

MIGRATION MOVEMENTS AND THEIR IMPACT ON THE DEVELOPMENT OF THE POPULATION IN THE POLOG REGION

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Abstract

The subject of this paper is the migration movements of the population in the Polog region, for the period from 2004 to 2021. Migrations in the Polog region play an important role in the development of the region. They depend on natural, economic, and social factors. Migration and natural movement are the main indicators through which the demographic development of the population is expressed. Therefore, in this paper migration movements and their impact on demographic development have been analyzed.

The descriptive, analytical, comparative method, statistical, and cartographic methods were used in the preparation of the paper. The analyses and conclusions are based on the processing of data from the State Statistical Office of the Republic of North Macedonia.

In the Polog region from 2004 to 2021, internal migrations decreased by 118 people, while in external migrations the most intense flow was recorded in 2014, with -246 inhabitants and in 2021 with -141 inhabitants. Regarding these rates, we found that the total migration balance of the Polog region decreased in the period 2004-2021 from -146 inhabitants to -232 inhabitants.

Regarding the selectivity of migrations by gender in the analyzed region with the highest intensity are the migrations of women, while according to marital status, the migrations are more pronounced among young couples and young singles.

The aim is to analyze the migration movements of the population in the Polog region, with special reference to the internal migrations and migrations of the Polog region, Polog region migrations abroad and vice versa, the immigrant and emigrant population by gender and marital status, for the identification of the factors leading to these changes related to political instability, weak institutional capacity, but often with poor economic indicators.

Keywords: internal migrants, external migrants, gender, marital status and region.

1. Introduction

The Polog Region is located in the northwestern part of the Republic of North Macedonia on an area of 2417 km² [9]. It borders the Republic of Kosovo to the north and northwest, the Republic of Albania to the west, the Southwest Region to the south and southeast, and the Skopje Region to the east and northeast. According to the altitude, the lowest point of the region is located in the village of Raotince at 385 m, and the highest point is the highest peak in the country, Golem Korab (2764 m) [9]. According to estimates in 2021, 352,591 inhabitants live in the region. It has a population density of 145.9 i/km² [11]. The Polog Region includes 9 municipalities, two of which are urban municipalities, Tetovo with 104504 inhabitants and Gostivar with 93956 inhabitants (2021) [11]. The total number of settlements in the Polog Region is 186 settlements¹.

Population surveys are of great importance for the economic and social development of the region and the country. When it comes to the dynamics of the numerical movement of the population in a region, it can be observed not only through the natural movement, but also through the mechanical movement of the population.

The main goal of the research is to emphasize the changes in the values of the migration balance of the population and their differences between the municipalities and the identification of the factors that lead to these changes.

¹ <https://www.slvesnik.com.mk/Issues/3155bfe9104a42308ef853aeb61b82b9.pdf>

The starting hypothesis is that due to the unfavorable economic and political situation of the country and specifically of the region, we have an intense flow of population migrations.

Within the framework of the Republic of North Macedonia and the Polog Region, the data indicate intense internal and external movements of the population. This pace of reconciliation movements is also characteristic for the analyzed period 2004-2021, and that in all the municipalities of the Polog Region. From the analysis, we note that in the Polog Region in 2004 the total migration balance is -146 i. or at a rate of -0.50‰, while in 2021 is -232 or with a rate of -0.66‰, which implies that we have a decrease of 87 i. or a rate reduction of 0.16‰. In the Polog Region, most of the local population migrates outside the borders of the state, which affects the change in the composition of the population. For this reason, this paper focuses on the mechanical movement of the population in the Polog Region, analyzing the total migration movements of the population, the migration movements of the population within the framework of the Republic of North Macedonia and the migrations of the population outside the borders of the state, by municipalities, for the period of 2004-2021.

2. Research methodology

The available data from the completed censuses as well as the data from the vital statistics enable the monitoring of most structures and processes of the population [1]. By applying the necessary mathematical and statistical methods, the values of the necessary indicators for the total migration movements of the population, the migration movements of the population within the framework of the Republic of North Macedonia, and the migrations of the population outside the borders of the state, by municipalities, for the period of 2004-2021.

The data of these demographic components were taken from the State Statistics Office of the Republic of North Macedonia, that is, from the annual statistical books, from 2005-2022. The analysis refers to the Polog Region during 2004-2021, that is, the municipalities that belong to this region.

Some of the methods that were used in this paper are: descriptive method, analytical, comparative, statistical, graphic, and cartographic method. During the analysis and processing of the data, a comparison was made of the results obtained from this research and they are presented through tables, graphs, and maps.

3. Results and discussion

3.1. The migration movement of the population: Migrations represent a complex socio-economic process and a significant component on which the numerical dynamics of the population depend. They cause significant changes in the demographic structure of the areas where they take place [6]. The reasons for population migrations are different, as well as their scale and intensity. And they differ in different periods of time. As a result, there are changes in the structure of the labor market and new trends in regional development [4]. For migration to take place, the following are important: the motive for migration and the formation of a potential migration mass, then the very act of moving the population from one place to another and finally the adaptation of migrants to the new living conditions [6].

As we mentioned, the Polog Region is characterized by significant internal and external migration movements. The mechanical movement of the population, known as "Population migration" is a global process, which is variable over time[4]. Migration movements in the Polog Region are expressed through the total number of immigrated and emigrated citizens analyzed by municipalities for the period from 2004-2021, at administrative, regional, and state levels.

The migration balance represents the difference between people who moved in and people who moved out of a certain territory in a certain period of time [6]. From the table of the migration movement of the population, we note that in the Polog Region in the period 2004-2021, we generally have a negative migration balance, the value of which records a decrease from 2004 to 2021 by 87 inhabitants. During this period, the number of

immigrants in the Polog Region increased by 971 inhabitants, while the number of emigrants increased by 1058 inhabitants. This means that in general we have a larger number of residents who emigrate from their place of residence. While in the cooperation between urban and rural municipalities, a more intense flow of migrations was recorded in the municipalities of Tetovo and Gostivar.

The second part of the table shows the rates of the migration balance per 1000 inhabitants.² According to the data in the table and the graphic presentation, we can see that in general all municipalities have a decrease in the migration balance, but with the lowest rate of the total migration balance in the period 2004-2021 are the municipalities: Mavrovo and Rostusha and Jegunovtse. The municipality of Jegunovtse recorded the most intensive flow of migrations from 2013 to 2016, mainly in 2014 with 42 immigrated persons and 148 displaced persons, which means -106 i. or with a rate of -9.93%. Migrations as a very complex and complex phenomenon can be produced by numerous social, psychological, economic, political, military, religious, urban, environmental, health and other reasons [2].

Table 1. Migration movement of the population in the Polog Region, for the period 2004-2021.

Net migration															
Municipality	Total migrations					Internal migrations					External migrations				
	2004	2009	2014	2019	2021	2004	2009	2014	2019	2021	2004	2009	2014	2019	2021
Tetovo	101	-37	167	-65	-98	109	-37	-50	-31	-38	8	0	117	-34	-60
Gostivar	-51	-82	10	-39	-7	-72	-26	-6	-16	-12	21	-56	16	-23	5
Bogovinje	2	1	-28	-29	-46	-6	-1	-18	-26	-26	8	2	-10	-3	-20
Brvenitsa	-6	-18	-25	-16	-4	-8	-18	-18	-7	9	2	0	-7	-9	-13
Vrapchish te	10	9	22	13	-18	-6	12	11	7	-23	16	-3	11	6	5
Zhelino	14	-14	-14	-10	-9	12	-14	-3	-6	18	2	0	-11	-4	-27
Jegunovtse	-10	7	106	-20	-23	-10	7	-9	-13	-8	0	0	-97	-7	-15
Mav.& Rost.	-4	-17	-8	-20	1	-4	-10	-8	-22	3	0	-7	0	2	-2
Teartse	0	-1	-16	-31	-28	0	-1	15	-17	-14	0	0	-31	-14	-14
Urban mun.	152	119	157	104	105	181	-63	-56	-47	-50	29	-56	101	-57	-55
Rural mn.	6	-33	175	113	127	-22	-25	-30	-84	-41	28	-8	145	-29	-86
Polog R.	146	152	332	217	232	209	-88	-86	131	-91	57	-64	246	-86	141
RNM	113	510	475	276	915	-	-	-	-	.	113	510	475	276	915
%															
Municipality	Total migrations					Internal migrations					External migrations				
	2004	2009	2014	2019	2021	2004	2009	2014	2019	2021	2004	2009	2014	2019	2021

² This data is processed based on the formula: $Nm = \frac{(I-E)}{P} \times 1000$

I- the number of settlers; E- the number of expatriates in a certain area; P- the average annual number of population

Tetovo	- 1.4 2	- 0.4 1	- 1.8 3	- -0.7	- 0.9 4	- 1.5 4	- 0.4 1	- 0.5 5	- 0.3 3	- 0.3 6	0.1 1	0	- 1.2 8	- 0.3 7	- 0.3 3
Gostivar	- 1.0 2	- 0.9 9	- 0.1 2	- 0.4 7	- 0.0 7	- 1.4 4	- 0.3 2	- 0.0 7	- 0.1 9	- 0.1 3	0.4 2	0.6 8	0.1 9	0.2 7	- 0.2 4
Bogovinje	0.1 3	0.0 3	- 0.9 1	- 0.9 3	- 1.4 6	- -0.4	- 0.0 3	- 0.5 9	- 0.8 4	- 0.8 3	0.5 3	0.0 7	- 0.3 3	- -0.1	- 0.1 0
Brvenitsa	- 0.3 7	- -1.1	- 1.5 1	- 0.9 6	- 0.2 2	- -0.5	- -1.1	- 1.0 9	- 0.4 2	- 0.4 9	0.1 2	0	- 0.4 2	- 0.5 4	- 0.4 9
Vrapchish te	1.1 6	0.3 4	0.8 1	0.4 7	0.5 8	- -0.7	0.4 5	- 0.4	0.2 5	0.7 4	1.8 6	0.1 1	0.4	0.2 2	0.1 9
Zhelino	0.5 6	- 0.5 3	- 0.5 1	- 0.3 5	- 0.3 2	- 0.4 8	- 0.5 3	- 0.1 1	- 0.2 1	- 0.6 3	0.0 8	0	- -0.4	- 0.1 4	- 0.1 4
Jegunovtse	- 1.3 8	- 0.6 5	- 9.9 3	- 1.9 3	- 2.1 5	- 1.3 8	- 0.6 5	- 0.8 4	- 1.2 6	- 0.7 5	0	0	- 9.0 9	- 0.6 8	- 0.6 5
Mav.& Rost.	- -4	- 1.9 3	- -0.9	- 2.2 6	- 0.1 2	- -4	- 1.1 3	- -0.9	- 2.4 9	- 0.3 5	0	- 0.7 9	0	0.2 3	0.2 4
Teartse	- 0	- 0.0 4	- -0.7	- 1.3 5	- 1.0 9	- 0	- 0.0 4	- 0.6 6	- 0.7 4	- 0.5 5	0	0	- 1.3 6	- 0.6 1	- 0.5 5
Urban mun.	- 1.2 6	- 0.7 0	- 0.9 0	- 0.5 9	- 0.5 3	- 1.4 9	- 0.3 7	- 0.3 2	- 0.2 7	- 0.2 5	0.2 4	- 0.3 2	- 0.5 7	- 0.3 2	- 0.2 9
Rural mn.	0.0 6	0.2 3	1.2 0	0.6 4	0.8 2	0.2 3	0.1 7	0.2 1	0.0 6	0.2 7	0.2 9	0.0 6	1.0 1	0.1 9	0.1 9
Polog R.	- -0.5	- 0.4 8	- 1.0 4	- 0.6 7	- 0.6 6	- 0.7 2	- 0.2 8	- 0.2 7	- 0.4 1	- 0.2 6	0.2	- -0.2	- 0.7 7	- 0.2 7	- 0.4 0
RNM	- 0.0 5	- 0.2 5	- 0.2 3	- 0.1 3	- 0.4 4	- -	- -	- -	- -	- -	0.0 5	0.2 5	- 0.2 3	- 0.1 3	- 0.4 4

Source: Statistical yearbook of the Republic of North Macedonia for 2005, 2009, 2015, 2020 and 2022.
<https://www.stat.gov.mk/> (Processed by the author)

The reason for the lowest rate of migration balance in those two municipalities is the increase in the level of education of the population and the movement towards urban municipalities. In the municipalities of Mavrovo and Rostusha, most of the villages are mountainous and for this reason, the inhabitants move to the nearest cities such as: Debar, Gostivar, Skopje, and Tetovo. As for the municipality of Jegunovtse, in addition to the movements in the urban municipalities, for a better life, they are also directed abroad.

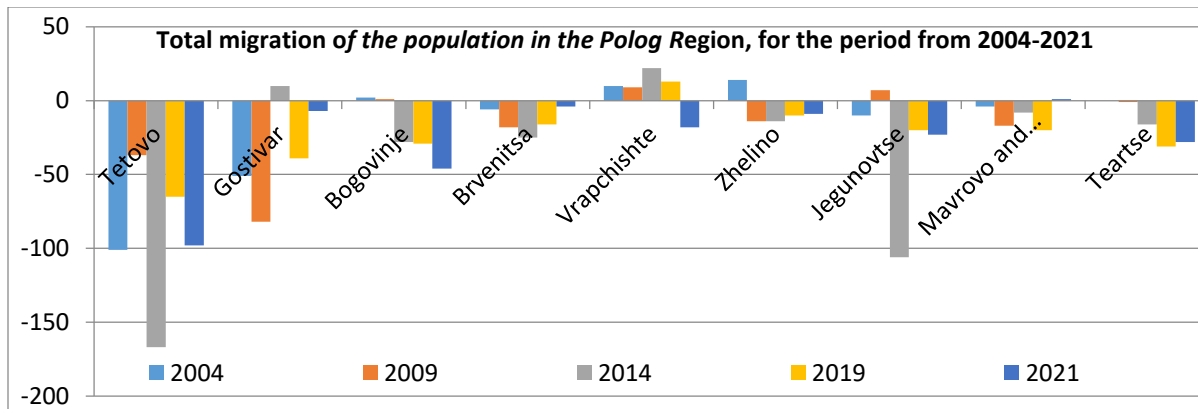


Figure 1. Total migration of the population in the Polog Region, for the period from 2004-2021.

3.2. *Internal migration:* We previously presented the data on internal migrations, more specifically the migration balance. As motivating factors that affect population migration are the needs and desires of people who want a better life, and the main reason appears to be: the lack of minimal means of survival, the unfavorable general economic situation, etc. [3].

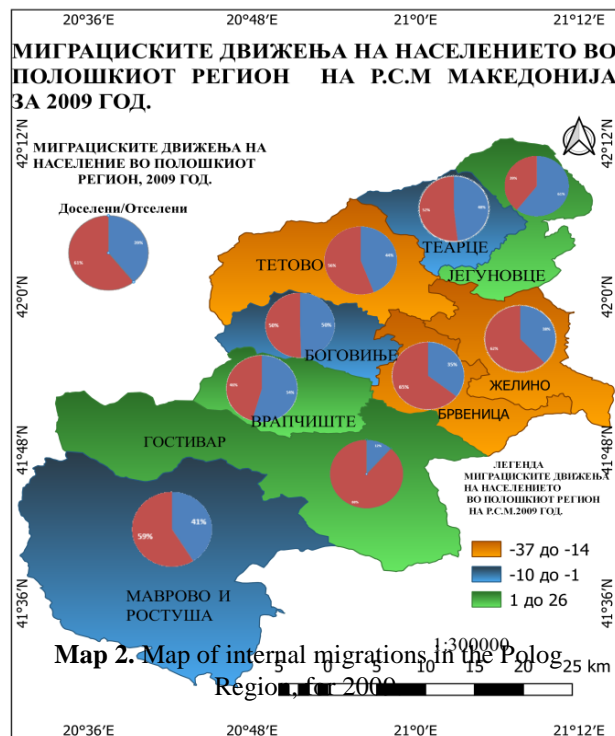
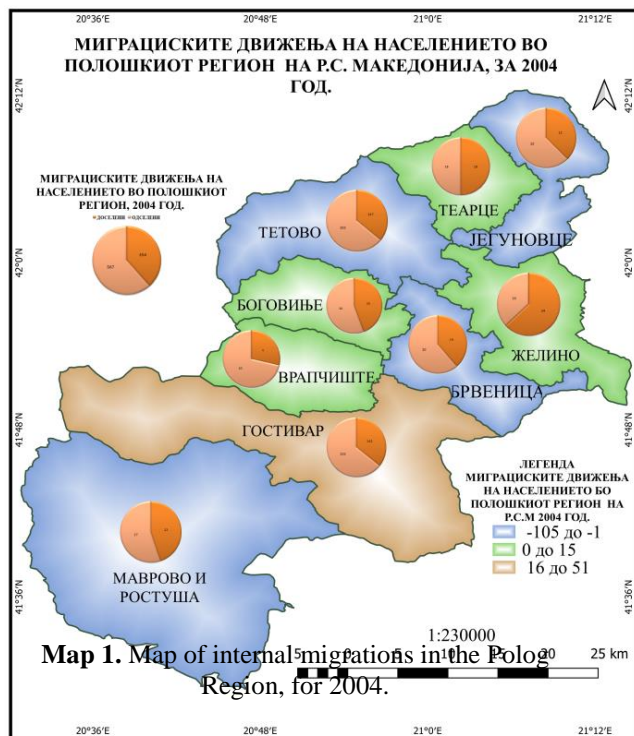
In the total number of migrations, an important place is occupied by migrations that take place within the borders of the state and are related to socioeconomic development. In the Polog Region, the internal migration of the population takes place throughout the entire territory of the Republic of North Macedonia, including a significant number of municipalities. Internal migrations in the Polog Region take place with the movement of the population on the relation from village to village, and village to city, especially to the city of Skopje, in order to solve their existential problems, the problem with employment, etc.

According to the data in table 1, internal migrations in the Polog Region recorded a decrease during the period 2004-2021 for 118 people, which means from -209 (2004) to -91 (2021). During the period 2004-2021 the migration balance rate decreased by 0.46‰, that is, from -0.72‰ (2004) to -0.26‰ (2021). The municipalities of the Polog Region during the period 2004-2019 have different indicators of migration balance, with the highest and positive rate of migration balance is only the municipality of Vrapchishte with 0.25‰ (2019), while the municipality with the lowest rate Mavrovo and Rostushe with -2.26‰ (2019). According to the data of 2021, these two municipalities have changes in internal migrations, the municipality of Vrapchishte has a negative migration rate of -0.74‰, while the municipality of Mavrovo and Rostushe has a positive rate of 0.35‰.

According to the data for the period 2004-2021, the largest flow of internal migration in the Polog Region was realized in 2004, as well as in 2019.

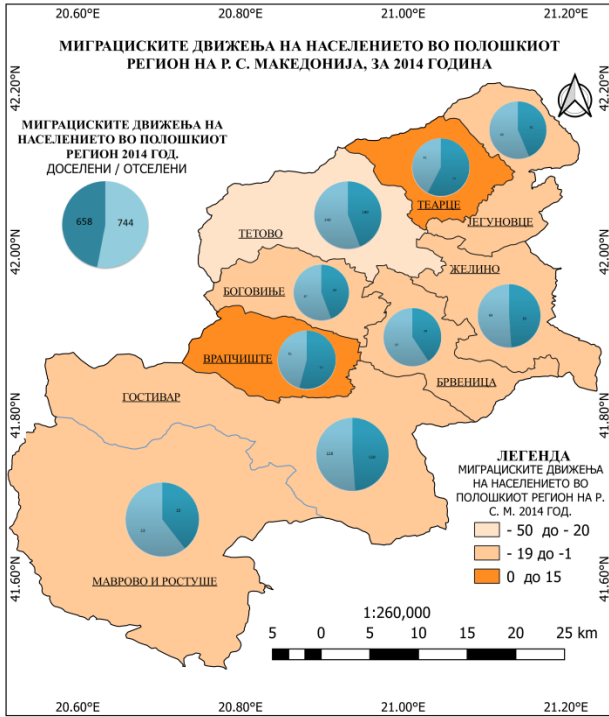
The general migration movement in the Polog Region is the result of intensive migration movements, which take place within the borders of the Republic of North Macedonia. This can be seen from the number of immigrants and emigrants who carry out their migrations as a result of dissatisfaction with life in the villages, or because of inadequate living conditions in the mountain villages, the possibility of a better life and earnings in urbanized places or cities, due to the ever-increasing technical-technological innovations and modernization of society, due to marriage, etc.

The migration movement hurts the development of the population in the areas from which the population is moving out. Emigration directly affects the total number of the population, in the reduction of the natural increase, and leads to oscillations in the population structures, population density, etc. But at the same time, there is a positive impact in the increase of the total number of the population in the areas where it is settled.

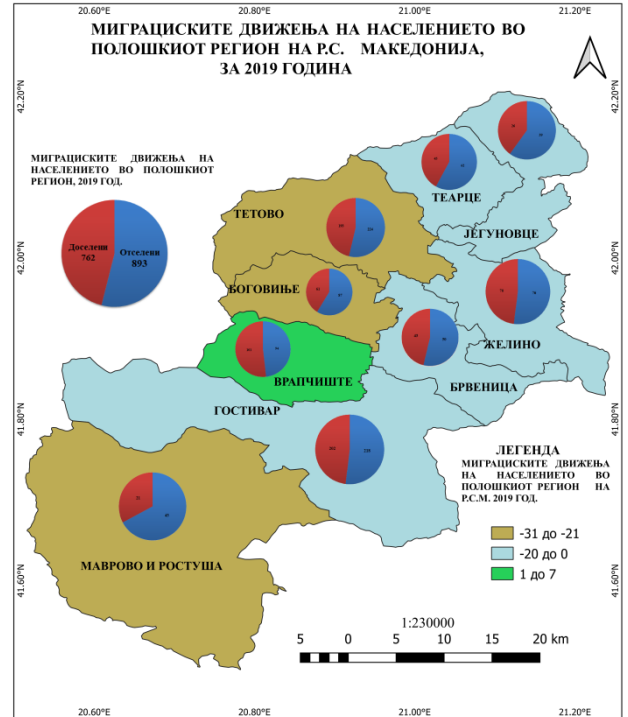


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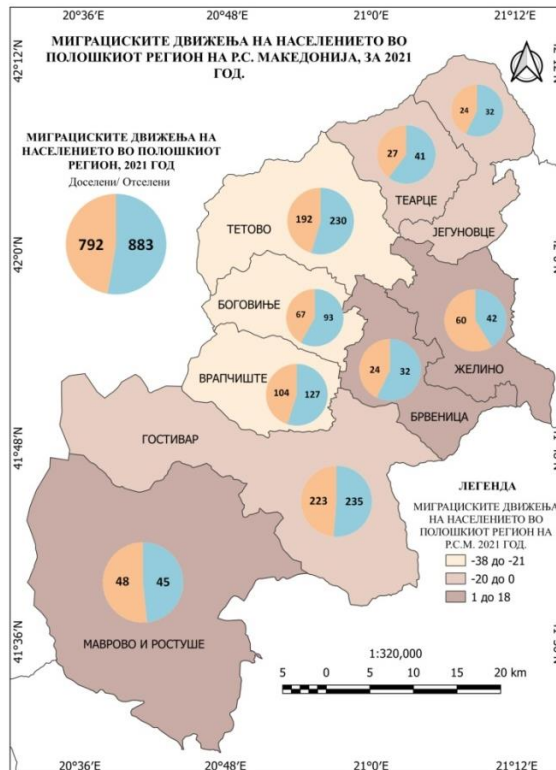
are map views, so that we can more clearly see and analyze the differences between the municipalities. For each year, from 2004 to 2021, we presented the internal migration movements in the Polog Region. According to the data on migrations from one municipality to another, in the Polog Region, migrations mostly take place in the settlements in the respective municipalities, to neighboring and urban municipalities. Interregional migrations are carried out in the nearest regions, such as: Skopje Region, South-East Region, North-East Region, Pelagonia Region and Vardar Region. Migrations to municipalities outside the region stimulate the aging process of the population by disrupting the age structure, which further affects the volume of births.



Map 3. Map of internal migrations in the Polog Region, for 2014.



Map 4. Map of internal migrations in the Polog Region, for 2019



Map 5. Map of internal migrations in the Polog Region, for 2021.

3.3. External migrations: External migrations include the spatial relocation of the population outside the borders of the state. External migration in terms of territorial scope can be between neighboring countries, continental and intercontinental [6]. As for external migrations, the destinations to which the population emigrates are the countries of Western Europe and those overseas [4]. In 2017 the number of our emigrants in foreign countries reached 534,720 [14], which represents 25.7% of the total number of inhabitants in the Republic of North Macedonia.

The categories of people who participate in external migrations in the Polog Region can be divided into: people who migrate for employment, who migrate with their family and those who migrate individually and later join other members of their families.

The population's desire for better living conditions, a higher standard of living, seeking opportunities for better personal and professional development and others are just some of the many reasons that encourage the population to leave their current place of residence and move to another place [5]. However, the main economic reasons appear to be the lack of the minimum means of subsistence, high unemployment rate of the active population, the general unfavorable economic situation, etc.

From the above table of the migration movement of the population, we note that in the Polog region in the period 2004-2021, the rate of the migration balance of external migrations decreased by 0.02‰, from 0.20‰ in 2004 to -0.40‰ in 2021, while in the Republic of North Macedonia during the analyzed period, the most intensive migration flow was observed in 2009 and 2014 with a rate of -0.2‰.

As for the municipalities with the largest number of displaced population, the urban municipalities are the most populous. Regarding the general population, only the municipality of Vrapcishte has the highest and positive rate of migration balance, which has decreased during the period. The dominance of the Turkish population in the municipality of Vrapcishte and the same religious affiliation as the population in the region is the reason for the arrival of the new population, where marriages are mainly influential.

The municipalities that show a decrease in the migration balance of the population are: Jegunovtse, Tetovo, and Teartse. The highest flux of migrations during the period in these municipalities was observed in 2014, and the lowest rate of the migration balance was observed in the municipality of Jegunovtse with -9.93‰, Teartse with -1.35‰ and the municipality of Tetovo with -1, 83‰. The other municipalities, even if they show lower indicators, still have negative migration balance values.

From the above, it can be concluded that external migrations in the Polog Region are quite present, with a tendency to increase, with a negative impact on the total number of population in the region, which will directly affect the reduction of the natural increase and will lead to oscillations in the population structures, and indirectly in the overall well-being and economic effects of the state. The destinations towards which external migrations are oriented are all the Balkan countries, then Austria, Switzerland, Germany, Denmark, Sweden, Norway, America, Australia, etc.

4. Conclusion

This paper focuses on the mechanical movement of the population, analyzing: the migration movements of the population in the Polog Region, including internal migrations, and external migrations, from 2004 to 2021. In recent years, the Polog Region has been facing numerous demographic problems and challenges arising from economic and social conditions, which affect demographic trends in the country.

According to what we analyzed in the paper, we note that the migration movement of the population in the Polog Region in the period 2004-2021 in general, there is a negative migration balance, the value of which recorded a decrease from 2004 to 2021 by 87 inhabitants, that is, at the level of the Republic of North Macedonia, we have a decrease by 802 inhabitants. According to the analyzed data, internal migrations in the Polog Region recorded a decrease during the period 2004-2021 for 118 people, that means from -209 (2004) to -91 (2021). Internal migrations in the Polog Region take place with the movement of the population in the

relation from village to village, city to city, city to village, village to city, especially to the city of Skopje, in order to solve their existential problems, the problem with employment, etc. According to the analysis, we note that in the Polog Region in the period 2004-2021, the migration balance of external migrations decreased by 198 i, from 57 i. in 2004 at -141 i. in 2021.

From the above, it is noted that all types of migration are more pronounced in urban municipalities compared to rural municipalities. From all that was analyzed, we can conclude that the decrease in the migration balance of the population is a consequence of the reduced rate of the immigrated population and the increase in the rate of the emigrated population. The reasons for the decrease in the migration balance of the population are: the intensive emigration of the active population abroad, but motivating factors that influence the migration of the population are the needs and desires of people who want a better life and the main reason appears to be a lack of minimum funds for survival, the unfavorable general economic situation, etc [5]. Also, migrations can occur for other reasons as emigrants try to provide better opportunities for themselves and their families, such as sending their child to a better and safer school or finding a job that will not only have a sufficient salary but also significant benefits and career growth prospects.

From the conducted research, it is established that migrations in the Polog Region are quite present, with a tendency to increase, with a negative impact on the total population in the region, which will directly affect the reduction of natural growth, and will lead to oscillations in the population structures and indirectly in the overall well-being and economic effects of the state.

In our opinion, for there to be a change in the rate of migration balance of the population and the oscillation of migrations, specific population, social, economic, and environmental policies should be undertaken which will create more jobs, facilitate conditions for a brighter future of young people, a higher standard of living, a cleaner environment. Policies that will positively affect the overall sustainable development of the population.

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