# THE NEW BROAD AGE GROUP IN THE FRAMEWORK OF SOCIETAL CHANGES ${ }^{1}$ 

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#### Abstract

The aging threshold of $7 \%$ for the ages of 65 years and above was touched in a lot of developed countries, even from the beginning of the $20^{\text {th }}$ century, and in France and Sweden from the $19^{\text {th }}$. The new aging threshold, determined at the value of $14 \%$ is passed or will be passed by all developed countries, that's why, a new threshold of $21 \%$ is examined as the new boundary of aging. In the near future, it will be passed by the most demographically aged European countries, and towards 2050, according to the demographic forecasting, it will be passed in more than 60 countries of the world, that's why the new broad age group, of 80 years and above is debated.


Key words: aging, old-age dependency ratio, dynamic of age groups
Jell Classification: J11, J71.
According to the UN classification, the population with the age share of 65 years and above, at the level of $4-7 \%$ is considered in the demographically aging threshold, and at $7 \%$ it is even more of an aged population.

These classifications were elaborated when the population was still young in the most developed states from an economical point of view.

For the "population share of 60 years old and above" indicator, a limit value is proposed for the perspective, until 2050, the threshold of $1 / 3$ of the population. Japan, with the most aged population is closing in to this threshold, and by 2050 the population proportion of 60 years and above might reach at a share of $44 \%$ of the total population.

This report [1] was written by the division of population as a contribution of the "Global Gathering" (2002) about aging. The report offers a description about the global tendencies of population aging and

[^0]includes a series of indicators of the aging process on developing regions, major domains, regions and countries.

Gerontological and demographical research shows that the old persons, in countries with a high life duration average, in comparison with persons of the same age who have lived half a century ago, have better health and an increased hope of living [2].

There are proposals that the traditional demographical aging indicators calculated by chronological age to be replaced by the prospective calculation of the age, therefore to move from the calculation of the lived years to the calculation of those that are going to be lived after a certain age (e.g. 60 years). This will allow us to take the growing of the average life duration into account and its variations on regions and countries.[3]

In Europe as well, the population of the European Union is under a solid process of aging. This type of demographical evolution might also be the imminent consequence of the progress, of the life style improvement, registered for the society. Social progress determines a substantial decrease of mortality rates, fact which leads to a higher life hope but there are other factors which lead to this process of population aging.

In perspective, there was found out that the active population of the European Union will decrease, while the number of inhabitants with ages of 65 and higher will continue to increase with almost 2 million a year. The age group of 65 and above of the total population of the EU will represent, in 2060, more than $28,4 \%$ in comparison to $16 \%$ in 2010[4].

## 1. Demographic evolution on age groups

In 2002, under the population of UE-28, population with ages between 0 and 14 years represent $16,8 \%$, and after 10 years, in 2012, it has decreased to $15,6 \%$ of the total, while maintaining the share of $15,6 \%$ in 2013. (Figura 1)

Meanwhile, persons considered to be competent of working (from 15 to 65 years old) represented $67,2 \%$ of the population total in 2002, and decreased to $66.5 \%$ in 2012, with a decreasing continuation of this population segment, to $66,2 \%$ in 2013.

Old persons ( 65 years and above) had a $16 \%$ share in 2002 and $17,9 \%$ in 2012, with an increase of 1.9 percentage points in 10 years. But in 2013 this share reached $18,2 \%$, with an increase of 0.3 percentage points in a single year. Therefore, the population increase of the 65 year olds and above has been accelerated at UE 28 .

The age group of 65 and above represents, in general, the population out of the labor market, according to the current legislation. The UE 28
average of this group's share has increased with 2 percentage points in the studied interval, from $16 \%$ (in 2002) to 18,2\% (in 2013). (Fig. 1 ).

In 2013, in comparison to 2002, the share of this age group is increasing in all the EU states. The decreases of the other groups are retrieved in this age group. From the 1 figure we can observe that the biggest share increase of this age group in 2013 is in Malta, with 4,6\%, followed by Lithuania, with $3,7 \%$, and then Germany and Finland with $3,6 \%$, but also the smallest share increase in Luxembourg( $0,1 \%$ ).

Fig. 1. Share dynamic registered on age groups in 2013 in comparison to 2002


Source: processing by Eurostat statistics (online data code: demo_pjanind, tps00028

With the biggest share of the 65 years and above age group, in the population total of the respective country in 2013, is in Italy with $21,2 \%$, increasing from $18,8 \%$ in 2002 with 2,4 percentage points, when it still has the biggest share. Italy is followed by Germany with $20,7 \%$ and Greece with $20,1 \%$.

In 2013, the smallest share of the 65 years and above age group is registered in Ireland with $12,2 \%$, but with a share increase of $1,1 \%$ in comparison to 2002. Close to Ireland's share is Slovakia, with $13,1 \%$ in 2013, with an increase of $1,7 \%$ in comparison to 2002 , when it had the smallest share in the EU. Italy remains with the biggest share during the interval, with the biggest share since $2002(18,7 \%)$ followed by

Greece( $17,4 \%$ ) and $\operatorname{Sweden}(17,2 \%)$, but with a smaller share increase in comparison to 2013 , up to $20,1 \%$, respectively $19,1 \%$.

If we study the share of the 65 years and above age group thoroughly, we can draw the conclusion that on this segment there are the biggest share increases in the population total at the majority of the countries of UE 28 in this time period. If we resume the initial classification of the UN, when the population was relatively young for the most economically-wise developed countries, and we readapt it to the new conditions, we can say that for a population with a 80 years and above share, at $4-7 \%$, they are considered in the aging threshold of the old.

The population structure of the European Free Trade Association and the candidates was similar to the one observed in the EU, the main exceptions being Iceland and Turkey, where the proportion of the youngest age group was bigger( $20,7 \%$ and, respectively, $25,3 \%$ ) and people aged 65 and above presented a relatively small share of the population total ( $12,6 \%$ and $7,3 \%$ ).

If we study in popular evolution of 80 years old and above, the biggest share, in the population total of the respective country in 2013, is Italy with $6,3 \%$, with an increase of 1,9 percentage points In comparison to 2002, when Sweden has the biggest share of this age group with $5,2 \%$. Italy is followed by Germany with a share of $5,4 \%$ and Belgium with $5,3 \%$.(Fig. 2.)

Fig. 2. Population evolution in the 80 and above age group in 2002,2012,2013


Source: processing by Eurostat statistics (online data code: demo_pjanind, tps00028)
In UE 28, in 2002, the population of 80 years and above represented $22,5 \%$ of the $65+$ population, increasing up to $27,4 \%$ in 2012 , with 5.1 percentage points in 10 years. In 2013, this share has increased to $28 \%$, with 0,6 percentage points more than last year.

We can observe in the 2 figure that the biggest share increase of the 80 years and above age group is in Lithuania, with 2,4 percentage points, followed by Greece, with 2.3 , and Latvia with 2,1 percentage points. The only country where the difference is 0 was registered in Sweden. With small
increasing values of this share are Denmark ( 0.2 percentage points), Ireland and Cyprus ( 0.3 percentage points).

## 2. Aging emphasis is indifferent for the South-East Europe

According to the long term forecasting of EU [3], Sweden stays the country with the biggest median age, for the most part of the $20^{\text {th }}$ century, in that period being 36 years. In the mid 90s Italy surpassed Sweden and kept its lead until the new century, when it had 40,4 years, followed by Germany with 40,2 , and it can be like this for the following 30 years.

After 2040, Latvia and then Romania are expected to have the biggest age averages, which confirm the transition to the east of the aging process. But at that date (after 2040), Sweden is expected to have one of the youngest populations of Europe, along with most of the northern countries and western Europe, while central and eastern European countries to be above the EU average. Until 2060, most countries are susceptible to having a population share of 80 years and above of $10 \%$, in comparison to $1-2 \%$. Likewise, the addiction rate for the age limit might reach more than one old person for each working 2 persons.[5]

In 2030, the expected population share of 65 years and above and the decrease of the work capable, for the majority of the regions, might push the old-age dependency ratio ${ }^{2}$ to above 2013's $27,5 \%$. For UE-27, the oldage dependency ratio is expected to increase to $38,0 \%$. This means that if, in 2013, 100 work capable persons supported 27 persons aged 65 and above, in 2030 they are expected to support over 38.

We can see that in more than half of the EU regions, old-age dependency ratio is expected to increase with more than 13 percentage points during 2010-2030.

The main challenge of the future is represented by public expenses in the pensions and health domains as a consequence of the population aging.

## Conclusions

We can draw a few conclusions concerning the aging of the populations, like the following:
$\checkmark \quad$ It is without precedent in the history of humanity, and in the $21^{\text {st }}$ century we will register a faster aging than the last century's.

[^1]$\checkmark \quad$ It is a global phenomenon, omnipresent, which affects every man, woman and child, but countries are at different stages of the process, and the changing rhythm differs a lot. Countries that started the process later will have less time to adapt.
$\checkmark \quad$ It is a long duration process and we will never return to the young generations our ancestors were living.
$\checkmark \quad$ It has profound implications for a lot of aspects of the human life.

A reexamination of the interval limits which define the demographic aging and the age limits of the old aged is necessary.

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[^0]:    ${ }^{1}$ This paper presents partial results of the research theme „Nonlinear model for analysis and forecasting of socio-economic effects of aging", fundamental program or priority of the Romanian Academy for 2014, coordinator M. Balan

[^1]:    ${ }^{2}$ Old Age dependency ratio, is the ratio of older than $64+$ dependents people to the working-age population--those ages 15-64 ( $\%$ of working-age population).

