

SOCIO-ECONOMIC SOLUTIONS FOR EDUCATIONAL SYSTEM, SUPPORT OF ROMANIAN DEMOCRATIC SOCIETY

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Abstract: This study explores the enrolment of Romanian educational population from 1970 to 2014 and the impact of socio-economic actions on educational population structure. In the end, the study proposes some actions, taken from Romanian educational history or European and world educational realities. During this period has been used many socio-economic actions for reducing the abandonment and increasing the enrolment. Some of the most important actions, which influenced the enrolment of the population in Romanian educational system, were demographic, educational, economic, and social. Several European and world educational practices are reminded in the paper and deserves to be taken into account for the increasing of the enrolment in the Romanian educational system.

Keyword: Romanian education, Romanian democratic society, Enrolment and abandonment, Socio-economic actions

Introduction

Some of the most important actions, which influenced positively the enrolment of the population in Romanian educational system, were demographic - abolition of legal abortion in Romania (Decree 770/1966), educational – especially, facilities for people returning to the education system (programmes like Second chance, since 1999) and insertion of the students into the labor market during school period (vocational and entrepreneurial programmes), economic – financial sustainment for poor/disadvantaged students or having special abilities (bourses or aids for students), social – social school canteens, social programmes for students (milk and horn programme which is enriched with fruits and vegetables) and so on. In the paper are proposed some European and world practices, which deserves to be taken into account for the increasing of the enrolment in the Romanian educational system.

Regarding educational measures some of the good practices could be taken from the United States where "The effects of school average authentic instruction appeared after taking into account effects on academic performance attributable to students' minority status, gender, 8th-grade achievement, 8th-grade engagement in school, the number of academic courses they took in mathematics and science, level of minority enrollment in the school, whether the school was a private independent school, the size of student enrollment at the school, and the following aspects of school organization: average number of mathematics and science courses taken, variability in number of mathematics and sciences counties taken; variability in authentic instructional practices; collective responsibility and academic press." (Newmann et. al, 1995, p. 56)

Other educational and administrative actions must be correlated with freedom of choice in education styles. In Romania a strong educational reform must be applied. One of the solutions is to encourage competition between public and private schools. This could be a measure to improve significantly the Romanian public education system, similar with the United States of America. Thereby, the competition will be applied "providing parents with tuition tax credits or vouchers that could be used to offset part of the cost of financing a private education for their children. The basis for this argument is an assumption that

individuals' preferences for expenditures on public education may be "double peaked," leading to the possibility that two equilibria for public school quality may exist (Sonstelie, 1979; also see Barzel and Deacon, 1975; Flowers, 1975; and Stiglitz, 1974). In one equilibrium, the public schools are of high quality and most students are educated in the public sector. In the other equilibrium, the public schools are of low quality and most students attend private schools. While both equilibria are locally stable, a cutback public school funding caused, for example, by tax limitation initiatives or by the adoption of policies that reduce the cost of attending private schools, "could trigger a progressive decline in public school quality accompanied by an accelerating exodus from the public schools - an unravelling of the public school system" (Sonstelie, 1979: 343)." (Couch, 1993, p. 2)

Methods and data

The methods used are multiple-approach, utilizing primary and secondary research through exploratory data from official website regarding educational field. Research was quantitative, but qualitative through exploration of the similar models in different countries with strong traditions in educations. Data were collected and adapted from the World Bank and Eurostat statistics.

Enrolment of the Romanian educational system – factsheets, causes and solutions

Enrolment of the Romanian educational system has numerous aspects to research. In this part of the paper will be presented factsheets, causes and solutions for different educational levels (pre-primary, secondary and, especially, tertiary). All these problems have common causes and solutions, some of them presenting particularities.

The Romanian educational system has to focus on the following critical issues for "elementary, middle and high schools: How can schooling nurture authentic forms of student achievement? How can schooling enhance educational equity? How can decentralization and local empowerment be constructively developed? How can schools

be transformed into communities of learning? How can change be approached through thoughtful dialogue and support rather than coercion and regulation? How can the focus on student outcomes be shaped to serve these principles?'" (Newmann, 1995, p. 62)

As presented before, one of the most significant problem of the Romanian is enrollment of educational population. As seen in figure 1, number of the people enrolled in Romanian learning system has experienced major fluctuations. During 1970 - 2014 period some indicators has increased, as *enrolment in pre-primary education, both sexes (number)* with 24,83% (from 448244 to 559565), *enrolment in pre-primary education, female (number)* with 21,34% (from 224483 to 272404), *enrolment in secondary vocational, both sexes (number)* with 8,33% (from 404048 to 437720), *enrolment in secondary vocational, female (number)* with 51,22% (from 121260 to 183377), *enrolment in tertiary education, all programmes, both sexes (number)* with 256,62% (151885 to 541653), *enrolment in tertiary education, all programmes, female (number)* with 344,77% (from 65353 to 290671) and others has decreased, like *enrolment in secondary education, both sexes (number)* with 26,91% (from 2138552 to 1562960), *enrolment in secondary education, female (number)* with 25,25% (from 1015142 to 758731).

Causes of the massive reduction of the enrolment in the Romanian educational system, especially after 1991 are connected of not sufficient governmental implication in the abortion policies, low funding of educational system and almost nonexistent involvement in the social part of the educational system. In the study *Abortion Legislation: The Romanian Experience* (David & Wright, 1971) the authors consider that the abolition of legal abortion has influenced decisively the increasing of the scholarly population. The authors consider that the Romanian government act very well. The idea is sustained by Teitelbaum (1972) in the study *Fertility effects of the abolition of legal abortion in Romania*. In 1970 – 2014 period the population has decreased with 1,69%, but in the interval between 1970 (20250398) and 1991 (23001155), during the abortion legislation, the population has increased with 13,58%. The decreasing was predominant (13,44%) in the interval 1991 and 2014 (19908979) when the demography and natality was out of control.

Solutions for increasing the educational system enrolment are related to development of the current actions or to impose some new ones. The proposal for implication in the abortion policy is related to development of the programmes which propose the education of the Romanian population regarding the necessity of the natality increasing. Others solutions are connected to diversification of the facilities for the people returning to the education system (programmes like Second chance, since 1999), insertion of the students into the labor market during school period (vocational and entrepreneurial programmes), financial sustainment for poor/disadvantaged students or having special abilities (bourses or aids for students), multiplication of the social school canteens and social programmes for students (milk and horn programme which is enriched with fruits and vegetables).

Important increasing (11,88%) of the students' number in secondary vocational education who are female is the effect of the female's emancipation and the labor work market which changed fundamentally its structure in this interval. Diversification and development of the tertiary economic sector and, even, quaternary show the necessity for more qualified females.

According to figure 2 the enrolment of the female population decreased to *percentage of students in pre-primary education who are female (%)* with 1,40% (from 50,08 to 48,68), *percentage of students in primary education who are female (%)* with 0,13% (from 48,40 to 48,27), *percentage of students in secondary education enrolled in general programmes, both sexes (%)* with 9,66% (from 81,10 to 71,44), *percentage of students in secondary general education who are female (%)* with 0,40% (from 51,53 to 51,13) and increased at *percentage of students in secondary education who are female (%)* with 1,08% (from 47,46 to 48,54), *percentage of students in secondary education enrolled in vocational programmes, both sexes (%)* with 9,11% (from 18,89 to 28), *percentage of students in secondary vocational education who are female (%)* with 11,88% (from 30,01 to 41,89).

Regarding females, the enrolment of the population has a very slow increasing, in fact was relative constant. During 1970 – 2014 period the female population has decreased with 0,44%, but in the interval 1970

(10303251) and 1991 (11667035), during the abortion legislation, the female population has increased with 13,23%.

The decreasing was predominant (12,04%) in the interval 1991 and 2014 (10257961) when the demography and natality was not sufficient controlled. But, as seen, the female population has reduced less than the total, meaning that the natality of the male population was in decline. As a solution for enrolment increasing of the males and females is to control, through governmental policies, the enrolment of the males, similar with those for females.

A special situation was in the tertiary education system. In figure 3 is presented the evolution between 1997 and 2013. As seen the enrolment in tertiary education decreased to percentage of students in tertiary education enrolled in Agriculture programmes, both sexes (%) with 0,74% (from 3,92 to 3,18), percentage of students in tertiary education enrolled in Education programmes, both sexes (%) with 0,32% from (2,23 to 1,91), percentage of students in tertiary education enrolled in Humanities and Arts programmes, both sexes (%) with 1,74 (from 10,86 to 9,13), percentage of students in tertiary education enrolled in Social Sciences, Business and Law programmes, both sexes (%) with 3,81% (from 40,94 to 37,14).

Increased at percentage of students in tertiary education enrolled in Engineering, Manufacturing and Construction programmes, both sexes (%) with 1,94% (from 22,42 to 24,37), percentage of students in tertiary education enrolled in Health and Welfare programmes, both sexes (%) with 5,06% (from 7,88 to 12,94), percentage of students in tertiary education enrolled in Science programmes, both sexes (%) with 1,44 (from 5,71 to 7,15), percentage of students in tertiary education enrolled in Services programmes, both sexes (%) with 0,66 (from 3,51 to 4,18), percentage of students in tertiary education who are female (%) with 2,76% (from 51,02 to 53,78), percentage of students in tertiary ISCED 5 programmes who are female (%) with 28,57% (from 54,21 to 82,78).

The solutions for the decreasing of the enrolment in tertiary educational system is to make a strong reform in the Romanian education. More and more students are living Romania in order to study abroad.

The structure of Romanian educational population by age and enrollment solutions

According to figure 4, between 1998 and 2014 population by age has dramatically decreased, especially after 1994. A detailed analysis, realized by professor Marginean, shows that “at the same time it starts to increase the value of school enrollment of the school age population from values that dropped to 60% in 1990/91, compared to 64% in 1989/90, to return in 1995/1996 to the values of the year reference and further increasing. Since the 1997/1998 school year, it has felt the effect of diminishing birth rates starting with 1990. Thus, the newborn cohort is reduced from 340,000 in 1989 to 250 thousand in 1990.” (Mărginean, 2009, p. 301). The most significant decreasing in population was to *population, age 0, total* from 411792 to 183697 with 55,39%, *population, age 1, total* from 376963 to 187998 with 50,13%, *population, age 5, total* from 325735 to 199748 with 38,68%, *population, age 21, total* from 415878 to 211485 with 49,15%, *population, age 24, total* from 351316 to 266963 with 24,01, and *population, age 25, total* from 314812 to 295059 with 6,27%. On long term the decreasing of the population for ages 0, 1 and 5 will have serious impact on enrolment and socio-economic growth.

Causes of decreasing are multiple, emigration being one of the most significant. Some authors consider that there is a direct correlation between economic growth and human capital.” It results that the decrease in natural growth has led to a decrease in the number absolute population, with important changes in structure by age groups of the population. The average age of the country’s population increased in recent years, reaching in 2004 to 38.3 years, the age that characterizes countries with adult population, this age is higher for the population feminine and, respectively, rural ones. It is estimated that by the year 2020, given the constant maintenance of the main phenomena level, the population of Romania will decrease by almost 2.9 million people, the reduction especially in the case of the school age population. By correlating the respective indicators with those of the material resources presented (giving a picture of the economic development of society) can show that the presence of well-educated human resources and health good results in high labor productivity, better organization of economic activity, higher production and higher income that, at in turn, allow new investment in education

and health, determining production a better educated and healthy human resource.” (Mihail et. al, 2010, p. 3)

Regarding females, figure 5 shows that from 1989 to 2014, the indicators decreased more to *population, age 0, female* from 201920 to 89158 with 55,84%, *population, age 1, female* from 184719 to 91252 with 50,60%, *population, age 12, female* from 197515 to 101777 with 48,47%, *population, age 24, female* from 172038 to 130518 with 24,13%, *population, age 25, female* from 153904 to 144511 with 6,10%, *population, age 5, female* from 159254 to 97007 with 39,09%. In fact, the total decreasing has been affected mostly by female population reduction.

An important research realized in the United States of America and applicable to Romania shows that population trend is decisive in enrollment of educational population. ”The number of students at each grade level is determined primarily by population trends. In fact, at the kindergarten, elementary, and high school levels, enrollment numbers tend to mirror closely the population count in those ages (with the estimates for high school and college enrollment were not significantly different from each other, close to 100 percent enrollment of the population aged 5 through 16) because of compulsory attendance requirements. In contrast, nursery school and college enrollment levels are influenced more by social and economic factors than just the age structure.” (Jamieson et al., 2001, p. 2)

Grouped on age category the decreasing of the educational population was constantly. As seen in figure 6, from 1970 to 2014, *population, ages 0-14, female* decreased from 2616736 to 1498048 with 42,75%, *population, ages 0-14, male* from 2736929 to 1580054 with 42,27%, *population, ages 0-14, total* from 5353665 to 3078102 with 42,50%, *population, ages 15-64, female* from 6789552 to 6677249 with 1,65%, *population, ages 15-64, total* from 13347879 to 13320508 with 0,21%. An insignificant increase has been recorded to *population, ages 15-64, male* from 6558327 to 6643258 with 1,30%.

Solutions for increasing educational population in Romania, especially for 0-14 ages, are connected to migration policies, infantile natality policies, financial support for families in order to send children to school, organizing seminars and practical applications with families about the importance of the education and non-abandonment of the school.

In **conclusion**, enrolment of the Romanian educational population has a multitude of negative causes and positive solutions. Regarding demographic actions, the Romanian authorities could organize campaigns and conferences for informing the risks of abortion. There is necessary to develop programmes which propose the education of the Romanian population regarding the necessity of the natality increasing. As reminded, others solutions are connected to diversification of the facilities for the people returning to the education system, insertion of the students into the labor market during school period (vocational and entrepreneurial programmes), economic sustainment for poor/ disadvantaged students or having special abilities (bourses or aids for students), multiplication of the social school canteens and social programmes for students.

A crucial reform must be applied in the Romanian educational system, similar with the 1995 reform from the United States of America."Researchers examined schools at many different stages of restructuring, and analyzed schools taking part in a variety of district and state reform strategies, including public school choice, tactical decentralization and state-level systemic reform. Their reports provide a rich combination of in-depth case studies and survey data portraying general trends. This report presents evidence that structural reforms can work, but only when human and social resources are organized to provide particular forms of support for schools and students." (Newmann, 1995, p. 62)

From European Union lessons, Romanian educational system must learn to be more opened and flexible, to offer qualitative virtual learning using ICT in education. A more applied curriculum is a solution for attractiveness and enrollment of the Romanian educational population. Great education debate offers a pattern of "direct relationship between education and the needs of industry" (Ball, 2017, p. 1). From the United Kingdom model (Early, 2017, p. 5-6) can be taken the idea of coherent applied science. Curricula must be oriented to efficiency and utility. For instance, the antic Israel understand the importance of applied curriculum including agriculture and practical skills. (Moț, 2016, p. 499). Reform of the Romanian educational system must include entrepreneurial and applied disciplines and skills for the students.

Another point of inflexion will be the insertion of the foreign students and the immigrants into Romanian educational system. Thereby,

pluralism is a must in Romanian educational system. Inequality should be reduced for all educational categories (Gabbard, 2017). In this sense, a replicable model of open schools applicable to Romania is described by Glatter (2017) in *London Review of Education*. Opened not only in the virtual learning, but in mentalities, too.

Acknowledgement: Paper has been realized under the project „Applying to Horizon 2020 - Model of car rentals for mountain tourism development in Bulgaria and Romania References”, financed through grant project proposals of the Perla Rent Cars EOOD. Project is layout by Centre for Mountain Economy of the National Institute of Economic Research “Costin C. Kirițescu” – Romanian Academy

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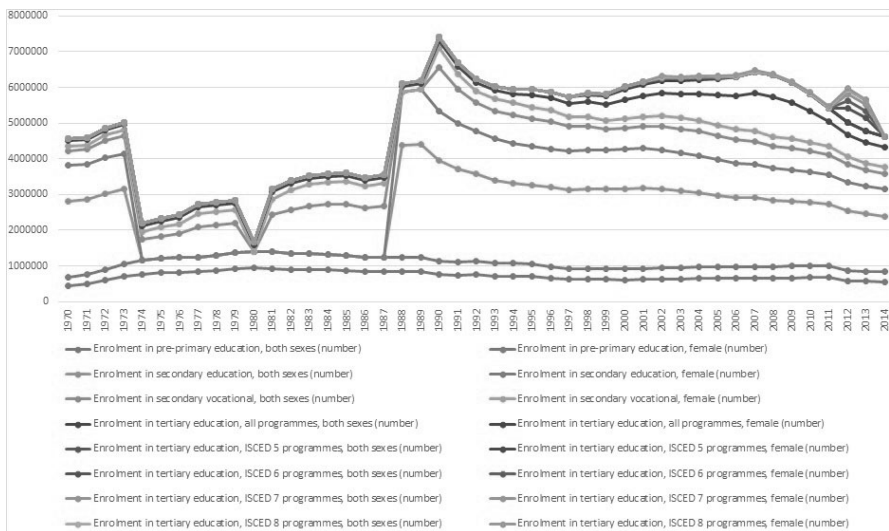


Figure 1. Students' enrolment in Romanian educational system (number)

Source: World Bank DataBank, *Education Statistics - All Indicators*, <http://databank.worldbank.org/data/reports.aspx?source=education-statistics-~all-indicators>

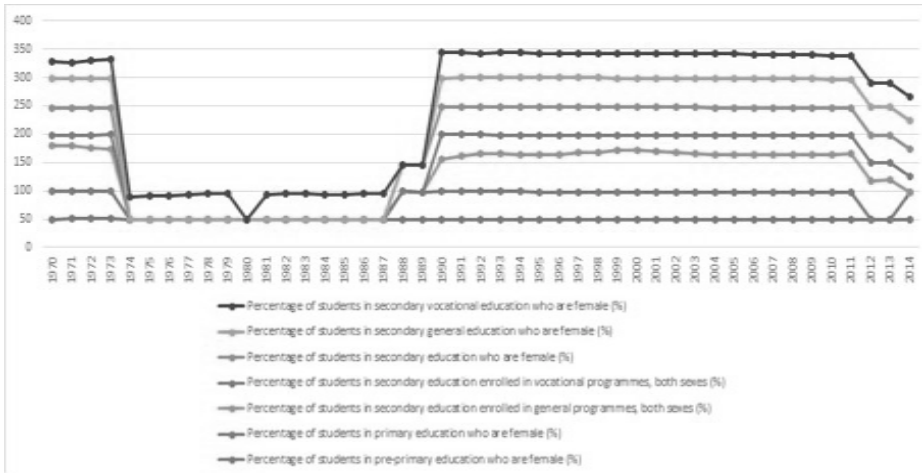


Figure 2. Students' enrolment in Romanian educational system, from pre-primary to secondary (%)

Source: World Bank DataBank, Education Statistics - All Indicators, <http://databank.worldbank.org/data/reports.aspx?source=education-statistics-~-all-indicators>

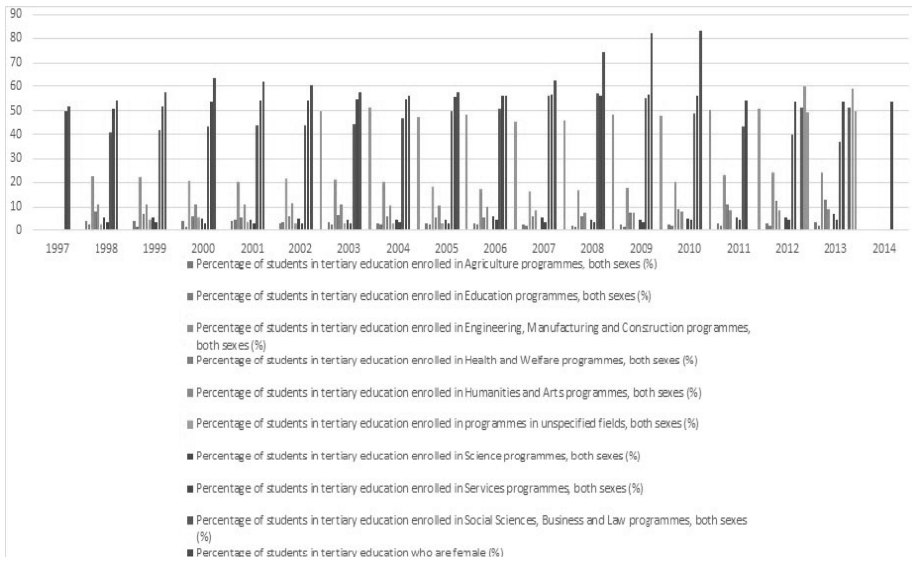


Figure 3. Students' enrolment in Romanian educational system, tertiary (%)

Source: World Bank DataBank, Education Statistics - All Indicators, <http://databank.worldbank.org/data/reports.aspx?source=education-statistics-~-all-indicators>

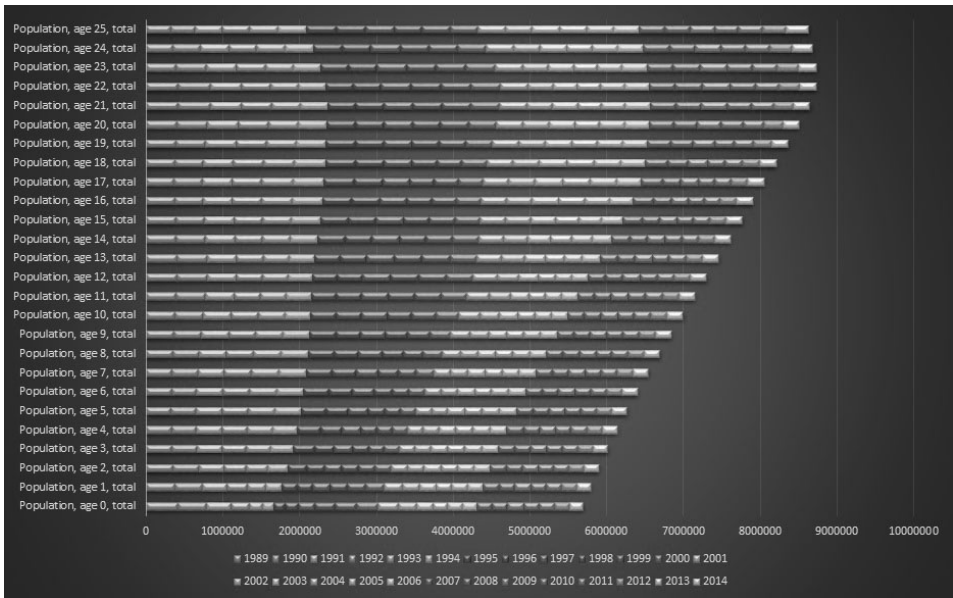


Figure 4. Total population in Romanian educational system by age

Source: World Bank DataBank, *Education Statistics - All Indicators*, <http://databank.worldbank.org/data/reports.aspx?source=education-statistics-~-all-indicators>

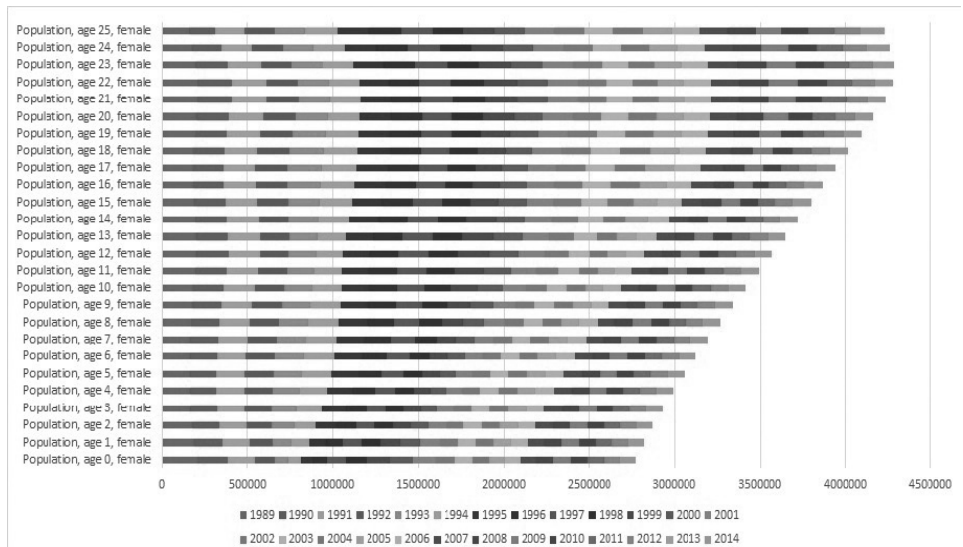


Figure 5. Female population in Romanian educational system by age

Source: World Bank DataBank, *Education Statistics - All Indicators*, <http://databank.worldbank.org/data/reports.aspx?source=education-statistics-~-all-indicators>

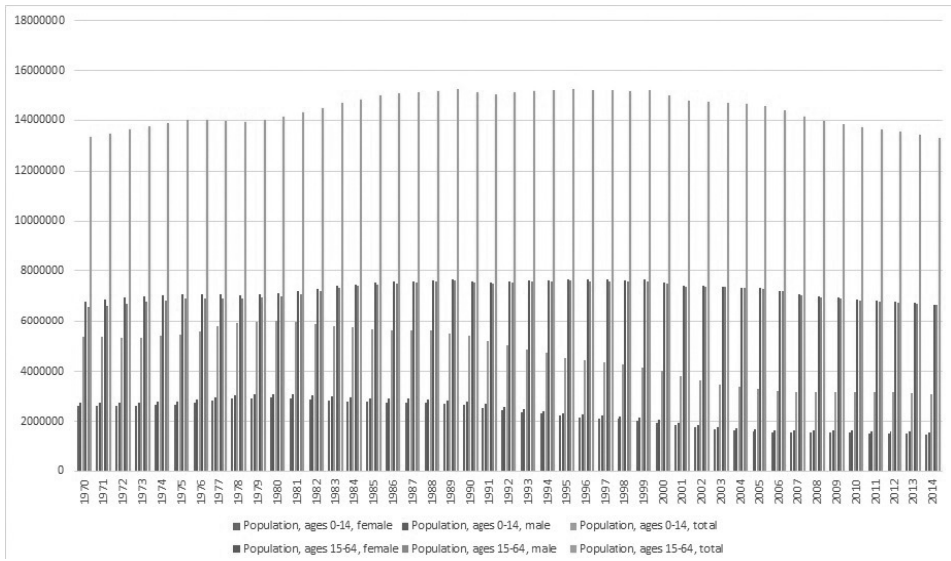


Figure 6. Population, total and female, in Romanian educational system by group of abandonment

Source: World Bank DataBank, *Education Statistics - All Indicators*, <http://databank.worldbank.org/data/reports.aspx?source=education-statistics-~-all-indicators>