

DOI: 10.37930/2782-6465-2022-1-2-45-62

Alexey V. Tebekin

Moscow State Institute of International Relations MFA of Russia (Moscow, Russia)

Nadezhda V. Mitropolskaya-Rodionova

Moscow State Institute of International Relations MFA of Russia (Odintsovo Branch)

Anna V. Khoreva

Moscow State Institute of International Relations MFA of Russia (Odintsovo Branch)

CHALLENGES AND DEVELOPMENT PROSPECTS OF NIS.2 WITHIN THE FRAMEWORK OF THE SIXTH TECHNOLOGICAL ORDER

Abstract: The paper analyzes the process of the natural transition of the world economy from the fifth technological paradigm to the sixth one in the 2020s. It is shown that, by analogy with the periods of transition from the fourth technological paradigm to the fifth one in the 1970s, and from the third technological paradigm to the fourth one in the 1920s, the expected decline in economic activity, which has already manifested itself in the global economic crisis of the 2020s-2021s, is observed in the 2020s. It is noted that the traditional decline in economic activity in the extractive and processing industries, which takes place in the transition phase, is currently aggravated by the imminent global financial crisis, which is a consequence of a large-scale separation of the global money supply from the global commodity supply. And the resolution of this crisis is a matter of the near future (the next few years).

It has been found that it is a huge surplus of unsecured financial resources (a global financial “bubble”) that makes a significant contribution to the slowdown of the processes of accelerating industrial technological development in the sixth technological paradigm by refocusing investors’ attention on speculative operations with cryptocurrencies and intangible assets, where the baton of the dot-com bubble has now been picked up by the set of information technologies under the banner of Industry 4.0, which was widely publicized, but never demonstrated its revolutionary economic efficiency.

It has been shown that despite the fact that advanced global industrial technologies are a priority target for Western sanctions, the Russian economy continues to focus on the extractive industries developed in the framework of previous technological paradigms, the dominance of which in the national economy actually guarantees the technological backwardness of the country. Conditions have been formulated under which the prospects for the development of NIS.2 within the framework of the sixth technological paradigm in the Russian economy will be high.

Keywords: challenges, prospects, NIS.2, sixth technological paradigm.

For citation: *Tebekin A.V., Mitropolskaya-Rodionova N.V., Khoreva A.V. (2022) Challenges and Development Prospects of NIS.2 within the Framework of the Sixth Technological Order. Noonomy and Noosociety. Almanac of Scientific Works of the S.Y. Witte INID, vol. 1, no. 2, pp. 45–62. DOI: 10.37930/2782-6465-2022-1-2-45-62*

Received 13 June 2022

捷别金 A. V.

俄罗斯外交部莫斯科国际关系学院(莫斯科, 俄罗斯)

米特罗波里斯卡娅-罗迪欧诺娃 N. V.

俄罗斯外交部莫斯科国际关系学院(奥金佐沃分校)

霍列娃 A. V.

俄罗斯外交部莫斯科国际关系学院(奥金佐沃分校)

第六代技术体系条件下第二代新工业社会发展的问題与前景

摘要:文章分析了世界经济在21世纪20年代从第五代技术体系向第六代技术体系过度的必然过程。文章指出,正如发生在20世纪20年代的第三代技术体系被第四代取代和发生在20世纪70年代的第四代技术体系被第五代取代的过程一样,在21世纪20年代出现经济活跃度下降现象,这种趋势已经表现在2020-2021年的世界经济危机之中。文章阐述了以前发生过的在经济体系迭代期间采掘和加工业出现经济活跃度下降现象,在目前正在形成的世界金融危机的影响下表现得更加显著,而这次金融危机是世界货币量大幅度脱离商品量引发的。同时,消除这次金融危机将是近期(近几年)的任务。

作者认为,没有任何保障的金融资源的巨大过剩(世界金融泡沫)严重阻碍了第六代技术体系条件下工业技术的发展,这是因为投资者把兴趣转向了加密货币这种投机生意和其他无形的非物质资产,然而,在现阶段,打着“工业4.0”旗号的信息技术被大力吹捧,展开了经济泡沫的接力赛,却并未带来突破性经济效益。

文章指出,尽管世界先进工业技术成为西方制裁的主要手段,国内仍然把重心放在具有上一代技术体系特点的采掘业,这种技术体系占据主要地位的现状决定了我国国民经济领域技术方面的落后性。在第六代技术体系条件下第二代新工业社会在我国将展现出良好的发展前景,目前,这种发展条件已经形成。

关键词:问题、前景、第二代新工业社会、第六代技术体系。

引文注释:捷别金 A. V., 米特罗波里斯卡娅-罗迪欧诺娃 N. V., 霍列娃 A. V. (2022). 第六代技术体系条件下第二代新工业社会发展的问題与前景//智力经济和智力社会. 新兴工业发展研究所论文选. vol. 1, no. 2, pp. 45-62. DOI: 10.37930/2782-6465-2022-1-2-45-62

文章已收到。2022年6月13日。

Introduction

The transition from the fifth to the sixth technological paradigm naturally raises the question of the future shape of the global and national economies, one option of which is the New Industrial Society of the second generation (NIS.2) [Bodrunov, 2016].

Just as the natural global economic crisis of the 2020s came as a complete surprise to global and national forecasting institutions¹, the expert community today lacks a unified and clear understanding of what the global and national economy will look like once the global economic crisis of the 2020s is overcome.

On the one hand, it is clear that the global community will continue to develop within a post-industrial economy [Bell, 2004], which has replaced the industrial economy and inversely changed the relationship between markets for material products and services provided (Fig. 1).

¹ Afonsky A. (2021). There's a knock from below. The year 2020 was the worst year for the world economy. Why is this crisis being compared to the Great Depression? URL: <https://lenta.ru/articles/2021/01/05/itogi/?ysclid=l3tv49py41>

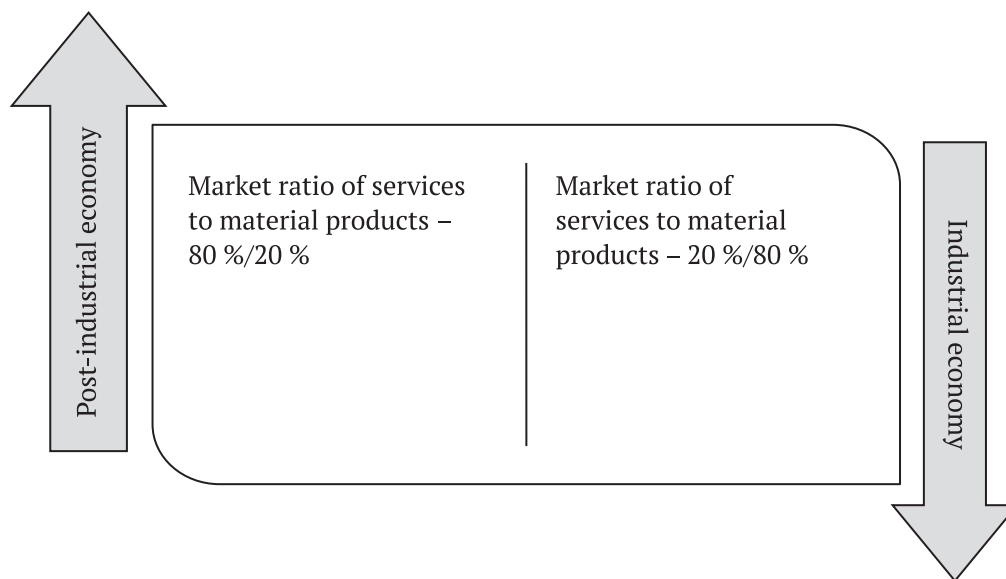


Figure 1. Inversion of the relationship between markets for tangible products and services as the world community transitions from an industrialised to a post-industrial economy to post-industrial economies

On the other hand, there is no doubt that material production is and will remain the basis of the national economy [Kharchenko I.S., Kharchenko L.I., 2014], the core of which is machine building (Fig. 2).

It seemed that with the permanent tightening of Western anti-Russian sanctions¹ managers of the domestic economy should understand the growing urgency of solving the problems of import substitution (especially in the production of means of production). And on the one hand, people are already outraged on the tribune of the Federation Council that even nails are imported in Russia², and the Deputy Chairman of the Security Council of the Russian Federation D. Medvedev prefers to stop using the term ‘import substitution’ and replace it with ‘technological sovereignty’, because the term ‘import substitution’ sounds humiliating for Russia, ‘especially when it comes to some scrap metal’³.

On the other hand, one can observe in practise that predominantly the avoidance of import substitutions is relied on, such as waiting for the lifting of the West’s anti-Russian sanctions⁴, the reorientation of imports from the West to imports from the East⁵, the introduction of parallel imports⁶, etc. In this context, the analysis and evaluation of the prospects for the implementation of new models for the development of the domestic economy, among the

¹ The sixth package of sanctions: Russia can’t give up. URL: <https://www.pravda.ru/economics/1707594-sanctions/>

² Matvienko surprised that in Russia “even nails” are imported. URL: <https://www.rbc.ru/business/13/04/2022/625705749a7947597cff5a17>

³ Medvedev called the term “import substitution” derogatory for Russia. URL: <https://ria.ru/20220526/importoza-meschenie-1790948399.html>

⁴ Odintsova E. The West has begun to lift anti-Russian sanctions: which restrictions have already been lifted and which can still be abandoned. Economic war is too expensive for “unfriendly countries”. URL: <https://www.kp.ru/daily/27388/4582572/>

⁵ Fursova I. Russia’s foreign trade traffic turned eastward. URL: <https://rg.ru/2022/04/06/vneshnetor-govyj-trafik-rf-razvernulsia-na-vostok.html>

⁶ The government approved the introduction of parallel imports in Russia. URL: https://minpromtorg.gov.ru/press-centre/news/#!/pravitelstvo_utverdilo_vvedenie_parallelnogo_importa_v_rossii

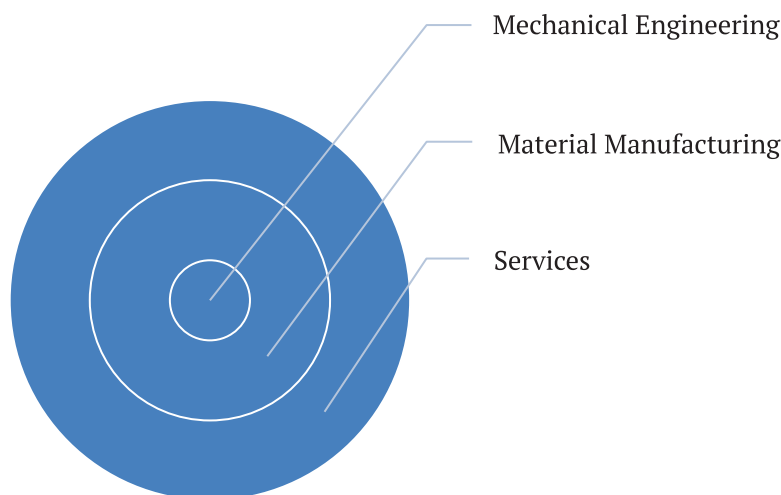


Figure 2. Material production as the backbone of the national economy of a state, with its core in mechanical engineering

constructive variants of which is the concept of NIS.2 developed by Professor S.D. Bodrunov, is becoming increasingly important.

Purpose of the study

The aim of this paper is to examine the problems and prospects of developing the NIS.2 as a constructive option for the development of the domestic economy in the sixth technological paradigm.

Main content of the study

The study of the problems and prospects of developing a constructive option for the domestic economy within the framework of the sixth technological paradigm was carried out on the basis of the model description of the NIS.2 based on the materials of [Bodrunov S.D., 2016] and presented in [Tebekin A.V., Mitropolskaya-Rodionova N.V., Khoreva A.V., 2021] (Fig. 3).

As can be seen from the analysis, the model of building a new second-generation industrial society (NIS.2) developed by Professor S.D. Bodrunov is based on the expected replacement of the monetary-liberal economic model with a new industrial development model that involves the implementation of four main directions (Fig. 3). Let us look at each of these directions in detail.

Innovative government solutions

The first to be considered are innovative government solutions (Figure 3), which unfortunately do not find practical implementation due to continued dependence on hydrocarbon extraction and export. It should be noted here that the rejection of innovative state solutions in the form of the rejection of new technologies in favour of hydrocarbon extraction and export has persisted since the Kosygin reforms of the 1960s.

It is fair to say that both the global energy crisis of the 1970s and the global economic crisis of the 2020s never led to the expected changes in the underlying energy resources, so the national economy continues to rely on hydrocarbon extraction and export [Tebekin, 2018]. This is reflected, for example, in the ranking of Russia's largest companies by revenue for 2021, in which the

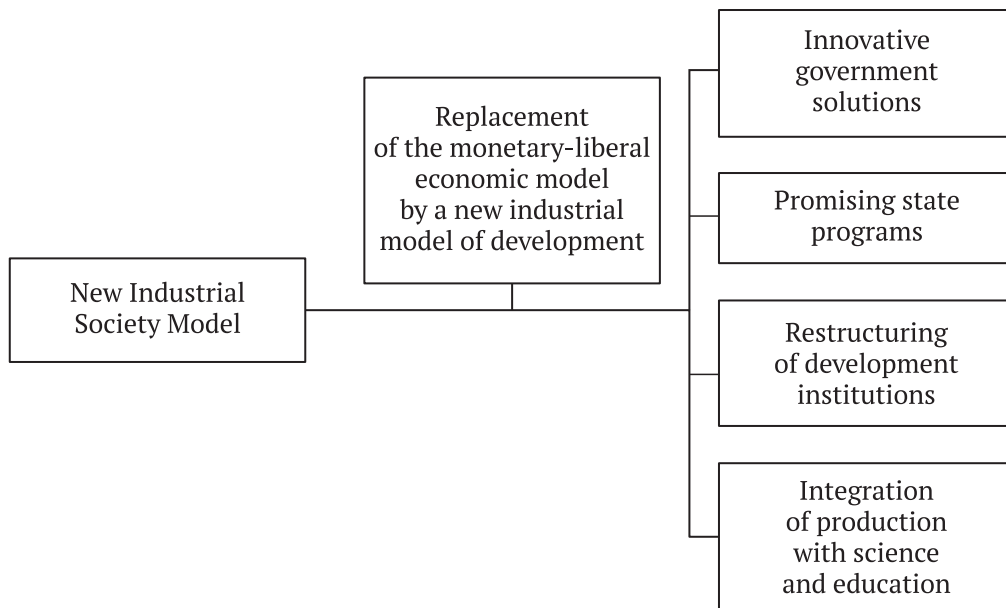


Fig. 3 The author’s version of the model description of the New industrial society of the second generation (NIS.2)

first three places are occupied by oil and gas companies – “Gazprom”, “Rosneft”, “Lukoil”, and the fifteen largest companies also include oil and gas companies such as “Surgutneftegaz” and “Transneft”¹.

Given the considerable interest of industrialised countries in the Arctic, where the USGS estimates that up to 13 % of the world’s undiscovered oil reserves and 30 % of gas reserves are located² (Figure 4), no groundbreaking government decisions are to be expected in the near future in an economy that is still dependent on oil export.

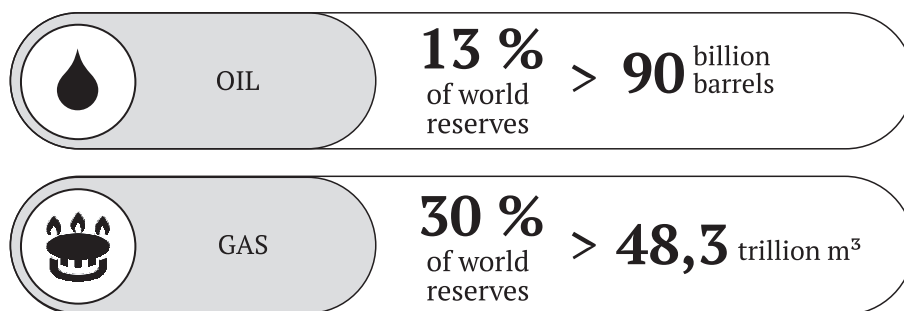


Fig.4. Oil and gas reserves in the Arctic

The 15 largest Russian companies by revenue in 2021 also include two financial companies (Sberbank and VTB), two retail companies (X5 Retail Group and Magnit), two investment companies (Rostech and Safmar), two energy sector companies (Russian Grids and Inter RAO), one transport company (Russian Railways), one nuclear industry representative (Rosatom), one met-

¹ RBC Pro presents the rating of the largest Russian companies by revenue. 2021. URL: <https://pro.rbc.ru/rbc500?ysclid=13zbheoxny>.

² Stocks that are hard to extract. URL: https://www.gazeta.ru/science/2012/05/26_a_4602393.shtml?ysclid=13zcad22ww

als and mining company (Norilsk Nickel) and one distribution company (Rosoboronexport)¹. Of this list, only Rostech and Rosatom have a direct link to the cutting-edge technologies of the sixth technological mode. However, due to their de facto monopoly position in the market, the intensity and scale of development of the Russian economy in these sectors is insignificant. All other large domestic enterprises are only indirectly and insignificantly associated with new technologies, if at all. Essentially, they represent industries based on technologies of the second, third and sometimes fourth technological paradigms.

Overall, at the time when the sixth technological paradigm began to develop, the Russian economy is only very weakly represented by fifth and even fourth technological paradigm technologies (and almost not at all by sixth stage technologies). It still relies on technologies of earlier stages, which sets the country's economic development even further back and, in fact, creates fertile ground for the imposition of sanctions against the supply of high-tech products to Russia. The logic of cyclical development implies that the global economic crisis in the 2020s, accompanied by problems in the energy market, will inevitably lead to problems in the market for material products. And in these conditions, the inductive vector of economic development objectively becomes the intellectual product based on new technologies (Fig. 5), which is capable of "pulling" the economy out of the crisis in the face of an inevitable shift in the focus of production from the sphere of energy and material products to the sphere of intellectual products.

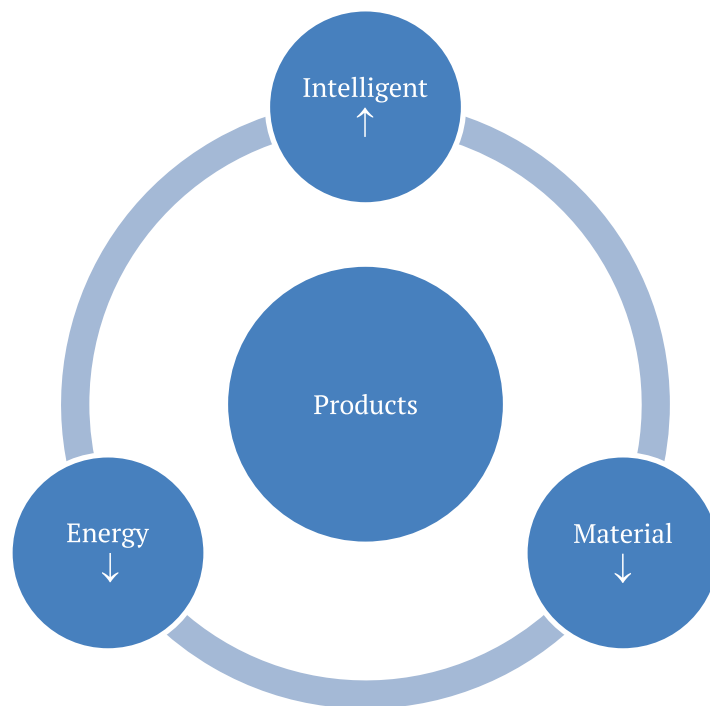


Fig. 5. Dynamics of the world volume of energy, material and intellectual products when the fifth technological paradigm is replaced by the sixth

Thus, from the point of view of model description of NIS.2 such element as innovative state solutions in the domestic economic system, unfortunately, is not observed at the present time.

¹ RBC Pro presents the rating of the largest Russian companies by revenue. 2021. URL: <https://pro.rbc.ru/rbc500?ysclid=l3zbheoxny>

However, this is a problem of many countries, conditioned by the process of overcoming the crisis, when the content of the TESP chain links changes radically: technology (T) - economy (E) - social environment (S) – politics (P).

The authors denote exactly this sequence, while many authors operate with the tools of PEST or STEP analysis.

Promising state programs

A big problem in the implementation of the NIS.2 model is also related to the content of prospective state programs. As such prospective state programs in the national economy in modern conditions should be considered documents aimed at achieving national goals until 2030, defined by the Decree of the President of the Russian Federation from 21 July 2020 No. 474¹:

- A unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030²;
- List of strategic initiatives of the Government for socio-economic development of the Russian Federation until 2030³.

A detailed analysis of these documents, carried out in particular by the authors in [Tebekin, 2021a, 2021c, 2021d; Tebekin A.V., Mitropolskaya-Rodionova N.V., Khoreva A.V., 2021] showed the following. First, the analysis of strategic documents of the Government of the Russian Federation, designed to ensure the strategic socio-economic development of the Russian Federation for the period up to 2030 showed a low level of compliance with the principles of strategic planning, provided by the Federal Law No.172-FZ “On Strategic Planning in the Russian Federation” of 28 June 2014, including⁴:

1) The principles of unity and integrity. In particular, [Tebekin, 2021d] shows that the list of strategic initiatives of the government for the socio-economic development of the Russian Federation until 2030⁵ lacks integrity, and [Tebekin, 2022] shows that the Unified Plan for Achieving the National Development Goals of the Russian Federation for the period until 2024 and for the planned period until 2030⁶ lacks unity, but rather that it is “robbing Peter to pay Paul” of government strategic initiatives, state programs, and individual national plans that does not cover most of the national development priorities.

2) The principles of continuity and uninterrupted continuity. Thus, it should be noted that the list of strategic initiatives of the government for socio-economic development of the Russian Federation until 2030 and the unified plan for achieving the national development goals of the

¹ Presidential Decree No. 474 of July 21, 2020 “On National Development Goals of the Russian Federation for the period until 2030”. URL: <http://www.kremlin.ru/acts/bank/45726>

² Unified plan for achieving national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf

³ Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. “On approval of the list of initiatives of social and economic development of the Russian Federation until 2030”. URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>

⁴ Federal Law of 28.06.2014 No. 172-FZ (ed. on 31.07.2020) “On Strategic Planning in the Russian Federation”. URL: http://www.consultant.ru/document/cons_doc_LAW_164841/

⁵ Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. “On approval of the list of initiatives of social and economic development of the Russian Federation until 2030”. URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>

⁶ Unified plan for achieving national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf

Russian Federation for the period until 2024 and for the planning period until 2030 do not have continuity with the “Strategy-2020”¹. Moreover, as noted in [Tebekin, 2022], the “Strategy-2030” never appeared as a strategic document of national economic development. And the documents adopted by the government as strategic instruments for the socioeconomic development of the country until 2030² (i.e. the list of the government’s strategic initiatives for the socio-economic development of the Russian Federation until 2030 and the unified plan for achieving the national development goals of the Russian Federation for the period until 2024 and for the planning period until 2030), appeared only fifteen months after the issuance of Presidential Decree No. 474 “On the national development goals of the Russian Federation for the period until 2030” of 21 July 2020. Therefore, there is no continuity of processes;

3) Principles of transparency (openness) of strategic planning. Repeatedly announced in 2021, and also repeatedly postponed in the adoption of strategic initiatives of the government, although subjected to serious criticism³ [Tebekin, 2021], they have not undergone serious changes since their first versions, with the Ministry of Economic Development of the Russian Federation openly denying⁴ that it is advisable to be guided by the Federal Law No. 172- FZ “On Strategic Planning in the Russian Federation” of 28 June 2014. One of the obvious problems of such planning is the lack of sufficient public discussion;

4) The principle of separation of powers. Judging by the claims about the timetable and quality of the content of the strategic directions of socio-economic development of the country proposed by the government authorities until 2030⁵ [Tebekin, 2022], there are major problems in the implementation of the principle of separation of powers in the implementation of strategic planning;

5) The principle of realism. Unfortunately, many experts note that the strategic development plans adopted by the government for the period until 2030 are unrealistic⁶ [Busheneva, 2016, Te-

¹ Decree of the Government of the Russian Federation from 17.11.2008 № 1662-r (ed. from 28.09.2018) “On the Concept of long-term socio-economic development of the Russian Federation for the period up to 2020” (together with the “Concept of long-term socio-economic development of the Russian Federation for the period up to 2020”). URL: http://www.consultant.ru/document/cons_doc_LAW_82134/

² Decree of the President of Russia from July 21, 2020 № 474 “On national development goals of the Russian Federation for the period up to 2030”. URL: <http://www.kremlin.ru/acts/bank/45726>

³ see: ASI failed to fulfill Putin’s strategic assignment. Agency of Publicized Initiatives. URL: <https://www.mk.ru/economics/2020/06/01/asi-ne-spravilos-so-strategicheskim-zadaniem-putina.html>; Vederina E. Economists criticized the new strategy of socio-economic development. Now instead of strategy the government is preparing “a broad list of new initiatives”. URL: <https://www.vedomosti.ru/economics/articles/2021/05/13/869660-ekonomisti-raskritikovali>; Mingazov S. “Very fashionable”: the government will develop a new strategy for implementing Putin’s decrees. URL: <https://www.forbes.ru/newsroom/biznes/420415-ochen-modno-pravitelstvo-razrabotaet-novuyu-strategiyu-dlya-vypolneniya>; Sergeev M. The government has announced a new list of its initiatives. Abundance of strategic plans doesn’t improve quality of life yet. URL: https://www.ng.ru/economics/2021-10-11/1_8274_government.html.

⁴ Government of the Russian Federation (2021). Development of the frontal strategy of socio-economic development of the Russian Federation. URL: <https://dpo-rd.ru/upload/iblock/fde/fde3983057ab8fdff17b67806891ed98.pdf>.

⁵ See: “Stillborn” Strategy-2030. What is preventing the authorities from presenting the image of Russia in 15 years? URL: https://kapital-rus.ru/articles/article/mertvoroidennaya_strategiya2030_chno_meshaet_vlasti_predstavit_obraz_rossii/; Vederina E. Economists have criticized the new strategy for socio-economic development. Now, instead of a strategy, the government is preparing a “long list of new initiatives”. URL: <https://www.vedomosti.ru/economics/articles/2021/05/13/869660-ekonomisti-raskritikovali>; Lyapunov K. Theory and practice. Does the Agency of Strategic Initiatives justify its name. URL: <https://lenta.ru/articles/2020/10/01/asi/>; Gray I. Strategy 2030: no matter how you sit. URL: <https://expert.ru/2021/05/17/strategiya-2030-kak-ni-sadis/>

⁶ Butrin D. The run on the guideposts. URL: <https://www.kommersant.ru/doc/5020038>; Dvinsky K. Digital concentration camp and grocery cards. What does the new strategy of Russia’s development threaten liberals? URL: https://tsargrad.tv/articles/cifrovoy-konclager-i-produktovye-kartochki-chem-grozit-liberalam-novaja-strategija-razvitiya-rossii_344233; Kolesnikov A. Communism by 2030: why new version of national projects will be forgotten in several years. URL: <https://www.forbes.ru/biznes/405665-kommunizm-k-2030-mu-pochemu-o-novoy-versii-nacproektov-zabudut-cherez-neskolko-let>.

bekin, 2021a), while in reality the problem of unreasonable hopes for a bright future reflected in the results of the “Strategy-2020” (Figure 6) is repeated [Tebekin, 2021b];

6) The principle of matching indicators with targets. According to the author’s research [Tebekin, 2021d], the government’s strategic initiatives cover only 15 % of the national goals defined by the President of the Russian Federation [Tebekin, 2021d]. And the GDP growth of 0.3 % promised by the government thanks to the government’s strategic initiatives¹ (!) cannot be recognized as a breakthrough, because: the error in such estimates is between 4.0 % and 5.0 % of GDP [Lyzlov, 2008]; the average GDP growth rate of the country in the last ten years (2012-2021) was 1.75 %²;

Key Indicator	
Plan	Fact
Economic growth	
+6 % Per year	-0,7 % Per year
GDP growth	
+66 %	+6 %
Real disposable income	
+50 %	-5 %
Unemployment rate	
50 % reduction	Growth by the end of 2020
Financing health care and education	
Over 7% of GDP	Less than 3.5% of GDP

Fig. 6. Evaluation by the expert community of the results of the implementation of the “Strategy 2020” on key indicators

According to Presidential Decree No. 474 of July 21, 2020, the country’s GDP growth should be above the global average (4 % per year) until 2030, while maintaining macroeconomic stability³.

In addition, it should be noted that with regard to economic development, the Unified Plan⁴ provides that, as part of the implementation of paragraph 4.1.a. “Providing the country’s GDP growth rate above the world average while maintaining macroeconomic stability”, a nominal GDP growth rate of 3 % per year is envisaged in 2022-2024. While the inflation rate planned by the Central Bank for this period is 4 %, the actual average inflation rate in the first five months of 2022 was 13.9 %⁵, i.e. the actual inflation in the current period of 2022 is 4.6 times higher than the planned GDP growth rate.

¹ Reshetnikov: strategic initiatives will provide an additional 0.3% of GDP growth from 2025. URL.: <https://tass.ru/ekonomika/12603251>

² Russia’s GDP by year: 1991 – 2022. URL: <http://global-finances.ru/vvp-rossii-po-godam/>

³ Presidential Decree No. 474 of July 21, 2020 “On National Development Goals of the Russian Federation for the period until 2030”. URL: <http://www.kremlin.ru/acts/bank/45726>

⁴ Unified plan for achieving national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf

⁵ Bank of Russia key rate and inflation. URL: https://cbr.ru/hd_base/infl/

7) The principle of measurable targets. It should be noted that not all the goals formulated in the strategic documents¹ have the attribute of measurability, and the indicators formulated by the government for their evaluation accurately reflect the measurement of the goals, not to mention the fact that many of these indicators, while having an effective form², do not have an adequate justification of effectiveness, both in terms of content and values (an adequate scientific justification) [Tebekin, 2022].

8) The principle of responsibility of participants in strategic planning. As studies [Tebekin, 2022] have shown, the big problems in implementing the processes of strategic planning of socio-economic development of the country lie in the very low level of compliance by participants of strategic planning with the principle of responsibility. As a consequence, Strategy-2020³ [Tebekin, 2021a] has actually been failed (for which no one has been held responsible), and Strategy-2030 essentially never appeared⁴ (for which no one has been held responsible either), and the documents⁵ aimed at implementing Presidential Decree No. 474 of 21 July 2020 on the GDP growth rate in the country until 2030 only appeared a year and a quarter after the Decree⁶ (for which no one has been held responsible either);

9) The principle of balanced strategic planning. Studies have shown [Tebekin, 2022] that there is a very serious problem, which is a very low level of compliance with the principle of balanced strategic planning. In particular, in the List of the Government's strategic initiatives for socio-economic development of the Russian Federation until 2030 and the Unified Plan for achieving the national development goals of the Russian Federation for the period until 2024⁷ and for the planning period until 2030, combined with national projects Russian Government. National projects. URL: <http://government.ru/rugovclassifier/section/2641/> do not ensure a balanced strategic development of the country along the declared lines of activity.

¹ Government of Russia. National Projects. URL: <http://government.ru/rugovclassifier/section/2641/>; Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. "On Approval of the List of Initiatives for Social and Economic Development of the Russian Federation until 2030". URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>.

² Mingazov S. "Very fashionable": the Government will develop a new strategy for implementing Putin's decrees. URL: <https://www.forbes.ru/newsroom/biznes/420415-ochen-modno-pravitelstvo-razrabotaet-novuyu-strategiyu-dlya-vypolneniyawww.forbes.ru/newsroom/biznes/420415-ochen-modno-pravitelstvo-razrabotaet-novuyu-strategiyu-dlya-vypolneniya>

³ see: Belyakov E. The Country of Unfulfilled Programs: Why the Failed Strategy 2020? URL: <https://www.kp.ru/daily/27053.7/4119288/>; Voronin Y. Movement without goals: why the "Strategy-2020" failed. URL: <https://newizv.ru/article/general/21-11-2019/dvizhenie-bez-tseley-pochemu-provalilas-strategiya-2020>; Zimniy A. Groundhog Day: "Strategy-2020" successfully failed - is the national projects' turn? URL: <https://www.nakanune.ru/articles/116644/>.

⁴ see: "Dead-born" Strategy-2030. What Stops The Authorities From Imagining Russia 15 Years From Now? URL: https://kapital-rus.ru/articles/article/mertvorojdennaya_strategiya2030_chno_meshaet_vlasti_predstavit_obraz_rossii/; Zakharov M. Strategy, which does not exist. URL: <https://centerforpoliticsanalysis.ru/position/read/id/strategija-kotoroj-net>; Zakharchenko A. "Strategy-2030" will feed, water, and then shoe the whole country. URL: <https://svpressa.ru/economy/article/289921/>; Voronin Y. Russia Without the Future: The Failure of the Development Strategy. URL: <https://argumenti.ru/opinion/2021/01/704632>

⁵ Unified Plan to Achieve the National Development Goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf; Decree of the Government of the Russian Federation of October 6, 2021 № 2816-r. "On approval of the list of initiatives of socio-economic development of the Russian Federation until 2030". URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>.

⁶ Decree of the President of Russia from July 21, 2020 № 474 "On national development goals of the Russian Federation for the period up to 2030". URL: <http://www.kremlin.ru/acts/bank/45726>

⁷ Unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf

Studies have shown that, for example, in the RF Government's Unified Plan for Achieving National Development Goals for the Period to 2030, about 90 % of items are devoted to the development of the social superstructure and only about 10 % of items are devoted to the economic basis [Tebekin, 2022]. As a result, it is concluded that the existing documents of the Government of the Russian Federation, dedicated to socio-economic development until 2030, do not observe the balance between the desired results and the sources of their achievement, which in accounting is determined by the balance between assets and liabilities [Tebekin, 2022];

10) The principle of efficiency and effectiveness of strategic planning. One of the central problems of strategic planning documents of socio-economic development processes for the period up to 2030¹ is the fact that they lack a strategic core to ensure prospective development [Tebekin, 2022]. In particular, there is no answer to the question – at the expense of what (not being breakthrough), simply import-substituting technologies are planned to provide a radical increase in the competitiveness and economic weight of the national economy, which is currently less than two percent in the world volume (Fig. 7).

The continued dependence of the national economy on production based on the technologies of the third technological paradigm (hydrocarbon production, metallurgical production, etc.) created in the years of the first five-year plans is apparently quite satisfactory for the domestic economic elites, since the intensive development of newer technologies of the subsequent technological paradigms (IV, V, VI) has been essentially blocked since the Kosygin reforms. This can be seen from the following features of the strategic documents².

First, very little attention is paid to the development of the technologies of the fourth technological paradigm, primarily machine building and machine tools (i.e., means of production), which account for almost half of Russian imports³, which is a breeding ground for permanent sanctions from the West. This problem is not solved by the logical way of import substitution⁴. The focus is constantly on lifting Western sanctions, replacing Western imports with Eastern ones, or on parallel imports.

Second, the strategic documents pay little attention to the effective development of technologies of the fifth technological paradigm (primarily electronics) [Tebekin, 2022], which significantly complicates the implementation of many digitization projects.

Third, strategic documents pay virtually no attention to the development of the most promising technologies of the sixth technological paradigm. For example, the Unified Plan⁵ does not mention nanotechnology, which is one of the key technologies at the core of the sixth technological paradigm [Glazyev, Kharitonov, 2009].

¹ Unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf; Russian Government. National projects. URL: <http://government.ru/rugovclassifier/section/2641/>.

² Unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf; Russian Government. National projects. URL: <http://government.ru/rugovclassifier/section/2641/>; Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. "On Approval of the List of Initiatives of Social and Economic Development of the Russian Federation up to 2030". URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>.

³ Exports and imports of Russian Federation by goods. URL: <https://customs.gov.ru/folder/519>

⁴ Klishas stated the failure of the import substitution program in Russia. URL: <https://www.rbc.ru/politics/19/05/2022/6285f0c79a7947c127bab983>

⁵ Unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf

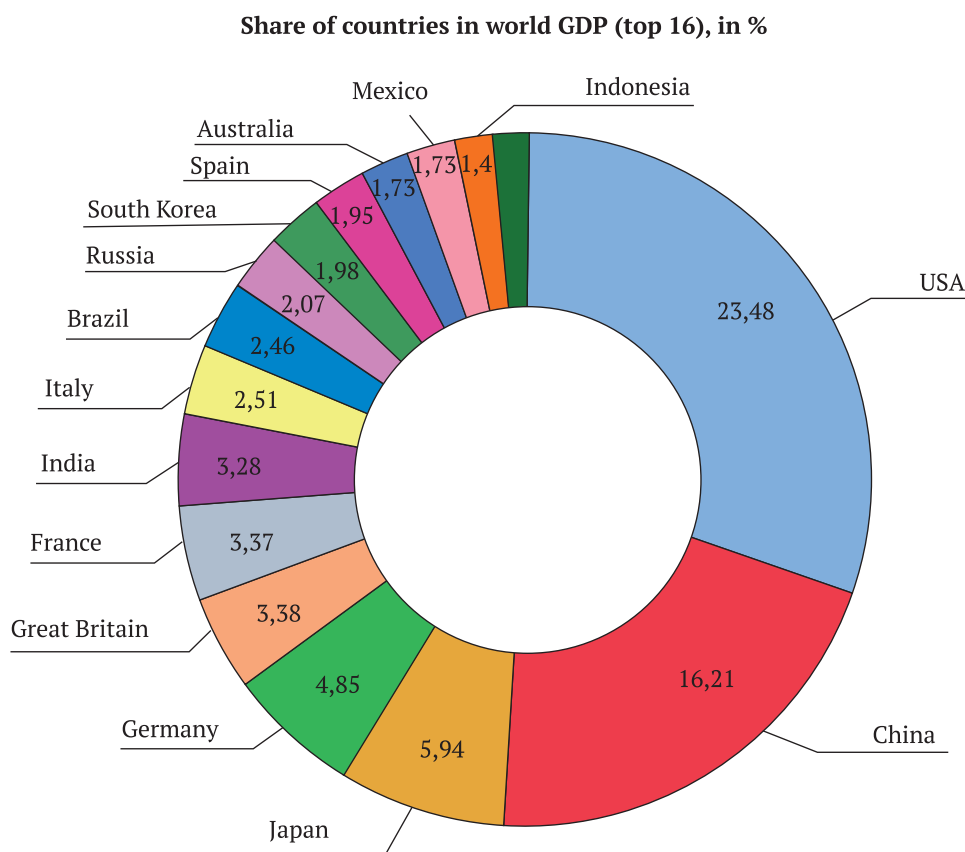


Fig. 7. Share of the world's leading countries in global GDP according to the IMF¹

11) Program-goal principle. Judging by the “patchwork” [Tebekin, 2022] of strategic development documents², they poorly comply with the program-goal principle of strategic planning³.

Reorganization of development institutions

Obviously, replacing the monetary-liberal economic model with a new industrial model of development (see: Fig. 3) requires the reorganization of development institutions.

Although some researchers see in the documents adopted by the government⁴ “a clear and reviewed government strategy for the accelerated development of the country’s econ-

¹ Share of countries in global GDP. URL: http://fincan.ru/articles/55_dolya-stran-v-mirovom-vvp/

² The unified plan to achieve the national development goals of the Russian Federation for the period up to 2024 and for the planned period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf; Russian Government. National projects. URL: <http://government.ru/rugovclassifier/section/2641/>; Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. “On Approval of the List of Initiatives of Social and Economic Development of the Russian Federation up to 2030”. URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>.

³ Federal Law of 28.06.2014 N 172-FZ (ed. from 31.07.2020) “On Strategic Planning in the Russian Federation”. http://www.consultant.ru/document/cons_doc_LAW_164841/

⁴ Unified plan for achieving the national development goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf; Russian Government. National projects. URL: <http://government.ru/rugovclassifier/section/2641/>; Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. “On approval of the list of initiatives of socio-economic development of the Russian Federation until 2030”. URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>.

omy”¹, indicating “concrete things based on the determining directions”², it is obvious that “the concrete things”³ are not yet the proof of their importance and integrity when embedded in the strategic system. And it is certainly not possible to talk about the implementation of radical changes that will ensure a breakthrough development of the national economic complex, without a radical reorganization of development institutions.

The developers of the Unified Plan⁴ stated that the institutional changes envisage: strategic initiatives⁵, including “frontal increase of flexibility and efficiency”; system changes in terms of industrial construction (national goals “Pleasant and safe living environment”, “Decent, efficient work and successful entrepreneurship”); institutional measures to support export (national goal “Decent, efficient work and successful entrepreneurship”). Behind these fragmentary slogans, the Unified Plan⁶ does not present concrete measures for institutional changes in the industry.

Under the current conditions, the institutional component of domestic industry (the Russian Ministry of Industry and Trade) is constantly combined either with science and technology or with the energy sector or with trade. Moreover, in the current combination (trade + industry), the latter is only complementary to trade (however, a similar situation existed with the combination “energy + industry”).

If we compare the current institutional component of Russian industry with the institutional component of industry at USSR in the mid-1980s, when there were 10 union ministries for machine building (production of means of production) and several dozen union ministries for industry in general, then the current 0.5 (as a maximum) ministries for industry in the country are a path to atavism and rudiment rather than development in terms of institutional changes.

Speaking of the existing practice of development institutions, one can look at the way eight development institutions were dissolved at the end of 2020⁷. Although Prime Minister M. Mishustin justified the liquidation of the institutions by saying that “optimization will accelerate the pace of development of the Russian economy and make the institutions more effective”⁸, as a rule, the development institutions are liquidated when the development institutions have fulfilled their tasks. If their efficiency is insufficient, it is enough to replace the administrative apparatus.

On the one hand, M. Mishustin has mentioned poor alignment with new national development goals as one of the reasons for liquidation of development institutions⁹. On the other hand,

¹ Dvinsky K. Digital concentration camp and grocery cards. Threats to liberals from new strategy of Russia’s development. URL: https://tsargrad.tv/articles/cifrovoy-konclager-i-produktovye-kartochki-chem-grozit-liberalam-novaja-strategija-razvitiya-rossii_344233.

² Ibid.

³ Ibid.

⁴ Unified Plan for Achievement of National Development Goals of the Russian Federation for the Period up to 2024 and for the Planning Period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf.

⁵ Decree of the Government of the Russian Federation of October 6, 2021, No. 2816-r. “On Approval of the List of Initiatives for Social and Economic Development of the Russian Federation until 2030”. URL: <https://www.garant.ru/products/ipo/prime/doc/402792803/>.

⁶ Unified Plan for the Achievement of National Development Goals of the Russian Federation for the period up to 2024 and for the planning period up to 2030. Government of the Russian Federation. October 1, 2021. URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celej_razvitiya_do_2024g.pdf.

⁷ Mishustin explained the reasons for liquidation of eight development institutes. URL: <https://www.5-tv.ru/news/321003/mishustin-obasnil-privychny-likvidacii-vosmi-institutov-razvitiya/>.

⁸ Ibid.

⁹ Ibid.

he said that the liquidation of development institutions was caused by “significant overlap of their functions with federal agencies and commercial organizations.”¹ Considering the fact that many of the reformed development institutions (both abolished and reorganized) have definitely not lost their importance as institutions (another thing is that their creators and managers should bear full responsibility for their effectiveness), we can say that the reform has been limited to the redistribution of power and, consequently, to the management of property and, of course, budgetary resources, of course.

Otherwise, there would be information not only about which development institutions are weakly aligned with the new national development goals, but also about which new institutions are responsive to the new challenges of our time and the new national goals. The question, for example, of who and why created the development institutions that have “significant overlap of functions with the federal government”² in these kinds of “reforms” has traditionally been left out.

Integration of production with science and education

When we talk about the relationship between production and science and education in the national economy, we should realize that the word integration fits them poorly in modern conditions. In addition, each of the above components currently has many problems of its own. If we talk about domestic education (primarily higher education as a link to science and production), the following problems should be highlighted. First, Russia was forced to withdraw from the Bologna Agreement³ in 2022. Second, despite the statement of the former Minister of Higher Education of the Russian Federation, under whom the Bologna system was introduced, that “in Russia no one has ever justified that a six-year education under the Bologna system provides a worse education than a five-year education”⁴, the question can be posed differently – nor with the introduction of the Bologna system, nor has anyone produced any scientific evidence after its application that higher education has been improved by the Bologna system. Moreover, everyone working in the field knows that the level of education in the country dropped significantly with the introduction of the Bologna system⁵. Thirdly, despite the statement of the current Minister of Science and Higher Education V. Falkov⁶ that the Bologna system is a thing of the past, there is no idea of what the domestic system of higher education will look like in the future.

An even bigger problem for linking the domestic higher education system to production and science is the fact that in the overwhelming majority of economic sectors the state has abandoned its function of distributing graduates. As a result, graduates often “go nowhere” and most of them do not work in the field they acquired at university (Fig. 8).

A serious problem for the integration of production, science and education is the gap between state funding of R&D and the world leaders by a factor of 3-4 (as a percentage of GDP).

¹ Mishustin explained the reasons for liquidation of eight development institutes. URL: <https://www.5-tv.ru/news/321003/misustin-obasnil-priciny-likvidacii-vosmi-institutov-razvitia/>.

² Ibid.

³ Vorobyeva, Y. (2022). Russia leaves Bologna system: who it will affect and how. URL: https://www.rbc.ru/spb_sz/28/05/2022/628e29749a794747a1ee085d?ysclid=14vexy3zys934323413

⁴ Ex-Minister saw no evidence of the shortcomings of the Bologna System. URL: <https://www.rbc.ru/society/26/05/2022/628f9f6c9a7947d7d83c8639?ysclid=14vga8hc64288330987>

⁵ The rector of Moscow State University said that the quality of education is declining because of the Bologna system. URL: https://www.rbc.ru/rb_cfrenews/6250b6239a7947735b2e9eea

⁶ Russia is abandoning the Bologna system – Bachelor’s and Master’s degrees. How education will change and what is in store for students? URL: <https://lenta.ru/articles/2022/05/26/bolonsky/>

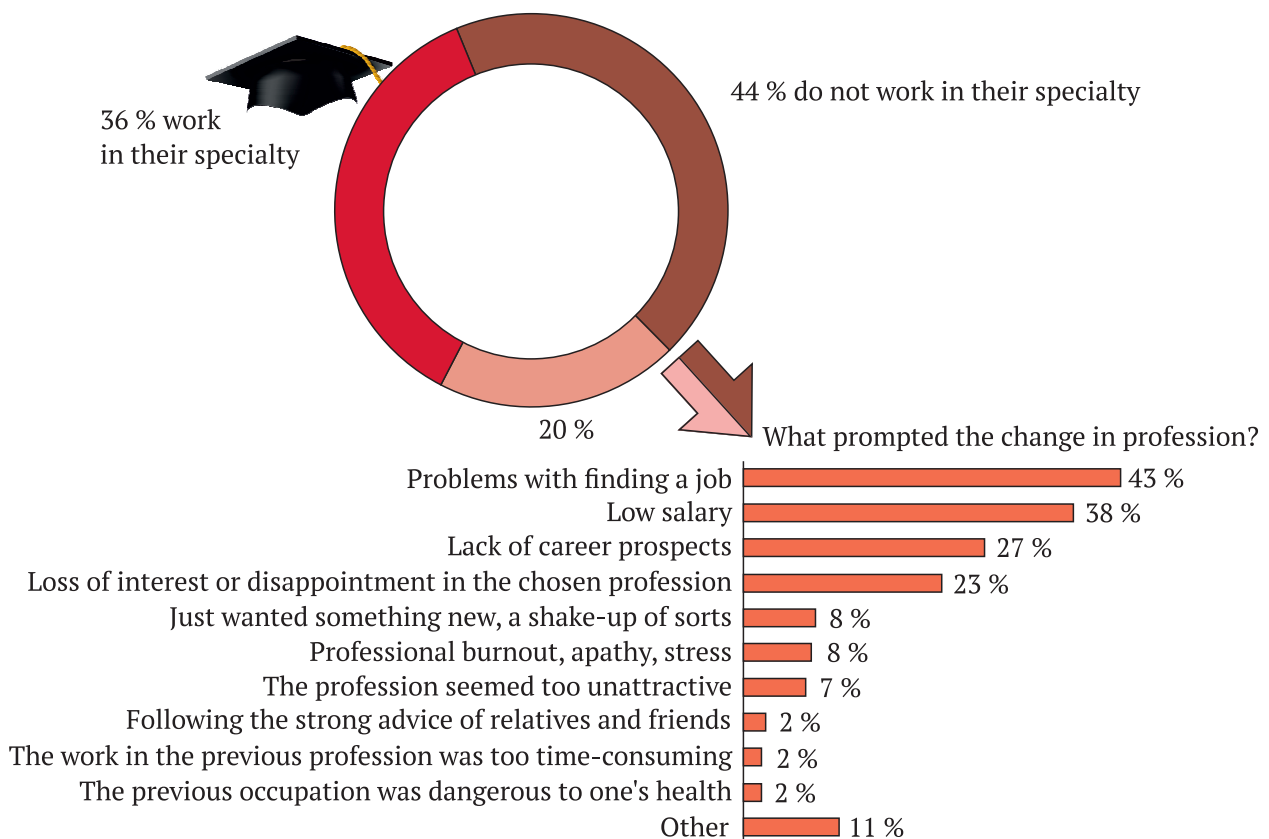


Fig. 8. Ratio of university graduates working in their specialty and not in their specialty¹

However, the main problem in the integration of education, science and production is the lack of jobs in the latter sector. If in 2007 the number of organizations (legal entities) in the country was 114989 according to Rosstat, in 2019 it was only 100407², i.e., a decrease by 13 % (!). At the same time, the shadow economy in the country continues to grow, the size of which is estimated up to six (!) annual budgets of the country³. But the most important thing is that the government does not plan to develop domestic competition in the field of production in the country. And if you listen to the Minister of Economic Development of the Russian Federation, you can see for yourself that the government does not plan to “get off the oil needle”. Here is what M. Reshetnikov stated at SPIEF-22: “In our dreams, we can now dream that the export of machinery and equipment will be comparable to the export of mineral resources, but we understand that this is not so. We can really efficiently produce and supply minerals, metals, chemicals and so on. We exist in chains and no matter what we say we are part of the global division of labor”⁴.

This sentence actually says everything about the Russian government’s pursuit of the NIS.2. In other words, Margaret Thatcher’s thesis about the “economic justification of 15 million

¹ What can motivate you to work hard? URL: <https://psy-files.ru/states/samootdaca-v-rabote-cto-mozet-k-nej-pobudit.html>

² Number of organizations and their territorially separate subdivisions (legal entities). URL: https://www.gks.ru/free_doc/new_site/business/prom/kol_yurr.htm

³ Arefiev, deputy from KPRF, estimated the damage from shadow economy in Russia at 136 trillion a year. URL: <https://turbopages.org/turbo?text=https%3A%2F%2Fflenta.ru%2Fnews%2F2022%2F01%2F09%2Fveryaccurate%2F>

⁴ Reshetnikov said that no one has cancelled the globalization of the Russian economy. URL: <https://www.interfax.ru/forumspb/846719>

people¹ living in our country” is alive and well. It should be noted that in addition to the significant problems of strategic planning, there are a number of other current problems for the creation of a new second-generation industrial society. These include the market problem of quasi-monopolistic dominance in the domestic economy. There is also the fiscal nature of tax policy, which permanently sidelines the domestic economy. There is also the problem of a credit policy in which interest rates on loans exceed the profitability of the manufacturing industry. This is also the problem of designing and implementing a competitive domestic industrial policy. This is also the problem of a huge surplus of unsecured financial resources (the global financial “bubble”), which is largely responsible for slowing down the processes of accelerating industrial and technological development in the sixth technological paradigm, both in the world and in Russia, as investors turn their attention to speculative operations with cryptocurrencies and intangible assets, where the baton of the dotcom bubble has now been taken over by the widely advertised but never really demonstrated revolutionary.

Of course, we should also mention the traditional decline in economic activity in the extractive and manufacturing industries that takes place when there is a change in technological paradigms, in the current environment exacerbated by the looming global financial crisis that is a consequence of the extensive disconnect between the global money supply and the global commodity supply. The resolution of this crisis is a matter for the near future (the next few years).

But nevertheless, the main problem of development of NIS.2 in the Russian Federation within the framework of the sixth technological paradigm at present is that even in the presence of goal-setting there are no appropriate program-targeted strategic plans. The greatest prospect in the development of the economy within the sixth technological paradigm in the emerging geopolitical and economic conditions may be associated with a forced rejection of the currently implemented model of quasi-monopolistic state capitalism.

Discussion of results and conclusions

Thus, the study has shown that the formation and implementation of the model of a new industrial society of the second generation (NIS.2) requires a change in the monetary-liberal economic model. The analysis of prospects for the formation of the NIS.2 model in the national economy was carried out in four key areas (assessment of the degree of innovation of government decisions; prospects of government plans, projects and programs of socio-economic development; prospects of constructive reorganization of development institutions; trends of integration of production with science and education).

As the main problem in the formation and implementation of the model of the new industrial society of the second generation (NIS.2), it seems that in the plans of the Russian government there is absolutely no course for the development of domestic competition in the field of manufacturing industry, i.e., the model of state quasi-monopolistic capitalism is maintained. At the same time, the tendencies are associated with waiting for Western sanctions, finding a substitute for Eastern imports, introducing parallel imports, but by no means with domestic import-substituting production.

At the same time, it cannot be ruled out that the intense geopolitical and economic changes taking place in 2022 will put the Russian economy on the NIS.2 development path. But the probability of such a scenario is not yet high.

¹ “In USSR it is economically justified to live 15 million people”: what Margaret Thatcher meant. URL: [https:// news.rambler.ru/troops/47536449/?utm_content=news_media&utm_medium=read_more&utm_source=copylink](https://news.rambler.ru/troops/47536449/?utm_content=news_media&utm_medium=read_more&utm_source=copylink)

References

- Akaev A.A., Rudskoy A.I. (2013). NBIC technologies and their impact on the dynamics of the world economy in the first half of the 21st century. *Partnership of Civilizations*. No. 3. Pp. 54–59. (In Russ.)
- Artemiev I.T., Artemiev E.I., Ivanov S.O. (2013). Analysis of The Cobb-Douglas Function from the Point of View of the Axiom of «Reasonable Economy». *Bulletin of the Chuvash University*. No. 3. Pp. 257–259. (In Russ.)
- Bell D. (2004). *The coming post-industrial society: the experience of social forecasting*. M.: Academia Publ. 783 p. (In Russ.)
- Bodrunov S.D. (2016). New industrial society of the second generation: man, production, development. *Economic Revival of Russia*. No. 2 (48). Pp. 5–14. (In Russ.)
- Bodrunov S.D. (2016). *The Coming of New Industrial Society: Reloaded*. M.: Ed. 2, supplemented. St. Petersburg: S.Y. Witte INID. 328 p.
- Busheneva Yu.I. (2016). Strategy 2030: rational planning or unrealizable prospect. In: *XX anniversary Tsarskoye Selo reading materials of the international scientific conference*. Pp. 131–135. (In Russ.)
- Vinokurov S.S., Guryanov P.A. (2016). The feldstein-horioka paradox in the eurasian economic space and in the world. *International Journal of Applied and Fundamental Research*. No 9. Pp. 269–271. (In Russ.)
- Voronov M.V., Leonova N.G., Stamov I.G. (2020). Safe Development of Civilization and «Reasonable» Economy. Russia: Trends and Prospects of Development. In: *Proceedings of the XIX National Scientific Conference with International Participation*. Issue 15. Part 1. Pp. 79–83. (In Russ.)
- Glazyev S.Yu., Kharitonov V.V. (2009). *Nanotechnologies as a key factor in the new technological order in the economy*. M.: Trovant Publ. 304 p. (In Russ.)
- Zvyagin, L.S. (2015). Practical methods of modeling economic systems. In: *Materials of the IV Intern. scientific conf.* Chelyabinsk: Two Komsomol members. Pp. 14–19. (In Russ.)
- Kudrov V.M. (2011). *World Economy: Socio-Economic Models development*. M.: INFRA-M. 399 p. (In Russ.)
- Lyzlov D.V. (2008). Methods of valuation of GDP as a criterion for the implementation of the state strategy. *Finance and Credit*. No 21. Pp. 48–55. (In Russ.)
- Neumann J., Morgenstern O. (1970). *Game theory and economic behavior*. M.: Nauka Publ. 707 p. (In Russ.)
- Pecherskikh I.A., Semenov A.G. (2011). *Mathematical models in economics: textbook*. Kemerovo: Kemerovo Technological Institute of Food Industry Publ. 191 p. (In Russ.)
- Tebekin A.V. (2018). Analysis of Crises from the Position of Economic Theory. *Journal of Economic Research*. Vol. 4. No 12. Pp. 3–9. (In Russ.)
- Tebekin A.V. (2021a). View «Forward» as the Basis of the Strategic Development of the National Economy. *Journal of Economic Research*. Vol. 7. No 3. Pp. 3–11. (In Russ.)
- Tebekin A.V. (2021b). View «Back» as a Foundation for the Strategic Development of Managed Socio-Economic Systems. *Bulletin of the Tver State University. Series: Economics and Management*. No 2(54). Pp. 123–137. (In Russ.)
- Tebekin A.V. (2021c). View «from the Top» on the Developing Strategy of Socio-Economic Development of the National Economy. *Transport Business in Russia*. No 4. Pp. 11–20. (In Russ.)
- Tebekin A.V. (2021d). An Integral View on the Formation of the Strategy for Socio-Economic Development of the Russian Federation until 2030. *Theoretical Economics*. No 10(82). Pp. 13–26. (In Russ.)

Tebekin A.V., Mitropolskaya-Rodionova N.V., Khoreva A.V. (2021e). Theoretical Model of a New Industrial Society of the Second Generation and Problems of the Practical Implementation of Noonomicus. *Theoretical Economics*. No 3(75). Pp. 59–70. (In Russ.)

Tebekin A.V. (2022). Problems of strategic planning in determining the processes of socio-economic development of the Russian Federation for the period up to 2030. *Theoretical Economics*. No 3. Pp. 36–51. (In Russ.)

Information about the authors

Alexey V. Tebekin

Doctor of Technical Sciences, Doctor of Economics, Professor, Professor of the Department of Management of the Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs of Russia (143007, Moscow region, Odintsovo, Novo-Sportivnaya st., 3)

E-mail: Tebekin@gmail.com

Nadezhda V. Mitropolskaya-Rodionova

Cand. Sc. (Econ.), Associate Professor, Department of Management, Odintsovo Branch, MGIMO of the Ministry of Foreign Affairs of Russia (143007, Moscow region, Odintsovo, Novo-Sportivnaya st., 3)

E-mail: n.v.mitropolskaya-ro@mail.ru

Anna V. Khoreva

Senior Lecturer, Department of Management, Odintsovo Branch, MGIMO of the Ministry of Foreign Affairs of Russia (143007, Moscow region, Odintsovo, Novo-Sportivnaya st., 3)

E-mail: info@veorus.ru khoreva_av@mail.ru