The Investment Activity in Russian Regions and Prospects for Economic Growth

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Abstract— The article examines the prospects for economic growth in Russia from the point of view of investment activity in its regions. A brief description of the methodology for the formation of coordinated forecast scenarios for the economic development of Russian regions (for federal districts and subjects of the Russian Federation) is given. The trends in the dynamics of the regional structure of the country's economy are analyzed. The influence of large investment projects on these trends is assessed. The scenario of economic development of the Russian regions, formed in the framework of the forecast macroeconomic parameters developed by the Ministry of Economic Development of Russia, is described.

Keywords—region; investment project; scenario; economic developent, gross regional product

I. Introduction

The regional structure of the Russian Federation is very heterogeneous. The territorial heterogeneity of the country is manifested, among other things, in the scale and branch structure of the economy of its regions. Therefore, in order to select promising directions, possible resources and constraints for the development of the Russian economy, it is necessary to develop strategic program documents that determine the projected guidelines for the regional and sectoral structure of the economy. The development of these documents requires the use of a systematic approach and the construction of an integrated system of socio-economic forecasting in the country. The system approach implies the development of methodology, economic-mathematical models, relevant information databases, as well as their implementation on modern software products for regular use to build a coordinated forecast scenarios for the socio-economic development of Russian regions.

II. Relevance and Scientific Novelty of the Research

For the regular formation of the state budget, the function of developing medium and long-term scenarios of the country's socioeconomic development is carried out by the Ministry of Economic Development of the Russian Federation (MED). However, in terms of regional details of economic development forecasts, the MED usually forms only a small group of indicators for the federal districts on the basis of data submitted by the subjects of the Russian Federation. Moreo-ver, the MED forms national macroeconomic indicators on a regular basis, while indicators for the development of federal districts are formed sporadically. It can be said that up to now the Russian Government does not develop detailed scenarios for the economic development of Russian regions. Strategies for economic development are developed in some regions of the Russian Federation. However, they are usually unreasonably optimistic, almost completely uncoordinated and do not correspond to the current scenarios for the development of the national economy, regularly formed by the MED. The main reason for these shortcomings is the lack of a systematic approach and the acute shortage of the methodological base of macroeconomic research in the Government (at the federal and regional level) and in the leading expert and research centers of the country.

In most non-state research centers, the forecasting of the economy of the Russian regions is carried out using input-output models, the methodological basis of which are the works of V. Leontyev published in the first half of the 20th century [1,2]. These model studies are mainly focused on the prospects for economic development of individual regions. In particular, the Institute for Economic Forecasting of the Russian Academy of Sciences (EcForRAS) created a model complex for the formation of long-term scenarios for the Ivanovo region development, which takes into account the relationships between the regional economy and the Russian economy as a whole. It includes the regression input-output model of the Russian economy RIM (Russian Interindustry Model) [3,4] and the related input-output model of the Ivanovo Region IVID (Ivanovo Interindustry Development model) [5]. Both models were built using software developed under the INFORUM project at the University of Maryland [6].

Another area of research using input-output models is the assessment of the prospects for coordinated development of aggregates of Russian regions (so-called inter-regional studies). For example, the Institute of Economics and Industrial Engineering of the Siberian Branch of the Russian Academy of Sciences in the 1990s carried out a series of calculations using several interregional models; in these calculations, Russia was divided into five macro-regions: European Russia, the Urals, Western Siberia, Eastern Siberia, the Far East. The economy of each macro-region was represented by 30 branches. As a result of these calculations, a set of optimal production options and its regional location was calculated, as well as the ef-

fects of interregional interactions and foreign economic relations [7]. Similar studies of the territorial development of the Russian economy were conducted in the Council for the Study of Productive Forces in the context of 8 macro-regions and 27 industries. It should be noted that in all these studies, the considered regional structure of the national economy did not correspond to the official territorial and administrative division of our country (neither in the context of the subjects of the Russian Federation, nor in the context of federal districts). This led to significant difficulties with the information support for regional studies due to the insufficiency of scant official statistics of Rosstat concerning the retrospective development of Russian regions. In this regard, it should be noted that all of the above models and quantitative studies of the regional economy were based on Soviet statistics relating to the input-output balances of the country and regions. This is due to the lack of relevant information in modern Russia (formed by Rosstat). Therefore, the number and intensity of research on the socio-economic development of the regions of the country have significantly decreased in comparison with the Soviet period.

Abroad, the most successful experience of regional studies has been accumulated in the USA and Australia, which is based on the development and use of input-output models of large dimension with a significantly expanded number of sectors and regions. These models are used to develop comprehensive forecasts or strategic development programs for industries and large companies, in particular, to forecast energy consumption. The dynamic regional model "Monash Multi-Regional Forecasting Green Model" (MMRF-Green Model) is developed and used on a regular basis in Australia [8,9]. The MMRF model includes economic indicators of 8 regions (six states and two territories) and 37 economic sectors are considered in each region. In the USA, the USAGE model [10] was developed on the basis of the Australian model; 500 industries and 50 states are considered in this model. The regional aspect of research on these models is provided by the construction of input-output balances for each modeled region (state) of the country. Therefore, these models require statistical data on the consumption of various products in different industries (input-output tables) for each modeled region. These data are regularly published by the national statistical offices of the United States and Australia.

For the last 30 years, statistical inter-branch data for our country (for example, input-output tables) have not been developed at all in any regional context. As a result, the lack of statistical information is still one of the main problems for studies of the prospects for socio-economic development of the country's regions. Two approaches are used to solve it. The first approach is to calculate own input-output balances (IOB) based on available meager regional statistics. The first approach was used by researchers of EcForRAS. With the assistance of the administration of the Ivanovo region they were able to form IOB tables for the region for 1990-1999. However, the data from Soviet statistics (in particular, the coefficient of direct costs coefficients of the Central Region of the RSFSR in 1987) were also used as a basis, and they were corrected with the help of expert assessments and data on the dynamics of the development of industries in the regions. The use of obsolete data of Soviet statistics (describing the struc-

ture of the USSR economy) sharply reduces the quality and reliability of own-generated regional input-output balances. The second approach does not assume the formation of complete regional IOBs and, accordingly, the use of input-output models. It implies the development of scenarios for the economic development of regions on the basis of regional disaggregation of the indicators for the country's economy and its branches, as well as procedures for mutual coordination of decisions obtained for different regions. This approach is applied by the Energy Research Institute of the Russian Academy of Sciences (ERIRAS); a brief description of this approach is given in the next section.

In addition to the lack of statistical information, another problem for regional economic research in Russia is the lack of a clear goal-setting. Studies of the prospects for the development of the regions of the country are often purely theoretical and their results are unsuitable for solving applied problems demanded by real economic subjects. Rational goal setting and determination of directions of economic development in the regional context require the creation of a comprehensive forecasting system. On the example of the USA, this system should imply the leading role of the state with the active involvement of leading academic and industry research centers [11], engineering organizations, as well as methodological and information coordination of their activities. Only in this case the forecasting system will ensure the development of state decisions and investment priorities, their transformation into specific investment projects with the development of financial and economic support mechanisms [12].

The ERIRAS has developed a methodology that helps to form coordinated scenarios for the development of the economy of all subjects of the Russian Federation and allows solving the methodical and information problems described above.

III. RESEARCH METHODOLOGY

The developed methodology for the formation of scenarios for the development of the Russian regions economy is aimed at participating in the preparation of strategic program documents related to the prospects for the development of the fuel and energy sector (FEC) of Russia. Scenarios generated using this methodology are the basis for forecasting the demand for energy resources in the whole country and for each RF subject of the Russian Federation (RF subject). The methodology allows you to determine the necessary economic information for centralized forecasting of demand for various types of fuel and energy in the Russian regions (the so-called "top-down" technique) [13]. According to the methodology, the forecasting of the economic development of the Russian regions is based on a combination of three principles:

- Coordination of prospective trajectories of indicators that determine the economic development of the country as a whole and its regions.
- Accounting for retrospective trends in the dynamics of the regional structure of the country's economy, determined by changes in the sectoral structure of the economy of regions.
- Accounting of the implementation of large investment projects in the Russian regions that cause qualitative changes in the sectoral structure of regional

production and the regional structure of the national economy in the forecast period.

To implement these principles, the work on forecasting the economic development of the regions includes five stages:

1. Construction of a scenario for the development of economic sectors for specification of the macroeconomic forecast parameters developed by the MED.

2. Formation of a database on the retrospective dynamics of economic development of all RF subjects.

3. Update of the database for significant investment projects, which are implemented or planned in the RF subjects; formation of a perspective "project" trajectory of development of the regions.

4. Development of coordinated forecast scenarios for the economic development of the RF subjects in accordance with trends identified in the retrospective period; these scenarios do not take into account significant prospective investment projects ("trend scenarios").

5. Formation of the final scenario of economic development of the RF subjects, including prospective investment projects and expected qualitative changes in the trends of the sectoral and regional structure of the country's economy.

At the first stage, to assess the prospects for the development of Russian regions, it is necessary to determine the forecast conditions for the development of the entire economy of the country. In accordance with Federal Law No. 172 of June 28, 2014 "On Strategic Planning in the Russian Federation" [14] any forecast scenarios intended for sectoral development programs should be developed on the basis of long-term parameters of the country's socio-economic development that are formed by MED. Therefore, the calculations at the first stage are reduced to the sectoral detailing of the macroeconomic parameters developed by the MED. The purpose of the detailing is to determine volumes of production and investment of key economy sectors that are necessary to ensure government parameters for the development of the economy, taking into account the requirements of the financial stability of the sectors. The optimization non-linear input-output balance model MENEC [15] developed by ERIRAS is used to achieve this purpose. For each year of the forecast period, only a small part of the indicators calculated on the MENEC model is used for the regional disaggregation. In particular, the following are used: productions and investments in the economic sectors, gross added value in the economy, household incomes. It should be noted that the amount of regular information published by Rosstat on the situation in the country's economy as a whole is quite sufficient to describe the development of the 28 industries considered by MENEC. However, the current level of development of the system of official statistical reporting in Russia allows you to obtain regional data on the dynamics of production and investment only for the following 10 sectors of the economy:

1) Agriculture, hunting and forestry;
2) Mining of fuel minerals;
3) Mining of non-fuel minerals;
4) Oil refinery;
5) Manufacturing except oil refinery;
6) Electricity, gas and water;
7) Construction;
8) Transport;
9) Communication;
10) Other services

Therefore, production and investments for 28 industries calculated on the MENEC are aggregated on the listed 10 sectors of the economy for the subsequent territorial detailing.

The purpose of the second stage is the retrospective values of indicators of economic development of subjects of the RF subjects in comparable prices. The following indicators are considered in each RF subject: gross domestic product (GRP), household incomes, gross output and investment of the above 10 sectors. The reporting data of these indicators given in current prices of respective years are recalculated in the prices of the reference (latest reporting) year. As a result, trends are determined in the sectoral structure of the regional economy and in the regional structure of the country's economy [16].

As for the third stage, the database of investment projects in the Russian regions is a key element in assessing the prospects for changing the sectoral and regional structure of the economy. Sources of information on investment projects are materials published in company reports, data of ministries and agencies, as well as local authorities of RF subjects. Another important source of information is the data of the System Operator of the Unified Power System of Russia (JSC SO UPS) on the electricity consumption of large consumers planned for commissioning in the RF subjects. Methodological recommendations on keeping the Register of investment projects were developed in 2017 on the request of the Ministry of Energy of the Russian Federation. According to these recommendations, the information on the list and economic parameters of large investment projects has to be provided and regularly updated by the executive authorities of all RF subjects.

The investment project is included into the database if it is at least 5% of the retrospective investments in the relevant sector of the RF subject. The following indicators for each project are identified:

● RF subject (j) where the project is being implemented;

● initial year of project investment and periods of attaining project output capacity;

● project output capacity in comparable prices (reference year prices) and its identification with one of the above 10 economic sectors (i - index of the sector);

● volume of required investments with their breakdown by project implementation years (t) and with their binding to the relevant economic sector (pI_{ij}^{t});

● volume of projected output with its breakdown by project implementation years and with binding to the relevant sector (pV_{ij}^{t}).

These primary project data are subjected to two-level aggregation. At the first level sectoral outputs and investments for all selected investment projects are sum up within each RF subject. As a result, the "project trajectory of the subject" is formed for each RF subject, which includes the vectors of sectoral outputs (pV_{ij}^{t}) and investments (pI_{ij}^{t}). At the second level, the "project trajectory of the country" is formed by summing up the "project trajectories of the subjects", which also represents a sequence of vectors of sectoral outputs (pV_{i}^{t}) and investments (pI_{i}^{t}).

The fourth stage is the formation of "trend scenarios" of RF subjects development (according to retrospective trends). To do this, the long-term trajectories of sectoral outputs (V_i^t) and investments (I_i^t) for the country as a whole must be "purged" of all forecast "disturbances" caused by large investment projects in the regions:

$$dV_i^t = V_i^t - pV_i^t \qquad (1)$$
$$dI_i^t = I_i^t - pI_i^t \qquad (2)$$

The obtained indicators are subjected to a two-level territorial division. At the first level, they are distributed among 8 federal districts (FD). Then, the resulting values for each federal district are used as the input values and differentiated by all RF subjects that are part of this federal district. The basis for regional calculations is the principle of non-strict preservation of the average retrospective values of rates of change in the regional shares of gross output (V_{ij}/dV_i) of all sectors, excluding transport, electricity and construction. The volumes of output of the 7 economic sectors, obtained with the help of this principle (together with the use of their coefficients of specific consumption of transport services), allow determining the forecasted output of the transport sector in each RF subject. Then, the dynamics of regional outputs of the power industry are determined using the coefficients of specific energy consumption of the previous 8 sectors. Sectoral capital investments are determined on the basis of the capital intensity of the corresponding sectoral outputs. Coefficients of specific consumption of the transport services and energy, as well as the capital intensity of the sectoral outputs are identified through the retrospective analysis in the second stage. The dynamics of capital investments in nine sectors in turn determines the dynamics of output and investment of the construction sector in the RF subjects. As a result of calculations at the fourth stage, the trajectories of outputs (tV_{ij}^t) and investments (tI_{ij}^t) of economic sectors in the RF subjects are determined on the basis of trends revealed in the retrospective period.

At the final stage, the impact of long-term investment projects that are implemented or planned for implementation in the RF subjects is taken into account. For this purpose, the outputs and investments caused by regional investment projects (which were selected at the second stage) are added to the "trend" volumes of regional outputs and investments of sectors:

$$V_{ij}^t = tV_{ij}^t + pV_{ij}^t \qquad (3)$$
$$I_{ij}^t = tI_j^t + pI_j^t \qquad (4)$$

In the end, the dynamics of the GRP of each region is determined depending on the dynamics of the total output of its sectors, and the forecasted volume of the population's income is defined as the share in the GRP of the corresponding region.

The described methodology has been used on a regular basis for the last 5 years to obtain forecast estimates of the demand for electricity in the medium term for the needs of JSC SO UPS. These forecast estimates are the basis for the regular preparation of the Development Scheme of the UPS of Russia, they determine the requirements for the production base of the power industry in the medium term. Since 2017, this methodology is an integral part of the methodology adopted in the Ministry of Energy of Russia for forecasting the demand for electricity and maximum electric loads for the RF subjects.

IV. RESEARCH RESULTS

The research of the impact of investment activity in the country's regions on the development of the national economy was limited to the forecast period until 2025. This is due to the objective lack of sufficient quantitative data on investment projects, the beginning of which is possible beyond this period. The research is based on the baseline scenario of the long-term country's socio-economic development, presented by the MED in May 2017. According to this scenario, the Russian economy will grow at a moderate pace (Table 1): in the period 2018-2025 on average by 1.5% annually (an increase of 12.4% compared to the level of 2016).

TABLE I.   BASIC MACROECONOMIC RATES OF THE BASIC SCENARIO

	2018	2019	2020	2021	2022	2023	2024	2025
GDP	1,50	1,50	1,50	1,50	1,40	1,40	1,50	1,50
Investments in fixed capital	2,20	2,00	2,10	2,10	2,20	2,30	2,30	2,40
Income of population	1,50	1,20	1,10	1,50	1,40	1,40	1,40	1,40

Table 2 shows indices of real growth in output of the sectors calculated for the MED's baseline scenario.

TABLE II.   OUTPUT INDEXES FOR ECONOMIC SECTORS, (2017 = 1)

	2019	2021	2023	2025
Agriculture, hunting and forestry	1,058	1,097	1,137	1,177
Mining of fuel minerals	1,004	1,018	1,027	1,020
Mining of non-fuel minerals	1,017	1,039	1,058	1,078
Oil refinery	0,979	0,953	0,935	0,924
Manufacturing except oil refinery	1,084	1,166	1,250	1,347
Electricity, gas and water	1,027	1,048	1,067	1,086
Construction	1,039	1,080	1,126	1,177
Transport	1,042	1,083	1,126	1,172
Communication	1,043	1,090	1,136	1,184
Other services	1,048	1,096	1,143	1,190

The largest growth in our calculations is demonstrated by the manufacturing industry (an increase of almost 35% over the forecast period) and the service sectors, with the slow development of the fuel and energy sectors.

We analyzed information on more than 4000 investment projects and selected 797 large-scale projects for our calculations (Table 3). Among them 6 are multi-regional, their implementation affects several RF subjects (for example, "The Power of Siberia" or the reconstruction of the Trans-Siberian Railway and BAM). Therefore, the total number of investment projects for the country as a whole does not coincide with the sum of projects by region (Table 3). It should be noted that in recent years the number of projects under consideration has reduced by an average of one third. Part of this reduction is associated with the completion of some projects (ie they reached the project production capacity), while the number of new projects has decreased significantly. In addition, some of the started projects have been curtailed due to the growth of uncertainty in the development of the economy.

TABLE III. NUMBER OF SELECTED LARGE-SCALE INVESTMENT PROJECTS BY FEDERAL DISTRICTS AND SECTORS

	Russia	Central	North-West	Southern exc. Crimea	Crimea	North Caucasus	Volga	Ural	Siberian	Far East
Total	797*	261	50	68	41	64	141	21	90	93
Agriculture, hunting and forestry	80	42	1	3	5	6	16	0	2	5
Mining of fuel minerals	23	1	1	1	1	0	3	0	7	9
Mining of non-fuel minerals	30	1	9	1	0	1	5	0	9	4
Oil refinery	20	2	1	6	0	3	3	0	5	0
Manufacturing exc. oil refinery	290	118	13	20	9	31	44	7	30	18
Electricity, gas and water	127	24	11	18	7	12	23	6	7	19
Construction	0	0	0	0	0	0	0	0	0	0
Transport	92*	22	8	8	4	3	27	7	19	24
Communication	9*	7	0	0	0	0	1	0	0	3
Other services	126	44	6	11	15	8	19	1	11	11

* The total number of projects in the country as a whole does not coincide with the summed numbers of projects in the regions

In the MED scenarios it is assumed that the forecast values of all macroeconomic indicators (including those shown in table 1) include the consequences of the implementation of all possible investment projects in the forecast period. Large investment projects cause qualitative changes in the structure of the economy. Therefore, in order to prolong retrospective trends in the regional structure of the economy, the projected volumes of production and investment of sectors were reduced by the corresponding volumes, which are determined by the selected projects. As a result, the growth rates of all macroeconomic indicators of the MED's baseline scenario changed significantly (Table 4): Without the implementation of large investment projects in the RF subjects, the average annual growth rate of the economy in the forecast period is reduced to 1.2%. The average annual growth rate of the population's income decreases from 1.4% to 1.1%

TABLE IV. TREND MACROECONOMIC RATES

	2018	2019	2020	2021	2022	2023	2024	2025
GDP	1,05	1,15	1,14	1,26	1,21	1,29	1,30	1,34
Investments in fixed capital	-13,72	3,94	2,54	2,15	0,77	1,41	1,17	0,50
Income of population	1,05	0,85	0,75	1,26	1,21	1,29	1,30	1,24

In retrospective years, there has been a trend to an increase in the aggregate share of Western federal districts (FDs) in the Russian economy. For example, this share increased in comparable prices from 69.2% to 70.2% for the period 2010-2015. Without the implementation of large investment projects, this trend would continue in the forecast period (table 5), because the growth rate of the economy of most western regions would surpass the rates of the eastern regions of the country. As a result, with the trend development, the share of the western part of the country in the economy would slightly increase by 2025 (up to 70.8%).

Investment projects have the greatest impact on the prospects for economic development in the Far Eastern FD. Without major investment projects the district's share in the economy of the country is reduced from the reported 5.7% to 5.5% in 2025. With the implementation of projects, it increases to 6.0%. The increase of the Far Eastern share is mainly due to a decrease of the share of the Central FD in the country's economy (Table 6). With implementation of all selected investment projects, the share of the Central FD in the economy decreases from the reported 34.9% to 34.6% for the forecast period.

TABLE V. TRENDS IN THE REGIONAL STRUCTURE OF THE ECONOMY

	Index of GRP relative to 2015, (2015 = 1)			Share in total GRP, %		
	2015	2020	2025	2015	2020	2025
Total GRP	**1,000**	**1,037**	**1,102**	**100,0**	**100,0**	**100,0**
Central FD	1,000	1,031	1,106	34,9	34,7	35,0
Northwestern FD	1,000	1,054	1,108	10,4	10,6	10,5
Southern FD	1,000	1,044	1,117	7,0	7,1	7,1
inc. Crimea	1,000	1,122	1,288	0,4	0,5	0,5
North-Caucasian FD	1,000	1,059	1,135	2,6	2,7	2,7
Volga FD	1,000	1,045	1,124	15,2	15,3	15,5
Ural FD	1,000	1,034	1,073	13,8	13,7	13,4
Siberian FD	1,000	1,034	1,099	10,4	10,3	10,3
Far Eastern FD	1,000	1,019	1,057	5,7	5,6	5,5

Dependence of economic development of federal districts on investment activity is shown in Table 7. The volumes of project investments decrease and, accordingly, their share in the total investments of regions also falls with the expansion of the forecasting horizon. This is due to the objective lack of information on projects with long-term implementation. At the same time, since the moment the project capacity is reached, the volumes of sectoral output, conditioned by the projects, are fixed until the end of the forecast period. As a result, the total volume and share of project outputs increase in the forecast period.

Large-scale investment projects have the greatest impact on the perspective volume of the economy in the Far Eastern FD, in the Northwestern FD and in Crimea. In 2025, the share of large-scale projects in the gross output of the Far Eastern FD grows to 9.5%, in the Northwest FD to 4.5%, and in Crimea to 5.5%. The development of the regions is mainly affected by projects that are implemented in the first forecast years. During these years, the shares of project investments in the total volume of regional investments reach their maximums (Table 7). In the Far Eastern FD large investment projects make a significant contribution to the dynamics of the

district's investments until the end of the forecast period (reaching more than 14% of the total volume of the district's investments).

tinue to develop on productive assets built in retrospective years.

TABLE VI. The Impact of Investment Projects on the Prospect Regional Structure of the Economy

	Index of GRP relative to 2015, (2015 = 1)			Share in total GRP, %		
	2015	2020	2025	2015	2020	2025
Total GRP	**1,000**	**1,060**	**1,135**	**100,0**	**100,0**	**100,0**
Central FD	1,000	1,050	1,126	34,9	34,5	34,6
Northwestern FD	1,000	1,085	1,160	10,4	10,7	10,6
Southern FD	1,000	1,072	1,156	7,0	7,1	7,2
inc. Crimea	1,000	1,170	1,362	0,4	0,5	0,5
North-Caucasian FD	1,000	1,092	1,180	2,6	2,7	2,7
Volga FD	1,000	1,055	1,138	15,2	15,1	15,3
Ural FD	1,000	1,041	1,090	13,8	13,5	13,2
Siberian FD	1,000	1,059	1,144	10,4	10,4	10,4
Far Eastern FD	1,000	1,104	1,184	5,7	5,9	6,0

At the end of the forecast period, the contribution of large investment projects to the country's gross output is 2.9%, and to the total volume of investments is only 2.4% (Table 7). It indicates that in the scenario the country's economy will con-

TABLE VII. Contribution of the Larg-Scale Projects to the Economy of Federal Districts

	Share in gross output				Share in total investments			
	2018	2020	2022	2025	2018	2020	2022	2025
Russia	**1,4**	**2,1**	**2,5**	**2,9**	**15,6**	**7,6**	**4,3**	**2,4**
Central FD	1,3	1,8	2,0	2,0	16,9	7,4	1,6	0,3
Northwestern FD	1,7	2,9	3,8	4,5	14,3	8,4	3,7	2,8
Southern FD	2,0	2,9	3,5	3,5	13,7	5,2	5,5	1,7
inc. Crimea	2,3	4,0	5,1	5,5	62,9	19,1	0,0	0,0
N.Caucasian FD	2,4	3,4	4,1	4,1	10,6	4,4	0,0	0,0
Volga FD	0,8	1,2	1,4	1,4	9,6	4,2	2,0	1,0
Ural FD	1,0	1,2	1,5	1,7	4,5	0,7	1,0	0,4
Siberian FD	1,8	2,6	3,0	3,9	12,9	4,7	2,4	5,3
Far Eastern FD	2,6	4,4	6,2	9,5	44,9	32,2	26,3	14,2

According to the obtained results, the total share of 10 most economically developed RF subjects is more than half of the country's economy at all forecast years. Moreover, the aggregate share of the Moscow city, the Tyumen region and the Moscow region exceeds 30% of the Russian economy (Fig. 1).
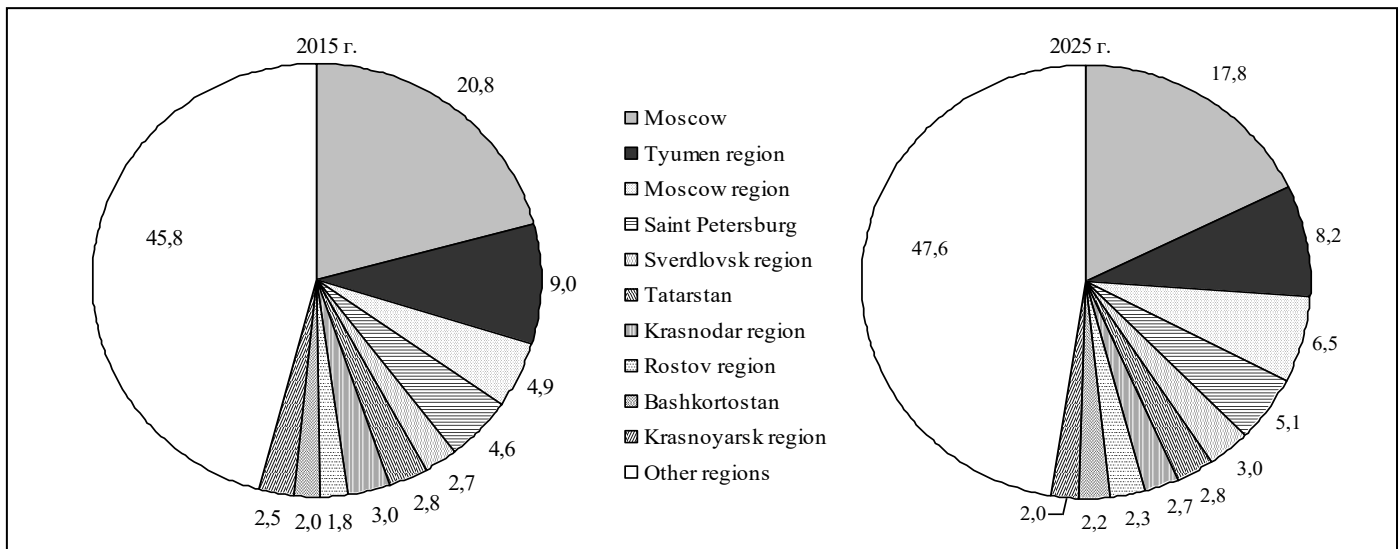

Fig. 1. The ten largest economic regions of the Russian Federation.

V. Conclusions

Along with the aggravation of geopolitical tensions, the main reason for the recent economic crisis and its slow overcoming is considered to be the exhaustion of the current model of the functioning of the domestic economy. The main driver of economic growth in this model is the export of mineral resources and other low-level products. To ensure stable high rates of economic growth in the foreseeable future, intensive renewal of productive assets is necessary with a multiple increase in the efficiency of the use of all resources in the country (mineral, labor, land, financial). It cannot be achieved

without large-scale investments. Furthermore, it is necessary to significantly increase the efficiency of the use of investment resources. It will require the development of an integrated system of forecasting, coordination and monitoring in the country, which should accompany the development of state decisions and investment priorities, their transformation into specific investment projects.

According to the baseline scenario of the Ministry of Economic Development, the average annual growth rate of the Russian economy for the next 8-10 years is expected at 1.5%. The conducted researches showed that all the known large in-

vestment projects which are implemented or planned in the regions of the country are able to provide only 0.3 percentage points of this indicated average annual GDP growth. Along with the baseline scenario, the MED also presented a target scenario for the economic development of the country. The average annual growth rate of the economy in this scenario is almost 2 times higher than in the baseline scenario. It means that with the current efficiency of using investment resources, doubling the GDP rates will require an increase in the amount of investments in the country by 5 times. However, the Ministry does not provide a clear description of the sources of this acceleration of the economy, methods and measures for its ensuring.

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