

11. Информационно-аналитические возможности бухгалтерского учета для управления устойчивым развитием экономики (Information and analytical accounting capabilities for managing sustainable economic development): монография / Н. В. Кулиш [и др.]. – Ставрополь: АГРУС Ставропольского гос. аграрного ун-та, 2019. – 156 с.
12. Щербатюк, С. Ю. Оценка содержательного наполнения учетной политики сельскохозяйственных организаций / С. Ю. Щербатюк // Актуальні проблеми та перспективи розвитку обліку, аналізу та контролю в соціально-орієнтованій системі управління підприємством»: Матеріали II Міжнародної науково-практичної конференції (м. Полтава, 25-26 травня 2016 року). – Полтава: РВВ ПДАА, 2016. – С. 154-157.
13. Щербатюк, С. Ю. Определяем материальный ущерб / С. Ю. Щербатюк // Моя бухгалтерия. Сельское хозяйство. – 2018. – № 7. – С. 32-37.
14. Щербатюк, С. Ю. Материальный ущерб: порядок оценки и отражения в учете / С. Ю. Щербатюк // Моя бухгалтерия. Сельское хозяйство. – 2018. – № 3. – С. 8-17.
15. Щербатюк, С. Ю. Особенности инвентаризации – 2019 для сельскохозяйственных организаций / С. Ю. Щербатюк // Моя бухгалтерия. Сельское хозяйство. – 2019. – № 11. – С. 12-20.
16. Щербатюк, С. Ю. Применение норм естественной убыли / С. Ю. Щербатюк // Моя бухгалтерия. Сельское хозяйство. – № 11. – 2019. – С. 20-24.

UDK 314.114 (476)

## ANALYSIS OF SOCIO-DEMOGRAPHIC FACTORS AFFECTING THE INVESTMENT CLIMATE OF THE REPUBLIC OF BELARUS

**A. Hrybau<sup>1</sup>, V. Kulakov<sup>2</sup>**

<sup>1</sup> – EI «Grodno state agrarian university»

Grodno, Republic of Belarus (Republic of Belarus, 230008, Grodno,  
28 Tereshkova st.; e-mail: mr.andrey.gribov@yandex.ru)

<sup>2</sup> – Polish national agency for academic exchange (NAWA)

Jan Kochanowski University of Kielce

Kielce, Poland (Poland, 25-318, Kielce, 78/85 Sandomierska str.; e-mail:  
vasili-kulakov@yandex.ru)

**Key words:** *investment climate, socio-demographic factors, mean length of life, educational and medical service, unemployment rate, labor migration, ethnic and religious composition, criminal risks.*

**Summary.** *The article examines a number of socio-demographic factors that influence the investment climate of the Republic of Belarus. The authors analyzed: changes in the average life expectancy of the population and the retirement age, the level of educational and medical services, the dynamics of unemployment and labor migration, as well as the ethnic and religious composition of the population. The identified trends allowed dividing all the factors into two groups, depending on the direction of their impact on the investment climate. The positive impact is exerted by: increasing life expectancy, relatively efficient education and health care systems, low levels of official unemployment, lack of religious and ethnic conflicts. The negative*

*factors include concealed unemployment and the outflow of qualified personnel abroad.*

*(Поступила в редакцию 06.06.2021 г.)*

**Introduction.** Under the recent research, many economists, both scientists and practitioners, pay special attention to the socio-demographic situation developing in a particular state. The reason for such interest is that one of the main components of the successful implementation of any investment project is the availability of qualified human resources.

These studies acquire particular relevance in the light of the ongoing transformations leading to an increase in the role of human capital, which sets in motion reproduction processes and largely determines the effectiveness of the use of other resources. Economic development becomes possible as a result of the formation and effective use of human capital, the normal development of which is possible only if the necessary social conditions are created.

There are many approaches to assessing the investment climate of countries. For the foregoing reasons, in many methods, a group of socio-demographic factors is considered as a separate category for analysis.

Within the framework of this study, as the main socio-demographic factors influencing the investment climate of the Republic of Belarus, we have identified: the average life expectancy of the population, the degree of development of medical and educational services, the level of unemployment and migration, as well as the ethnic and religious composition of the population.

**Objective.** The main goal of research is to analyze the socio-demographic factors affecting the investment climate of the Republic of Belarus, as well as to determine the direction of this influence.

**Materials and research methods.** The research was conducted on the basis of evidence from the International Center on Aging, the United Nations reports, National Statistical Committee of Belarus, Ministry of Labor and Social Protection of Belarus and other official sources.

The following methods were used in the study: analysis and synthesis, comparisons, abstract-logical, and others.

**Research results and discussion.**

Mean length of life and age of retirement

Life expectancy is a measure of premature death and it shows large differences in health across the world.

This indicator is so important for describing population conditions that, together with the education index and the Gross Domestic Product (GDP) index, it forms the Human Development Index used by the United Nations Development Programme (UNDP) [17].

For quite a long period of time in the Republic of Belarus there has been observing a positive trend in the change in the life expectancy of the population, both on average and by sex groups. In the period from 2015 to 2019 this indicator increased by 0.6 years and amounted to 74.5 years. Here-with, women live on average 10 years longer than men (Table 1).

Table 1 – Life expectancy dynamics in the Republic of Belarus

Indicators	Years					2019 +/- to 2015
	2015	2016	2017	2018	2019	
LifeExpectancy (bothsexes)	73.9	74.1	74.4	74.5	74.5	0.6
FemalesLifeExpectancy	78.9	79.0	79.2	79.4	79.4	0.5
MalesLifeExpectancy	68.6	68.9	69.3	69.2	69.3	0.7

Source: prepared by the author based on: [16, 17]

According to the Human development reports of United Nations development program 2020, Belarus is ranked 85th in the international life expectancy rating with an indicator of 74.8 years, behind the leading Hong Kong for more than 10 years [8]. As can be seen, international estimates do not differ significantly from national statistics.

It should be noted that the level of life expectancy in general and among women in the country is higher than the global average, while Belarusian men live up to a year less than the world average [10].

Despite the fact that the life expectancy of women in the country is higher than that of men, since January 1, 2020, the retirement age is set at 57 years for women, 62 years for men. Since 2016, this indicator in Belarus has increased four times (6 months at a time) for a total of 2 years. By 2022, it is planned to set the retirement age at 58 and 63 years, respectively [15].

At the moment, the retirement age in the Republic of Belarus is lower than in European countries. For example, in Poland, men tend to retire at 65 and women at 60. However, it should not be forgotten that Belarus has lower indicators of life expectancy.

The increasing life expectancy of the population, as well as the gradual, planned increase in the retirement age, are perceived by investors as positive trends in the development of the country's economy, and therefore the investment climate.

#### Educational and medical service level

The education system in the Republic of Belarus encompasses general education, continuing education and special needs education. All in all, there are more than 8.000 educational institutions providing education on different levels in Belarus. They have about 3 million students and employ over 400.000.

General education includes pre-school education, secondary education, secondary vocational education, post-secondary vocational education, higher learning and post-graduate education. Extracurricular activities are divided

into extracurricular programs for children, youth and adults. This classification of education is in conformity with the International Standard Classification of Education (ISCED 2011). Thus, the country is implementing the principle of lifelong learning [3].

Belarus' education policy is based on the following principles:

public participation and co-operative management of the education system;

a fair and equal access to education;

high-quality education for all.

The education system is financed mostly by public funds, which is viewed as the country's investment in human capital [3].

In 2015, on the second try, Belarus joined the Bologna Process – the European Higher Education Area (EHEA) [2].

The first attempt to become a part of the Bologna Process was made in 2012 and was unsuccessful. The Ministers of Education at the forum in Vienna denied Belarus this right. This decision was determined by the presence of minimal academic freedoms in Belarusian universities, the weak development of the student self-government system, the lack of transparency in the work of the university administration and the rector elections [1].

Entry into the Bologna process presupposed the reform of higher education in accordance with global and European trends. This reform was partially implemented. As a result, Belarus became part of the European integration project, but with certain conditions, the so-called "Road Map".

Attention should be paid to the fact that the issues raised at the forum in Vienna, for the most part, remain unresolved to this day.

The Republic of Belarus is one of the few post-Soviet countries and European countries that have preserved a healthcare system funded by the state budget and adapted it to social and economic conditions.

According to official data for the last few years the state budget has been spending 4 % of the GDP on healthcare, which is on par with the social security threshold recommended by the World Health Organization and specified by the Concept of National Security of the Republic of Belarus [6]. The statistical characteristics of the health care system of the Republic of Belarus are presented in Table 2.

Table 2 – Statistical characteristics of the health care system of the Republic of Belarus, per 10 thou. population

Indicators	Years					2019 +/- to 2015
	2015	2016	2017	2018	2019	
Number of specialist doctors	56.0	57.3	57.8	58.5	59.1	3.1
Number of secondary medical workers	132.8	132.4	133.1	133.9	134.4	1.6
Availability of short-term stay hospital beds	86.3	84.5	84.2	83.9	84.2	-2.1

Source: prepared by the author based on: [16]

The Social Progress Index (SPI) was created by the Social Progress Imperative to define the success of societies as the capacity of a society to meet the basic human needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential. It is a comprehensive measure of real quality of life, independent of economic indicators [4].

In 2020 Social Progress Index rankings Belarus is ranks 47 (SPI = 77 out of a possible 100). At the same time, indicators such as «Access to Basic Knowledge» and «Nutrition and Basic Medical Care» belong to the Highest component scores (Fig. 1).

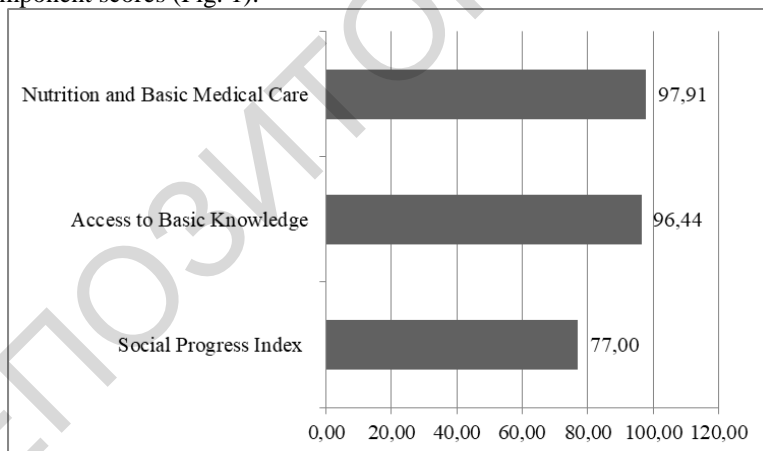


Figure 1 – Social Progress Index and its components in Belarus in 2020

Source: own elaboration based on [5].

For the last ten years considerable attention has been paid to manning requirements of the healthcare system by means of developing the medical education system, introducing progressive education forms, new organizational forms, and continuous vocational training technologies. The availabil-

ity of practitioner medics per 10.000 capita in the Republic of Belarus totaled 45.6 in 2019, which is higher than that in the European Union (33.4) and the CIS states (38.1). The availability of nurses per 10.000 capita in the Republic of Belarus totaled 134.4 in 2019, which is considerably higher than the figure registered in the European Union (86.8) and the CIS (62) [9].

The analysis shows that, despite a number of problems, the Republic of Belarus has developed relatively effective education and health systems. This, certainly, has a positive effect on the country's investment climate.

#### Unemployment rate

There is a very specific situation on the labor market in the Republic of Belarus. The registered unemployment rate is below the normal natural level, which, in fact, indicates the absence of frictional and structural unemployment in the country (Fig. 2).

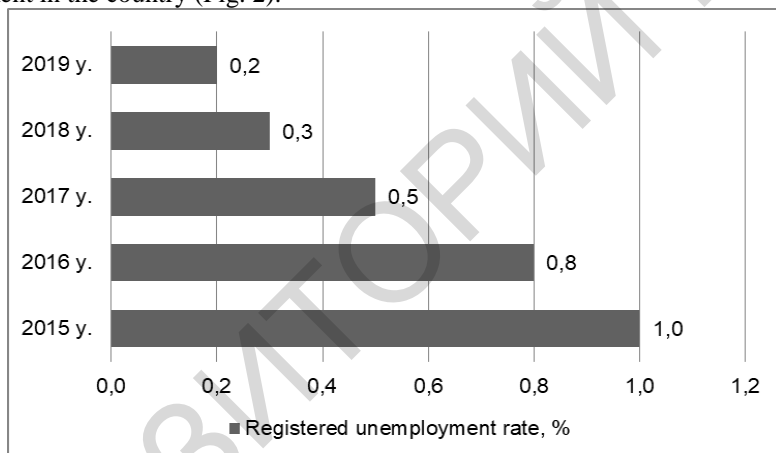


Figure 2 – Dynamics of registered unemployment rate in Belarus, %

Source: own elaboration based on [16].

Such a low level of unemployment in the country is explained by the specifics of its accounting. The official statistics do not take into account people who do not register at the labor exchange, and prefer to look for work on their own.

There are several obvious reasons for unwillingness to register. The main one is the extremely low unemployment benefits (the maximum sum as of the beginning of 2021 is 58 BYN, which is equivalent to about 16.5 EUR). Herewith, the benefit is paid only for the first six months. In addition, in order to receive it, the unemployed is obliged to take part in social work, such as harvesting crops in agricultural enterprises, cleaning streets, etc. This directly contradicts to the convention of the International Labour Organization.

It should also be said about the low level of remuneration for the vacancies offered on the labor exchange.

As a result, many citizens prefer not to register, but to look for work on their own, without relying on the help of the state. This leads to an increase in hidden unemployment, which is difficult to identify and record.

Due to the complexity of the calculation, it is difficult to establish its real level. The National Statistical Committee of the Republic of Belarus, based on sample survey data, announced the figure of 4.2 % at the end of 2019 [16]. However, some economic experts and sociologists reckon that the level of actual unemployment in Belarus can range from 6 % to 10 % of the economically active population. It is these figures that appear most frequently in studies [18].

For an investor, a low unemployment rate is one of the indicators of the purchasing power of the population. At the same time, it can also be a harbinger of negative events in the country's economy, as it can lead to higher inflation and an increase in key central bank rates.

In the specific economic conditions of the Republic of Belarus, it is difficult to determine whether the current level of unemployment is a positive or negative driver of the investment climate.

#### Dynamic of labor migration

In the modern economy, external migration is considered as one of the sources of the formation of the country's human capital.

Migrations are considered from two points of view: co-development which engages migrants as promoters of development and the main sources of human capital in a country and the theory of dependence, which confirms that migrations deepen poverty in territories of their origin [11].

Entries into and exits out of CIS countries now account for the majority of the migration flow in the Republic of Belarus. During the past five years, the group comprised approximately 72 % of immigrants and 82 % of emigrants (Tab. 3).

The data show that after a two-year decline in the number of citizens entering the country in 2016 and 2017, there is a significant increase in this indicator in 2018 and 2019. And the main growth gives non-CIS countries. This trend can be explained by the commissioning of a number of new enterprises, suggesting, in accordance with investment agreements with China, the attraction of foreign labor, in particular from the PRC [7].

Table 3 – Trends in external migrations in the Republic of Belarus, thou. people

Specification	Years					2019/ 2015, %
	2015	2016	2017	2018	2019	
<b>Influx</b>						
Total	28349	21038	18961	24601	34846	122.9
From CIS countries	22505	15615	13305	17008	22533	100.1
From non-CIS countries	5844	5423	5656	7593	12313	210.7
<b>Outflux</b>						
Total	9855	13098	15087	15239	20976	212.8
From CIS countries	6679	8997	9558	9829	12941	193.8
From non-CIS countries	3176	4101	5529	5410	8035	253.0
<b>Migration balance</b>						
Total	18494	7940	3874	9362	13870	75.0
From CIS countries	15826	6618	3747	7179	9592	60.6
From non-CIS countries	2668	1322	127	2183	4278	160.3

Source: own elaboration based on [16].

This hypothesis is supported by the fact that since 2015 the number of Chinese immigrants has increased by more than 3.5 times and amounted to 4669 people in 2019.

Regarding the dynamics of the number of citizens leaving the country, we note a clear upward trend. Furthermore, the number of those who left for non-CIS countries during the analyzed period increased by more than 2.5 times. This is due to the reorientation of the Belarusian population towards Western Europe and other developed countries.

One of the most popular destinations for emigration is the dynamically developing Republic of Poland. In this state, the process of employment, admission to educational institutions, obtaining a residence permit for citizens of the Republic of Belarus is one of the simplest among all developed countries. According to official statistics, the number of people who left for Poland from 2015 to 2019 increased by more than 5.4 times.

It should also be noted that the official data concerning citizens of Belarus emigrating abroad do not reflect reality, because only a small portion of people emigrating to work in other countries are registered by the relevant authorities.

According to a study conducted under the scientific supervision of Professor Luchenok, the outflow of unregistered economic migrants from Belarus is more than 30 times higher than the registered economic migration [12]. This study is based on statistical data for the period up to 2010, but it can be claimed that the situation has not changed considerably. This fact is confirmed indirectly by a decrease in the number of people employed in the Belarusian economy.



It should be noted, that about 40 % of those leaving the territory of the Republic of Belarus are people with higher education. If we add to this the skilled workers who have received secondary specialized education, the share will rise to 67 % on average. Not all of them work in their specialty and occupy qualified positions abroad, but the tendency towards an outflow of highly educated professionals is obvious [7].

From there, despite the positive migration balance, we note certain negative trends in the Belarusian labor market associated with the outflow of skilled labor.

#### Ethnic and religious composition

Ethnic and religious features are characterized by a set of relations related to the ethnic and confessional composition of the population in a particular country or region. These relations permeate politics, economics, culture, ideology, international relations and other sphere of life. The legacy of previous eras has a great influence on the ethno-religious factor.

History shows that the outbreak of differences on ethnic or religious grounds can lead to serious negative consequences, including armed conflicts and the division of territories.

Despite the fact that more than 20 nationalities live in the Republic of Belarus, the country is characterized by a fairly high degree of homogeneity of the national composition of the population (Fig. 3).

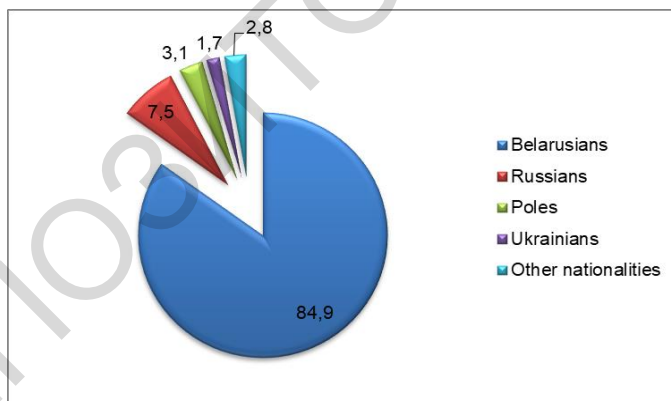


Figure 3 – Ethnic composition of the population of Belarus in 2019, %

Source: own elaboration based on [16].

According to the data published by the National Statistical Committee on the results of the 2019 population census, 9 413 446 people live in Belarus, of which Belarusians – 7 990 719 (84.9 %), Russians – 706 992 (7.5 %), Poles – 287 693 (3.1 %), Ukrainians – 159 656 (1.7 %). Other nationalities

account for about 2.8 % of the population. Among the national minorities are: Jews, Armenians, Tatars, Gypsies, Azerbaijanis, Lithuanians, Turkmens, Germans, Georgians, Moldovans, Chinese, Latvians, etc.

Difficulties for the state can arise when an ethnically homogeneous population professes different religions.

The Republic of Belarus is a multi-faith state. Freedom of religion in Belarus is guaranteed by the Constitution. The rights and freedoms of believers are also enshrined in the law on freedom of conscience and religious organizations [14].

The leading position in the religious life of the country is occupied by the Belarusian Orthodox Church. Catholicism is the second most popular religious denomination in the republic.

The Republic of Belarus is not a highly religious country. According to the rating compiled by The Telegraph, based on three WIN/Gallup International surveys conducted in 2008, 2009 and 2015, the country is among the twenty least religious countries in the world, ranking 16 (34 % of religious people) in the ranking. This rate is significantly lower than in the nearest neighbors Russia (50th place and 70 % of religious people) and Poland (90th place and 86 % of religious people) [13].

Regardless of the fact that a certain degree of social xenophobia and racism with historical roots are characteristics of the Belarusian national character, Belarus is traditionally viewed as a tolerant society, which is alien to negative manifestations in relation to representatives of other cultures and ethnic groups.

Based on the analysis, we can conclude that the country is dominated by Slavic peoples, historically professing the Christian religion. Along with the Belarusians, these are mainly ethnic groups of the bordering states, which have close historical ties, affinity of languages, similarity of customs and traditions. This uniformity of ethnic and religious composition reduces the probability of intra-ethnic conflicts, and, accordingly, has a positive effect on the country's investment climate.

**Conclusion.** The research shows that in the Republic of Belarus, 2019 est., a fairly stable socio-demographic environment has been formed, which contributes to attracting foreign capital to the country.

The analysis revealed that the growing life expectancy for both genders, the gradual increase in the retirement age to the average European level, the sufficiently developed education and health systems, the low level of official unemployment, the positive migration balance, and the homogeneous ethnic and religious composition of the population are positively perceived by potential investors.

At the same time, we note certain problems with the fulfillment of the conditions stipulated by the “Roadmap” of joining the Bologna process, as well as the presence of hidden unemployment and labor migration, which are many times higher than official statistics. These facts have a negative impact on the investment climate of the republic.

This classification of factors into positive and negative shows the overall picture and allows to determine the direction of their influence, but does not give an idea about the strength of the impact of specific indicators or their significance for the owner of capital. To make informed investment decisions, a deeper analysis is required, including expert assessments.

#### LITERATURE

1. Belarus in the Bologna Process: a survival game [Electronic resource] Information portal Adukar. – Access mode: <https://adukar.by/news/abiturientu/belarus-v-bolonskom-processe>. – Access date: 11.03.2021.
2. BFUG Full Members [Electronic resource] European Higher Education Area and Bologna Process. – Access mode: [http://eha.info/page-full\\_members](http://eha.info/page-full_members). – Access date: 11.03.2021.
3. Education in the Republic of Belarus [Electronic resource] Official portal of the President of the Republic of Belarus. – Access mode: <https://president.gov.by/en/belarus/social/education>. – Access date: 04.03.2021.
4. Global Index: Overview [Electronic resource] Social Progress Index. – Access mode: <https://www.socialprogress.org/index/global>. – Access date: 11.03.2021.
5. Global Index: Results [Electronic resource] Social Progress Index. – Access mode: <https://www.socialprogress.org/index/global/results>. – Access date: 11.03.2021.
6. Healthcare [Electronic resource] Official portal of the President of the Republic of Belarus. – Access mode: <https://president.gov.by/en/belarus/social/healthcare>. – Access date: 11.03.2021.
7. Hrybau, A. Features and Trends in External Migration in the Re-public of Belarus / A. Hrybau, V. Kulakou, A. Napiórkowska-Baryła // Olsztyn Economic Journal. Olsztyn, 2020. P. 63-77.
8. Human Development Reports [Electronic resource] United Nations Development Programme. – Access mode: <http://hdr.undp.org/en/content/latest-human-development-index-ranking>. – Access date: 10.03.20221.
9. Information about the confessional situation in the Republic of Belarus [Electronic resource] Commissioner for Religious and Ethnic Affairs. – Access mode: <https://belarus21.by/Articles/1439296790>. – Access date: 16.03.2021.
10. Life Expectancy of the World Population [Electronic resource] Worldometers. – Access mode: <https://www.worldometers.info/demographics/life-expectancy/>. Access date: 10.03.2021.
11. Lotero-Echeverri, G., & Perez Rodriguez, M.A. Migrations in contemporary society: correlation with migration and development / G. Lotero-Echeverri, M.A. Perez Rodriguez // Retos-Revista de Ciencias de la Administración y Economía, 9(17), 141-154.
12. Luchenok, A.I. Influence of migration flows on the socio-economic development of Belarus / A.I. Luchenok, I.V. Kolesnikova // Institute of Demography of the National Research University «Higher School of Economics» № 649 – 650 [Electronic resource] – Access mode: <http://www.demoscope.ru/weekly/2015/0649/analit05.php>. – Access date: 15.03.2021.
13. Ranking of countries by level of religiosity [Electronic resource] Information portal NONEWS. – Access mode: <https://nonews.co/directory/lists/countries/religionsness>. Access date: 17.03.2021.
14. Religion [Electronic resource] Official portal of the President of the Republic of Belarus. – Access mode: <https://president.gov.by/en/belarus/society/religion>. – 16.03.2021.

15. Retirement table [Electronic resource] Information portal Myfin.by. – Access mode: <https://myfin.by/wiki/term/tablica-vyhoda-na-pensiyu>. – Access date: 10.03.2021.
16. Statistical Yearbook of the Republic of Belarus: stat. digest / Nats. stat. com. Rep. Belarus. – Minsk: RUE «Information and Computing Center of the National Academy of Sciences. stat. com. Rep. Belarus», 2020 – 436 p.
17. The life expectancy: what is it and why does it matter [Electronic resource] International Center on Aging (CENIE). – Access mode: <https://cenie.eu/en/blogs/age-society/life-expectancy-what-it-and-why-does-it-matter>. – Access date: 10.03.2021.
18. Unemployment in Belarus [Electronic resource] Information portal Benefit. – Access mode: <https://benefit.by/info/bezrobotica/>. – Access date: 12.03.2021.

## EVALUATION OF THE RESIDENTIAL REAL ESTATE MARKET IN THE OLSZTYN COMMUNITY

**Ilisio Manuel de Jesus**

El «University of Warmia and Mazury in Olsztyn»  
Poland, Olsztyn 10-718, ul. Oczapowskiego 4, 895234333  
[imdj@uwm.edu.pl](mailto:imdj@uwm.edu.pl)

**Key words:** *real state, consumer preference*

**Summary.** *The study presents an analysis of the housing preferences of the inhabitants of Olsztyn to determine relevant features that were related to residential real estate and the structure of the demand on the market. The methods and principles of were also described, using housing subsidies and the processes of loan granting. Changes in the demographic structure, average monthly gross salary, mortgage interest rates and housing prices were also investigated. Data showing the structure and dynamics of housing resources are also presented. The research results were based on statistical data from the Central Statistical Office in Olsztyn, data from bank reports and statements, as well as own survey designed to investigate the housing preferences of the population of Olsztyn. This research also analyzed the influence of factors on the demand for residential real estate in Olsztyn, and there was a positive assessment for the development of the real estate market. An analysis of the preference surveys revealed specific market behavior of buyers that supported the processes of market expansion. The demand for new flats resulted in an increase in the development investments of housing policy in the Olsztyn community.*

*(Поступила в редакцию 06.06.2021 г.)*

**Introduction:** Nowadays, it is not difficult to notice the fast growth rate of the real estate market in the Polish economy. This market is constantly enlarged by the development of land with new residential buildings, public buildings, such as offices or schools, and commercial, industrial or recreational premises. Over the last few years, the real estate rental system and its sale have developed quite strongly. Such development has been caused by the main need of the society for private property and income. Another task of