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### **A LOOK AT SOME OF THE EUROPEAN UNION'S MAJOR SOCIAL PROBLEMS AND THEIR ECONOMIC IMPACT**

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#### **Abstract**

The EU's economy accounts for a significant share of the world economy. Measured in terms of GDP, it is still the biggest in the world. In addition to that, being a single market of 28 countries, the EU has been a major trading player accounting for around 20% of global exports and imports. However, EU's trade was hit by the global recession. It is additionally hindered by the attempts of its economic policy to provide for a sustainable growth by investing in transport, energy and research in order to minimize the impact of further economic development on the environment. The most serious problems of the EU are connected with the unstable and comparatively low employment, continuing energy dependence, demographic change and population's aging, as well as the persisting economic and social disparities within member states and between European regions in the North and South, West and East. The migration crisis adds to the problem with the lack of coherent solution, unsuccessful integration, growing inequalities and fragile multilateralism, having both – their social and economic effects. This paper aims to explore the most pressing challenges before the European Union's economy today and in the years to come – aging population and social disparities.

**Keywords:** European Union, Ageing Population, Social Disparities, Economic Effects

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#### **1. Introduction**

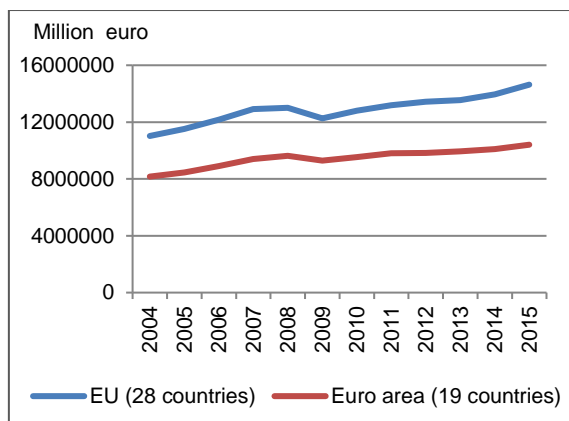
The EU's economy accounts for a significant share of the world economy. Measured in terms of the output it produces (goods and services), it is still the biggest in the world. In addition to that, being a single market of 28 countries, the EU is a major player in world trade. With just 7% of the world's population, the EU's trade with the rest of the world accounts for around 20% of global exports and imports, which keeps it still the world's largest exporter and importer.

However, EU's trade was hit by the global recession. It is additionally hindered by the attempts of its economic policy to provide for a sustainable growth and minimize the impact of further economic development on the environment.

The most serious problems of the EU are connected with the comparatively low employment that was also hit by the global economic crisis, as well as the continuing energy dependence. Another big issue is the demographic change and population's aging, as well as the persisting economic and social disparities between the member states and between European regions in the North and South, West and East. This paper aims to explore the most pressing demographic and social challenges before the European Union's economy - ageing population and the lack of economic homogeneity.

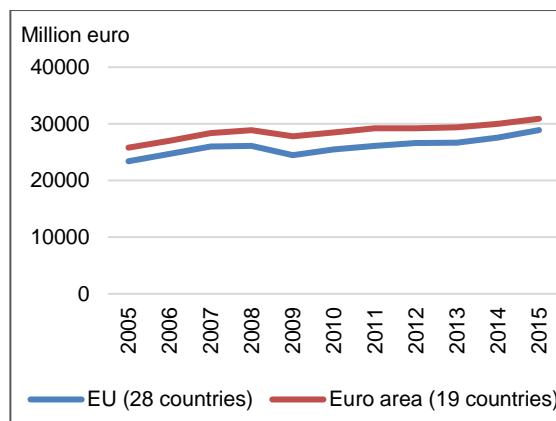
## 2. EU's Major Economic Indicators – state of play and projections

The GDP of the EU in the last decade has been continuously growing in all years except for 2008-2009, when it decreased considerably due to the financial and economic crisis. In 2015, the GDP of the EU28 was EUR 14.6 trillion (Figure 1). A substantial share of it – over 70 % - represented the GDP of five of the largest EU member states (Germany, the United Kingdom, France, Italy and Spain).



**Figure 1 GDP in the EU at market prices, current prices 2005 - 2015**

Source: Eurostat (2015a)



**Figure 2 GDP in the EU per capita at market prices, current prices 2005 - 2015**

Source: Eurostat (2015a)

Figure 2 shows that after the crisis the average GDP per capita in the EU-28 has been slowly rising. In 2015, it reached EUR 28 900 per capita in the EU and EUR 30 900 per capita in the euro area (Eurostat, 2015a).

The highest value in 2015 was registered in Luxembourg (EUR 91 900), where GDP per capita in PPS was about 3.2 times the EU-28 average (2.7 times higher ten years earlier), and 14.5 higher than the average in Bulgaria (6 300). In comparison to 2005, the GDP disparity between the richest and poorest EU member states (Luxembourg and Bulgaria) has decreased from 20 times to 15 times.

In general, the overall labor productivity in the EU has been increasing in all economic sectors. Probably thanks to the speedy technological evolution, it has been the highest in the sphere of industrial production (31%), followed by distributive trades, transport, accommodation and food services – around 17%. In the period 2004 – 2014, the labor productivity per employee has increased in nearly all EU Member States except for Greece, Italy and Luxembourg.

The final consumption expenditure in the EU in the period 2004-2014 increased by average 9.0 %. The consumption expenditure of the general government increased by 13.0 %, while that of households and non-profit institutions rose insignificantly (Eurostat, 2015a). Despite this, they contributed considerably to the EU's GDP in 2014 (56.9 %), the share of the government expenditure being 20.9 % and that of gross capital formation - 19.3 % (Eurostat, 2015b).

The EU's gross fixed capital formation reported a significant decrease in 2009 (-11.9 %), recovering in 2014 when it reached 2.3 % in real terms. The overall investment intensity varies according to sources and member states. The main contributors of investment in 2013 were the private sector, businesses and households - 16.7 % of the EU's GDP, while the share of the public sector's investment was only 3.0 %. In relative terms, Estonia was leader in public investment (5.5 % of GDP) and investment by the business sector (17.8 %), while Finland recorded the biggest investment by households (6.4 %) (Eurostat, 2015b).

In 2015, the European economy had the chance to generate bigger growth due to several favorable conditions, namely – cheap oil prices, favorable euro exchange rate, monetary

policy supporting growth and augmented public expenditure, a part of which was a result of the state care for the incoming asylum seekers (European Commission, 2016). However, the impetus of these factors has been partly offset by the downturn in emerging economies, resulting in a moderate economic growth.

There are two types of risks with the EU growth's projections. The external are linked to the slowing economic growth in developing economies with which the EU has been actively trading, the likely geopolitical tensions that could affect the European economy, as well as possible significant changes in oil prices or financial turmoil. The internal derive from the formation and implementation of the EU's policies, for example the structural reforms of the member states, the contradictions between member states concerning common European challenges, as well as the uncertainty about Brexit's consequences.

### **3. EU's Major Social Problems with Economic Impact**

The European Union is a part of a world of increasing complexity and dynamic changes. One of the major challenges it must address is the technological revolution resulting from the development of digital technologies and their implementation in the economy and society, which is fundamentally changing the way economies and societies function (European Strategy and Policy Analysis System, 2015).

Europe's key challenges relate to the need to boost employment, prepare for population aging, enhance social cohesion, and all that while trying to create a knowledge-based economy. These aspects are closely interlinked and need to be addressed by a coherent and comprehensive economic policy that would lead to sustained rates of economic growth in the long term.

On the other hand, it faces even more evident problems like terrorism and widening inequalities. In a survey conducted among 27,969 people from all over the EU between 9 April and 18 April 2016 regarding the future of Europe and European integration people define the priorities they believe the Union should concentrate on. Among the top two are the terrorism - 82%, followed by unemployment - 77% of the respondents (European Parliament, 2016).

Ageing population is a global trend that will preserve because of the rising life-expectancy, decreasing fertility and improved rates of education. Europe's key challenges of restoring full employment, creating a knowledge-based economy, preparing for population aging, and safeguarding social cohesion are closely interlinked and, as stressed in the EU Broad Economic Policy Guidelines, need to be addressed by a coherent and comprehensive economic policy strategy for the medium-to-long term. The overarching objective of this strategy is to enhance the capacity of the EU economy to generate high rates of noninflationary growth over a prolonged period. Basically, this involves pressing ahead with deep, comprehensive reforms of product, capital, and labor markets, backed up by a sound macroeconomic policy-mix aimed at sustained rates of growth close to potential within an environment of price stability.

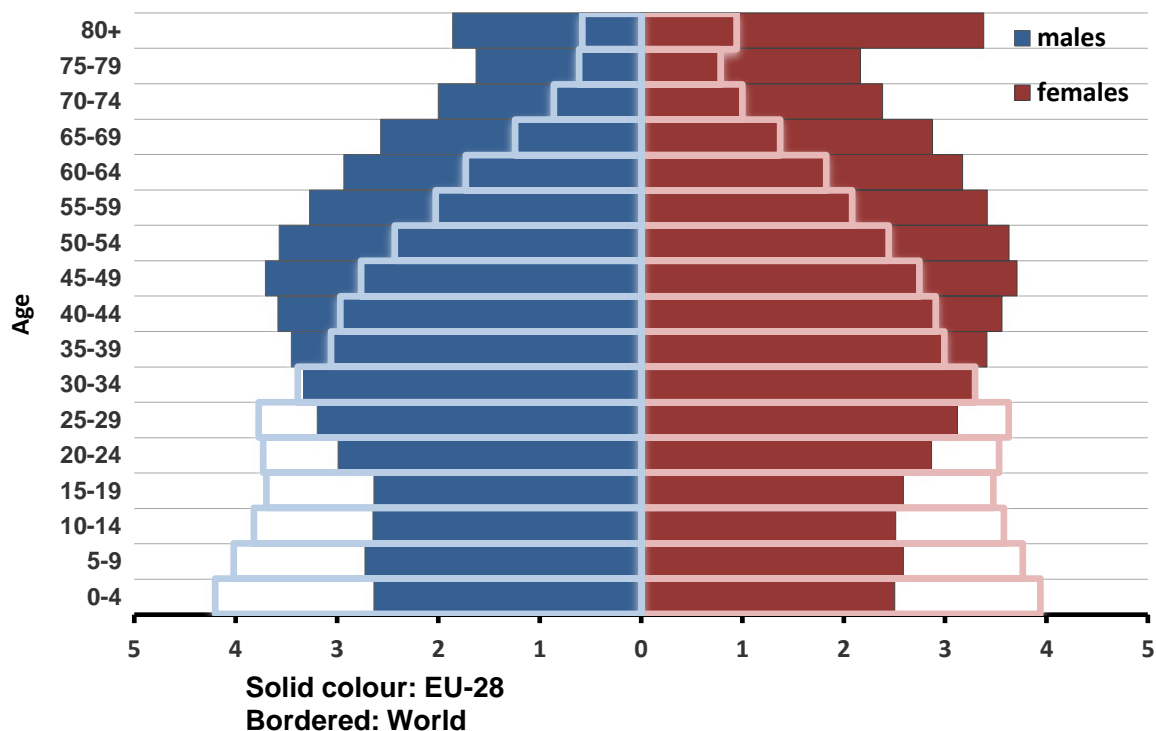
In the last decades, despite the overall decline in poverty globally, inequalities within and between countries have been increasing worldwide in both – developed and developing economies. The inequalities within EU regions have been also growing. Aging population and growing inequalities within the EU are two problems, which have been analyzed in the present paper.

#### **3.1. The basic problem with the ageing European population**

The ageing population is a serious challenge for the European Union, similarly to many economies in the world today. It is a result of both - the constantly low levels of fertility rates, as well as of the increase in life expectancy in the recent decades. It is likely to cause a series of economic, budgetary and societal problems in the years to come. A series of long-term projections indicate the possible consequences of the ageing population in the EU.

The size of the EU population is expected to grow, due to a big extent to the inward migration, but it would be older. It is forecasted to grow by almost 5% (from 507 million in 2013 up to 526 million in 2050), after which it would decline to 523 million in 2060. The problem arises

from the fact that the age structure of the European population differs considerably from the structure of the world population. While the biggest shares of the world's population fall within the youngest age groups, this is not the case for the EU's citizens (Figure 3).



**Figure 3. Age pyramids (male and female) of the EU and the world, 2015 (% of total population), Data for 1 January 2013**

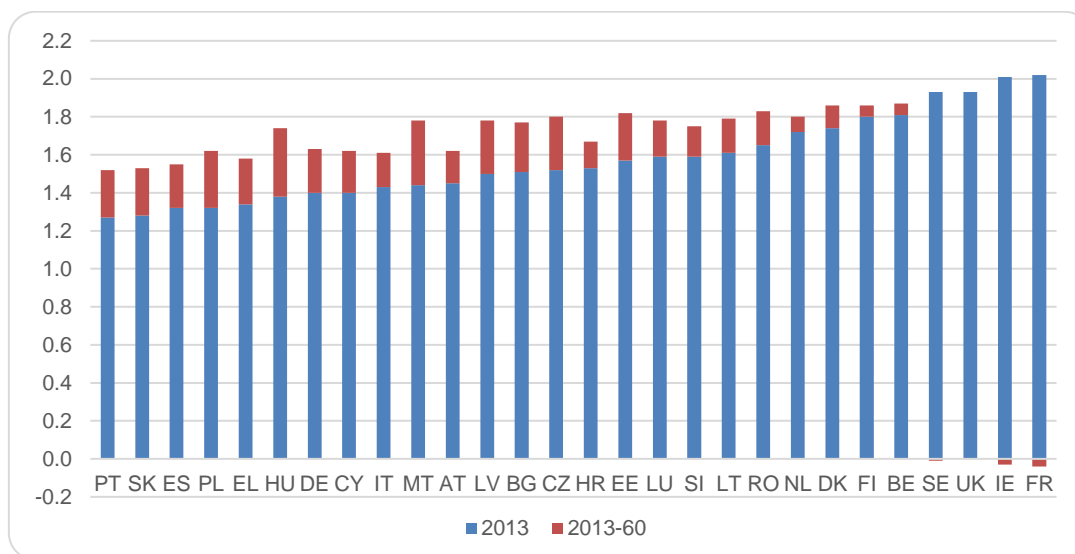
**Source:** Author's calculations with data from Eurostat (2017a) (European population) and United Nations, Department of Economic and Social Affairs, Population Division (2017) (World population)

The present state of the EU population is a result of the continuous decreasing fertility rates evident in all the recent decades except for the last one. A much smaller part of the EU population is evident in the younger age groups, especially in the first two.

The major factors affecting age structure are fertility, migration and life expectancy. The fertility rate is the average number of children born to a woman if she acts according to the society's age-specific fertility rates measured in a given year. The factors for falling fertility rates in the EU are the postponement of motherhood and the current trend toward bearing children at later and later ages, as well as the fact that women today prolong their educational studies, are more actively involved in the workforce and are better suited in society in terms of perception and participation.

Despite the increase in the fertility rates in half of the EU in the decade after 2000, when they reached 1.8 in some of the member states (France, Sweden, Finland and the UK), they decreased in several other countries, mainly the South European ones like Cyprus, Malta and Portugal (European Commission, 2015a). In 2012 the average fertility rate declined again and was 1.6, which was quite low and insufficient to cover the natural replacement level of 2.1 (Eurostat, 2015c).

The European Commission is not an optimist for the future population development in the EU. Its projection forecasts a slight convergence in the fertility rates in the different countries, with the EU average fertility rate rising to 1.68 by 2030 and 1.76 by 2060 (Figure 4).



**Figure 4. Projection of TFR in EUROPOP2013 (number of births per woman)**

**Note:** PT – Portugal, SK – Slovakia, ES – Spain, PL – Poland, EL – Greece, HU – Hungary, DE – Germany, CY – Cyprus, IT – Italy, MT – Malta, AT – Austria, LV – Latvia, BG – Bulgaria, CZ – Czech Republic, HR – Croatia, EE – Estonia, LU – Luxembourg, SI – Slovenia, LT – Latvia, RO – Romania, NL – Netherlands, DK – Denmark, FI – Finland, BE – Belgium, SE – Sweden, UK – United Kingdom, IE – Ireland, FR – France.

**Source:** European Commission (2015a)

On the global level, the trend includes increasing life expectancy rates, especially for women. However, there are great variations between countries. In 2012, in the EU the life expectancy at birth for females was lowest in Bulgaria (77.9 years) and highest in Spain (85.5 years), and for males lowest in Lithuania (68.4 years) and highest in Sweden (79.9 years). The official projections assume the increase in life expectancy at birth will continue to grow slower but this will depend on factors like the future medical developments, public health policies and societal factors like smoking rates and obesity (European Commission, 2015a).

Male life expectancy at birth in the EU is projected to increase from 78 years in 2013 to 84 years in 2060, and for females - from 83 in 2013 to 89 years in 2060. The most significant increases are expected in the Central and Southeast European member states (Bulgaria, Hungary and Romania), where the life expectancies are the lowest - 69 - 72 years.

The overall projection shows that the life expectancy in the EU will rise by 4.8 years (males) and 4.6 years (females) in the period 2013 – 2060 (being 65 in 2013), (European Commission, 2015a).

The projections reflect the present wide differences among Member States. As a whole, the EU population will increase, but in almost half of the countries it will decrease – Bulgaria, Germany, Estonia, Greece, Spain, Croatia, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, Slovenia and Slovakia. The biggest population growth is expected in Luxembourg (+111%), Belgium (+38%), Sweden (+36%), Cyprus (30%), while the most significant decrease is projected in Lithuania (-38%), Latvia (-31%) and Bulgaria (-25%), (European Commission, 2015a).

In the long-term, however, a positive natural population change and net migration is expected. The population change includes two elements. The first one is the difference between the number of live births and number of deaths, the so called natural change. The second one is the net migration (the difference between immigration and emigration). In the period 2005-2010 the EU, along with all of the G20 members except Russia, recorded a positive population change.

The European Union has become a destination for migrants since the middle of the last century, the post-war period. Their number varies drastically in the last three decades. In the

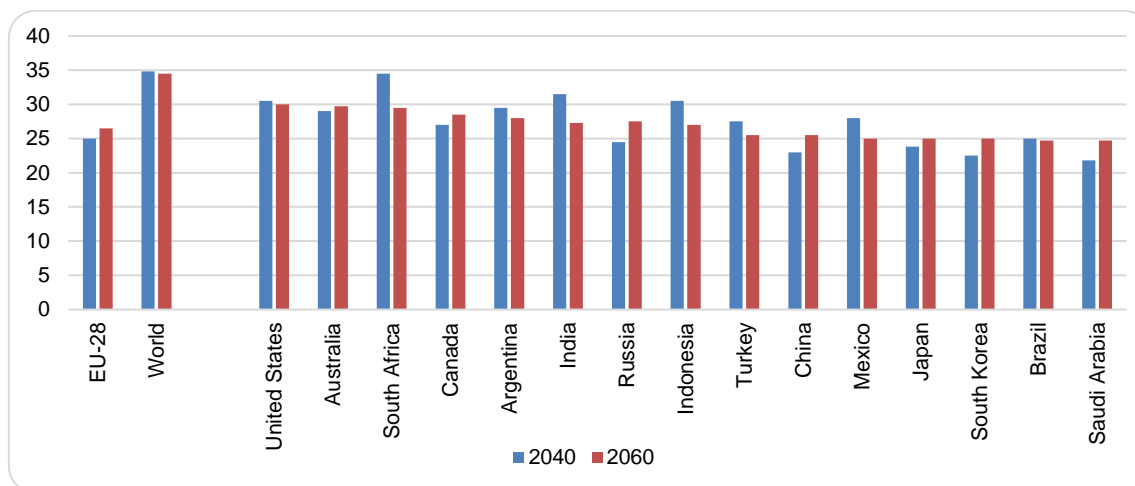
1990s, they were around 750,000 people per year, in 2003 - 1.8 million, until the start of the financial and economic crisis - 1.5 million, after the crisis - around 700,000 per year. In 2012-2013 the net migration flows reached 1.7 million migrants per year again. This is not an overall European phenomenon, however, as the migration flows vary considerably by country, with Germany, France and the UK being the most attractive for immigrants.

(European Commission, 2015a) does not provide a better perspective by projecting first a substantial increase in the net migration flows in the EU by 56 % (from 874,000 people in 2014 to 1,364,000 by 2040), but followed by a sharp decline to 1,037,000 people by 2060 (an annual inflow of 0.2% of the EU population).

The expected net migration to the EU cumulated up to 2060 is 55 million (about 11% of its population in 2013), concentrated mainly in Italy (15.5 million people), the United Kingdom (9.2 million people), Germany (7.0 million people) and Spain (6.5 million people). Spain and Italy will turn from origin to destination countries in the coming decades. Changes and even reverses are also expected for countries that traditionally record a net outflow (Bulgaria, Romania, Latvia, Lithuania).

It is of great importance what type of age and social groups these people represent but this could be a topic of further analysis. Asylum seekers are considered to represent a substantial potential and if successfully integrated, that could be a key solution to the European problem with the workforce deficit. In 2014 in the EU there were around 626 thousand asylum applicants, mainly from Syria (122 thousand), as well as from Afghanistan, Kosovo, Eritrea and Serbia. A great number of asylum applicants into the EU also came from G20 members like Russia (19.7 thousand), China (5.2 thousand) and Turkey (5.1 thousand).

Despite these positive trends, however, the European Union would not be able to improve significantly its demographic situation, as evident by two other important indicators. In 2013 the young-age dependency ratio (the level of support for younger persons (under 15 years old) provided by the population in working age (people of age between 15 and 64 years) in the EU was 23.6 %, lower than in most G20 members (In Japan in 2013 it was the highest - 40.5%) but still very high. The projections for the EU are for even higher values in 2040 and 2060 (Figure 5).



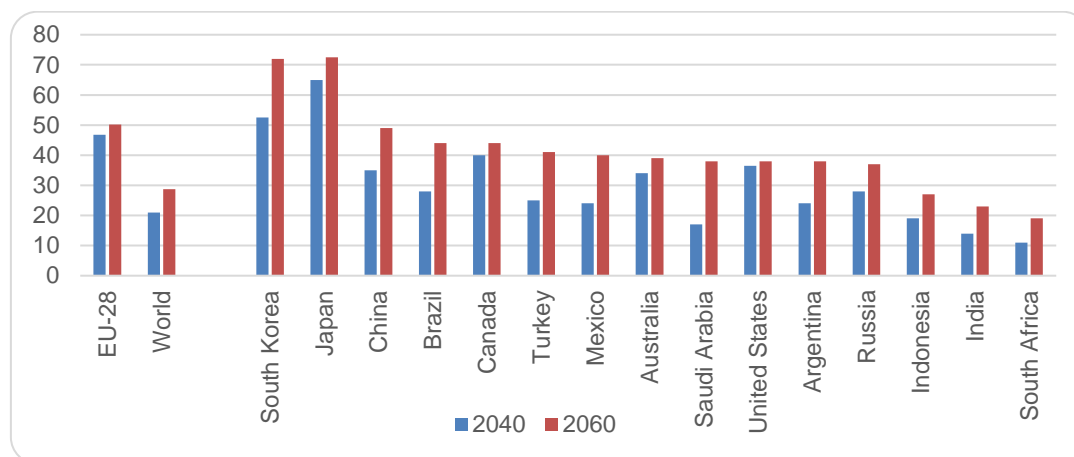
**Figure 5. Young-age dependency ratio projections, 2040 and 2060\* (Population aged 0–14 as a percentage of the population aged 15–64)**

**Note:** \*EU-28 projections made based on Europop2013 convergence scenario

**Source:** Eurostat (2015d)

Similarly, the old-age dependency ratio (calculated as the number of people over 65 years old as a share of the number of people of age between 15 and 64 years old) is projected to keep on rising in the EU, as well as in all G20 members. It means that the burden to provide for social expenditure including healthcare, institutional care and pensions will also rise. The

EU's old-age dependency ratio is expected to rise from 27.5 % in 2013 to 50.2 % by 2060, which would be 21.9 pp above the world average, see Figure 6.



**Figure 6. Old-age dependency ratio projections, 2040 and 2060**  
(Population aged 65 or more as a percentage of the population aged 15–64)

Source: Eurostat (2015e)

This means that in 2060 the EU would have not four but only two working-age people for every person aged over 65 years. The working-age population in the Union is projected to shrink in the projection period (2013-2060) by around 13% (Eurostat, 2015e).

To sum up - the average for the EU fertility rate is projected to increase but insufficiently, remaining far from the rate of natural replacement. Meanwhile life expectancy at birth will increase. The projection about the net migration inflows to the EU shows that it will grow by 2040 and then start to shrink. The most bothering trend, however, is that because of all the negative demographic trends in Europe, the old-age dependency ratio will almost double by 2060.

It is likely that the changes in the demographic trends have a significant political, economic and social impact on societies worldwide. There will be probably a negative impact on the labor force, population's savings and labor productivity, as well as on the pension, social protection and healthcare systems in all countries.

However, the influence of ageing on different economies is expected to vary by countries. The higher the level of education of the national population, the longer it will be involved in the workforce, the bigger savings it will have and the more productive it will be. This is positive for developed countries and quite distressing for the emerging countries with dominating low level of education.

The ageing of population leads to a direct decline in the active population and could be the reason for long-term stagnation, a fall in productivity, risks for the social protection systems and social cohesion, and increased incentives for emigration. In this case, the EU will need more immigrants for its workforce, but the rise in populism and fears within the member states make it difficult for governments to win support for more open immigration policies (European Strategy and Policy Analysis System, 2015).

According to the Eurostat's projections the EU's ageing population will lead to a rise in overall participation of the labor force on the labor market. The reasons for that are two – on the one hand, because of the wider participation of young women in the workforce, and on the other – because of the expected impact of the reforms taking places in the countries' pension systems. It will be particularly evident for older workers in the age group 55-64, because of the pension reforms. The total participation rate of people aged 20-64 years is expected to rise from 76.5% in 2013 to 80.1% in 2060 (European Commission, 2015a).

The projection about the labor supply in the EU is that it remains stable in the period 2013 - 2023 but decline by 8.2% in 2023-2060 (19 million people less). The total employment

rate (in the age group aged 20-64) in the EU is projected to increase from 68.4% in 2013 to 72.2% in 2023 and 75% in 2060, but the number of employed would in fact decrease (European Commission, 2015a). As the continuous population ageing will only be partly compensated by the higher participation rates and migration inflows, the real employment rate (people between 20 and 64 years of age) in the EU will practically decline. Their number will be highest in 2022 (215 million) but by 2060 it will drop to 202 million.

The trend of EU's ageing population will affect seriously its GDP growth rate which will stabilize but at a much lower level of an average of 1.1% up to 2020 and 1.4-1.5% by 2060. The small increase in the EU's total population in the period to 2060 and the projected increase of employment rates will contribute to the average potential GDP growth but on the other hand the population in working age will decrease and this will influence unfavorably economic growth. As a result, according to Eurostat, the net result of the labor input on growth will be negative.

The process of ageing in the EU provokes serious problems for the budgets of the Union's member states that will have to pay a high price. In the period 2013-2060 the age-related expenditures of the member states for pensions, health and long-term care and education are expected to reach approximately 2 pp. of GDP, of which +0.9 pp. for health care and +1.1 pp. for long-term care spending (European Commission, 2015a).

There are big differences across EU Member States, which are a result of the diversity in public pension systems and reforms but a reduction of public pension spending in the long-term run is planned in most of them. In the long-term the public pension benefit ratio (calculated as the relation of average pensions to average wages) is expected in the whole EU (except in Luxembourg) on average by 9 pp. Including private pensions, by 2060 this ratio is projected to be above 50 percent in Denmark, Greece, Italy, Lithuania, Netherlands, while it will have fallen below 30 percent in much more countries including Bulgaria, Estonia, Croatia, Latvia, Poland and Romania (European Commission, 2015a).

There is an assumption that the process of ageing will lead to a decrease not only in labor-force participation but also in the savings rates, which will lead to a slowing economic growth, especially in less developed countries. It is also very likely that effects like a bigger female participation in the labor force and raising the retirement age mitigate the negative consequences of ageing on economic growth (Bloom, Canning and Fink, 2010).

Another positive perspective relates to the trends of the Fourth industrial revolution, which has been developing based on the new digital technologies and other related to them modern phenomena as the Internet of things, cloud computing, big data, robotics and 3D printing. These innovative technologies bring new opportunities for the European industry and support it to become more competitive, cost-efficient, innovative, as well as open and capable of inventing and providing new or tailor-made products on the market. Research shows that the process of digitization of products and services can generate more than €110 billion of additional revenue in the EU in the medium term (European Commission, 2017). It would also lead to smart automation of industrial production that would make it self-ruled making workforce redundant. This would weaken the need for workers in the European industry and probably relieve to some extent to problem with population aging.

### **3.2. The bothering widening economic and social inequalities**

Inequality in the global scale has been increasing. An OECD research shows that the uneven distribution of income after taxes and social benefits has been raising in the OECD countries in the last three decades. In 2013 in OECD countries the average income of the richest 10% is approximately 9.5 times that of the poorest 10% on average, an upward trend in the last years, and the gap has been rising even faster since the global financial crisis. On the one hand, this has been the result of the increasing inequality of income from work, which has been rising, and on the other - of the inequality of income from capital (dividends, interest and capital gains), where most often, the rich share of the population is benefiting more than the others. In 2010 the richest 1% of the population had 10% or more of the total pre-tax incomes in 9 of the 18 OECD countries (OECD, 2014).



The increasing income inequality is turning into a serious social and economic problem with different negative effects on economic growth and social wellbeing (IMF, 2014). Together with the negative demographic trends in many countries, it is expected to put a strain on their social protection systems.

It provokes a significant risk as well, of political, social and economic nature (RAND Europe, 2013). It is expected that more than two thirds of the emerging economies and poor countries in the world will suffer from increasing social inequality. In addition to that it is expected that the inequalities in income and education will have a strong and stimulating effect on migration trends (European Strategy and Policy Analysis System, 2015). Empirical studies and simple observations show that economic inequality in the EU has been increasing substantially in recent years, as well as social and economic disparities both within regions and between member states.

The following comparison covers both – the economic development in terms of GDP, and the social development as measured by the Social Progress Index (SPI).

The comparison between the least and most developed European regions, on the one hand, and the EU28 average, on the other, in terms of generated GDP as purchasing power per inhabitant shows that the poorest region in Bulgaria (and in the EU), the Northwest region, is under one third of the EU average, and almost 7 times less than that of Hamburg, Germany (Table 1).

**Table 1. GDP of selected NUTS 2 regions in the EU in 2014**

Region, country	Code	Gross domestic product at current market prices (Purchasing Power Standard per inhabitant)	Gross domestic product at current market prices (Purchasing Power Standards per inhabitant in percentage of the EU average)
Northwest, Bulgaria	BG31	8,200	30
South Central, Bulgaria	BG42	8,700	32
North Central, Bulgaria	BG32	9,300	34
North East, Bulgaria	BG33	10,800	39
South East, Bulgaria	BG34	10,800	39
Southwest, Bulgaria	BG41	20,600	75
European Union	EU28	27,500	100
Wien, Austria	AT13	43,500	158
Noord-Holland, Holland	NL32	44,300	161
Praha, Czech Republic	CZ01	47,500	173
Île de France, France	FR10	49,000	178
Hamburg, Germany	DE60	56,600	206

Source: Eurostat (2016a)

This is also proved by the Social Progress Index, which represents an empiric evidence of the considerable differences within and between EU Member States in terms of population's capabilities of satisfying its basic needs connected with affordable housing, sufficient healthcare, quality education, clean environment, etc. (The index is similar to the global Social Progress Index and is calculated by the Directorate-General for Regional and Urban Policy of the European Commission, the Social Progress Imperative and Orkestra-Basque Institute of Competitiveness).

The SPI gives a broad idea of the practical social and economic situation in the EU member states, combining plenty of indicators that cover three dimensions of social progress: Basic Human Needs, Foundations of Wellbeing, and Opportunity. It includes all 272 European regions and scores absolute performance on a 0-100 scale for each of the indicators included to measure the twelve social and environmental (not economic) indicators.

There are three dimensions of the SPI, including the components: 1) Basic Human needs incl.: nutrition and basic medical care; water and sanitation; shelter; personal safety; 2) Foundations of Wellbeing, incl.: access to basic knowledge; access to Information and

Communications; Health and Wellness; Ecosystem Sustainability; 3) Opportunity, incl.: Personal rights; Personal Freedom and Choice; Tolerance and Inclusion; Access to Advanced Education.

The SPI considers the SEE region as the most undeveloped in social terms (European Commission, 2016a). Like the GDP, the SPI is traditionally the lowest in two of the member states – Bulgaria and Romania. The Bulgarian Yugoiztochen (Southeast) region is the one with the lowest SPI value in the EU – only 39.7, which is less than half of the highest EU value of 82.3 in Övre Norrland, Sweden (Table 2).

**Table 2. Social Progress Index in selected NUTS2 regions in the EU in 2016**

Region Code	Region	Country	EU Regional Social Progress Index	Basic Human Needs	Foundations of Wellbeing	Opportunity
BG34	Yugoiztochen	Bulgaria	<b>39.72</b>	42.46	45.80	31.61
BG31	Severozapaden	Bulgaria	<b>40.62</b>	44.71	46.97	31.12
RO31	Sud Muntenia	Romania	<b>41.82</b>	43.91	43.31	38.36
RO22	SudEst	Romania	<b>42.89</b>	43.34	45.50	39.92
RO21	NordEst (RO)	Romania	<b>43.49</b>	43.35	42.26	44.88
BG42	Yuzhen tsentralen	Bulgaria	<b>44.22</b>	47.86	49.74	35.74
BG33	Severoiztochen	Bulgaria	<b>45.67</b>	46.28	46.67	44.06
BG32	Severen tsentralen	Bulgaria	<b>46.22</b>	47.33	49.30	42.18
RO41	SudVest Oltenia	Romania	<b>46.32</b>	47.88	45.87	45.24
RO11	NordVest	Romania	<b>48.67</b>	49.12	47.91	48.98
RO12	Centru	Romania	<b>49.46</b>	51.21	50.06	47.17
ITF3	Campania	Italy	<b>49.72</b>	62.05	48.13	40.20
RO42	Vest	Romania	<b>50.07</b>	51.94	49.39	48.91
ITG1	Sicilia	Italy	<b>50.09</b>	62.05	49.58	39.87
BG41	Yugozapaden	Bulgaria	<b>50.70</b>	52.75	54.84	44.79
ITF4	Puglia	Italy	<b>51.71</b>	63.59	50.44	42.19
EL25	Peloponnisos	Greece	<b>51.81</b>	67.17	51.97	38.31
RO32	Bucuresti Ilfov	Romania	<b>52.03</b>	52.03	50.91	53.17
Other EU regions...						
NL22	Gelderland	Netherlands	<b>81.11</b>	89.81	73.66	80.27
FI1B	HelsinkiUusimaa	Finland	<b>81.19</b>	84.62	74.03	85.17
DK05	Nordjylland	Denmark	<b>81.36</b>	88.52	74.27	81.60
NL31	Utrecht	Netherlands	<b>81.37</b>	89.88	70.25	84.62
FI20	Åland	Finland	<b>81.61</b>	88.64	72.78	83.82
DK01	Hovedstaden	Denmark	<b>81.67</b>	86.58	71.89	87.02
DK04	Midtjylland	Denmark	<b>81.98</b>	87.58	73.23	85.52
SE33	Övre Norrland	Sweden	<b>82.33</b>	89.42	73.92	84.02

Source: European Commission (2016a)

This rating is an indisputable proof of EU's social inequalities, which are partly due to the non-achieved European cohesion goals, but mainly to the social and economic disparities in the different countries before EU membership (Moraliyska, 2016).

Although the EU has entered its fourth year of economic recovery (European Commission 2016b), the statistics show a bothering and preserving trend of increasing poverty and social exclusion. The Europe 2020 strategy's implementation that has set a target of 'lifting at least 20 million people out of the risk of poverty and social exclusion' by 2020 compared to the year of 2008 has not been performing well enough. Reaching this objective has to be supported by appropriate economic, employment, tax, and education policies.

One important indicator applied by the European Commission is the “Europe 2020” strategy indicators for poverty and social exclusion. The indicator ‘people at risk of poverty or social exclusion’ consists of three sub-indicators: monetary poverty, severe material deprivation, and very low work intensity.

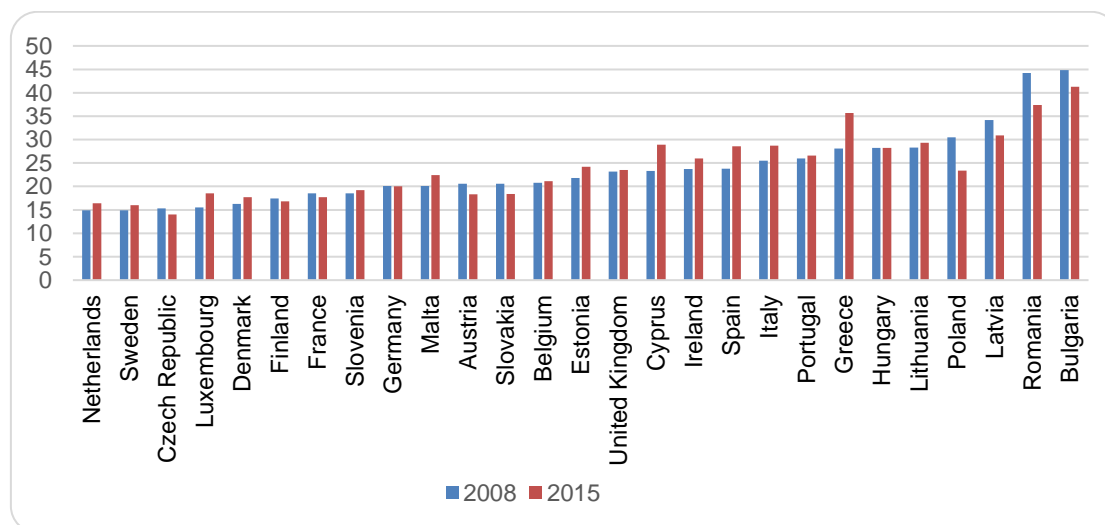
The indicator of monetary poverty represents the share of European population receiving income, which in value is below the risk-of-poverty threshold defined as 60 % of the median incomes in the respective country after social transfers are subtracted.

Material deprivation is an indicator connected with the material incapability of people to meet their basic living needs. Severely materially deprived people cannot afford at least four of the following: paying their rent or utility bills or other loan payments; to keep their home warm; to pay unexpected expenses; to eat meat/fish every second day; a week-long holiday away from home; to own a car/washing machine/color TV/telephone.

Very low work intensity represents the number of people in the age group between 0 and 59 years old that live in households where the adults worked not more than 20 % of their potential during the past year.

It is a rather surprising and unfavorable fact that in the richest continent, Europe, in 2014 almost one in four inhabitants (24.1% of the EU population), has been estimated to be risk of poverty or social exclusion. One third of them (40 million Europeans) have been falling into more than one category of poverty – either from the so called “monetary” poverty and material deprivation (almost 13 million), or materially deprived and living in households with very low work intensity (3.4 million), or both (14.5 million). And one fourth of them (around 10 million Europeans) were suffering from all three forms (Eurostat, 2016a).

The negative trend of rising poverty has been evident in most Member States.



**Figure 7. People at risk of poverty or social exclusion, by country, 2008 and 2015 (% of population)**

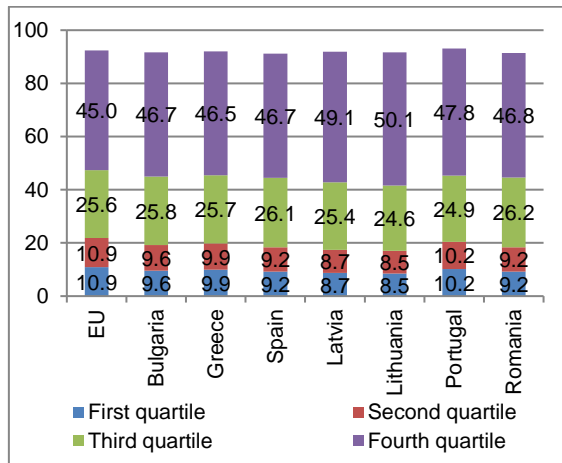
Source: Eurostat (2016a)

There are significant differences in the period between 2008 and 2015 and between Member States (Figure 7). The best-performing countries, where the share of population at risk of poverty or social exclusion decreased most in this period were Poland and Romania, while the countries marked the biggest increases in this negative indicator were Greece and Spain.

One factor for the significant variations in the poverty rates in the EU member states are the differences in the effects of the economic and financial crisis (European Commission, 2016b). However, another even more important factor seems to be the existing divergence in the way labor markets, social systems and fiscal policies of the Member States are structured and function.

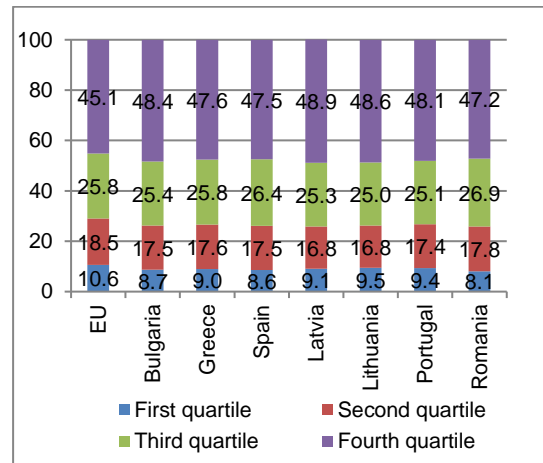
A useful tool to estimate the inequality of income is through the distribution of income by quantiles, as share of income. Over the period from 2010 to 2014, the distribution of income by quantiles in the EU remained stable, with the poorest 1/4 earning slightly less than in 2010 and the richest 1/4 earning slightly more. During this period, the richest 1/4 of the population earned above four times more than the poorest 1/4 (Figures 8 and 9).

Evident are significant variations in the EU in terms of income distribution. In 2014, it was the most uneven in Romania, Bulgaria, Spain, Estonia and Latvia. In the Czech Republic, Finland, Slovenia, the Netherlands and Belgium had relatively smaller income distribution ratios.



**Figure 8. Distribution of income by quantiles in 2010, Share of national equalized income**

Source: Author's preparation based on Eurostat (2016b)

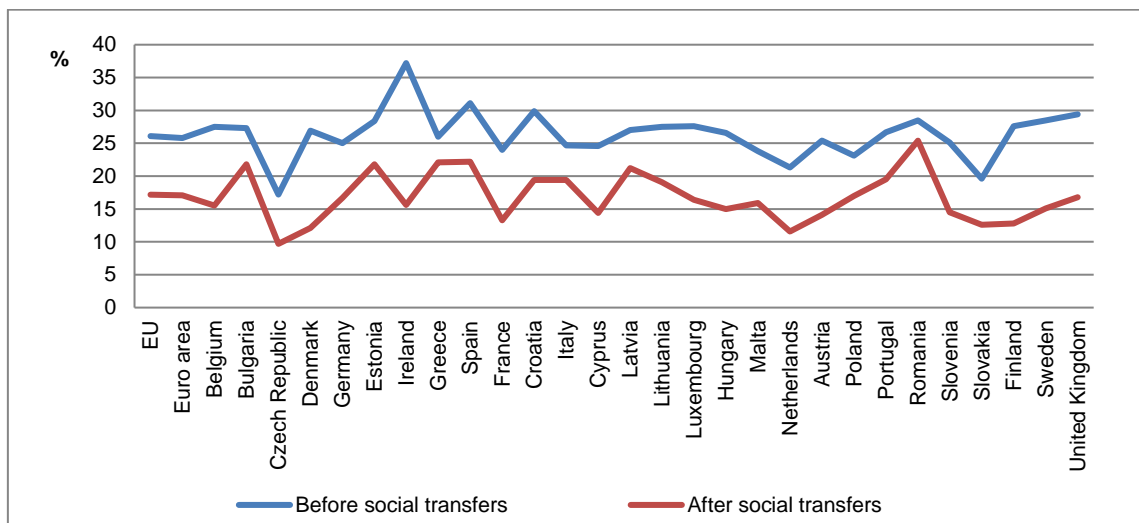


**Figure 9. Distribution of income by quantiles in 2014, Share of national equalized income**

Source: Author's preparation based on Eurostat (2016b)

The aim of the social security that member states provide as social transfers is to prevent and decrease the risk of poverty. Its effect is estimated through comparison of the rate of risk of poverty before and after social transfers (Figure 10). It shows that on average, the social transfers in the EU reduced the share of population at risk by 8.9 percentage points in 2014, from 26.1 % to 17.2 %.

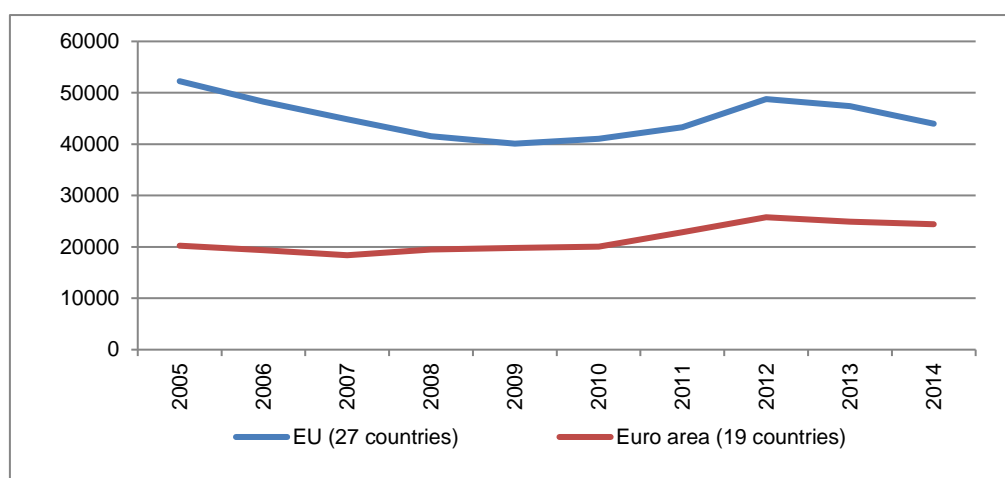
Even though the social expenditure helps to prevent a bigger monetary poverty, in 2014 the extent to which this had effect varied among the EU's member states, Ireland reporting the highest reductions in poverty (– 21.6 pp), followed by Denmark (– 14.8 pp) and Finland (– 14.8 pp). Conversely, the smallest decreases were recorded by Romania (– 3.1 pp), Greece (– 3.9 pp) and Italy (– 5.3 pp). The variations in the efficiency of social protection expenditures in the member states are a result mainly of the different levels of poverty and inequality and the differences in the expenditures to relieve them.



**Figure 10. Rate of risk of poverty before and after social transfers in 2014, percentage of total population**

Source: Author's preparation based on Eurostat (2016b)

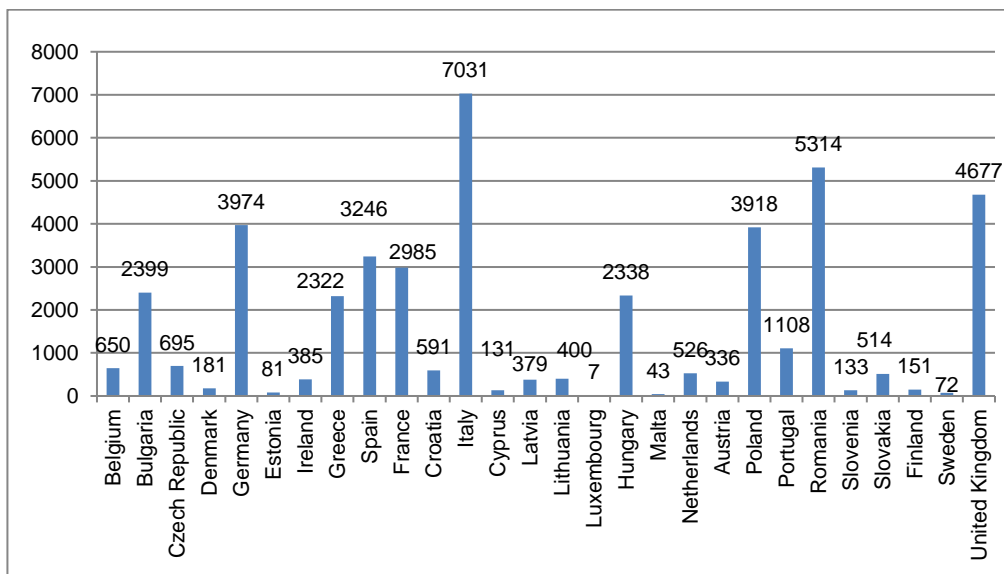
The level of material deprivation in the EU is also very high, even though it has been decreasing in the last years. In 2014 almost one in ten people in the EU (44.8 million people) was suffering from material deprivation (Figure 11).



**Figure 11. Number of severely materially deprived people in the EU27 and the Euro area, 2005 – 2014, thousand persons**

Source: Author's preparation based on Eurostat (2016b)

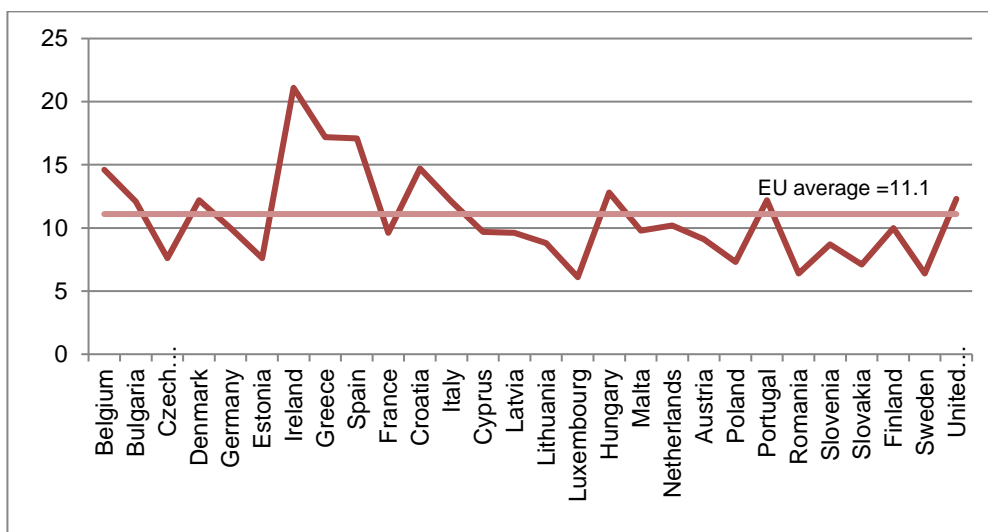
Before the financial and economic crisis, the number of severely materially deprived people in the EU was decreasing but after 2008 it started to increase in more than half of the member states. In 2014 these levels varied significantly, the disparities being a result of a complex combination of factors, among which different levels of living standards and the effectiveness of the national social policies (Figure 12).



**Figure 12. Severely materially deprived people in the EU27 in 2014 (thousands of people)**

Source: Author's preparation based on Eurostat (2016b)

The rate decreased in nine countries, mostly in Poland, where severe material deprivation in 2014 fell by 7.3 percentage points from 17.7 % in 2008 (Figure 13).



**Figure 13. Rate of severe material deprivation in the EU in 2014 (as % of the population of the respective country)**

Source: Author's preparation based on Eurostat (2016b)

The member states also vary by the indicator work intensity. In 2014, 11.2 % (or 41.8 million) of the EU inhabitants were part of households with very low work intensity, in which the working-age members worked less than 20 % of their potential during the previous year. This indicator varied from 6.1 % in Luxembourg to 21.1 % in Ireland and it rose during the crisis. Spain, Greece and Ireland registered the biggest increases in the number of such households (by 10.5, 9.7 and 7.4 pp in the period 2008-2014), while the situation was better off in Romania (– 1.9 pp) and Germany (– 1.7 pp).

Another big problem for the EU is that a big share of the people who work are also affected by poverty, depending on the working conditions and terms of work contracts (working part-time, having a temporary contract, etc.). According to Eurostat, men were more likely to suffer from in-work poverty than women (9.0 % in 2014), although women more frequently hold part-time positions and often earn a lower salary. More vulnerable to risk of in-work poverty are young workers, households with dependent children and single-person households, as well as single parents (one of five in 2014).

There are different opinions about the causes of social and economic inequality, the main being globalization, technological change and economic policies. The positive effects of globalization are associated with lower transport and communication costs, the wide distribution of technologies and know-how, enhanced innovations and more efficient production technologies, as well as manufacturing offshoring. In addition to that, the new information technologies have raised the productivity and the demand for skilled labor, which on the other hand, deepened the differences between high-income and low-income households (OECD, 2011). In addition to that changes in labor market institutions and legislation could harm the group of low-skill workers and contribute to the increasing (pretax) inequality (Jaumotte and Buitron, 2015). On the other hand, while the increasing level of employment results in reduced income inequality, the persistent trend of loss of traditional full-time jobs could offset this positive impact.

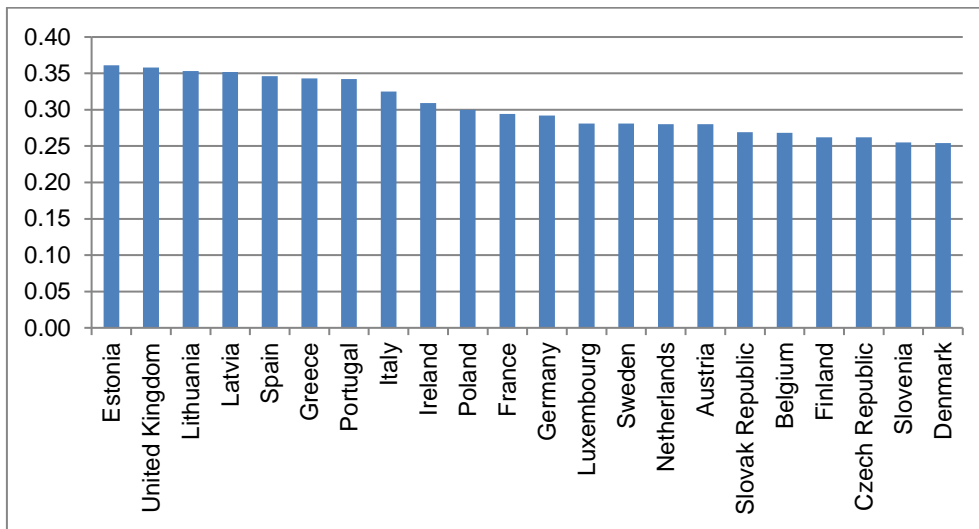
Economic analyses prove different ways of how the economic inequality influences the economic development. The increasing income inequality is registered in 19 OECD countries between 1985 and 2005 and it is considered as being the cause for a 4.7 pp decrease in economic growth in them in the period 1990 - 2010 (OECD, 2011). It has also been blamed for the slow economic recovery of the EU, due to its strong negative impact on consumption and demand (Cynamon and Fazzari, 2016). The income inequality has even been pointed as one of the main drivers of the still-ongoing economic and financial crisis (Rajan 2010).

In addition to that the low-income households may turn to redistribution, which could impact negatively on investment (Alesina and Perotti, 1996). Their lower incomes could also influence negatively their family decisions in terms of education and training (Galor and Zeira, 1993). An increased number of low-income households could lead to a lower domestic demand, hampering the adoption of advanced technology (Murphy, Shleifer and Vishny, 1989).

The deepening of income inequality in the EU in the last several decades has been reconfirmed also by other indicators, one of which is the Gini coefficient (a measure of statistical dispersion which represents the income distribution of a nation's residents; a value of zero implies full equality while a value of one - complete inequality).

A few empirical studies address the level of inequality in the EU regarding the Gini coefficients of the EU-wide income distribution. All papers focus on net-equalized incomes and show an EU-level Gini Coefficient in the range between 0.311 and 0.378 and a low but steady trend of increase (European Commission, 2015b).

Figure 14 presents the Gini coefficient in different member states, for which there was available data by OECD. It shows significant differences between member states. Northern countries, as well as some of the Central European ones report smaller economic disparities.

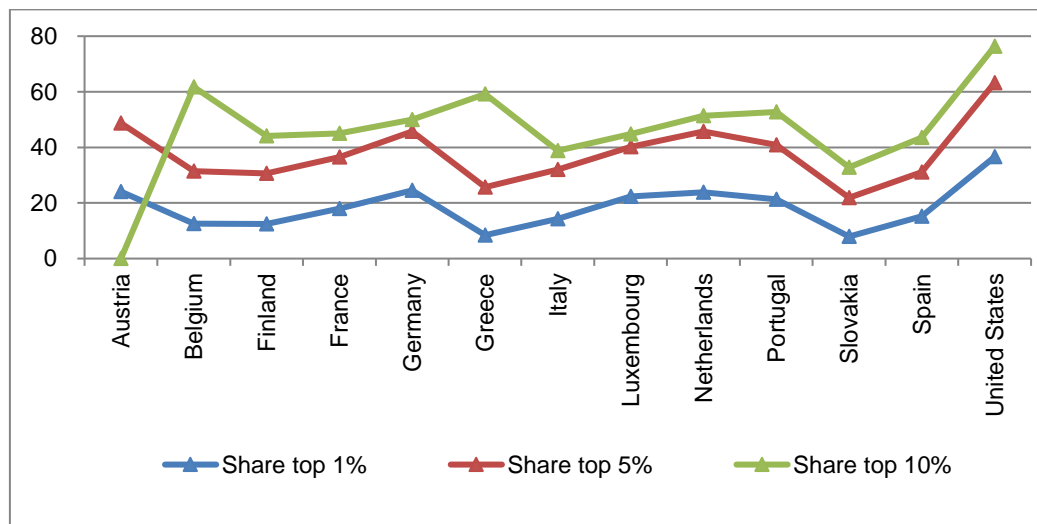


**Figure 14. The Gini coefficient in EU member states in 2013 (disposable income, post taxes and transfers), Total population**

Source: Author's preparation based on OECD (2016)

The disparities between member states are also evident by other poverty and economic inequality indicators, such as those showing the distribution of wealth between different social groups. Data also suggests that with time, wealth inequality has increased significantly.

Figure 15 shows the share of the top- 1%, 5% and 10% of wealth in the total population of certain EU member states and the USA.



**Figure 15. Share (%) of the wealth owned by the top 1%, 5%, 10% wealthiest people in the population in US and certain EU member states in 2010**

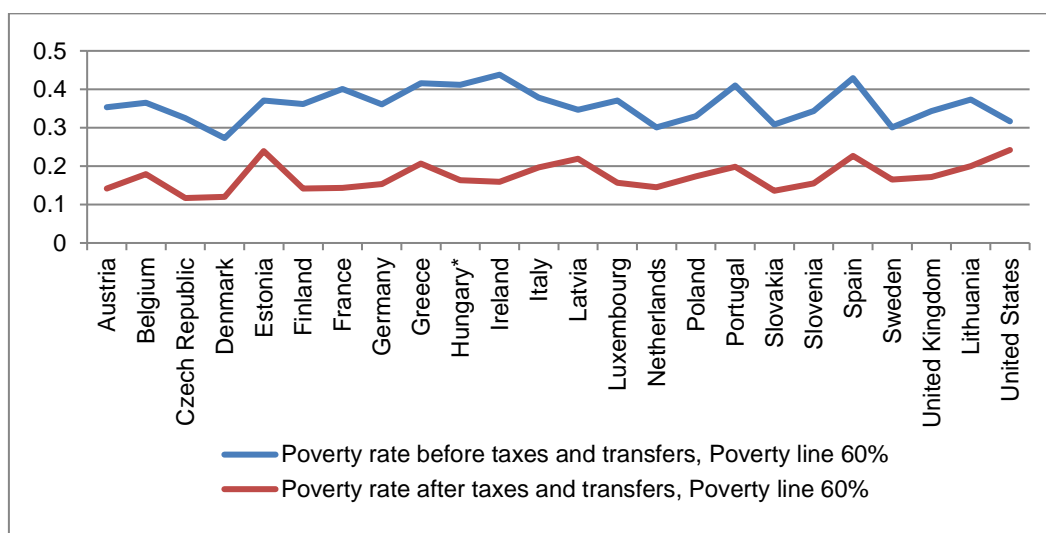
Note: The share of the top 1%/5%/10% refers to share of wealth owned by the 1%/5%/10% wealthiest people in the population.

Source: Author's preparation based on OECD (2016)

Different shares vary in member states; however, they remain lower than those in the USA. The share of wealth owned by the 1% wealthiest people in the population in member states varied between 8% in Slovakia and Greece to 25% in Germany (in Netherlands and Austria is 24%). This means that 1/4 of the wealth of some countries is owned by the wealthiest



1% of the population and this large concentration is of a great macroeconomic significance. The share of wealth owned by the 5 % wealthiest people in the population in the analyzed member states varies between 26% in Greece to 46% in Austria (in the USA, it is 63%). The share of wealth owned by the 10 % wealthiest people in the population in the analyzed member states varies between 33% in Slovakia to 62% in Belgium, i.e. almost a double difference (in the USA, it is 76%).



**Figure 16. Poverty rate before and after taxes and transfers, Poverty line 60%, in EU member states in 2013**

**Note:** \*data for Hungary is for 2014

**Source:** Author's preparation based on OECD (2016)

Figure 16 depicts poverty rates before and after taxes and transfers. The poverty rate is the ratio of the number of people (in a given age group) whose income falls below the poverty line, in this case of 60%.

It is evident that cross-countries differences exist, with poverty rate before taxes and transfers in 2013 being the lowest in Denmark (0.273) and highest in Ireland (0.438). The poverty rate after taxes and transfers is lowest in Denmark (0.12) and highest in Estonia (0.239). In the USA in 2013 the poverty rate before taxes and transfers was 0.317 and after taxes and transfers – 0.242, which are values considerably lower than many of the EU member states.

The causes of the differences in the level of disposable income in the EU member states is explained with differences in the labor markets and how efficient they are, the characteristics of households, the national tax and re-distribution status quo and others. It seems that the top decile of the EU population has been holding a bigger and bigger share of the total income (OECD, 2012), leading to an increasing level of income and social inequality on the continent. Despite this, the rise in the top incomes in Europe looks insignificant in comparison to that in other countries and particularly the United States.

There is no consent in literature about the causes for social inequalities between the shares of population with the highest and lowest income. Some of the explanations include suggestions that these are the changes in taxation, the labor market conditions and institutions, the process of economic and overall globalization or the dynamic technological change.

One of the major factors is the type of the tax system (progressive or flat) and in the European Union the tax systems vary. Considering the top 1% of the distribution, there is a strong negative relationship between top income shares and top income tax rates over the period 1975 to 2008, and only countries that made sustainable cuts in top rate tax rates registered a rise in the share of top incomes (Piketty, Saez and Stantcheva, 2011).

Globalization and technological change may also be the reason for the increased reward for managerial skills on top positions in career development. At the other end of the distribution are the people in the European Union for whom income growth is slower, probably also as a result of the bigger internationalization of trade that has led to job losses and/ or decreased income of low-qualified workers.

The labor legislation and institutions are also important but their influence has been declining in the last decades in numerous developed countries. It seems that they even have a two-sided effect on low-income workers in terms of employment and incomes and overall the problem with inequality in the EU remains unsolved (Fredriksen, 2012).

A negative correlation relation has also been identified between the level of education of the parents and the probability of getting into poverty of their child. The correlation is positive between the probability of a child to be in risk of poverty when already an adult and the family's financial problems in its childhood. Despite this trend varies in member states, it is statistically significant at least one outcome in 1 year (2005 and/or 2011), in less developed EU countries from Central and Southeast Europe (Eurostat, 2017b).

#### 4. Conclusion

There are two major social problems of the EU that are deepening and will likely have serious economic consequences – its ageing population and the preserving cross-country social and economic inequalities.

The statistics with no doubt show that the population of the EU is ageing and it will continue to do so in the next few decades. It is projected that the share of older European citizens in the member states will rise fast, while the proportion of working-age people will fall significantly. The most bothering fact is the projections by 2016 expect the share of European workers who will have to take care of the Union's pensioners to decrease doubly, from four to two. Ageing populations present significant challenges to the European social and welfare systems. These demographic trends warn against the insecure social, economic and financial problems that will rise and deepen in the EU in the long-term. The impact of demographic ageing on European social models necessitates a strong response from the European policy makers.

There are considerably social and economic inequalities between the EU's member states. This seems to be acknowledged by the EU's institutions. The European Commission expects no rapid improvement and the share of Europeans at risk of poverty is likely to preserve on a high level amounting to 100 million people in 2020 (European Commission, 2014).

The poverty and people-at-risk problems in certain EU member states are severe. The existing levels of poverty and social exclusion in the European Union in general are extremely high having in mind that this is the continent in charge of the biggest share of the world's GDP. It is responsibility of both - the European Union and its member states to take urgent measures for economic recovery and growth. The main goal should be poverty reduction, which is also a major aim of the Europe 2020 Strategy, but which still has not delivered the necessary results. Its task to save at least 20 million people from poverty and social exclusion by 2020 has proved very difficult to achieve, both in the short and long-run.

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