

EDUCATION IN BUCHAREST CITY AND ITS METROPOLITAN AREA. CHALLENGES, TARGETS AND OPPORTUNITIES

EDUCAȚIA ÎN BUCUREȘTI ȘI ZONA SA METROPOLITANĂ. PROVOCĂRI, OBIECTIVE ȘI OPORTUNITĂȚI

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Abstract: Education is a key factor in economic development, in achieving jobs, social prestige, in improving the health system, the cultural participation. Improving participation in education, reducing school dropouts, increasing the proportion of population following secondary and tertiary education are proposed solutions to reduce poverty, social exclusion, low paid jobs. The purpose of this article is to analyze the evolution of the population in terms of its inclusion in various level of education in Bucharest and its metropolitan area during the 1990-2010.

Key-words: *education, qualifications, skills, inclusive growth, Bucharest metropolitan area, Romania*

Cuvinte cheie: *educație, calificări, competențe, creștere inclusivă, aria metropolitană București, România*

I. INTRODUCTION

Education and training are some of the elements that define sustainable social development (Brunhofer&Prnjavorac, 2010; Stănculescu&Marin, 2011). The importance of a study concerning population distribution into education levels results from the fact that it offers both an eloquent view of the level of training of a country's population and on the qualifications of human resources. It's a well-known fact that people with higher education can have an easier insertion in the labour market (Ianoș et al., 2013; Chirileasa, 2013). It is well established that the distribution of personal incomes in society is strongly related to the amount of education people have had (Global Monitoring report, 2005, Evans et al., 2010). Human capital is an important element of economic growth (O'Dubhslainé, 2006, Moore-Cherry&Ancien, 2013).

A better-educated society generates positive effects linked to increased productivity of business ventures, the introduction of new technologies and increased innovation rate (Global Monitoring Report, 2005), education being often

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seen as a primary engine to maintain and develop a society's economic life standard (Stenberg, 2011).

Also, education has an impact on socio-economic outcomes relevant for social stratification, such as work, occupation and social prestige (DiPrete&Grusky, 1990; Ultee&Luijkx, 1990 quoted by Schröder&Ganzeboom, 2009).

There is also a number of indirect effects generated by the education such as: on health (Ross&Wu, 1996; Westert et al., 2005 quoted by Schröder&Ganzeboom, 2009), delinquency (Lochner, 2004 quoted by Schröder&Ganzeboom, 2009), mortality (Lleras-Muney, 2005; Doornbos&Kromhout, 1990 quoted by Schröder &Ganzeboom, 2009), child mortality, fertility, children education (Barro, Lee, 2010 quoted in Siesta Draft final report, Annex D, Education, 2012), cultural participation (Bourdieu &Passeron, 1977; Ganzeboom et al., 1991 quoted by Schröder&Ganzeboom, 2009), knowledge (Hyman et al., 1975 quoted by Schröder&Ganzeboom, 2009), values (Hyman&Wright, 1979; Inglehart, 1971 quoted by Schröder&Ganzeboom, 2009) and attitudes (Brint, 1984; Van de Werfhorst&De Graaf, 2004 quoted by Schröder&Ganzeboom, 2009).

A well-educated labour force will attract highly paid jobs (O'Dubhslainé, 2006).

One of the important goals of the 2020 Europe strategy is the development of a highly-skilled workforce (Merciu et al., 2012).

Some of the targets of the Europe 2020 Strategy related to the education are: to improve the population involvement on educational levels, to reduce the rate of school dropout with at least 10%, 85% of 22 year old should have completed upper secondary education. Also, the aim to raise the overall quality of all levels of education and training in the EU, is mentioned even in the Flagship Initiative: "Youth on the move". Increasing participation of people in education has also the aim to reduce the percentage of persons with low educational attainment and to increase the number of young people with higher education.

In addition, it is specified the need for promoting education and development of skills with a view to creating a modern education system in all member states (Innovation Union Report). Why is it important to study education broken down into several levels? Each level has its own function in a person's development from both a cognitive and professional point of view.

Primary education, the most formative phase of the education process, ensures the acquisition of the basic skills (communication, literacy and mathematical skills) that are essential for securing employment, ensuring the extent personal interaction and decent living standards (OECD, 1992 quoted by O'Dubhslainé, 2006).

Secondary education plays a dual role in today's education systems. On one hand, it serves as an extended platform for all young people to further develop the knowledge and skills that are needed in civic society and the knowledge economy. On the other hand it provides many young people with qualifications for the labour market and further learning. In the past, secondary education primarily served the elite as an educational transition to higher education (Sahlberg, 2007).

Tertiary education provides high-level occupational preparation in a more applied and less theoretical way; tertiary education institutions accommodate the growing diversity of qualifications and expectations of school graduates (OECD, 2008). Tertiary education is a major driver of economic competitiveness. Tertiary education contributes to social and economic development through four major missions: the formation of the human capital, the building of knowledge bases, the dissemination and use of knowledge, the maintenance of knowledge (OECD, 2008).

The present article is part of an extensive study that provides the foundation for the GROSEE ESPON project „Emergence of Growth Poles Network in South – East of Europe” which aim is to explore which is the input of the three cities (Bucharest, Sofia and Athens) on the emergence of a peripheral “integrated zone” of the South – Eastern Europe and how they are interacted with the European polycentric network, especially with the European polycentric network, as well as with the European core area and with the non-EU member states bordering the three countries (GROSEE ESPON – Inception Report, 2012).

The purpose of the present article is to analyze the evolution of population from the point of view of its distribution into education levels taking as a case study Bucharest city and its metropolitan area during 1990-2010.

II. DATA AND METHODS

The study was grounded into exhaustive research into the reports released by the European Commission, paying special attention to the European Union’s 2020 strategy.

The authors analyzed the goals and initiatives proposed by the European Commission, the general and specific recommendations concerning the role of education in economic growth, finding employment, population health and fighting poverty mentioned in the international literature.

A second stage of the study consisted in collection of statistical data on the education levels of the population of Bucharest city and its metropolitan area. The data was collected so as to achieve a comparative analysis spanning 1990-2010. The choice of the respective time span was not random, as the early part being a difficult period of transition from the centralized economy (of the Communist era) to the free-market economy (the post-Communist era), which involved a series of important changes across the nation from the political, economic, social and cultural points of view. Later on, the visual materials were created, using the statistical data supplied by the National Statistics Institute, thus highlighting the evolution of the indicators and interpreting the position of the capital city from the point of view of the population distribution into education levels, both inside its polarization area and nationwide.

III. RESULTS AND DISCUSSIONS

By analyzing the ratio of children enrolled in the pre-school education system, high ratios are observed at the level of both Bucharest city and those counties that are part of the capital city’s metropolitan area (Fig. 1).

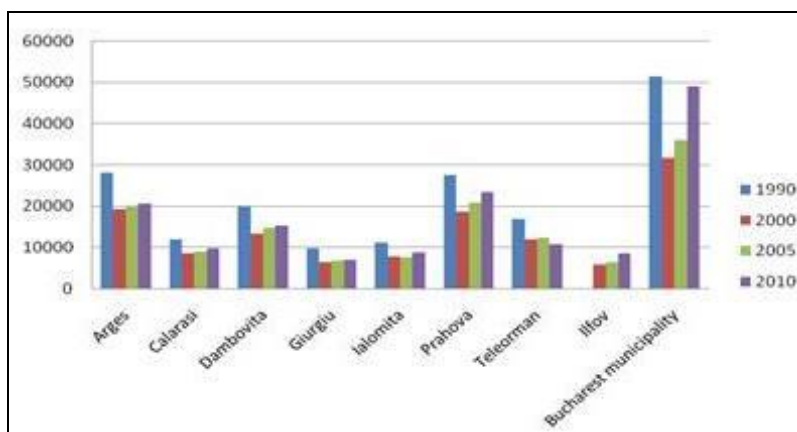


Fig. 1. Participation of the population to preschool education (county level)
(Data Source: National Institute of Statistics)

Bucharest stands out at a noticeable distance from the rest, however. Moreover, the time span analyzed reveals a decline in the numbers of pre-school-education children by 2000 when compared to 1990, a decline due to the birth rate drop. A rise occurred in the number of the pre-school-education population starting 2005, with values remaining high through to 2010, across all counties and Bucharest (with the exception of Teleorman county, which registered a slight decline in 2010).

Although the numbers of pre-school-education population increased from 2000 to 2010, the values were too low when compared to those registered in the 1990s. The high pre-school-education population values during the first half of the time span analyzed were the result of a high birth rate, continuing from the time when Romania was ruled by the Communist regime through into the early 1990s.

As far as the two regions are concerned – Bucharest city and its metropolitan area – both notice the same trend towards an increase in pre-school-education population numbers (Fig. 2).

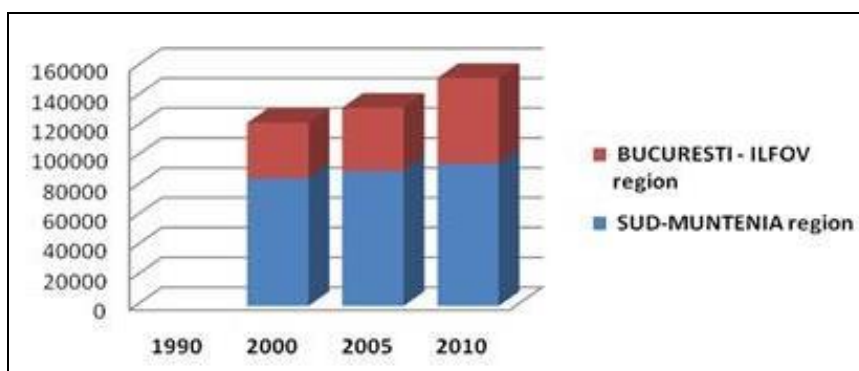


Fig. 2. Participation of the population to preschool education (regional level)
(Data Source: National Institute of Statistics)

A bigger increase can be observed in pre-school-education population in the Bucharest-Ilfov region, a 1.5 times increase over the time span analyzed, compared to a 1.1 times increase in South-Muntenia region. This growth is due to the definitive settling of people in the region, most of them young people attracted by opportunities to find well-paid jobs in the capital city. This favourable economic background determined a relatively high birth rate.

Primary and secondary education (including forms of special education) feature high values by 2000, accounting for 56% of the people enrolled in some form of education system. One can notice a slight decline of the population enrolled in primary and secondary education institutions (in 2005, it accounted for 52% of the population enrolled in the education system) as a result of the decline of the birth rate; in 2010 the figure stood at 50.3%) (Fig. 3).

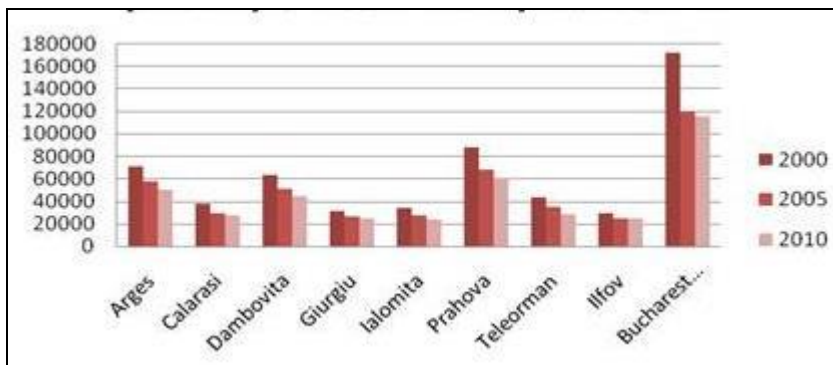


Fig. 3. Participation of the population to primary and secondary education (county level)
(Data Source: National Institute of Statistics)

Over the period considered, there is a noticeable decreasing trend at the regional scale, with a decline of 109,188 people in South Muntenia region and a decline of 60,947 people in Bucharest-Ilfov region (Fig. 4). This declining trend of the primary and secondary education population is the direct result of the birth rate decrease, which began in the early 1990s, when the law banning abortions was invalidated, a law enforced during the Communist period.

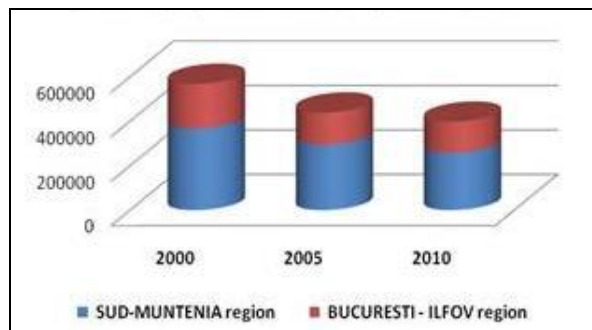


Fig. 4. Participation of the population to primary and secondary education (regional level)
(Data Source: National Institute of Statistics)

The ratio evolution of high-school students registered fluctuations during the time span analyzed. The first half of the period is marked by significant drops all across the analysed area, followed by a relative increase in the number of high-school students. The analysis of the distribution of high-school student in the counties included in the Bucharest Metropolitan Area indicates that the lowest ratio is found in Ilfov county (Fig. 5).

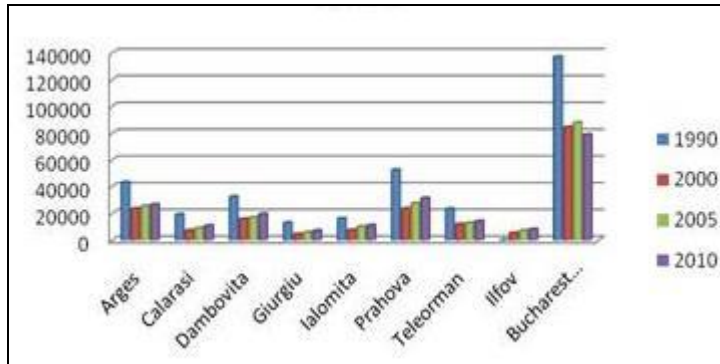


Fig. 5. Participation of the population to high school education (county level)
(Data Source: National Institute of Statistics)

The low number of high-school students in Ilfov county is explained by the fact that a large portion of students is enrolled in high-schools in Bucharest city, partly so as to benefit from the level of training supplied in here, partly because most of them will go on to attend university, with an opportunity to settle in the capital city.

The proportion of population enrolled in high schools varies at the regional level: in the case of the South-Muntenia region that ratio rose during the analyzed time span (1.3 times), and the Bucharest-Ilfov region registered a slight fluctuation (from 89,606 people in 2000 to 94,939 people in 2005 and a slight drop in 2010, that is to 87,074 people) (Fig. 6).

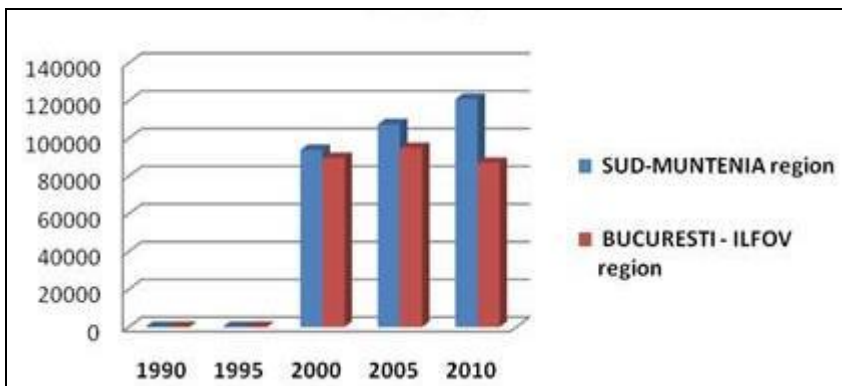


Fig. 6. Participation of the population to high school education (regional level)
(Data Source: National Institute of Statistics)

Vocational education is one of the forms of education that suffered one of the biggest drops, a situation brought about by different causes: on the one hand, the decline of the birth rate, on the other hand the reorganization of the industrial sector which drove most young people to choose going to academic or business-administration high-schools.

Before 1990, and for a few years after, students choosing vocational schools were given tuition contracts that secured them jobs in industrial facilities after graduation. Students in vocational schools were prevented access from bachelor's degree exam and were thus unable to attend university. The ratio of people enrolled in vocational schools had registered declines as early from the first part of the analysed period (Fig. 7), when Romanian economy saw the first instances of industrial-enterprise shutdowns. That was a direct effect of the economic policies launched during the Communist regime, focusing on the exacerbated development of industry. Industrial reorganization continued in the next period, which brought about young people's reorientation towards forms of education that would focus on training and the acquisition of professional skills in those sectors of the economy relevant for the labour market at that precise moment.

In addition, certain vocational schools focused on the development of professional skills for people focusing on agriculture, but it has not accounted for many young people an attractive field of work, which brought about the closing down of numerous vocational schools.

In 2003 the Ministry of Education made the decision of creating arts and crafts schools, which functioned up to 2009; the decision was also made to waive the interdict on bachelor's degree exam and university admission for people graduating arts and crafts schools. In 2010 arts and crafts schools were converted into technical schools.

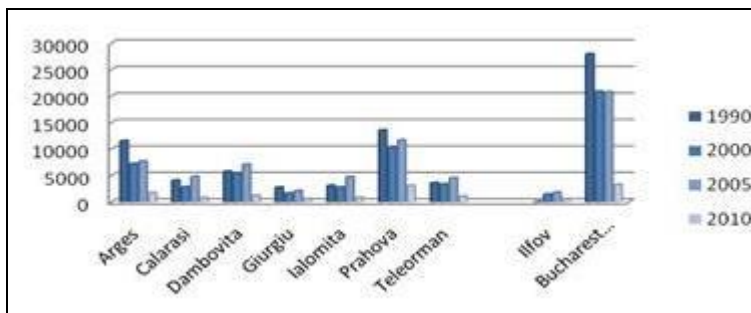


Fig. 7. Participation of the population to professional education (county level)

(Data Source: National Institute of Statistics)

At a regional level, the downtrend is a visible one, with the highest values found in the Bucharest-Ilfov region (the ratio of people enrolled in vocational schools dropped 5.8 times during the analysed period) as compared to the South-Muntenia region (the ratio of people enrolled in vocational schools dropped 3.6 times).

As mentioned above, taking into consideration of the background of economic reorganization, numerous industrial facilities in the two regions were shut down, which drove the population to reorient towards other forms of education (academic or business-administration) (Fig. 8).

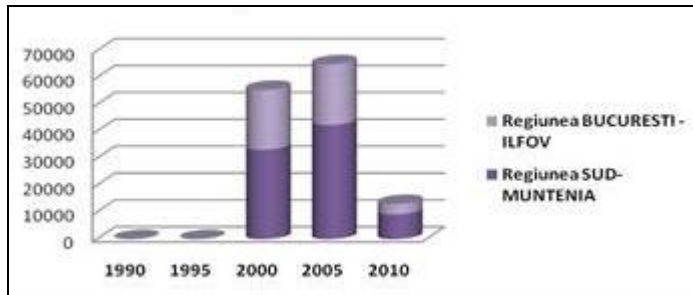


Fig. 8. Participation of the population to professional education (regional level)

(Data Source: National Institute of Statistics)

Reșița and its adjuvant area were the recipients of important manpower resour The number of people enrolled in postsecondary schools registered fluctuations, with successive rise and drops (Fig. 9), most of them partially the result of changes occurring in the Romanian economy.

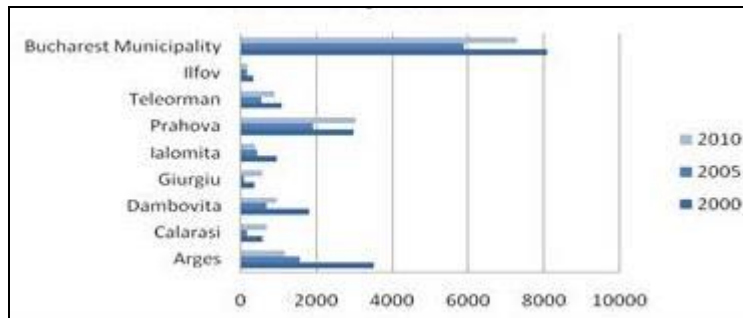


Fig. 9. Participation of the population to post-secondary education (county level)

(Data Source: National Institute of Statistics)

As a brief historical note, post-secondary schools are recent and they emerged out of the need to provide additional training, mainly to graduates of vocational schools, so as to ease their employment process. The types of post-secondary schools span a wide spectrum, covering specialities in the fields of industry, constructions or services (tourism, healthcare).

At the regional scale, an increase can be observed in the number of the population enrolled in post-secondary schools (Fig. 10). Both regions register a

slight decline in 2005 (slightly more visible in South-Muntenia region) followed by a rise in both regions in 2010.

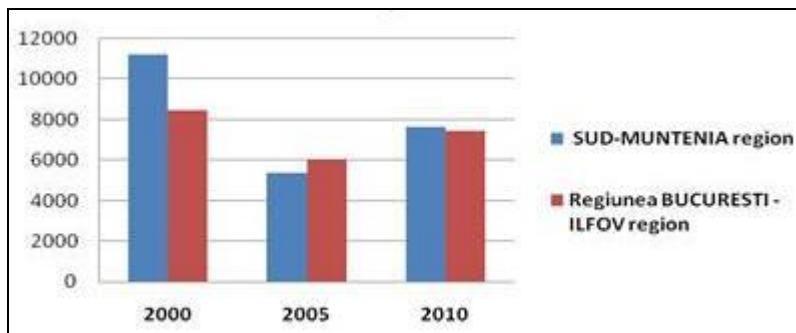


Fig. 10. Participation of the population to post-secondary education (regional level)
(Data Source: National Institute of Statistics)

An analysis of the population enrolled in higher-education institutions indicates that the highest values are found in Bucharest city, which attracts a large number of students, some of them coming from various regions across the country (Fig. 11).

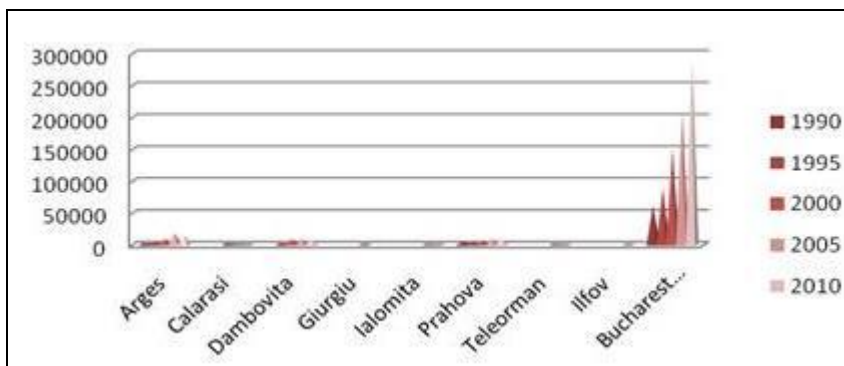


Fig. 11. Participation of the population to tertiary education (county level)
(Data Source: National Institute of Statistics)

The range of specializations of the universities in the Bucharest city is another element that attracts a high number of students. In addition, mention should also be made of the importance and influence of higher-education centres outside Bucharest (for instance Ploiești, Pitești, Târgoviște).

The educational process in the South-Muntenia development region is supported by a relatively well-developed network of higher-education institutions that can ensure the population's access to that level of education. Certain university centres in the Bucharest Metropolitan Area host universities where specialities are closely linked to particular industrial sectors (the Oil and Gas University in the Ploiești city), with the biggest part of the graduates going on for internships and

even for employment abroad, where the demand for specialists skilled in oil and gas drilling and crude oil refining is higher.

In addition to engineering sciences, the most widespread fundamental fields of study in the South-Muntenia region are the economic, social and political sciences.

As far as university centres in the Bucharest Metropolitan Area are concerned, there is a noticeable trend towards diversification of the specialities in higher-education institutions, with the goal of training the future graduates in compliance with the current demands on the labour market. This trend is found among both universities with a long tradition (a School of Management and Business was recently created as part of the University of Bucharest), and among universities established in the past few years (the University of Târgoviște).

Although there are several university cities inside the Bucharest Metropolitan Area, the Bucharest city hosts several important universities that have risen to prominence over time, gaining recognition and winning over an ever-increasing number of graduates as prime destinations. Bucharest is one of the European cities with a high number of students. This state is partially due to private universities, established since the early 1990s. The capital city accounts for close to half of all students nationwide, spanning the whole spectrum of studies, from agricultural sciences to the arts, theatre and film.

One may actually speak of an overgrowth trend as far as Bucharest as an university centre is concerned, as it accounts for circa 33% of all higher-education institutions (28.6% of all state universities and 38% of all private universities) (Ianoș, 2010).

At regional scale, there can be observed a highly visible differentiation of the ratio of the higher-education population, with the Bucharest-Ilfov region standing out with the highest values, as a result of the presence of the capital city, the most important university centre across the national level (Fig. 12).

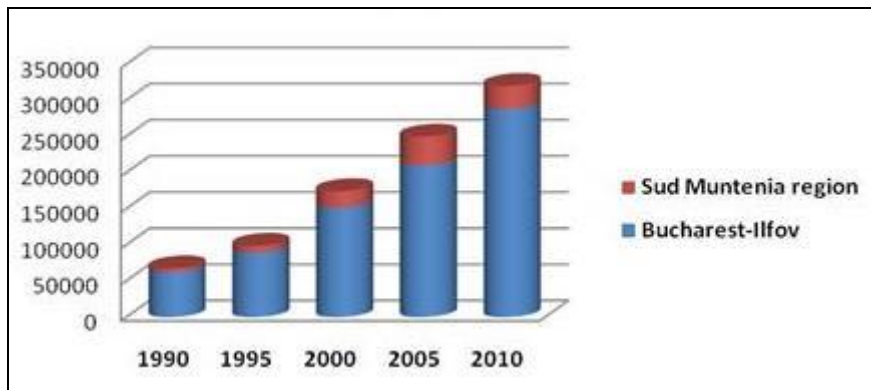


Fig. 12. Participation of the population to tertiary education (regional level)

(Data Source: National Institute of Statistics)

In addition, it can be noticed that the higher-education population in the Bucharest-Ilfov region have grown geometrically during the time span analyzed. While, in 1990, the Bucharest-Ilfov region registered 62,080 people with higher education, in 2010 there were 287,771 people enrolled in higher-education institutions in the Bucharest-Ilfov region; only 251 of them were found in Ilfov County, with the others enrolled in schools in the capital city. The number of people pursuing higher education in the Bucharest region rose 4.6 times from 2000 to 2010. In the South-Muntenia region, the number of higher-education people rose for about 6 times. In 1990, there were 5,339 people in the South-Muntenia region, and in 2000, the region exceeded 20,000 people enrolled in higher-education institutions. In 2010, there were 32,017 people.

The current economic recession has brought about important economic and social changes worldwide (Merciu et al., 2012). From this point of view, an important goal linked to cutting back the effects of the recession and boosting competitiveness is the development of a highly-skilled workforce.

There is an ever-increasing concern among government policy-makers and the public for increasing the quality and the degree of participation in education and professional training. From the perspective of the members of civil society, educational results are deemed essential factors to productivity and competitiveness (Buchel, 2002 quoted by Mora et. al., 2006).

The analysis of workforce resources places ever more emphasis on the qualities of employees, as well as on other quality indicators (abilities, skills), as they are deemed factors that can contribute to increasing productivity and competitiveness on the market (Merciu et al., 2012).

The level of education influences labor market insertion and consequently the acquisition of a qualified job (Ianoş et al., 2013).

In the Innovation Union Report it is specified to promote education and skills development in order to create an excellent, modern education system in all Member States.

Low educational attainment is regarded as an obstacle to both personal and professional development and is also a disadvantage for society's purpose of dropping the disparities and inequities between individuals or groups. Low educational attainment is one of the main determinants of personal income and employment status (Siesta ESPON-Draft Scientific Report, 2012).

One may expect an increased involvement of the new EU member states in the education and permanent training programs as a result of the support granted by way of the European Social Fund to the conduct of education and training programs. Recently, there have been important changes in the organization and implementation of education and professional training programs in most developed countries.

Lately, there have been major modifications in organizing and implementing the education and training processes in most of the countries with developed economy. The Western European countries consider that a competitive and competent labor force and an educational system sensitive to the changes occurred on labor market are decisive factors in ensuring economic performance.

In the last years, many European countries follow the trend of establishing connections between the education field and the economic requests through professional education and training programs.

Because of the fact that the education level is more and more related to the labor market insertion process, it is considered that a superior training level is equivalent to a higher employment chance. More and more measures are being taken in this respect in the EU space, applying from the inferior education levels, in order to ensure a solid instruction: in lower secondary education, learning at least one foreign language is compulsory in every country (Mejer et al., 2010). This tendency correlates with one of the targets proposed by the EU, which is a teenager to know at least two foreign languages. Nevertheless, this objective is considered to be a useful quality for the young people in obtaining a job, because it is considered that the risk of unemployment for young people is much higher for those with poor educational qualifications (Reich et al., 2008 quoted by Merciu et al., 2012).

Low educational attainment in a population signifies labor force with restricted skills and subsequently constitutes a hindrance in long term economic growth. The document “New Skills for new Jobs” (2010) certifies the importance of acquiring multiple skills for the opportunity to have a new job. This is related to a higher education attainment. According to recent projections, in 2015, around 30% of jobs are expected to require qualifications on the level of higher education and almost half will require at least medium level qualifications at upper secondary education levels.

Low-skilled workforce is a big issue that needs to be faced in order to promote a smart, sustainable and inclusive growth economy, basically through flexibility. At the same time, a low level of education is frequently associated with a high poverty rate, generating vulnerable social groups.

Investments in human capital are among the conditions necessary for long-term economic prosperity.

The general targets and the actions that should be pursued in the field of education in the Bucharest-Ilfov region are as follows: equal and increased access to education; high quality of education and the preparation of knowledge-based society; decentralization and de-politicisation of the educational system; the transformation of education into the core resource for modernisation; viewing investments in human capital as the most profitable investment on the long run; adjustment to European guidelines and ending the isolationism of Romanian education of the past few years; the institutional development of permanent education (Ianoş, 2010).

Universities in the Bucharest-Ilfov region contribute to the creation of a highly-skilled workforce thanks to their role as a creative catalyst (Ianoş, 2010).

Higher education in the Bucharest-Ilfov region is provided by both state-run education institutions in Bucharest and by private institutions.

The educational system in the South-Muntenia region is becoming a modern and diversified one, developed in parallel with the economic reorganisation in the area.

IV. CONCLUSIONS

It is proven that the education of a person (measured in the number of years spent in the education system) is direct proportional with the quality of the education received (usually, defined as cognitive and non-cognitive skills, abilities, values or other psychological and behavioural traits acquired during the education process). The learning process is highly complex because it entails a multitude of relations between the teaching staff and the students, involving a certain curriculum and teaching techniques, unfolding against a vast social context blending the values promoted by the school, by the social institutions and by the students' families.

Romania went through difficult times during the early 1990s, when the transition was made from the centralized regime to the free-market economy, with political and economic changes bringing about a series of social and cultural after-effects. The effects on education were both positive and negative, involving either the reorganization of vocational schools, or major changes in the reform of the higher-education system (the transition from centralized education to university autonomy, the diversification of disciplines matching the diversification of the national economy).

As far as the selected case study is concerned, one may conclude that both the Bucharest city and its metropolitan area are characterized by high-quality education services, with an increase in the ratio of higher-education people registered in the past few years as a result of the emergence of new higher-education institutions. In addition, one notices the reorganization of the curriculum reform in industry-focused university centres.

The Bucharest university centre stands out in terms of both of the large number of higher-education institutions, offering a wide range of specialties, and experienced teaching staff and the technical facilities.

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