

## Comparative Analysis of the Social Assistance System in Romania vs. Hungary

Oprışan Oana

*"Ovidius" University of Constanta, Faculty of Economic Sciences*

[oana.oprisan@yahoo.com](mailto:oana.oprisan@yahoo.com)

Ţileagă Cosmin

*"Lucian Blaga" University of Sibiu, Faculty of Economics*

[cosmin\\_tileaga@yahoo.com](mailto:cosmin_tileaga@yahoo.com)

Nicodim Liliana

*"Ovidius" University of Constanta, Faculty of Economic Sciences*

[nicodimlili@yahoo.com](mailto:nicodimlili@yahoo.com)

### Abstract

*The problems of social assistance are addressed and solved within the national framework of each state, social assistance by its nature having an internal character. Social assistance is being restructured and develops according to the existing situation of the population and the local and regional traditions, but it also takes into account the international regulations. According to the provisions of art. 22 of the Universal Declaration of Human Rights states that any person, in his capacity as a member of society, has the right to social security (social protection) and therefore to social assistance; she is entitled to achieve the economic, social and cultural rights indispensable for her dignity and for the free development of her personality through national effort and international collaboration, taking into account the resources of each country.*

**Key words:** social assistant, health system, employed population

**J.E.L. classification:** H55

### 1. Introduction

Romania's accession to the EU marks once more the opportunity to build a modern social system. Under the conditions of the general transformation of the Romanian society, from the key institutions and flexible structures in motion, to the opening of the population to change, the promotion of an efficient social model, based on the principles promoted by the EU proves to be a responsible and necessary act for our country .

The need to build up the social system in our country is primarily driven by different risk areas such as pension, sickness and unemployment benefits, providing protection against poverty for a large number of people at risk (Buzducea, Doru, 2009).

The general objective of building a socially successful model in Romania is to advance the reform of the social sector by addressing the social problems of integration with a strong political and strategic emphasis, provoking debates and discussing policy recommendations (Cojocaru, Ştefan, 2006). A European learning process is embedded, crystallizing a complex, flexible and open method of coordination of actors dedicated to the European integration of Romania. All activity is a contribution to the development of the European Social Strategic Framework (Ionescu, C, Toderaş, N, 2007).

Achieving a social model that is fully compatible with the requirements of the European Union and subsequently having the capacity to integrate new elements resulting from best practices in the Community space in the future requires an effort to eliminate the distortions that occur in the use of human resources and ensuring a higher quality of the social assistance sector (Ciumaş, C., Văidean, V.L,2011).

## **2. Analyzing the level of development and specialization in Romania Employment in Romania**

In our country, from 2005 to 2009, the employed population registered a decrease of about 400 people, then by 2013 it increased significantly, reaching 9369.7 persons (Major D, 2009). In 2014, there was again a decrease followed by a slight increase in population, these fluctuations also reflecting the population occupied in health and social care, where values also fluctuated from one year to the next (Payne, Malcom, 2012).

### **Gross Domestic Product in Romania**

Total Gross Domestic Product recorded a significant increase over the analyzed years from RON 80.3 billion in 2005 to 512.5 RON in 2015. This led to an increase in the Gross Domestic Product and in the health sector and social assistance.

### **Comparative analysis between the two states**

Hungary is a parliamentary republic located in the center of Europe. It neighbors Serbia to the south, Croatia and Slovenia to the southwest, Austria to the west, Slovakia to the north, and Romania to the east. The capital of the country, Budapest, is also its largest city and the seventh city in the EU by population (1.7 million inhabitants).

The quality of medical services has not improved significantly in recent years, although the system has received more and more money. CNAS's budget has risen at an explosive pace since the beginning of 2010.

According to the data of the National Insurance and Health House, the budget granted in 2010 was 4.17 billion lei, thus reaching up to 16.9 billion lei in 2015. Hungary has approximately 200 hospitals and a number about 72 thousand beds.

In 2012, according to statistics, Hungary's health service contributed 4.17% to GDP, 1.17% higher than Romania. According to the Hungarian Health Insurance Authority, 41% of hospitals are providing information brochures to people about their rights as patients and more than half of hospitals provide this information online.

In 2012, a hospital room in Hungary had an average of 3.6 beds funded by the National Health Insurance Fund, and in 2013 it fell to 3.5 beds. In a hospital, there were on average 7 single-bed rooms, funded by the same source, and 28 double-bed rooms in 2013, 3% more beds than in 2012.

In conclusion, we can say that the Hungarian health and social assistance system is clearly superior to the Romanian one through the services offered, by the degree of government involvement and, last but not least, by the aspect and standards of public and private institutions.

For the analysis of health services and social assistance in Romania compared to Hungary, we have chosen as a comparison indicator the number of beds in hospitals.

## **3. Relative specialization index calculation for Romania and Hungary**

### **Employed population**

Total employment in Hungary in 2015 =  $PO_t = 10.0$  thousand people.

Employment in the health service is 8.8%.

Employment in health service =  $PO_s = 880\ 000$  people

From all this it follows that the share of the population occupied in the health service in Hungary in the year 2015 is:  $\frac{880}{10.000} * 100 = 8,8\%$

Index of relative specialization in the health service and the Service Health Hungary and Romania:  $4,36\% - 8,8\% = -4,44\%$

### **The gross domestic product**

Hungary's total GDP in 2015 was RON 157.275 billion

GDP in the health service is RON 13.9 billion.

The share of GDP in the health service in Hungary in 2015 is:  $\frac{13,6}{156,284} * 100 = 8,70\%$

Index of relative specialization in the health service and the Service Health Hungary Romania:  
 $10,17\% - 8,70\% = 1,47\%$

#### 4. Forecast of development of social services

In this chapter we predict employment in health and social welfare and GDP. For both the employed population and the Gross Domestic Product, we will use two prediction methods: the average growth method and the linear trend method.

#### Employment in health and social system

Table no. 1. Average earning method for employed population

Years	$y_i$ - thousands of people-	$t_i$	$\hat{y}_i = y_1 + \bar{\Delta} * t_i$	$(y_i - \hat{y}_i)^2$
2005	341,8	0	341,2	0
2006	346,4	1	347,38	0,71
2007	357,2	2	353,56	22,52
2008	357,5	3	359,74	1,12
2009	366,9	4	365,92	0,48
2010	352,7	5	372,1	364,88
2011	378,4	6	378,28	0,522
2012	373,6	7	384,46	89,51
2013	354,8	8	390,64	1342,52
2014	393,8	9	396,82	3,37
2015	402,7	10	403	0
<b>Total</b>	<b>4042,7</b>	-	-	<b>1825,451</b>

Source: National Institute of Statistics: www.insse.ro

The applied calculation formulas are:

$$\bar{\Delta} = \frac{y_n - y_1}{n - 1} = \frac{403 - 341,2}{11 - 1} = 6,18 \text{ thousand persons, where } \bar{\Delta} \text{ represents the average growth rate;}$$

$$\bar{y} = \frac{\sum y_i}{n} = \frac{4030,3}{11} = 366,39 \text{ thousands of people, where } \bar{y} \text{ represents the average of the series;}$$

$$A = \sqrt{\frac{\sum (y_i - \hat{y}_i)^2}{n}} = \sqrt{\frac{14719,02}{11}} = 12,88, \text{ where } A \text{ is the mean square deviation;}$$

$$v = \frac{A}{\bar{y}} * 100 = \frac{12,88}{366,39} * 100 = 3,51\%, \text{ where } v \text{ represents the coefficient of variation; the value of } 3,51\% \text{ being less than } 5\% \text{ shows that by this method the series is well adjusted.}$$

Table no. 2. The linear trend method for the employed population

Years	$y_i$ - thousands of people -	$t_i$	$t_i^2$	$y_i * t_i$	$\hat{y}_i = a + b * t_i$	$(y_i - \hat{y}_i)^2$
2005	341,8	-5	29	-1706	342,09	1,1892
2006	346,9	-4	18	-1386	346,95	0,208
2007	358,2	-3	11	-1074,9	380,97	513,87
2008	358,9	-2	5	-717,4	356,67	4,1208
2009	369,3	-1	2	-366,6	361,53	25,812
2010	354,4	0	0	0	366,39	179,34
2011	378,4	1	3	379	371,25	60,11
2012	374,4	2	5	750	376,11	1,238
2013	353,9	3	11	1062	380,97	727,41
2014	391,7	4	19	1580	385,83	84,11

2015	401,6	5	28	2015	390,69	151,56
Total	4033,8	0	118	535,1	-	1748,742

Source: National Institute of Statistics: www.insse.ro

The applied calculation formulas are:

$\hat{y}_i = a + b * t_i$ , where:  $a = \bar{y} = 366,39$  thousands of people

$$b = \frac{\sum y_i * t_i}{t_i^2} = \frac{535,1}{110} = 4,86$$

$$A = \sqrt{\frac{\sum (y_i - \hat{y}_i)^2}{n}} = \sqrt{\frac{1748,737}{11}} = 12,60, \text{ where } A \text{ represents the average square deviation;}$$

$v = \frac{A}{\bar{y}} * 100 = \frac{12,60}{366,39} * 100 = 3,43\%$ , where  $v$  represents the coefficient of variation; the value of 3, 43% being less than 5% shows that even by this method the series is well adjusted.

### The gross domestic product

Table no 3. Method average GDP growth rate

Years	$y_i$ - Billion RON -	$t_i$	$\hat{y}_i = y_1 + \bar{\Delta} * t_i$	$(y_i - \hat{y}_i)^2$
2005	1,98	0	1,96	0
2006	1,62	1	2,78	1,53
2007	1,93	2	3,6	2,65
2008	2,53	3	4,42	3,96
2009	2,59	4	5,24	7,23
2010	2,81	5	6,06	11,08
2011	3,42	6	6,88	12,39
2012	11,71	7	7,7	15,68
2013	10,33	8	8,52	2,85
2014	10,27	9	9,34	0,73
2015	10,21	10	10,16	0
Total	62,85	-	-	68,5

Source: National Institute of Statistics: www.insse.ro

The applied calculation formulas are:

$$\bar{\Delta} = \frac{y_n - y_1}{n - 1} = \frac{10,17 - 1,96}{11 - 1} = 0,821 \text{ billion RON where } \bar{\Delta} \text{ represents the average growth rate;}$$

$$\bar{y} = \frac{\sum y_i}{n} = \frac{58,78}{11} = 5,34 \text{ billion RON, where } \bar{y} \text{ is the average of the series;}$$

$$A = \sqrt{\frac{\sum (y_i - \bar{y})^2}{n}} = \sqrt{\frac{58,1}{11}} = 2,29, \text{ where } A \text{ represents the mean square deviation;}$$

$v = \frac{A}{\bar{y}} * 100 = \frac{2,29}{5,34} * 100 = 42,88\%$ , where  $v$  is the coefficient of variation; the value of 42,88% being less than 5% shows that through this method the series is well adjusted.

Table 4. The linear trend method for the Gross Domestic Product

Years	$y_i$ - Billion RON -	$t_i$	$t_i^2$	$y_i * t_i$	$\hat{y}_i = a + b * t_i$	$(y_i - \hat{y}_i)^2$
2005	1,98	-5	26	-9,84	53,34	2639,90
2006	1,62	-4	17	-6,22	54,42	2796,29
2007	1,96	-3	11	-5,97	55,50	2865,46
2008	2,51	-2	6	-4,88	56,59	2933,30
2009	2,58	-1	2	-2,75	57,68	3039,31
2010	2,81	0	0	0	58,77	3140,48
2011	3,41	1	1	3,39	59,86	3192,25
2012	11,71	2	4	23,36	60,94	2428,51

2013	10,2	3	9	30,69	62,03	2685,31
2014	10,5	4	16	40,84	63,12	2800,52
2015	10,3	5	25	50,88	64,21	2920,32
<b>Total</b>	<b>65,81</b>	<b>-</b>	<b>110</b>	<b>119,68</b>	<b>-</b>	<b>31441,65</b>

Source: National Institute of Statistics: [www.insse.ro](http://www.insse.ro)

The applied calculation formulas are:

$\hat{y}_i = a + b * t_i$ , where:  $a = \bar{y} = 58,78$  Billion RON

$$b = \frac{\sum y_i * t_i}{\sum t_i^2} = \frac{119,68}{110} = 1,088, \text{ where } \hat{y}_i \text{ is the adjusted series;}$$

$$A = \sqrt{\frac{\sum (y_i - \hat{y}_i)^2}{n}} = \sqrt{\frac{31441,65}{11}} = 2858,33, \text{ where A represents the average square deviation;}$$

$$v = \frac{A}{\bar{y}} * 100 = \frac{2858,33}{58,78} * 100 = 4862,75\%, \text{ where v represents the coefficient of variation; the value of } 44.66\% \text{ being much higher than } 5\% \text{ shows that even by this method the series is not well adjusted.}$$

## 5. Conclusions

In Romania, the number of impact studies on the adoption of normative acts regulating various social benefits is relatively low and predominantly directed towards the study of certain social benefits, most often the guaranteed minimum income. We note the consistency of making statistical reports rather than critical impact and evaluation analyzes, identifying general trends and possible adverse effects of adopted social protection measures.

However, statistical reporting is only a very useful first step in the evaluation process and is not a real monitoring of the factual situation. Assessing the evolution of the national social assistance system in Romania leaves the impression that this system is developed. In fact, at the base of the pyramid, where we should encounter institutions, services, benefits and social assistance specialists, we find a chronic underdevelopment of these structural elements.

One of the options in reforming social policy has been the methodology for setting the level of benefits both from the point of view of reporting on existing resources and from the point of view of the expected effect on the beneficiaries.

To speed up the 100% implementation and operation of the management information system in the field of social benefits in order to achieve correct administration, accurate verification of the way in which benefits are provided, etc. it's necessary. The development of a permanent system of monitoring and evaluating how to implement social benefits legislation through the existence / development of system-appropriate impact indicators, to be interpreted independently and professionally, could lead to the emergence of viable proposals for improving social policies in Romania and especially those on the achievement of the Europe 2020 target.

## 6. References

- Buzducea, Doru – Sistememoderne de asistență socială. Tendințe globale și practici locale, Editura Polirom, Iași, 2009
- Cojocaru, Ștefan – Proiectul de intervenție în asistența socială. De la propunerea de finanțare la proiectele individualizate de intervenție, Ed. Polirom, Iași, 2006
- Ciumaș, C., Văidean, V.L., Protecție și asigurări sociale, Editura Toderescu, Cluj-Napoca, 2011
- Ionescu, C, Toderăș, N., *Politica de dezvoltare regională*, Editura Tritonic, București, 2007
- Institutul Național de Statistică: [www.insse.ro](http://www.insse.ro)
- Major D., *Asigurările sociale în România. Realități și perspective*, Editura Casa Cărții de Știință, Cluj-Napoca, 2009
- Payne, Malcom – Teorii moderne ale asistenței sociale, Editura Polirom, Iași, 2012