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# 217 MILLION PERSONS OF THE EU27 HALF BILLION POPULATION WERE WORKING LAST YEAR

A. European population has been ageing; in the last decade persons aged 60+ years formed two thirds of the total population increase in the EU27countries.

Ageing of the population in the EU Member States as well in other countries of the Old Continent is, first of all, caused by low birth rate, which even does not provide for simple reproduction of the population over a long term. Other factor is the average life expectancy has been longer and longer. As a result the share of the elderly has been growing in all European countries. In the EU still in 1990 the share of pre-working component of the population aged 0-14 years was significantly outnumbering the share of the elderly aged 65+ years (19.5% compared to 13.7%). At the beginning of 2010 the share of aged 65+ years reached 17.4% yet the share of children under 15 years of age dropped to 15.6%. Demographic data of numerous states have been under revision so far depending on finalised results of respective national censuses but, it can be assumed, that the difference in between the older component of the population and the children one will grow even further.

Eurostat regularly publishes values of the **age dependency ratio**, which is constructed as a share of the pre-working and post-working components of the population to the population of working age. In between 1990 and 2010 this age dependency ratio in the total EU27 was changing just a little, mostly due to the increasing number of the elderly was compensated by a decrease in the number of children. Compared to data for the whole EU27 the old-age dependency ratio in the Czech Republic was substantially decreasing in this period due to an extreme decline in the birth rate in the last two decades. Moreover, strong generations born in the 1950s and 1970s were in the working age then.

# Selected structural indices on the population development in the EU27 and in the Czech Republic in 1991-2010 (as at 1 January)

| Indicator   | Country                | 1991         | 2001         | 2010         | 2011      |
|---|------------------------|--------------|--------------|--------------|-----------|
| Median age  | EU27<br>Czech Republic | 35.4<br>35.4 | 38.3<br>37.6 | 40.9<br>39.4 | 39.6      |
| Age dependency ratio, 1. variant (populations aged 0-14 and 65+ years divided by the population 15-64 years), % | EU27<br>Czech Republic | 49.7<br>50.9 | 48.9<br>43.0 | 49.3<br>41.7 | -<br>42.7 |
| Age dependency ratio, 2. variant (populations aged 0-19 and 60+ years divided by the population 20-59 years), % | EU27<br>Czech Republic | 83.9<br>89.8 | 80.4<br>70.4 | 80.3<br>72.9 | 74.0      |
| Young age dependency ratio, 1. variant (the population aged 0-14 years to the population aged 15-64 years), %   | EU27<br>Czech Republic | 28.9<br>31.9 | 25.4<br>23.2 | 23.3<br>20.2 | 20.6      |
| Old age dependency ratio, 1. variant (the population aged 65+ years to the population aged 15-64 years), %      | EU27<br>Czech Republic | 20.8<br>19.1 | 23.5<br>19.8 | 25.9<br>21.6 | 22.2      |

Source: Eurostat, demographic data



The trend in population ageing will continue in all European countries and bring great impacts. Moreover, demographic conditions in numerous countries will be affected by migration.

Demographic changes may be assessed according to development till these days and expected long-term development of the age dependency ratio in the Czech Republic. The age dependency ratio (1. variant) grew since 1930s (it was 47.8% at the end of 1937) till the 1970s and attained its maximum in the 1980s (it was 58.2% as at 1 January 1981). Since the 1990s it has been declining rapidly and merely in the last year it slightly grew from 42.7% at the end of 2010 to 44.7%. This will change essentially.

In January this year the Czech Statistical Office updated the mean variant of the projection of 2009. (More detailed information is available in Section of Overviews of the journal of Demografie No. 2 of June 2012, see: <a href="http://www.czso.cz/csu/2012edicniplan.nsf/publ/1803-12-q2-2012">http://www.czso.cz/csu/2012edicniplan.nsf/publ/1803-12-q2-2012</a>). The following table gives summary characteristics, which document the long-term impacts of the population development on the age structure of the Czech Republic population. The old-age index will grow rapidly. Simultaneously, the so-called **economic burden index**, which takes into account the development in the number of persons entitled for old-age pension according to Section 32 of the Act No. 155/1995 Sb. on old-age pension in valid wording thereof, was calculated as well. The fact that the vast proportion of the population of 15-19 years old still prepares for future occupations and the number of persons capable of work in this population is therefore very low. At the beginning of the previous year there were sixty-eight dependent persons (aged 0-19 years and the elderly entitled for retirement) per one hundred of persons of working age from twenty years to the retirement age. This index will, however, grow substantially slower than the standard dependency ratio and in 2041 it shall attain the level comparable to the value of the beginning of 2021.

## Characteristics of the Czech Republic population age structure in selected years of the period from 2011 to 2041

| Indicator                                | Indicator v | Indicator value according to status as at 1 January |       |       |  |
|--|-------------|---|-------|-------|--|
|  | 2011        | 2021  | 2031  | 2041  |  |
| Average age                              | 40.8        | 43.1  | 45.7  | 47.7  |  |
| Old age index (65+/0-14)                 | 107.8       | 135.5   | 180.7 | 227.6 |  |
| Dependency ratio (0-14 and 65+/15-64), % | 42.7        | 55.7  | 57.9  | 66.8  |  |
| Economic burden index                    | 68.1        | 72.7  | 71.7  | 73.0  |  |

Source: CZSO - Prognosis of the population development

It is obvious that prolongation of the retirement age will affect working activities of the older age population in a significant manner and thus will rectify of the population development impacts on the total employment.



## B. Last year there were by over 4 million persons less working in the European Union than in 2008.

The creation of conditions for actual placement on the labour market of the persons capable of work has, besides the population development and legal measures prolonging working life, essential effects on the total employment. In 2011 there were 217 million persons, that is almost 44% of the whole half a billion population of the European Union, working. Compared to 2000 the number increased by 15 millions, yet the development of employment was not uniform, which was demonstrated namely in the last three years. Although there was a certain increase in employment in the last year the number of the employed still does not reach the level prior the crisis in 2008. A drop in employment compared to that in 2008 was mostly demonstrated not merely in countries, which are now frequently quoted in media as Greece, Ireland, Portugal, and Spain, but also in Bulgaria and in the Baltic States.

#### Number of the employed persons in the EU27 Member States

|                |           |           |           |           |                         | Thousand                |
|----------------|-----------|-----------|-----------|-----------|-------------------------|-------------------------|
| Country        | 2000      | 2008      | 2010      | 2011      | Difference<br>2011/2000 | Difference<br>2011/2008 |
| EU27           | 202 019.2 | 221 314.3 | 216 398.1 | 217 168.9 | 15 149.7                | -4 145.4                |
| Belgium        | 4 120.0   | 4 445.9   | 4 488.7   | 4 509.3   | 389.3                   | 63.4                    |
| Bulgaria       | 2 872.4   | 3 360.7   | 3 052.8   | 2 949.6   | 77.2                    | -411.1                  |
| Czech Republic | 4 675.1   | 5 002.5   | 4 885.2   | 4 904.0   | 228.9                   | -98.5                   |
| Denmark        | 2 716.2   | 2 852.8   | 2 706.1   | 2 702.7   | -13.5                   | -150.1                  |
| Germany        | 36 324.1  | 38 541.5  | 38 737.8  | 39 738.0  | 3 413.9                 | 1 196.5                 |
| Estonia        | 568.4     | 656.5     | 570.9     | 609.1     | 40.7                    | -47.4                   |
| Ireland        | 1 671.4   | 2 101.2   | 1 847.8   | 1 808.9   | 137.5                   | -292.3                  |
| Greece         | 4 097.9   | 4 559.4   | 4 388.6   | 4 090.7   | -7.2                    | -468.7                  |
| Spain          | 15 440.2  | 20 257.6  | 18 456.5  | 18 104.6  | 2 664.4                 | -2 153.0                |
| France         | 23 123.2  | 25 895.3  | 25 692.3  | 25 764.0  | 2 640.8                 | -131.3                  |
| Italy          | 20 930.1  | 23 404.7  | 22 872.3  | 22 967.2  | 2 037.1                 | -437.5                  |
| Cyprus         | 293.7     | 382.9     | 385.1     | 375.6     | 81.9                    | -7.3                    |
| Latvia         | 941.6     | 1 124.5   | 940.9     | 970.5     | 28.9                    | -154.0                  |
| Lithuania      | 1 419.4   | 1 520.0   | 1 343.7   | 1 370.9   | -48.5                   | -149.1                  |
| Luxemburg      | 180.9     | 202.4     | 220.8     | 224.8     | 43.9                    | 22.4                    |
| Hungary        | 3 806.6   | 3 879.4   | 3 781.2   | 3 811.9   | 5.3                     | -67.5                   |
| Malta          | 143.2     | 160.1     | 164.2     | 168.6     | 25.4                    | 8.5                     |
| Netherlands    | 7 859.5   | 8 592.7   | 8 370.2   | 8 368.7   | 509.2                   | -224.0                  |
| Austria        | 3 683.6   | 4 089.9   | 4 096.3   | 4 143.8   | 460.2                   | 53.9                    |
| Poland         | 14 517.6  | 15 799.8  | 15 960.5  | 16 130.5  | 1 612.9                 | 330.7                   |
| Portugal       | 5 002.6   | 5 197.8   | 4 978.2   | 4 837.0   | -165.6                  | -360.8                  |
| Romania        | 10 897.6  | 9 369.1   | 9 239.4   | 9 137.7   | -1 759.9                | -231.4                  |
| Slovenia       | 893.6     | 996.1     | 966.0     | 936.1     | 42.5                    | -60.0                   |
| Slovakia       | 2 083.4   | 2 433.7   | 2 317.5   | 2 351.4   | 268.0                   | -82.3                   |
| Finland        | 2 367.4   | 2 530.9   | 2 447.5   | 2 473.7   | 106.3                   | -57.2                   |
| Sweden         | 4 125.4   | 4 593.0   | 4 545.8   | 4 641.9   | 516.5                   | 48.9                    |
| United Kingdom | 27 263.9  | 29 363.9  | 28 941.5  | 29 077.7  | 1 813.8                 | -286.2                  |

Source: Eurostat, Labour Force Sample Survey



Last year the **employment rate** as a ratio of the number of the working persons to the population aged 15-64 years attained 64.3% in the total of all Member States and was by 1.5 percentage points (p.p.) lower than in 2008. Differences in between respective Member States are enormous. There are countries, on one side, where the employment rate is over 70% (Nordic States, Germany, and Austria) but in numerous countries it is by more than 15 p.p. lower (Greece, Spain, and Italy).

It is characteristic to countries with high employment that work activities is high both in the young working age up to 24 years and in the group of persons older than sixty years, except for Austria. On the contrary, states with the least employment feature a lower level of working activities both in the elder age and, especially, among the young persons. Based on available data an **indicator** can be constructed **that gives how many persons of a given age group are not working whatever the reason for is (100 – the employment rate as percentage)**.

Share of unemployed persons<sup>1)</sup> in the EU27 Member States in 2011 in selected age groups

Percentage Age group Country of which: 15-64 25-29 50-59 60-64 20-24 **EU27** 35.7 27.9 68.6 22.0 30.7 38.1 56.0 35.0 79.2 Belaium 23.1 19.5 Bulgaria 41.5 63.4 35.7 25.7 32.7 73.2 Czech Republic 34.3 58.3 26.4 17.6 23.5 74.2 Denmark 26.9 33.5 26.8 17.6 20.8 57.1 55.8 Germany 27.5 34.8 22.6 17.0 21.9 Estonia 34.9 50.3 26.0 21.8 26.6 56.0 Ireland 40.8 52.3 33.7 30.3 36.6 59.8 Greece 44.4 70.4 40.2 30.1 42.0 71.9 Spain 42.3 63.8 36.9 30.8 39.1 67.3 France 24.0 27.8 81.2 36.2 51.6 18.4 Italy 43.1 66.2 41.2 28.8 36.6 79.2 28.0 Cyprus 31.9 48.3 20.7 17.5 57.6 Latvia 38.2 55.3 26.6 23.9 29.7 65.7 39.3 26.3 22.2 30.1 64.2 Lithuania 64.8 35.4 64.9 20.2 16.9 33.9 79.1 Luxemburg 44.2 32.6 38.1 85.8 Hungary 66.9 26.4 46.2 84.9 Malta 42.4 32.7 18.0 26.2 Netherlands 25.1 26.5 15.8 14.9 23.8 60.0 Austria 27.9 30.0 18.7 14.4 27.6 79.1 78.8 Poland 40.3 57.7 26.2 21.2 40.2 25.5 Portugal 35.8 53.9 21.0 35.1 63.2 42.3 Romania 41.5 65.1 31.7 24.5 71.0 Slovenia 35.6 54.0 25.2 15.4 40.3 84.5 Slovakia 40.5 64.4 32.7 23.8 30.9 82.2 Finland 31.0 40.6 24.3 17.7 22.6 58.2 Sweden 25.9 40.5 21.9 14.1 15.5 36.8 30.5 37.2 22.9 24.7 55.9 United Kingdom 19.8

Source: Eurostat, calculations of the CZSO

<sup>1)</sup> The number of the economically inactive and the unemployed.



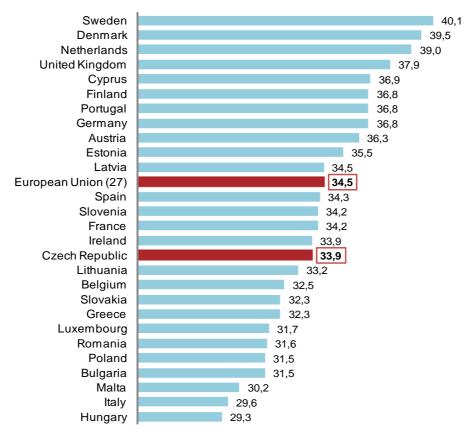
Differences among countries are great. For instance, in Greece and Italy there are over 40% of the young aged 25-29 years not working. That means these are in a prevailing portion persons who have already completed their studies. Concerning the Czech Republic the total share of not working persons is below the European average mainly due to so far relatively low unemployment.

The Czech Republic comparison to its western and southern neighbour gives a less positive image. In Germany and Austria, the same way as in all Nordic countries and in the UK, the young up to 24 years are working more frequently. In the Czech Republic majority of the young aged 20-24 years is not working, their share in frequency of the this five-year age group was over 58%, that is by 8 p.p. more the average of the EU27. In Germany and Austria it was merely one third of the young of this age who were not working. Moreover, in Germany the share of not working persons in the older group of working age of 60-64 years is lower. In the Czech Republic there were three quarters of younger sexagenarians not working last year. In Germany their share was solely slightly over one half of all persons of this age.

The long-term population development, legislation, and economic conditions of respective countries affect the total employment in a decisive manner. Differences among the European Union Member States can be summarised and expressed by means of the indicator of **the average length of active life** constructed on basis of continuous changes to economic activities according to results of the continuous labour force sample survey. According to data published by Eurostat for 2010 the difference in the length of active life was up to ten years (in Italy and Hungary shorter than thirty years, and, on the other side, in Sweden longer than forty years).



#### The average length of active life in 2010 in the EU Member States



Source: Source: Eurostat, Labour Force Sample Survey

Remark: The length of active life also includes the time when a person was unemployed; therefore differences in the length of working life are even larger.

Extent the population is involved in work is the decisive factor affecting the overall socioeconomic conditions in respective countries. Therefore under conditions of the Czech Republic numerous issues need to be addressed as how to increase simultaneous working activities and preparations for future occupations in the group of the young. Or it is necessary to create appropriate conditions for higher activities after the age of sixty has been reached. It can be assumed, on the basis of the comparison with economically developed countries, that the national economy structure by activity and characteristics of required occupations both for females and especially for males will be greatly modified. In this context the development of the lifelong education system, which should enable the working persons, who at present are of younger or middle working ages, will find long-term qualified placement on the labour market.