

ANALYSIS OF HUMAN DEVELOPMENT IN ROMANIA, 2008 – 2015 PERIOD

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Abstract: *The paper “Analysis of Human Development in Romania, 2008-2015 period” aims at carrying out an analysis of human development in Romania in the analysed period. In the first part of the research, we presented a few theoretical notions related to human development, and subsequently, in the second part, we carried out an analysis of the main human development indicators in the analysed period. The most important indicators of human capital are the school enrolment ratio, the average number of schooling years, the literacy rate, and also the ratios of the active population graduating from various types of schooling. Out of these indicators, the schooling years represent the most frequently used variable in determining the human capital stock.*

Keywords: human development, population indicators, demographic indicators, health status indicators, human capital.

JEL Classification Codes: O15.

1. INTRODUCTION

“Human development is a branch of the psychological sciences arising from the need to understand how the psychical characteristics, functions and processes are constituted from the earliest ages and their evolution throughout the entire human existence, with the progresses that characterise each age.” (Constantinescu, 2006)

Human development has two main objectives, namely:

- To describe how human individuals develop from the psychological point of view, how they change throughout their entire life;
- To explain the development by highlighting the biological and social factors that determine these changes.

“Human development reveals the continuous evolution of man with fragilities and progress and regress, in such a way as to point out the psychical and behavioural unicity of his personality.” (Constantinescu, 2008)

Thus, human development can be considered a branch of psychology which has as an object the study of the physical peculiarities of each age stage, in relation to the biological and social factors that influence it.

“The contemporary conceptualization of human capital rendered the old methods of monetary assessment of human beings inappropriate for the measurement of the human capital stocks, both at the micro, as well as at the macrosocial level.” (Voicu, 2011)



At global level, in the conditions of the contemporary pace of the change, the role and importance of the intellectual component of work grows considerably, and consequently, in the measurement and assessment of human resources, it is necessary to take into account the skills, level of training and qualification, but also the experience. In the labour market, people come with their own talent, ability, innovative spirit and entrepreneurship, with the capacity to take over, process information and knowledge in such a way as to give them special value. (Crețu, 2010) Consequently, human capital is the source of wealth both for individuals and for organizations.

The most important investments in human capital are education and professional training. The level of high school and university education has a significant contribution to the increase of a person's income, even after covering direct and indirect education costs, and even after the adjustments made according to a better familial situation and according to the increased capacities of the people with a high level of education. (Becker, 1997)

Education has a very important role in the development of knowledge, skills, and attitudes that are determining for economic growth and vitality.

Companies that have employees with a higher intellectual capital will earn significant incomes for a long period of time. Nevertheless, we can notice the competition between large companies in order to attract in their own team employees with a high level of qualification and education, in such a way as to be able to meet the future requirements and demands of the economy and the society.

Almost always, the earnings of people with a high level of education are much higher than the average ones, even if the advantages are usually higher, in less developed countries.

The financial advantages obtained from having a university level of education grew sharply during the 1980s, reaching their highest level of these fifty years. Moreover, the benefits in the form of gains of the high school graduates compared to those who abandon this form of education have also grown. In such a way, the discussion concerning the overeducated Americans ended, and was replaced by the renewed concern whether the United States provide an appropriate, qualitative and quantitative education, but also other forms of vocational training as well.

2. ANALYSIS OF THE EVOLUTION OF THE MAIN INDICATORS OF HUMAN DEVELOPMENT IN ROMANIA, 2008 – 2015 PERIOD

Population indicators

In order to be able to be scientifically researched, the human population must be accurately defined, but also correctly delimited in space and time, from the quantity and quality point of view.

Human population can be defined as a collectivity comprising persons who live in a certain period of time and in a very well delimited territory. The fundamental characteristics that define population are as follows: the number (the headcount), distribution, dynamics and structure.

All the persons who are part of a certain collectivity makes up the number, volume, size or headcount of the population. Normally, it can be obtained by registering and summing up the people who make it up, at a given moment, and therefore, this statistical operation is referred to as census.

The evolution of the population as a whole, as well as the shift from one state to the other, depend on its initial headcount and structure, on the one hand, and on the natural and migratory movement, on the other hand. It is clear that a certain number and a certain structure of the population influence, in a sensitive way, the intensity of the demographic phenomena, and the

shift from one state of the population to another state, as it progresses over time, represents the result of the intensity of the natural and migratory movement phenomena.

The registered number of population is the number calculated on the occasion of the census or of other similar statistical operations, which represent the population at a critical moment of the registration, as a physical number. This is fundamental in demography, and various demographic calculations can be made by means of it. The number of the population represents an aid for the determination of its density as well, and the very important indicators of the average pace of demographic growth.

From the quantity and also structural point of view, human population is defined by means of two features that define it, i.e. the headcount and the generations composing it.

The two features are in a continuous changing process, both the headcount and especially the generations, changes take place at every moment, each year recording new generations, while the existing ones decrease as a result of mortality.

This continuous renewing process is referred to as natural movement, a phenomenon that can be analysed from the most diverse points of view. Thus, if the number of the population remains the same for a long period of time, due to the natural movement, namely due to the natality and the mortality, a continuous replacement of some generations with others takes place, on the other hand.

Natality is the main criterion of defining the demographic policy of any country, but also for its encouragement or limitation. The population natality is the multitude of the live births in a human population, delimited both in time and in space. Natality is a proportionality relationship between the number of live births and the total population of a territory within a timespan, usually one year. Natality is the main phenomenon of population growth, the population growth being the result of the numerical surplus of new-borns on deceases.

Due to the importance it has for the evolution of the population, natality represents the essential substrate of the demographic policy measures, because the subjective element, which can be determined by such measures, is more pronounced than in the case of the population mortality.

The second component of the natural movement of the population is mortality. Mortality means that all the deceases that took place within a population in a certain period of time are taken into account.

Special importance, due to the high intensity and the specificity of the collectivity to which it relates, is given by the infant mortality. The mortality of newborns up to the age of one year is the most important among the age-specific mortalities.

Due to the fact that infant mortality is influenced by a multitude of factors, its level expresses a set of social, economic, cultural, sanitary conditions and is an index of welfare, civilization and the cultural level of a people.

Table 1. Main demographic indicators in the 2008 – 2015 period

		(persons)						
Years indicators	2008	2009	2010	2011	2012	2013	2014	2015
Population (mil.)	20537848	20367437	20246798	20147657	20060182	19985814	19908574	19819477
Natural population growth	-38468	-40521	-47743	-47216	-52834	-48914	-52354	-75655*

Source: 2015 Romanian Statistical Yearbook, p. 50, * 2016 Romanian Statistical Yearbook, p. 54.

The resident population is the total number of persons with Romanian citizenship, foreigners and persons without citizenship, who have their habitual residence on the territory of Romania.

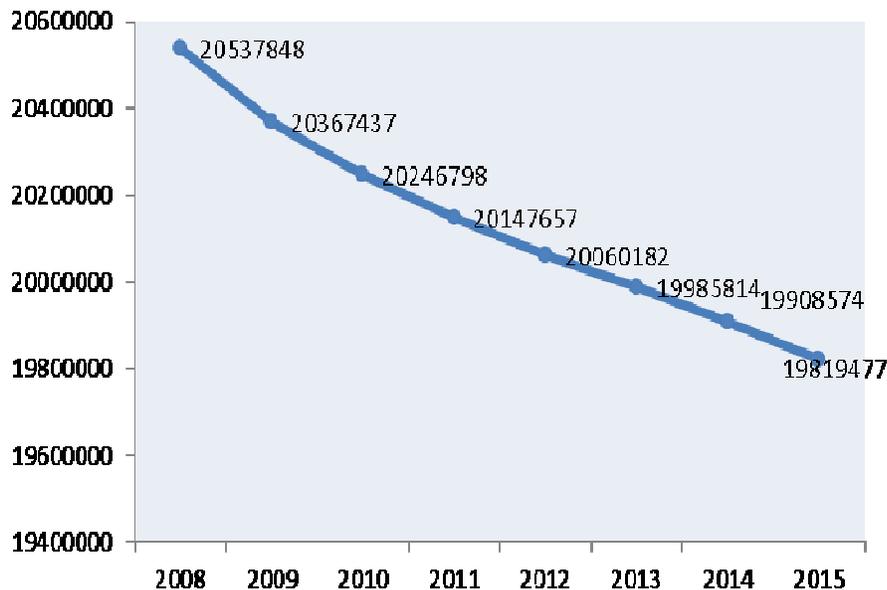


Figure 1. Population of Romania in the 2008 – 2015 period

Source: Prepared by the author based on the data in Table 1.

As we can notice from Figure 1, throughout the analysed period, 2008 – 2015, the population of Romania was on a continuous downtrend. For example, in 2008 there were 20537848 inhabitants. In 2009, the population of Romania was of 20367437 inhabitants, decreasing compared to 2008 by 170411 persons.

In 2015, the population of Romania decreased by 37927 inhabitants due to the demographic decline, and the reduction in the population due to demographic causes was accelerated compared to the previous year. Another important factor of the decline in the Romanian population is emigration.

The Romanian population is drastically reducing from one year to the next, both due to the negative natural growth, and as a result of the migration of the population in other countries.

Natural growth is the difference between the number of live births and the number of deceased in the reference year.

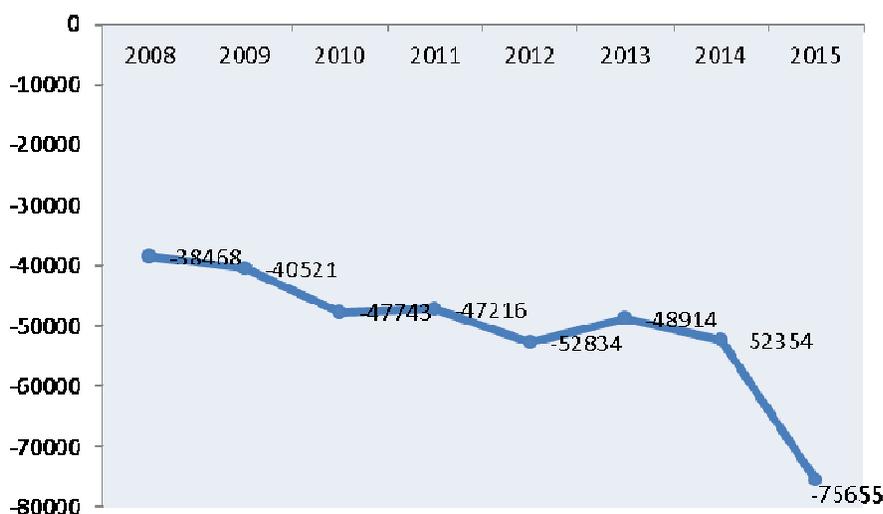


Figure 2. The natural growth of the population of Romania in the 2008 – 2015 period

Source: Prepared by the author based on the data in Table no. 1.

Throughout the analysed period, according to Figure no. 2, the natural growth in Romania was negative. In 2008 a negative natural growth of -38468 persons was recorded. In the following years, the natural growth had oscillating trends, but remained negative. In 2015, the registered natural population growth was – 75655 persons.

Table no. 2. Life expectancy in the 2008 – 2015 period

		(years)							
Years	Indicators	2008	2009	2010	2011	2012	2013	2014	2015
	Life expectancy	73.47	73.76	73.90	74.20	74.69	75.16	75.47	75.41

Source: http://www.insse.ro/cms/files/Web_IDD_BD_ro/index.htm.

The life expectancy and or the average life shows the average number of years a person would live, if he or she lived for the rest of his/her life in the conditions of the age-related mortality in the reference period. The life expectancy of each person change as the person grows old or the mortality trends change. (http://www.insse.ro/cms/sites/default/files/field/publicatii/speranta_de_viata_sanatoasa.pdf)

The life expectancy at birth is the most frequently used indicator that represents the average number of years a newborn may live in the conditions of the intensity of the mortality on ages.

The life expectancy at the age of 65 years is a synthetic indicator that shows in a practical manner the influence of the living conditions of the population on the number of years a person may live, but it is also an important reference for the configuration of policies on pensions and long-term care of elderly persons.

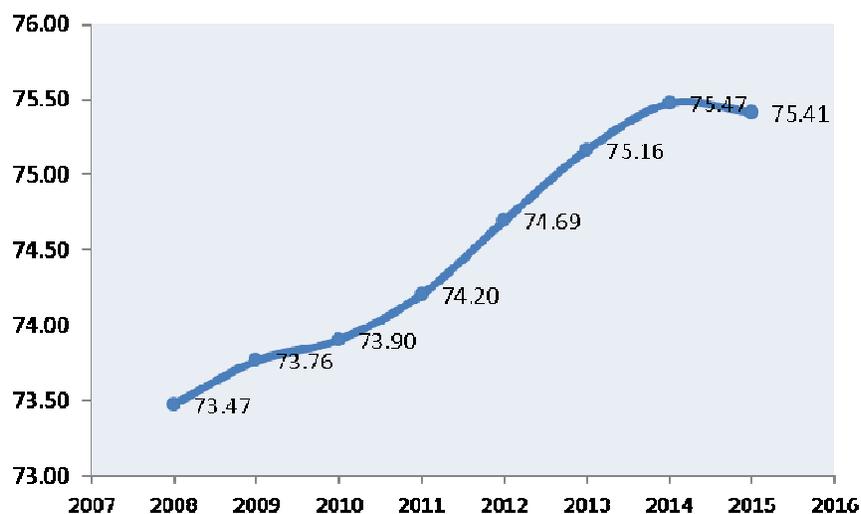


Figure 3. Life expectancy in the 2008 – 2015 period

Source: Prepared by the author based on the data in Table no. 2.

From Figure 3 it can be seen that throughout the analysed period, 2008 – 2015, life expectancy in Romania was on a continuous uptrend. Thus, in 2008 life expectancy was 73.47 years, exceeding the value of 74.20 years of 2011. Therefore, being on a continuously uptrend, life expectancy in Romania, in 2015 reached 75.41 years.

Table 3. Indicators of the health status in the 2008 – 2015 period

(for 1000 persons)

Indicators \ Years	2008	2009	2010	2011	2012	2013	2014	2015
Mortality rate	11.2	11.4	11.5	11.2	12.6	12.4	12.8	13.1
Infant mortality rate	11.0	10.1	9.8	9.4	9.0	8.9	8.4	7.6
Birth rate	10.8	10.9	10.5	9.7	10.0	9.4	9.7	10.0

Source: http://www.insse.ro/cms/files/Web_IDD_BD_ro/index.htm.

<http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00027&plugin=1>

<http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00112&plugin=1>

Mortality, as a demographic phenomenon, refers to the frequency of deceases in a certain population and for a period delimited in time. Unlike the natality, mortality is the negative component of the natural movement of the population. It influences the numeric increase/decrease of the population and its structure on age groups.

The mortality rate is the number of people deceased in a year related to the population on 1st July of the respective year and is expressed in the number of deaths per 1000 inhabitants. (http://www.insse.ro/cms/sites/default/files/field/publicatii/anuarul_statistic_al_romaniei_1.pdf)

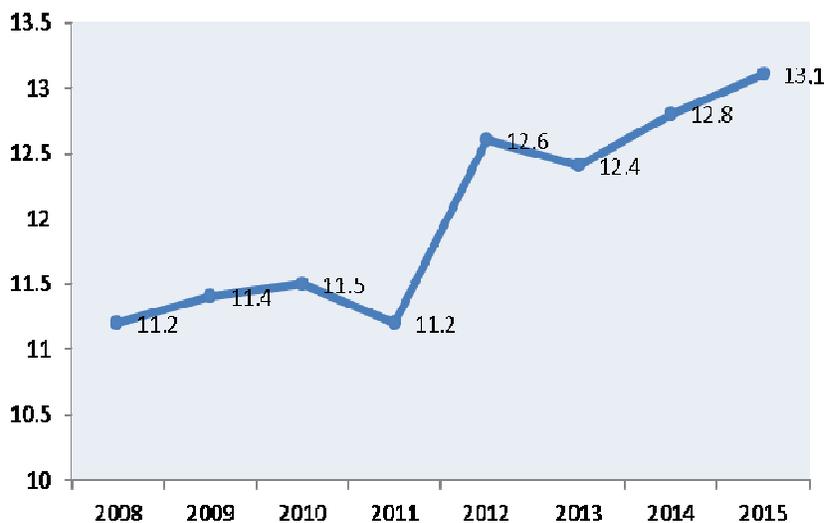


Figure 4. Mortality rate in the 2008 – 2015 period

Source: Prepared by the author based on the data in Table no. 3.

As can be seen in Figure 4., the mortality rate in Romania, in the 2008 – 2015 period, had an oscillating trend, having increase as well as decrease periods. Thus, in 2008 the mortality rate was 11.2 per 1000 people, recording a slight increase until 2010, when it reached 11.5 per 1000 persons. In 2011, it had a slight decrease, mortality in Romania reached the value of 11.2 per 1000 inhabitants. In the following year, i.e. 2012, mortality reached the value of 12.6 per 1000 persons, therefore, it increased.

However, in 2013 it tended to decrease again, the recorded value reaching 12.4 per 1000 persons. Consequently, by 2015, mortality reached the value of 13.1 per 1000 persons.

Infant mortality is an important component of general mortality and the best indicator of the social and economic development. Life expectancy at birth of a population is largely determined according to the chances of survival of the newborn in the first year of life. The factors that can influence infant mortality are both the economic, social and environmental factors, as well as the factors related to the healthcare system.

Infant mortality rate is the number of deceased aged under 1 year per 1000 live births in the respective year. (http://www.insse.ro/cms/sites/default/files/field/publicatii/speranta_de_viata_sanatoasa.pdf).

From Figure 5. It can be seen that the infant mortality rate in Romania, in the analysed period, namely 2008 – 2015, decreased continuously. In 2008, infant mortality had a value of 11.0 per 1000 persons, decreasing, and therefore, in 2012 mortality reached the value of 9.0 per 1000 persons. By 2015, mortality reached the value of 7.6 per 1000 persons.



Figure 5. Infant mortality rate in the 2008 – 2015 period

Source: Prepared by the author based on the data in Table no. 3.

Natality is the main problem of demography, while attitude towards natality remains the fundamental criterion of defining the demographic policy of any country, for the encouragement or limitation of natality. Natality, under the influence of a large number of demographic, social, economic, cultural and psychological factors, has a wide typological variety worldwide, but within each and every country, its evolution has important trends within the general social and economic context.

Birth rate can be calculating as a ratio between the number of live births throughout a given period, usually one year, and the number of the total population in the middle of the year, representing the proportion of births per 1000 inhabitants. Birth rate in Romania has followed, in recent decades, the general downtrend, with the economic development.

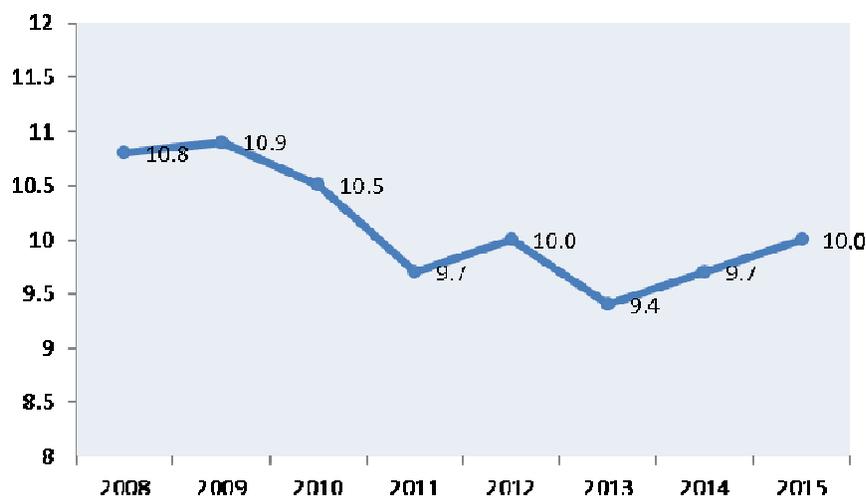


Figure 6. Birth rate in the 2008 – 2015 period

Source: Prepared by the author based on the data in Table no. 3.

From Figure 6., it can be seen that birth rate had an oscillating trend, increasing and decreasing. In 2008 birth rate reached the value of 10.8 per 1000 persons, being on a slight uptrend 2009, when it reached the value of 10.9 per 1000 persons. Throughout the following period, in 2010 it recorded the value of 10.5 per 1000 persons, decreasing compared to the previous year, but it continued to follow the same downtrend in 2009 as well. However, from 2013 it increased, and thus the birth rate reached in 2015 the value of 10.0 per 1000 persons.

3. CONCLUSIONS

Human capital must comprise all the investments made by the population in order to improve productivity. Such investments include formal, non-formal and informal education, the skills acquired by on-the-job training, and the experience acquired by learning from practical activities.

Investments in human capital are beneficial both for the individual, as well as for the society by increasing productivity, a better business organization, and the reduction of crime.

Investments in training human capital are viewed as a component of the national wealth.

The human factor, in the economic development process, intervenes by increasing the workload and also the quality of work, and is expressed by means of labour productivity. Lifelong learning is an important element in the assessment of the quality of human resources, its purpose being to update and renew a person's capacities.

Due to the fact that the largest part of the knowledge, skills and qualifications are acquired in school, through the training and educational process, the fundamental role of education in acquiring and developing human capital as well as in the economic development of a country was recognized.

Economy is given increased interest in relation to the study of the population, both as manufacturer as well as consumer. Due to the fact that human society cannot be defined outside the human collectivity, the production-consumption concept cannot be conceived disregarding the population either, whether it refers to material or to spiritual goods.

The evolution of the demographic phenomena that have occurred in recent decades reveals that important changes have taken place in the population's demographic behaviour, under the influence of social, economic, psychological, educative and legislative factors. The behaviour can include the evolution with relatively positive trends in certain countries, and the downtrend in most countries of the birth rate and of the natural growth. Such evolutions recorded in the demographic behaviour reveal that in the contemporary conditions of the society development, the content, as well as the social side of the demographic phenomena compared to the biological ones have an increased importance.

The distribution of the population on sub-collectivities according to various characteristics, the proportions between the sub-populations, represent the structure or the status of the populations.

The transition from one state to another, of the evolution of a population as a whole, depends both on its initial headcount and structure, as well as on its natural and migratory movement. It is clear that a certain number and a certain structure of the population can influence the intensity of the demographic phenomena, while the transition from a state of the population to another state, in time, is the result of the intensity of the phenomena of the natural and migratory movement.

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