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Comparative analysis of fixed capital investments in the regions of Russia

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Abstract

The aim of the research was to assess the specific levels of fixed capital investment per capita in all regions of Russia. The research was based on official 2019 statistics on the volume of fixed capital investments in 82 regions of Russia, as well as data on the population. In the research, the analysis of clusters associated with the unification of the objects studied in relatively homogeneous groups based on the study of the values of the compared indicators was applied. The normal distribution function was used in modelling to estimate the distribution of specific values for most regions. The following results and conclusions were obtained: it has been shown that the formation of five groups is optimal. In addition, it was shown that in 2019 nine regions were characterized by an extremely high level of investment due to the tasks of their strategic development to meet federal challenges. They also identified regions with relatively low values of specific investments in fixed assets. Everything indicates that specific investment values have a significant differentiation in several regions of Russia.

Keywords: investments; fixed capital; regions of Russia; cluster analysis; normal distribution functions.

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Análisis comparativo de las inversiones de capital fijo en las regiones de Rusia

Resumen

El objetivo de la investigación fue evaluar los niveles específicos de inversión de capital fijo per cápita en todas las regiones de Rusia. La investigación se basó en las estadísticas oficiales de 2019 sobre el volumen de inversiones en capital fijo en 82 regiones de Rusia, así como los datos sobre la población. En la investigación se aplicó el análisis de conglomerados asociado a la unificación de los objetos estudiados en grupos relativamente homogéneos basados en el estudio de los valores de los indicadores comparados. La función de distribución normal se utilizó en la modelización para estimar la distribución de valores específicos para la mayoría de las regiones. Se obtuvieron los siguientes resultados y conclusiones: se ha demostrado que la formación de cinco grupos es óptima. Además, se demostró que en 2019 nueve regiones se caracterizaron por un nivel de inversión extremadamente alto debido a las tareas de su desarrollo estratégico para hacer frente a los desafíos federales. También se identificaron las regiones con valores relativamente bajos de inversiones específicas en activos fijos. Todo indica que los valores de inversión específicos tienen una diferenciación significativa en varias regiones de Rusia.

Palabras clave: inversiones; capital fijo; regiones de Rusia; análisis de conglomerados; funciones normales de distribución.

Introduction

Investments in fixed assets are aimed at the development of modern national economies (Laopodis, 2021; Karadzhova and Dichevskaya, 2014). At the same time, based on the analysis of the state of production resources and alternative options for their development, the implementation of the most effective investment decisions is ensured.

The development of investments in fixed assets is important both for states and for enterprises and organizations (Hoffman and Valderrama, 2021). Therefore, the study of their volumes seems to be an urgent area of research for both developed and developing countries. Of the greatest interest is the assessment of regional aspects of investments (Alama-Sabater and Cantavella, 2019). In recent years, Russia has formed high expectations of fixed capital investment increase. According to Russian Federal State Statistics Service (Rosstat) data, these expectations are largely becoming real, since the absolute values of such investments for the period from

2015 to 2019 increased by almost 50%, which is significantly higher than the total inflation amounted to 19% these years (Federal service of state statistic, 2021a).

The aim of our research was to assess specific fixed capital investment levels per capita in all regions of Russia. The main problem to which this study is trying to give theoretical and empirical answers is to assess the volume of investments in fixed assets in each of the regions. This study provided new information about regional differences in investment.

The information obtained will allow the government, financial and credit institutions, the public, as well as researchers to make scientifically sound decisions to support investment activity. This study contributes to the expansion of knowledge about the distribution of investment flows between regions.

1. Literature review

Scientific publications on the problems of investments in fixed assets have received significant development in the twenty-first century. It is possible to note such research reports as (Eklund, 2013; Jehiel, 2018; European Investment Bank, 2018; Rioja *et al.,* 2014). Publications in Latin American journals (Alvarado *et al*., 2017; Eustaquio Casagrande and Valvano Cerezetti, 2014; Lopez and Cardim de Carvalho, 2008; Acevedo Rueda and Lorca Susino, 2021) have made a significant contribution to the study of fixed capital investments.

The problem of regional investment activity in Russia was the focus of research in a few scientific publications. Let us consider the most relevant ones, published in 2018-2020. A brief description of these publications is given in Table 1.

Authors	Problems dealt	Period, years	Investment objects	Type of indicators
1	2	3	4	5
Starkova (2020)	Comparative analysis of investments by region, as well as investment volume indices	2014-2018	The regions of the Volga Federal District	absolute

Vorgunova and Vikharev (2018)	The volume and structure of investment flows in fixed capital, including industries and fund sources	2007-2017	Russia	absolute
Giraev (2020)	The dynamics of investment volume and structure in fixed capital considering the types of economic activity	2014-2018	Russia, the North Caucasus Federal District, Dagestan	absolute, specific
Kumaneeva (2020)	The dynamics of changes in the structure of investment activity in the sectors of the economy	2008-2019	The Kemerovo Region	growth indices
Temirbolatova (2020)	The assessment of fixed capital investments as one of the main indicators describing the development of the region	2016 - 2018	The Karachayevo-Circassion Republic	absolute
Chernenko et al. (2020)	Problems of project funding, the impact of investments on economic growth, the assessment of their volume required for the growth of the gross product	2014-2018	Russia	absolute
Golub and Kochubey (2020)	Distribution of investments in fixed capital within organizations of various forms of ownership	2016-2018	Russia	absolute

Zubova and Kruglov (2020)	The ranking of the country's subjects based on practical investments in the fixed capital development on their territories	2017	All regions of Russia	absolute
Kirichenko and Smirnov (2020)	The analysis of the interconnection between investments and the indicators of production, cargo turnover, as well as the profit accumulated by the organizations of the city	2009-2019	The city of Moscow	absolute
Grishina (2020)	The analysis of trends in the concentration of fixed capital investments in a small number of regions. Predicting proposals for spatial changes in the investment policy	2017-2018	Regions of Russia	specific
Glazyrina et al. (2018)	Consistent patterns of territorial features of investment processes	2011-2013	All regions of Russia	specific
Bashina et al. (2018)	The assessment of foreign direct investment	2000-2016	Russia, Federal Districts	absolute
Edronova and Maslakova (2019)	Own financing of fixed capital investments	2005-2016	Russia, Federal Districts	absolute

Subkhonberdiev et al. (2018)	Attracting investments to the regions of advanced development	2015-2018	The Far Eastern Federal District	absolute
Fatyanov (2019)	The impact of investment on the economic situation and development of the regions, as well as the improvement of the life quality of population	2012-2016	The Central Federal District	specific
Izotov (2019)	The impact of the investment potential of Russian regions on the level of foreign investment	2011–2017	All regions of Russia	absolute
Zabolotni (2019)	Investment enhancement due to the development of tax regulation	2018	Particular regions of Russia	absolute
Ulanova and Sologub (2019)	The assessment of investments in the agricultural sector and its main activities	2017-2018	Agro-industrial complex of Russia	absolute
Grenaderova (2019)	The assessment of the impact of investments on the sustainability of regional development	2018	Particular regions of Russia	absolute

Table 1. Scientific publications on investment activity in Russia.

According to the information in Table 1, it can be stated that the problem of studying regional investment activity is relevant in our country. However, until recently, theoretical and applied studies have paid little attention to the comparative analysis of the investments in fixed capital in

different regions of the country. In the research works where such analysis was undertaken, absolute investment values were a focus of comparison as a rule. This does not always seem logical, as the regions vary significantly in population, size, and geographical position. In this regard, it seems appropriate to conduct the analysis of regional investment activity based on the number of residents in the regions, considering the influence of other factors.

2. Methodology and design

The comparison of absolute fixed capital investment values in various regions is not regarded rational due to the regions' significant difference in their economic potential and population in particular. Therefore, we suggest using specific indicators to compare investments across the country's regions. These indicators measured regional fixed capital investment values per capita of the corresponding region.

The study included four stages. Initially, it made the original observations of the investment volume in each region of Russia as well as the region's population. Then specific investment values for every region were calculated. The second stage involved the cluster analysis of the values of specific investments by region. The third step was to assess the distribution of the specific investment values by the regions of the country. The fourth stage suggested a comparative analysis specifying the regions with maximum and minimum specific investment values.

The research was based on 2019 official statistics on the volume of investments in fixed capital in 82 regions of Russia, as well as the data on the population in them (Federal service of state statistic, 2021a; Federal service of state statistic, 2021b).

In research, the cluster analysis is associated (Feser and Sweeney, 2000; Smorodinskaya and Katukov, 2019) with the unification of the studied objects into relatively homogeneous groups based on the study of the values of the compared indicators. The k-means method used in this work in the process of successive iterations forms clusters based on minimizing the total quadratic deviation of the values of indicators for the analyzed objects from the center of each cluster.

The normal distribution function was used in the economic-mathematical modelling applied to estimate the distribution of specific values for most regions of Russia. The article represents the methodical approach (Pinkovetskaia *et al.,* 2021) for the development and use of such function to determine the average value, as well as the range of its variation across the regions.

3. The research findings and their discussion

The first stage of the research was aimed at collecting basic empirical data about the investment volumes in every region of Russia, as well as the number of inhabitants in each corresponding region. Such data fragment for eight regions is shown in the first three columns of Table 2. Column 4 contains the results of calculations of specific investment per capita values for each of the regions.

Regions	Investments, billions of rubles	Population, thousands of people	Investments, thousands of rubles per person
1	2	3	4
Perm territory	283.78	2.61	108.69
Kirov region	72.23	1.27	56.78
Nizhny Novgorod region	295.25	3.21	91.85
Orenburg region	212.04	1.96	108.02
Penza region	89.37	1.32	67.80
Samara region	293.73	3.18	92.28
Saratov region	162.12	2.44	66.42
Ulyanovsk region	79.73	1.24	64.38
...	...	...	...

Table 2. The extract from the basic data and specific investment by region.

The clyster analysis of specific investment values by region with the help of the Statistica program was undertaken at the second stage of the research. Using the k-means method with eleven iterations it seems optimal to build five clusters. The results of this cluster analysis are shown in Table 3.

Cluster	The average investment value, thousands of rubles per person	Number of regions
1	2	3
First	251.81	four
Second	499.92	five

Third	147.15	thirteen
Fourth	97.29	twenty-six
Fifth	60.46	thirty-four

Table 3. The results of the cluster analysis.

The verification proved the high quality of the cluster analysis, since testing showed that the value p = 0.000, which is less than not only 0.05, but also 0.001. This indicates the highly significant differences of all clusters in all their parameters.

Let us consider the main results of cluster analysis. The data in column 3 of Table 3 show that the first cluster includes four regions, the second cluster – five regions, the third cluster - thirteen regions, the fourth cluster - twenty-six regions and the fifth cluster - thirty-four regions.

The mean values of the indicators for the five clusters are given in the second column of Table 3. The mean differences of the nearest clusters are as follows: between the fifth and fourth clusters it is 36.83 thousand rubles/person, between the fourth and third - 49.86 thousand rubles/person, between the third and first clusters it is significantly more - 104.66 thousand rubles/person, between the first and second clusters it equals 248.11 thousand rubles/person.

Thus, the centers of the third, fourth and fifth clusters are located relatively compactly, and the centers of the first and second clusters are at a considerable distance from them. Taking this into account, one can conclude about the extremely high specific investment values in these nine regions and their significant differences from other regions in terms of specific investments. The remarkable thing is that the first and second clusters comprise only nine regions, which corresponds to 11% of the total number of subjects of the country.

The first cluster is made up of Leningrad region, Murmansk region, Magadan region and Moscow city. Amur region, Sakhalin region, Tyumen region, republic of Sakha and Chukotka autonomous area are parts of the second cluster.

In the eight regions composing the first and the second clusters, fixed capital investments relate to the implementation of the federal strategic programs.

- In Tyumen and Magadan regions, the programs are related to the development of mining and processing complexes/industries.

- In Amur region – the development of transport and energy infrastructure, construction of gas processing enterprises.
- In Leningrad region – the development of port and industrial infrastructure.
- In Murmansk region - the development of the mining complex, shipbuilding, as well as a transport hub.
- In republic of Sakha and Chukotka autonomous area - development of mining enterprises.
- In Sakhalin region – the development of the oil and gas complex, transport and energy infrastructure.

Large specific investments in the ninth region (Moscow) are conditioned by its status as the only metropolis in the country. The main areas of fixed asset investment in Moscow were the development of transport infrastructure, the creation of a comfortable urban environment and renovation.

The results of the cluster analysis indicate that in the nine regions there are extremely high values of specific investments, compared with the other (73) regions. Therefore, the third stage of the analysis involved the assessment of specific investment values in these 73 regions belonging to the third, fourth and fifth clusters. In the course of the computational experiment, economic and mathematical modeling based on empirical data was carried out. The model that describes the distribution (y) of the of fixed capital investment values per capita (x, thousands of rubles) is given below:

$$y(x) = \frac{1551\ .25}{33\ .91 \times \sqrt{2\pi}} \cdot e^{\frac{-(x-89\ .02)^2}{2 \times 33\ .91 \times 33\ .91}}.$$

The high efficiency of this normal distribution function was confirmed during Shapiro-Wilk, Pearson and Kolmogorov-Smirnov criteria testing.

The parameters of the normal distribution function support the conclusion that the average fixed capital investment value in 73 regions of Russia is 89.02 thousand rubles per capita, and the value of the standard deviation is 33.91 thousand rubles per person.

Thus, it can be concluded that there is a significant differentiation of indicators in 73 regions.

The next stage involved identification of the regions with the minimum values of specific investments. At the same time, the minimum values are regarded to be less than the difference between the average value for 73 regions and the corresponding standard deviation. The results of this

analysis showed that the minimum values (from 37.26 to 55.11 thousand rubles/person) were marked in such regions as the Ivanovo, Kostroma, Kurgan, Bryansk, Pskov regions, Mari El, North Ossetia-Alania, Ingushetia, Kabardino-Balkaria, Karachayevo-Circassian, Chuvash and Chechen republics, as well as Altai territory. These regions need special attention to the increase of investment in the near future.

Conclusion

The analysis fulfills the purpose of the study to assess the levels of fixed capital investment in the regions of Russia in 2019. The conclusions are of academic novelty and originality. They are as follows:

1. The methodology for assessing specific investments indicators per employee in each region with help of the cluster analysis and the normal distribution function is presented.
2. The cluster analysis of the of specific investment values in 82 regions of Russia was carried out.
3. The formation of five clusters is proved to be optimal.
4. It was shown that in 2019 nine regions were marked with extremely high level of investment due to the tasks of their strategic development to tackle the federal challenges.
5. The regions with relatively low values of specific investments in fixed assets have been identified.
6. The specific investment values are proved to have a significant differentiation in various regions of Russia.

The results of the work have a certain theoretical and practical significance for the government, regional and local authorities. The methodological approach to assessing an investment level presented in the article can be used in further research. The knowledge gained is of interest and can be used in educational process at universities.

There were no restrictions on empirical data in the research process, since information from all regions of Russia was considered.

Bibliographic References

ACEVEDO RUEDA, Rafael; LORCA SUSINO, María. 2021. “Growth and Institutions in Latin American Countries: An Experimental Review for the XXI Century” In: Revista Facultad de Jurisprudencia. No.

9, pp. 119-149. Available online. In: https://www.redalyc.org/journal/6002/600266295003/. Consultation date: 10/10/2021.

ALAMA-SABATER, Luisa; CANTAVELLA, Manuel. 2019. "Spatial income and public capital: an example of the Spanish region" In: Applied Economics. Vol. 51, No. 48, pp. 5297-5309. Available online. In: https://doi.org/10.1080/00036846.2019.1613500. Consultation date: 10/11/2021.

ALVARADO, Rafael; INIGUEZ, Maria; PONCEA, Pablo. 2017. "Foreign direct investment and economic growth in Latin America" In: Economic Analysis and Policy. No. 56, pp. 176-187. Available online. In: https://doi.org/10.1016/j.eap.2017.09.006. Consultation date: 10/11/2021.

BASHINA, Olga; MATRAEVA, Lilia; ALYABYEVA, Anna. 2018. "Assessment of the impact of foreign direct investment on the socio-economic development of Russian regions: results of a statistical and econometric study" In: Bulletin of the Academy. No. 3, pp. 14-22. Available online. In: https://www.elibrary.ru/item.asp?id=37013683. Consultation date: 15/09/2021.

CHERNENKO, Vladimir; FEDOROV, Konstantin; FEDOROVA, Svetlana. 2020. "Investment activity: problems of growth of the national economy" In: Economic vector. Vol. 1, No. 20, pp. 87-95. Available online. In: https://www.elibrary.ru/item.asp?id=42809749. Consultation date: 15/10/2021.

EDRONOVA, Valentina; MASLAKOVA, Daria. 2019. "Aspects of own financing of investments in fixed capital by regions of Russia" In: Science and business: ways of development. Vol. 2, No. 92, pp. 275-277. Available online. In: https://www.elibrary.ru/item.asp?id=37057082. Consultation date: 15/08/2021.

EKLUND, Johan. 2013. "Theories of Investment: A Theoretical Review with Empirical Applications". Working paper No. 2013:22, Stockholm, Available online. In: https://entreprenorskapsforum.se/wp-content/uploads/2013/03/WP_22.pdf. Consultation date: 15/08/2021.

EUROPEAN INVESTMENT BANK. 2018. Investment Report 2018/2019: retooling Europe's economy. European Investment Bank, Luxembourg. Available online. In: https://www.eib.org/attachments/efs/economic_investment_report_2018_en.pdf. Consultation date: 20/08/2021.

EUSTAQUIO CASAGRANDE, Elton; VALVANO CEREZETTI, Fernando. 2014. "Investment theory and empirical approach: a discussion on difficulties" In: Latin American Journal of Management for Sustainable Development. Vol. 1, No. 1, pp. 93-103. Available online. In: https://doi.org/10.1504/LAJMSD.2014.059782. Consultation date: 15/08/2021.

FATYANOV, Aleksey. 2019. "Investments as a universal factor of socio-economic development of regions" In: Regional journal. Vol. 5, No.20, pp. 43-44. Available online. In: https://www.elibrary.ru/item.asp?id=37619608. Consultation date: 22/09/2021.

FEDERAL SERVICE OF STATE STATISTIC. 2021a. Available online. In: http://www.gks.ru/wps/wcm/connect/rosstat/rosstatsite/main/enterprise/reform/. Consultation date: 22/10/2021.

FEDERAL SERVICE OF STATE STATISTIC. 2021b. The population of the Russian Federation. Available online. In: https://rosstat.gov.ru/compendium/document/13283. Consultation date: 22/10/2021.

FESER, Edward; SWEENEY, Stuart. 2000. "A Test for the Coincident Economic and Spatial Clustering of business Enterprises" In: Journal of Geographical Systems. Vol. 2, pp. 349-373. Available online. In: https://doi.org/10.1007/PL00011462. Consultation date: 10/11/2021.

GIRAEV, Vezirhan. 2020. "Investment processes in the Russian Federation and regional financial support imbalances" In: Economy: yesterday, today, tomorrow. Vol. 10, No. 3A, pp. 10-24. Available online. In: https://www.elibrary.ru/item.asp?id=43137103. Consultation date: 10/11/2021.

GLAZYRINA, Irina; FALEYCHIK, Anrei; FALEYCHIK, Larisa. 2018. "Investments and economic development: a comparative analysis for the regions of Russia" In: Journal ZabGU. Vol. 24, No. 8, pp. 101-111. Available online. In: https://www.elibrary.ru/item.asp?id=36486944. Consultation date: 8/11/2021.

GOLUB, V; KOCHUBEY, Elena. 2020. "Analysis of investment development of the Russian Federation" In: MODERN SCIENCE. No. 4-3, pp. 59-63. Available online. In: https://www.elibrary.ru/item.asp?id=42774031. Consultation date: 13/11/2021.

GRENADEROVA, Mariya. 2019. "Economic efficiency of investments in the context of sustainable development of the regions of Russia" In: State advisor. No. 4, pp. 72-78. Available online. In: https://www.elibrary.ru/item.asp?id=41415359. Consultation date: 10/11/2021.

GRISHINA, Irina. 2020. "Forecasting the receipt of investments in the fixed capital of the regions for the period up to 2024: methods and results of the development of the territorial section of the forecast of the development of Russia" In: Regional economy. South of Russia. Vol. 8, No. 1, pp. 49-62. Available online. In: https://www.elibrary.ru/item.asp?id=42903925. Consultation date: 10/10/2021.

HOFFMAN, Andre; VALDERRAMA, Patricio. 2021. "Long-term economic growth indicators in Latin America - 1820-2016" In: Journal of Economic Reviews. Vol. 35, No. 3, pp. 833-869. Available online. In: https://doi.org/10.1111/joes. Consultation date: 10/09/2021.

IZOTOV, Dmitri. 2019. "Receipt of foreign direct investment in the Russian regions: potential and risk factors" In: Economic and social changes: facts, trends, forecast. Vol. 12, No. 2, pp. 56-72. Available online. In: https://www.elibrary.ru/item.asp?id=38029289. Consultation date: 13/11/2021.

JEHIEL, Philippe. 2018. "Investment Strategy and Selection Bias: An Equilibrium Perspective on Overoptimism" In: American Economic Review. Vol. 108, No. 6, pp. 1582-1597.

KARADZHOVA, Vera; DICHEVSKAYA, Snezhana. 2014. "Investment Activity in Small Open Economies" In: Technologies and Investments. No. 5, pp. 65-78. Available online. In: http://dx.doi.org/10.4236/ti.2014.520081. Consultation date: 12/11/2021.

KIRICHENKO, Irina; SMIRNOV, Alexandr. 2020. "Formation of a system of indicators that have a key impact on the development of investment processes (on the example of Moscow)" In: Drucker journal, Vol. 2, No. 34, pp. 346-367. Available online. In: https://www.elibrary.ru/item.asp?id=42897721. Consultation date: 10/11/2021.

KUMANEEVA, Mariia. 2020. "Structural characteristics of the Kuzbass investment process in the context of strategic management of regional development" In: Bulletin of the Belgorod University of Cooperation, Economics and Law. Vol. 6, No. 85, pp. 134-147. Available online. In: https://www.elibrary.ru/item.asp?id=44244106. Consultation date: 9/11/2021.

LAOPODIS, Nikiforos. 2021. "Understanding investment Theories and strategies" In: Taylor and Francis Routledge Group, New York. Available online. In: 10.4324/9781003027478. Consultation date: 10/11/2021.

LOPEZ, Julio; CARDIM DE CARVALHO, Fernando. 2008. "Resuming growth in Latin America: short and long term policies" In: Brazilian Journal of Political Economy. Vol. 28, No. 3 (111), pp. 392-413. Available online. In: https://doi.org/10.1590/S0101-31572008000300002. Consultation date: 8/11/2021.

PINKOVETSKAIA, Iuliia; NURETDINOVA, Yulia; NURETDINOV, Ildar; LIPATOVA, Natalia. 2021. "Mathematical modeling on the base of functions density of normal distribution" In: Revista de la Universidad

del Zulia. 3ª época. Año 12 No. 33, pp. 34-49. Available online. In: http://dx.doi.org/10.46925//rdluz.33.04. Consultation date: 8/11/2021.

RIOJA, Felix; RIOS-AVILA, Fernando; VALEV, Neven. 2014. "The Persistent Effect of Banking Crises on Investment and the Role of Financial Markets" In: Journal of Financial Economic Policy. Vol. 6, No.1, pp. 64-77. Available online. In: https://doi.org/10.1108/JFEP-08-2013-0035. Consultation date: 8/11/2021.

SMORODINSKAYA, Nataliya; KATUKOV, Daniel. 2019. "When and why regional clusters become the basic link of the modern economy" In: Baltic region. Available online. In: https://www.elibrary.ru/item.asp?id=39289798. Consultation date: 7/11/2021.

STARKOVA, Olga. 2020. "Investment in fixed capital in the Volga Federal District" In: Economics and management: science-practice journal. Vol. 3, No. 153, pp. 102-106. Available online. In: https://www.elibrary.ru/item.asp?id=42944873. Consultation date: 7/11/2021.

SUBKHONBERDIEV, Alisher; TITOVA, Elena; KUSTOV, Dmitri; LOBACHEVA, Natalia. 2018. "The territory of advanced development as a tool for attracting investments to the region" In: Journal VSUIT. Vol. 80, No. 4, pp. 403-407. Available online. In: https://www.elibrary.ru/item.asp?id=37208099. Consultation date: 10/11/2021.

TEMIRBOLATOVA, Svetlana. 2020. "Regional investments and directions of investment policy" In: Business. Education. Right. Vol. 1, No. 50, pp. 235-240. Available online. In: https://www.elibrary.ru/item.asp?id=42424350. Consultation date: 7/11/2021.

ULANOVA, Olga; SOLOGUB, Natalia. 2019. "The role of investments in the development of the agro-industrial complex of Russia and the region" In: Niva Povolgie. Vol. 2, No. 51, pp. 100-108. Available online. In: https://www.elibrary.ru/item.asp?id=39040200. Consultation date: 12/11/2021.

VORGUNOVA, Viktoria; VIKHAREV, Vadim. 2018. "Analysis and forecasting of changes in the structure of investments in fixed capital in Russia" In: Journal of modern research. No. 12.17, pp. 78-85. Available online. In: https://www.elibrary.ru/item.asp?id=36872982. Consultation date: 6/11/2021.

ZABOLOTNI, Galina. 2019. "Tax regulation as an effective method of public administration for solving the problem of insufficient investment in the economy of regions" In: Azimut science research: economics and management. Vol. 8, No. 2, pp. 139-141. Available online. In:

https://www.elibrary.ru/item.asp?id=38499878. Consultation date: 10/11/2021.

ZUBOVA, Yulia; KRUGLOV, Sergei. 2020. "New approach to the formation of the rating of investment attractiveness of regions" In: Scientific review. Economic sciences. No. 1, pp. 31-36. Available online. In: https://www.elibrary.ru/item.asp?id=42756796. Consultation date: 7/09/2021.

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