

Structural Dynamics of the Employed Population of the Far Eastern Federal District of Russia

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Abstract--- *Currently, the Russian Federation is being introduced in integration and socio-economic processes unfolding in the dynamically developing Asia-Pacific region of the world. It is necessary to consider complex use of rich natural resources potential and favorable economic and geographical position as the most rational direction of development of economy of the Far Eastern Federal District. The solution to this problem is closely related to the modernization of the existing industrial structure of economy in the federal district. The study aims at investigating impact of the current structure of employment (by type of economic activity) both in the Russian Federation as a whole and in individual subjects of the Far Eastern Federal District of Russia, on the pace of economic development and the income level of population. To that end, the article proposes to use the method of structural-share analysis, which allows assessing the degree of influence of national and local factors on the structure of employment by main types of economic activity of all 11 subjects of the district. It is noted that the employment in the sphere of industrial production and services provides a high level of income.*

Keywords--- *Regions, Subjects of the Far Eastern Federal District, Structure of the Employed Population, Types of Economic Activity, Factors of Structural Changes, Structural-share Analysis, Income of the Population.*

I. INTRODUCTION

Recently, social and economic development of the Far Eastern Federal District (FEFD) of the Russian Federation has received a lot of attention at all levels of territorial administration. The federal government is implementing comprehensive development programs for the eastern regions of the country. New mechanisms of regional development are being actively introduced, in particular, the territories of advanced development (TAD), free ports (for example, The Free Port of Vladivostok). In this regard, it is important to study the regional features of the current structure of the employed population in the subjects of the Far Eastern Federal District, to determine rational directions of economic development, taking into account the rich natural resources potential and the unique economic and geographical position in the Asia-Pacific region of the world.

The formation of a diversified economy can be considered the most rational all-Russian tendency in the development of the subjects of FEFD and their structure in the long term, where proportionally developed material and intangible production will be presented. A special role in the transformation of the structure of the economy should belong to industry, and first of all, manufacturing facilities. Marine economic activities (fisheries and fish farming, maritime transport, oil and natural gas production on the Sakhalin Island Shelf) play an important role for the "Pacific" regions of the Far Eastern Federal District. A significant role in employment in the subjects of the federal district belongs to the fisheries complex, for example, about 15 thousand people were employed in Primorsky Krai (more than 2.5% of employed in the organizations of the region). The average wage in the

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organizations of the fishery complex of Primorye exceeds the average wage of the region by 1.5 times since 2016. [16].

The lack of effective forms and methods of regional policy during socio-economic reforms has led to differentiation of federal districts in the Russian Federation by levels of production and welfare of the population. First of all, this applies to the subjects of the Central Federal District, where the socio-economic situation is more prosperous than in other federal districts of the country. Strong differentiation is also observed in the levels of socio-economic development of territories within the federal districts (at the entity level) of the Russian Federation, which negatively affects economic development of federal districts and the country as a whole. For example, subjects located in the southern part of the Far Eastern Federal District have greater demographic and production potential than the “northern” subjects of the District. In addition, the subjects included in the “coastal” economic zone are also more developed in socio-economic terms than the “continental” subjects of the region [6, 7].

The restructuring of regional economy involves transformation of both component and territorial structures, including changes in economic specialization and production relations of enterprises. The purpose of such transformations is to increase rational economic, social and environmental qualities of regional development [3, 4]. Before imposition of economic sanctions there was low demand for products of domestic manufacturing industries (primarily mechanical engineering and metalworking), high costs for its production (higher tariffs for energy and transport) in the economy of the Russian Federation. The implementation of import substitution programs creates favorable conditions for modernization of production, development of enterprises focused on the production of engineering, light and food industries (mainly to replace imported goods in the Russian markets). In this case, domestic producers have the opportunity to get foothold into new market segments, due to restrictions on import of products of foreign producers. However, reduced demand in the domestic markets caused by the financial and economic crisis has a negative impact on the development of production.

It should be taken into account that the subjects of federal districts, although functioning in a single socio-economic space, but they are characterized by a strong variety of factors of regional development, expressed in the features of industrial and territorial structures of their economy, the nature of economic specialization, the level and quality of life of the population.

II. MATERIALS AND METHODS

The data of the Federal State Statistics Service, including official statistical information reflecting the structure of employment and the standard of living of the population for the period 2005-2017 for the subjects of the Far Eastern Federal District of the Russian Federation, were used as initial materials.

There is a direct correlation between employment structure and income level of the population [26, 27, 18, 14]: 1) the average per capita income in the country and in the constituent entities of the Russian Federation is in inverse proportion to the share of agriculture in the structure of the employed population, 2) a direct correlation between the size of per capita income in the country and the subjects of the Far Eastern Federal District of the Russian Federation and the share of industry (primarily manufacturing) in the structure of the employed population. 3) a weak, direct correlation between the relatively high per capita income of the population and a significant share of

service industries in the structure of the employed population of the country and in the subjects of the Far Eastern Federal District of the Russian Federation.

The impact of each of these factors on structural changes in the economy of the FEFD subjects of the Russian Federation can be studied using the method of “structural-share analysis” [18, 14]. The presented method allows assessing regional features of all-Russian trends in the development of the structure of the country’s economy, caused, for example, by crisis phenomena in the financial and economic sphere or problems of economic growth. The method involves: 1) assessment of the employment dynamics in the economy by economic activities in the Russian Federation and in all subjects of the Far Eastern Federal District for 2005-2017; 2) assessment of impact of general for the Russian Federation employment dynamics by the main types of economic activities on the employment structure in the subjects of the Far Eastern Federal District; 3) assessment of impact of the diversity factor of the structure of the federal districts of the Russian Federation as a whole (by economic activities) on the employment dynamics in the subjects of the Far Eastern Federal District; 4) assessment of the summary results of the “structural-share analysis” of the components of the employment dynamics in the FEFD subjects of the Russian Federation.

III. RESULTS

Features of dynamics of industrial structure of employment in the Russian Federation by types of economic activity are presented in table. 1.

Table 1: The Employment Rate in the Economy by Type of Economic Activity in the Russian Federation
 (Percentage)

Economic activities	2005	2010	2014	2017
The Russian Federation, total	100.0	100.0	100.0	100.0
agriculture, hunting and forestry, fishing, fish farming	11.4	10.0	9.4	7.1
mining	1.7	1.6	1.6	1.6
manufacturing	17.4	15.2	14.6	14.2
production and distribution of electricity, gas and water	2.9	2.9	2.8	2.3
construction	7.5	8.0	8.4	8.8
wholesale and retail trade; repair of motor vehicles, motorcycles, household goods and personal items	16.6	17.9	18.7	19.0
hotels and restaurants	1.5	1.8	1.9	2.3
transport and communication	7.8	7.9	8.0	9.3
real estate transactions, rental and services	7.5	8.0	8.7	2.7
education	9.1	8.7	8.1	7.7
health and social services	6.6	6.8	6.6	6.2
other activities	9.9	11.2	11.3	17.9

Source: [15, 16].

It should be noted that in the Russian Federation and in the subjects of FEFD, the increase in per capita income was uneven. The unconditional leaders in the size of per capita income of the population are Chukotka Autonomous Okrug, Sakhalin and Magadan Oblast. This is due, among other things, to a high proportion of industry (mining, including oil and natural gas production on the Sakhalin Island Shelf), as well as transport and communication in the structure of the employed population. (Figure 1).

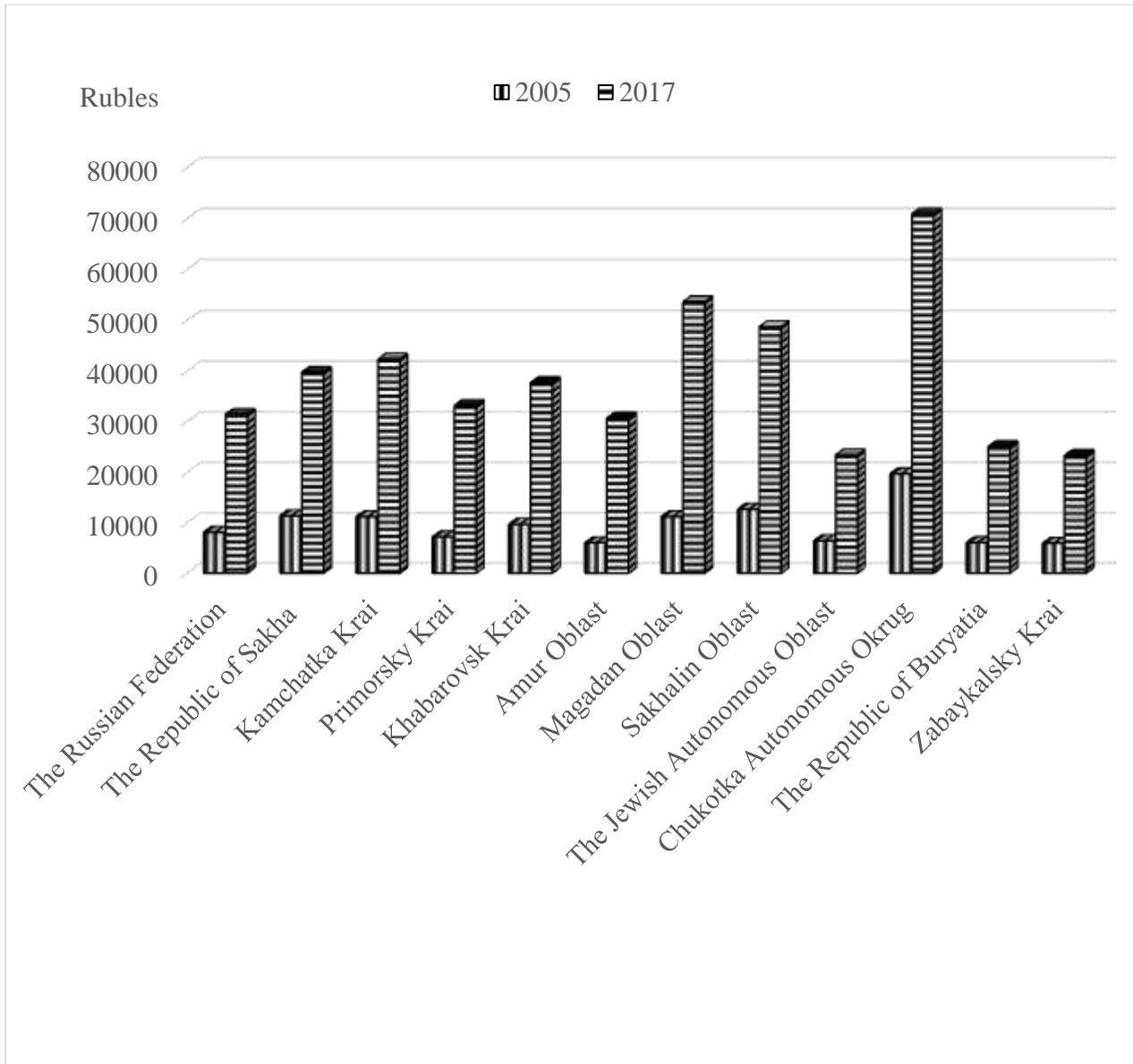


Figure 1: Changes in Average Per Capita Income of the Population of Subjects of the Far Eastern Federal District of Russia for 2005 and 2017, (Per Month, Rubles), Compiled from: [15, 16].

The share of industries and agricultural production in the structure of the employed population in the subjects of FEFD of the Russian Federation is shown in Figure 2. The high share of the employed population in agriculture, hunting and forestry is common to new subjects of the far Eastern Federal District – the Republic of Buryatia and Zabaykalsky Krai, for which one of the low levels of average monthly income of the population in the country is noted (among all 85 subjects of the Russian Federation in 2017, Zabaykalsky Krai took only 60 place, and the Republic of Buryatia – 46).

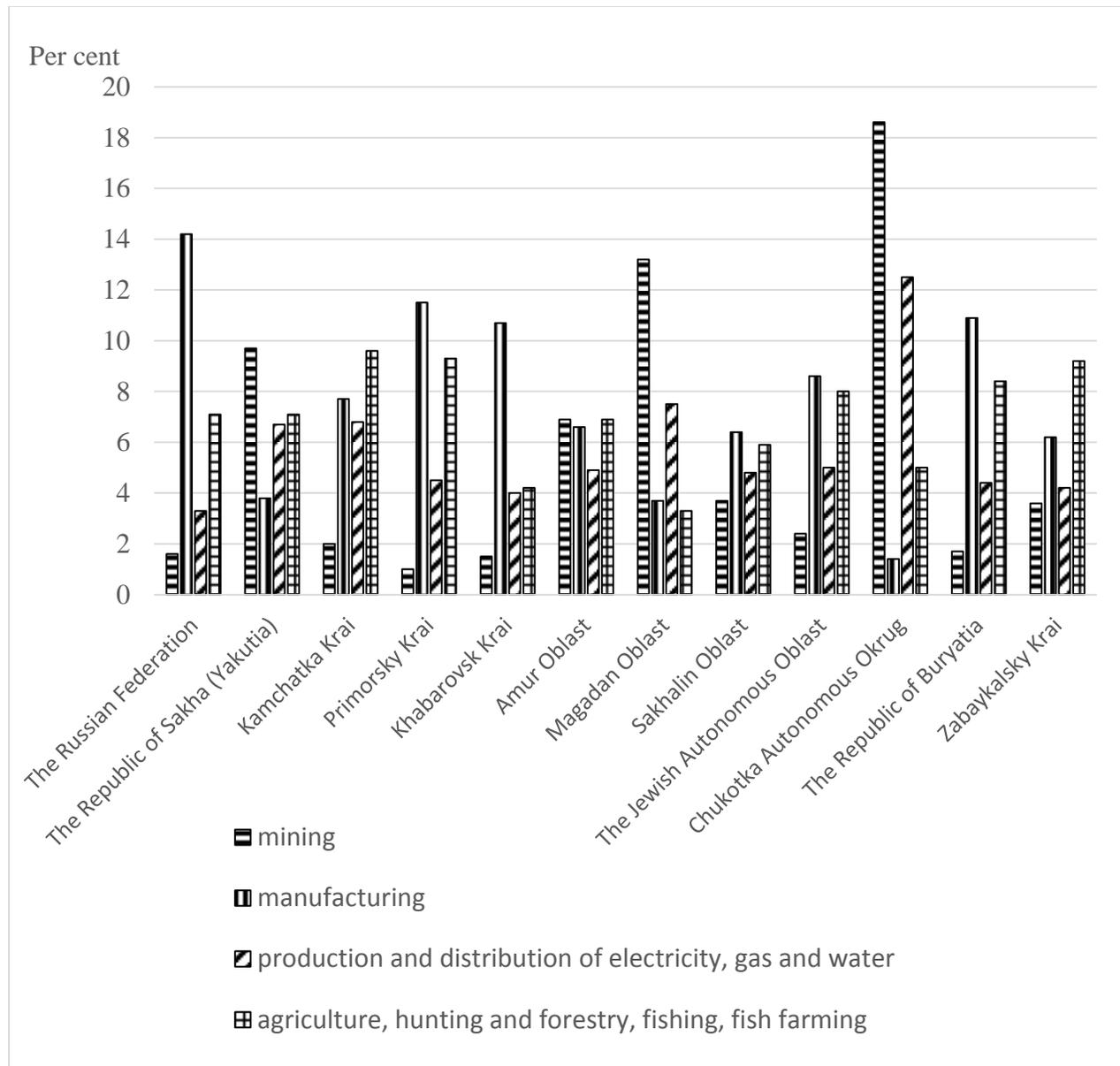


Figure 2: The Share of the Employed Population in Industrial Production, Agriculture, Forestry, Hunting, Fisheries and Fish Farming in the Subjects of the Far Eastern Federal District of the Russian Federation (Per Cent, For 2017),
 Compiled From: [16].

At the same time, the highest income groups of the population were observed in the regions with a high share of the employed population in the industry – Chukotka Autonomous Okrug, Sakhalin and Magadan Oblast, the Republic of Sakha (Yakutia), Kamchatka, Khabarovsk and Primorsky Krai. A high proportion of the employed population in the service sector (construction, transport and communications, trade) is in Primorsky Krai and Khabarovsk (Figure 3).

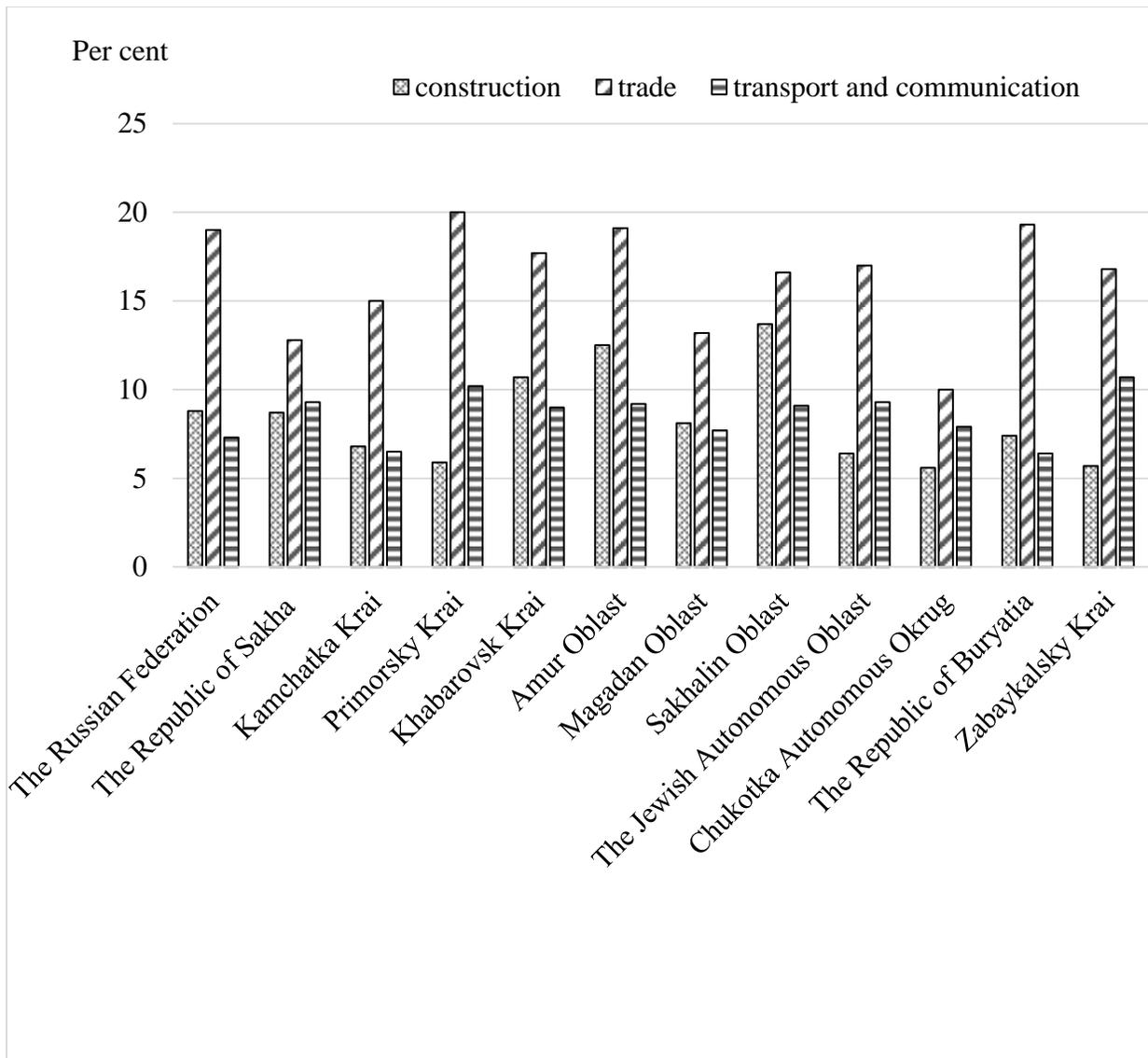


Figure 3: The Share of the Employed Population in the Service Sector (Construction, Wholesale and Retail Trade, Transport and Communication) in the Federal Districts of the Russian Federation, (Per Cent, For 2017), Compiled

From: [16]

For the period from 2005 to 2017 in the majority of subjects of the Far Eastern Federal District of the Russian Federation (with the exception of the Sakha Republic and Sakhalin Oblast), it was observed a slight decrease in the number of the employed population (Table 2).

The territorial features of changes in the number of employees in the Russian Federation as a whole and in the subjects of FEFD are presented in table 2. In the Russian Federation as a whole, there was an increase in employment in the 2000s. In the country for the period 2005-2017 the number of employed in the overall economy increased by 5159.9 thousand people or by 7.7 % compared to 2005.

Table 2: Changes in the Number of Employees in the Russian Federation and in the Subjects of the Far Eastern Federal District

Economic activities	Employment, thousand people		Changes (2005-2017)	
	2005	2017	Thousand people	%
<i>I</i>	2	3	4	5
The Russian Federation	6668.8	71842.7	5159.9	7.7
agriculture, hunting and forestry, fishing, fish farming	7528.0	5074.5	-2453.5	-32.6
mining	1121.6	1126.8	5.2	0.5
manufacturing	11630.9	10173.2	-1457.7	-12.5
production and distribution of electricity, gas and water	1922.7	2378.5	455.8	23.7
construction	4986.1	6318.9	1332.8	26.7
wholesale and retail trade; repair of motor vehicles, motorcycles, household goods and personal items	11037.6	13685.7	2648.1	23.9
hotels and restaurants	1016.7	1661.6	644.9	63.4
transport and communication	5261.9	6686.9	1425.0	27.1
real estate transactions, rental and services	4980.1	1933.9	-3046.2	-61.2
education	6047.7	5525.1	-522.6	-8.6
health and social services	4432.6	4450.3	-82.3	-1.9
other activities	6616.9	12817.3	6200.4	93.7
The Republic of Buryatia	386.6	382.7	-3.9	-1.0
The Republic of Sakha (Yakutia)	471.8	492.1	20.3	4.3
Zabaykalsky Krai	476.0	467.3	-8.7	-1.8
Kamchatka Krai	179.5	165.4	-14.1	-7.8
Primorsky Krai	980.2	973.9	-6.3	-0.6
Khabarovsk Krai	717.4	690.9	-26.5	-3.7
Amur Oblast	424.2	390.6	-33.6	-7.9
Magadan Oblast	93.8	93.2	-0.6	-0.6
Sakhalin Oblast	277.7	282.7	5.0	1.8
The Jewish Autonomous Oblast	79.3	67.2	-12.1	-15.3
Chukotka Autonomous Okrug	38.5	33.7	-4.8	-12.5

Source: [15, 16].

The average number of employees in the country has increased (compared to 2005) by 7.7% over the period from 2005 to 2017 (Table 2). High rates of growth in the number of employed were characteristic of such economic activities as construction (26.7% of the 2005 level in 2017); trade, repair of cars, household goods and personal items (by 23.9%); hotels and restaurants (63.4%); transport and communication (27.1%); production and distribution of electricity, gas and water (23.7%). A small increase in the employed population was in the industrial activity – mining (0.5%).

At the same time, there was a decrease in the number of employed in the economy in agriculture, manufacturing, real estate transactions, rental services, as well as in education and health care in the period from 2005 to 2017. The decrease in the number of people employed in education is also accompanied by a decrease in the number of students in educational institutions. Negative consequences of this tendency (both for the education system and for the production and social sphere of the Russian Federation in the future) should be noted.

Changes in the employment structure of population of the Russian Federation and in separate regions of the Far Eastern Federal District can be the consequence of general trends in the country; they can be determined by characteristics of development of the regional economy. The characteristic features of the employment dynamics in sectors of the economy (R) in the regions of the federal district can be represented as follows [18]: $R = N+M+S$, where N shows the changes in employment in the country and in separate regions of the federal district under the influence of the overall dynamics of employment in the country, M – how changes in the number of employed in the Russian Federation and the subjects of federal districts of the country due to changes in the industrial structure of the Russian economy, S – the component of impact of structural changes in the Russian Federation and in the federal district.

Calculations of the degree of influence of these components on the employment dynamics in the subjects of FEFD are presented in tables 3-5. Similar calculations can be made for certain types of economic activity.

Using the materials of table 3, it can be concluded that the actual change in the overall number of employed in most of FEFD subjects of the Russian Federation does not coincide with the calculated data obtained according to the growth rate of the number of employed in the country ($N= +7.7\%$). At the same time, the deviation of the calculated data from the actual data for different subjects of the federal district is not the same. In accordance with the growth rate of the number of employed in the country for the period 2005-2017, which amounted to $+7.7\%$, in the Republic of Buryatia the growth of the number of employed was to reach 29.8 thousand people.; in the Republic of Sakha (Yakutia) – 36.3; Zabaykalsky Krai – 36.6; Kamchatka Krai – 13.8; Primorsky Krai – 75.4; Khabarovsk Krai – 55.2; Amur Oblast – 32.7; Magadan Oblast – 7.2; in Sakhalin Oblast – 21.4; the Jewish Autonomous Oblast – 6.1; the Chukotka Autonomous Okrug – 2.9.

Table 3: Assessment of Impact of Employment Dynamics of the Russian Federation by the Main Types of Economic Activity on the Structure of Employment in the Subjects of the Far Eastern Federal District

Subjects of the Far Eastern Federal District	Employment, thousand people, in 2005	Possible (+) employment growth, (-) employment decline in 2017, thousand people ($N= +7.7\%$)	Actual (+) growth, (-) decline in 2017 (R)	$M+S=R-N$ (8) – (9)
6	7	8	9	10
The Republic of Buryatia	386.6	+29.8	-3.9	33.7
The Republic of Sakha (Yakutia)	471.8	+36.3	+20.3	16.0
Zabaykalsky Krai	476.0	+36.6	-8.7	45.3
Kamchatka Krai	179.5	+13.8	-14.1	27.9
Primorsky Krai	980.2	+75.4	-6.3	81.7
Khabarovsk Krai	717.4	+55.2	-26.5	81.7
Amur Oblast	424.2	+32.7	-33.6	66.3
Magadan Oblast	93.8	+7.2	-0.6	7.8
Sakhalin Oblast	277.7	+21.4	+5.0	16.4
The Jewish Autonomous Oblast	79.3	+6.1	-12.1	18.2
Chukotka Autonomous Okrug	38.5	+2.9	-4.8	7.7

Source: [15, 16].

The smallest deviation of the calculated data from the actual ones is noted in Chukotka Autonomous Okrug, Magadan Oblast. In Sakhalin Oblast, in the Republic of Sakha (Yakutia) and in the Jewish Autonomous Oblast this indicator is also calculated slightly different from the actual values of the number of the employed population in the economy of subjects of the Far East. A significant excess of the actual increase over the calculated values was noted for the most socially and economically developed subjects of the federal district (Primorsky and Khabarovsk Krai) and in the Amur Oblast. In addition, there is a noticeable excess of the actual increase in the number of employed over the calculated indicator in the Republic of Buryatia, Kamchatka and Zabaykalsky Krai.

The differences of the calculated and actual data on the overall number of employed in the Russian Federation and in separate subjects of the Far Eastern Federal District based on certain types of economic activities primarily due to peculiarities of industrial structure of economy of the Russian Federation as a whole (impact assessment of the factor M) and the local peculiarities of the economy of constituent entities of the federal district (S) (Table 4).

The specific influence of the factor of difference of employment structure by types of economic activity in Russia on dynamics of number of the employed in the subjects of the Far Eastern Federal District are presented in table. 4. The indicator of growth rate of output (M) for the types of economic activities of subjects of the federal district is calculated as follows: $M = \text{number of employees in 2005} \times [\text{industry growth in the country, \%} - \text{the rate of national growth, \%}] / 100\%$.

Table 4: Assessment of Impact of the Diversity Factor of the Structure of Federal Districts of the Russian Federation as a Whole (By Types of Economic Activity) on the Employment Dynamics in the Subjects of the Far Eastern Federal District

Federal districts	Increase (decrease) in the activity in Russia – national increase (decrease) [(5) – 7.7%]	Employment in the federal district in 2005, thousand people	$M = (12) \times (13)/100\%$, thousand people
<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>
The Republic of Buryatia	-8.7	386.6	-33.6
The Republic of Sakha (Yakutia)	-3.4	471.8	-16.0
Zabaykalsky Krai	-9.5	476.0	-45.2
Kamchatka Krai	-15.5	179.5	-27.8
Primorsky Krai	-8.3	980.2	-81.4
Khabarovsk Krai	-11.4	717.4	-81.7
Amur Oblast	-15.6	424.2	-66.2
Magadan Oblast	-8.3	93.8	-7.8
Sakhalin Oblast	-5.9	277.7	-16.4
The Jewish Autonomous Oblast	-23.0	79.3	-18.2
Chukotka Autonomous Okrug	-20.2	38.5	-7.8

Source: [15, 16].

In other FEFD subjects, this factor has a negative impact on the change in the number of employed in the economy (in the Primorsky, Khabarovsk and Zabaykalsky Krai, in Amur Oblast). First of all, this situation in the subjects of the federal district is due to a more significant decrease in the number of employees in agriculture,

forestry, hunting, fishing and fish farming, as well as in manufacturing and education. For example, in agriculture, forestry, hunting, fishing and fish farming of Primorsky Krai, the number of employees decreased from 103.7 thousand in 2005-2017; in Khabarovsk Krai – from 58.1 thousand people to 29.0 thousand people; in Amur Oblast – from 44.0 thousand people to 27.1 thousand people. The situation is similar in manufacturing: in Primorsky Krai, the number of people employed in this activity decreased from 122.7 thousand people to 111.8 thousand people; in Khabarovsk Krai – from 90.1 thousand people to 74.2 thousand people, etc. [15, 16].

Summary calculations of the impact of three factors on the employment growth in the economy of the subjects of FEFD for the period from 2005 to 2017 are presented in table 5.

Table 5: Summary Results of the “structural-share Analysis” of the Components of Employment Dynamics in the Subjects of the Far Eastern Federal District of the Russian Federation

Subjects of the federal district	2005	2017	R	Components of employment dynamics, thousand people		
				N	M	S
The Republic of Buryatia	386.6	382.7	-3.9	+29.8	-33.6	-0.1
The Republic of Sakha (Yakutia)	471.8	492.1	+20.3	+36.3	-16.0	0.0
Zabaykalsky Krai	476.0	467.3	-8.7	+36.6	-45.2	-0.1
Kamchatka Krai	179.5	165.4	-14.1	+13.8	-27.8	-0.9
Primorsky Krai	980.2	973.9	-6.3	+75.4	-81.4	-0.3
Khabarovsk Krai	717.4	690.9	-26.5	+55.2	-81.7	0.0
Amur Oblast	424.2	390.6	-33.6	+32.7	-66.2	-0.1
Magadan Oblast	93.8	93.2	-0.6	+7.2	-7.8	0.0
Sakhalin Oblast	277.7	282.7	+5.0	+21.4	-16.4	0.0
The Jewish Autonomous Oblast	79.3	67.2	-12.1	+6.1	-18.2	0.0
Chukotka Autonomous Okrug	38.5	33.7	-4.8	+2.9	-7.8	+0.1

Source: [15, 16].

IV. DISCUSSION

Structural changes in the economy of federal subjects of Russia are the most important impact of social and economic processes in the country, which are manifested as a result of the combined effect of a number of factors – the results of technological changes; the country’s inclusion in the international processes of economic integration; the development and implementation of the state strategy for the development of regions and support for strategic, basic economic activities [1, 2 14]. Structural changes in the regional economy of the Russian Federation depend primarily on the following factors: 1) the general tendency of economic development in the country, 2) directions of transformation of the economic structure of the region, 3) changes in production by major economic activities of the region [11, 26, 27, 14].

A.G. Granberg was one of the founders of the theory of territorial structures of the economy and their modeling [8, 9], the results of the assessment of the regional territorial structure of the population, industrial production, gross regional product, etc. are given in his works. The generalized idea of the territorial structures of the economy of individual countries and their areas is presented in the works of I.M. Mayergoyz [12], where the territorial structure of the economy is considered at the national level as a triune, consisting of interconnected forms (structures) – 1) integrated spatial structure; 2) multiple territorial-industrial structure, and 3) nutritious-distribution structure

(consisting of elements of industrial infrastructure in its relationship with the resettlement). Yu.G. Saushkin [19] justified the need for a comprehensive systematic approach to the study of territorial structures of the economy, the allocation and study of integrated territorial socio-economic systems, including for the management of their formation and development. In the works of M.D. Sharygin [24] more generalized territorial social systems are considered, which are territorial forms of the spatial-temporal organization of society, its component, functional and territorial structures are distinguished.

A detailed analysis of the main approaches to the allocation and study of territorial structures of economy and resettlement in the regions of Russia is presented in the work of P.Ya. Baklanov [4]. The dynamics of socio-economic space of Russia is considered in the works of V.L. Baburin [3] and V.E. Shuvalov [25]. Various stages of the formation of territorial structures of the Russian economy are considered in the works of P.A. Minakir [13].

In the works of W. Isard [11] methods of regional (spatial) analysis are considered, M. Porter [28, 29] reviewed the role of relationships in the effective development of the structure of industrial clusters, M. Storper and R. Walker [30] considered the factors of economic growth. The relationship between the employment structure and the level of their income in countries and regions was studied in the works of S. Kuznets [26, 27].

In the works of N.V. Zubarevich [10] the crisis phenomena in post-Soviet Russia is discussed, including the employment dynamics in the regions of the country, the spatial distribution of regions by income level. Dynamics of population and socio-economic development of Russian regions is considered in the works of Yu. A. Simagin and V.G. Glushkova [20]. The results of interaction of regionalization and centralization processes unfolding in Russia are considered in the works of A.I. Treyvish [21]. In the works of V.I. Chasovsky [23] the results of the study of transformation of territorial structures of the economy of countries and regions in the post-Soviet space are reflected, market forms of territorial organization of industrial production and modernization of the Russian economy are identified.

At the same time, the problems of studying the role of various factors in changing the territorial socio-economic structure of the economy of the Russian regions, in particular, the dynamics of the employment structure of the population have not yet been fully considered.

The study of the employment dynamics of the population by the main types of economic activity in the subjects of FEFD for the period 2005-2017 is carried out for the first time. It is especially important to assess the impact of the general for the Russian Federation dynamics of the number of employed in the main types of economic activity on the employment structure in the subjects of FEFD and to identify the influence of the diversity factor of the structure of the federal districts of Russia as a whole (by types of economic activity) on the dynamics of the number of employed in the subjects of FEFD.

In the structure of the employed population of the Russian Federation for 2005-2017, the following features are noted, they can be characterized as negative trends: a decrease in the number of employed in industrial production and primarily in manufacturing (from 17.4% to 14.2%) and in education (from 9.1% to 7.7%). There is an increase in the number of employees in the service sector – wholesale and retail trade; repair of motor vehicles, motorcycles, household goods and personal items (from 16.6% to 19.0%), in transport and communication (from 7.8% to 9.3%)

and in construction (from 7.5% to 8.8%) and a decrease in the number of employed in agriculture, hunting and forestry, fishing, fish farming (from 11.4% to 7.1%), which is characteristic of the modern structure of the economy of developed countries.

The overall increase in the number of employees in the Russian Federation for the period 2005-2017 is related to the growth of economic activity in the country, primarily in consumer markets, and the reduction in the number of unemployed. The index of industrial production for the period under review showed stable growth. For example, in 2005 the index value was 105.1; in 2010 – 107.3; in 2014 – 101.7; in 2017 – 102.1 (in constant prices; % to the previous year). The number of officially registered unemployed people in the Russian Federation in 2017 decreased by 42.4% in comparison with 2005 (from 1830.1 thousand people to 775.5 thousand people). The decrease in the number of unemployed was noted in all subjects of the Far Eastern Federal District of the country. At the same time, the largest decrease in the number of unemployed was in Amur Oblast (by 55.4%), Chukotka Autonomous Okrug (53.8%), Kamchatka Krai (34.1%), Sakhalin Oblast (32.6%), Primorsky Krai (24.5%) and Khabarovsk Krai (23.1%). At the same time there was a significant increase in the size of per capita income of the population (from 8088 rubles per month in 2005 to 31422 in 2017) and of the population of the subjects of FEFD.

The subjects of the Far Eastern Federal District of the Russian Federation for the period 2005-2017 can be divided into several types based on changes in the number of employed in the economy: 1) regions with a marked increase in the number of employed in the economy (the growth rate of employment below the national average), 2) subjects with a decline in the number of employees.

The Republic of Sakha (Yakutia) and Sakhalin Oblast belong to the first group of FEFO subjects, in which there is an increase in the number of employed for 2005-2017 (growth rates of employed below the national average). The highest increase in employment was observed in the Republic of Sakha (4.3%). In this subject, the most significant increase in employment was in construction; transport and communication; wholesale and retail trade; repair of motor vehicles, motorcycles, household goods and personal items. A small increase in employment was observed in industrial activities – mining, as well as in the production and distribution of electricity, gas and water.

In the structure of the employed population of Sakhalin Oblast, there was also an increase in the number of people employed in construction; in wholesale and retail trade; repair of vehicles, motorcycles, household goods and personal items; transport and communication.

In the second group there are subjects of the Far Eastern Federal District, in which there is a decrease in the number of employees for the period 2005-2017. In these subjects, there was a significant decrease in the employed population in almost all types of activities – industry (manufacturing), agriculture and forestry, fishing and fish farming, etc. The most noticeable increase in the number of employed people in this group of FEFD subjects was only in construction (except for the Jewish Autonomous Oblast and Chukotka Autonomous Okrug) and in wholesale and retail trade. In addition, the number of people employed in mining slightly increased in Amur and Magadan Oblast, Kamchatka Krai and the Jewish Autonomous Oblast; in transport and communication – in Primorsky Krai.

None of the subjects of the Far Eastern Federal District has a positive impact of factor (M), i.e., the hypothetical change in employment due to the difference in industrial structure between the subject of the Far Eastern Federal

District and Russian Federation in general has not been reflected in increased employment. To a lesser extent, the negative impact of this factor is noted in Magadan oblast and Chukotka Autonomous Okrug. It should be noted that there is a structure of employees in all subjects of the Far Eastern Federal District, which does not have a positive impact on the growth of the number of employed in the economy. The only positive value of employment growth was noted in Chukotka Autonomous Okrug. There is a lag in the growth rate of the number of employees from the average level in the country in such subjects of the Far Eastern Federal District as the Republic of Buryatia, Zabaykalsky Krai, Kamchatka Krai, Primorsky Krai and in Amur Oblast.

In these subjects of FEFD, the low employment growth is explained by the weak activity in the economy, which is largely due to the structure of the economy – backward in terms of economic activities (characterized by the indicator (M)). First of all, this is reflected in the high proportion of the employed population in such economic activities as mining, agriculture, forestry, hunting, fishing and fish farming. A large group of subjects is characterized by zero values of employment growth due to the negative impact of the intraregional factor S (calculated as the difference $R-N-M$). It characterizes the possibility of a negative impact on the dynamics of the number of subjects employed in the economy, the complex social and economic conditions and economic factors (high production costs, lack of investment in manufacturing activities, weak development of own consumer markets, etc.).

It should be noted that the reduction of public investment opportunities caused by the global financial and economic crisis and imposed economic sanctions against Russia can lead to instability of the economic situation in the subjects of the Far Eastern Federal District. In addition, the economic indicators in the country as a whole and in some subjects of the Far Eastern Federal District are adversely affected by fluctuations in world prices for raw materials, oil, competition in the markets of petroleum products and natural gas in the European Union, as well as economic sanctions. Ultimately, these factors lead to reduction in revenues to the budget of the Russian Federation, which limits funding of Federal targeted programs of socio-economic development of the regions.

The current socio-economic situation requires a change in the structure of the economy in the country as a whole, and in the subjects of the Far Eastern Federal District, primarily by increasing the share of industry (manufacturing) and development of services. One of the key principles of effective transformation of the economy is realized in practice in the branches of engineering – the combination of cost benefits on the scale of production and economy due to the product assortment [22].

For this purpose, enterprises and organizations need tax incentives to compensate for their costs of construction and operation of production. To this end, on the territory of federal districts of Russia, territories of advanced development (TAD) are being created, which means a fairly compact territory with a certain socio-economic potential, existing priorities for long-term development, favorable transport-geographical and natural resource factors and with a system of socio-economic preferences established for this territory, which can ensure its effective and accelerated socio-economic development [5]. Large enterprises and organizations, both Russian and foreign, mainly processing activities, transport and logistics services are considered (as the main link of the structure of

TAD). The priority activities are the elements of the marine economic complex – fish processing, marine transport and logistics, processing of oil and natural gas produced on the Sakhalin Island Shelf.

V. CONCLUSION

Determination of the most effective directions of transformation of the structure of the economy of the subjects of FEFD based on local socio-economic features, as well as their geographical location, their support and stimulation, should be considered as the most important problem of territorial administration in the Russian Federation.

In the long term, the current conditions for import substitution can contribute to the formation of a more balanced and effective territorial and industrial structure of production in the Far Eastern Federal District, primarily through the development of its own manufacturing industries (engineering). For the Far Eastern Federal District, which borders directly on the dynamically developing countries of the Asia-Pacific region, it is possible to consider an effective strategy for the inclusion of activities in the integration economic processes and relations that have been developed here.

In the federal and regional programs of socio-economic development of the Far Eastern Federal District and its subjects, where the main goal is to improve the standard of living of the population, the results of assessing impact of structures of the employed population on the level of income of the population should be taken into account.

The most important direction of transformation of territorial and industrial structures of the economy of the “northern” subjects of the Far Eastern Federal District (the Republic of Sakha, Magadan Oblast, Kamchatka Krai, Chukotka Autonomous Okrug) is the development of not only mining, but also processing industries, as well as infrastructure (transport, energy, construction, services). It is also assumed to place orders for products by the largest industrial companies of the Asia-Pacific region at Russian and foreign enterprises of the Far Eastern Federal Districts.

Such transformations of the structure of the economy are associated with changes in the structure of the employed population of the subjects of FEFD. This is primarily reflected in the increase in the share of the employed population in industry and services. It should be noted that employment in these activities provides the highest income to the population in the subjects of FEFD.

Thus, own production of competitive import-substituting products can be created in the territory of the Far Eastern Federal District of the Russian Federation, primarily necessary to meet the needs of the population in goods and services, as well as for the technical re-equipment of existing and creation of new manufacturing industries (for integrated development of natural resource potential of the region and its favorable economic and geographical location).

ACKNOWLEDGEMENTS

This research was supported by Russian Science Foundation within the framework of the project No. 19-18-00005 “Eurasian vectors of sea economic activity of Russia: regional economic projections”

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