MAIN THREATS TO THE ROMANIAN LABOUR MARKET IN THE CURRENT CONTEXT

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The paper's topic is focused on the Romanian labour market prospects, which is going to be affected by two main threats: aging and population decline. These two factors are supposed to dramatically change Romania's economic structure. It is therefore necessary to know how they will evolve in the next decades, facts which represent the main objective of our article.
These topics are debated at large scale at the European and national level, because they describe a process which implies European Union as a whole.
The methodology used in order to quantify this phenomenon includes statistical methods (correlation analysis and descriptive statistics). We have used data available at national and European level in order to build a proper argumentation.
The results obtained are worrying because there is a high risk to assist at an accelerated aging of the Romanian people, doubled by a very low birth rate. This might create huge problems in the economic and social system due to productivity decrease and the pressures on the pension's funds.
The paper offers scientific arguments for developing macroeconomic policies in order to prevent the negative situation in which we could be within less than 40 years. As a comparison term we brought into attention the Germany situation, country which offers economic equilibrium to the EU, but is also affected by aging.
The manner in which this problem has been approached is an original one because we tried to put Romania's situation into the context of the European Union general situation, the threat being emphasised by the fact that it is going to be a trend for the whole continent.
Actually, if it is not taken adequate measures, we will be confronted with a demographic crisis, much worse than the current financial one, because the effort of the country to reverse a birth rate decreasing trend with an aged population will take decades.

Key words: *aging, labour market, employment structure, sustainable development*

JEL classification: *J11, J21, O16*

I. Introduction

Sustainable development is one of the fundamental objectives laid down by the European Union constitution treaty. The concept of sustainable development refers to meeting the needs of present generations without compromising the opportunities of future generations to meet its own needs.

Given the importance of this objective in 2001 the European Union launched its first Sustainable Development Strategy (SDS), adopted by the European Council in Gothenburg.
In the common vision of the Member States, which can be found in the revised SDS (June 2006), sustainable development implies the need to ensure the preservation of land capacity to support life in all its diversity based on principles such as: democracy, gender equality, solidarity, rule of law and respect of fundamental rights, freedom and equal opportunities for all. The expected result is continuous improvement of welfare and quality of life for present and future generations by promoting a dynamic economy characterized by full employment, high levels of public education and health, social and territorial cohesion, and environmental protection.
In 2010, with the launch of Europe 2020, the priority to ensure sustainable economic growth was reiterated. This became one of the three fundamental objectives of the European Union for the next decade, with smart and inclusive growth. In response to financial crisis and the challenges of globalization, the growing pressure on resources and aging populations, the European Commission established a series of targets in order to achieve economic growth.
The targets established and the initiatives undertaken are strongly correlated. Thus, education, training and lifelong learning will equip the workforce with skills and qualifications needed in order to fulfil the jobs requirements. This will lead to increasing employment rates, incomes and living standards, contributing to poverty reduction.
A better level of education will increase innovation and research capacity of the economy, including developing green technologies. They will help to combat climate change and to boost competitiveness and the number of jobs in environmental protection field (COM, 2010).
In this context, human resource plays a dual role: it is one of the strengths of the European Union (manifested by the talent and creativity of individuals), but also a threat (by negative demographic trend, the aging population and the reduction of the compatibility between qualifications held by the labour force and those required in the current economic labour market).

II. Demographic factors and their impact on sustainable growth

In 2008, EUROSTAT has released the forecasts related to the population growth trend until 2060 (EUROPOP2008, convergence scenario) for all the 27 Member States, including Norway and Switzerland, which have been used by the European Commission in order to analyse demographic aging impact on public expenditures.
The results of these projections bring into attention the powerful negative impact exerted on long term by the population aging on the public finances (pensions, health insurances and long term care), employment, productivity, economic growth and other areas. Life expectancy is supposed to rise, and the “baby boom” generation is going to decrease.
Thus, in 2008, at the level of the 27 Member States, the **total population** counted 495.4 million people, increased by 2% compared to 2000. EUROSTAT forecasts indicate that in 2035 it is going to be recorded the largest number of EU population (520.7 million), but this will gradually decrease until 1st January 2060 at 505.7 million, but it will maintain over the level recorded in 2010 (Fig. no. 1).

Regarding Romania, the decreasing trend of the last years is going to be maintained for the next period. If in 2008 the population numbered was 21.5 million people, falling by 4.4% compared with 2000, in 2060 this is estimated to reach 16.9 million, with almost 20% lower than the number recorded in 2008 (Fig. no. 1).

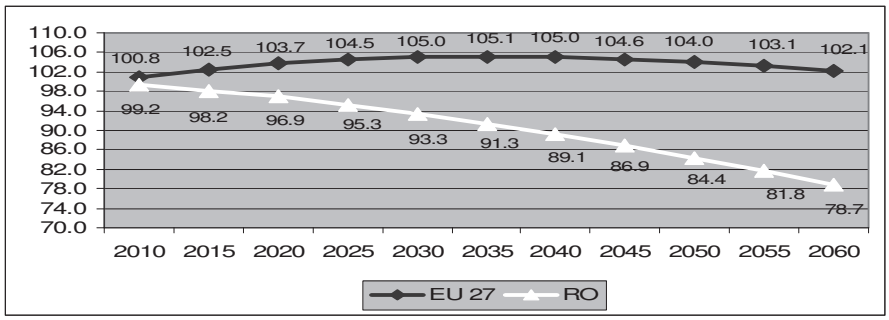

Fig. no. 1 Population projection at 1st January of each year (2008=100)
Source: EUROSTAT, EUROPOP2008, Convergence scenario

These projections are considered by many Romanian authors too pessimistic. Thus, Lazea (2009) and Bari (2010) put in discussion the forecast number of 157.9 thousand annual births, considering that an average of 210.8 thousand is more realistic.
This has been computed starting from the same average fertility rate of 1.32 births per women, projected by the EUROSTAT study, but considering that 1.1% women from the population of the period 2008-2060 will give birth (1.1% has been also the share of the women from the total population who gave birth during 1990-2005).
According to these hypotheses, in 2060 the Romania's population could reach a number of 19.7 million persons, by 17% larger than EUROSTAT projection (Fig. no. 2).

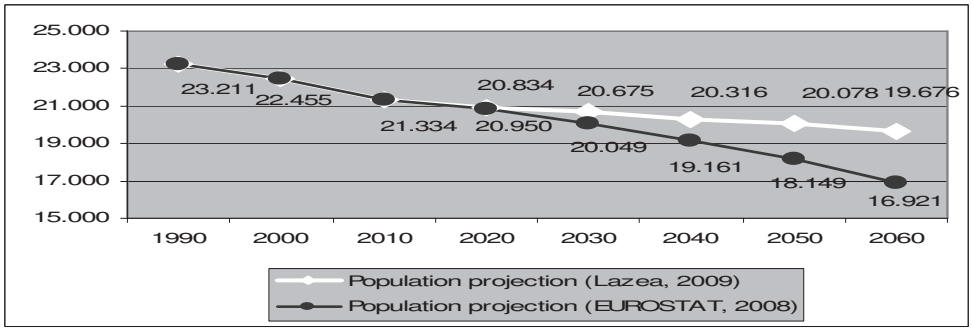

Fig. no. 2 Population projection in EUROSTAT studies (2008) and Lazea (2009)

Even if the hypothesis of a population of 16.7 millions inhabitants in 2060 will not be realised, being one of the most pessimistic, Romania is going to be affected by a strong **aging process**.
First of all, this phenomenon is sustained by the *population age structure,* characterised by the increase of the elderly (over 65 years) and the decrease of young people share (under 15 years) in the total population number (Fig. no. 3).

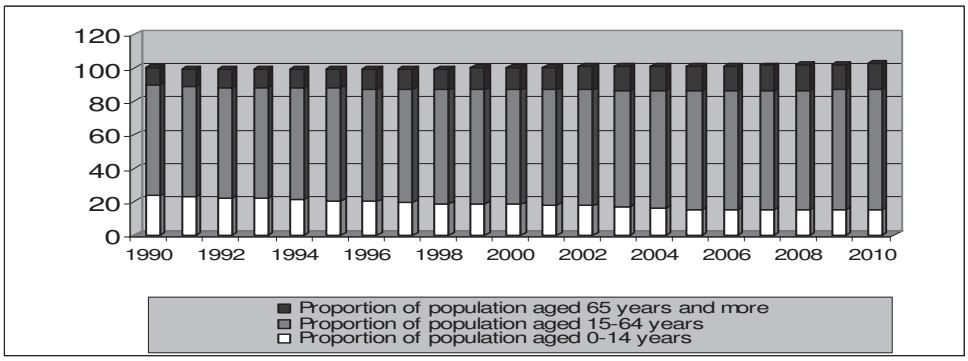

Fig. no. 3 Population age structure (1990-2010)
Source: EUROSTAT, NavTree_en. pdf, Population on 1 January: Structure indicators

This situation can be also emphasized if we analyse *old dependency ratio,* which has progressively increased in the last 20 years, becoming almost equal to the youth dependency ratio that has continuously decreased (Fig. no. 4).

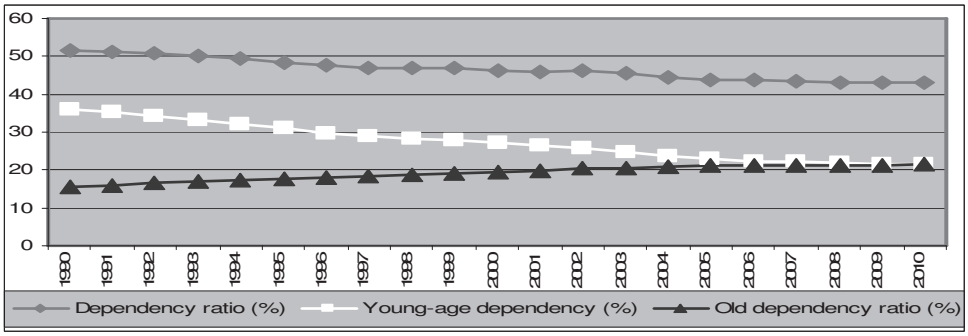

Fig. no. 4 Dependency ratio, young-age dependency and old dependency ratio in Romania (1990-2010)
Source: EUROSTAT, NavTree_en. pdf, Population on 1 January: Structure indicators

The number of elderly at EU level is expected to increase from 84.6 million in 2008 to 151.5 millions in 2060, actually from 17.1% to 30% of the total population number. In these conditions the old-age dependency ratio (population 65 and over to population 15 to 64 years) is going to increase from 25.4% in 2008 to 53.5% in 2060 (Fig. no. 5).

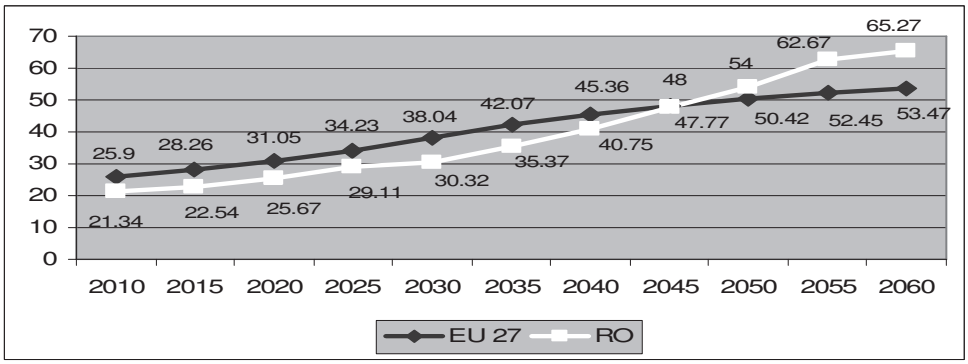

Fig. no. 5 Projected old-age dependency ratio EU – 27 and Romania (2010-2060)
Source: EUROSTAT, EUROPOP2008, Convergence scenario

Regarding Romania, the old-age dependency ratio is going to record an accelerated growth, being estimated to overstep the EU average in 2045 and reach a value of 65.27% in 2060 (Fig. no. 5).
Even if according to the papers released by the above mentioned Romanian authors it is sustained the fact that this indicator will not reach the level of 65.27% in 2060, more reliable being a lower percentage (almost 53.37%), this represents an increase by 150% compared to the value recorded in 2010.
In these conditions it is expected that the economic effects of the projected demographic evolutions to be very strong, and a long term sustainable development to be not so sure. The main cause is represented by the decrease of the population number capable to work and, consequently of the activity rate, this fact having a direct effect on reducing the output and slowing down the economic growth process.

III. Demographic aging and structural changes in economy
One of the direct effects of demographic aging on the economic activity will be changing the structure of demand for goods and services fact which is going to have a significant influence on this market, but also on labour and capital markets (Börsch-Supan 2003).
Thus, the demand for goods and services special designed for old people it is going to raise. In 2060 a smaller number of the work force will have to produce more in order to assure at least the actual level of consume and the capital will be mainly allocated to the countries where the population is younger and the earning rates could be higher.
In the case of Germany, the above mentioned authors have synthesised the effects of demographic aging according to the next forecasts:
- In 2035 the workforce will have to be by 15% more productive in order to obtain the gross domestic product per capita that could have been realised if the demographic aging had not been recorded;
- Only half of this increase in productivity could be achieved by increasing the efficiency of capital use, taking account of the human capital deterioration that comes up with demographic aging;
- Many of the jobs will be subject to a process of economic restructuring, the result of changes in the structure of demand for goods and services.
In this respect, in the paper entitled *Aging and Structural Change* (ThieBen, 2007) using a regression function with panel data the author analyses the impact of aging on the structure of the economy.
Analysed data support the idea according to which aging will accelerate the relative decline of some sectors such as agriculture and mining, the increase of the financial sector, real estate and social services, and also will slow down the decline of manufacturing industry.
The most interesting result of the research is the fact that aging will sustain the increase of the sectors with quite low productivity that will affect on long term the economic growth process.
For Romania, the situation is much more difficult. Thus, a simple analysis proves the fact that in 2060, in order to maintain the same standard of living recorded in 2009

(GDP/capita of 2607 USD) for the 19676.4 thousand persons that will represent the population of Romania, the productivity of the 11083.4 thousand persons at the working age should be by 28% higher (this in order to obtain the production realised by the 15478 thousand persons at the working age in 2009).
But, if we intend to reach the level of the developed countries, the productivity should rise more than that.
According to the data offered by the World Bank for 1990-2008 period, it seems that for Romania the link between the proportion of elderly and the proportion of people employed in agriculture has un reverted *U* shape. If until 2001, the two indicators had recorded the same direction of evolution, it seems that, after this year aging determined a decrease in employment in agriculture (Fig. no. 6).

Fig. no 6 Correlation between demographic aging and employment in agriculture
Source: Own processing according to the World Bank data

A more stable relation can be seen between the population employed in industry and the indicator that quantifies the process of aging. Thus, a long period of time, aging has conducted to the decrease of employment in industry, but for the moment this relation tends to change (Fig. no. 7).

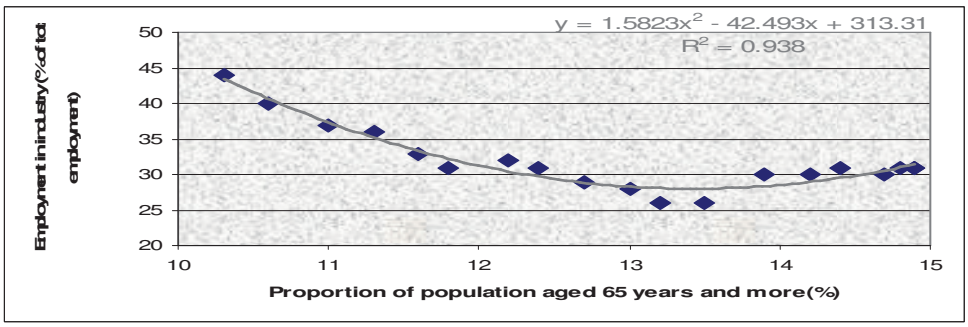

Fig. no 7 Correlation between demographic aging and employment in industry
Source: Own processing according to the World Bank data

Regarding the tertiary sector, as in Germany, the correlation between the two indicators proves the existence of a direct, very strong relation. Thus, with the acceleration of aging, as expected, employment in services has recorded an increasing trend (Fig. no. 8).

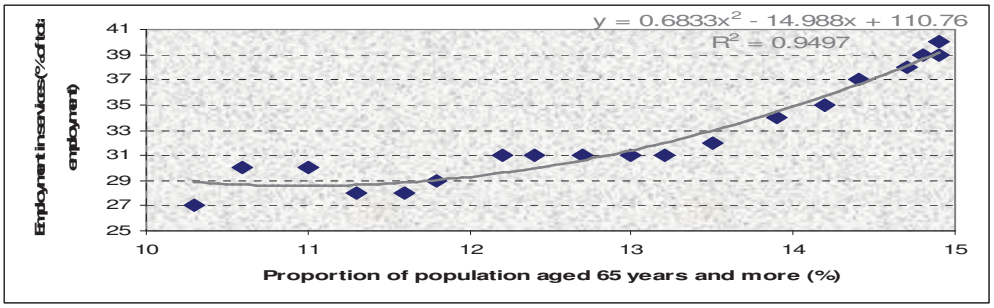

Fig. no. 8 Correlation between demographic aging and employment in services
Source: Own processing according to the World Bank data

IV. Conclusions

According to data presented above, in the coming decades internal growth potential of Romania will be affected not only by the consequences of the financial crisis that our country is passing through, but also by a negative demographic process.

First, this will reduce the size of one of the main factors of production – labour force and will determine its deterioration due to population aging. In the absence of significant increase in labour productivity the economic effects of negative demographic trends will be felt through a slowdown in the process of economic growth. The main reason is the decrease in the working age population and therefore in the rate of activity, which will have a direct effect of reducing production.

Due to the aging process the structure of economic activity is expected to change, by increasing the share of tertiary sector, i.e. services for older people and with this the structure of employment.

In addition, external challenges manifested by increased competition in international markets will force our country to quickly change the economic structure and the system of education in order to be able to adopt technological changes necessary for a sustainable economic growth.

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