

Development of the Russian Economy in the Medium Term: Risks and Opportunities

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Abstract—The article examines the key risks of the development of the Russian economy in the medium term, resulting from the deterioration of trade and economic relations with developed countries. The most important changes in the model of functioning of the national economy are described. It is stated that restrictions on the supply of imported products have become the leading factor in the reduction of economic activity in 2022. The shifts in the formation of production, income and prices under the influence of sanctions are considered as a process of structural and technological restructuring of the Russian economy, requiring an increase in investment in the modernization of production and an increase in costs for research and development. The high dependence on imports and the technological backwardness of the Russian economy are seen as key constraints to its sustainable development in the medium term. One of the ways to compensate for the negative impact of sanctions, with a high probability, will be the replacement of high-quality resources with mass ones. It is emphasized that, taking into account the tasks of economic development, the period of loss of the quality of economic growth should not be long, and in the medium and long term, the qualitative component of growth should prevail in the formation of economic dynamics.

Keywords: economic growth, economic policy, sanctions, structural changes, economic forecast

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Introduction. In 2022, the Russian economy faced unprecedented external pressure, which created new development constraints that reduce the potential for economic growth in the medium term. To understand newly emerging risks and threats, it is important to determine the impact of new conditions on the formation of economic dynamics, a possible set of solutions to compensate for the negative impact of sanctions on the economy. Such an analysis can become an important element of the strategy for the development of the Russian economy.

Since new challenges are changing the existing system of interactions in the economy, a comprehensive analysis of the shifts taking place in the structure of the economic system is necessary.¹ These include characteristics of the development of the economy at the level of key elements of production, income and demand. The search for options to mitigate the negative impact of the sanctions restrictions requires an analysis of the available opportunities for structural maneuver, which

will make it possible to determine the range of realistic economic policy decisions.

Changing the conditions for the formation of economic dynamics. It should be noted that the key result of the transformation of the system of trade and economic relations between Russia and most developed countries was a radical change in the basic principles of the functioning of the domestic economy (Table 1).

First of all, we note the changes taking place with the model of the functioning of foreign trade. In the last 30 years, the development of the Russian economy has been based on a significant foreign trade surplus. It created financial stability, supported domestic demand and provided an increase in reserves [2]. In conditions when significant restrictions are imposed on transactions with the currencies of developed countries, which are supplemented by sanctions on the supply of a number of goods to Russia, the question of the expediency of maintaining the current volumes of exports to unfriendly countries is quite acute. Since the quality of reserve currencies for the Russian economy has changed significantly, it makes sense to exchange them for high-quality Russian resources only when these payments are guaranteed to be backed by a corresponding flow of imported goods. Thus, in the medium term, it would be advisable to strive for the principle of balanced trade with unfriendly coun-

¹ The structure of the economy in this case refers to the functional links between the individual elements of the national economy, which determine the quantitative and qualitative characteristics of its development. In particular, we are talking about the sectoral structure of production, income, final demand, costs, etc. [1].

Table 1. Changes in key parameters of the functioning of the economy that occurred in 2022

Until February 2022	After February 2022
Trade surplus	Balanced foreign trade
Export parity in the formation of prices for raw materials	Price containment for intermediate products
Import replacement of gaps in production chains	Building production chains based on import substitution
Multilevel reservation and savings in the financial and budgetary systems	Intensification of budget expenditures and the need to expand debt financing instruments
Devaluation budget premium and balanced budget	Financing structural and technological modernization at the expense of the budget deficit

Source: Compiled by the author.

tries, which implies, among other things, a rethinking of the role of the commodity sector in the Russian economy.

During the formation of domestic prices for raw materials, an important element of the connection between the Russian and world economies for a number of years was the principle of export parity (net-back) [3]. The essence of this principle is that prices in the domestic market are equal to world market prices minus transportation costs, export duties and the ruble exchange rate. At the same time, by definition, it was assumed that producers of raw materials have an equal opportunity to supply products to the domestic and foreign markets. Even before the crisis of 2022, this principle led to the formation of imbalances in the Russian economy, especially after the “reincarnation” of the budget rule in 2017, when the exchange rate was maintained against the backdrop of rising world prices. This was the reason for a significant increase in domestic prices for intermediate products, which negatively affected the economic dynamics and required special measures from the government to contain it.

The positive balance in foreign trade over the past three decades made it possible to compensate for the insufficient complexity and manufacturability of the domestic economy through the import of components, technologies and finished products [4]. Now, in the context of direct bans on the supply of a number of types of products to our country and attempts to cut them off from the results of the scientific and technological activities of developed countries, the possibilities of such a policy are becoming significantly limited. In this regard, there are increasing requirements for the complication of the Russian economy, lengthening the chains of product processing, increasing investment in research and development (R&D) [5, 6]. Only on this basis can a layered policy of import substitution be pursued. At the same time, it is necessary to clearly understand that the autarchy of the Russian economy does not make sense, therefore it is necessary to deepen production ties with friendly countries.

The principles of financial stabilization, which became an integral element of economic policy after

the crisis of 2014–2015, assumed the formation of an extensive system of reserves in the financial and budgetary system [7]. This system was based on the assumption that in the face of external shocks, the probability of which seemed rather high, the Russian economy should be able to fend off their key negative consequences while maintaining full manageability at all levels of the financial system. Thus, reservations were made in both national and reserve currencies. As the experience of the 2020 crisis showed, there was a lot of rationality in this approach: despite the significant shocks caused by the novel coronavirus pandemic, significant negative consequences were avoided in the financial sector [8]. In the conditions of 2022, the stability of the financial system also provided significant support to the economy, however, the freezing of most of the Russian gold and foreign exchange reserves sharply limited the possibility of reserves in the currencies of developed countries. In addition, the Russian economy is faced with the need to parry a number of emerging macrostructural problems by intensifying budget spending.

The budget policy, which for a number of years was based on the principles of balance and the possibility of using the devaluation premium to finance expenditures, is also undergoing significant changes. In conditions when the investment motivation of business and household incomes are under pressure, the requirements for a countercyclical budget policy naturally increase, so there can be no talk of a balanced budget, at least in the medium term. With a high probability, during the transition period, it will be necessary to finance irregular (investment) budget expenditures, both at the expense of the National Welfare Fund (NWF) during a period of relatively high inflation, and domestic borrowing during a period of price decline [9]. Of course, budgetary financing of part of the cost of structural modernization requires control over both the level of public debt and price dynamics.

Structural features of the development of the Russian economy. The dynamics of the main macro indicators in the modern Russian economy are largely formed as a result of complex intersectoral interactions [10]. The high importance of structural factors in the formation

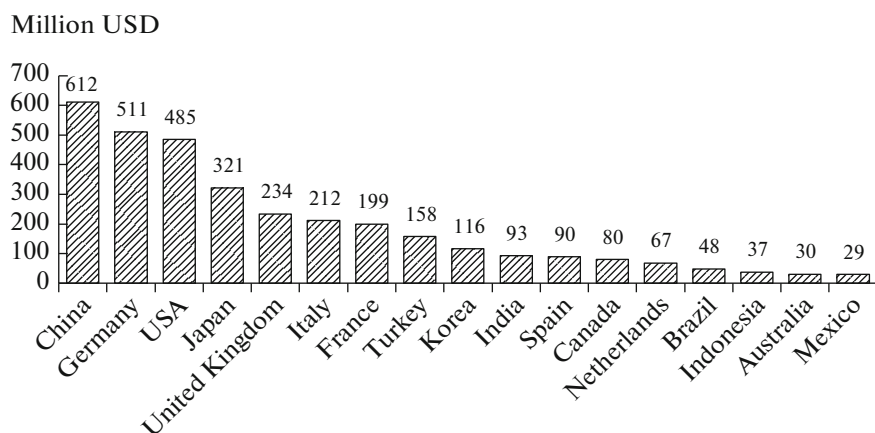


Fig. 1. Growth in production in Russia with a 1% increase in partner country GDP, 2018.

Source: OECD data, author's calculations.

of economic dynamics in the short and medium term implies the use of analysis and forecasting methods that take into account the characteristics of the sectoral structure of the economy, as well as the existing system of intersectoral relations [11, 12].

Accordingly, in order to obtain meaningful assessments of the prospects for the development of the Russian economy, it is required to use not only sectoral statistics, but also data from input–output tables, as well as other sources of information that make it possible to carry out predictive and analytical calculations regarding the relationship between dynamic and structural characteristics. For example, only with the use of such an approach it is possible to estimate the full macroeconomic effects within the framework of production activities, taking into account the system of cooperative relations existing in the economy and the distribution of income.

As already noted, the events of February–March 2022 radically changed the principles of economic relations with the outside world. Prior to these events, there was an exchange of high-quality resources between Russia and developed countries, which provided our country with access to the necessary goods and services. However, a side effect of the implementation of such a model was the preservation of the technological backwardness of the Russian economy.

The key result of the transformation that has actually already taken place was that the most realistic scenario for medium-term development was the use of the potential of the domestic market [13]. However, despite the apparent lack of alternatives and a certain attractiveness of such a scenario, it has significant risks, careful consideration of which will improve the quality of decisions made in the field of economic management [14].

Before the events of 2022, Russia was quite deeply involved in the system of world trade and economic relations. In particular, when analyzing the Russian

economy, a high elasticity of the growth of its production was recorded in relation to the growth of the economies of the leading countries of the world, which was not surprising due to its high export dependence (Fig. 1). Severing decades-old ties will have a lasting negative impact on economic growth potential. Overcoming this challenge may be associated with the launch of compensatory mechanisms and the implementation of a set of countercyclical economic policy measures.

Economic development in the medium term will be shaped under pressure from foreign trade restrictions associated with the regime of anti-Russian sanctions. Attempts to abandon Russian raw materials will negatively affect the production and export of raw materials. Restrictions on the supply of goods and services to Russia will hinder the satisfaction of final and intermediate demand. Thus, the Russian economy will be under complex pressure in foreign trade operations, limiting the potential for economic growth in the short and medium term.

Compensatory mechanisms that can use the existing potential for the economic development of the Russian economy can counter the negative trends in the break in trade and economic relations with developed countries [13]. One of these is the development of the domestic market and the intensification of relations with friendly countries. Its full functioning requires an increase in production efficiency [14] and the quality of economic growth, which is a difficult task, especially in the context of an attempt to cut Russia off from the key results of scientific research and development in developed countries.

In order for the policy of structural transformation to be successful, it is necessary to define criteria for the implementation of projects to develop industrial cooperation and restore destroyed production chains.

In accordance with our calculations, which take into account direct, indirect, and induced effects [15],

Table 2. Dependence on imports for certain types of products, %

Intermediate consumption	Import share, %	Population consumption	Import share, %	Investments	Import share, %
Medicines and substances	63	Computer equipment	83	Cars and equipment	86
Rubber and plastic products	60	Textile	81	Furniture	71
Substances chemical	54	Electrical equipment	76	Computer equipment	67
Cars and equipment	50	Other vehicles	72	Electrical equipment	61
Finished metal products	49	Medicines	63	Agriculture*	54
Furniture	47	Rubber and plastic products	61	Textile	42
Vehicles	47	Substances chemical	58	Other vehicles	39
Publishing Services	42	Cars and equipment	49	Vehicles	28
Paper	37	Finished metal products	44	Software products	25
Nonmetallic mineral products	33	Furniture	41		

* The presence of agriculture in this column should not come as a surprise, since pedigree livestock, in accordance with the SNA methodology, is classified as fixed capital.

Source: Rosstat data, author's calculations.

the break in cooperation ties with developed countries, primarily European ones, had a negative impact on the dynamics of production in a number of sectors of Russian industry. At the same time, due to the high share of industrial assembly, losses in terms of value added (GDP) can be considered moderate. In particular, estimates based on input–output tables for 2019 allow us to estimate the shortfall in GDP from restrictions on the supply of imported intermediate products from unfriendly countries at 0.8% of GDP for the production of vehicles and equipment, at 1.2% for other vehicles and equipment, 1.1% for the production of computer, electronic and optical equipment. Thus, the cumulative decline in GDP for the three machine-building activities may amount to slightly more than 3% in 2022. Another 0.4% of GDP can be estimated at the loss of trade enterprises due to the withdrawal of a number of international brands of clothing and other consumer goods from the country.

The high level of dependence of the Russian economy on foreign products is characterized by data on the share of imports in intermediate consumption and final demand (Table 2). Attention is drawn to the fact that among the items highly dependent on imports there are those that have a direct impact on the parameters of vital activity (drugs and substances for their production).

Of course, part of the imports came to Russia from friendly countries, and there are opportunities to maintain such supplies. Preliminary “mirror” statistics indicate that part of the imports from unfriendly countries can be supplied through parallel channels. However, the high volume of critical imports poses understandable risks to the security of the Russian economy. It should be noted that the technological backwardness of Russia from developed and a number of developing countries limited the potential for

growth and constantly increased the dependence of the economy on imports. In fact, it contributed to the preservation of the gap between Russia in terms of economic development and developed countries that had formed by the 2010s. Taking this factor into account, it should be stated that the fundamental task for the Russian economy and politics has not changed, the conditions under which it will have to be solved, and the amount of resources available for this have changed.

Possible ways to compensate for the negative impact of sanctions on the Russian economy. In the conditions of 2022, the reduction in imports led to both a limitation in domestic demand and production. The Russian economy found itself in a situation where it was required, in terms of the theory of Academician Yu.V. Yaremenko, to compensate for high-quality resources with mass ones [16]. The main direction of this compensation in the medium term may be the use of the capacity of the domestic market, available raw materials, competitive capacities in industry and construction [17]. Of course, this process will not be “free.” Apparently, it will have to be paid for by a lower dynamics of production efficiency. It is important that this period of exchanging quality for quantity be relatively short.

For example, the presence of construction capacities allows maintaining and even expanding the volume of construction work with minimal use of imports. However, sooner or later, the problem of modernizing the fleet of construction equipment will arise, and for this, appropriate production capacities must be created, import supplies must be provided, otherwise there will be restrictions on increasing the volume of construction work.

The existing dependence on intermediate, investment and consumer imports cannot be overcome in

the medium term. Accordingly, under any scenario, a strategy is required to reorient trade flows, logistics and insurance to friendly countries in order to ensure critical (not produced in the country) imports. In the longer term of political de-escalation, there is a need to rethink the principles of trade and economic relations with developed countries.

The change in the model of foreign trade creates new requirements for the functioning of raw materials production and import substitution. For them, compensatory may be the lengthening of production chains towards higher added value, which will allow not only to reduce dependence on imports of such products, but also to solve the problem of restrictions on the supply of domestic raw materials to foreign markets [18]. For example, only 7% of oil produced in Russia is used for the production of petrochemical raw materials. At the same time, the range of products manufactured in this sector of the economy is still extremely narrow.

Another direction could be the use of raw materials, primarily relatively cheap energy for the production of highly energy-intensive products. Such a departure from the problem of restrictions on Russian energy exports will help form the necessary level of competitiveness of Russian energy-intensive industries (chemical and metallurgical production, mechanical engineering) in the domestic and foreign markets.

Both of the described directions have prospects for increasing exports, as well as changing its geography, which is especially important in the current conditions.

In terms of import substitution, you can be guided by three key criteria. The first is the unconditional satisfaction of the requirements of safety and life activity. Here, the priority of making managerial decisions is up to the state. The second is the criterion for the payback (albeit conditional) of projects, taking into account the capacity of the domestic market. The third is the possibility of selling products in foreign markets.

Calculations carried out at the Institute of Economic Forecasting, Russian Academy of Sciences, show, for example, that the existing program for the production of the MC-21 medium-haul aircraft, taking into account import substitution, has an acceptable macroeconomic efficiency: per 1 ruble production an additional 1.27 rubles added value is created, while the market capacity and the planned production program make it possible to achieve a significant effect on the scale of the entire Russian economy.

Another frequently discussed example is the development of the production of rare earth metals (REMs). In this case, preliminary calculations show that acceptable macroeconomic efficiency is not achieved here. The problem is that the domestic economy shows extremely limited demand for such metals.

At the same time, production facilities have already been developed in the world, offering a large volume of such products for the world market (China, United States). Under these conditions, for the effective implementation of projects in the field of REM production in Russia, it is required either to compete in the external market with leading manufacturers, which requires the highest development efficiency characteristics, or to expand the demand for these resources in the domestic economy. The second direction involves a radical increase in production, primarily engineering products [19], i.e., is in line with the policy of structural and technological restructuring of the economy. The REM example shows that solutions of a complex intersectoral nature can play an important role in effectively solving the problems of import substitution.

The structure of consumer demand remains a significant constraint on economic development. As it has been repeatedly noted by a number of authors [20, 21], the Russian structure of household consumption is very archaic. In particular, food, housing and communal services and transport account for almost 50%. This means that the demand of the population for quality goods and services is largely limited, and this is an obstacle to business development, including the production of modern goods and services. The already available high-frequency data on the structure of consumption of Russian citizens indicate that during the crisis of 2022, all signs of a further deterioration in the structure of consumption appeared (Fig. 2).

Thus, while maintaining a relatively stable demand for food, the costs of buying cars, household appliances and even clothes have significantly “sunk.” To a certain extent, this is due to a jump in prices for imported products and restrictions on their supplies to Russia, but, one way or another, we see that the current situation negatively affects the quality of demand and creates problems for the development of the economy. And if the situation of high-income groups of the population is compensated by the realization of pent-up demand, then for low-income households the possibilities of such compensation without additional support measures will be severely limited.

The above means that in the discussion about what should initiate a new cycle of economic growth, there is no rational choice between investment and consumption of the population. The new economic policy should ensure the modernization of production based on the frontal growth of consumer and investment activity. There are still resources for this in the economy.

However, the main challenge of the current crisis is that they are trying to cut Russia off from world achievements in the field of R&D in the widest range of technologies. The model of scientific and technological development that has developed over the past 30 years was based on the need to preserve technolog-

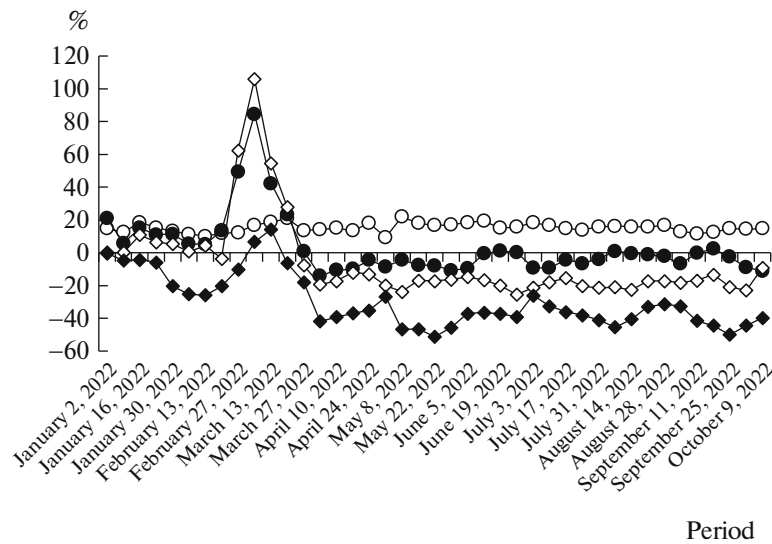


Fig. 2. Dynamics of consumption of certain types of products by the corresponding period of 2021: ○— food; ◇— household appliances and electronics; ●— auto dealers and auto parts; ◆— clothes, shoes and accessories.
Source: SBERindex.

ical competencies related to maintaining national security (defense industries, nuclear and space complexes), and to actively use foreign research and development results in the civilian complex. This model suited the state, which could compensate for limited resources in a narrow segment of tasks, and met the interests of the commodity business, which could use ready-made technological solutions, bypassing the difficult stages of development and implementation. Now this design has become extremely limited in use. Suffice it to say that countries unfriendly to Russia control up to 70% of the total global spending on research and development.

The answer to such a challenge could be an increase in domestic spending on R&D, building a national system of scientific and technological development and cooperation in research with friendly countries. The minimum required level of growth in research and development costs in such a scenario is estimated by us at no less than 0.3–0.5%, with applied science being predominantly financed. Then the total volume of domestic spending on research and development will be approximately 1.5–1.7% of GDP, and another 0.5–1.0% of GDP can be R&D results imported from friendly countries. Thus, we can talk about increasing the total (domestic and imported) R&D costs to the level of 2–2.7% of GDP. This level allows us, at least, to talk about compensation for those losses that are associated with restrictions on access to foreign technologies that arose due to sanctions. Ideally, we can talk about the achievement of technological sovereignty (the introduction of this term into circulation has significantly changed the guidelines for the scientific and technological development of our country [22]).

Requirements for the quality and level of justification of economic policy. From the point of view of economic policy, we should talk about the need to build a strategy for a long-term response to sanctions pressure. We are talking specifically about strategy, since a set of priority measures to overcome the negative impact of sanctions makes it possible to overcome only their short-term effects. In the future, the nature of the impact of sanctions on the Russian economy will change, and economic policy should change accordingly. Thus, we are talking about the formation of a layered set of actions aimed at the transition from compensatory measures to sustainable development, based on the structural and technological restructuring of the Russian economy.

For the successful implementation of a long-term strategy for the antis sanction development of the Russian economy, it is also necessary to determine the principles on the basis of which economic policy in our country will be formed in the medium term, and compare them with the potential for economic growth and available resources.

First of all, we should talk about the harmonization of those decisions that are made at different levels of government. Until now, when making managerial decisions, a certain gap has formed between the macroeconomic and project levels. As a rule, macroeconomic indicators were the benchmarks in the field of monetary and budgetary policy. At the same time, for other levels of management, priority was given to the project approach, in which the key criterion was the commercial or social effectiveness of a project. The problem was that there was often no assessment of how a set of quality and accepted projects affected the achievement of the overall goals facing the economy.

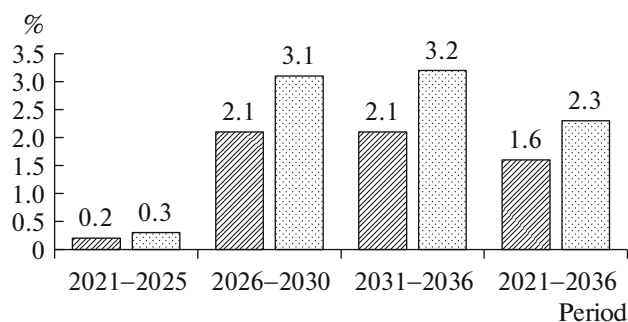


Fig. 3. GDP growth rates in the inertial and baseline (moderately optimistic) scenarios:

▨ inertial scenario; ▨ base scenario.

Source: Calculations of the Institute of Economic Forecasting, Russian Academy of Sciences.

In the changed conditions and with the emerging resource constraints, this situation should be changed, and decision-making in the field of economic policy should be based both on the assessment of the effectiveness of financed projects and on quite transparent assessments of their contribution to achieving the goals of economic development.

With regard to the choice of these criteria, it is possible to use different approaches. We can talk about assessing the full macroeconomic effects (on production volumes, GDP, budget revenues). However, under the current conditions, such assessments may not be enough. Social effects are becoming a high priority for the medium-term development of the Russian economy; therefore, economic efficiency estimates can be supplemented by composite indicators of the impact of projects on wages, employment, and the development of human capital sectors [23]. If we supplement the economic and social effects with indicators of the impact of projects on the development of ecology and the natural environment (which, despite current events, has not lost its relevance), then we can come to an unexpected conclusion. It consists in the fact that the principles of ESG that seemed extremely far from reality² criteria, modified to suit the goals of current economic policy, may well become an effective decision-making tool focused on the most important areas of economic development. As for the significance of this or that factor (economic, social or environmental), this is a matter of choosing priorities in each period of implementing a long-term development strategy.

Quantitative and qualitative characteristics of economic growth. The need for a forced period of exchange of qualitative growth factors for quantitative ones, which is highly likely to await the Russian economy, does not mean at all that the issue of production

² Environmental Social Governance is a management concept based on the principles of sustainable development.

efficiency is relegated to the background (in all its manifestations, including environmental and climatic characteristics) [24]. It's just that Russia, due to the scale of the economy and the availability of primary resources, has the opportunity to live for a certain time under the conditions of a compensatory development mechanism. However, already in the medium term, the transition to the predominance of a qualitative component in the formation of economic dynamics for our country has no alternative. This means that a set of large projects and sectoral strategies should consider various performance dimensions as key, and appropriate investments in research and development will need to be ensured for the necessary change in the level of basic technologies.

Increasing the share of the qualitative component of growth³ by 2030 up to 55–60% will allow, according to our estimates, to provide in the period 2022–2035, average annual growth rates at the level of 2.3–2.5%. At the same time, in the period 2025–2035, despite external economic restrictions, this figure may exceed 3%. In this case, consumer and investment demand, whose contribution to the formation of economic dynamics will be more than 2%, may act as a key growth factor (Fig. 3).

The inability to use the existing potential of the domestic market and the lack of qualitative shifts in economic dynamics will lead to the economy slipping into an inertial scenario with GDP growth rates of 1.5–1.6%. Russia cannot afford such a scenario in the current geopolitical conditions.

CONFLICT OF INTEREST

The author declares that he has no conflicts of interest.

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³ Part of the growth in value added, which is formed by increasing the efficiency of the use of primary resources (agricultural raw materials, minerals, metals, chemical products, etc.) and is expressed in a change in the share of these resources in the output structure [25].

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