



Munich Personal RePEc Archive

## **Regional Analysis of Out-of-School Children in Romania**

Caragea, Nicoleta

2012

Online at <https://mpra.ub.uni-muenchen.de/48781/>  
MPRA Paper No. 48781, posted 01 Aug 2013 23:46 UTC

# Regional Analysis of Out-of-School Children in Romania

Nicoleta CARAGEA<sup>1</sup>

## Abstract

*The current study consists of a regional analysis of children participation in education in Romania.*

*From an administrative point of view, the country is organized in 41 counties and Bucharest city. The regional level emerged in the public policymaking only after 1989, when escaping a hyper-centralised system of government and under the influence of the accession process and regional policies of EU. Eight development regions were defined, partly following historical regions of Romania. The main regional development structures in Romania were created at national and regional level but in 2011 the Government proposed for public debate a new administrative organisation model, considering the current one not being effective.*

*A special feature of Romania is the large share of its population living in rural areas (46%), significantly higher compared with EU average (24%). As we will see, this fact is relevant for our analysis, given the marked differences in the quality of social services provision (including education) between the two areas of residence.*

*The analysis is part of the UNICEF and the UNESCO Institute for Statistics (UIS) Global Initiative Activities in order to stimulate more complex and more informed and monitored policy responses related to exclusion from education. In Romania, the study was carried out by specialists from Ministry of Education, Ministry of Labour and also experts from National Institute of Statistics and UNICEF Romania. The main data sources used were administrative and statistical data sources, like the Exhaustive Education Survey and the Household Budget Survey. The reference period of the analysis consisted from five academic years, from 2005-2006 to 2009-2010, using a set of standardized data tables.*

**Key words:** out-of-school, development region, education, attending school, enrolment

**JEL Classification:** I21, I24

## 1. Introduction

The out of school phenomenon is a consequence of the impact of social, cultural, economical and educational factors on social life. The participation of children to education is the convergent result of family, school, community and public authority representatives. If one of those components has not an optimal response, it can increase the risks of out of school children. Frequently, the causes of out of school are generated by poverty and poor socio-economic conditions that characterize the most exposed groups like: Roma children, children from rural areas, children with disabilities (Dobrică & Jderu, 2005).

The current study consists of a regional analysis of children participation in education in Romania.

From an administrative point of view, the country is organized in 41 counties and Bucharest city. The regional level emerged in the public policymaking only after 1989, when escaping a hyper-centralised system of government and under the influence of the accession process and

---

<sup>1</sup> Affiliation: Lecturer, PhD at Ecological University of Bucharest/Senior Expert at National Institute of Statistics

regional policies of EU.

Eight development regions were defined, partly following historical regions of Romania.

### ***Figure 1. Regional development structures in Romania***

The main regional development structures in Romania were created at national and regional level but in 2011 the Government proposed for public debate a new administrative organisation model, considering the current one not being effective.

## **2. Data sources**

The analysis presented in that paper is based on two main data sources carried out by National Institute of Statistics in Romania. The reference period of the current study is 2005-2010.

First data source is exhaustive, the data being collected from all types of educational establishments and from all levels of education in October-November each year, relating both the beginning of the current school year and the end of the previous school year. The data collected from public and private educational establishments based on the questionnaires<sup>2</sup> are aggregated by educational stages (pre-primary, primary, lower secondary, upper secondary, vocational, post-secondary and tertiary) in line with the organisational structure of the national education system in Romania.

The second data source is a statistical survey – conducted yearly by National Institute of Statistics. The sample design of Household Budget Survey and the results coverage is at national, macro-regional and regional level. The data are collected each month on a sub-sample of 3,120 households. The sampling unit is the household. Sampling (the smallest administrative area for which out-of-school population data are statistically accurate) or regional coverage of schools (NUTS-2 level<sup>3</sup>).

There are some important limitations arising from the HBS. The students who never attended pre-primary education could not be accurately identified (Caragea, 2011); this situation is due to the fact that in the case of the information regarding the family members' current status the answer options in the questionnaire does not include the status *enrolled in kindergarten*. Also, for family members who are over 15 years of age, the school enrolment situation cannot be

---

<sup>2</sup> All questionnaires are available in word and excel formats at the following address:

[http://www.insse.ro/cms/rw/pages/chest\\_invatamant.ro.do;jsessionid=0a02458c30d5b04e2de915d245cdac869a0b34388175.e38QbxeSahyTbi0Lbxz0](http://www.insse.ro/cms/rw/pages/chest_invatamant.ro.do;jsessionid=0a02458c30d5b04e2de915d245cdac869a0b34388175.e38QbxeSahyTbi0Lbxz0). At request, the National Institute of Statistics database (TEMPO) can also be accessed.

<sup>3</sup> NUTS - Nomenclature of Territorial Units for Statistics

accurately detected as the data collection tool focuses on their situation on the labour market (employed/unemployed) and not on their school situation (enrolled/not enrolled in education).

### 3. Definitions

The following list provides the definitions of key education indicators for the quantitative analysis.

The definition of an *out-of-school child* used in the study is *a child who is enrolled but stopped attending the classes during a specific school year.*

Definitions of other educational terms are the followings:

*School entrance age:* School entrance age varies from one level of education to another. School entrance age for pre-primary education is 3 years, for primary education is 6/7 years, for lower secondary education is 11 years and for upper secondary education is 15 years.

*Enrolment:* all children, pupils and students (included in the educational and training process) during a school/university year regardless of the type of education attended (day, evening, part-time education and distance learning) and of age.

*Attendance:* the total number of pupils/students of a certain age group, regardless of the level of education in which they are included, expressed as a share in the total population of the same age group.

*Drop-out:* Drop-out rate is an indicator defined as the ratio between the school population enrolled at the beginning of the school year and the number of students enrolled at the end of the year.

*Educational attainment:* The highest educational level attended by a person (primary, secondary, tertiary).

Primary adjusted net enrolment rate (ANER). Total number of pupils of the official school age group who are enrolled at primary or secondary education levels, expressed as a percentage of the primary population.

Lower secondary adjusted net enrolment rate (ANER). Total number of pupils of the official lower secondary school age group who are enrolled at lower or upper secondary education levels, expressed as a percentage of the lower secondary age population.

Gender parity index is the ratio of female-to-male values of a given indicator.

Adjusted primary net attendance rate (ANAR). ANAR is calculated as the percentage of the official primary school age population that attends either primary or secondary school.

Adjusted lower secondary net attendance rate (ANAR). ANAR is calculated as the percentage of the official lower secondary age population that attends lower or upper secondary school.

Other relevant terms: the total number of pupils/students of a certain age group, regardless of the level of education in which they are included, expressed as a share in the total population of the same age group.

### 4. Poverty and participation in education – Regional analysis

Poverty could be a serious problem to children's access to quality learning opportunities and their potential to succeed in school. The consequence of poverty on the children participation in education has been demonstrated by numerous national studies (Voicu, 2010; Jigău, 2002). Although the basic education in Romania is financed by government, there are a lot of supplementary costs supported by families in order to sustain their children in education system. In this circumstance, children from poor families are the most exposed to drop-out or other risks affecting the participation in school.

Almost a quarter of total population is under the poverty risk in Romania (Box1), having an income less than 60% of the average of the national equivalent income. More, 33% of children aged 0-17 years old are under the poverty risk.

#### **Box 1. Poverty rate evaluation**

According to the relative method that produces the indicator of poverty, recommended by European Official Statistics (Eurostat), the poverty risk is evaluated on the base of a threshold by 60% of the median of household revenue, estimated per adult-equivalent.

In terms of regional distribution, the highest rates of poverty are calculated in **North-East, South-East and South-West**, and the lowest is in Bucharest. The poverty has implication in educational participation. The lowest adjusted net attendance rate is calculated for the poorest regions. This affirmation is for both primary and lower secondary level of education (figure 2a and 2b).

*Figure 2a. Adjusted net enrolment rate in primary education  
(2008-2010)*

*Figure 2b. Adjusted net enrolment rate in lower secondary education  
(2008-2010)*

Source: author's calculation based on data from National Institute of Statistics, Romania

Analyse presents interesting results for upper secondary education, the first level after the basic education. In this education level the adjusted net enrolment rate registered a positive trend in period 2005-2010 across all regions in Romania. The highest level of the adjusted net enrolment rate in upper secondary education is in Bucharest (from 80,2% in 2005 to 94,8 in 2010), followed by Centre and South-East Regions. The last region registered the highest difference during the reference period, by 9,8 percentage points. The figure 3 shows the lowest trend of the adjusted net enrolment rate in upper secondary education in the North-East Region between 2005 and 2010, from 68,1 to 76,5. That means almost a quarter of population aged 15-16 years old are out of school in that region. This situation could be explained by the distribution of GDP by regions in Romania, the South-East region being the poorest by economic site.

***Figure 3. Adjusted net enrolment rate in upper secondary education  
(2005-2010)***

Source: author's calculation based on data from National Institute of Statistics, Romania

An economic perspective of children being out of school is shown in the figure 4 (primary level of education). In 2005, 16% of poorest family children aged 7-10 years old were out of school, the trend decreasing by 9% until 2010. Data presented in the charts 4 and 5 are calculated on the base of household budget survey, carried out by National Institute of Statistics, every year.

**Figure 4. Percentage of primary school age children out of school, by wealth index quintiles, in 2005-2009**

Source: author's calculation based on data from National Institute of Statistics, Romania

Percentage of primary school age children out of school decreases during the reference period for both poorest and richest children enrolled in primary education (figure 5a) and lower secondary education (figure 5b).

**Figure 5a. Percentage of primary school age children out of school (poorest and richest), in 2005-2009**

Source: author's calculation based on data from National Institute of Statistics, Romania

## **Figure 5b. Percentage of lower secondary school age children out of school (poorest and richest), in 2005-2009**

Source: author's calculation based on data from National Institute of Statistics, Romania

### **5. Conclusion**

There are differences between regions in Romania regarding the participation of children in education. The out of school phenomenon is the convergent result of family, school, community and public authority representatives. If one of those components has not an optimal response, it can increase the risks of out of school children. Frequently, the causes of out of school are generated by poverty and poor socio-economic conditions that characterize the most exposed groups, but also regions like the South-East where the economical development process is very slow or almost absent during the last two decades.

### **6. Acknowledgements**

The analysis presented in this paper is part of the UNICEF and the UNESCO Institute for Statistics (UIS) Global Initiative Activities, where the author was a member of the project's team as an expert of the National Institute of Statistics, Direction of Social Statistics Services. The Romanian Report for 2011<sup>4</sup> is in progress to be finalized at the middle of 2012.

### **7. References**

- [1] Caragea N., (2011), *Regional Analysis of Adult Education in Romania*, Analele Universitatii București – Seria de Economie și Administrație, <http://annalseas.faa.ro/en/acasa.html> , Indexed by : [ProQuest](#), [EBSCO-CEEAS](#), [INDEX COPERNICUS](#), [Ulrich's Periodicals Directory](#), [Knowledge Base Social Sciences Eastern](#)

---

<sup>4</sup> The Report is a dynamic picture of the children who dropped out or are at risk of dropping out, researching the effectiveness of current policies aiming at ensuring equal opportunities and facilitating access to quality education and training in school education, development of the administrative capacity of the institutions that coordinate the national education system and development of human capital in the education system through projects funded by European funds.

[Europe](#) Included by international library: [Genamics JournalSeek](#), [New Jour \(Georgetown Library\)](#)

- [2] Caragea, N.,(2010), *Education Trends in Romania - A Statistical Analysis by Gender for the Last Decade*, Tehnologia Inovativă, nr. 3/2010, p. 55-61, ISSN 0573 - 7419, editata de ICTCM – CITAf, [http://www.ictcm.ro/Electronic%20form%20TI%203\\_2010.pdf](http://www.ictcm.ro/Electronic%20form%20TI%203_2010.pdf)
- [3] Dobrică P. , Jderu, G., (2005), *Educatia scolara a copiilor rromi. Determinări socio-culturale*, Vanemonde
- [4] ICCV, ISE, Reprezentanta UNICEF in România, (2002), *Participarea școlară a copiilor romi: probleme, soluții, actori*
- [5] Jigău, M., Surdu, M. (coord.), (2002), *Participarea la educație a copiilor romi. Probleme, soluții, actori*, Editura MarLink, București
- [6] Voicu, B., (2010), *Impactul valorilor sociale asupra rezultatelor educaționale. Implicații pentru politicile educaționale*, pp. 386-406 în Emilian M. Dobrescu și Niculaie Iancu, coord., *Politici educaționale. Relevanță și eficiență*, București: EuroLobby. ISBN: 978-606-92508-0-8.
- [7] Voicu,B., (2002), *Educația și politicile antisărăcie*, prezentată la „Masă rotundă despre politicile sociale”, seminar susținut la Universitatea “Lucian Blaga” Sibiu, 7-8 iunie 2002.

## 8. Annexes

**Table 1: Adjusted net enrolment rate (ANER), by sex and level of education, with GPI, 2009-2010**

	Male	Female	Total	GPI
<b>Region</b>				
	<b>Primary</b>			
North-Est	90.96	90.52	90.75	1.00
West	93.29	93.15	93.22	1.00
North-West	95.40	94.59	95.00	1.01
Center	92.84	92.60	92.72	1.00
South-West	94.93	95.60	95.26	0.99
South	93.34	93.20	93.27	1.00
South-Est	93.32	93.51	93.42	1.00
Bucharest	99.00	98.12	98.57	1.01
<b>Region</b>				
	<b>Lower Secondary</b>			
North-Est	88.15	85.90	88.90	1.03
West	88.41	85.21	88.67	1.04

North-West	91.31	86.06	91.50	1.06
Center	92.48	86.87	91.95	1.06
South-West	91.24	87.45	91.42	1.04
South	90.16	86.59	90.52	1.04
South-Est	87.22	83.62	87.79	1.04
Bucharest	98.02	94.33	98.80	1.04
<b>Region</b>	<b>Upper Secondary</b>			
	<b>y</b>			
North-Est	72.03	75.66	73.81	0.95
West	77.34	79.04	78.17	0.98
North-West	78.37	78.37	78.37	1.00
Center	79.48	80.49	79.97	0.99
South-West	84.28	87.42	85.81	0.96
South	79.70	82.58	81.11	0.97
South-Est	79.02	80.70	79.84	0.98
Bucharest	107.85	113.21	110.47	0.95

Source: author's calculation based on data from National Institute of Statistics, Romania