



# DEMOGRAPHY AND COMPETITIVENESS IN THE EUROPEAN UNION



**KINCS**  
MÁRIA KOPP INSTITUTE  
FOR DEMOGRAPHY  
AND FAMILIES



OECONOMUS  
GAZDASÁGKUTATÓ  
ALAPÍTVÁNY

## IMPRESSUM

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# DEMOGRAPHY AND COMPETITIVENESS IN THE EUROPEAN UNION



2024



## WELCOME

Europe's constant need for crisis management (coronavirus epidemic, war, energy crisis, economic difficulties) and the left-wing ideological amazement against common sense are constantly occupying the resources that we should devote to big strategic issues. The stakes of the next century are no less than the survival of Europe in demographic, economic, political and cultural terms. At the moment, however, there is no intellectual ability, no long-term vision, no political ambition for Europe to take into account whether we are really creating a world on the old continent that we want our children to inherit.

Demography is one of the key areas that Europe does not deal with at the strategic level, but only "manages" some aspects of it. The mistaken migration policy of millions of illegal migrants from third countries supported by Brussels, packaged in „philanthropy" but fundamentally serving economic interests, is also one of the answers to the demographic crisis. This mistaken policy undermines our „common" European life. Irreversibly.

Hungary follows a different path than Western Europe. We will not allow the establishment of migrant ghettos, we will maintain the southern border barrier,

we have created the strictest foreign-police regime in Europe. But part of the Hungarian model is also the maintenance of Europe's most extensive family support system and the introduction of Europa's most powerful home-creation programme (CSOK+).

If there is a child, there is a Hungarian future! We know this. Through our children, we are able to leave a piece of ourselves here, and through them the culture, language, identity, public law and constitutional customs of our country will also survive. It is also a non-negligible fact that our children are also the builders of the future, and in this sense, the „well-being" of family policy and demography is also a matter of employment, economy, competitiveness and, last but not least, security. The aim of this publication is to shed light on the latter aspects in order to win the battle on the future of the continent in Europe with economic arguments based on objective data.

### **dr. Miklós Panyi**

Deputy Minister and Minister of State for Parliamentary and Strategic Affairs of the Prime Minister's Office

## WELCOME

Europe today is a continent of empty cradles. Our continent is getting older, more people die than are born. Hungary – in a unique way in Europe – is doing a lot to change this, that is why it has been regarding family policy as an important national strategic task for more than 10 years.

The population of the European Union is changing, demographic problems appear more strongly every year. There are member states that rely on external while others on internal resources to manage this situation, and there are also those that still do not attach importance to unfavorable demographic trends.

Hungary would like to solve population problems on its own. This is more difficult and lengthy, but less risky. We want to encourage childbearing, thereby increasing the number of births, while also maintaining our national identity. One of the main goals of our family policy since 2010 is to increase the wealth and well-being of families, along with improving demographic trends. That is why we introduced and offer more than 30

forms of family support and promote the importance of the family-friendly idea.

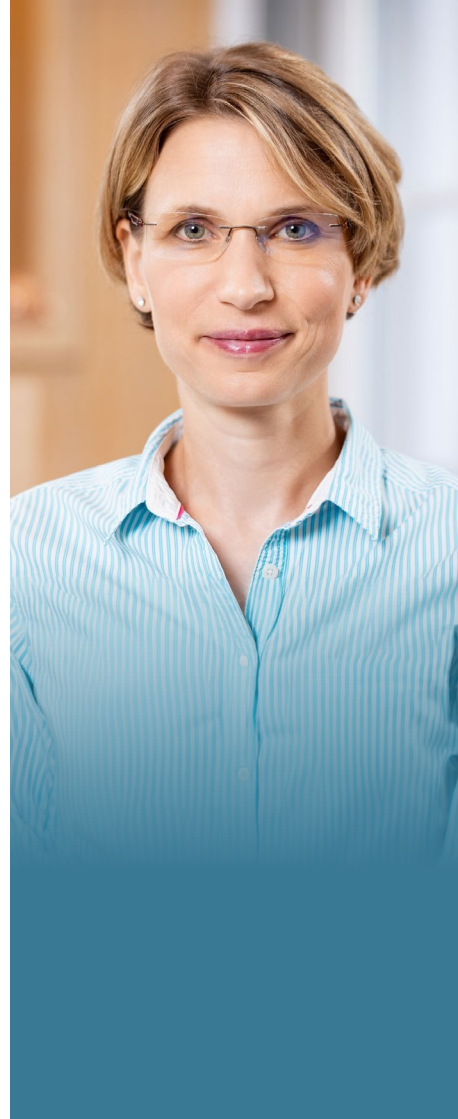
The basis of our family policy is to support childbearing by creating a suitable economic, institutional and social environment for families. The task of our support system is to offer solutions for all generations of the family, from the youngest to the elderly.

Our important premise is that working and having children are not mutually exclusive but mutually reinforcing factors. We can be more effective in our family life and at work if these two important areas of our lives are in harmony with each other.

We believe that a country's capacity for action and competitiveness depends on the strength of its families.

### **dr. Ágnes Hornung**

Minister of State for Families  
at the Ministry of Culture and Innovation



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## FOREWORD

When Hungary became a member of the EU in 2004, we rightly thought that we became part of an economic superpower: the EU's economy accounted for about a quarter of the total world economy, its size almost reached that of the United States. Nearly 460 million people, 7 percent of the world's population, lived in the European common market, and a fifth of world trade was carried out by EU countries. The EU saw itself as a peaceful challenger to the United States: according to the goals declared in Lisbon (2000), it will become a world leader in innovation and competitiveness, while building its geopolitical role in the world.

Despite the success of the single market and deepening integration, the EU is today in a weaker position to achieve the above goals than in 2004. What's more, in some areas, it's no exaggeration to talk about accelerating backlogs and heavy, unresolved problems. Some of the economic problems are specifically demographic: growing labour shortages; the challenges of declining weight and economies of scale in world consumption and production due to demographic trends;

the crowding out of national budgets by social health expenditure on ageing.

If there is no positive turn, all these will have increasingly negative consequences, both in terms of the EU's international weight and its ability to enforce its interests.

Our publication was prepared to shed light on the relationship between demographic processes and competitiveness, and in this context to show the processes taking place in the European Union, with special attention to the period since Hungary's previous Presidency of the Council of the European Union in 2011. Our intention was to provide an overview of the demographic and competitiveness challenges facing the European Union, including Hungary.

### **Tünde Fűrész**

President of the Mária Kopp Institute for Demography and Families (KINCS)

### **dr. Péter Töröcsi**

Chairman of the Board of the Oeconomus Economic Research Foundation



# POPULATION CHANGE IN THE WORLD

## What is this?

The number of people living on Earth and their distribution by region can be determined based on the estimates of the United Nations. The population statistics provide information on the factors affecting the change in the population (births, deaths, migrations) and their development.

## Why is it important?

The number of the population is the most basic social-demographic indicator, which allows us to monitor the development of the number of humanity, which significantly affects the future of a given region.

## International outlook

In 2023, the world's population reached 8 billion people. The different rates of population growth significantly affect the distribution of the world's population by region. The proportion of Europeans in the world's population is steadily decreasing: in 1960, 20 percent of the world's population was European, today it is only 10 percent, and by 2070 it is expected to be only 6 percent. According to UN data, the population of Asia increased from 1.4 billion to 4.7 billion people between 1950 and 2021, so today 60 percent of the world's population lives here. The population of the Member States of the European Union accounts for 6 percent of the world's population, compared to 13 percent in 1950.

## The Hungarian way

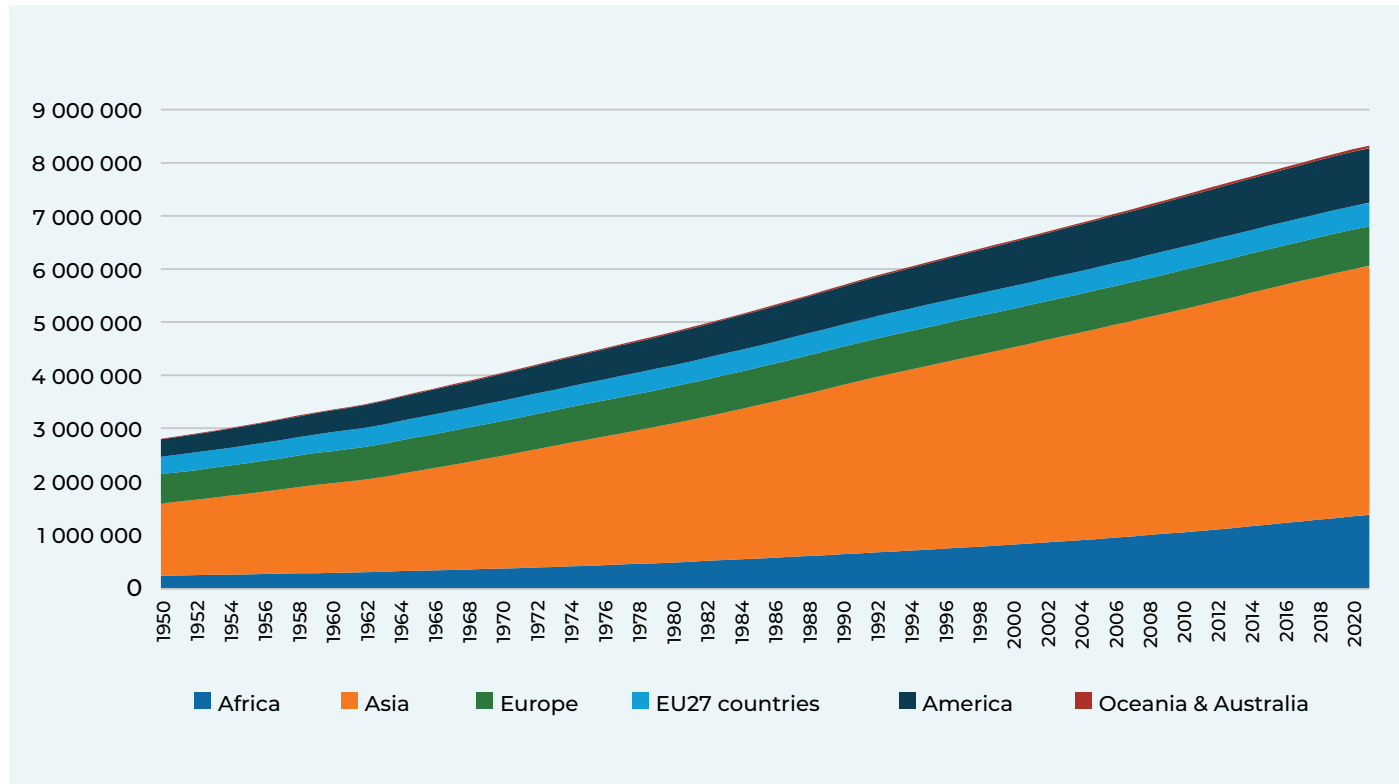
According to the data of the Central Statistical Office (CSO), the population of Hungary has been growing year by year between 1950 and 1980, but has been declining continuously since 1981. As a result, the population of 9 million 603 thousand people in 2022 was 310 thousand more than in 1950, but 1.1 million fewer than in 1980.

## Interesting facts

According to the UN, the growth of the world's population so far is expected to slow down, then stop in the second half of the 21st century, and may even start to decline after that. Meanwhile, the proportion of developing countries – primarily sub-Saharan African populations – in the world's population may increase. Today, the largest population growth is taking place in Africa, where the population increased more than sixfold between 1950 and 2021. The UN forecasts that Africa will continue to have the highest growth rate in the future, so that 38 percent of the world's population will live on this continent in 2100.



# POPULATION CHANGE IN THE WORLD



Population development by region (1950-2020)  
(Source: UN, created by KINCS)

## WILLINGNESS TO HAVE CHILDREN IN THE WORLD

### What is this?

The total fertility rate (TFR) is one of the most commonly used indicators of childbearing behavior. It shows how many children, on average, a woman would give birth to in her lifetime if fertility data for a given year were to remain constant.

### Why is it important?

In order for a society to reproduce itself, the TFR must reach 2.1, that is, a couple to reproduce themselves must have at least two children (+0.1 is required due to infant deaths). If fertility falls permanently below the reproduction level, the overall population begins to decline and age.

### International outlook

Fertility levels play a decisive role in the slowing rate of population growth, which is declining worldwide, except in a few countries. The average number of children per woman decreased by half to 2.3 between 1950 and 2021. In recent years, the TFR has decreased in all regions, so the fertility indicators of the regions have converged, but the differences are still significant: in 1950, the value of TFR was 6.6 in Africa and 2.7 in Europe; in 2021, it decreased to 4.3 and 1.5, respectively.

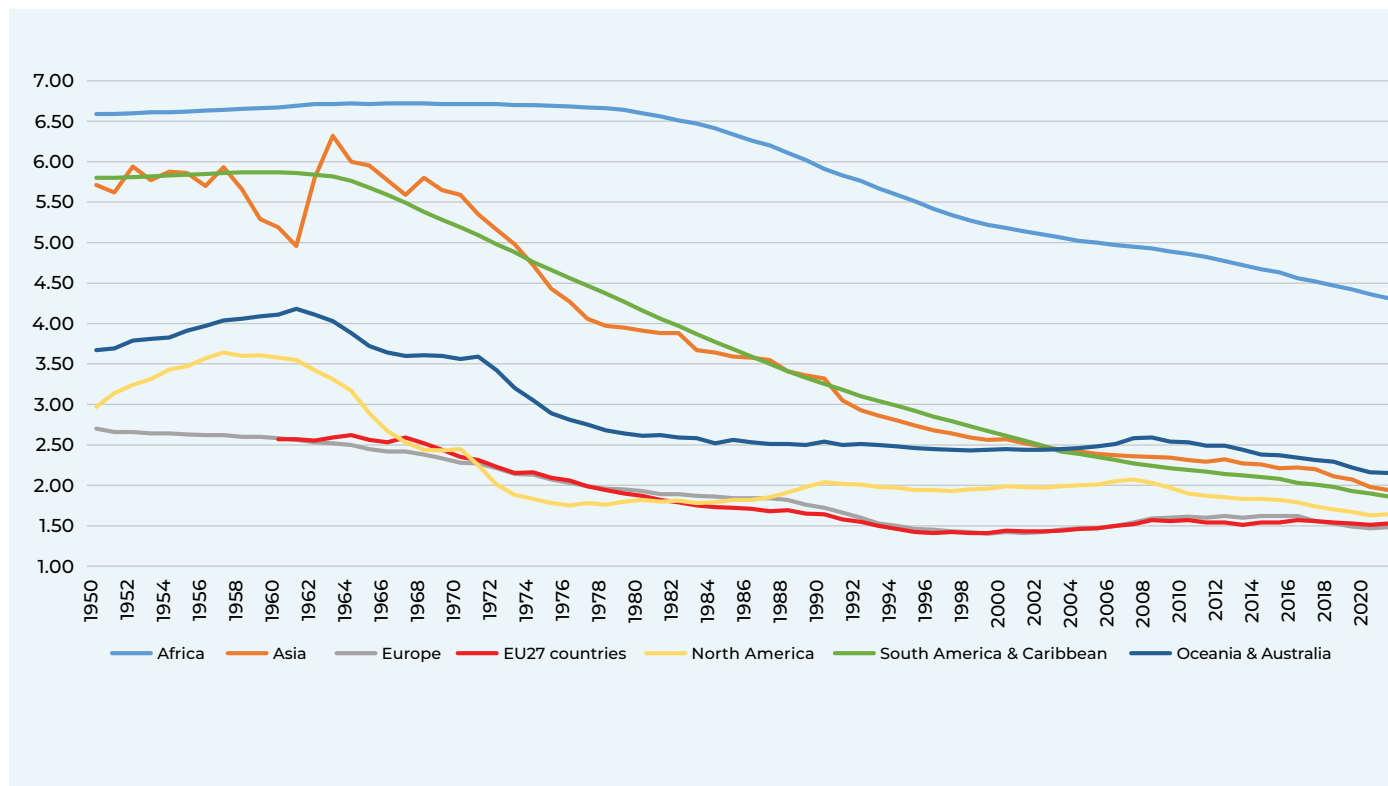
### The Hungarian way

In Hungary, the value of TFR was 2.6 in 1950, which decreased continuously until 2010. The only exception to this was the Ratkó era, when the value increased to 3.0 in 1954 due to the prohibition of abortion. The subsequent decline reached its lowest point in 2011, when the TFR has been raised from 1.23 to 1.61 in 2021.

### Interesting facts

According to the UN forecast, by the end of the century, fertility is not expected to reach the reproductive level, that is, 2.1, for any region.

## WILLINGNESS TO HAVE CHILDREN IN THE WORLD



Development of the total fertility rate by region (1950-2020)  
(Source: UN, created by KINCS)

# THE DESIRE TO HAVE CHILDREN IN THE EUROPEAN UNION

## What is this?

The total fertility rate is the most accurate description of the desire to have children of people living in the Member States of the European Union, which shows how many children are born on average in the lifetime of women living in the European Union.

## Why is it important?

The weight of the European Union in the world has decreased, and this decline is partly due to demographic reasons. The decreasing desire to have children is weighing on Member States as an increasingly heavy burden.

## European overview

In none of the EU countries does the fertility rate reach the 2.1 value required to maintain the population. In the European Union (EU27), the average overall fertility rate decreased from 1.54 to 1.46 between 2011 and 2022. During this period, the average number of children per woman increased in 10 countries and decreased in 17 countries, even in those countries where it reached the reproductive level at the beginning of the decade. Between 2011 and 2022, there was a rearrangement between the regions of the European Union, while formerly in Western and Northern European countries, now the Central and Eastern European countries have the highest fertility levels. The exception is France, where the fertility rate is 1.79, which is the highest in the EU, while in Malta it was only 1.08 in 2022.

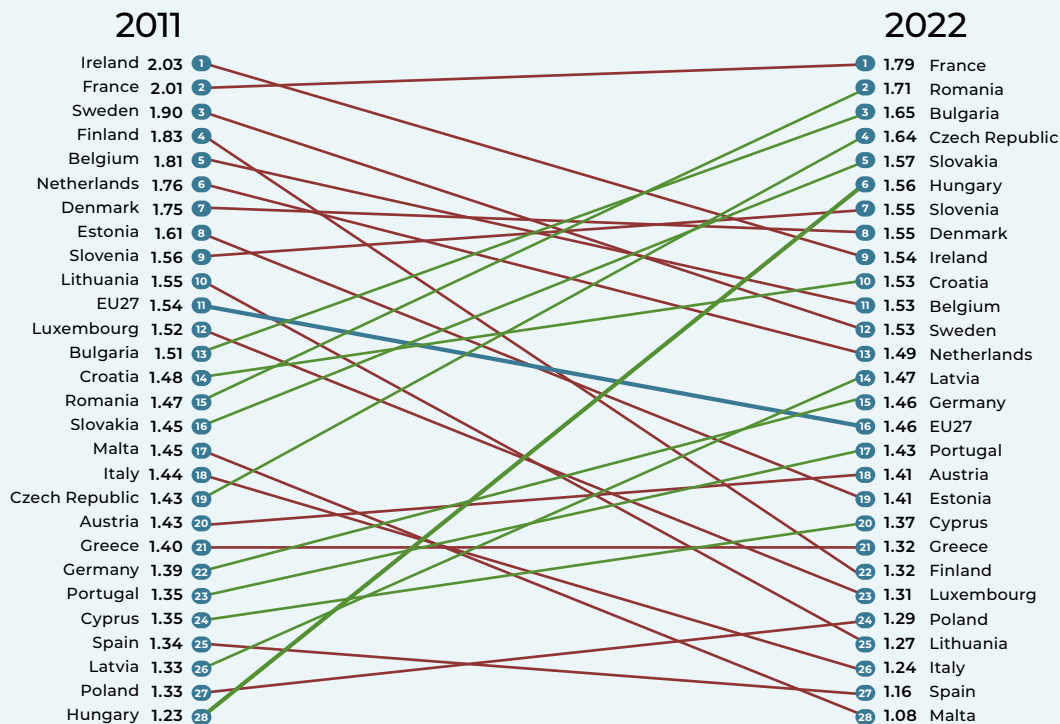
## The Hungarian way

Between 2011 and 2022, the value of TFR increased the most in Hungary, from 1.23 to 1.56. Thanks to this, Hungary moved from the last place in the EU ranking to the sixth place. This was the most significant position change in the given time interval.

## Interesting facts

Of the ten Member States that still had fertility rates above the EU average in 2011, four slipped into the midfield and two slipped into the bottom third. In comparison, the Central and Eastern European countries, which were still in the lower and middle ranks in 2011, moved up to the upper third.

# THE DESIRE TO HAVE CHILDREN IN THE EUROPEAN UNION



Development of the total fertility rate in the European Union (2022/2011)  
 (Red means decrease and green means increase)  
 (Source: Eurostat, created by KINCS)

# DESIRE FOR MARRIAGE IN THE EUROPEAN UNION

## What is this?

The crude marriage rate is the ratio of the number of marriages during the year to the average population in that year.

## Why is it important?

Marriage is a more durable form of cohabitation, in which typically more children are born than in the case of cohabitation. Research proves that people living in a marriage are happier and more satisfied with their lives, and that a harmonious spousal relationship also contributes to mental and physical well-being.

## European overview

In the European Union, those Member States in which the number of marriages decreased between 2011 and 2021 are in the majority. The rate per thousand inhabitants decreased from 4.2 to 3.9 in the EU as a whole. During this time, the crude marriage rate increased the most in Hungary, from 3.6 per thousand to 7.4 per thousand, and as a result, this rate was the highest in the EU in 2021. At the end of the ranking were Slovenia and Portugal, with only 2.8 marriages per thousand inhabitants in these countries.

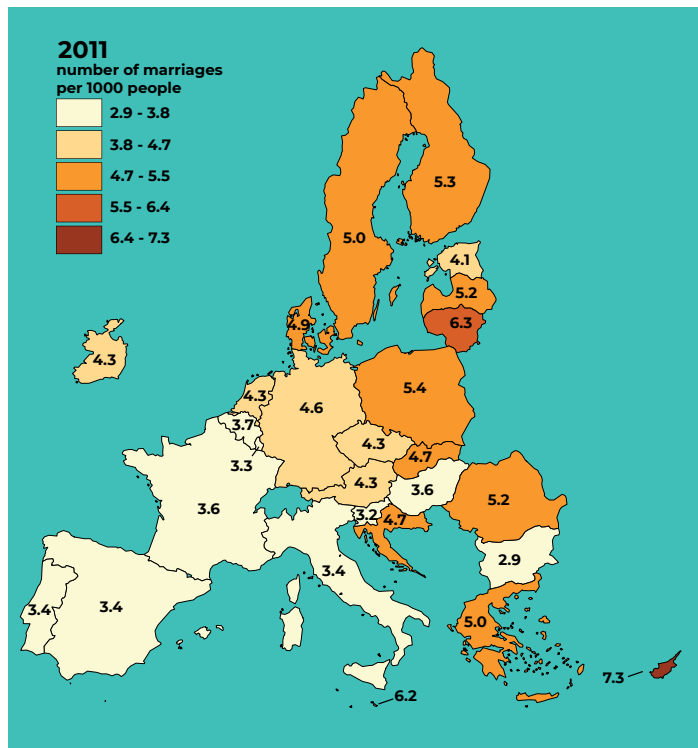
## The Hungarian way

In Hungary, the number of marriages reached its lowest point in 2010 after a prolonged and significant decrease, but after that, an upward trend started. Marriage has become increasingly popular among Hungarians, with the effect that by 2021 the number of weddings has doubled compared to 2010, reaching an outstanding 7.4 per thousand crude marriage rate at the international level.

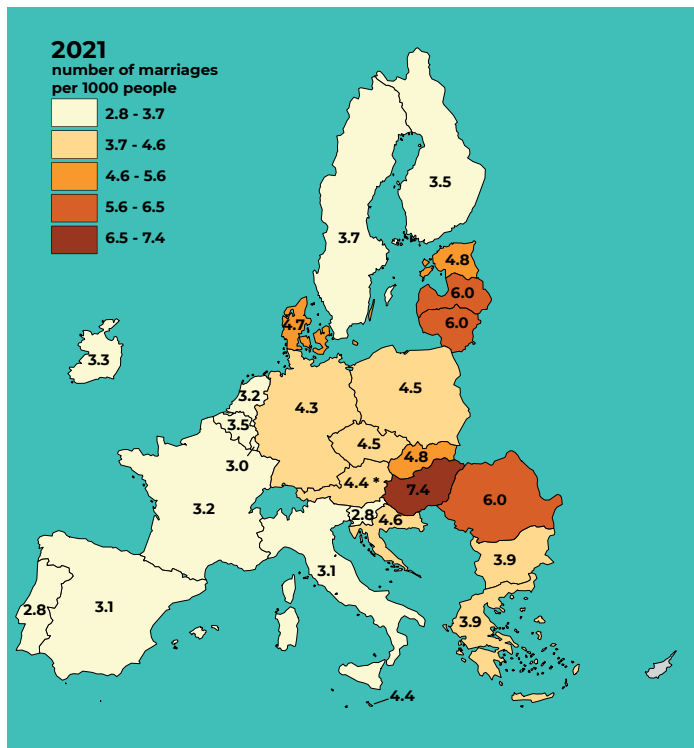
## Interesting facts

In Hungary, not only the number of marriages has increased in recent years, but more and more couples are connecting their lives where both parties have gone to the registrar for the first time. The proportion of children born in marriage has also increased significantly in Hungary, which is a unique phenomenon in the European Union.

## DESIRE FOR MARRIAGE IN THE EUROPEAN UNION



Number of marriages per thousand people in the Member States of the European Union (2011)  
(Source: Eurostat, created by KINCS)



Number of marriages per thousand people in the Member States of the European Union (2021)  
(Source: Eurostat, created by KINCS)  
\*2020

## NUMBER OF BIRTHS IN THE EUROPEAN UNION

### What is this?

In the European Union, children from mothers who have had their habitual residence in the European Union for at least 12 months before giving birth count towards the number of births. The birth rate shows the number of births per thousand inhabitants. A birth from a mother born abroad is a birth where the mother was not born in that country but in another country. A birth from a mother born outside the EU is a birth where the mother was not born in that country, but in another country outside the EU. According to EU rules, a child comes from a mother born abroad if her mother was born in another EU member state or outside the EU.

### Why is it important?

With the help of birth indicators, we can track the number of births in the European Union, the number of children per thousand inhabitants, and the role of those coming from abroad in the development of the number of births. In this way, it can be predicted how the population of the Union will change, how the dependency rate will develop, and how the proportion of those with other cultural and ethnic backgrounds will change in the host society.

### European overview

In the European Union, almost 4.5 million children were born in 2011, but their number has fallen below 4 million in 2022. The number of births per thousand people at EU level decreased from 10.1 to 8.7 in the mentioned time interval. In recent years, the number of children born to foreign mothers has been increasing continuously, reaching 22 percent in 2022. Two-thirds of mothers born abroad are from non-EU countries, and in 2022, one in seven newborns had roots outside Europe.

### The Hungarian way

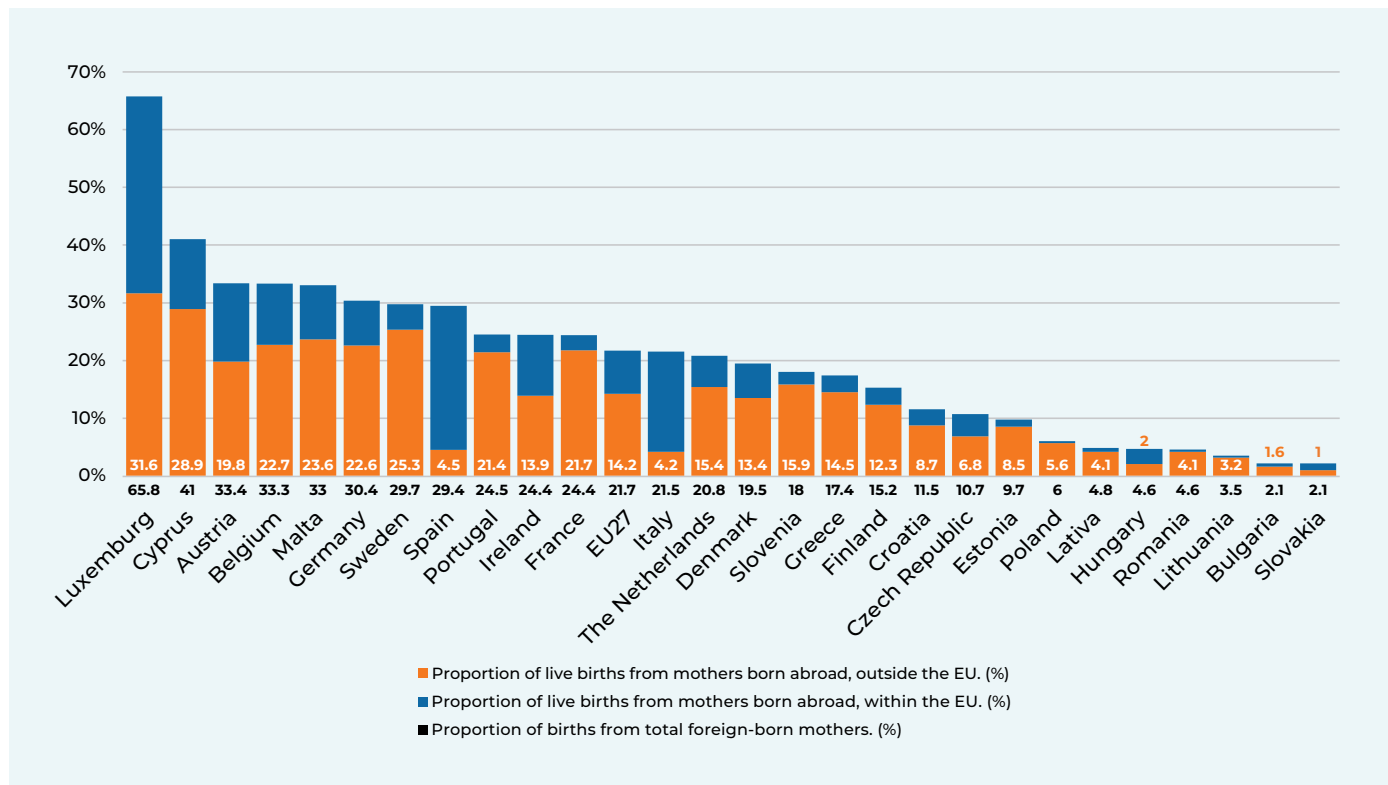
In the EU, the number of births per thousand women increased only in Hungary and Germany between 2011 and 2022. The birth rate in Hungary increased from 8.8 to 9.3, and the number of births was 88,049 in 2011 and 89,669 in 2022, according to Eurostat data. Due to the decrease in the number of women of childbearing age, the number of births increased by only 1.8 percent between 2011 and 2022, but the birth rate improved by 5.7 percent. In Hungary, the number and rate of births from foreign mothers is also low, at only 4.6 percent. Mothers born abroad are typically women from Hungarian communities in the Carpathian Basin who have relocated to the motherland.

### Interesting facts

Today, with the exception of Eastern European countries, in most European Union Member States, one out of every three to five newborns has a mother of foreign origin. In Austria, Belgium, Germany, Sweden, Spain and Malta, every third child, in Portugal, Ireland, France, every fourth, in Italy, the Netherlands, Denmark, every fifth newborn has a foreign mother. In Luxembourg, two out of three children are born to foreign mothers. The mothers of a quarter of children born in Germany or Sweden come from outside the European Union.



# NUMBER OF BIRTHS IN THE EUROPEAN UNION



Proportion of live births from mothers born abroad in the European Union  
(Source: Eurostat, created by KINCS)

## GLOBAL OLD-AGE DEPENDENCY

### What is this?

The old-age dependency ratio is an indicator used to measure the ageing of the population, which shows the proportion of elderly people (65 years and older) to the active age group (15–64 years).

### Why is it important?

The various indicators of dependency are the most important indicators of the changes in the age composition of the population. Since this indicator does not take into account the number and proportion of children, it shows the current state of aging. It provides information on the burden of supporting elderly people of working age.

### International outlook

The aging process of the world's population is well illustrated by the fact that the global old-age dependency ratio increased from 8.5 percent to 14.8 percent between 1950 and 2021. There was an increase in all regions, with the largest increase in Europe, where it rose by 18 percentage points to almost 30 percent, the highest of all regions. The other extreme is Africa, where the rate has basically stagnated, barely exceeding 6 percent in 2021. Among the countries of the world, Japan has the highest elderly dependency rate, 51 percent.

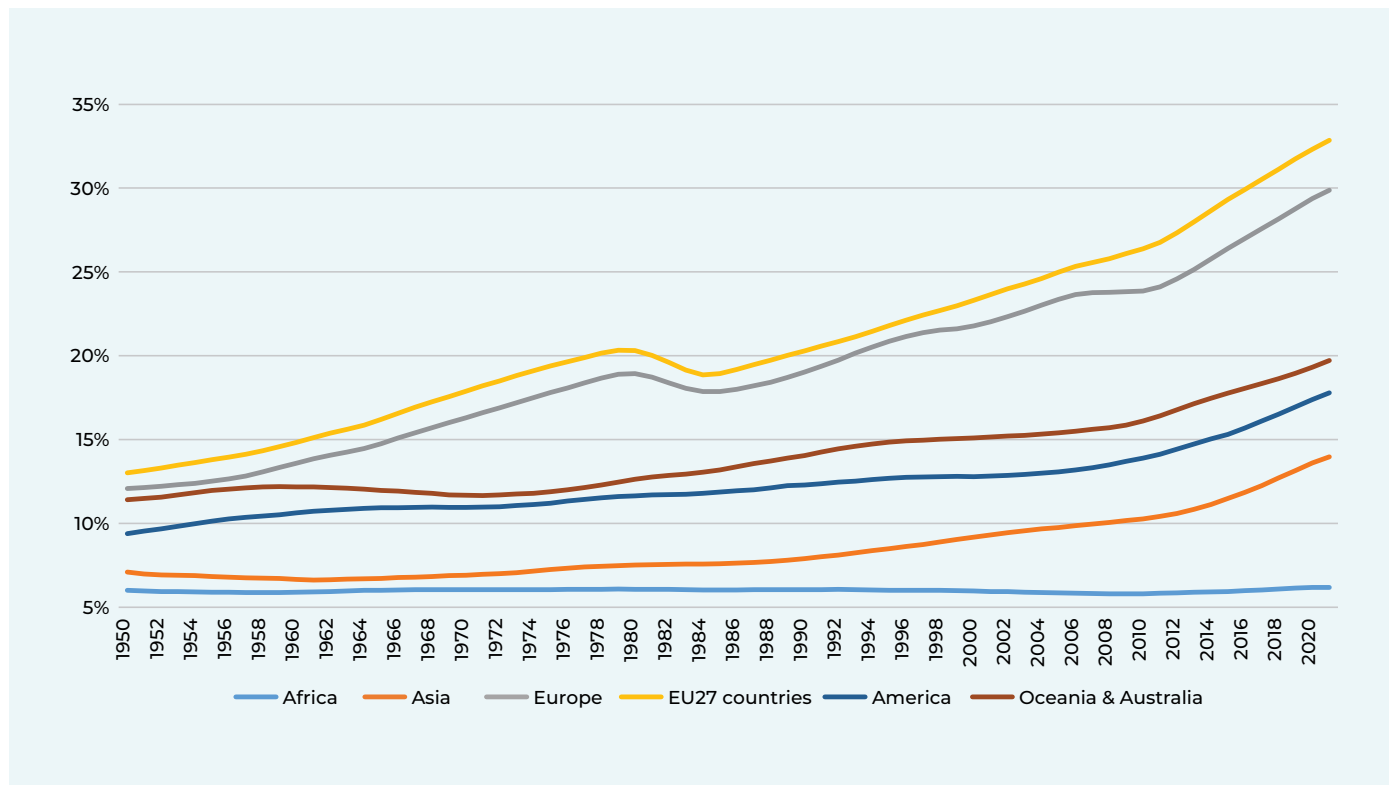
### The Hungarian way

Since 1981, the ageing process of the population has accelerated in Hungary as well. Over the past seven decades, the old-age dependency ratio has increased from 11 percent to 31 percent compared to 1950. This was achieved by having nearly as many people of working age in 2021 as in the middle of the last century, so the significant increase in the proportion of older people is clearly due to a large increase in the elderly population (the number of people aged 65 and over nearly tripled in 70 years).

### Interesting facts

The UN forecasts that the average old-age dependency ratio of almost 15 percent in the world will exceed 40 percent by 2100.

# GLOBAL OLD-AGE DEPENDENCY



Development of the old-age dependency ratio by region (1950-2020)  
 (Percentage of elderly people over 65 years old per active 15-64 year olds)  
 (Source: UN, created by KINCS)

# AGEING INDEX IN THE EUROPEAN UNION

## What is this?

One of the frequently used measures of population ageing is the ageing index, which shows the proportion of elderly people (65 years and older) to the child-aged population (younger than 15 years). It provides information on the number of elderly people per hundred children.

## Why is it important?

The ageing index is the most important indicator of the ageing process, society gets older as the number of children decreases, while the number of elderly people increases. It leads to the aging of society if the fertility and mortality rate also decreases, but the life expectancy increases. This process is currently taking place in the European Union.

## European overview

All EU Member States are characterised by an ageing society. Between 2011 and 2022, the ageing index increased in all countries, most notably in Portugal: from 124 percent to 185 percent, which means that there are almost two over-65s per child. In the EU as a whole, the index value has increased from 115 percent to 141 percent, that is, there are about one and a half elderly people per child. In 2022, this rate was the highest in Italy, at 188 percent; only in Ireland (76 percent) and Luxembourg (93 percent) did the number of children exceed that of the elderly. The increase in the ageing index is significantly affected by the increase in healthy life expectancy.

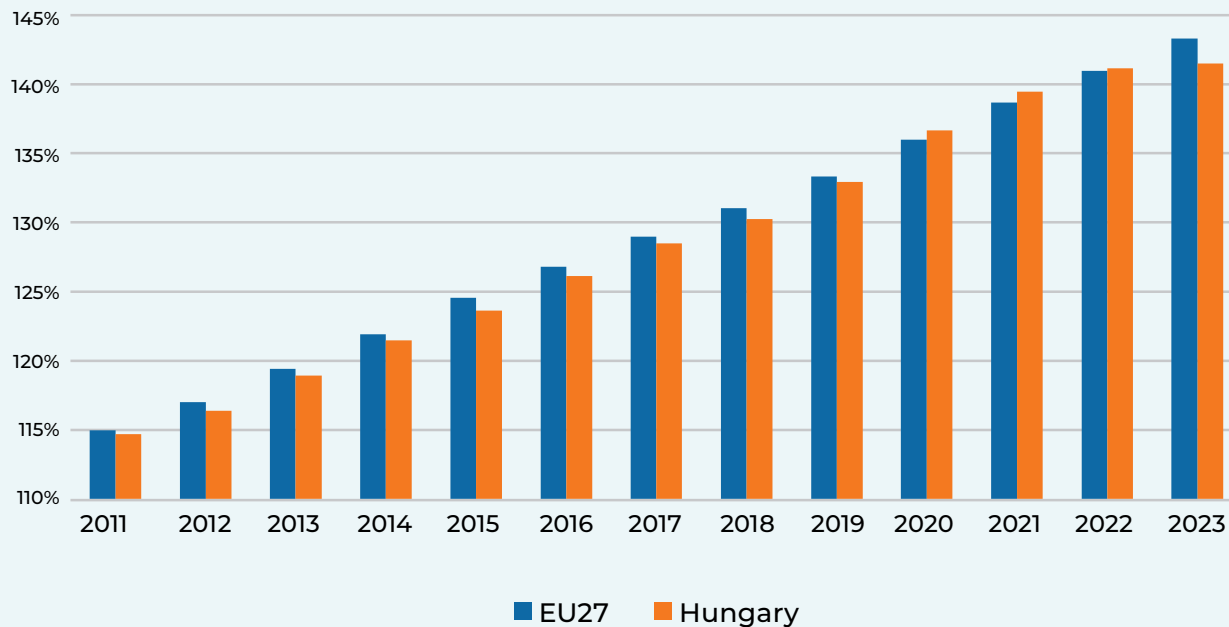
## The Hungarian way

In Hungary, the number of people aged 65 and above exceeded the number of children under the age of 15 for the first time in 2006, and since then the prevalence of elderly people has been increasing. In 2022, there were 141 elderly residents per hundred children, while in 2011 there were only 115. The *Ratkó* effect due to the prohibition of abortion in the 50s plays a significant role in the growth of the age group over 65.

## Interesting facts

Eurostat predicts that by 2100, there will be 246 elderly people per 100 children in the European Union, instead of the current 141, meaning that the ageing of the old continent will be even stronger.

## AGEING INDEX IN THE EUROPEAN UNION



Changes in the ageing index in the European Union (2011-2023)  
(Percentage of people aged 65 and over to people younger than 15)  
(Source: Eurostat, created by KINCS)

# THE EUROPEAN UNION'S SHARE OF THE GLOBAL ECONOMIC PERFORMANCE

## What is this?

Gross domestic product (GDP) is the best measure of the annual monetary output of a region's citizens and legal entities (mainly companies), which can be used to determine the share of the world economy that it represents.

## Why is it important?

In 2004, the gross domestic product of the EU and the US barely differed: the EU's share of the world economy was 26 percent, the US's share was 28 percent, but the proportions have now changed.

## International outlook

In twenty years, the EU's share of the world economy has fallen to 17 percent, while that of the United States has remained essentially unchanged. This is not the result of Brexit (2020): the UK's exit has cut "only" 2 percent of the EU economy. In fact, unlike the United States, which doubled in size in 20 years while growing by a third of the population, Europe's economy could not maintain its relative position with the accelerating growth of China and Asia.

The EU's share of world foreign trade is also decreasing: it was 18 percent in 2004, now it is 14 percent; China, meanwhile, has overtaken the EU. The surge in energy prices and the downturn caused by the war also hinted at the vulnerability of the EU.

A good example of long-term dynamics is European car production: in 2022, 11 million passenger cars were produced in the EU, essentially as much as 10 years ago; in 2004, this number was still 15 million. Meanwhile, the volume of the USA increased by a third, and the Chinese increased sixfold (!): in 2023, 30 million passenger cars were already produced in China, of which 5 million were exported.

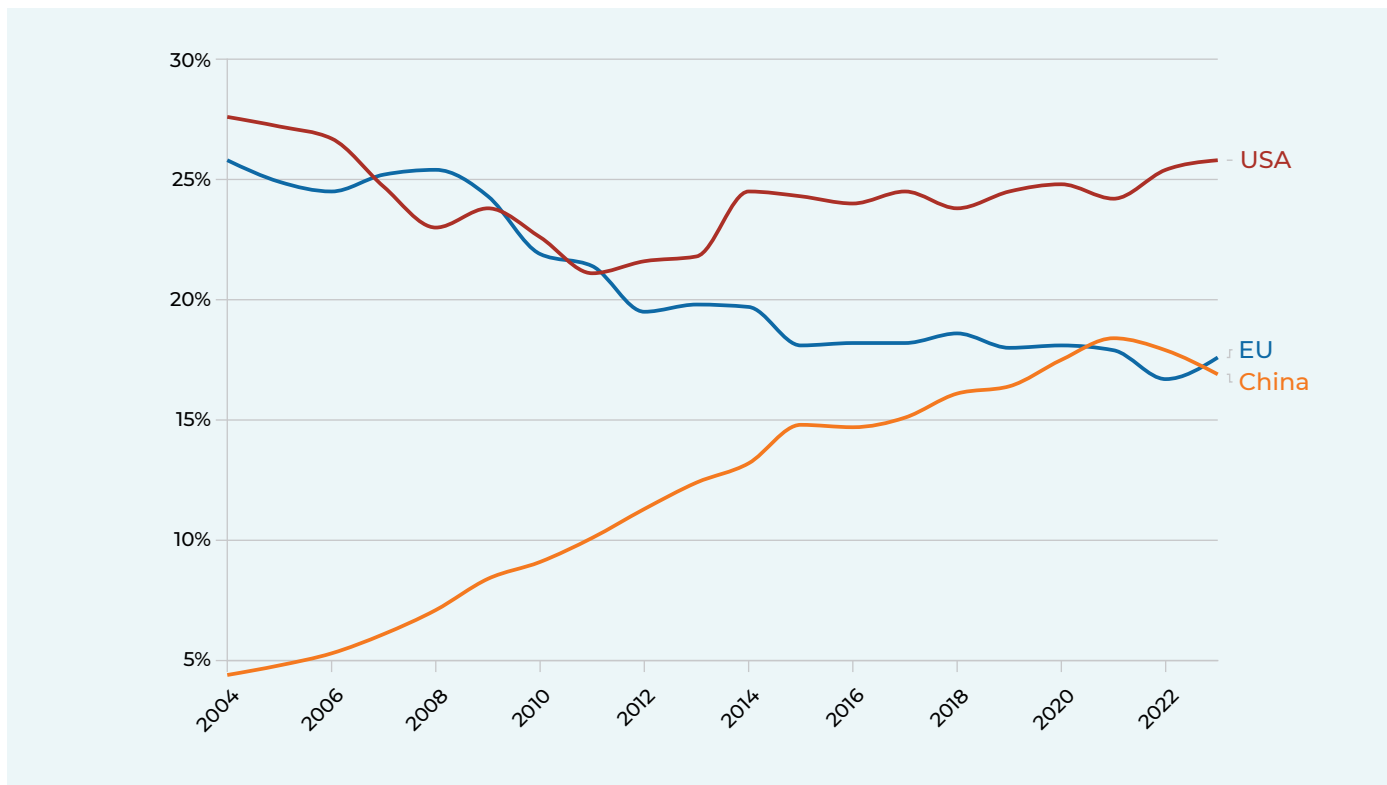
## The Hungarian way

Between 2013 and 2022, the growth rate of the Hungarian economy exceeded the average economic growth of the EU by 1.8 percent, and GDP growth was 2.2 percentage points higher than that of Germany. Catching up with the EU average has accelerated: in 2010, Hungary's GDP per capita was 66 percent of the EU average, and in 2022 it reached 76 percent.

## Interesting facts

Today, only 6 of the 50 largest companies in the world are in the European Union, while 20 of them are American and 13 are Chinese. The EU is essentially lagging behind in the digital revolution: only 11 of the world's 100 largest technology companies were from the EU in 2022. In 1990, 44 percent of the world's chips were produced in the EU, and by 2004 this had shrunk to 15 percent and by 2022 to 10 percent. Recently, the EU has made significant efforts to reverse the negative trends: plans have been made for industrial resettlement (e.g. chip production), rare metal extraction, battery production and green energy. However, these programmes are hampered by a general shortage of labour and production capacity across Europe, as well as a shortage of highly skilled professionals.

## THE EUROPEAN UNION'S SHARE OF THE GLOBAL ECONOMIC PERFORMANCE



The European Union's share of the world's economic performance  
(Source: IMF, Bruegel, created by Oeconomus)

# IMPACT OF POPULATION CHALLENGES ON COMPETITIVENESS

## What is this?

Demographic trends in Europe have significant economic and social consequences. The low birth rate, the number and proportion of elderly people puts companies and age groups under double pressure. One of the biggest problems of European competitiveness is ageing and the lack of a skilled workforce.

## Why is it important?

EU decision-makers have recently started to deal with the topic of demography and competitiveness: classical sending markets are getting exhausted, which have so far compensated for the negative demographic processes with guest workers, and integration problems caused by mass migration also force governments to change their approach. Demographics play a key role in economic growth because the age composition of the population affects labor supply and productivity. The changing age pyramid also affects the consumption structure and investments. Labour market participation, birth rate, age of workers, their skills and qualifications have a decisive influence on a nation's economic growth. Further strengthening the innovation-driven economic growth model is difficult to imagine in the absence of innovative and entrepreneurial young people.

## European overview

In 2023, the old-age dependency ratio in the EU was 33.4 percent, which means that for every individual over 65, there were less than three people of working age (15-64 years). It is predicted that the trend will increase and in 2050 there will be less than two working-age people per elderly person. Considering that 80-90 percent of per capita health expenditures occur over the age of 65, the related expenditures increase dramatically, while fewer and fewer people will pay their contributions.

## The Hungarian way

Hungary is one of the countries with a below-average dependency rate in the European Union, but as the proportion of the elderly increases, the old-age dependency ratio also increases in our country. According to Eurostat's forecast, it will increase from 31.6 percent in 2023 to 45.5 percent by 2050, that is, while in 2023 there was an elderly dependent per 3.2 active-age residents, in 2050 this indicator will be only 2.2.

## Interesting facts

Declining labour supply also means fewer people will be paying into pension schemes. The next generations, if they want to maintain the standard of living of current pensioners, will need to save more and work longer. In addition to rising pension liabilities, the cost of health care and care for the elderly is also putting a strain on public finances. All of this leads to an increase in taxes and a decrease in competitiveness. If there are few people of working age, it is difficult to fill jobs: real wages will increase, the structure of goods and services will change, demand will decrease and inflation may appear. The impact of current demographic processes on competitiveness depends to a large extent on the reaction of companies and national economies; the appropriate reallocation of resources and a thoughtful economic and family policy can help adaptation.



## IMPACT OF POPULATION CHALLENGES ON COMPETITIVENESS

High proportion of working-age, educated population in the total population	High proportion of retired people in the total population
By mobilizing labor reserves, the willingness to invest can be increased.	Due to the aging of the working-age population, labor shortages occur and the willingness to invest decreases.
High entrepreneurial spirit, a young and skilled workforce is open to innovation.	Low entrepreneurial willingness, diminishing innovation potential.
The working-age population is the driving force behind consumer demand.	Declining and transforming demand.
Pension schemes are easy to balance.	The sustainability of pension schemes is becoming increasingly difficult to ensure.
Pressure on health and social care systems is low.	Pressure on health and social care systems is increasing and requires additional intervention.
Increasing private and public savings, lower interest rates, and budget balance are easier to ensure.	Declining private and public savings, rising interest rates, financing the budget becomes more expensive.
Less pressure on the budget, lower taxes.	Taxes are also higher because of the pressure on the budget.
<b>INCREASING INTERNATIONAL COMPETITIVENESS</b>	<b>DECREASING INTERNATIONAL COMPETITIVENESS</b>

International competitiveness of ageing and very old societies  
(Source: Oeconomus)

## EU REGIONAL COMPETITIVENESS INDEX

### What is this?

The Regional Competitiveness Index (RCI), developed by the European Commission, has been measuring the main factors of competitiveness for all NUTS-2 regions of the European Union since 2010. The index value is given as a percentage, where 100 percent represents the same competitiveness as the European Union average for the region. The RCI consists of three sub-indices (Basic, Efficiency and Innovation) and 11 pillars describing different aspects of competitiveness.

### Why is it important?

The RCI has adapted and extended the framework of the World Economic Forum's Competitiveness Index to the EU's regional context, with the aim of capturing the underlying factors that support the long-term economic development of a region. Regional competitiveness in this context is the ability of a region to offer an attractive and sustainable environment for both companies and the people living there. Many of the indicators on human capital and the quality of institutions in the index affect how attractive a region is to young people who are about to start a family, which thus affects the long-term labour market potential of the region and, consequently, its economic performance.

### European overview

When comparing the 2022 values of the RCI with the 2016 data, it can be said that while the level of competitiveness has stagnated or even decreased in the northern and western Member States, there is a clear process of competitiveness development in the regions in the eastern and southern Member States. Sweden and Luxembourg saw the largest declines of around 10 percentage points over the past 6 years, while Lithuania (+24 percent), Greece (+22 percent) and Bulgaria (+21 percent) showed the highest increases.

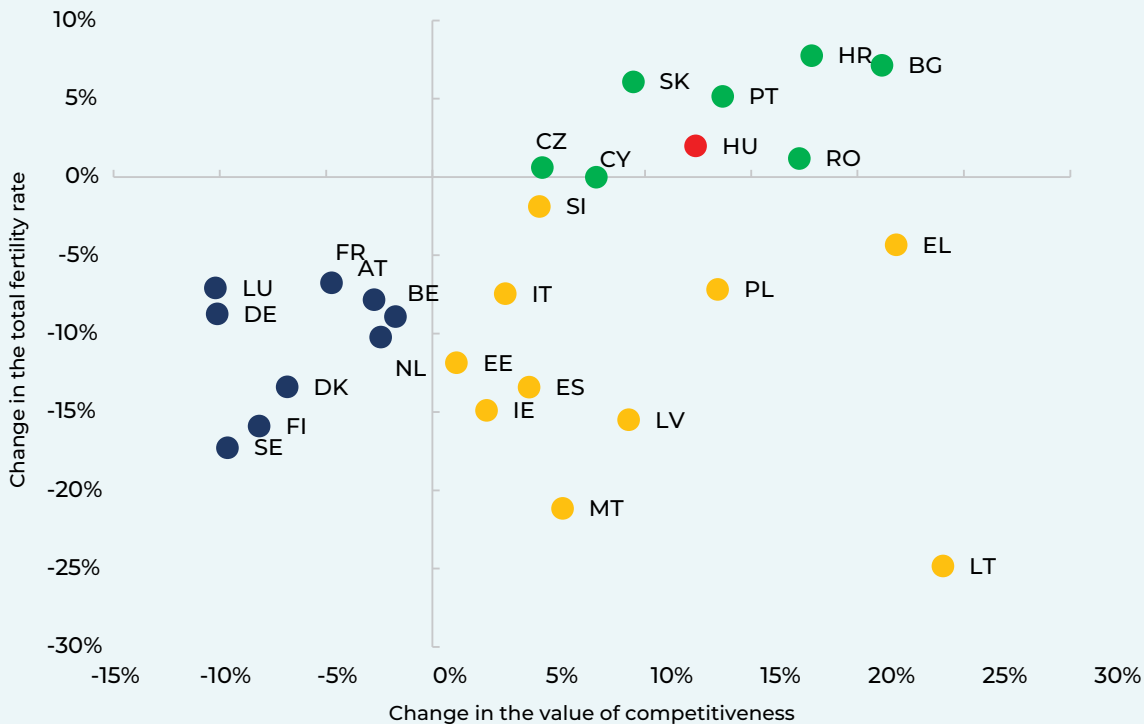
### The Hungarian way

From 2016 to 2022, Hungary increased its competitiveness level by about 12 percentage points. Examining the three sub-indexes, the greatest increase can be observed in the field of efficiency, where our country achieved the fourth most dynamic growth among the Member States.

### Interesting facts

As shown in the figure below, there is a correlation in the changes in the competitiveness and fertility patterns of the Member States. It can be seen that in no European Union Member State has the desire to have children improved where competitiveness has deteriorated. In contrast, in Member States where the fertility rate has increased in recent years, competitiveness has improved without exception.

## EU REGIONAL COMPETITIVENESS INDEX



Change in competitiveness and fertility in EU27 Member States, 2016-2022  
(Source: Eurostat, created by KINCS)

# LABOUR MARKET SITUATION AND DEMOGRAPHIC TRENDS

## What is this?

The most important indicators of the labor market include: unemployment rate, activity rate (economic activity rate), employment rate, dependency rate. The economically active population (labor force) consists of employed and unemployed people. The employment rate is the percentage of people in work as a percentage of the total working-age population, that is, it shows the percentage of people of working-age who are working.

## Why is it important?

Labor force is one of the factors of production, and the scarce supply of labor force can become a serious obstacle to economic development. In addition, employment and secure work income are decisive factors in starting a family and having children, so youth unemployment can significantly hinder the positive development of the number of births.

## European overview

Although employment in the EU continued to increase in 2023, reaching 70 percent (15-64 age group), the rate of increase (almost 8 percentage points) compared to 2011 varies significantly from one Member State to another and from one age group to another. The increase in the employment rate was the highest in Malta (+35 percent) and Hungary (+30 percent) compared to 2011, but also exceeded 20 percent in Poland, Ireland, Romania and Lithuania. Among young people under the age of 30, employment growth was the highest in Lithuania and Hungary (more than 30 percent), while in five Member States the employment rate of young people is still below 40 percent.

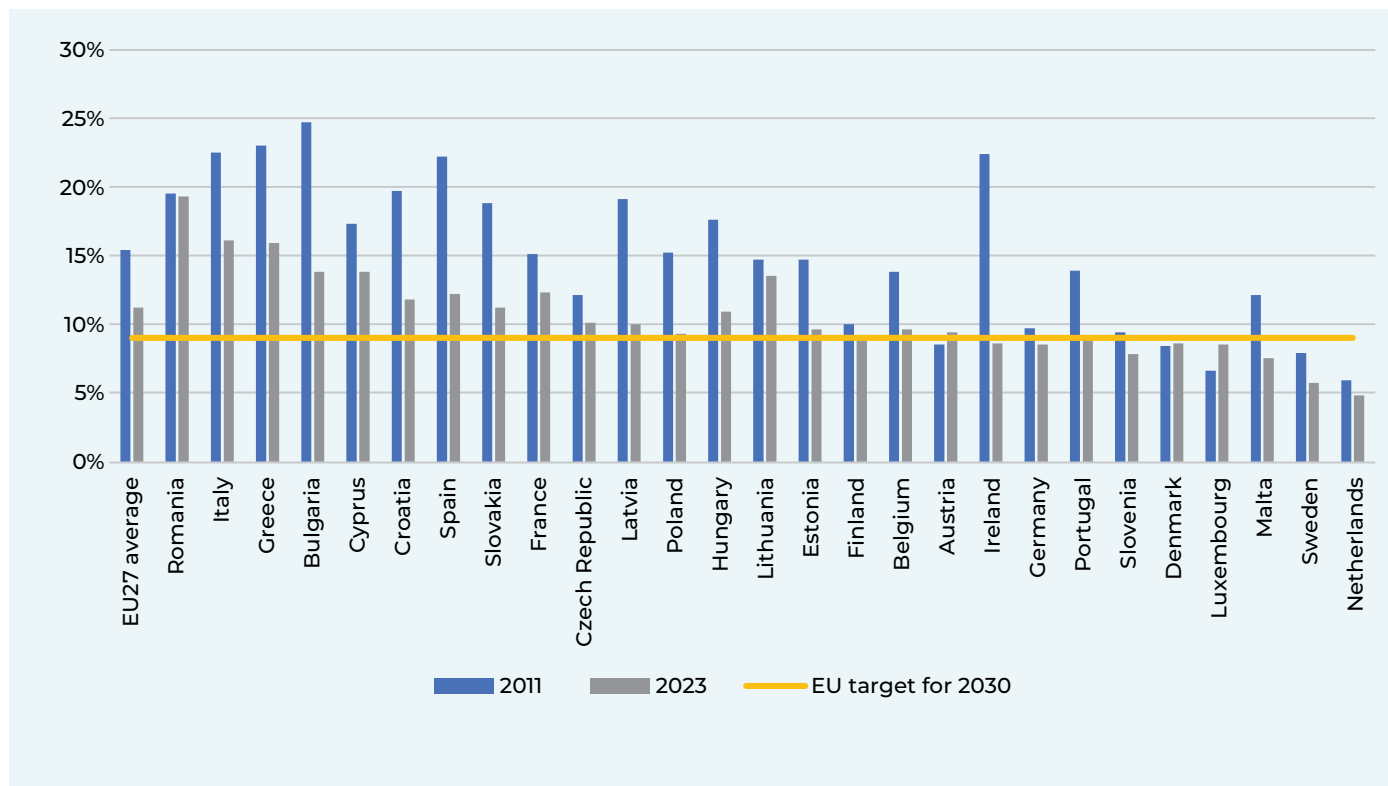
## The Hungarian way

The domestic employment rate has been continuously higher than the EU average since 2014, reaching 74.8 percent in 2023, which is a historical peak in the Hungarian labor market and the eighth highest value in the European Union. Since 2011, employment has increased the most in Hungary after Malta.

## Interesting facts

The future of Europe depends on its young people, who can improve the competitiveness of the "old continent" through their knowledge and their contribution to economic performance. In the European Union in 2023, 11.2 percent of those aged 15–29 belonged to the so-called NEET category, that is, a young person who is not currently working or participating in any education or training. The European Union aims to reduce their share to below 9 percent by 2030 at the latest. Currently, the share of NEETs varies significantly among EU Member States, with Romania (19.3 percent) having the highest share in 2023 and the Netherlands (4.8 percent) at the other end of the scale. In Hungary, the number of NEETs is below the EU average, having decreased significantly by almost 7 percentage points since 2011.

## LABOUR MARKET SITUATION AND DEMOGRAPHIC TRENDS



Proportion of NEETs in the population aged 15-24 (%)  
(Source: Eurostat, edited by Oeconomus)

## FEMALE EMPLOYMENT AND CHILDBEARING

### What is this?

Employment can be measured not only for an economy as a whole, but also by age group and gender. The employment rate of women measures the ratio of women in the given age group to the female population in the same age group.

### Why is it important?

According to research examining demographic processes, the work-life balance has a significant impact on the willingness to have children. For women, it is decisive that they can reconcile employment with having children.

### European overview

While from the 1970s it was observed that the higher participation of women in the labor market was mostly coupled with gradually decreasing birth rate figures in developed market economies, from the 1990s the reverse was the case. Since 2011, women's employment has typically increased more in Eastern Europe, and fertility has also increased the most, while in other Member States of the European Union, with the increasing participation of women in the labor market, childbearing has typically decreased.

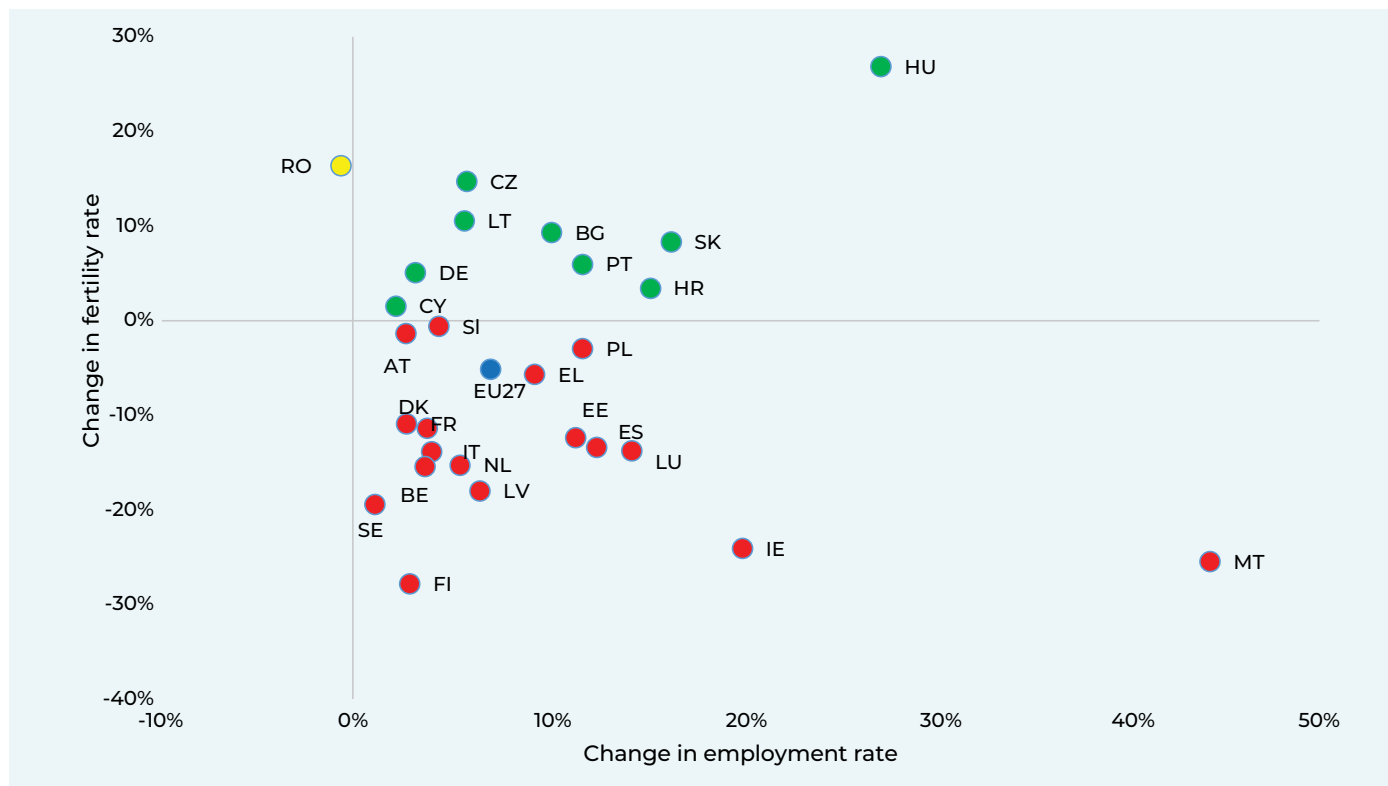
### The Hungarian way

Between 2011 and 2022, the employment rate of women in the European Union increased to the second highest extent in Hungary, while fertility increased to the highest extent in Hungary. This indicates that having children and working in Hungary are mutually reinforcing and not mutually hindering factors.

### Interesting facts

Although the rate of female employment increased in all EU Member States after 2011, this was mostly associated with the increase in the desire to have children only in Eastern Europe. Between 2011 and 2021, the employment rate of women with children under the age of six in Hungary more than doubled, according to Eurostat data, and the employment rate of mothers with 3 or more children almost tripled. This required forms of support that served the work-life balance and made it possible for mothers to return to the labor market. Examples include nursery development (the number of nursery places has doubled since 2011), GYED Extra (which allows someone to receive childcare fee or allowance while working), or the PIT-exemption of mothers with four children and women raising children under the age of thirty.

## FEMALE EMPLOYMENT AND CHILDBEARING



Change in the employment and fertility rate of women aged 25-49 in the European Union (2022/2011)  
(Source: Eurostat, created by KINCS)

# GLOBAL COMPETITION

## ? What is this?

Competitiveness is an economic concept that makes it possible to compare the ability of enterprises or national economies to produce products that are in demand and profitable. The most internationally accepted organizations that regularly examine the competitiveness of countries are the World Economic Forum and the World Competitiveness Center of the IMD Swiss business school.

## ! Why is it important?

Competitiveness is also a measure of the capacity of a given economy to change and adapt, to make the best use of its resources and to increase social welfare in a sustainable way.

## 🌐 European overview

In the latest rankings of both organizations, it is striking that only four EU member states are among the top ten countries examined. According to the IMD's 2023 ranking, the majority of EU Member States could improve their competitiveness over a 10-year period, but the economically dominant Germany and France worsened their ranking, in which case the lack of qualified workforce and decreasing investment activity caused the loss of position. In the World Economic Forum's latest competitiveness ranking for 2019, Hungary ranked 47th, improving its competitiveness ranking by 15 places over 10 years, while it ranks 46th in the IMD's latest ranking for 2023.

## 🇮🇹 The Hungarian way

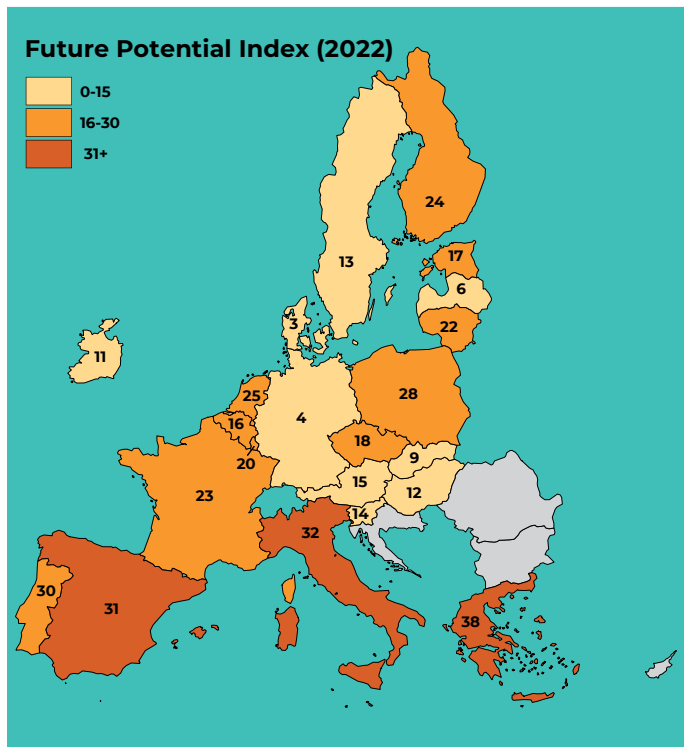
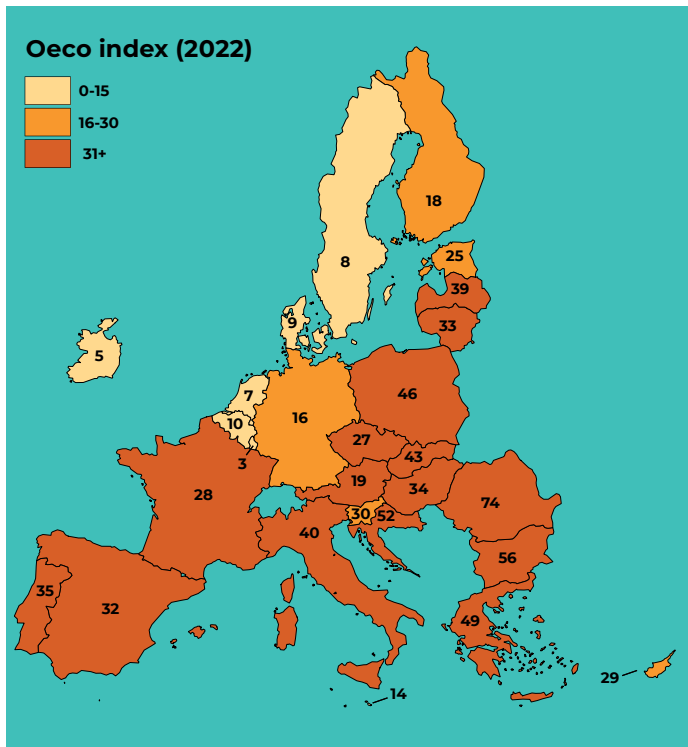
There are two complex indicators developed in Hungary: one is the Future Potential Index and the other is the Oeco index. The aim of the Future Potential Index is to measure the ability of the entities that make up society (family, organization, society, country) and to make them comparable to how well they are prepared to deal with the changes expected in the future in order to maintain well-being. The framework conditions determining well-being are: peace and order, community and attachment, care and generativity, balance and health. The variables examined are: ecological-geopolitical, technological, socio-economic and cultural pillars. The Future Potential Index examines the 38 OECD member countries, so countries that are not members of the international organization do not appear on the map. The aim of the development of the Oeco index was to create a metric that can approach and understand the question of development in several aspects. The past performance and development of each country can be analyzed along three dimensions (economic, social and political) and 25 indicators, and the current differences can be compared. The Oeco index contains 25 data provided by the World Bank. Indicators to measure well-being, demography and the state of human resources include life expectancy at birth, education and health expenditures as a percentage of GDP, and HDI (Human Development Index) and HCI (Human Capital Index), among others. The Oeco index is a global index, looking at 164 countries.

## 💡 Interesting facts

In the Future Potential Index, indicators such as fertility rate, work-life balance and the proportion of single-person households occupy a decisive place for the family. Thanks also to family policy measures, Hungary ranks 12th among the countries. According to the value of the Oeco index in 2022, Hungary ranks 18th in the EU and 34th in the world.



# GLOBAL COMPETITION



Ranking of EU Member States in the Oeco index and the Future Potential Index  
 (Source: Oeconomus and Future Potential Observatory)

## SUMMARY

We are living in an era of change and challenge, in a global competition where the workforce is a key competitive factor. The decisive factor in the economic well-being of the developed world from the end of World War II until the 1980s was the growing working-age population, but in Europe it reached its peak and began to decline. The process is accelerated by the fact that the baby-boomer generation is now reaching retirement age. In addition to the decline in the working age population, the increased health and social costs typical of aging societies, the impact of only increasingly difficult pension systems, and the impact of decreasing and changing demand on economic growth and competitiveness cannot be eliminated. The developed world, including the EU countries, is now looking for answers to these challenges.

In June 2023, the Council of the European Union invited the European Commission to develop a proposal to address demographic challenges, in particular their impact on competitiveness. The developed proposal was adopted by the European Commission in October 2023. The proposal is based on four pillars:

1. Supporting parents, including by improving the childcare system so that they can more easily balance family life and work.

2. Developing the skills of young people to improve their chances in the labour market and supporting their access to affordable housing.

3. Maintaining the welfare level of older age groups.

4. Alleviating labour shortages through a regulated migration policy that favours talented young people within the EU.

Hungary recognized and started to work actively to solve the problems raised by the EU only in 2023. Hungarian family policy covers the entire life path from childhood to old age: with a number of family policy measures, it has created a family-friendly country where the idea is matched by a system of instruments. In the absence of these, if the total fertility rate had remained at the 2011 level (1.23), 178 thousand fewer children would have been born between 1 January 2011 and 1 January 2023.

The Hungarian model builds on the increase in childbearing willingness through strengthening families and does not believe in solving demographic challenges through mass migration. The family-friendly turnaround in Hungary, and hopefully throughout the European Union, may also result in a demographic transformation, which is the key to the long-term sustainability and competitiveness of the community.

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