

GLOBALISATION IMPACT ON DEMOGRAPHIC PHENOMENA

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Abstract:

Globalisation, climatic changes and demography are the main forces modelling the development of societies at large and of each nation in particular. Both provide for opportunities but also challenges.

The paper aims to identify and synthetically present some factors of influence which triggered by the end of the 20th century and the beginning of the 21st century a series of characteristics defining the changes of the demographic model and structure of population on age brackets. Romania's population lost in the period 1992-2012 about 1900 thousands persons.

Also, in this paper are presented the most important factors that determined the demographic decline beginning in the last decade of the 20th century at world and national level. For Romania, another phenomenon was represented by the demographic dregs due to the emigration of the feminine population of fertile age. The increase of the share of female population in the emigration flows became more noticeable in the period 2002-2007.

Key words: *globalization, demographical evolution, socio-economic impact, demographics factors*

JEL classification: J10, J11, J19

1. Introducere

The intensified globalisation represents the fundamental feature of the world economy at the beginning of the 21st century. Globalisation is characterised by the marked trend of diminishing and eliminating the barriers between national economies, as well by stronger links between these economies.

Globalisation has, as well, its own *demographic model*: swift acceleration of individuals' movement from the rural area and the agrarian lifestyle to the urban area which is more closely related to global trends of fashion, foods, markets and leisure.

Globalisation and demography are the two main forces modelling the development of societies at large and the European one in particular. Both provide for opportunities and for challenges as well.

The demographic trends at world level and, implicitly at European level indicate longer and healthier life-spans and question topics such as the new costs of an aging society, equity among generations, the higher importance granted to child nurturing and to the balance work/personal live in fostering family life, the relationship between generations and the new poverty threat.

Globalisation, next to the new technologies, provides a huge growth potential. Yet, individuals should be able due to their studies and professional training to take full advantage of these opportunities and adjust to the disappearance of some traditional industrial trades.

The paper intends to analyse the impact of globalisation on the development of the main demographic phenomena.

2. Globalisation impact on demographic phenomena

In the last decade, the world's economic map was redesigned, both because of the spectacular changes occurred on the international political scene and of the influence of unprecedented technological shifts. A certainty is that market economy triumphed all over the world. On the background of these substantial changes to basic trends were outlined. One of them refers to the economic globalisation advantaged, among others, by the diminishment of transportation costs and by communication.

The other confirms the attempt of various nations, connected to their own territory to organise within some regional frameworks defined by geographic and historical proximity connections. In this new context, the power

relationships changed under the influence of shifting the heavy weight of world output, meaning the localisation of the latter, determined in its turn by the strategic games implemented mostly by multinational companies acting at present under the power of attraction of national territories.

2.1. Characteristics of world demographic evolution

Despite of the outspread of production and consumption models, the world economy is far from being homogenous.

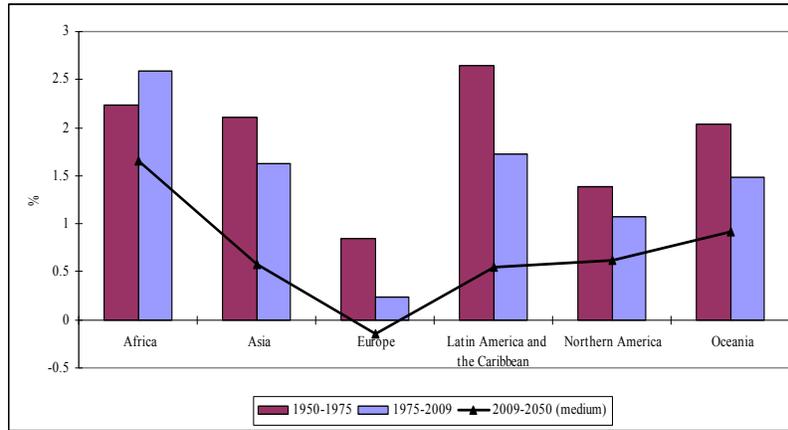
If the Earth population continues to grow at the current rate, then mankind shall face soon a critical issue generated by the imbalance that might appear between producers and consumers. The signs of such an imbalance may be felt already now, representing one of the most spectacular shifts about to change radically the appearance of the world in which we live.

As is already known, for a long time Asia-Oceania represents more than half of the world population. This impressive increase triggered a shift of the output heavy weight and reversed the relative levels of economic development without the respective micro-region gaining the expected position in the distribution of the world income. As of 1960 and up to 1999 the world population exceeded the 3 billiards and increased to 6 billiards inhabitants, and in 2009 it is of 6.829 inhabitants. Unfortunately, the territorial distribution of this population is extremely unequal. For instance, in the year 2009, in Asia lived less than 4.21 billiards people, that is 60.35% of the world population. Europe did not succeed to total more than 10.72%, while Africa had 14.8%. Smaller weights were held by Latin America and the Caribbean (8.52%), North America (5.1%), and Oceania (0.51%).

According to the World Bank Report, the average rates of world's population change on the major areas were distributed in accordance with the graphs in figure 1.

The most recent estimates about population, realised by the UN indicate that the demographic increase at world level shall be of 1.8% in the period 2005-2010, and thereafter shall decrease being in the period 2045-2050 of 0.34%, considerable diminishments being recorded also at the level of the major continents (Figure 2).

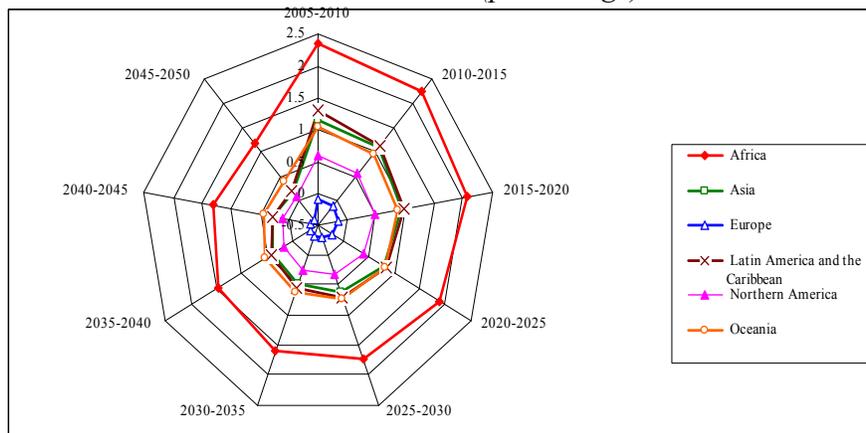
Figure 1 Average Annual Rates of Change of The Population of The World and Major Areas, 1950-1975, 1975-2009, 2009-2050(medium)



Source of data: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2009). *World Population Prospects: The 2008 Revision. Highlights*. New York: United Nations, and processing to authors

The most dramatic situation with respect to the natural increase is highlighted for Europe where, if in the period 2005-2009 was recorded a negative value (-0.09%), for the period 2045-2050 the forecast is that it shall be of -0.40% (Figure 2).

Figure 2 Average Annual Rate of Natural Increase for The World and Major Areas, 2005-2050 (percentage)



Source of data: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2009)

Considering the sustainability limits of the financial and hydrographical limits of each country, all national governments require a carefully elaborated and adequately supported demographic policy that should take into account the hosting capacity of the country, irrespective of the consumption level decided on by the citizens. As noticed by Edward O. Wilson, biologist at Harvard “*each nation has an economic policy and a foreign policy. The time has come to talk more openly about a demographic policy...which is in the vision of the informed general public, the optimum population?*”

The unbroken demographic increase is the main source of the growing pressure exercised on the natural systems. It is estimated that some countries like Ethiopia, Nigeria and Pakistan shall triple their populations up to the year 2050. It is expected that Nigeria shall have a growth from 154.729 million persons’ in 2009 to 289.083 million persons’ in the year 2050, more than lived in the entire Africa in 1950. Ethiopia, a country controlling a large part of the superior watercourse of the Nile, which is indeed the vital nurturing artery of Sudan and Egypt shall increase its population estimated in the year 2009 of 82.825 million to 173.811 millions in the year 2050. It was calculated that the population of India, a country with 1.2 billiards inhabitants shall increase by 416 millions up to the year 2050.

At the same time, despite China’s efforts, its population shall still increase by 71 millions.

An issue of concern for international experts is that the total number of Earth’s inhabitants continues to increase at high levels. Hence, despite the relative diminishment of the population’s growing rate, at world level is estimated that the population shall increase by more than 232 millions in the year 2015 against the year 2009. If in the past there were required 123 years for the world population to increase from one billiard persons to two billiards (1800-1923), thereafter each of the subsequent billiards was reached in respectively 33 years, 14 years and 13 years. In order to hinder this increase regarded as high particularly for the developing countries, UN experts in the field have introduced and generalised in these countries the concept of “family planning”. For the last twenty years it is estimated that the use, for instance, of contraceptives in African, Asian and Latin American developing countries has increased from 14% to 57%.

Still, the access to the measures included in family planning remains low in developing countries against developed countries, a fact revealed also by the average size of the families (at most two children per family in developed

country and up to six children per couple in the weakest developed countries of Sub-Saharan Africa or of the Pacific Isles). In spite of the measures implemented by the UN specialised organisation (UNFPA, WHO, etc.) it is estimated that, at world level, there are over 350 million couples that don't have access to any of the services and information ranges with respect to modern family planning.

The analysis of some statistics and scenarios realised by various international bodies allows for inferring some conclusions, that is:

a) Population's distribution on Earth shall continue to be uneven, the Asian region counting about 57.2% from the world population in the year 2050 (in the median variant of UN estimates) (60,5% in the year 1995), followed by Africa with 21.8% (12.7% in the year 1995);

b) The People's Republic of China remains also for the future by far the most populated country of the world, with 1.22 billiards inhabitants in the year 1995, and the forecasts indicate a population growth to 1.45billiards in the year 2025 and to 1.417billiards in 2050. If by the year 2025, India maintains its position on the second place by 1.431billiards inhabitants (against 936 million inhabitants in the year 1995), in the year 2050 its population shall reach to 1.614 billiards inhabitants, hence moving up to the first position. Still, the highest population growth rate in the world is forecasted to be recorded in Africa.

c) The lowest population growth rate shall be recorded in Europe, the population of which in the year 2025 shall practically be maintained at the level of the year 1995 (727 million persons). In the year 2050, total fertility rate (average number of children per woman) shall be in the average scenario the lowest also in Europe (1.82) and highest in Africa (2.4)

d) With respect to the age groups 0-14 years and 15-24 years, in Asia, Europe and in Latin America and the Caribbean as well the period 2010-2050 will record a diminishment of these population segments. For the age group 25-59 years only in Europe there will be recorded population decreases corresponding to this population segment;

e) The analyses realised indicated the fact that population diminishments at the level of the year 2050 shall be recorded only for Japan (the population shall decrease by about 25497 thousands persons), in the Russian Federation (by approximately 24777 thousands persons), in Germany (by about 11663 thousands persons) and in the former communist countries of Europe.

2. Brief presentation of Romania's demographic characteristics

The last 25 years were characterised by a continuing diminishment of Romania's population. The rapid and significant decrease of the birth rate, the recrudescence of the mortality rate and negative external migration have all dramatically changed the demographic image of Romania. The year 2014 is the 25th year of demographic decline, a period in which Romania lost 1.95 million inhabitants which means 8.4% from the population the country had at the beginning of the years 1990 (Mihăescu C., Niculescu-Aron I.G., Petre D., 2009).

Romania is among top 5 EU Member-States (together with Slovakia, Poland, Latvia and Slovenia) that will know the swiftest ageing growth rate of the population in the next decades. The median total population age shall be of 46 years in the year 2030 and 52 years in the year 2060 (Statistic NIS).

The evolution of the demographic variables in Romania makes no exception from the general trend of European populations. Here, on one hand, birth rates, mortality and marriages have increasingly lower values. On the other hand, the average age of concluding the first marriage, of having the first child, and the frequency of divorces and of consensual unions are all on an increasing trend.

In Romania, the structure on age of the population bears the characteristic fingerprint of a demographic ageing process due mainly to births' rate decrease (from 9.3‰ in the year 2013), which triggered the absolute and relative decrease of young population (0-14 years of age). In parallel, the life expectancy increase (71.24 years of age for men, and 78.28 years of age for women) determined the increase in the numbers and weight of elderly population (of 65 years of age and over).

We observe the diminishment of the young population's weight, with ages between 0 and 14 years of age from 23.6% (in the year 1990) to 14.86% (in the year 2013) and an increase of the elderly population's age of 65 years of age and over from 10.4% (in the year 1990) to 15.2% (in the year 2013). Adult population, aged between 15 and 64 years of age increased constantly from 66.03% (in the year 1990) to 69.97% (in the year 2013).

For the first time in the last four decades, on January 1st 2012 the weight of the young population became equal to the weight of elderly population (15.0%). The elderly population is a heterogeneous entity, as it includes the "younger" elderly (65 to 74 years of age), the "elderly" old individuals (75 to 84 years of age) and the very old ones (85 years of age and over).

If currently out of the 21.26 million inhabitants, 9.3 million are adults, 5.7 million young individuals and children, and over 6 million are elderly, over 50 years the demographic image shall look completely different: pensioners will represent more than half out of the country's population, the number of adults and children will decrease, and the age pyramid shall have a significant narrower base.

During the last years is noticed a trend of a higher increase in the number of "older" elderly (from 816.7 thousands in the year 1990, to 1.206 million in 2013), against the subgroup of "younger" elderly (from 1.47 million in 1990 to 1.74 million in the year 2013).

The demographic ageing phenomenon is more marked in the rural area than in the urban one. Thus, at the beginning of the year 1990, the weight of the population aged 65 years and over in the rural area was of 13.5% from total population and this weight increased in the year 2013 to 18.4%.

A characteristic of the ageing process is the increase in the numbers of women among the elderly population, which is a process of "*feminised old age*". Women live longer, their numbers being almost twice higher than the number of men.

3. Models for the analysis of the impact of globalisation on demographic evolutions

In the specialised literature are used various models by which the attempt is made to determine the impact of globalisation and of climatic changes on the demographic evolution. These models are used for quantifying the evolutions in the socio-economic development of some countries with differing conditions from the viewpoint of endowment with natural resources, material and human capital, technology and population, in a world with a particular dynamics of goods, persons, and capital movement, with flexible structures of the economies, etc.

By means of the developed scenarios it is intended to quantify the impact of globalisation on various countries depending on the actual conditions of the respective country. Within the model are contained the following important segments: i) the global economic system; ii) the system of the natural environment resources, referring to the environment quality, the capacity of the natural resources to ensure welfare, to the output and consumption within the economy; iii) the changes triggered by the population increase and its distribution on age groups in each country taken into account (including here also international migration).

The consequence, determinism and discrete time periodicity of the model is followed by means of: i) equilibrium; ii) optimization (maximising profit, maximising wage by international migration, mixed final consumption of goods, mixed investments, etc.); iii) updating (in production, numbers and structure on age groups of the population, mortality and fertility rate, etc.). To these is added a set of information about the price indexes of the international trade.

In general, the models used for this purpose contain several modules, respectively:

- ◆ *production module*, containing three sectors of production: the industry of intensive resources (generating finished goods), non-intensive resources industry (services), and extracting industry (and generating intermediary goods).

- ◆ *investments module*;

- ◆ *environmental quality module*; within this module is taken into account the air pollution and the impact of polluting spills at local and regional level. It is pursued to obtain information on the evolution of the emissions resulting from the economic activity, and to a lesser extent information about the economy's structure. Pollution is a result of used energy sources which are assumed within the module to be a linear function of production in the intensive resources' industry, and as a logarithmic function depending on the end consumption of goods per capita.

- ◆ *population module*, in which are comprised the basic demographic indicators, as well as the indicators related to the migration flows.

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