ANALYSIS OF THE EXPECTED DEVELOPMENT OF DEMOGRAPHIC FACTORS AND THEIR ADAPTATION TO THE LABOR MARKET IN SLOVAKIA

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Abstract

The research subject of our work is demographic development as a factor of labor market development in the Slovak Republic. The aim of this paper is to point out the topicality of the researched issue, which is the demographic development of the population in terms of age, birth rate and mortality and their impact on the labor market in Slovakia. In the first part, we will approach these factors fundamentally influencing the labor market from a theoretical point of view with the help of an analysis of the literature on the given issue. In the next part of the paper we will focus on statistical indicators of demographic development. Also in this section we will focus on indicators of the age of the population of the Slovak Republic and the economically active population by age groups. We will point out the measures taken by the government to eliminate the risks posed by possible developments. Every advanced society strives to create the conditions now for sustainable social and economic development in the future. Economic and social development is closely linked to the labor market. Migration can alleviate the process of population decline in Slovakia, but it will have only a minimal impact on the process of population aging. The contribution can be the use of the post-productive population, migration as the primary source of absent labor and preparation for labor shortages.

Keyword

demographic development, labor market, economically active population, age group, productive age, birth rate, mortality

JEL classification: *J1, J6, F01, J11*

Introduction

Since the 1960s, the rate of population growth has been declining. In an increasing number of countries, demographic scissors are closing. Despite the influx of migrants, some developed countries are experiencing depopulation - a decline in population. Eastern Europe is beginning to approach the West with its reproductive behavior and is demographically aging approximately the same. Theoretical demography creates models of the development of demographic systems and seeks universally valid laws. In this article we discuss the issue of the aging population in the Slovak Republic and the associated birth rate, mortality and migration. In the near future, strong post-war years will start to retire, weak post-revolutionary years are entering the labor market, more and more people are studying at universities and migration for work to other EU countries is very high. There is a risk that in the course of several years there will not be enough workers on the Slovak labor market (Employment Institute, 2013). The number of people over the age of 80 should almost triple to 12%. In Slovakia, we can expect a similar scenario as in the EU, and even some analysts assume that the number of older people of retirement age will be 30 years higher than the European average. Among the basic factors

influencing the labor market we can include the education of the population, labor migration, the introduction of new measures and also the demographic development in the given society in the conditions of the Slovak Republic. The phenomenon of demographic development affects society not only from a social point of view, but at least to the same extent from an economic and economic point of view. The Slovak labor market is characterized by a weak link between economic growth and employment, respectively unemployment, which represents a certain barrier to recovery from previous employment declines. If we start from the assumption that economic growth needs a labor force for its creation, then a higher growth rate will be associated with employment growth and at least a partial reduction in unemployment (Lubyová, M. – Štefánik, M. et al. 2015). In our paper we will focus on the factors of this phenomenon and the intensity of their influence on the development of the labor market. We will outline the problematic aspects of the situation, and examine what the government's steps are in this issue.

1. Theoretical background

Demographic change is taking place throughout society and its consequences are increasingly being reflected in employment policy. The objectives of the Europe 2020 strategy in the field of employment policy should take into account demographic change and strive to build a work environment adapted to the age of workers and a massive expansion of further education and training opportunities (Strunz, Vojtovič, 2014). In particular, there is a need to increase the employment rate of workers over the age of 50, to prevent older workers who are interested in remaining in the labor market from being excluded from the labor market, thus guaranteeing them a decent pension and at the same time feeling socially needy. (Páleník, 2014). In the future, the process of demographic aging will also affect the structure of the workforce, as confirmed by (Punch, Pearce), when they claim that the „European workforce will age as well as the entire population". In the labor market in the Slovak Republic, a situation has developed in recent years where more and more people are reaching retirement age. At the same time, there are fewer and fewer younger people who are at the age of leaving education and entering the labor market. This is due to historical developments (mainly the decline in birth rates in the 1990s and its more favorable development in earlier periods). In addition to economic growth and employment, this phenomenon is an important explanatory factor in the current mismatch between supply and demand in the labor market and the observed shortage of suitable potential employees. The flow indicators show that in one year, approximately 50,000 people currently enter the labor market (employment or unemployment) after graduation, and approximately 1,000 more people retire from the labor market (whether old-age or disabled).

The very fact that we are among the EU countries with the fastest aging population (second place among EU countries) is a fact that unequivocally confirms the need to forecast additional labor needs by 2040. It is precisely labor replacement that makes up the bulk of labor market needs already in medium term. This is compensation caused by the departure of employees from the labor market, especially into old-age retirement. It is assumed that strong population years - persons born in the period 1953-1958 will form a substantial part of people leaving the labor market by 2024. We can assume that in 2040 the number will double, perhaps even triple (MPSVR, 2019).

1.1 Demographic development in Slovakia

The basis for the development of the supply side of the labor market is demographic development. The population and its age and gender structure are the basic determinants of labor supply. In addition, the working age population (15 to 64 years) has immediate potential for the number and structure of the workforce, as the labor force is a subset of the productive population.

One of the most serious, but nevertheless not so popularly solved problems today is the aging population. As in the whole of the European Union, problematic indicators regarding birth rates are being recorded in Slovakia, which raises reflections on the future of our country. The evolution of the demographic structure of the age group speaks of

a serious impending problem. In Slovakia and in other European countries, there is a very small number of children born compared to the past (Bleha, B. et al. 2003).

From 1980 to 2000, there was a decrease of almost 50 percent in Slovakia (from 95 thousand children per year to 55 thousand children). On the graph of the prediction of the age structure, we see a large imbalance in the age structure of the population. This imbalance is mainly due to two important indicators - fertility and mortality, and to a lesser extent migration is added to this situation. Fertility refers to the average number of children born to a woman during their lifetime. Currently, this indicator is at 1.45. While in the late 1980s there were about 2 children per woman in 1995, it was only 1.5 children. This declining trend continued until 2002, when a record low fertility rate of 1.19 was recorded in Slovakia. The phenomenon of declining fertility is caused by the so-called demographic and economic paradox. He talks about the connection between economic changes in the country and the development of fertility. With the country's growing GDP, increasing education and women's independence, fertility is declining at the same time. This trend can often be observed in developed countries. However, the paradox is valid only to a certain extent, when fertility has stabilized and is slowly beginning to increase (Dennison, T., & Ogilvie, S. C. 2016). Birth rates have risen slightly since 2002, currently reaching 1.45 children per woman. However, the longer such low fertility persists, the greater the age gap between the population. The predictions are slightly increasing, but only to a small extent, a roughly linear increase from the current 1.45 to 1.65 in 2060. The long-lasting low birth rate will result in a reduction in the number of children born each year from the current 55,000 to about 32 thousand in 2060. While a large number of the population will enter retirement age, an ever smaller number will be classified as the economically active population (Radvanský, M. 2010).

Another important indicator is mortality. It speaks of the average life expectancy of the population at birth, while declining mortality causes the population to age, and high mortality causes its decline. Mortality in Slovakia has been developing steadily since 1989 and can be predicted with a relatively high probability. As Vaňo et al (2002)“ write regarding the structure of mortality, in all five variants of mortality development (very high, high, medium, low, very low) the largest decrease is expected in those age categories in which the situation is least favorable and lagging behind developed countries is the largest. These are mainly middle-aged and older men and older women. Only a small reduction in the difference in mortality between men and women is expected“. As Vaňo further states „The development of migration in Slovakia will largely depend on the course of integration processes in Europe and on the migration situation in the world. In any case, the relocation of people from less developed countries to more developed ones is a global trend that Slovakia will not do without. It is assumed that the migration balance of the Slovak Republic in the future will be influenced mainly by a group of inhabitants (citizens of the Slovak Republic) who will seek employment in developed countries and a group of immigrants from developing countries“. This statement is supplemented by Krajňáková (2019), when she claims that foreign, international migration is also considered one of the fundamental civilization challenges of the 21st century, because it has serious economic, social, population, cultural, political, security, environmental and other impacts.“.

Population aging is a global demographic process that is most prevalent in developed countries. This state of demographic development of the population is the result of the previous economic and social development of society. Technological and scientific progress and the growth of work efficiency have created conditions that have led to a reduction in mortality, an increase in average life expectancy and better health care for the population (Vojtovič, S. - Krajňáková, E. 2017). The simulation for countries shows that the aging of the population causes a decline in the growth of labor supply and an increase in the growth of capital stock, which leads to a deepening of capital. Population aging can significantly weaken growth potential. However, the result is sensitive to the mode of intergenerational transfer of human capital. The study shows that the method of social transfer of human capital is

quite important for the long-term growth of the economy (Choi, K. –Shin, S. 2015).

A significant upward shift in the age structure of the population is mainly caused by the first two previous factors, which are birth rates and mortality. This creates the structure of an inverted pyramid, which speaks of a problematic demographic situation. The largest part of today's population will move into retirement age, and the ever-decreasing number of children born, which is expected by 2060, is causing the pyramid to narrow further. At today's mortality, the upper part of the pyramid would start to narrow rapidly around the age of 75, but with a decrease in mortality in 2060, this narrowing will not begin until around the age of 85. This causes an even greater increase in the economic dependency index. Thus, a situation arises where an ever-increasing part of the population receives a pension and fewer and fewer people have to work for these pensions. There is a significant imbalance, the solution of which must come as soon as possible, otherwise there may be an inability to provide these pensions. Fertility and fertility in Slovakia has undergone a significant and historically unique transformation in the last two decades or so. The period of relatively easy-to-read trends in reproductive behavior, which stemmed from the considerable stability of the mechanisms, thus ended in the early 1990s and was replaced by a period characterized by considerable dynamics and a range of changes with much more difficult to predict developments. Moreover, the transformation of the model of reproductive behavior is so fundamental that the information obtained from analyzes of the nature of birth and fertility after the Second World War lost much of its informative value. This is one of the reasons why fertility is a very problematic component in the current conditions (Šprocha – Vaňo –Bleha 2013).

1.2 Current and expected demographic trends

Mortality is likely to continue to decline and more immigrants from non-EU countries will arrive in Slovakia. Combined with the age structure of the population, this will mean a reduction in the number of births since about 2020 and, starting with the current, a continuous increase in the number of deaths. The result will be depopulation beginning shortly after 2021 and a significant acceleration of the aging process after 2020. Migration can alleviate the depopulation process, but will have only a minimal impact on the aging process. A number of theoretical models have been proposed to explain why international migration is beginning, and although each ultimately seeks to explain the same, it uses radically different concepts, assumptions, and reference frameworks. The neoclassical economy focuses on differences in wage and working conditions between countries and on migration costs; he generally understands movement as an individual decision to maximize income. In contrast, "The new economy of migration" considers conditions in different markets, not just labor markets. Perceives migration as a household decision taken to minimize risks to family income or to overcome capital constraints on family formation activities (Massey, D. S. a kol. 1993). Due to the problems of finding a job on the labor market, the population aged 50 to 64 is of special interest. This part of the productive population is currently at an all-time high, mainly due to strong generations born during the period of increased birth rates after World War II and in the 1950s. (Štefánik, M. et al., 2018). The aging of the population in Slovakia will be a universal process until 2050, which means that it will take place continuously and in all regions. As already mentioned, the process of population aging in Slovakia is mainly related to the development of birth rates. That is why we have a region with a younger population in Slovakia, which consists of regions with a higher birth rate, such as the Prešov, Žilina and Košice regions. All others have regions with older populations. The current changes in demographic development have already been reflected in the development of the workforce. Labor force growth is slowing down resp. they are turning into a decline and the workforce is aging. Demographic developments will continue to affect the number and structure of the workforce in the future. It is generally assumed that a smaller, older and more ethnically diverse workforce will be involved in achieving economic results than at present. People aged 50-64 currently make up almost a quarter of the economically active population in Slovakia, while at the beginning of the 21st century it was

only about 14%. In addition to the demographic impact on the population in this age group, raising the retirement age also plays an important role in relation to the labor market. People are living longer - with average life expectancy over the last two decades in almost all regions. The populations of many regions are aging rapidly. The aging process is a major achievement that did not begin to develop until the end of the twentieth century. Demographers define an aging population as an increasing middle age of the population or a change in the age structure of the population, so that older people are increasingly represented in the overall age structure of the country. (Shrestha, L. B. 2000).

2 Aim and methods of research

The main goal of the paper is to evaluate and identify the impact of population aging, birth rates and mortality on employment in the Slovak Republic. When examining demographic development as one of the main factors that affect the labor market, we will use the analysis to approach the demographic development in Slovakia, focusing mainly on three indicators of the object, which are birth rate, mortality and population migration. (Lisenkova, K., Mérette, M. and Wright, R., 2013). The main benefit of addressing this issue should be the ability to prepare for future labor shortages in the labor market or to use the possibility of migration as a source of absent labor. In order to fulfill the main goal, we have also defined partial goals, which:

1. They analyze the current state of the population,

2. They characterize the demographic development in the Slovak Republic,

3. They will detect the development trend of the economically active population according to age groups,

4. They examine selected indicators and find out their direction.

2.1 Methodology

In order to fulfill the main goal and sub-goals, which we set out in the previous part of the paper, it is necessary to proceed in accordance with the predetermined methodological procedure contained in the theoretical and analytical part.

1. The elaboration of the theoretical part of the paper requires a detailed study of the issue through monographs, scientific articles and relevant legislation.

2. The elaboration of the analytical part of the work must be divided into several steps:

a) The introduction of the analytical part of the paper is devoted to a survey of the current state and development of the population with a priority focus on the population of age category 50. In this part, the statistical method is applied as an analysis

b) The next step for the fulfillment of the main goal is a survey of the current state and development of birth rates, mortality and migration.

In this case, we again apply the basic statistical method-analysis.

c) On the basis of the obtained and processed data, we will prepare data for the assessment of the dependence between the aging of the population and the development of the labor market by means of regression analysis.

d) In the final part of the work we summarize the results and identified problems, for which we will try to suggest potential measures.

3 Labor market and employment on the basis of age

The workforce will age and there will be a shortage of young workers in several countries, so it is necessary to focus on the older age group of employees in working age, ie to design strategies that will eliminate the shortcomings of older workers and exploit its full potential. . Population aging, the decline in birth rates, but also other demographic trends can be considered threats that can significantly threaten the situation on the labor market and the overall economic growth in the country. The following chapter is devoted to the analysis of the development and situation on the labor market in the Slovak Republic. Even according to available statistical data, the demographic development in

Slovakia is moving towards an aging population, which confirms our statement.

Since 2014, the average age of the population has been above 40 years. In 2016, it reached a value of 40.4 years and according to the update from 2019, this indicator is approaching 41 years, more precisely 40.8 years in 2018. Half of the population of Slovakia is currently older than 39.8 years. The year 2018 is a turning point in the monitoring of the aging of the population, because the number and share of seniors in Slovakia for the first time in history exceeded the number and share of children. In 2018, for the first time, there were 102 people aged 65 and over for every 100 children. Population aging is mainly affected by the aging of the so-called post - war generation and weak fecundity (physiological fertility) of the generation born in the 90s of the 20th century. Although the manifestations of the aging of the Slovak population are not so noticeable today, the development of the age structure points to the acceleration of the aging process of the population in Slovakia. Demographic development in Slovakia is characterized by:

- gradual decrease (since 2003 a slight increase, stagnation) of the birth rate
- reducing (stagnation) mortality
- by increasing life expectancy
- the growth of a group of very old people over the age of 80

The population of the Slovak Republic has been aging since the end of the 1950s, but this process has gained significant intensity since the 1990s. Despite the fact that in 2016 most children were born in the last 5 years and the birth rate is rising, its values are still low. The manifestation of the aging of the population is changes in the structure of the population, increasing the average age of the population, increasing values of synthetic indicators.

We will approach the indicators of the age of the population in the period from 2007 to 2016 in the following table, from which we will find out the average age, media age, aging index, as well as the index of economic burden of selected groups of the population in the given period.

Table No.1 Age indicators of the population of the Slovak Republic, 2007 - 2016

Ukazovateľ	Pohlavie	Rok									
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
priemerný vek	muži	36,34	36,61	36,84	37,09	37,41	37,68	37,96	38,24	38,50	38,74
	ženy	39,54	39,81	40,05	40,28	40,61	40,87	41,15	41,43	41,68	41,91
	spolu	37,99	38,25	38,49	38,73	39,05	39,32	39,60	39,87	40,13	40,37
mediánový vek	muži	34,60	35,00	35,40	35,80	36,30	36,70	37,10	37,60	38,00	38,40
	ženy	38,00	38,30	38,60	38,90	39,40	39,70	40,10	40,60	41,00	41,40
	spolu	36,20	36,50	36,90	37,20	37,70	38,20	38,60	39,00	39,40	39,80
index starnutia *	muži	55,25	56,93	58,23	59,06	60,89	63,16	65,68	68,23	71,06	73,75
	ženy	97,83	100,67	102,94	104,07	106,20	109,07	112,20	115,34	118,62	121,39
	spolu	76,00	78,26	80,01	81,01	82,96	85,51	88,34	91,17	94,22	96,96
index ekonomického zaťaženia **											
	spolu	38,37	38,00	38,09	38,23	39,25	39,81	40,57	41,39	42,41	43,77

* počet osôb vo veku 65 rokov a viac na 100 detí vo veku 0 – 14 rokov
** počet detí vo veku 0 – 14 rokov a osôb vo veku 65 rokov a viac na 100 osôb vo veku 15 – 64 rokov
Zdroj údajov: ŠÚ SR

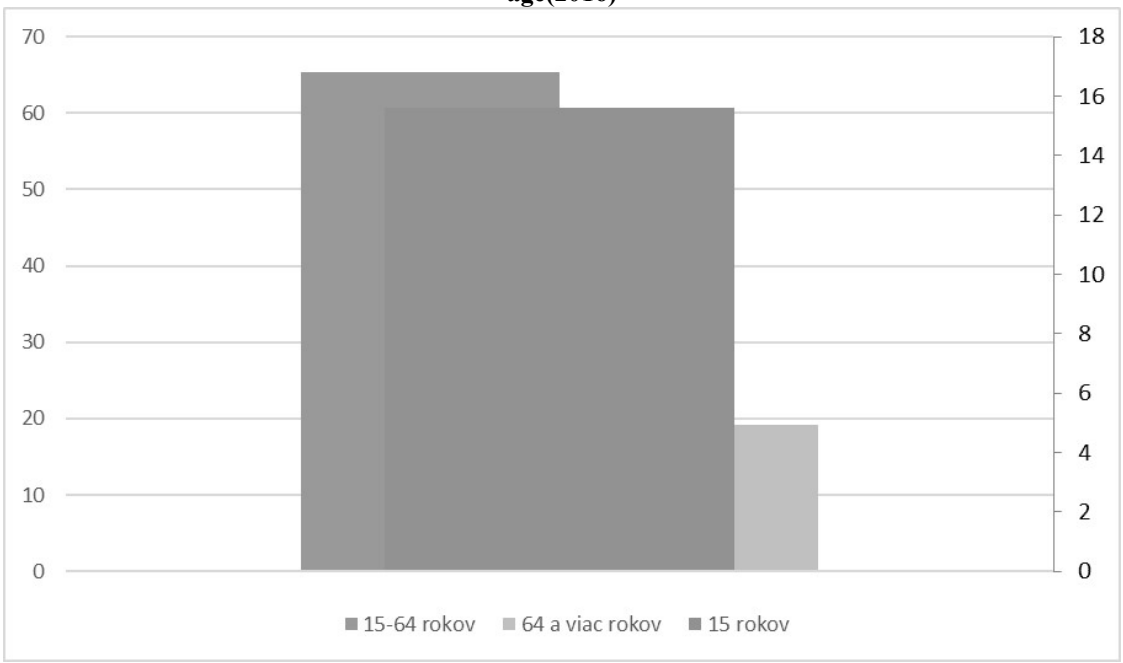
The table shows that the average age of men is approximately 3 years lower compared to the average age of women. Women have averaged almost 42 years, men less than 39. The median age of the population is also increasing, the total population of Slovakia has increased from 36.2 years in 2007 to 39.8 years in 2016. In terms of gender, half of the female population is already older than 41.4 years and half of the male population older than 38.4 years. The aging

index increased by approximately 21 points in the observed period (2007 - 2016), so that in 2016 there were almost 97 persons aged 65 and over per 100 persons aged 0-14. In the female population, the value of the aging index has been above 100% since 2008. In 2016, the aging index was 121.4% for women and 73.8% for men. Within the female population, the post-productive component has predominated over the pre-productive component since 2008.

The economic burden index is also constantly increasing; in 2016, there was a year-on-year increase of 1.4 points. During the monitored 10 years, its value increased from 38.4 (2007) to 43.8 in 2016. This means that per 100 inhabitants of working age (15-64 years) there were 44 inhabitants of non-productive age (0-14 -year and 65 and more years).

As can be seen from the following graph, at present in Slovakia the ratio between the number of persons of working age, it means. 15 - 64 years (65.3% in 2016) and the number of persons in pre-productive age, i. birth - 15 years (15.6% in 2016) and post-productive age, i. 64 and more years (19.1% in 2016) still relatively favorable. However, this is only a temporary situation, which will change in the near future to the detriment of the productive age, as demographically strong years will gradually move into the post-productive age.

Graph 1 Comparison of the number of persons in pre-productive, productive and post-productive age(2016)



Source: Own processing

In table no. 2 we compared the economically active population by age groups. We focused on the years from 2008 to 2018. We noticed that in the youngest age group of 15-19 years, a decrease in the number of active population has been recorded since 2008, but the number has started to rise again in the last three years. In the age groups from 20-34, a decrease in the number of active population was recorded. The number of economically active population aged 20-24 decreased the most, which may be due to the ever-increasing number of people studying at universities. On the contrary, in the age groups from 55 years and more the number of active population increased, which is caused by the aging of the population. In the age group 65 and over, the increase between 2008 and 2018 was more than 300%, which is the largest

increase in the number of economically active population. Another almost 300% increase was recorded in the group from 60-64 years. We also recorded an increase in the number of active population in the age group 40-44 years, where the number of active population has increased by almost 56,000 people since 2008, which in 2018 represented 406,000 economically active inhabitants.

The total number of economically active population increased to 2,746,000 in 2018, compared to 2,691,200 in 2008, so it is on an upward trend.

Table 2 Economically active population by age groups

AGE GROUP	ROK										
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Together	2 691,20	2 690,00	2 706,50	2680,00	2706,5	2715,3	2721,8	2738,3	2758,1	2754,7	2746,3
15 - 19 years	28,7	25,3	23,4	22,8	22,2	19,4	19,2	18,4	20,7	20,7	21,9
20 - 24 years	241,1	229,9	222,4	203,5	199,8	197,7	182,1	190,7	185,4	181,9	167,9
25 - 29 years	384,6	374,6	371,5	354,5	360,2	352,3	341,1	341,1	337,1	321,5	314,0
30 - 34 years	388,2	397,9	393,9	385,5	381,3	376,9	369,9	363,2	365,1	354,8	349,8
34 - 39 years	337,6	350,8	369	374,4	388,8	399,6	407,0	403,3	404,3	396,7	384,1
40 - 44 years	350,2	340,4	336	329,0	327,6	341,3	360,1	374,3	384,1	395,8	406,0
45 - 49 years	351,8	346,8	344,7	342,0	339,6	333,8	329,6	324,0	320,4	323,1	337,4
50 - 54 years	346,9	343,3	338,5	339,9	330,1	323,8	321,0	322,1	323,3	317,8	316,3
55 - 59 years	206,7	224,9	246,3	258,8	278,1	285,2	289,3	294,4	293,0	293,3	292,3
60 - 64 years	45	46,3	50,2	57,1	66,8	73,3	77,8	87,4	103,9	119,9	123,0
65 and more	10,5	9,9	10,7	12,4	12,2	12,2	14,8	19,5	20,9	29,1	33,7

Source: Statistical Office of the Slovak Republic, 2018

Provided that the direction shown in the table is maintained in the near future, the transition of the population from productive to post-productive age will have an increasing tendency in the near future, which confirms the example with the strongest age group 40-44, which in 2040 will be the group which moves to a group of 65 or more. If we add to this the age group 45-49 years, which is the third strongest in terms of economically active population according to age groups in our table, we assume that after 2040 more than 700,000 economically active population will retire from work (Statistics Office). , 2019). The above research shows us the fact that Slovakia has taken the direction of an aging population. This statement is confirmed by the very fact that we are among the EU countries with the fastest aging population (second place among EU countries).

The important fact that we are among the EU countries with the fastest aging population (second place among EU countries) is a fact that unequivocally confirms the need to forecast additional labor needs by 2040. It is precisely labor replacement that makes up the bulk of labor market needs already in medium term. This is compensation caused by the departure of employees from the labor market, especially into old-age retirement. It is assumed that strong population years - persons born in the period 1953-1958 will form a substantial part of people leaving the labor market by 2024. We can assume that in 2040 the number will double, perhaps even triple (MPSVR, 2019). Based on these findings, we can assume that Slovakia expects a significant decline in the workforce in the horizon of twenty years, which is also confirmed by Páleník et al. (2014) when they claim that „In present, Slovakia is still one of the younger populations in the European area, the initial situation in the form of the nature of the age structure predisposes it to dynamic aging in the next 10-15 years.“.

4 Active labor market policies and the impacts of selected factors

Since 2011, the implementation of the National Project for the Development of the Labor Market in the Slovak Republic has led to a new era of monitoring the needs of the labor market, which were clearly defined and quantified for the first time. Since then, the

comprehensive apparatus for monitoring the needs of the labor market has been regularly updated, innovated and expanded due to the wide-ranging use in the societal context. The first indicator developed in 2013 was the additional need for employees, which expressed the future number of job opportunities that will not be satisfied from the currently employed persons. It consisted of an expansion demand expressing the difference between the number of jobs created and lost and a replacement demand expressing the number of vacancies due to the exit of employees from the labor market. The additional need of employees in companies, the additional need of employees in natural persons - entrepreneurs and the society-wide need of natural persons - entrepreneurs together form an additional need of manpower, which is a final and comprehensive view of additional demand for work in the Slovak Republic. Based on these facts and visions, the Ministry of Labor, Social Affairs and Family, together with representatives of employers and employees, agreed to develop a strategy that will respond to the arrival of these changes in the labor market.

Another document from the workshop of the Government of the Slovak Republic including demographic development and also including the labor market, but without their interconnection is the document National Program of Active Aging for 2014-2020. With this document, Slovakia addresses the issue of active aging as a political priority in all its complexity. „It is a new and comprehensive programming document aimed at promoting the human rights of older people through their activation through public support policies. It is not just about employment policies and the employability of older people (what is the primary focus of the Active Aging Strategy), but also on policies to promote their lifelong learning, civic and social activities outside the formal labor market, to promote their independence, dignity, economic and social security, including protection against ill-treatment in all spheres of society and relations“ (National Program for Active Aging for years 2014 – 2020, www.employment.gov.sk)

From the European workshop, this issue is addressed in a document entitled - Green Paper: „Facing demographic change in Europe: a new solidarity between the generations“, this document is a response to fundamental changes in demographic developments in Europe (European Commission, 2005). In this document, the European Commission declares that it is aware of the consequences of this development and that it considers population aging and migration to be very serious problems today. It also outlines possible solutions for increasing the fertility and integration of migrants, which includes the term new intergenerational solidarity (social integration of young people, global approach to the productive population, active aging, solidarity with the very old population). Regional and world rates and percentages are weighted averages of countries for which data are available; regional averages are displayed when data are available for at least three quarters of the region's population. According to this criterion for comparison with the Slovak Republic, Japan ranks first with the highest life expectancy in the world (84 years), while Burkina Faso is at the bottom of the list (60 years),(Pison, G. 2009).

Two other components are needed to achieve the goal of social equality: an individual attempt to improve one's life, for example by changing jobs, migrating or adjusting reproductive behavior; or collective attempts through social movements. Historical demography, comparative historical life-cycle studies and the history of migration have contributed to our understanding of the ways in which people have tried and are still trying to improve their situation and climb the social ladder, especially in Europe. (Lucassen, L. 2016).

Conclusion

It follows from the above that when looking at the demographic structures of the unemployed population in the Slovak Republic, it is clear that demographic development will not significantly affect the solution of the problem of long-term unemployment as one of the most significant problems in the labor market in the Slovak Republic. Demographic development in Slovakia is evolving towards an aging population. This statement is not the most positive, and if we add to it the fact that the economically active population will, over time, move radically into the sphere of post-productive age, the question

arises before us how to deal with this situation. This phenomenon will affect many aspects of social as well as economic life in Slovakia in the future. Examining the demographic development until 2060, we found that this year, due to the aging population in Slovakia, approximately 21% of the labor force will be missing in the labor market. Although the government has taken several measures (programs) to mitigate the impact of the problem, it is uncertain today whether these will be effective and sufficient to address the issue in the future. In the near future, therefore, it will certainly be important to monitor developments in this area and address the issue as seriously as possible. Solutions in the form of employing older people, raising the retirement age, but also migrating in the labor market, or even the emerging phenomenon of industrial robotisation and the advent of IT, can, under certain circumstances, have a broad spectrum impact on demographic developments. However, these are questions and topics for other research. Estimates threatening overpopulation have not been confirmed, quite the opposite. The world's population is in a situation where fewer and fewer countries will have population growth (Divinsky, B. 2004). The Slovak Republic is currently facing an aging population. Because aging is, to a certain extent, irreversible, society must prepare to operate in changed conditions. This is a situation with which humanity has no experience so far, as human society has never experienced aging to the present extent in the past. The functioning of society needs to be adapted to the increasing number and proportion of older people. The aging of the population has serious economic, social and political consequences. The high cost of caring for and securing the elderly, on the one hand, and the lower number of the productive population, on the other, will increase the pressure on public finances.

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