# THE IMPACT OF DEMOGRAPHIC CHANGES AND MIGRATION ON ECONOMIC GROWTH WITHIN EMU COUNTRIES

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Abstract: At the present time, demographic changes and migration are two economic and social challenges very debated within countries that are part of the Economic and Monetary Union, and also subject of various articles, books and studies. Over the years, various theories have attempted to explain demographic changes and migration and many economists and researchers tried to figure out the relationship between the two concepts and economic growth of both sending and receiving countries. The debates have argued the following statements: demographic changes and migration generally can promote, restrict or have no impact on the economy of a country. Likewise, the aim of this paper is to provide an analysis of the impact of demographic changes and migration on the economic growth of the EMU countries. This paper provides a theoretical framework of demographic changes and migration at international level, which emphasize the relevance and consequences of these two concepts on the economic growth of countries. Furthermore, is illustrated a summary of the Economic and Monetary Union, its main function and the benefits of the single currency in all European countries. An analysis of several demographic changes and migration indicators in EMU countries is also submitted, in order to highlight the situation in EMU countries. The research methodology entailed both quantitative and qualitative analysis. Statistical indicators regarding demographic changes and migration in EMU countries were used for research and a qualitative analysis made through discussions concerning the impact of demographic changes and migration on the economic growth of EMU countries. The results of this research emphasise that EMU countries are facing important demographic changes: an ageing population, low fertility rates, high duration of working, a high life expectancy at birth and a high number of immigrants. These changes could cause in the future important issues for the economy of the EMU countries. Furthermore, regarding the economic effects of migration for both sending countries and receiving countries, the debates have highlighted that can vary (both can experience gains/losses). In conclusion, EMU countries should take into account demographic changes and migration when they operate towards economic growth.

**Keywords:** demographic changes; migration; economic growth; EMU countries.

JEL Classification: F22; J11; J19; J61; R23.

#### 1. Introduction

This research paper intends to assess demographic changes and migration within EMU countries, and subsequently, to discuss the impact of demographic changes and migration upon economic growth.

Currently, demographic changes and migration represent two of the economic and social challenges and opportunities of the Economic and Monetary Union. In order to support the labour force and employment in the Euro area, different policies are required to be adopted and implemented within European Union and Member States, with regard to demographic changes and migration.

Over the past years, demographic changes and migration have strongly influenced the EMU labour market and therefore, there have been changes in the ethnic and national profile of the Member States. A high number of people from different areas migrated to the Euro area, as conditions were more favorable than those in their native countries. Regarding the impact of demographic changes and migration on the economic growth of the EMU countries, we contend that for both sending countries and receiving countries, the economic effects of migration can vary (both can experience gains/losses).

#### 2. Literature Review

Demographic changes and migration constitute two important issues, raised and addressed until the moment in various research papers, books and other works, and are considered to have a substantial connection with the economic growth of a country. Hereinafter, it is to be fulfilled a segregate approach of the two concepts - demographic changes and migration, as a result of literature investigation.

Generally, demographic changes shall cover changes in population structure, due to various reasons. According to Investopedia (2019), demographics is the study of population based on factors such as age, race and sex.

According to Bloom et al. (2001), the link between population change and economic growth is a very discussed subject amongst researchers, and there is an ongoing debate about whether population change it (1) restricts, (2) promotes, or (3) is independent of economic growth. Demographic changes have a significant impact on economic growth, therefore it can affect the GDP of a country. For example, if the population of a country lowers, it directly influences the reduction of input. The economic growth of a country it also depends on the changes of the number of people in the workforce.

Furthermore, there are two theories with regard to the relationship between demographic changes and economic growth: an optimistic and a pessimistic alternative. The pessimistic theory belongs to Thomas Malthus, which is regarded as the father of demography. Malthus concluded that if the rate of population will grow, the food production could not possibly increase fast enough to be sufficient, and as a consequence, it will have a negative impact on the economy of the countries which will face this issue (Ježić, 2018).

As opposed to Malthus, the optimistic theory, which belongs to Esther Boserup, states that extra people do more work and bring more thought to bear human problems. Therefore, Boserup considers that people are productive and inventive, and the more they are, countries will have more workers, more consumers for the

industrial goods, the more taxes can be paid, and the more trade can take place (Ježić, 2018).

At the present time, active ageing is a new challenge for countries and shall consist of life-long learning. Lee and Manson (2010) highlighted that a high number of elderly people will eventually cause growing transfers from the working population to the elderly (high tax rates, family support burdens).

In recent years, the family pattern has been subject to major changes, as follows: the number of marriages has decreased whereas the number of divorces has increased; the age at the first marriage has went up; the model of non-parent family has experienced a large-scale; the families want fewer children; the number of children out of wedlock has increased.

Theoretical approaches regarding migration concept have been boundless over time. Many authors attempted to find a unique theory able to encompass migration. Ordinarly, migration shall mean a phenomenon which can be explained by the behavior of people and social realities.

The International Organization for Migration (2011) defines migration "as the movement of a person or group of people, either over an international border or within the same state, and may include: the migration of refugees, of displaced persons, of economic migrants and of people moving for various other reasons".

The migration phenomenon may be classified in accordance with the following criteria (Europe Direct, 2013): a) on a territorial link: internal or international migration; b) in terms of time factor: permanent or temporary migration; c) on the basis of motivation: voluntary or involuntary migration; d) in line with means employed: regulated or illegal migration.

One of the Ravenstein's (1885) laws of migration states that economic factors represent the main cause of migration.

Furthermore, a number of authors have argued that the phenomenon of migration is influenced by a combination of economic, environmental, political and social factors (Chirvas et al., 2015): either in a migrant's country of origin (push factors) or in the country of destination (pull factors).

OECD (2014) pointed that migration is good for the economy: is considered to be positive for the labour market, for the public purse and for the economic growth. Hence, those above have been explained thereby: (1) On the labour market, migrants occupy significant niches, contribute to labour-market flexibility, and at the same time, young migrants are considered to be better educated compared with those up for retirement; (2) Regarding the public purse, migrants contribute in taxes and social contributions; (3) In terms of economic growth, migrants arrive with skills and contribute to human capital development and to technological progress.

# 3. The Economic and Monetary Union - A Step in the Integration of European Union Countries

The Economic and Monetary Union (EMU) was founded in 1992, as a major step in the integration of all EU countries and entails the coordination of economic and fiscal policies, a common monetary policy and a common currency - euro (European Commission, 2019). The Euro area is a monetary union of 19 of the 28 European Union Member States (Table 1) which has adopted the euro as their common currency (Wikipedia, 2019). The remaining countries of European Union (Bulgaria, Denmark, Croatia, Poland, Romania, Sweden, the Czech Republic, Hungary and

United Kingdom) participate in the economic union, but not in the monetary union, as they have to complete the third stage of the introduction of the euro (WorldData, 2019).

Table 1: EU countries within EMU and the year of commencement

Austria (1999)	France (1999)	Latvia (2014)	Portugal (1999)
Belgium (1999)	Germany (1999)	Lithuania (2015)	Slovakia (2009)
Cyprus (2008)	Greece (2001)	Luxemburg (1999)	Slovenia (2007)
Estonia (2011)	Ireland (1999)	Malta (2008)	Spain (1999)
Finland (1999)	Italy (1999)	Netherlands (1999)	

Source: www.worlddata.info

The admission within EMU requires compliance with certain protocols (admission criteria): (a) the countries must be EU member states; (b) the economy of the countries must comply with the following: the inflation rate must not be lower than 1.5% of the most price stable EMU country, the countries must not be indebted more than 60% and the new debt must be less than 3% (WorldData, 2019).

A single currency in all European countries is considered to support a more effective single market, which benefits companies and the population (European Commission, 2019).

## 4. Methodology and Discussions

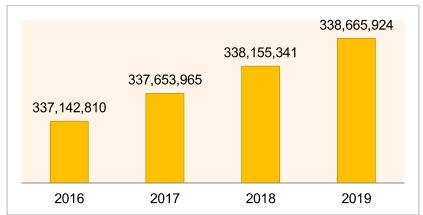
Within this article, we used both quantitative and qualitative methods. Statistical indicators regarding demographic changes and migration were used for the research. Information has been carried over by Eurostat and Worldometers, and as indicators have been chosen the following: indicators concerning population; total fertility rate; life expectancy at birth; duration of working life; the number of immigrants and emigrants. Statistics regarding migration phenomenon were submitted by a Eurostat article from March 2019, which will be further updated in March 2020.

The statistics we used in this chapter were synthesised in the format of tables and charts. Moreover, a qualitative analysis has been made through discussions concerning the impact of demographic changes and migration on the economic growth of EMU countries.

### 4.1. Analysis of Demographic Changes in EMU Countries

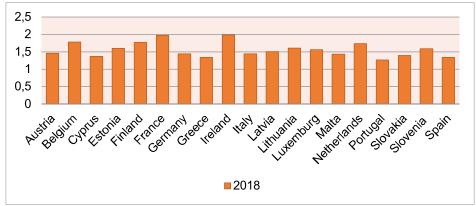
In April 2019, have been 338,7 million inhabitants within EMU countries (Worldometers, 2019), equating to 66.35% of the EU population, 45.57% of the Europe population and 4.4% of the world population. An evolution of the population of EMU countries, from 2016 until April 2019, is shown in Chart 1. Data show an upward trend of the EMU countries population in the past four years. According to Worldometers statistics (2019), in the following EMU countries has been recorded a downward trend of the population: Italy, Estonia, Greece, Latvia, Lithuania and Portugal. This situation was mainly caused by low fertility rates, high life expectancy and the movement of the population. Furthermore, in 2018, 51.2% of total population of EMU countries were females and 48.8% were males (Eurostat, 2019a). Regarding age structure, in EMU countries, people of working age have the highest share in total population, followed by older persons and young people (Eurostat, 2019a).

What is worrisome for this countries is an increase of elderly people, which will have consequences in the long run for the economy.



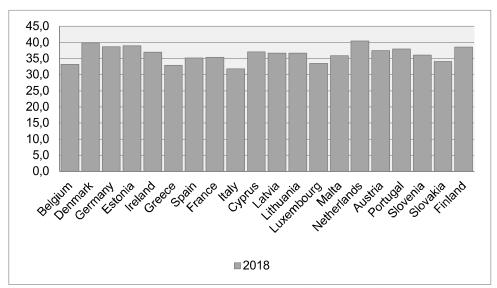
**Chart 1:** Population in EMU countries (number of people, 2016-2019) Source: processed from Worldometers

Total fertility rates within EMU countries, for the year 2018, are shown in Chart 2. At a first glance, can be noticed that total fertility rate is highest in the following countries: France, Ireland, Belgium, Netherlands, Finland. Countries like Greece, Portugal, Spain and Cyprus are faced with low rates of fertility. Reasons why this countries face low fertility rates could possibly be: the use of contraception, the growing number of educated women, a greater acces of women to labour market or religious reasons.



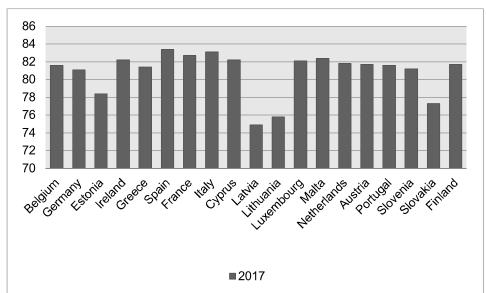
**Chart 2:** Total fertility rate in EMU countries (2018) *Source:* processed from Worldometers

The duration of working life in EMU countries, for the year 2018, is summarised in Chart 3. Based on this information, the following observations have been outlined: Netherlands, Denmark, Finland, Estonia and Germany have the highest duration of working life. On the other side, Belgium, Greece and Italy have a lower duration of working life.



**Chart 3:** Duration of working life in EMU countries (years, 2018) *Source:* processed from Eurostat

In Chart 4 is shown life expectancy at birth in EMU countries for the year 2017. Statistics highlight that in Spain, France, Italy, Cyprus, Luxemburg and Malta, life expectancy at birth is higher than in the other countries. Latvia, Lithuania, Slovenia and Estonia are facing with low life expectancy at birth.

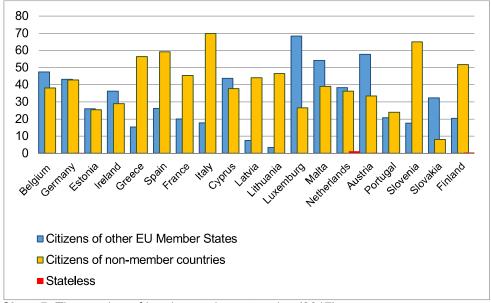


**Chart 4:** Life expectancy at birth in EMU countries (2017) Source: processed from Eurostat

### 4.2. Analysis of Migration in EMU Countries

With regard to emigration, Eurostat (2019) states that it is difficult to measure emigration phenomenon, because keeping track of people who leave the country is much more difficult to be done than keeping track of people who arrive, due to proceedings. According to European Commission (2019), the following EMU countries reported the largest number of emigrants in 2017: Germany (560.7 thousand), Spain (368.9 thousand) and France (312.6 thousand). Furthermore, the analysis will focus with consideration upon immigration. The evidence submitted by Eurostat (2019) highlights the following: (1) the country with the largest number of immigrants was Germany (917.1 thousand); (2) Spain (532.1 thousand), France (370 thousand), Italy (343.4 thousand) and Netherlands (189.6 thousand) have also reported a large number of immigrants; (3) the countries with the lowest number of immigrants were: Slovakia, (7.2 thousand), Latvia (9.9 thousand), Slovenia (18.8 thousand).

Chart 5 shows an evidence of the number of non-national immigrants who entered into EMU countries in 2017, by categories: citizens of other EU Member States, citizens of non-member countries and stateless. It can be noticed that in Greece, Spain, France, Italy, Latvia, Lithuania and Portugal, citizens of EU non-member countries possess the largest proportion in the total number of non-national immigrants. Furthermore, within Belgium, Ireland, Cyprus, Luxemburg, Malta, Netherlands and Slovakia, the highest share in the total number of non-national immigrants is held by citizens of other EU Member States. In Germany, citizens of other EU Member States and citizens of EU non-member countries possess a share approximately equal in the total number of non-national immigrants. A low share of stateless immigrants has been recorded only in the following countries: Germany, Spain, Latvia, Lithuania, Netherlands, Austria and Finland.



**Chart 5:** The number of immigrants by categories (2017)

Source: processed from Eurostat

Furthermore, in 2017, among EMU countries have been also recorded the following statistics regarding immigration phenomenon (Eurostat, 2019): (1) in terms of gender distribution of immigrants, in the majority of EMU countries has been recorded a higher number of men in relation to women, and (2) the immigrants that entered in EMU countries were much younger than the total population resident in the country of destination.

# 4.3. Discussions on the Impact of Demographic Changes and Migration on the Economic Growth of EMU Countries

We emphasise that *demographic changes* may give rise to the following effects on the economic growth of the EMU countries:

- (1) Considering that the majority of EMU countries are experiencing an ageing process, mainly fuelled by a reduction of the fertility rate and an increase of life expectancy, their economy may be affected thereby: into the labour market will appear concerns in terms of employment policies, the consumption of goods and services is about to change up on new age groups, the process of saving will gradually decrease.
- (2) If the population of EMU countries continues to age, this fact would cause difficulties in State budget: more expenditures with social protection and pensions funds will increase.
- (3) The educational system of these countries will also encounter various issues due to demographic changes: there will be a reduction of young people, human resources development will face new challenges. The smaller the fertility rate is within a country, the smaller will be the number of young people. Likewise, the educational system could experience massive changes.

Regarding the impact of *migration* on the economic growth of EMU countries, have we outline the following circumstances:

- (1) The definitive establishment of individuals in the country of destination is going to lead to a reduction of population in the country of origin, having as repercussion the reduction of economic growth. The country of origin will lose citizens who would have worked, paid taxes, consumed and saved money.
- (2) Taking into consideration that oftentimes young people and people of working age are the ones that most leave a country of origin, the consequences will lead to an accelerated process of ageing in the home country.
- (3) As regards the immigration of young people, the home countries will be confronted with reduced fertility rates, which will lead to a small number of newborn babies
- (4) In the case of families who emigrate and children remain in the home country, the effects will be both positive and negative: with money received from the country of destination, the persons who have remained in the home country will consume and pay for goods and services (which will foster national economy); on the other hand, due to distance, between families is hereby established a cold relationship which sometimes leads to family issues and disruptions.
- (5) A positive impact on the country of destination will be an increase in employment, most of the time in fields wherein their population would never work. The immigrants support the economic activity of the destination country, by paying taxes and consuming goods.

#### 5. Conclusions

Demographic changes and migration represent two of the economic and social challenges and opportunities of the Euro Area. With respect to the impact of demographic changes and migration on the economic growth of the EMU countries, we contend that for both sending countries and receiving countries, the economic effects of migration can vary (both can experience gains/losses).

In EMU countries, demographic changes have experienced alterations in the last years. The number of inhabitants has increased, the growing number of elderly people constituting a worrying situation. Fertility rate is high only in some countries, while life expectancy at birth is generally high in all EMU countries. We think that all countries should at least adopt and implement policies regarding demography, in order to maintain a steady situation and prevent alarming circumstances.

At the best of times, individuals have chosen to move or to work in a country that is part of the Economic and Monetary Union, because there are available a large selection of opportunities, much more attractive than the situation in their home countries. The country with the largest number of immigrants in 2017 was Germany (917.1 thousand), being followed Spain (532.1 thousand), France (370 thousand), Italy (343.4 thousand) and Netherlands (189.6 thousand), which have also reported a large number of immigrants. These countries provide attractive opportunities to individuals, and this is mainly the reason for which is happening such a thing.

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