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DEMOGRAPHIC AND LABOUR MARKET SITUATION IN HUNGARY IN THE LIGHT OF GLOBAL TRENDS

Abstract: Demographic changes significantly affect a country's economic growth prospects. In recent years, advanced economies have been characterized by aging societies, which can have many macroeconomic effects, including the reduction of labour supply. This makes it necessary to examine demographic and labour market processes in a unified framework.

The purpose of this study is to analyse the Hungarian demographic and labour market processes, and to reveal their relation to global trends and country-specific factors. Demographic and labour market processes also fit into international trends in Hungary, however, unique country-specific factors can also be identified due to the path dependence of development. In addition, the increase in the fertility rate in recent years should be highlighted in Hungary. Mitigating the decline in labour supply as a result of aging and reversing its potential trend is an essential factor in the tight labour market. This tension can be resolved by adapting and extending the achievements of Industry 4.0, as well as through foreign workers. Nevertheless, the long-term maintenance and potential increase of Hungary's labour force reserve is necessary to maintain its current economic growth.

Keywords: AGEING, FERTILITY, POPULATION POLICY, STRICT LABOUR MARKET, HUNGARY.

Introduction

In recent years, many uncertainties have affected the outlook of the global economy. Various exogenous shocks have had a significant impact on small open economies in different ways and to different extents. Apart from these turbulent processes, there are many economic and social phenomena that characterized developed economies, including Hungary, even during the economic cycle preceding the pandemic. One of these processes is the aging society, as seen from a demographic point of view. Aging is a complex demographic process, the social and economic effects of which can occur in the short, medium, and long terms. In this context, it is necessary to analyse global and country-specific connections to ensure appropriate social, economic, and political responses. At the same time, changes in the population often generate labour market consequences. Aging has a direct impact on the labour market by reducing the number of active workers (Marton, 2018). However, the labour market was in a special situation before and after the pandemic. In many economies, the employment rate approached the level of full employment, and a sectoral labour shortage also developed. The tight labour market seemed to be permanent, which could not be diverted by the changed working conditions caused by the pandemic. However, fears of recession caused by uncertainties can deviate from this state, and the negative demographic trends can also affect the labour market in the long term. Without adequate social and economic policy measures, this can lead to sudden rise and permanent unemployment rates in some economies. This is particularly important in light of the fact that the effects of population policy measures rarely appear in the short term, and more often have positive returns in the medium and long term.

The purpose of this study is to analyse the Hungarian demographic and labour market processes in a global context, and to reveal the pattern behind the development of individual factors. Central and Eastern European countries have followed a unique path during their development history. As a result, path dependence is more significant in their case, which relevantly influences the national economic manifestations of global trends through country-specific factors. The established structure follows this logical arc. In this context, the theoretical connections behind aging and to what extent it characterizes the world economy will be examined. As already outlined above, the pandemic did not significantly affect the labour market. After the identification of the theoretical connections, Hungary is examined in the framework of a case study. The country-specific factors of the Hungarian demographic situation, as well as the correlations with the current labour market situation, are examined in detail. The study concludes with a summary and conclusions.

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Global demographic and labour market situation

Is an aging society the new norm?

Population policies are constantly changing in accordance with the level of development of economies; thus introducing effective measures requires the establishment and continuous review of country-specific target systems in accordance with local characteristics. This demographic process is also represented by the different stages of the demographic transition. Each section presents different population challenges. These include the issue of the population boom, which mainly characterizes developing economies, which requires intervention from other policy areas in addition to active population policy measures. This includes health and education policy, family policy and other fiscal policies, as well as measures aimed at reducing poverty as well as social and income inequalities. The last stage of the demographic transition is the period characterized by a low death and birth rate, which is combined with better health conditions, higher life expectancy at birth.

Examining the two endpoints of the interval from the point of view of the age group, it can be concluded that the lower part of the age group widens in the country with a population boom, and the younger generations represent a larger share of society. Rapid population growth leads to overpopulation, which can reach global proportions and raise economic, social, and ecological problems such as impoverishment, problems accessing an adequate quality and quantity of food and drinking water, or the exploitation of natural resources. At the other extreme, the population pyramid first takes the shape of a tree trunk, and then the upper part, which includes the older population groups, begins to widen.

Analysing population policy empirically from the point of view of the world economy, it can be concluded that it has been characterized by a certain duality in recent decades. Some societies – primarily developing and emerging economies – have had growing populations, resulting in overpopulation for humanity globally, while other countries – primarily developed economies – had aging societies.

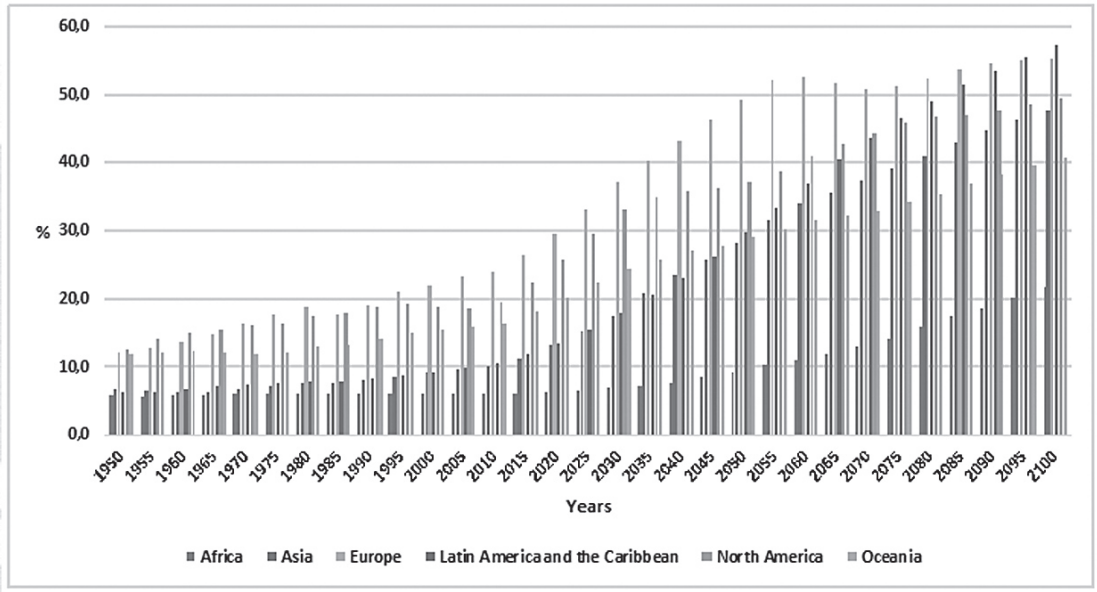

Figure 1: ***Development of the old-age dependency ratio in individual world economic regions (Source: own editing based on data from the United Nations, Department of Economic and Social Affairs, Population Division)***

While the general opinion is that aging is still only a problem of developed economies, this assumption is false. Based on the old-age dependency ratio[1] (Figure 1), it can be stated that the two most developed regions (North America and Europe) stand out in terms of the social proportion of the elderly. Nevertheless, according to the forecasts of the United Nations, Department of Economic and Social Affairs, Population Division, examining the problem area depending on the development of trends, the societies of Latin America and the Caribbean region, as well as Asia, are aging the fastest in terms of age composition. The outlined trend already existed in the 2000s, and it has still not been possible to stop it (not to mention reverse it), which calls into question the assessment of the success of the social policy measures introduced in some developed and developing countries. The importance of the dangers caused by an aging society is underlined by the example of China, where – despite previous trends and social policy directions – the possibilities of state incentives for having children have recently come to the fore again.

When examining the rate of aging at the national level, several interesting features can be identified. In 1950, Ireland had the highest proportion of elderly people: 18.1 people over 65 years of age per 100 people of working age, compared

1 In the study, the old-age dependency ratio refers to the ratio of the population over 65 to the population of working age between 15 and 64.

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to 8.4 for the entire world economy. By 1985, the then highest ratio was already 26.7 people in Sweden (world average: 9.9 people). And by 2020, the value of the indicator rose to 48 people in Japan, where the proportion of elderly people in society almost doubled in 35 years. (In the case of Japan, the rate of growth was even faster, 3.2 times, since in 1985 only 14.8 people over 65 reached the working age per 100 people.) However, according to the forecasts of the UN' Population Division, the trend will continue, and, to take the example of Albania, the most rapidly aging society at the time, the value of the indicator will be 104.1 people by 2100. At the same time, in many economies, in addition to the low birth rate, the emigration rate of young people can significantly influence the age composition of society. Looking at the world economy, the value of the indicator will be 37.7 people in 2100, that is, there will be 4.48 times more elderly people in 150 years, while during this period the world population will rise from 2.5 billion to 10.8 billion people. It can therefore be concluded that an aging society interweaves both present and future social processes. However, aging goes beyond social and population policy aspects. It is a complex social and economic problem area, which has negative growth correlations both fiscally and economically. From the fiscal side, it has an impact on expenditures (health, pension, and social care systems for the elderly) and on revenues (decrease in the proportion of active workers), while from the growth side it can cause a decrease in productivity and capital accumulation (Marton, 2018). The latter rightly raises the issue of secular stagnation.

In addition to the current social trends, the pay-as-you-go pension system in most countries may already become unsustainable[2] in the medium term, with two potential solutions: reforming the system and reversing social trends. The latter can be achieved by increasing population growth and encouraging people to have children. The two solutions can result in sustainability and positive consequences independently, but even more so by complementing each other.[3] In addition, Péter et al. (2020) emphasize that to promote sustainability, in addition to family policy measures (promoting more births and the dual role of women), increasing the labour market activity of the elderly can be crucial. This can be facilitated from an economic policy point of view by encouraging their activity, improving their health, and thereby extending the duration of their working lives, as well as raising the retirement age.

2 Sustainability can be influenced by many factors: trends in the number of elderly and working-age population within a society; macroeconomic factors such as the level of employment and the evolution of real wages; extent of black economy and the willingness to pay annuities.

3 Vékás (2021) synthesized the results of research on the old-age dependency ratio since 2015 related to the sustainability of the Hungarian pension system, based on which the value of the indicator can be put at an average of 37.4% in 2030 based on the forecasts. Regarding the solution options, it should be emphasized that structural reforms may have a limited effect in the short and medium terms (reduction of pensions is political and social, contribution increases cannot be implemented for reasons of economic growth, while the effects of family policy measures on fertility appear in the long term), thus, in the absence of significant changes to the pension system, in the medium term (until 2030) an increase in employment and real wages, as well as the retirement age, can be a solution.

SOCIAL HORIZONS
Vol. III / Issue 5 / JUN 2023.

Labour market trends in the light of the pandemic

An aging society is characterized by a decrease in the proportion of the working-age population and an increase in the burden on the social welfare system. Shifts in the economic cycle can have various economic consequences, among which the impact on economic growth can also be derived from traditional growth theories. Growth theories consider population growth to be the driving force behind economic growth. Conversely, the moderation of population growth works against growth activity. This induced the creation of Hansen's original secular stagnation theory, and also served as a breeding ground for the supply-side approach of the new secular stagnation theories that emerged in the early 2010s. The basis of the original theory of secular stagnation is that the slowdown in population growth results in a reduction in the breadth of capital accumulation, the depth of which already slowed down in the United States during the recovery period from the 1929–1933 world economic crisis compared to before (Hansen, 1939). The new theories of secular stagnation were born during the recovery from the 2008 and 2010 crises and provided a range of explanations. In terms of labour market and productivity factors, the supply-side approach is relevant. Based on the theory, the decrease in potential output can be traced back to the slowdown in population growth and the decrease in productivity (Gordon, 2015).

At the same time, these only indirectly explain the slowdown in economic growth due to the decrease in population growth – in parallel with other factors (especially through the overall slowdown in productivity). The problem of aging goes beyond this, however, and affects output through many different channels. The change in the age structure of society, aging, and the parallel decrease in the proportion of people of working age within society all lead to a decrease in the growth factor of the amount of work. This clearly does not reduce the growth contribution of labour productivity, but with a suitable level of technology, it can reduce the contribution of the labour factor to growth.

The aging society is therefore closely linked to the labour market and economic growth in several ways. Since the pandemic, however, it is worth highlighting the special role of the labour market in terms of the factors of economic growth. The developments in the labour market were already of considerable relevance in the period before the pandemic, as we can see from the sectoral labour shortages prior to 2019 – to cite only one example. The pandemic changed this labour market environment: unemployment rates rose suddenly, and new forms of employment appeared. A delay effect in labour market developments prevailed during the recovery period; that is, the increase in economic growth was followed only at a moderate pace by a decrease in the unemployment rate. However, this finding depends considerably on country-specific factors such as the structural characteristics of the labour market, the flexibility of wages, the rigidity of labour

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market rules or labour mobility. However, the coronavirus pandemic has created a completely different situation in the labour market. This crisis was different in terms of shock effect, involvement of the labour market and crisis management. This has resulted in various labour market achievements, such as an increase in people working from home, shortened working hours or temporary employment, all of which have indirectly or directly shaped the situation of the workforce and made it difficult to compare the current situation with any other previous one. The Covid-19 pandemic and its various waves have had a cumulative and wide-ranging impact on various segments of the labour market.

Nevertheless, even before the pandemic, tendentious processes affected the situation of the workforce. Among other things, the effects of the achievements of industry 4.0 and the aging society can be classified here. The achievements of Industry 4.0 had an impact on the labour market even before 2020, regardless of the coronavirus. In relation to individual jobs, the complementary effect has become commonplace, and in many cases, there is also the possibility of a substitute effect. However, this depends on country-specific factors, the prevalence of Industry 4.0 achievements in each country, their degree of adaptation, and their economic structural connections. Research conducted on the United States labour market, Acemoglu et al. (2020) showed that while there is a substitution effect for work processes that can be replaced with the current level of artificial intelligence, this is not yet true of the entire labour market, although the pandemic has accelerated this process. In addition, according to research by the ILO (2021), the rise of remote work and various online collaboration platforms can create an opportunity for businesses to employ flexible labour, which might also allow new workers to enter the labour market who were not, or only partly, able to participate in it until now. Linking digitization to structural issues, Baldwin (2020) also emphasizes that the accelerated digital transformation following the Covid-19 pandemic, the changing needs of office space and the resulting higher costs, as well as the debt situation of businesses can encourage remote work, digital work, and automation.

Another relevant labour market factor is the labour shortage. After the recovery, the pre-pandemic trend of labour shortages in certain sectors reappeared in the short term. The decrease in demand caused by the Russian–Ukrainian war and the inflationary effect partly masks the supply inefficiencies, which also reduces the turbulent effects caused by the labour supply. Nevertheless, labour shortages affecting individual sectors are considerable in most economies. This trend is coupled with the endowment of the pandemic, remote work, and hybrid work. The two processes will be the defining labour market trend of the near future, which will act as mutually reinforcing mechanisms.

Based on Marton's (2022) previous analyses, it can be established that, based on the OECD's monthly data on vacant positions, March–April 2022 was the maximum point for vacant positions in most OECD member states, a figure which decreased by May. Examining the proportion of vacant positions (projected on TEÁOR B-S activities), it can be stated that its rate in the EU-27 member states has been

showing a continuous upward trend since the second quarter of 2020, reaching 2.9 in the first quarter of 2022. Comparing the number of unemployed and the number of vacant positions at the level of individual member states, several conclusions can be made:

- ***there is no general labour shortage in most countries, but there are sector- and position-specific labour supply problems related to sectors and specific positions;***
- ***among the countries examined, in the first quarter of 2022, in the Czech Republic, the Netherlands, Germany and Norway, the number of vacant positions exceeded the number of unemployed, which can thus be qualified as a general labour shortage;***
- ***looking only at the number of unemployed without taking into account the quality and qualifications of the workforce, it can be stated that in many countries, the unemployed represent a significant reserve compared to vacant positions, thus strengthening (re)training, mobility and labour market flexibility with targeted economic policy programs could be at least a partial solution;***
- ***in the case of some countries (including Southern European states and Bulgaria), the number of vacant positions is low, while the number of unemployed can be considered high, which may indicate structural weaknesses of the given country's labour market and economy.***

As already noted above, the various technological achievements currently only play a complementary role, making work processes more efficient (for example big data) and are already partially replacing certain work processes today (which will increase on the long term), but their impact on the labour shortage is twofold. On the one hand, they cause a decrease in the labour supply, but on the other hand, they require continuous retraining of the workforce and adaptation to changes in individual jobs. In this way, they can partially moderate the negative impact on labour supply, but they will not be able to completely eliminate this. In addition, the narrowing labour supply strengthens the bargaining position of employees.

This process appeared already after the pandemic, which can result in a change in the relationship between "life" and "work" and a shift in the direction of various new labour market trends (for example remote work, hybrid working, four-day work week, etc.). Remote work or working from home, which came to the fore during the pandemic, is still part of the everyday work environment of many companies (even if only in a hybrid form). At the aggregate level of the EU-27, the proportion of people regularly employed in remote work continued to increase in 2021 compared to 2020 and reached 13.4%. Nevertheless, by examining the Eurostat data in more detail, it can be concluded that a double pattern has developed in the member countries in terms of the ratio of telecommuters to the total employed.

A relationship can also be demonstrated between remote work and wages. In the United States, Barrero et al. (2022) confirms that the increase in the comfort value of remote work moderates the pressure of wage growth and reduces the share of work as a production factor in the national income. In addition, the reduction in the

wage distribution gap experienced in the USA since 2020 can also be traced back to the convenience effect of remote work. Regarding the time factor of the effects, the authors' analysis states that the effect on wage growth can be long-lasting, while for the latter two factors, the effect can last until the point where telecommuting appears as a convenience factor.

Debates can and should be held about how remote work affects the efficiency of work, whether it effectively transforms work processes from the point of view of work organization. At the moment, however, research shows heterogeneous results on remote work productivity. The same debates must be conducted regarding the 4-day working week, which is becoming increasingly popular. Nevertheless, the labour market is now under pressure from both the demand and supply sides that fundamentally changes the patterns that have developed over the past few decades. In individual industries, different models may develop in terms of the form and time of work. Ultimately, however, the evolution of the labour market will be directly influenced by only one factor: the evolution of corporate profits.

Demographic and labour market perspectives in Hungary

Following the identification of the global population and labour market processes, the next step will be to analyse the situation in Hungary. The purpose of this structural unit is to examine the development and trends in the Hungarian labour market and population. These analyses are compared to the global context.

In the fall of 2022, the last large population census took place in Hungary, and in the processing and communication phase of the collected data, the preliminary demographic data was published. Based on this data, several conclusions can be drawn regarding the change in population in the light of the global processes outlined earlier.

The population of Hungary reached its peak in the 1980s, and since then its population has been decreasing, having now fallen below 10 million people, and based on the latest census data, it now slightly exceeds 9.6 million (Figure 2.). The underlying factors behind the data are examined, and it can be concluded that it is not just the characteristics of an aging society in the traditional sense, despite what can be seen from the population pyramid. In terms of the death rate, the pandemic resulted in excess mortality which began to return to a level similar to the values of 2019 at the end of last year (HCSO, 2023e).

SOCIAL HORIZONS
Vol. III / Issue 5 / JUN 2023.

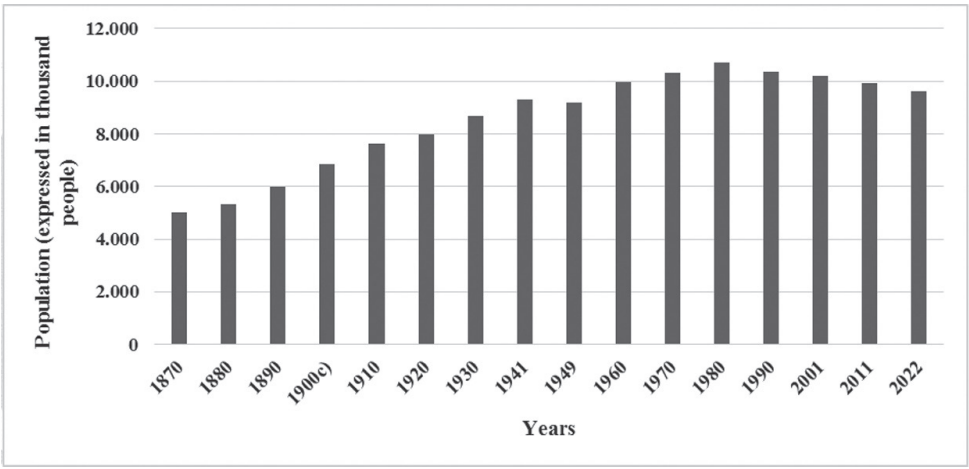

Figure 2: ***The evolution of the population in Hungary***
(Source: own editing based on data from the Hungarian Central Statistical Office
Notes: c) Civilian population: 6,804 thousand people.)

Examining the development of old age from a historical perspective, the main characteristics of an aging society are clearly visible. In the 1910s, the country was still in the first stage of the demographic transition, but in the past 110 years, various population policy measures have been implemented, the impact of which is clearly visible in the population pyramid as well (Figure 3).

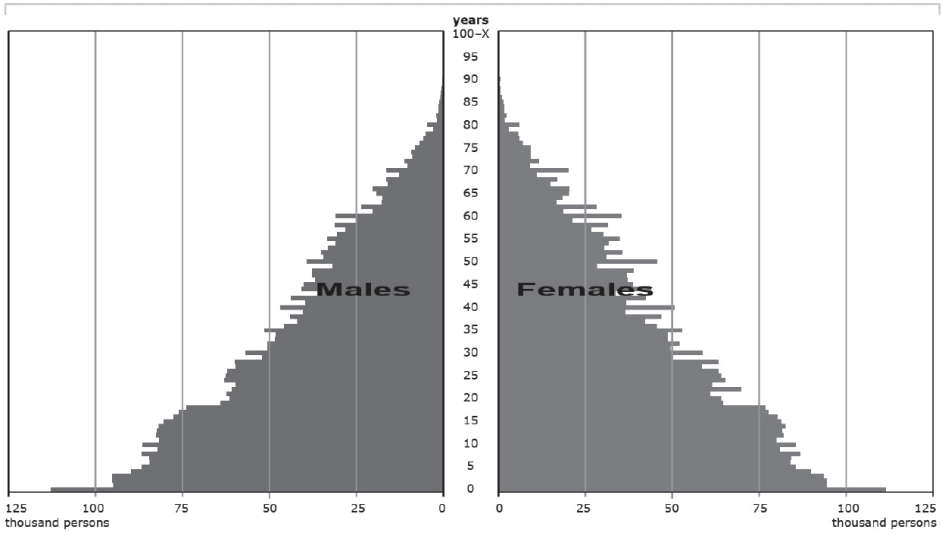

Figure 3: The population pyramid of Hungary in 1910
(Source: HCSO (2023a))

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It must be noted that in Hungary, there was no baby boom after the Second World War, and instead the fertility rate was very low (Őri-Spéder, 2020:490). The population policy measure that can be regarded as a response to this brought about the Ratkó era, which resulted in a population boom period between 1950 and 1956[4]. The effects of this period can be seen to this day, both economically and socially. The increase in the number of births at that time meant a positive return on the labour market and a quantity of labour for the economy for decades. This process involves three factors. On the one hand, examining the issue from a social and population point of view, the effects caused by population growth slowly subsided. The children born between 1950 and 1956 generated yet another population increase – which was combined with the various population and family policy measures of the 1960s, 70s and 80s – however, the further effect was lacking. The grandchildren of the Ratkó era already had a lower willingness to have children, and the fertility rate was determined at a lower level (Őri-Spéder, 2020:500). The second factor that can be highlighted is that children born between 1950 and 1956 have started to reach retirement age in recent years, which is associated with a reduction in the workforce. This negative labour market scenario may put additional pressure on the Hungarian labour market, which will require the involvement of additional labour. As the third factor, it can be highlighted that individuals retiring in large numbers may also place stress on the pension and health care systems. These tendencies can also be identified on the curve shown in Figure 3, which compares the data of the two most recent Hungarian censuses.

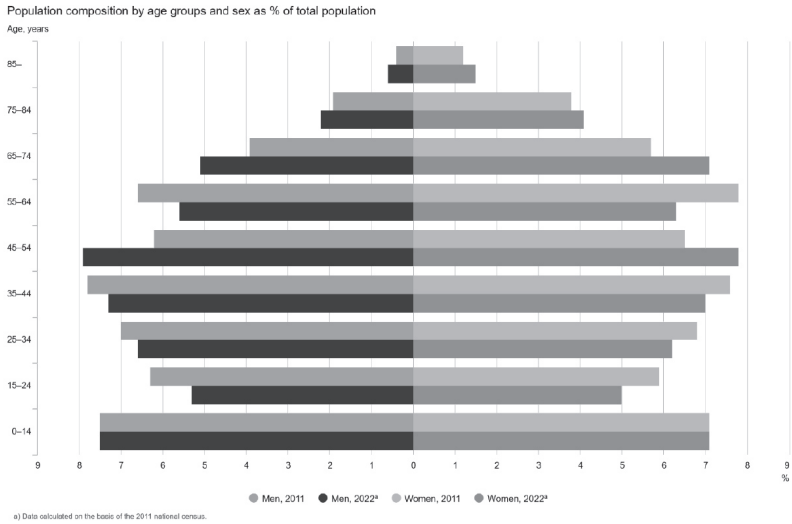

Figure 4: The population pyramid of Hungary in 2011 and 2022
(Source: HCSO (2023b))

4 The Ratkó era actively intervened in people's private lives, including measures such as the ban on abortion (Pongrácz, 2013).

Based on these, it can be identified that the proportion of people over the age of 65 has increased in Hungarian society, so the number of pensioners has also increased in the last ten years. The growth of the age group born in 1970 is also clearly visible in the middle part of the age group. It also appears that a small gap can currently be observed between the children of the Ratkó era and those born in that era in the age group between 55 and 64. In addition, it appears that a continuously decreasing trend can be observed among the age groups between 15 and 44 years as the age decreases. Őri-Spéder (2020) stated that, just as in other Central and Eastern European countries, the uncertainty caused by the regime change significantly reduced the willingness to have children in Hungary. Compared to 1990, the total fertility rate decreased significantly in the following years, reaching its lowest point (1.23) in 2011. After that, however, the value of the indicator increased and reached its value of 1.59 by 2021 (HCSO, 2023c). Figure 4 also shows that the previous declining trend seems to stop in the younger age groups, and the proportion of those aged 0 to 14 did not decrease from 2011 to 2022.

Population and family policy measures can be multifaceted in terms of their nature, and in terms of their effects, they can exert their effects on population, society and the economy in the short, medium and long terms. Gál et al. (2018) highlights the role of asymmetric statistical visibility, as Europe can be considered an elderly-oriented welfare state and a continent of child-oriented parents. Regarding the goals of the family support policy, Thévenon (2011) identified six goals: reducing poverty and maintaining income; direct compensation for the economic costs of childbearing; promoting employment; improving gender equality; supporting early childhood development and encouraging an increase in birth rates. Kristó (2014) highlights that, in addition to the traditional goals of family policy, an important factor is the provision of choice, that is the flexibility of the established regulations. The OECD member states define different focal points in family policy measures, and based on these characteristics, Thévenon (2011) created individual clusters, based on which the individual countries form a single, homogeneous group. Based on these, the northern model, the Anglo-Saxon model, the continental European model, the southern European country group, supplemented with Japan and South Korea, and the eastern European cluster were created. From the point of view of Hungary, this model can be considered relevant. In the case of the clusters, it could be established that homogeneous groups were formed, however, within the country group, there may be differences in the priority of the family support policy. In addition, it can be highlighted that, based on the studies, no uniform family policy model can be identified for the Eastern European group, and it should be emphasized that they also carry the characteristics of the other models. Nevertheless, a common feature is support based on the financial situation of the family, but to a lesser extent than in the Southern European cluster.

Makkay (2021) emphasizes that, in a European context, the Hungarian family support system can be considered generous towards parents raising children. In terms of the nature of the measures, the family support system is multifaceted,

but in recent years the measures have shifted from individual benefits to the work-related support. Sági et al. (2018) studied several European Union member states and found that increasing the willingness to have children with various tax policy benefits takes more time, as many other factors also play a role in it in the short term. These include, for example, the difficulties of buying a home. In line with this, they point out that a housing subsidy system has also been introduced in Hungary in connection with having children. In addition, it is important to emphasize that when examining the ratio of family allowances to GDP, a significant aspect is the type of benefit categories that are classified as types of family allowances (Makkay, 2021).

In line with this methodological consideration, many studies also include related areas when examining the factors influencing the desire to have children. Successfully increasing birth rates depends to a large extent on the standard of living of young married people, as well as on ethical standards (Sági et al, 2018). The continuation of the active housing program can be considered an indirect family policy measure. In addition, it can be highlighted that housing support also improved the quality of life of existing families with children (Makkay, 2021). Monostori's (2023) studies established that the proportion of three-generation households in Hungary continuously decreased for a period between 1980 and 2016 (except for the economic uncertainty and recession of the years after the regime change, that is between 1990 and 2001). The three-generation life affects a significant part of families with children in a short period of their lives, the reason for this can be traced primarily to social factors and social disadvantages. However, Lentner et al. (2017) highlights that, in addition to factors related to the standard of living (for example housing), employment, and subsidies related to the social care system, factors that significantly influence fertility are factors that increase the social embeddedness of families. Sági-Lentner's (2022) research, based on a representative survey, emphasizes the role of sociocultural factors on the increase in the willingness to have children. Spéder (2020) also points out that parallel to the development of demographic processes, there was a significant change in the timing of having children (depending on the level of education, it was postponed to 29 or 31 years), family size, and the level of fertility. In addition, education can be considered a significant factor in the development of the country's demographic conditions (Őri-Spéder, 2020; Spéder, 2020). For example, the interval between the birth of the first and second child is shorter in Hungary for women with higher education than for women with lower education (Bartus et al., 2013).

Due to the aging society and Hungary's special demographic situation, the large number of retiring workers can have a significant impact on the labour market. In this context, it is essential to analyse the special features of the Hungarian labour market. Hungarian economic policy places great emphasis on the factor of work, which is a key factor in economic growth. In accordance with this, a detailed overview of the country's labour market is essential.

Figure 5 shows the evolution of the unemployment rate. Examining the figure in detail, it can be concluded that since August 2017, Hungary has had an unemployment rate of less than 4%, which in economic terms can be equated to the level of total employment, which was only broken by the pandemic. However, the influence of global and European factors identified in the previous chapter was also felt in Hungary. Accordingly, the labour market measures applied during the pandemic proved to be effective, and the pandemic had a small impact on the labour market. Based on the results of a questionnaire survey conducted in North-Western Hungary, Jenei-Módosné Szalai (2022) determined that employees would primarily prefer the hybrid form of work and would similarly support the option of fully working from home. On the other hand, employers would not consider either solution advantageous. This difference in attitude to work can lead to a conflict of interest between the employer and the employee, which can lead to labour market tensions in Hungary and in general. However, this also depends on the legal background of atypical forms of employment. Based on the data of the HCSO (2023d), in the period between December 2022 and February 2023, the proportion of people working remotely or from home was lower than in the years of the pandemic, albeit significantly more than before the pandemic. Thus, after the end of the pandemic, Hungarian employees returned to onsite work, but hybrid work takes place in many companies. This can promote the technological development and resilience of the Hungarian labour market by making it more flexible in terms of reactions to potential shocks. It should be emphasized that the Hungarian labour market closely follows international trends. Within this framework, the four-day working week was also introduced and tested in some cases, which may result in further reorganization in addition to the previously considered traditional labour market trends.

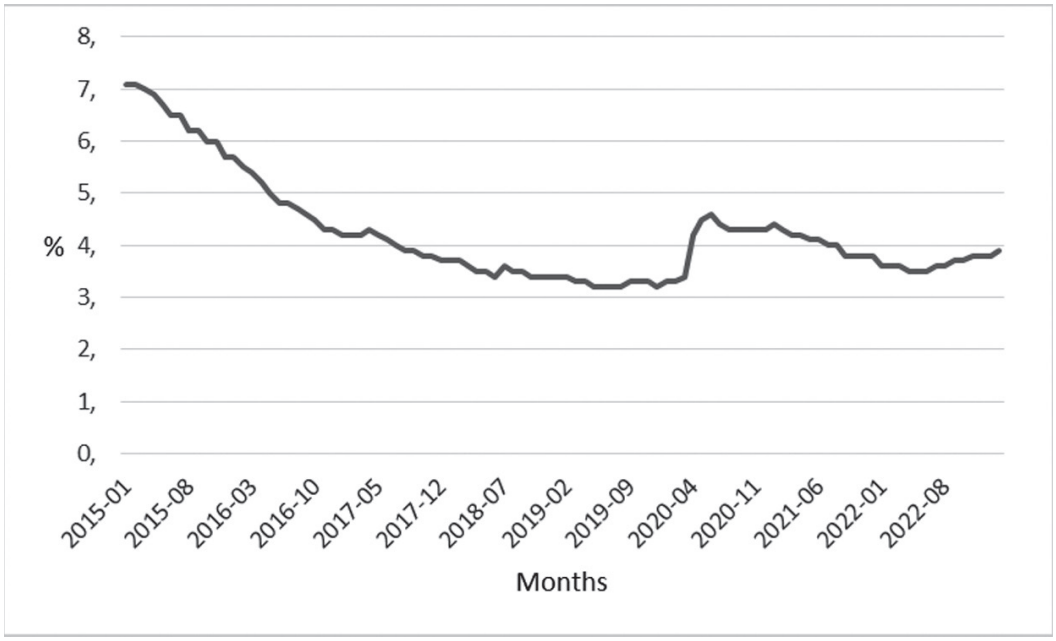

Figure 6: ***Unemployment rate in Hungary, seasonally adjusted, January 2015 – March 2023 (Source: own editing based on Eurostat data)***

In connection with the development of the unemployment rate, it can be concluded that the Hungarian labour market has long been considered tight. Similar to the previous chapter, examining the factor of labour shortage, based on Figure 6, it emerges that there is no general labour shortage in Hungary. The number of unemployed always exceeds the number of vacant positions. Nevertheless, it can be stated that the Hungarian economy is clearly characterized by sectoral unemployment. Examining the number of sectoral vacancies, it can be said that the Hungarian labour market can be said to be extremely tight in several sectors (for example tourism). The labour shortage can induce an increase in wage demands from the employees' side, which can result in an increase in labour costs for employers. To deal with the labour shortage, companies also employ foreign workers, whose number was estimated to exceed 70,000 in February 2023, primarily employed in the industrial and manufacturing sectors (Hornyák-Nagy, 2023). Foreign labour supply is a key factor for economic growth. Nevertheless, the aging society can also affect the productivity of the workforce, so maintaining and improving the level of labour productivity is of prime importance in the future. Together, these can significantly shape the country's competitiveness and economic growth.

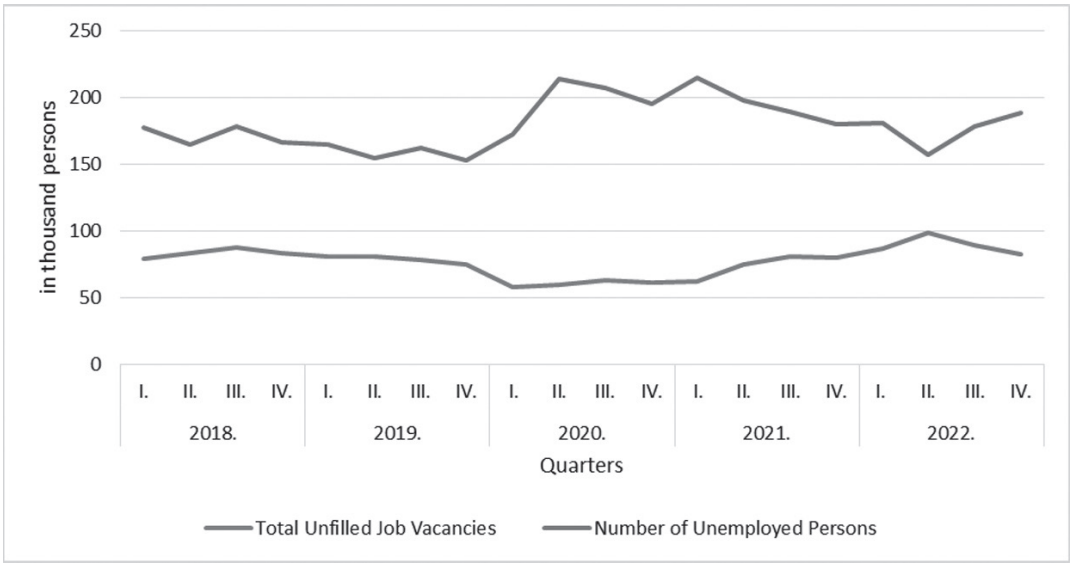

Figure 7: ***The development of total unfilled job vacancies and the number of unemployed persons in Hungary (Source: own editing based on HCSO data)***

Summary and conclusions

Overall, it can be concluded that Hungarian demographic conditions are influenced by the aging society, with which the country fits into the population trends of developed economies. At the same time, country-specific characteristics can bring negative consequences to the surface in a multiplicative way. It is necessary to maintain and strengthen the social and economic policy measures, to ensure that the turn in social processes – which is primarily embodied in the total fertility rate – continues. Maintaining this and further encouraging the desire to have children is an essential condition for demographic processes to become more sustainable in the longer term. Mitigating the decline in labour supply because of aging and reversing its potential trend is an essential factor in the tight labour market. This tension can be resolved by adapting and spreading the achievements of Industry 4.0, as well as through foreign workers. Nevertheless, the long-term maintenance and potential increase of the country's labour force reserve is necessary to maintain its current economic growth. In parallel with this finding, the identification of the economic, social, sociological, and cultural factors that influence the desire to have children outlined in the context of Hungarian characteristics and the examination of their quantitative correlations are essential in future research.

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ДЕМОГРАФСКО И СТАЊЕ НА ТРЖИШТУ РАДА У МАЂАРСКОЈ У СВЕТЛУ ГЛОБАЛНИХ ТРЕНДОВА

Апстракт: Демографске промене значајно утичу на изгледе за економски раст земље. Последњих година напредне економије карактерише старење друштва, што може имати многе макроекономске ефекте, укључујући смањење понуде радне снаге. Због тога је неопходно да се демографски процеси и процеси на тржишту рада сагледају у јединственом оквиру. Сврха ове студије је да се анализирају мађарски демографски процеси и процеси на тржишту рада и да се открије њихов однос са глобалним трендовима и факторима специфичним за земљу. Демографски процеси и процеси на тржишту рада такође се уклапају у међународне трендове у Мађарској, међутим, могу се идентификовати и јединствени фактори специфични за земљу због зависности од путање развоја. Поред тога, у Мађарској треба истаћи повећање стопе фертилитета последњих година. Ублажавање пада понуде радне снаге као резултат старења и преокретање његовог могућег тренда је суштински фактор на скученом тржишту рада. Ова тензија се може решити прилагођавањем и проширењем достигнућа Индустрије 4.0, као и преко страних радника. Ипак, дугорочно одржавање и потенцијално повећање резерве радне снаге у Мађарској је неопходно да би се одржао њен садашњи економски раст.

Кључне речи: СТАРЕЊЕ, ФЕРТИЛИТЕТ, ПОПУЛАЦИОНА ПОЛИТИКА, СТРИКТНО ТРЖИШТЕ РАДА, МАЂАРСКА.