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The issue of raising the retirement age from the perspective of public administration and the labour market

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Abstract: *The management of economic and social activities in the state leads to the concept of public administration. Public administration has a rich structure, which basically represents the management of public affairs and societal problems. One of the current societal problems is generational change, which affects all events not only in economic but also in social life. The aging of the population brings many problems, mainly related to generational change in the labour market and the sustainability of economic processes due to the low number of generations entering the labour market. The shortage of labour and the growing number of pensioners puts a heavy strain on public finances, especially in the areas of social and health care. The aim of the study is, based on the analysis of demographic statistical data, to determine the distribution of the workforce aged 60-64 on the labor market in the context of answering the question of whether it is correct to consider raising the retirement age, which resonates in several EU countries. In order to achieve the stated objective, we analyzed data based on statistical databases of the Social Insurance Institution, the Statistical Office of the Slovak Republic and the OECD, UN. The assumption is that as the retirement age increases, the number of people on early retirement will increase. However, our findings showed that as retirement age increases, the number of people using disability pensions increases significantly, which may be related to attrition in the workforce due to the nature of manual jobs. Instead of raising the retirement age, it is therefore important to focus on improving working conditions, increasing labor productivity through smart industry investments and simplifying the employment of workers from third countries. In Slovakia, the retirement age is gradually increasing and in 2030 it should reach 64 years. On the basis of the forecast, the number of workers in this group will increase significantly and this growth will continue until the end of the 2040 reference period. For this reason, further changes in the retirement age are questionable and the important thing will be to*

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keep the workforce in good mental and physical condition for as long as possible, which will require changes in the public sector, particularly in the areas of education, health care and social inclusion.

Keywords: public sector, public administration, labour market, demographic development

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Introduction

As a result of generational change, most countries that are also referred to as developed are at a tipping point, when the effects of intergenerational change are gradually beginning to be felt in different areas of economic, social and public life. The main problem areas are caused by the influence of three factors, namely the significantly higher number of older generation cohorts (primarily the Baby Boomers, X and Y), increasing longevity and decreasing fertility rates. As strong generational cohorts age and leave the labor market, this will lead to negative impacts on countries' economies. (Zhang and Zhao, 2022; Wang and Sung, 2022; Park et al., 2022; Duxburyová and Ormsbee, 2020). From January 2024, a part of the pension reform will come into force in Slovakia, according to which the retirement age will be abolished and the retirement age will continue to be calculated according to the life expectancy for the time being. A long-term sustainable pension system can be defined as a system that, on the one hand, does not overburden public finances and, on the other hand, provides a socially acceptable rate of compensation in a sustainable way, not just for one generation.

Population aging will gradually begin to affect more and more non-Western countries over the years, and thus these generational changes will have negative impacts worldwide (Xi et al., 2022; Lau et al., 2022; Rice et al., 2022; Nagarajan et al., 2021). The aging of the population without significant intervention or changes in the labor market and social sphere in terms of, for example, an increase in labor productivity or a sudden and significant increase in fertility rate will lead to a global decline in economies. The generally assumed problem should be the negative development of the economy across all countries and the related problem of maintaining social and health insurance, which will lead to the growth of public debt and the growing tax burden in countries. It will be important how individual states and communities can prepare and react to these facts, which will lead to a large increase in the number of old people. As a result of the current development of life expectancy, and especially in countries with a larger number of manual workers, where there is greater workforce attrition, we do not consider increasing the retirement age to be an optimal solution. Instead, it is necessary to focus on comprehensive measures and changes in the field of financing the public sector, especially in the fields of education and science and research, which would lead to

an increase in labor productivity and changes in the migration policy of countries in order to significantly simplify the legal possibilities of employing foreign labor. With the growth of labor productivity and the recruitment of foreign workers, the consequences of population aging and the expected pressure on the economic, health and social systems and the burden on public finances should be alleviated.

1. Literature review

A number of studies have linked the growing number of elderly people and the relationship between the growing expenditure on the social and health system and GDP (Mason and Lee, 2022; Spijker, 2022; Tang B. et al., 2022; Li et al., 2022; Xue et al., 2022, Williams et al., 2022). The results of these studies, which have been conducted both globally and regionally, show that the aging of the population will lead to a gradual year-on-year decline in GDP, and thus a slowdown in economic growth. It will therefore be important to keep the social and health system sufficiently funded to handle the increasing pressure of the number of elderly people. However, this will be difficult to sustain with the declining number of young people (Generation Z, Alpha and probably other Beta generations) who are gradually entering the labor market with the current legislative set-up. In connection with increasing expenditures on health and social care, there will have to be an increase in the contribution burden of the working part of the population (Kollerup et al., 2022; Tynkkynen et al., 2022, Doheny et al., 2022; Costa Font and Vilaplana Pietro, 2023, Xu et al., 2022; Chen and Xu, 2023). In addition to negative impacts on economic growth (GDP) and the social and economic systems of countries, the aging of the population will also affect the labor market. This will lead to changes on the supply side of the labor market and hence labor shortages, as well as the need to adapt work and management style to keep workers on the labor market for as long as possible (Lu et al., 2023; Zhang et al., 2022; Liu et al., 2022; Tan et al., 2021). The growing life expectancy requires changes in social policy regarding pension insurance, especially in connection with the benefits provided (Reznik et al., 2018). In addition to the insufficient replacement of old generational cohorts in terms of population by young incoming generational cohorts due to declining birth rates, there is, as a result of globalization and the openness of countries compared to the period of the old generational cohorts, an increase in the migration of young people, which will lead to an even more pronounced labor shortage in the labor market. Migration of young people abroad is a privilege especially of countries with lower economic growth and a lower standard of living (Naterer and Lavrič, 2022; Marcheti et al,. 2022). With the aging of the population and a significant lack of new labor force, there will be relatively large-scale and negative changes that will affect all aspects of the economic and social functioning of countries. With an increasing average life expectancy, the fastest solution to the effects of aging and maintaining economic growth, together with maintaining the social and health system, is to gradually increase the retirement age. In connection with the retirement age and its increase,

several studies have been created as part of regional research across different countries, which bring a view of the given issue from different aspects, but collectively complete a certain picture brought by the issue from a given perspective (Hu et al., 2023; Lee and Cho, 2022; Riphahn and Schrader, 2022; Geyer et al., 2022; Nivalainen, 2021). The reform and raising of the retirement age will be inevitable over time, but this is an extremely unpopular step, especially in the political context, which causes a wave of resistance from the citizens. At the moment, however, we consider raising the retirement age to be an unnecessary tool for addressing the problem, as it is too simplistic of a solution for such a complex issue. Increasing the retirement age and aging itself leads to attrition in a significant part of the workforce and thus to an increase in health complications, which leads to a change in work productivity (Hernæs et al., 2023; d'Errico et al., 2022). In conjunction with workforce attrition, particularly in demanding, predominantly blue-collar jobs, in the context of raising the retirement age, there is a risk of an increase in the number of people using the possibility of early retirement (Zwick et al., 2022). Based on our findings, which will be presented in this study, we can confirm this statement, but more than the possibility of early retirement, the number of people on disability pensions has increased significantly. During pension reforms and raising the retirement age, it is necessary to take into account mortality rates and life expectancy as well. With the development of technology and scientific progress, the quality of life and its length have improved significantly, but there has been a significant decline in terms of available statistics in the context of the pandemic. The provided statistics lack data for the year 2022 (OECD, 2021; UN, 2022; WorldBank, 2021), where this decline may continue, mainly due to the Covid-19 pandemic and its long-term effects, which have not yet been fully explored, but also due to a reduction quality of life caused by several global crises (Muniyandi et al., 2022; Díaz-Olalla et al., 2022; Quast et al., 2022; Qvist, JY., 2021).

2. Objective and methodology

The solution to the problem as outlined in the introduction can be seen from a number of perspectives, with one solution that is increasingly appearing in the literature and policy circles being an increase in the retirement age. In our study, we will therefore focus on the significance of this solution for the Slovak Republic. The aim of the study is, based on the analysis of demographic statistical data, to determine the distribution of the workforce aged 60-64 on the labor market in the context of answering the question of whether it is correct to consider raising the retirement age, which resonates in several EU countries. In order to achieve the set objective, we analysed data based on the statistical databases of the Social Insurance Institution, the Statistical Office of the Slovak Republic and the OECD, UN. The objective is set on the basis of a research question that appears more and more frequently in society: is it necessary to raise the retirement age to maintain public finances (especially the social and health care system)?

Figure 1 shows the evolution of the number of pensioners over the years. Along with this development, the figure also shows the evolution of disabled persons, early retirees and the number of deaths. The given data are in comparison with the increasing retirement age. The figure shows a linear and polynomial trend, showing the development for the entire period plus one year ahead (for the year 2023). Estimated life expectancy is an important indicator when considering changes in the retirement age. Figure 2 shows a comparison of this indicator (UN) between the period before and during the pandemic. Processed forecasts are based on OECD population predictions. For the specified number of employees, the data from the changes of the years are used and their average value is applied to the next period. It is a combination of a more accessible prediction of population development recalculated with the average employment rate of the 60-64 age group and the average number of people who are not working.

The limitations of the research are in the data used. The predictions used may not be correct with any certainty, as a huge number of factors enter into the development of the indicators under study that cannot be predicted. Furthermore, in the context of increasing the retirement age and the number of workers, precise statistics are not available, and therefore, the results are only approximate. Statistical data on people using disability pensions are not sufficient because we do not know from the available data whether the people in question are not working at all or are working partially.

3. Results

The aging of the population in the context of the labor market brings several problems, which are mainly based on the generational differences of individual generational cohorts. It is important to analyse the evolution of employment itself, which reflects for us in terms of age cohorts what representation of the labour force in terms of age is found on the labour market.

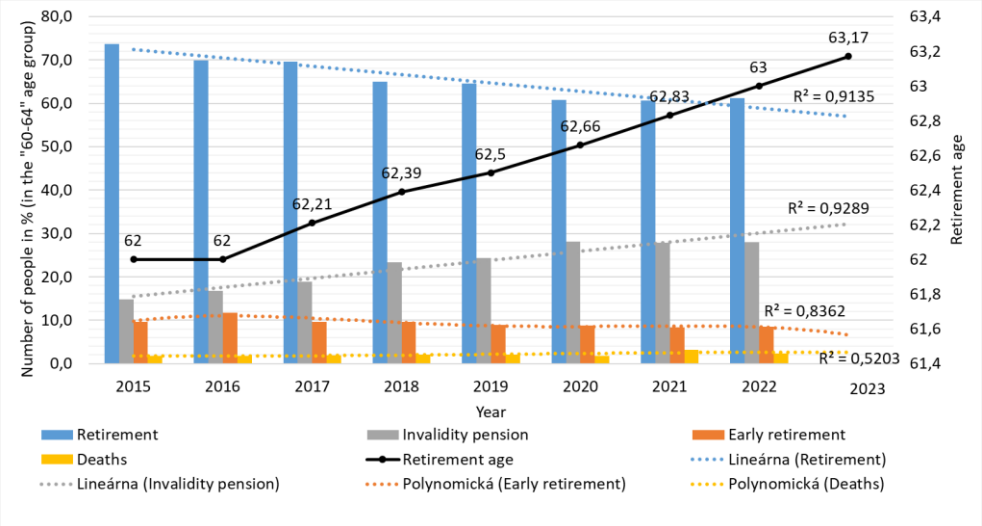
Table 1. Employment rate development by age groups

Employment rate by age groups								
Age groups / Year	2015	2016	2017	2018	2019	2020	2021	Average in %
15 – 64	52.80	54.30	55.10	55.90	56.30	55.10	60.29	58.39
15 – 19	3.00	4.00	4.10	5.20	3.50	3.00	2.10	3.56
20 – 24	39.60	42.60	46.00	46.40	43.70	40.30	38.00	42.37
25 – 29	72.70	74.00	73.10	73.70	75.00	72.90	75.30	73.81
30 – 34	73.00	75.90	75.00	76.50	76.40	76.30	82.90	76.57
35 – 39	79.50	80.60	81.20	80.70	80.90	78.70	84.50	80.87
40 – 44	83.70	85.50	85.40	86.20	86.60	84.90	85.70	85.43
45 – 49	83.10	84.20	85.10	87.70	87.90	86.70	85.20	85.70
50 – 54	77.90	80.50	80.70	83.00	85.20	83.20	84.00	82.07
55 – 59	**69.70**	**70.50**	**74.50**	**76.50**	**77.50**	**78.40**	**77.90**	**75.00**
60 – 64	**22.80**	**27.00**	**31.50**	**32.50**	**37.00**	**38.30**	**43.20**	**33.19**
65 +	2.50	2.60	3.50	4.00	4.60	4.50	4.40	3.73

Source: own processing

When monitoring the development of the percentage representation of employment rates within different age groups, we can observe the influence of aging and the gradual departure of strong generational cohorts from the labor market. As a result, there will be a gradual or even complete departure of strong population cohorts from the labor market, and the numbers of incoming cohorts will not be sufficient for a stable replacement. Currently, raising the retirement age is a relatively discussed topic, mainly at the political level, not only in the Slovak Republic but throughout Europe. However, if we look at the development of Slovakia's employment rate by five-year age groups, we can see a relatively large drop in the number of workers between the age groups 55-59 and 60-64. This raises the question of whether it makes sense to raise the retirement age and why there is such a significant decline in the number of workers a few years before retirement, and what is the cause of the decline in the labour force in this age structure.

Figure 1. Percentage development of the number of persons in the age group 60-64 years who left the labor market based on social insurance classification in comparison with the development of the retirement age

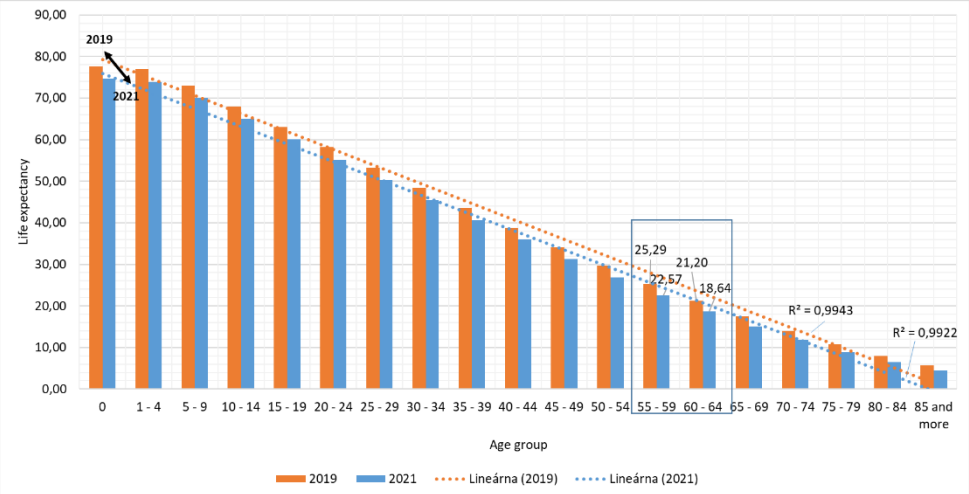


Source: own processing based on data requested from the Slovak Social Insurance Institution

The retirement age in Slovakia is currently capped at 64 years, which is expected to reach its full level by the year 2030.This pension plan applies to people born before 1966 (Social Insurance Institution of Slovakia, 2023). However, according to policy statements, the retirement age is currently to be linked to life expectancy, which would mean that people born in 1967 and earlier will retire according to the calculations towards life expectancy (Homolova, 2022). Currently, people retire from the labor market at the age of 63 years and 2 months (63.17 in 2023). We

assumed that as the retirement age increases, the number of people in early retirement will increase. However, this assumption has not been met and instead we can conclude that with increasing age and a shift in retirement age there is an increase in people on disability pension. The economy of Slovakia has long been focused mainly on the industrial, and therefore the production sphere, and based on statistical data, up to 26 percent of workers are employed directly in industry, but the total share of manual workers is up to 60 percent (industry, mining industry, logistics, construction, catering and accommodation services, retail and wholesale) (slovakstatistics, 2022). This may indicate that there is a "physical attrition" of the workforce and, as a result of long-term manual work, the number of people using the possibility of receiving a disability pension is increasing. Another factor to consider when increasing the retirement age is likely life expectancy. This has been rising fairly steadily in recent years, but with the arrival of the Covid-19 pandemic, the development of the estimated life expectancy has changed negatively.

Figure 2. Development of life expectancy in Slovakia for all age groups, comparison of 2019 and 2021 (comparison of the period before and during the pandemic)



Source: own processing based on data available from UN

The average life expectancy for individual age groups has recently been negatively affected by the Covid-19 pandemic, where we can see a decrease in the probable length of life in individual age groups. Overall, there was a decrease in all groups by an average of 9 percent. In the selected monitored categories 55-59 and 60-64, there was an even more significant decrease (10.75%), with the negative impacts of the pandemic becoming significantly more pronounced with increasing age. Data for 2022 cannot yet be analysed due to their unavailability, but we can continue to expect stagnation or a larger decline, not only because of the pandemic but also because of the reduction in quality of life caused by a combination of global crises (inflation,

energy, war, environmental changes). From this point of view, although the number of pensioners will increase, their quality and length of life are currently quite significantly affected and, in terms of their contributions to the social system, the state could theoretically also 'benefit'. This raises the question of the relevance of further increases in the retirement age. With the increasing retirement age and overall aging, the number of people on disability pensions is growing. As Cylus and Tayara (2021) state in their research, referring to earlier studies (Berg et al., 2010; Rehkopf et al., 2011), around one quarter of workers aged 60 to 61 will develop some disability, which will prevent their ability to continue to remain on the labor market, and this can be related mainly to the type of work activity performed, as the reported disabilities are mainly associated with chronic diseases, mobility problems and limitations in daily activity, and thus there is some attrition of the workforce from long-term work activity.

Table 2. Percentage development of indicators for the age category of 60-64 years

Year	2016	2017	2018	2019	2020	2021	2022	Average
Retirement age	62,00	62,00	62,00	62r76d	62r139d	62r6m	62r8m	
Dead	94,46	101,53	97,17	97,85	101,08	129,08	73,22	99,20
Disabled	**109,23**	**114,61**	**117,40**	**100,91**	**109,71**	**101,11**	**100,99**	**107,71**
Early retirement	117,14	84,34	94,64	89,33	92,77	98,36	102,76	97,05
Old age pension	96,45	94,99	89,85	94,90	88,86	92,66	92,84	92,94

Source: own processing

The percentage evolution of the individual indicators monitored confirms, as in Figure 1, confirms to us that the gradual development of the years and the growth of the retirement age leads to an increase in the number of people on disability pensions. The latter is the only indicator that has grown over the whole period under review.

Figure 3. Development of the age group (number of employed, number outside the permanent employment, and population trends)

Source: own processing

In Figure 3, we base our projections on OECD population projections, where we work with the likely projected path from 2023 onwards if the retirement age were to remain unchanged. In 2030, through gradual development, the retirement age will reach the limit of 64 years. This will gradually increase the number of people in employment in this age group. However, people from this group will be mainly due to attrition, as shown by the already mentioned scientific research, in a relatively large representation outside the labor market, especially on disability and early retirement, and it is also necessary to take into account a higher mortality rate in comparison with younger age groups. Our assumption in the above forecast is, based on developments to date, that around one third of the total employed will be outside the labour market. The workforce from the monitored group will more than double from 2030, when the pension cap is reached. Based on the available scientific publications dealing with this issue, the results were not completely clear, but the authors were more inclined to the fact that in older age groups there is a decrease in work productivity, but also, for example, increased sick leave (Rinsky-Halivni, 2022, Børing and Grøgaard, 2021, Viviani et al., 2021). Just like the mentioned studies, we also draw attention to the need for further research, which would aim to find out the level of effectiveness of employing older age groups, with a possible increase in the retirement age, which would already include the 65-69 age group.

4. Discussions

Our main assumption was that with the increase in the retirement age, the number of people using an early old-age pension would increase. From the findings of our

analyzes of the population aged 60-64, we can see that with the gradual shift in the retirement age, the number of people on early old-age pensions does not increase, but the number of people on disability pensions does. We expect this trend for the next period as well, when we assume that at the fully reached retirement age of 64, approximately one third of people will be out of the labor market due to attrition, and it is questionable what percentage of those who will participate in the labour market will also be recipients of a disability pension. The reason for the observed increase in the number of people on disability pensions may be due to the conditions that need to be met to qualify for early retirement. Börsch-Supan et al. (2022) report that many employees performing manual and physically demanding work are forced to take a disability pension because they do not meet the eligibility requirements for early retirement. The disability pension thus serves as a bridging option between the period until the start of the old-age pension. Thus, our findings also reflect the results of other authors. Cylus and Tayara (2021) report that at the age of 60-61, approximately a quarter of people will develop a certain disability, which will constitute a significant obstacle to their remaining on the labor market. Likewise in his Eaton studios. (2019) referring to the Center for Aging Better claims that later retirement can cause difficulties especially for people performing manual and physically demanding work, while this group of people has an increased risk of health problems that will affect the quality of everyday life. According to our findings, the current pension reform will bring about 70 per cent of the 60-64 age group into the labour market, which is almost double increase compared to the present. The efficiency of these workers becomes questionable. According to De Felice et al. (2022), aging workers bring some positives, but on the other hand, they have lower adaptability to innovation, poorer skills in using new technologies, less creativity, and a relative loss of physical strength. Therefore, the question arises to what extent the category of 60-64 years will fall into this description and whether it makes any sense to increase the retirement age. Due to the fact that with increasing age and staying on the labor market, the risk of causing disability increases and also for the decrease in productivity, we do not currently consider this to be a suitable solution. In line with other authors, we give attention to possible other solutions that would not require changes in pension legislation but would keep the workforce in the labour market voluntarily. This would be the promotion of active aging in which older people would be supported in the labour market. Lucantoni et al., (2022) state that active aging includes several activities that are mainly associated with support in the areas of participation, health, safety, psychological well-being, and lifestyle, while, in addition to the above, we would draw attention to the need for lifelong learning. Active ageing is one of the ways in which older people can remain a confident part of society and which makes it possible to foster intergenerational integration and solidarity.

5. Conclusions

The evolution of demographic changes in the context of labour supply is now becoming quite dynamic, with several changes occurring simultaneously. This is mainly about changes between individual generations in the differences in work preference and also about significant numerical differences and the related key problem, which is the aging of the population. Large generational cohorts are leaving the labor market, which the younger ones are unable to replace in terms of numbers. Sufficient labor force is required to maintain stable economic growth of the country. The development of the labor market and the country in a certain period will be relatively unfavorable, because the total number of inhabitants will be high (productive and post-productive), but there will be less labor force. The main issue that will need to be addressed will be the evolution of total aggregate demand for goods and services in the future. At some point, as the number of elderly people increases, the death rate will increase and the country's population will gradually decrease due to extinction. Logically, consumption will also decrease and therefore it will be necessary to look at the processes in the economy differently. The demand for labor is a derived demand and therefore will not be as high as it is currently. The aging of the population and the workforce will thus lead to two effects over time. The first effect will cause an increase in the demand for labour and the need to grow the number of workers. The second effect will lead to increased mortality over a period of time as the population ages. This effect may have the opposite effect on the labour market and the size of the labour force, because as the number of deaths increases, the overall need to produce so many goods and services decreases. Currently, experts do not talk about these connections, but focus mainly on the aging of the population, which they see as a significant problem, the solution of which, or rather the mitigation, requires interventions by the state in several areas. The simplest solution, which is mainly presented by political elites and some professional studies, is to raise the retirement age. Currently, in the Slovak Republic, the retirement age is raised by 2 months every year, and this increase should stop in 2030 (Colin F., 2019). However, a high employment rate, a stable political situation, and good and sustainable public finance contributions are important for a stable and successful pension system (Outlioua and Fazouane, 2023). The retirement age will thus be set at 64 this year. For this reason, in our study we focused on the examination of the age category 60-64 years, in which retirement is gradually being postponed. From the results of our study, we can see a relatively high drop in employment that occurs precisely in this age group. This is mainly due to the fact that some people have already reached retirement age (for the year 2023, it is 63). This relatively large group of those who already left is supplemented by people who voluntarily taken early retirement, are on disability pension or have died. It is important to note that the majority of individuals in this age group who are on disability pensions are no longer actively participating in the labor market. From the group of those who exited, they represent an average share of up to 27 percent, and this trend of individuals on

disability pensions is increasing annually. Based on this trend and the results of several scientific studies we use for interpreting the findings, we assume that this trend will continue in the range of 30 percent in the coming years, considering the nature of the work activities, which predominantly involve manual labor, leading to workforce attrition. The results of the forecast show that the number of older people, and therefore the representation of people in this age group, will increase, as will the number of people in employment from this group, but a significant proportion of people will no longer be able to perform work activities from a health point of view, and the amount of productivity of older people is also questionable.
In further research, we recommend focusing on the 60-64-year-old group from the point of view of social benefits, especially people on disability pensions. An important step is to identify the exact reasons for their disability and how many of them can work.

Conflict of Interest

The authors declare that the research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

Acknowledgment

That is not the case.

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