: EMPIRICAL EVIDENCE AND PRACTICAL IMPLICATIONS

Abstract: The article examines the key parameters of the nootransition as a process of transformation of the socio-economic system, focusing on changes in the nature of labour and forms of ownership. The focus is on the concept of the aromorphosis of labor as an indicator of the transition from the industrial-market system to a non-economic way of satisfying reasonable needs based on creativity, culture, and personal development. A system of empirical indicators is proposed that reflects the depth and direction of the nootransition in the Russian context: the transformation of the structure of labour, forms of employment, motivation to work, the spread of creative activity, and the diffusion of property. Based on the analysis, it is concluded that Russia is in a transitional stage between the second and third phases of the global nootransition, demonstrating partial labour and institutional transformation while retaining the fundamental features of the industrial system.

Keywords: aromorphosis, economics, creativity, labour, noonomy, nootransition, knowledge.

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智慧型转型过程中的俄罗斯经济状态——指标的实证和实践

摘要: 本文探讨了作为社会经济体系变革过程的智慧型转型的关键指标, 重点关注劳动性质和所有制形式的变化。主要探讨了劳动模态这一概念, 将其视为从工业-市场体制向非经济方式满足合理需求的过渡指标, 这种方式基于创造力、文化和个体发展。文中提出了一套反映俄罗斯当前社会背景下智慧型转型深度与方向的实证指标体系: 劳动结构的转型、就业形式、劳动动机、创造性活动的普及, 以及所有权的扩散。基于所进行的分析, 得出结论: 俄罗斯正处于全球智慧型转型第二阶段与第三阶段之间的过渡阶段, 在保留工业模式基本特征的同时, 展现出部分劳动和制度转型。

关键词: 模态、经济、创造、劳动、创造力、智慧经济、智慧型转型、知识。

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Introduction to the Problem

Modern global economy is experiencing a period of profound and multidirectional transformations, encompassing not only production and technological aspects but also socioeconomic and cultural ones. Among the most pressing challenges facing humanity are growing inequality, a crisis in the content and meaning of labor, the dehumanization of production processes, the dominance of short-term financial interests over long-term development, and so on. These phenomena exacerbate the need to search for alternatives to the current model of economic growth, based on profit, overconsumption, and exploitative logic.

In this context, the need to develop a new paradigm - one focused not on quantitative indicators, but on the development of human qualities, the advancement of knowledge, cooperation, and the creative intensity of labor - is becoming increasingly pressing. In the Russian political-economic school, this approach has received conceptual form of the theory of noonomy and the associated phenomenon of nootransition - a qualitative shift from industrial-market logic to a (post-)market, human-centered way of life.

However, this approach is still in the process of theoretical and methodological understanding and development: a unified system of notions is lacking, and methodological and empirical tools for assessing ongoing changes are poorly developed. Verifying the nootransition stage in relation to specific national economic systems poses particular challenges. It is insufficient to consider quantitative indicators alone (e.g., GDP level, employment) – we need to consider nationally specific parameters of social relations, the nature and content of labor, the logic of reproduction, etc.

In this regard, based on the above, it can be concluded that the problem of developing a system of empirical indicators representing the depth and direction of nootransition in the domestic economic system, drawing on the theory of noonomy, comprises a significant research problem relevant to the modern field of social sciences and requiring comprehensive elaboration and substantiation.

Literature Review on the Research Problem

The issue of nootransition and the associated transformation of the nature of labor is crucial in contemporary Russian political and economic thought. The foundations of the theory of noonomy were laid by S.D. Bodrunov, who defined it as a qualitatively new model of reproduction focused on knowledge, creative labor, and social cooperation. According to his interpretation, noonomy is “a non-economic way of organizing the economy to meet needs, which is implemented by humans who have gone beyond material production” [Bodrunov, 2019, p. 9]. It is emphasized that “noonomy is a qualitatively new, non-economic social system, on the path to which all the basic institutions of the existing economy - private ownership, money, etc. - are removed, and humans become individuals focused on non-simulative needs and self-improvement” [Buzgalin, Kolganov, 2020, p. 9].

An important area of understanding noonomy is the critique of market restrictions on creative labor, as shown in the works of A.V. Buzgalin. The author notes: “The real foundations of the

genesis of post-capitalist relations are the progress of labor that is creative in its content and the relations that arise on this basis, including: 1) relations of the creation of unlimited public goods, taking the form of everyone's ownership of everything; 2) relations of individual development through labor, which acquires the status of a need; 3) relations of co-creation" [Buzgalin, 2022, p. 100]. This means that noonomy is based not on the commodity nature of labor, but on its ability to be an expression of freedom, self-actualization, and social utility.

L. A. Bulavka-Buzgalina continues this idea, emphasizing the alienation of creativity in market culture. It is articulated that the market system not only alienates the artist's work but also subjugates the process of inspiration and the creator's inner nature: "Now, not only the artist's creative output is becoming a commodity, but also their creative intentions, their authorial ideas, and even what is called the creator's 'soul' or 'inspiration.' ... Thus, the artist becomes a function of the brand market" [Bulavka-Buzgalina, 2021, pp. 12-13].

The problem of labor transformation in the context of digitalization is addressed in the study by M.V. Grechko and S.E. Sevikyan. The authors point out that automation eliminates routine tasks and promotes meaningful activity, but simultaneously exacerbates forms of alienation. Thus, digital capitalism intensifies exploitation through the extension of working hours, the rhythmization of labor, and the subordination of creative activity to algorithmic logic [Grechko, Sevikyan, 2023, p. 310]. In this context, labor truly takes on a dual dimension - as a factor of emancipation and as an object of digital control.

The political and institutional aspects of labor's transformation are represented in the research of international scholars. For example, A. Freeman writes about the fundamental role of creative labor in the modern economy. It has been noted that it is in combination with information and communication technologies that creative labor becomes a source of marketable products whose value is based on uniqueness and a non-mechanical nature. He emphasizes that creative labor is not mechanical labor, which, in combination with ICT, creates a mass market for products that embody the utility of uniqueness [Freeman, 2020, p. 26].

The Club of Rome made a significant contribution to the development of alternative economic paradigms, beginning with its first report, *The Limits to Growth* (1972). Subsequent publications, including *Come On! Capitalism, Short-Termism, Population, and the Destruction of the Planet*, emphasize the need for sustainable development, a reassessment of economic goals, and the limited nature of natural resources. The focus is not on quantitative growth, but on the quality of development, oriented toward the long-term viability of the system [von Weizsäcker, 2018].

Thus, both domestic and foreign scholarly traditions are moving toward rethinking the nature of labor, development goals, and the criteria for progress. In Russian political economic thought, this trend is expressed in the theory of noonomy and nootransition, which emphasize a shift in goal-setting: from consumption and profit to knowledge, creativity, and self-actualization.

However, it's important to emphasize that the domestic scholarly tradition still lacks a robust methodology for verifying the nootransition at the empirical level. Furthermore, indicators capturing the aromorphosis of labor as a key element of the new order are poorly developed. In this context, the goal of this research is not only to theoretically understand noonomy but also to develop measurement tools for the practical analysis of the current state of domestic economy during the nootransition.

Methods and Approach

This research draws on the tradition of critical political economy, and noological and institutional approaches exploring the connections between the transformation of labor, the development of productive forces, and the shift in socioeconomic structures. The aim of this paper is to determine the position of the Russian economy on the trajectory of nootransition through an analysis of relevant indicators. The object of this research is the modern Russian socioeconomic system, both retrospectively and prospectively. The subject of the research includes the aromorphosis of labor and the diffusion of ownership as the basic empirical markers of the nootransition's stages.

The choice of research tools is determined by the nature of the research problem being addressed. For the purposes of this research, these include the following:

- the theory of noonomy, which serves as the methodological basis for the research, allows us to present the aromorphosis of labor and the nootransition as interconnected processes of transforming social and labor relations;
- a content analysis of academic publications and identification of the most frequently encountered interpretations of the concepts of “nootransition” and “aromorphosis of labor” in domestic and international literature;
- structural and institutional analysis aimed at identifying the characteristics of employment patterns and their compliance with the criteria of labor aromorphosis and the stages of nootransition;
- statistical analysis, including the interpretation of data from Rosstat and analytical centers.

Thus, the methodological basis of this paper allows us to link the theoretical and conceptual analysis with the empirical examination of the transformation of labor and forms of ownership in the domestic economy, which ensures the comprehensive nature of the research.

Nootransition and Aromorphosis of Labor: Substantive Determination

The transition to a new social order based on knowledge, cooperation, creative motivation, and creative employment is becoming increasingly urgent in the face of growing tensions between existing forms of labor and productive forces. This process has been termed in academic literature as the nootransition, representing a profound transformation of the socioeconomic foundations of development.

Before presenting the author's reflections on the logic and trends of nootransition, it is necessary to define the conceptual definition of this phenomenon. It should be noted that in the modern epistemological field of economic science, various interpretations of the concept of “nootransition” coexist, making its formal and unified definition challenging (Table 1).

Application of the concept of “nootransition” in the epistemological field of economics reveals a plurality of approaches, representing both (1) differences in theoretical foundations and (2) analytical priorities, i.e., from macroeconomic structures to the transformation of labor motivation and social reproduction goals.

The possibility of an objective, scientific understanding of the concept under study allows us to assert that, substantively, noonomy is associated with a transition to a non-economic method of satisfying reasonable needs based on creativity, culture, and personal development. In S.D. Bodrunov's idea, the transition to knowledge-intensive material production is viewed as a prerequisite for the nootransition. However, knowledge-intensive production in itself does not yet signify the emer-

Table 1
Qualitative Analysis of Definitions of “Nootransition”

AUTHOR	ASPECTS ON WHICH THE RESEARCHER FOCUSES
S.D. Bodrunov	Nootransition as a transition from an industrial and market order to a (post)market system based on meaning-centric development, cooperation and the satisfaction of non-material human needs. The transition to a “human-centric model” is called the nootransition.
A.V. Buzgalin	The connection between the nootransition and the evolution of labor itself is emphasized: from alienated and coercive to creative and meaning-making. Labor becomes an individual need which forms the foundations of post-capitalism.
M.V. Grechko	A combination of qualitative changes in the system of social development, the goal of which K. Marx called “the other” side of material production and social relations. The means of achieving this state is the transformation of the content of labor, which, from necessity, becomes a motive and a need realized through creative activity.
V.V. Arkhipova	Nootransition is seen as a turning point in the development of a noosociety based on knowledge, noovalues, and solidarism; it is associated with the transition to a new world economic order - an integral one.

Source: authors.

gence of noonomy: “Noonomy refers to a non-economic way of organizing the economy to meet needs, which is implemented by humans who have gone beyond material production” [Bodrunov, 2019, p. 9]. Consequently, in its final phase, noonomy is marked by a non-economic way of organizing the economy and represents a qualitatively new stage of social development, which allows it to be meaningfully distinguished from the knowledge economy (as a stage in the development of the post-industrial economy). In this research, we will adhere to this understanding of noonomy, viewing the nootransition as a process of creating the prerequisites for the emergence of a “human-centered” system of economic organization.

In all interpretations, labor is the central “node” of the nootransition. Its qualitative change becomes both an indispensable prerequisite and an empirical indicator representing the dynamics of this process. In this context, the concept of “aromorphosis of labor,” introduced into scholarly discourse by S. D. Bodrunov, takes on particular significance. Bodrunov defines the aromorphosis of labor as a quantum leap in the structure and content of work activity, consisting of a transition from routine, standardized, and alienated forms of employment to activity imbued with knowledge, meaning, social relevance, and personal motivation. Such labor not only ensures the reproduction of material wealth but also becomes a means of human self-actualization, a source of cooperation, development, and the creation of a new social order. Moreover, the aromorphosis of labor, together with the diffusion of ownership, act as the basic markers of the nootransition’s stages.

Aromorphosis of Labor and Diffusion of Ownership as Indicators of Nootransition

Within the logic of noonomy, labor becomes a *means* of development for both the individual and society as a whole. This directly correlates with the idea of “inverting” Maslow’s hierarchy: while basic needs (survival, security) dominated in the industrial era, digitalization and basic abundance are leading to a return to higher levels: self-actualization, creativity, and so on. In noonomy, people work not for income, but for meaning, development, and contribution to the

common good. Consequently, the structure and content of labor become the criterion for determining how close society has come to a noonomic way of life.

Some researchers demonstrate that key sectors of noonomy (education, science, culture, healthcare, IT, project work) are marked by high levels of non-routine, cognitive, and creative workload [Grechko, Pleshivtseva, 2024, p. 161]. They require initiative, collaboration, interdisciplinarity, and the ability to reflect and make moral choices; they require internal motivation and intellectual engagement. Therefore, employment growth in these sectors and structural changes are not a secondary aspect, but a primary marker and characteristic of the state of nootransition.

However, aromorphosis of labor is impossible without the quality of the production environment. If the education system continues to reproduce routine skills, and the work culture and established model of industrial relations reward compliance over initiative, then formal employment indicators in creative industries will not signal a transition. This is why guarantees of freedom and autonomy in work, support for self-employment and freelancing, and the development of a co-creative environment rather than a corporate hierarchy are so important.

Thus, the aromorphosis of labor is not a linear process, but a shift in the system of productive forces and production relations, which can be accelerated or blocked depending on state priorities and the development goals of business and society. In this sense, it is not the growth of information technology (IT) industries or creative employment per se that is an indicator of the nootransition, but the extent to which such forms of labor become the norm and a meaningful development goal.

Consequently, labor, within the logic of noonomy, serves a dual function: on the one hand, it serves as an indicator of profound transformation; on the other, it is a system-forming mechanism for the establishment of a new social order. As long as labor remains alienated, routine, and impersonal, we can speak of the nootransition only as a potential. Only when labor becomes a space for freedom, creativity, and solidarity is the realization of a (post)market, human-centered order possible.

The solution to this research problem will ultimately depend on a theoretical understanding of available empirical data. The synthesis and analysis of this data allowed the authors to present key indicators representing the aromorphosis of labor in the context of nootransition, and to characterize them and determine their practical significance for assessing the current state of labor in the Russian socioeconomic system (Table 2). First, however, let's provide a methodological explanation.

To empirically assess the position of the Russian economy within the coordinates of the nootransition, we use indicators representing key transformations in the practice of social production, identified in S.D. Bodrunov's original concept. These include the spread of knowledge-intensive production, the transformation of labor structure, the development of new forms of employment, and the diffusion of ownership. The selection of this list of indicators is motivated by the fact that their changes reveal the prerequisites for the transition to noonomy in practice. Ultimately, this allows the presented indicators of labor aromorphosis to be used as empirical markers of the stages of nootransition.

Next, we will conduct a more detailed analysis of the presented indicators of labor aromorphosis in the context of nootransition in the domestic socio-economic system.

Knowledge intensity of labor. It is one of the key indicators for assessing the extent to which an economy is approaching a noonomic order. This concept refers to the proportion of work ac-

Table 2

Systematization and characteristics of basic indicators of labor aromorphosis in the context of nootransition in the domestic socio-economic system

Indicator	Description
Knowledge intensity of labor	Expressed as the share of GVA generated by sectors dominated by knowledge and intellect (education, IT, science, culture). It indicates the extent to which the economy relies on knowledge and intellect for its development, rather than on outdated industrial production
Transformation of labor structure	A comprehensive indicator that includes 1) creative component of the labor process, which is assessed by the share of people employed in creative, knowledge-intensive occupations and serves as an indicator of the transition from routine work to co-creation, self-actualization, and cognitive autonomy. 2) Routine work represents the share of employment associated with standardized and algorithmic operations susceptible to automation. This indicator allows us to identify the prevalence of forms of employment that do not require high cognitive or creative engagement, and thereby assess the lag or progress in the transition to noonomy
New forms of employment	This is an indicator of flexibility, decentralization, and agency of labor. The growth of these forms indicates an institutional restructuring of the social order
Diffusion of ownership	This indicator represents the emergence and spread of new forms of ownership and co-ownership. It signifies qualitative shifts in labor organization and a reduction in the degree of alienation; it demonstrates the extent to which the ownership system promotes cognitive cooperation and the communal nature of labor

Source: authors

tivity dominated by cognitive, analytical, and research functions, based on systemic knowledge and a high level of education. To quantify this parameter, the share of Gross Value Added (GVA) generated by knowledge-intensive industries - such as education, healthcare, culture, high-tech manufacturing, and scientific research - is used. The growing contribution of these industries to GVA indicates that the economy is increasingly based not on industrial production technologies, but on knowledge as its primary resource. This, in turn, is a direct evidence of a deepening nootransition and aromorphosis of labor, i.e., a transition to creative, intellectual, and socially beneficial activities. Let's look at the GVA indicator by sector of the domestic economy, according to Rosstat data (Figure 1).

According to the data, the bulk of GVA in Russia in 2024 was generated by sectors such as wholesale and retail trade, manufacturing, mining, and real estate operations. These sectors account for almost 50% of gross value added. At the same time, the most significant sectors from a noonomic perspective (education, healthcare, scientific and technical activities) collectively generate less than 15% of GVA.

Accordingly, this disproportion shows the persistence of an industrial-market development logic where reproduction and raw materials industries remain the key priority, while human-centered and knowledge-intensive sectors are underfunded and secondary. This indicates an imbalance in the structure of the economy, which complicates the implementation of nootransition and the establishment of a new model focused on creative work, education and culture.

1. Transformation of labor structure. Transformation of labor structure is a comprehensive indicator representing the dynamics of the ratio of routine and creative employment in the

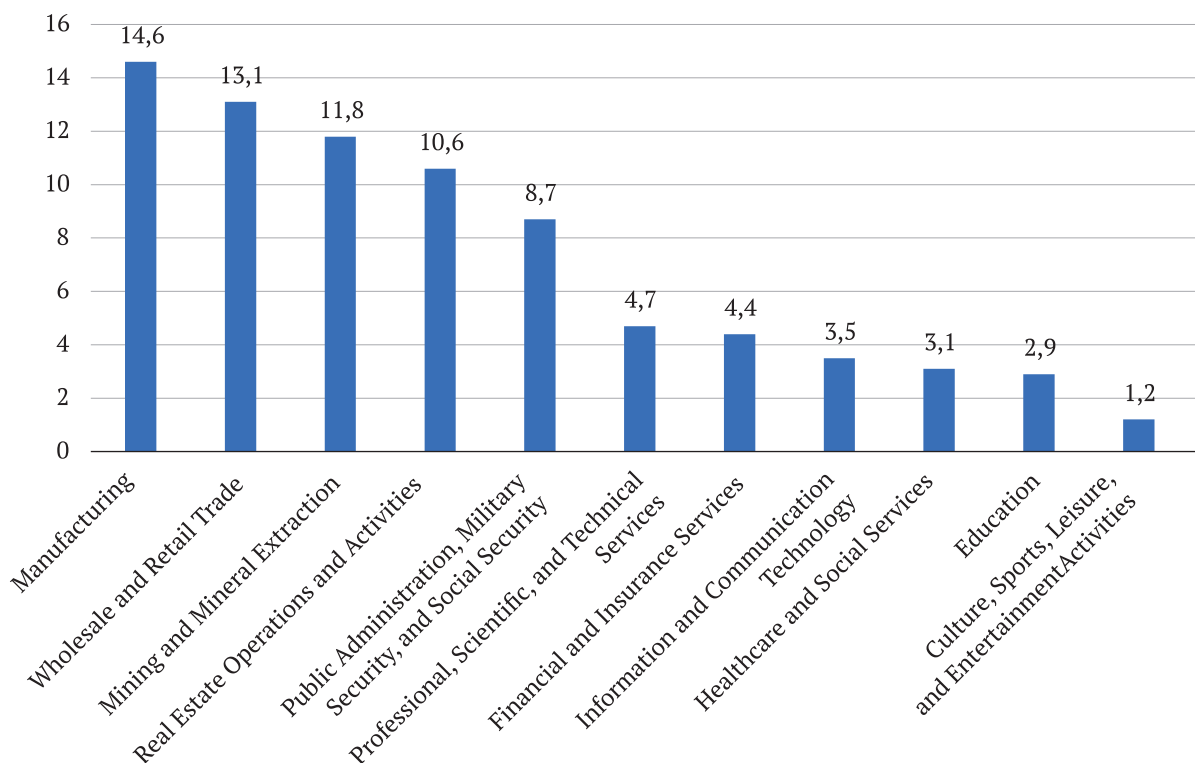


Fig. 1. Gross value added by sectors of the Russian economy in 2024, %.

Source: adapted from: Socio-economic situation in Russia in 2024. Access mode: <http://ssl.rosstat.gov.ru/storage/mediabank/osn-12-2024.pdf> (Accessed on: 15.06.2025).

economy. This indicator characterizes a qualitative shift in the content of labor activity: from the predominance of standardized, reproducible functions to the proliferation of creative, cognitive, and meaning-making work. This process directly represents the aromorphosis of labor as a marker of nootransition.

An important indicator of the aromorphosis of labor and Russia's transition to noonomy is the share of employment in industries focused on creativity, intellectual creation, meaningful design, and cultural reproduction¹.

Conceptually, this shift corresponds to the logic of aromorphosis as an evolutionary leap: labor is transformed from a coercive and alienated process into a form of self-actualization, intellectual autonomy, and meaningful contribution to the common good. Let's look at Rosstat data on the structure of employment by type of economic activity (Figure 2).

An analysis of employment structure by economic activity in Russia, based on Rosstat data, allows us to characterize the current state of labor aromorphosis and identify the extent of creative employment. Among all economic sectors, sectors with high cognitive and creative workloads include education, healthcare, professional, scientific, and technical activities, arts, entertainment and recreation, as well as information and communications.

¹ Note: it is important to distinguish between the creative nature of labor, which can be present in various sectors (for example, education or healthcare), and employment in creative industries as specialized sectors of the economy that produce original, cultural, digital, and design products. Thus, the growth of creatively oriented employment, in a broad sense, represents structural transformation of labor: from routine, algorithmically reproduced work to co-creative work where the outcome cannot be pre-programmed.

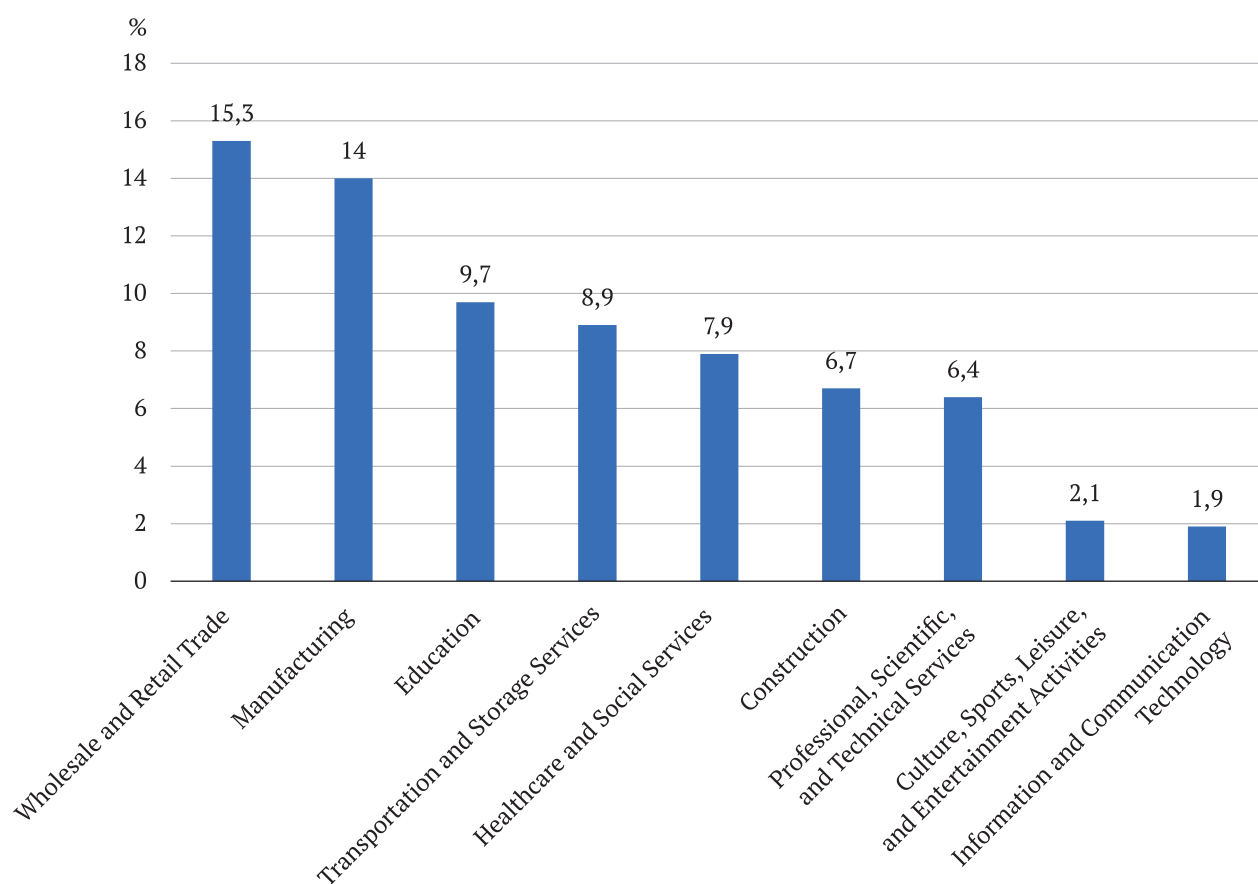


Fig. 2. Structure of employment by type of economic activity in Russia in 2023, %.

Source: adapted from: Labor Force, Employment and Unemployment in Russia 2024. Access mode: http://ssl.rosstat.gov.ru/storage/mediabank/Rab_sila_2024.pdf (Accessed on: 15.06.2025).

A significant indicator of qualitative changes in the labor structure is the growth of employment in the creative economy. According to the HSE report *Russia's Creative Sector in Figures: 2024*, the share of people employed in the creative sector currently amounts to approximately 6.2% of the total workforce. Notably, the employment structure in this sector exhibits a pronounced cognitive and educational focus: 32.5% of workers are young professionals, and 56% are educated at university level. The growth rate of added value in Russia's creative economy in 2023 was 1.7 times higher than the national average, further demonstrating its dynamism¹. According to forecasts, the share of creative industries in GDP could reach 6% by 2030, compared to the current 3.5%².

Thus, industries with a high cognitive and creative workload collectively account for approximately 32% of all employment. However, not all of these sectors are equal in terms of creative freedom and intellectual autonomy. More narrowly defined creative and knowledge-based industries, where labor is directly focused on generating new knowledge, cultural meaning, and innovation, include professional, scientific, and technical activities; arts, entertainment and recrea-

¹ Institute of Statistic Studies and Economics of Knowledge, Higher School of Economics at National Research University Russia's Creative Sector in Figures: 2024 URL: <https://issek.hse.ru/news/996745368.html> (accessed on: 23.07.2025)

² Free Economy. No. 33, January–March 2025, pp. 102 – 109.

tion; and information and communications.¹ Collectively, these sectors account for only 10.4% of employment, indicating that the creative component of labor in the domestic economy remains low, despite isolated pockets of growth. This contrasts particularly with sectors of the traditional economy, where employment is significantly higher: wholesale and retail trade – 15.3%, manufacturing – 14%, transportation and storage – 8.9%, and construction – 6.7%. These four sectors characterized by a high degree of routine, repetitive work operations, and the functional alienation of labor collectively account for approximately 45% of the workforce. They are primarily focused on material production, trade and intermediary operations, logistics, and sales; that is, they reproduce the logic of the industrial order, which is incompatible with the noonomic paradigm.

This ratio of creative and routine employment indicates that the aromorphosis of labor in the domestic economy has not yet acquired a systemic nature, despite the essential role played by IT, science, arts and education in the transition to noonomy. Spatial and organizational concentration also remains substantial: employment in creative industries is concentrated in megacities, meaning creativity is predominantly urban, thereby creating the so-called phenomenon of spatial “creative inequality.” At the same time, the forms of labor themselves often retain characteristics of salaried, vertically organized employment. According to HSE data, employment growth in creative industries in Moscow was 24.4%, in St. Petersburg it was +10.7%, in urban districts with populations over 1 million the growth was 9%, and in less urbanized areas, the same figure maintained at +3.9–4.5%².

Thus, the current employment structure demonstrates an imbalance between the traditional and creative components of labor process. Russian economy operates within the framework of an industrial-market development model where creativity, knowledge, and culture have a supporting role in the development process. To launch a sustainable mechanism of nootransition, it is necessary not only to quantitatively expand employment in creative industries but also to qualitatively transform the system of social relations: reducing bureaucracy, developing flexible forms of employment, and supporting autonomy and interdisciplinary creativity.

Directly related to the indicator of labor aromorphosis is the indicator of routineness of labor operations in the economy. The transition to noonomy is impossible without profound transformations in the structure of labor, primarily through the displacement of routine and repetitive tasks and their replacement with cognitive, creative, and cooperative activities.

The paradigm of labor aromorphosis allows for a new perspective on the structure of employment not only in terms of industries or skill levels, but also in terms of the nature of work tasks. We can distinguish the following:

- routine manual tasks (physically repetitive actions (cleaning, packing, machining));
- routine cognitive tasks (predictable mental actions (filling out reports, checking data, entering information));
- non-routine cognitive tasks (analysis, planning, people business, creativity);
- non-routine physical tasks (interaction with objects in a non-standard environment (medicine, care, repair)).

¹ Note: Education and healthcare are undoubtedly areas where knowledge and people play an essential role, but only a portion of this employment exhibits the characteristics of a true aromorphosis of labor - a high degree of autonomy, meaningful motivation, and creative freedom.

² Institute of Statistic Studies and Economics of Knowledge, Higher School of Economics at National Research University, Creative Sector in Russia Shows Concentrated Growth. URL: <https://issek.hse.ru/news/913623863.html> (Accessed on: 23.07.2025)

To assess the structure of labor by task type in Russia, one can refer to the data presented in the following studies. This study by E.A. Edinak, based on domestic statistics, presents the employment structure by skill level. As of 2017, highly skilled workers (managers, specialists) made up only 31% of the workforce (approximately 22.5 million people), semi-skilled workers made up 45%, and low-skilled workers made up 27%. Moreover, a significant proportion of workers are concentrated in industries with a high level of routine: trade, manufacturing, and services. Education and healthcare, the pillars of noonomy, account for only about 30% of highly skilled employment [Edinak, 2021, p. 60].

However, skill level is only an indirect measure. A more insightful picture is provided by a study by V.E. Gimpelson and R.I. Kapelyushnikov, who calculated the Routine Task Intensity (RTI) index based on an analysis of 421 occupations. The results show that the total share of jobs dominated by routine tasks is small, amounting to just over one-tenth [Gimpelson, Kapelyushnikov, 2022, p. 39].

However, this doesn't automatically mean the dominance of creative work. On the contrary, the study shows that routine cognitive functions retain a high share in mid-skilled occupations, especially among office workers. For this group, the routine index approaches +0.7, making them both the most vulnerable to automation and the most disconnected from development objectives.

Overall, despite rising educational levels, the structure of tasks in the domestic economy remains predominantly routine, and therefore incompatible with the value-based and functional logic of noonomy. This leads to an important conclusion: low formal level of routine (10-20%) precludes the possibility of labor aromorphosis, as most tasks remain predictable and algorithmically driven, creative analytical functions are not integrated into the production culture, and routine actions are performed under conditions of organizational freedom and administrative control.

Thus, to trigger the aromorphosis mechanism as a systemic process, an increase in the share of employment in industries with high cognitive and creative loads is required. Furthermore, the economy's dependence on sectors with highly repetitive tasks (trade, transportation, low-skilled services) must be reduced. Empirically, the threshold required to trigger the aromorphosis mechanism can be provisionally defined as achieving a predominance of non-routine cognitive tasks at the level of 50% of the working population, with a simultaneous reduction in the role of routine cognitive operations in the office and administrative area.

2. New forms of employment. The current stage of labor transformation is accompanied not only by changes in its content but also by shifts in organizational forms. The emergence of new forms of employment (NFE) such as self-employment, freelancing, remote and flexible work, project-based employment, etc. represents the decentralization and individualization of work, increases autonomy, expands the scope for choice, and potentially brings work closer to a state of co-creation.

Unlike traditional wage labor based on hierarchy, subordination, and alienation, new forms of employment allow workers to independently manage the content, rhythm, and scope of their work. It is this shift (from execution to initiation, from orders to projects) that makes them a potential marker of the aromorphosis of labor. As is well known, the theory of noonomy interprets labor as an internal need, a form of meaningful participation in society, and not just a means of earning income. New forms of employment offer specifically these opportunities.

Self-employment formalized under the special tax regime "Self-Employment Tax" (SET), has become the most developed form of employment in Russia. According to the Federal Tax Ser-

vice, as of March 2025, 13.02 million self-employed individuals were registered in the country¹. The year-over-year increase was over 30%, indicating a significant shift away from formal employment and toward professional autonomy. It's important to emphasize that the majority of self-employed individuals are specialists in services, teaching, digital consulting, design, and crafts - areas where knowledge, skill, and individuality predominate.

Another common form of employment is freelancing which encompasses casualisation, project-based and contract work. By 2023, there were approximately 19 million people in Russia employed in project-based and freelance work, representing approximately 18–20% of the gainfully employed population². Freelancing is particularly prevalent in IT, design, translation, education, and online services, making it an important indicator of flexibility and cognitive focus of labor. Moreover, freelancing represents a form close to (but not quite the same as) the logic of self-organized, creatively motivated labor described in post-market theories.

Finally, in the context of digitalization and post-pandemic employment restructuring, remote and flexible work arrangements are rapidly developing. According to the Russian Public Opinion Research Center, in 2024–2025, approximately a quarter of all employed people in Russia had experience working remotely³. Such forms significantly expand individual control over work time, rhythm, and the content of activities, which enhances agency and can be considered an important element of the noonomic order.

However, it is important to stress that not all new employment is advanced in its content. For example, so-called platform employment, although formally disrupting the structure of conventional employment, in reality remains highly algorithmic, alienated, and routine. In such settings, workers report not to a manager but to an algorithm, do not control the outcome, but merely perform tasks according to strict regulations. This is more of a digital form of routine, subordinated labor than a step toward noonomy, and therefore cannot be considered a manifestation of labor aromorphosis.

Furthermore, it should be noted that not all new forms of employment can be unambiguously classified as manifestations of labor aromorphosis. Despite their apparent flexibility and digital nature, many of them are accompanied by alienation, a lack of institutional guarantees, and increased control and rhythmization. Thus, some of these forms are hybrid in nature, combining elements of autonomy with features of digital routine⁴. This requires clarification: within the framework of labor aromorphosis, only those forms that provide agency, creative self-actualization, and meaningful motivation can be considered relevant.

Thus, new forms of employment, while maintaining certain conditions, can act as markers of nootransition, as they allow for moving beyond the vertical labor organization, enhance the meaningful and substantive richness of work, and create the basis for project-based, autonomous, and socially beneficial activities.

¹ Rusbase (2025). Federal Tax Service: The number of self-employed in Russia has exceeded 13 million people for the first time. URL: <https://rb.ru/news/chislo-samozanyatyh-2025/> (accessed on: 17.06.2025).

² Inclient (2025). How many freelancers are there in the world? URL: <https://inclient.ru/freelance-stats/> (accessed on: 17.06.2025).

³ Russian Public Opinion Research Center (2025). Remote work as the new normal. URL: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/rabota-iz-doma-kak-novaja-norma> (accessed on: 17.06.2025).

⁴ Note: For the purposes of this research, autonomous forms of employment include independent freelancing, self-employment in intellectual and professional services, and project-based employment which presupposes a high level of worker autonomy. Accordingly, pseudo-autonomous (or quasi-autonomous) forms of employment include platform employment (couriers, aggregator drivers, etc.), where formal autonomy is combined with a high degree of algorithmic and organizational control.

3. Diffusion of ownership. Diffusion of ownership represents the emergence and spread of new forms of ownership and co-ownership, such as sharing, quasi-private models, platform forms, and collective ownership of intellectual deliverables. This indicator allows us to capture shifts in the system of social relations accompanying the transformation of labor in the context of the transition from industrial-market model to post-market economy.

New forms of ownership are creating a fundamentally different “envelope” for labor. In the context of sharing and platform economies, labor is increasingly carried out within the framework of co-ownership of deliverables, collective use of resources, and soft collectivism. This is expressed, for example, in the spread of shared ownership practices for intellectual property (open source), the development of co-ownership models for production assets on platforms (e.g., crowdfunding projects), and the increasing share of sharing services where users simultaneously act as consumers and participants in the value creation process. Thus, new forms of ownership facilitate the expansion of cooperative practices, reduce the degree of alienation of labor, and strengthen its meaning-making function.

According to RBC, Russian sharing economy market was valued at 770 billion rubles in 2019¹. The most rapidly growing segments are car sharing, short-term housing rentals, and shared vehicles, representing a sustained interest in shared forms of resource ownership and use. Recent survey data presented in a study by Tele2 and Mobile-Review show that 57% of Russians aged 18-35 have used sharing services at least once, and 23% do so regularly². These figures evidence the gradual emergence of a new model of ownership based on the principles of shared access, functional use, and reduced exclusivity of ownership. This can be seen as one of the signs of institutional transformation of working conditions as part of the nootransition.

Crowdfunding and crowdlending practices representing the proliferation of collaborative models of project creation and financing further demonstrate the transformation of ownership relations and labor organization. These forms of resource co-ownership involve collective investment, in some cases with the distribution of rights or income from deliverables, making them relevant for analyzing the stages of nootransition. According to BusinesStat, between 2020 and 2024, the Russian crowdfunding market's turnover grew from 7 billion to 53 billion rubles, an increase of more than sevenfold³. Furthermore, according to the Central Bank of the Russian Federation, over 22.8 billion rubles were raised through crowdfunding platforms in 2023, supporting the growing interest in collective financing in real economy⁴.

The data presented demonstrate a trend toward the spread of collective governance and resource distribution mechanisms that mediate labor and create new institutional forms of interaction between actors. Thus, crowdfunding and crowdlending can be viewed as markers of the diffusion of ownership and the establishment of a soft collectivist logic in the context of transformation.

Diffusion of ownership in modern conditions highlights the contradictory nature of nootransition processes. On the one hand, the consideration of sharing models and collective ownership

¹ RBC. Trends (2020). Economy of Sharing in 30 Facts and Figures. URL: <https://trends.rbc.ru/trends/sharing/5ddb3279a7947b01be74c19> (accessed on: 25.06.2025).

² Mobile-reiew (2024). Interesting statistics about sharing services in Russia from Tele2. URL: <https://mobile-review.com/all/news/interesnaya-statistika-o-sheringovyh-servisah-v-rossii-ot-tele2/> (accessed on: 26.06.2025).

³ BusinesStat (2025). Analysis of the crowdfunding market in Russia in 2020-2024, forecast for 2025-2029. (Demo version), p. 8. URL: https://businesstat.ru/images/demo/crowdfunding_russia_demo_businesstat.pdf (accessed on: 24.06.2025).

⁴ Jetlend (2024). Central Bank statistics on crowdlending and crowdfunding for 2023. URL: <https://jetlend.ru/blog/v-2023-godu-rossijskie-kompanii-privlekli-cherez-kraudlending-22-8-mlrd-rublej-tsb/> (accessed on: 21.06.2025).

of labor deliverables predetermine the development of soft collectivist practices that facilitate the development of cognitive collaboration. On the other hand, many platform models retain characteristics of alienated labor: participants do not receive rights to the products of their work and operate within strictly regulated digital ecosystems.

Thus, the diffusion of ownership can be viewed as a significant institutional indicator of nootransition, representing the depth and trend of transformations in ownership relations and labor conditions. The emergence of new forms of co-ownership and shared use of resources indicates the growth of cooperative nature of labor and the strengthening of cognitive cooperation as prerequisites for the establishment of a (post)market, noonomic order where knowledge and intellectual deliverables are considered as common goods, and not as an item of individual private property.

Discussion of Findings

The analysis above allows us to draw substantiated conclusions about the nature and extent of labor aromorphosis in contemporary Russian economy in the context of determining the potential for possible nootransition. The identified indicators represent key areas of labor transformation in the (post)market context.

Overall, there are isolated local shifts consistent with the logic of labor aromorphosis: the share of employment in creative and project-based areas is growing, the number of self-employed individuals is increasing, the presence of education and IT in the labor structure is expanding, and new forms of ownership are emerging. However, these processes have not yet acquired a systemic, institutionalized nature. A significant portion of the economy continues to rely on routine, standardized, and alienated labor, particularly in the trade, manufacturing, transportation, and management sectors.

The main limiting factor is the structural misalignment of the labor market and insufficient, often sporadic, government support for cognitive, creative, and autonomous employment. Despite the quantitative signs of a shift, the qualitative parameters (the meaningfulness of work, the degree of freedom, and integration into socially beneficial activities) remain locally fragmented. This allows us to speak only of the initial phase of nootransition. Its potential for transformation has not yet been translated into a sustainable development model.

Table 3 below summarizes the key findings for each of the indicators considered.

Table 3

Final assessment of indicators in the context of nootransition

INDICATOR	ASSESSMENT
Knowledge intensity of labor	The share of knowledge-intensive industries remains limited. There are areas of growth (IT, education), but there is a lack of systematic approach
Creative component of labor	The share of creative employment is increasing, but remains insufficient. The basic structure is predominantly routine
Routine nature of work	High level of routine tasks in the economy. Automation is not accompanied by cognitive retraining
New forms of employment	They are developing rapidly, but lack sufficient legal and institutional support. Contradictions in modern forms of employment are being identified regarding their actual autonomy
Diffusion of ownership	Collective ownership models (sharing, crowdfunding) are on the rise, but most platform practices remain highly alienating. Signs of institutional shift exist, but they are still fragmented

Source: authors.

The authors believe that moving from fragments to a holistic model of noonomy requires not only expanding employment in the creative industries but also transforming the target function of economic development at the state level. This involves shifting the emphasis from increasing material production and profits to satisfying meaningful, socially beneficial, and intellectual needs, which is the essence of nootransition. In this context, it is important to refer to the conceptual diagram of the stages of nootransition proposed by S.D. Bodrunov, which is given in Figure 3. The figure shows the logic of global noomovement through six key parameters, each allowing for an institutional and structural assessment of the depth of ongoing changes.

Basic characteristics	Vector of global nootransition as an interval of noomovement and its content				
Key stages of nootransition	I	II	III	IV	V
WEO	→	Integral			
TP	→	TP-VI	→	TP-VI 1	
Type of production	→	knowledge-intensive	→	noo-intensive (nooproductio)	→
State of IMFS	EFE	NS	NOO-IMFS		→
Type of social structure	NIS	→	NIS.2	→	Noosociety
Systems transformation	economy		→		noonomy

Note: “→” is a symbol of a transitional state; EFE = “end of financialization era”, NS = “normal state”, “NIS” – new industrial society, “NIS.2” – new industrial society of the second generation; “TP” – technological paradigm, “WEO” – world economic order, “IMFS” – international monetary and financial system.

Fig. 3. Diagram of global nootransition¹

Comparing the presented parameters with the results of the authors’ analysis allows us to formally determine the country’s current position on the nootransition trajectory.

1. World Economic Order (WEO): Russia remains oriented toward an industrial-raw materials structure with a high degree of dependence on resource exports and foreign economic conditions. However, under the influence of sanctions pressure and new technological isolation, elements of transformation are occurring. This corresponds to the transitional state of WEO (→), characteristic of the second stage of nootransition, where a shift away from the neoliberal financial model begins, but an integral order has not yet been established.

2. Technological paradigm (TP): At the global level, modern advanced countries are preparing for the dominance of the sixth technological paradigm where intellect, science, and creative activity become the main productive forces and form a new labor structure and models of organizational development [Bodrunov, 2022, p. 42; Glazyev, 2023, pp. 28–30]. At the same time, according to Academician E.N. Kablov, as of 2023, the structure of Russian economy demonstrates the dominance of technologies of the fourth technological paradigm (about 50%), while the share of the fifth paradigm is about 10% and is concentrated in limited sectors - the defense industry and

¹ Source: Bodrunov S.D. (2025). Theory of Noonomy and a New Stage in the Development of Political Economy. Problems of Political Economy. No. 2(42), pp. 128–138.

the aerospace industry. Approximately one-third of technologies belong to the third technological paradigm¹. This indicates a persistent technological lag preventing the full achievement of potential of labor aromorphosis. Thus, Russia has not yet completed the transition even to the dominance of the fifth technological paradigm, which creates structural limitations for entering the noonomy phase.

3. Production type: The economy primarily retains an industrial-material production type, but in certain sectors, knowledge intensity is increasing (e.g., the growth of creative economy within the social production system). This indicates the beginning of a shift toward knowledge-intensive production characteristic of stage II, with some features of stage III (noo-intensity has not yet been achieved).

4. Type of social structure: Despite the growth of self-employment, freelancing, and digital professions, Russia retains the logic of vertical governance, weak labor agency, and institutional control. Nevertheless, elements of NIS.2 are beginning to emerge, especially in megacities (for example, the localization of creative workers primarily in large urban agglomerations (approximately 80% of those employed)). This corresponds to the end of stage II and the beginning of stage III.

5. Systemic transformation: Economic goal-setting remains focused on GDP growth, resource extraction, and export flows. The categories of “meaning,” “human development,” and “social justice” are not integrated into the system of value-based targets at the level of the state development strategy. Therefore, it can be argued that Russia is still in the “economy” phase as the dominant form of systemic organization, i.e., at the cusp of stages II and III.

Conclusions

Ultimately, an objective scientific analysis and direct generalization of the obtained research results indicate the emergence of certain characteristics in the Russian economy inherent to the third stage of nootransition (i.e., the transition to a “human-centered model” of development, driven by labor according to S.D. Bodrunov). These include: the growing importance of knowledge-intensive production, the increasing share of intellectual labor, and the proliferation of new forms of employment. However, these processes are fragmented and sporadic, and are not accompanied by a large-scale transformation of ownership relations or the universal spread of autonomous forms of labor organization. The authors believe that it is the combination of the established prerequisites for the next stage of development with the continued significant role of traditional socioeconomic relations that allows us to ultimately characterize Russia’s current situation as intermediate (transitional) between the second and third stages of nootransition.

Thus, Russia’s transitional position within the general framework of global nootransition means that the country has transcended the purely industrial stage and entered a zone of semantic and labor transformation, though not yet dominated by new paradigms. The present situation can be characterized as a “potential nootransition zone” where the dialectical contradictions between the old and new logics of development are already clearly evident, but not yet resolved.

The transition to the next stage requires systemic support for creative and cognitive employment, the institutionalization of new forms of labor, and a redefinition of development goals in favor of people, knowledge, and socially beneficial creative endeavors. Only then will the aromorphosis of labor cease to be a fragment and become a structural marker of the future noonomy.

¹ Science and Life. The Sixth Technological Paradigm. URL: <https://www.nkj.ru/archive/articles/17800/> (accessed on: 23.07.2025).

References

- Arkhipova V. V. (2023). Integration Processes in the Global Economy: A Noosphere Approach and the Development of the Eurasian Space. *Economic Revival of Russia*. Vol. 75. No. 1. P. 15. DOI: 10.37930/1990-9780-2023-1-75-35-49. (In Russ.).
- Bodrunov S. D. (2019). Noonomy: Conceptual Foundations of a New Development Paradigm. *Bulletin of the Ural State Economic University*. Vol. 20. No. 1. Pp. 5–12. DOI: 10.29141/2073-1019-2019-20-1-1. (In Russ.).
- Bodrunov S. D. (2022). From Noonomy to Noosphere? *Noonomy and Noosociety. Almanac of Scientific Works of the S. Y. Witte INID*. Vol. 1. No. 3. Pp. 36–47. DOI: 10.37930/2782-618X-2022-1-3-36-47. (In Russ.).
- Bulavka-Buzgalina L. A. (2021) Culture as a Market: “Is Inspiration Not for Sale”? *Questions of Philosophy*. No. 3. Pp. 5–17. (In Russ.).
- Buzgalin A. V., Kolganov A. I. (Eds.). (2020). *On the Way to Noonomy: Man, Technology, and Society in the Space of Associated Production and Consumption*. Moscow: S. Y. Witte INID. 490 p. (In Russ.).
- Buzgalin A. V., Kolganov A. I. (2022). Capitalism, Post-Capitalism, and the Creative Revolution (Critical Reflections on D. A. Davydov’s Article). *Sociological Studies*. No. 9. Pp. 100–109. DOI 10.31857/S013216250021070-0. (In Russ.).
- Gimpelson V. E., Kapelyushnikov R. I. (2022). *Routine and Risks of Automation in the Russian Labor Market*. Moscow: Higher School of Economics Publishing House. 44 p. (In Russ.).
- Glazyev S. Y. (2023). Prospects for the Development of Russia in the Long Wave of Growth of the New Technological Order. In: *8th St. Petersburg International Economic Congress (SPEC-2023)*. Pp. 27–32. DOI: 10.37930/1990-9780-2023-2(76)-33-41. (In Russ.).
- Grechko M. V., Pleshivtseva A. A. (2024). On the Role of the Creative Worker in the Economy of the 21st Century. *Problems of Political Economy*. Vol. 39. No. 3. Pp. 150–168. DOI: 10.5281/zenodo.13895711. (In Russ.).
- Grechko M. V., Sevikyan S. E. (2023). Creative Labor in the Era of Digital Industry 4.0: A Marxist Approach. *International Forum Kazan Digital Week 2023*. URL: <https://elibrary.ru/item.asp?id=54763197&pff=1> (Access date: 13.06.2025). (In Russ.).
- Edinak E. A. (2021). Assessment of Total Labor Costs in the Russian Economy Considering the Qualification Level of Workers. *Studies on Russian Economic Development*. URL: <https://cyberleninka.ru/article/n/otsenka-polnyh-zatrat-truda-v-rossiyskoy-ekonomike-s-uchetom-kvalifikatsionnogo-urovnya-rabotnikov> (Access date: 17.06.2025). (In Russ.).
- BusinesStat (2025). Analysis of the Crowdfunding Market in Russia in 2020-2024, Forecast for 2025-2029. (Demo). *BusinesStat*. 8 p. URL: https://businessstat.ru/images/demo/crowdfunding_russia_demo_businessstat.pdf (Access date: 24.06.2025). (In Russ.).
- Boos V. A., Kutsenko E. S., Solomatin P. P., Sharapova A. S. (2024). Creative Sector in Russia Demonstrates Concentrated Growth. *ISSEK HSE*. URL: <https://issek.hse.ru/news/913623863.html> (Access date: 23.07.2025). (In Russ.).
- Begin A. (2024). How Many Freelancers Are There in the World? *Inclient*. URL: <https://inclient.ru/freelance-stats/> (Access date: 17.06.2025). (In Russ.).
- n. a. (2024). Creative Sector of Russia in Numbers: 2024. *ISSEK HSE*. URL: <https://issek.hse.ru/news/996745368.html> (Access date: 23.07.2025). (In Russ.).

- n. a. (2024). Central Bank Statistics on Crowdfunding for 2023. *Jetland*. URL: <https://jetlend.ru/blog/v-2023-godu-rossijskie-kompanii-privlekli-cherez-kraudlending-22-8-mlrd-rublej-tsb/> (Access date: 21.06.2025). (In Russ.).
- n. a. (2024). Labor force, Employment and Unemployment in Russia: 2024. *Rosstat*. URL: http://ssl.rosstat.gov.ru/storage/mediabank/Rab_sila_2024.pdf (Accessed 15.06.2025). (In Russ.).
- Petrov M. (2024). Interesting Statistics on Sharing Services in Russia from Tele2. *Mobile-Review.com*. URL: <https://mobile-review.com/all/news/interesnaya-statistika-o-sheringovyh-servisah-v-rossii-ot-tele2/> (Access date: 26.06.2025). (In Russ.).
- Makarenko G. (2020). Sharing Economics in 30 Figures and Facts. *RBC Trends*. URL: <https://trends.rbc.ru/trends/sharing/5ddbb3279a7947b01be74c19> (Access date: 25.06.2025). (In Russ.).
- Strukova E. (2025). FTS: the Number of Self-Employed in Russia for the First Time Exceeded 13 Million People. *Russian Business*. URL: <https://rb.ru/news/chislo-samozanyatyh-2025/> (Access date: 17.06.2025). (In Russ.).
- Kablov E. (2010). Sixth Technological Paradigm. *Science and Life*. URL: <https://www.nkj.ru/archive/articles/17800/> (Access date: 23.07.2025). (In Russ.).
- n. a. (2024). Socio-economic Situation in Russia: 2024. *Rosstat*. URL: <http://ssl.rosstat.gov.ru/storage/mediabank/osn-12-2024.pdf> (Access date: 15.06.2025). (In Russ.).
- n. a. (2025). Working from Home as the New Normal. Russian Public Opinion Research Center (VCI-OM). URL: <https://wciom.ru/analytical-reviews/analiticheskii-obzor/rabota-iz-doma-kak-novaja-norma> (Access date: 17.06.2025). (In Russ.).
- von Weizsäcker E. U., Wijkman A. (2018). *Come On! Capitalism, Short-termism, Population and the Destruction of the Planet*. A Report to the Club of Rome. 220 p.
- Freeman A. (2020). Creative Labor, Mental Objects and the Modern Theory of Production. *Science & Society*. Vol. 84. No. 4. P. 26
- Stiglitz J. E., Sen A., Fitoussi J. P. (2009). *Mismeasuring Our Lives: Why GDP Doesn't Add Up*. URL: <https://www.iep.ru/en/press/book/2015/mis-measuring-our-lives-why-gdp-doesn-t-add-up.html> (Access date: 15.06.2025).

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