

# STATISTICAL CHARACTERIZATION OF HUMAN DEVELOPMENT IN ROMANIA AND THE EUROPEAN UNION

Lecturer PhD **Grațiela BRÂNZĂ**  
Constanta Maritime University, Romania  
[gratielabranza@gmail.com](mailto:gratielabranza@gmail.com)

## **Abstract:**

*The quality of life depends on the nation's power of development, social policy that ensures the income of the population for consumption and social-cultural expenses. Knowing the well-being of the population requires the computation of some synthesis indicators that quantify the level, structure and quality of life. The Human Development Index is the most important indicator that measures longevity, level of education and living standards in a country.*

*This paper presents the concept of quality of life in general and a comparison of Romania's Human Development Index with other European Union Member States. It is also highlighted the long-term unemployment effects on the quality of life in the European Union and some solutions that can be taken to diminish this disequilibrium.*

**Key words:** quality of life, Human Development Index, life expectancy index, training level index, GDP per capita index

**JEL classification:** C430, I131.

## **INTRODUCTION**

Analysis of the quality of life requires highlighting the resources and opportunities existing in society, as well as the conditions of access them. A complex analysis needs the selection and study of a large number of indicators from different social and economic domains, such as: inhabitants, natural environment, human settlements, social environment, family, person, occupation, quality of active life, macroeconomic resources of the living standard, income, consumption a.s.o. Statistical methods used in the analysis of quality of life are: comparison, analysis of structural modifications, dynamics analysis, factorial analysis a.s.o. (Brânză, 2013; Roșca, 2009). In ensuring a high standard of quality of life we highlight the fact that Romania integrates successfully into the priorities and values of the European Union related to quality of life, especially related to some subjective indicators of quality of life compared with objective indicators. For example, most people from the Member States are committed to providing the necessary lives, having a good health, creating a family. A decreasing tendency recorded the fertility and migration is growing. In these conditions, the EU recommendations for government employment policies and creating quality jobs (good labor conditions, corresponding wage a.s.o.), combating poverty, support for families find their full necessity in Romania.

## **GENERAL ASPECTS REGARDING QUALITY OF LIFE**

Quality of life is a multifactorial concept that represents the overall assessment of the individual, taking into account the well-being associated with the events or conditions influenced by one intervention (preventive, therapeutic and other).

The synthesis of the life quality of a country's population is based on the calculation and analysis of the synthetic indicators of life quality, according to the methodology recommended by the National Report of Human Development (UNDP, 1998):

- Human development index (HDI): longevity, level of education, standard of living;
- Index of the disappearance of gender discrimination in human development;
- Index of women's participation in political, economic decision making;

- Poverty index, obtained as the average of four indices: the economic poverty index, the privation in human capital index, the infrastructure privation index and the lack of local resources index (Moret et al., 1993).

Quality of life is a phenomenon that can not be statistically rigorous measured, as the objective data must be supplemented with socio-psychological information to capture the complexity of the individual's behavior, but also that of the society as a whole. The entire society must work to improve the living conditions of all its members (Begu, 1999).

In order to study the quality of life, the O.N.U. handbook (ONU, 1989) specifies the list of areas and issues to be considered, which can be summarized in the table below:

**Table no 1. Areas and issues of interest regarding life quality**

Area	Issues
Population	Natural Movement, International Migration, Demographic Structure, National and Ethnic Groups.
Settlements and housing	Geographical distribution of population, urban and rural areas, new housing construction, water and sanitation, rents and housing expenses, household energy consumption, transport.
Household and Family	Size of household, consumption, marriage, divorce, fertility.
Health and Health Services	Mortality and morbidity, diseases, health services, resources, nutrition, alcohol and tobacco consumption.
Education	The level of training and illiteracy, school enrollment, adult education, vocational training.
Economic activity	Labor force participation, inactive population, employment, unemployment, work benefits, conditions and qualification level.
Socio economic groups and social mobility	Occupational structure, intra and intergenerational mobility.
Income, consumption, wealth	The level, growth and structure of household income; the level, growth and structure of consumption; distribution of income and consumption; level and distribution of wealth.
Social security and services	Protection against loss of income, use and importance of protection.
Free time, culture and communication	Use of leisure time, leisure and cultural activities, facilities, expenses, mass media.
Public order and individual safety	Frequency and severity of offenses, victimization, characteristics and treatment of offenders, justice institutions, staff.

Source: ONU, 1989

Compared with this first version, there have been improvements in the indicator system, with special population groups (women, young, old, disabled), new elements (international migration, school abandonment, economic protection, unemployment) and even new indicators (average of life, adult education, accessibility to goods and services, and others).

Measuring the progress of a country is done with the help of the human development indicator, which takes into account social and economic sustainability indices and provides input for analyzing opportunities and obstacles for human development policies. At the level of a country's population, the United Nations Development Program considers human development to be based on three pillars: a longer and healthier life, the accumulation of as much knowledge as it's possible and a decent standard of living. In this context, the indicator composition contains three key indices: the life expectancy index, the training level index and the GDP per capita index. (UNDP, 2004)

The last Human Development Report (HDR) created by UNDP in 2016, has a major objective - how human development can be ensured for everyone nowadays and in the future. There are important disparities between regions and countries regarding socioeconomic conditions, ethnic

and racial discriminations, the gap between women and men or the differences between rural and urban areas. So, the HDR also identifies the national policies and key strategies on this theme, in order to give an equal chance to every human being to live a better life according to the various dimensions of human development.

### **STATISTICAL OVERVIEW OF HUMAN DEVELOPMENT INDEX IN ROMANIA AND THE OTHER MEMBER STATES OF THE EUROPEAN UNION**

The United Nations Development Program has promoted since 1990 the Human Development Index (HDI) as one of the main tools for comparing countries across the globe. Gross Domestic Product per capita and life expectancy at birth are two important indicators included in the HDI calculation. In 2007 Romania held the 61 position in the world from 182 countries, in terms of GDP/capita (7703 USD) and 85 position in the life expectancy at birth (72.5 years), and in terms of HDI - position 63. (Marginean, I., 2010)

The Statistical Annex of the 2016 HDR presents the 2015 HDI values and ranks for 188 countries and UN-recognized territories. Romania's HDI value for 2015 is 0.802, placing the country in the very high human development category. According to UNDP, human development groups are: the very high human development group (with a Human Development Index of 0,892 in 2015), the high human development group (HDI=0,746), the medium human development group (HDI=0,631) and the low human development group (HDI=0,497).

**Table 2. Human Development Index in the EU-28 in 2014 and 2015**

Country	2015 Human Development Index (HDI value)	2015 HDI rank	2014 HDI rank
Austria	0,893	24	24
Belgium	0,896	22	21
Bulgaria	0,794	56	57
Croatia	0,827	45	46
Czech Republic	0,878	28	28
Cyprus	0,856	33	34
Denmark	0,925	5	6
Germany	0,926	4	4
Greece	0,866	29	29
Estonia	0,865	30	31
Finland	0,895	23	23
France	0,897	21	22
Hungary	0,836	43	43
Ireland	0,923	8	8
Italy	0,887	26	27
Latvia	0,830	44	44
Lithuania	0,848	37	37
Luxembourg	0,898	20	20
Malta	0,856	33	35
The Netherlands	0,924	7	6
Poland	0,855	36	36
Portugal	0,843	41	41
Romania	0,802	50	51
Slovakia	0,845	40	40
Slovenia	0,890	25	25
Spain	0,884	27	26
Sweden	0,913	14	15
United Kingdom	0,909	16	16

Source:UNDP, 2016

Among European Union countries, Romania places on the 27th position, before Bulgaria. The best HDI ranks are held by Germany, Denmark, the Netherlands and Ireland. Despite this position in the overall hierarchy of European Union member states, Romania has recorded

progresses in the period 1990-2015, starting with an HDI of 0.700 and obtaining 0.802 at the end of the studied period. Also, all the component indices of Human Development Index have constantly evolved, as we can observe in the table below:

- life expectancy at birth have increased by 7,62% in 2015 compared to 1990;
- expected years of school have grown up with 2,8 years in 2015 compared to the reference year;
- mean years of schooling have increased by 1,8 years in the period 1990-2015;
- GNI (Gross National Income) per capita grew up on average with 0,918 \$ per capita yearly.

**Table 3. Evolution of Romania's HDI component indices in the period 1990-2015**

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	69.5	11.9	9.0	11,164	0.700
1995	69.5	10.4	9.5	10,229	0.686
2000	70.5	11.7	9.9	10,201	0.708
2005	72.3	13.7	10.1	13,887	0.755
2010	73.8	15.7	10.6	17,100	0.798
2011	74.1	15.3	10.7	17,333	0.797
2012	74.3	14.7	10.8	17,511	0.794
2013	74.5	14.7	10.8	18,103	0.797
2014	74.7	14.7	10.6	18,895	0.798
2015	74.8	14.7	10.8	19,428	0.802

Source: UNDP, 2016

### **LONG-TERM UNEMPLOYMENT AT EUROPEAN UNION LEVEL - EFFECTS AND SOLUTIONS OF DIMINUATION**

At European Union level, there are special institutions that focus on the increasing of life quality for the entire society. Eurofound is a good example in this context and its research on this issue concludes that good public services improve citizens's quality of life and enable their active participation in society. Otherwise, Eurofound's programming document for 2017-2020 focuses on six strategic areas of intervention:

- „working conditions and sustainable work;
- industrial relations;
- labour market change;
- quality of life and public services;
- the digital age: opportunities and challenges for work and employment;
- monitoring convergence in the European Union” (Eurofound, 2017).

According to Eurofound studies, among the most important issue that affect the quality of life in every society is “young people not in employment, education or training” (NEET). The NEET category includes 6.6 million young people, from which some 4.6.million aged 15-24 were unemployed in 2015. Individuals from NEET category have many disadvantages regarding the level of education, poverty, family problems. They are vulnerable because they can't accumulate human capital.

Eurofound identifies seven groups within the category of NEET aged 15-24. The biggest share (29.8%) is for short-term unemployed, which have been unemployed for less than a year. The second group is for long-term unemployed (22%), which have been unemployed for more than a year and have an increased risk of social exclusion. With a share of 15.4%, the group of those who have family responsibilities can't work because they are caring for children or incapacitated adults. The majority components (88%) in this group are women. The last four groups are the re-entrants (7.8%), those who suffer from illness or disability (6.8%), those who are discouraged (5,8%) and other NEETs (12.5%), that includes the most vulnerable, the most privileged people (Eurofound, 2017).

This classification presents the composition of NEETs at European level. Each member states has different size and composition of NEET population. Eurofound gives two examples: Sweden, where 10% of NEETs are long-term unemployed and discouraged workers and Italy with 42% in this category.

Long-term unemployment is the first cause of inequality, poverty and social exclusion, thus affecting the individuals, their psychological and health status. This generates high costs for the health care system and welfare services. All these problems have a significant negative effect on the quality of life. Long-term unemployment leads to the deterioration of human capital, which is the most significant resource for modern European economies, with huge implications on the efficiency of labor market and on the future economic growth and development (European Commission, 2015g).

On European Union average, the value of long-term unemployment fell by 11% in 2015. Among member states, the value of long-term unemployment decreases by more than 20% in Estonia, Bulgaria, Ireland, Poland, United Kingdom; increases by 2% - 13% in France, the Netherlands, Sweden, Croatia, Austria, Latvia, Romania and records almost 25% in Finland and Luxembourg. With moderate or low long-term unemployment rates (2%-5%) and high long-term unemployment shares within the total unemployment population (40%-54%) are in the following countries: Lithuania, Latvia, France, Belgium, Poland, Hungary, Romania, the Netherlands, Malta, Czech Republic, Finland, Germany.

The experiences in different European countries reveal that the activation measures of unemployment can reduce considerably the long-term unemployment. Only the Nordic countries were able to promote and develop the activation policy. The Baltic states confronted with many variations in GDP, Southeast European countries have to cope with the economic crisis, neglecting the welfare and activation policies and East-Central European states present a combination of all these issues. The authors Duell, Thureau and Vetter proposed in their study measures to combat long-term unemployment and its negative effects on the whole society and economy through "a broad approach involving different policies, ranging from activate labor market policies, social inclusion policies and awareness of discrimination to macroeconomic, structural, regional and educational policies" (Duell et al., 2016).

Also, they suggested southern European countries "to modernize their production models, invest in skills, research and development and the promotion of high value-added industries in order to create additional employment opportunities".

## CONCLUSIONS

As a result of United Nations Development Programme's evolution, sectoral statistical research is carried out in areas of high social and economic relevance, such as the status of women, children, the elderly, access to work, working conditions, environmental degradation, access to information, civil, ethnic or labor conflicts. As some of these are impossible to quantify, the emphasis is on the theoretical aspects, the construction of indicator systems and the elaboration of the calculation methodology.

On the basis of the limited set of indicators, synthetic indicators were constructed to measure the qualitative aspects of human development. The Human Development Index is calculated annually since 1990 by United Nations Development Programme, providing a more pertinent measure of progress made by the world's states on human development than traditional economic indicators. Knowledge of Human Development Index and other indicators in its component is very important for each state to substantiate human development strategies.

## REFERENCES

1. Begu, L.S. (1999). *Statistică Internațională*. București: Editura ALL Beck
2. Brânză, G. (2013) *Measurement tools of life quality development by OECD and the European Union*, Business and Economics series, Volume 5, pp. 88-92
3. Duell, N., Thurau, L. and Vetter, T. (2016). *Long-term Unemployment in the EU: Trends and Policies*. Economix Research and Consulting. Available at: [www.bertelsmann-stiftung.de](http://www.bertelsmann-stiftung.de)
4. Eurofound (2017). *Living and working in Europe. Yearbook 2016*. Luxembourg: Publications Office of the European Union. Available at: [www.eurofound.europa.eu](http://www.eurofound.europa.eu)
5. European Commission (2015g). *Labor market and Wage developments in Europe*. Social. Europe. Directorate General for Employment, Social Affairs and Inclusion. Luxembourg: Publications Office of the European Union
6. Marginean, I. (2010). *Calitatea vieții în România: prezent și perspective*. Calitatea Vieții. XXI.nr. 3-4. pp.231-237
7. Moret, L., Chwalow, J., Baudoin-Balleur, C. (1993). *Evaluer la qualite de la vie: construction d'une echelle*. Rev. Epidem. Et Sante Publ.41. pp. 65-67
8. Roșca, R.E. (2009) *Analiza indicatorilor calității vieții în România*, Analele Universității Creștine „Dimitrie Cantemir” București, Seria Științe Economice, pp.77-82
9. United Nations Development Programme. (1998). *National Report of Human Development*
10. United Nations Organization. (1989). *Handbook on Social Indicators*. New York
11. United Nations Development Programme. (2004). *Human Development Report*. pp. 258
12. United Nations Development Programme. (2016). *Human Development Report. Statistical Annex of the 2016 HDR*. Available at: <http://hdr.undp.org/en/data>