

## ASPECTS OF EARLY LEAVING EDUCATION AND TRAINING SYSTEMS FROM THE PERSPECTIVE OF TERTIARY EDUCATION

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### ABSTRACT

*Sustainable development can only be achieved by increasing the role of education. Education provides basic skills and knowledge without which social and environmental issues cannot be overcome. Different social and economic reasons prevent young people from working or studying. The article presents an analysis of the issues related to early leaving of education and training systems. Early leaving out of education and training systems hinders integration into the labour market. This affects the participation of adults in learning, but also the subsequent continuation of studies in higher education. Thus, a situation regarding the graduation of tertiary studies is presented.*

**KEYWORDS:** *education, graduates, youth*

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### 1. INTRODUCTION

Education is one of the important components of the Europe 2020 Strategy. Education and training fulfill fundamental functions in terms of demographic, socio-economic, environmental and technological challenges faced by the countries of the European Union. Sustainable development can only be achieved by increasing the role of education. Education provides basic skills and knowledge without which social and environmental issues cannot be overcome.

Comparing educational systems is difficult due to the different educational content and structure. However, the International Standard Classification of Education (ISCED) and the Program for International Student Assessment (PISA) are used to reflect the development of education systems worldwide.

At the same time, the main objective of the Bologna Process is to establish and promote a comparable European system for higher education, and to promote employment on the labour market. The European Credit Transfer and Accumulation System (ECTS) was also adopted to promote student mobility.

There are rapid transformations in the economy and society. Measures are needed to increase employment rates and social inclusion. Socio-economically disadvantaged people should have access to lifelong learning. In order to achieve the transition to a knowledge-based economy, it is necessary to modernize and improve education and training systems.

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The possession of skills and abilities, enabling people to evolve, are essential factors for increasing competitiveness in the European Union.

At the same time, certain characteristics of the family from which students come, such as income and parenting, are in strong relationships with pupils' performance. Thus, it is believed that increasing educational outcomes can be achieved through additional school resources by lowering the size of pupils' classes, by allocating a higher annual duration to school, and by awarding higher salaries to teachers (Vintilă et al. 2017).

The early exit of education and training systems makes integration into the labour market more difficult (Kleinert et al. 2018).

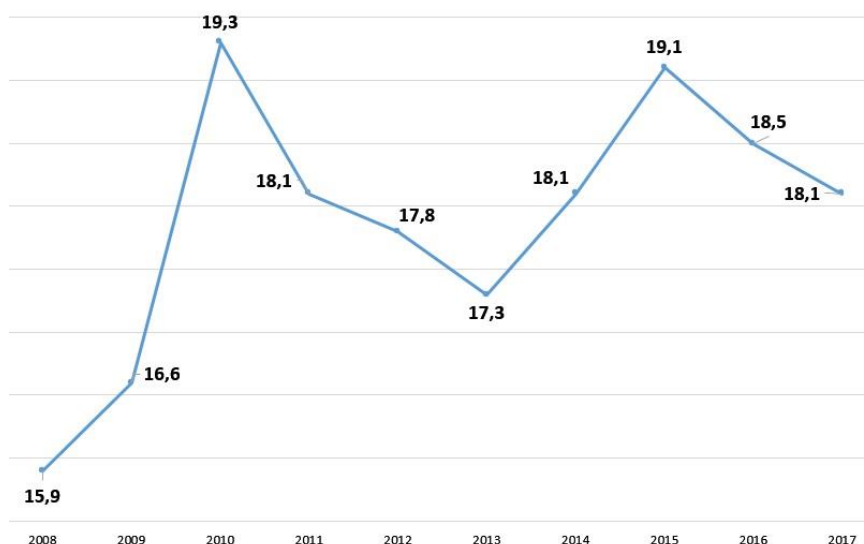
Thus, Table 1 presents the comparative situation for the early leavers from education and training, from 18 to 24 years, for the years 2008 and 2017, in the countries of the European Union.

**Table 1. The comparative situation for the early leavers from education and training**

	2008	2017
European Union	14,7	10,6
Austria	10,2	7,4
Belgium	12,0	8,9
Bulgaria	14,8	12,7
Croatia	4,4	3,1
Cyprus	13,7	8,6
Czech Republic	5,6	6,7
Denmark	12,5	8,8
Estonia	14,0	10,8
Finland	9,8	8,2
France	11,8	8,9
Germany	11,8	10,1
Greece	14,4	6,0
Hungary	11,7	12,5
Ireland	11,7	5,1
Italy	19,6	14,0
Latvia	15,5	8,6
Lithuania	7,5	5,4
Luxembourg	13,4	7,3
Malta	27,2	18,6
Netherlands	11,4	7,1
Poland	5,0	5,0
Portugal	34,9	12,6
Romania	15,9	18,1
Slovakia	6,0	9,3
Slovenia	5,1	4,3
Spain	31,7	18,3
Sweden	7,9	7,7
United Kingdom	16,9	10,6

*Source:* made by the authors based on data published on website of the Eurostat, 2018.

The data show that in 2017 the highest values are registered in Malta, Spain, Romania, Italy, and the lowest values in Slovenia, Poland, Ireland, Lithuania. Compared to 2008, in 2017, early leavers from education and training fell to Portugal, Spain, Malta and Greece. In order not to reduce education to simple learning, adult education and learning can make contributions to Agenda 2030 by recognizing the inseparable elements that link individuals to complex social life (Milana et al. 2017). For Romania, the evolution of this indicator is shown in Figure 1.



**Figure 1. Evolution of early leavers from education and training**

*Source:* made by the authors based on data published on website of the Eurostat, 2018.

It is noted that for the period 2008-2017, the indicator has a relative growth trend.

Globally, there are a number of challenges that, unresolved, can lead to bottlenecks and obstacles. These challenges include coordinating collective action between a multitude of actors; mobilizing adequate funding to address the scale and scope of the Sustainable Development Sustainability Goal Agenda; and addressing the gaps in three primary generating conditions - the necessary human capacity, efficient institutions and political will. The conclusion of effective partnerships at global, regional and national level can lead to real progress in the sustainable development objective of education.

A number of factors have made national education systems affected by change. Thus, increased internal and external mobility has allowed movements of families and individuals both within countries and beyond national borders. Increasing the degree of globalization of economies has allowed for increased interdependence between countries. Also, the day-to-day spread and use of new technologies and digital platforms has increased access to enormous amounts of information and the media. These changes have significantly affected labour markets. At the same time, the trajectories of people's careers, as well as the types of skills that employers are looking for, have been influenced. Now, education and training systems must be reformulated so as to enable young people to find a job that will give them success in work and in life. The existence of innovations in the field of education and training are important through the bases that they place in the manifestation of progress in other areas (Benavot & Naidoo, 2018).

The evolution of another indicator is shown in Table 2.

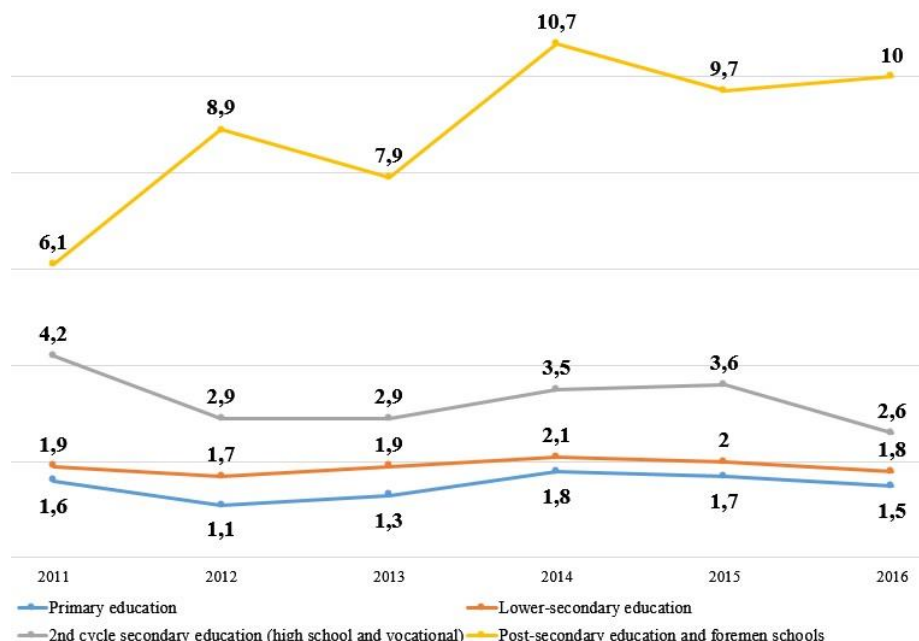
**Table 2. Abandon rates in pre-university education, by development regions**

Levels of education	Development regions	2011	2012	2013	2014	2015	2016
Primary education	Total	1,6	1,1	1,3	1,8	1,7	1,5
	- Northwest	1,3	0,9	1	1,4	1,6	1,4
	- Center	2,3	1,7	1,8	2,7	2,3	2,4
	- North east	1	0,9	1	1,3	1,2	1,1
	- South east	1,8	1,5	1,7	2	1,9	2,1
	- South-Muntenia	1,6	0,9	1,2	1,8	1,6	1,5
	- Bucharest-Ilfov	1,8	0,8	1,1	1,6	1,4	1,2
	- South -west Oltenia	1,3	0,8	0,9	2	1,7	1,5
	- West	1,8	1,3	1,7	2,1	2,1	0,9
	Lower-secondary education	Total	1,9	1,7	1,9	2,1	2
- Northwest		1,7	1,4	1,5	1,8	1,9	1,9
- Center		2,6	2,3	2,7	3,1	2,8	2,9
- North east		1,5	1,7	1,5	1,8	1,7	1,5
- South east		2,6	2,1	2,3	3	2,3	1,9
- South-Muntenia		2	1,8	1,9	2,1	1,9	1,8
- Bucharest-Ilfov		1,6	1	1,7	0,5	1,4	1,4
- South -west Oltenia		1,7	1,5	1,2	2,1	1,4	1,4
- West		2	1,8	2,1	2,7	2,6	1
2nd cycle secondary education (high school and vocational)		Total	4,2	2,9	2,9	3,5	3,6
	- Northwest	3,8	3	3,1	3,2	3	2,4
	- Center	4,1	3,6	3,8	4,6	4,6	3,6
	- North east	4,8	3,1	3,2	3,7	3,3	2,4
	- South east	4,7	3,2	2,3	3,5	3,6	3
	- South-Muntenia	3,2	2,6	2,2	2,7	2,7	2,1

Levels of education	Development regions	2011	2012	2013	2014	2015	2016
-	Bucharest-Ilfov	4,8	2,2	2,8	3	3,8	2,1
-	South -west Oltenia	3,7	2,3	2,8	3,6	3,4	2,5
-	West	4,5	2,8	2,7	4,4	4,8	3,4
Post-secondary education and foremen schools	Total	6,1	8,9	7,9	10,7	9,7	10
-	Northwest	4,9	9,1	10,1	11,3	12,1	10,8
-	Center	5,6	8,7	8,4	12,3	13,2	12,6
-	North east	6,2	7,8	7,4	11,6	9,6	10,7
-	South east	8,7	10	8,2	10	10,2	12,3
-	South-Muntenia	6,6	7,9	4,7	8,9	9,6	5,2
-	Bucharest-Ilfov	5	8,6	6,7	10	:	13,6
-	South -west Oltenia	5	9,7	9,3	10,7	10	8,2
-	West	7,3	9	7,3	10,4	12,5	11,4

*Source:* made by the authors based on data published on website of the NIS, 2018.

From the data presented in the table, it can be noticed that for second cycle secondary education, abandonment rate decreased in 2016 compared to 2011 in Bucharest-Ilfov and North East. It also grew up for Post-secondary education and foremen schools in Bucharest-Ilfov and Northwest. The evolution of this indicator for these levels in 2011-2016 is shown in the following figure.



**Figure 2. Evolution of abandon rates in pre-university education**

*Source:* made by the authors based on data published on website of the NIS, 2018.

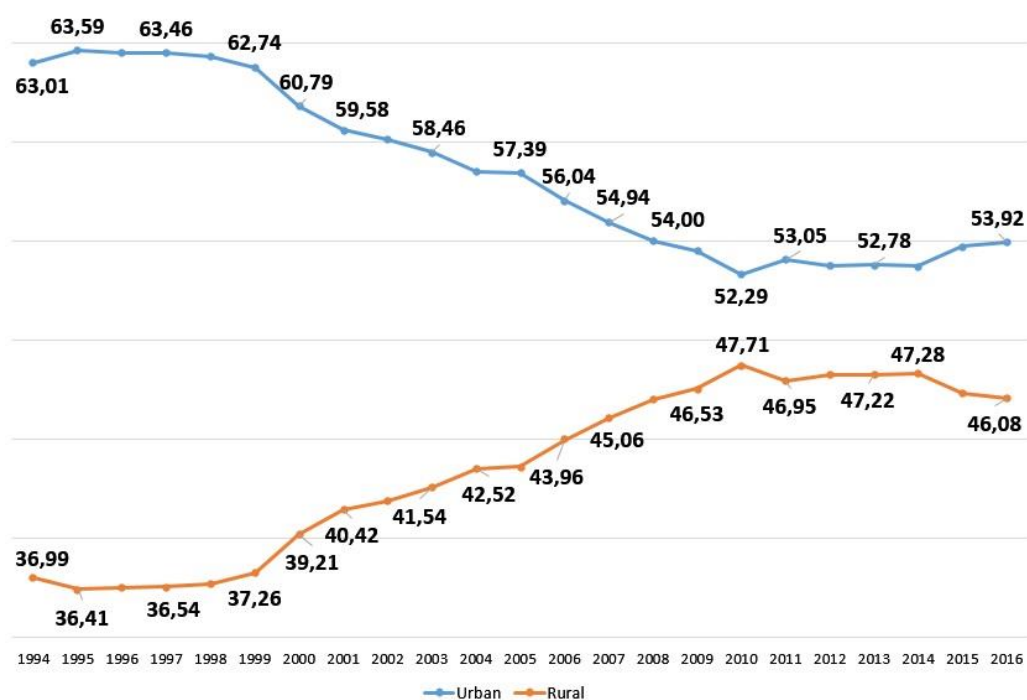
Different social and economic reasons prevent young people from working or studying. For a community, issues related to the phenomenon of early school leaving are a social issue.

Considering that even people without formal education can find a job, some people do not want to learn. This, even if they are aware that the incomes of the persons who complete the studies will be higher than their income. Another reason for abandonment can be the high effort that has to be made to form in a particular job, considered as cost-effective.

School abandonment is also influenced by young people's belonging to disadvantaged families. If learning has not been appreciated by the generation of parents, in many cases, this attitude has also entered the minds of children. Thus, some parents have neither experience nor authority, nor do they have the knowledge to provide help and guidance.

In some cases, for people who only have primary school education and do not have a qualification, finding a job is almost impossible. Thus, in these cases, the motivation of children for work is very limited. For people without work there is a lack of tasks and routine activities (routine). In many cases, basic skills are lacking: punctuality, efficient time management, quality work, performance, effective conflict management, etc. Not having the requisite qualifications on the labour market, some young people work most often in atypical jobs. These lower jobs are just survival tools, they cannot be attractive models for a teenager and cannot be the starting points for creativity and personal fulfillment (Csoba and Herrmann, 2017).

Figure 3 shows the evolution of the share of urban and rural graduates in primary and lower-secondary education for the period 1994-2016



**Figure 3. Evolution of the share of urban and rural graduates for primary and lower-secondary education**

*Source:* made by the authors based on data published on website of the NIS, 2018.

The previous figure shows that, in the period 1994-2010, the share of graduates in the urban environment decreased, growing in rural areas.

The educational level of the population in developed countries has increased. From the point of view of the development of economies, this aspect involves both positive and negative effects. A negative aspect is given by the lack of certain competences of higher education graduates. As a result, these graduates will take jobs that are below the level of the theoretical skill gained. It is necessary to analyze the factors that determine the inadequacy of the acquired competences and qualifications and the requirements of the labour market.

The following table presents a comparative situation of the share of graduates of higher education for the member countries of the European Union for the age group 30-34 years.

**Table 3 - Population by Tertiary education**

	2008	2017
European Union	31,1	39,9
Austria	21,9	40,8
Belgium	42,9	45,9
Bulgaria	27,1	32,8
Croatia	18,5	28,7
Cyprus	47,1	55,8
Czech Republic	15,4	34,2
Denmark	39,2	48,8
Estonia	34,4	48,4
Finland	45,7	44,6

	2008	2017
France	41,0	44,3
Germany	27,7	34,0
Greece	25,7	43,7
Hungary	22,8	32,1
Ireland	46,1	53,5
Italy	19,2	26,9
Latvia	26,3	43,8
Lithuania	39,9	58,0
Luxembourg	39,8	52,7
Malta	21,0	30,0
Netherlands	40,2	47,9
Poland	29,7	45,7
Portugal	21,6	33,5
Romania	16,0	26,3
Slovakia	15,8	34,3
Slovenia	30,9	46,4
Spain	41,3	41,2
Sweden	42,0	51,3
United Kingdom	39,5	48,3

Source: made by the authors based on data published on website of the Eurostat, 2018.

In 2017, the highest percentages were registered in Lithuania, Cyprus, Ireland, Luxembourg and Sweden. In 2017, compared to 2008, the values increased in Austria, Czech Republic, Slovakia, Greece, Lithuania.

For Romania, the evolution is shown in Figure 4.

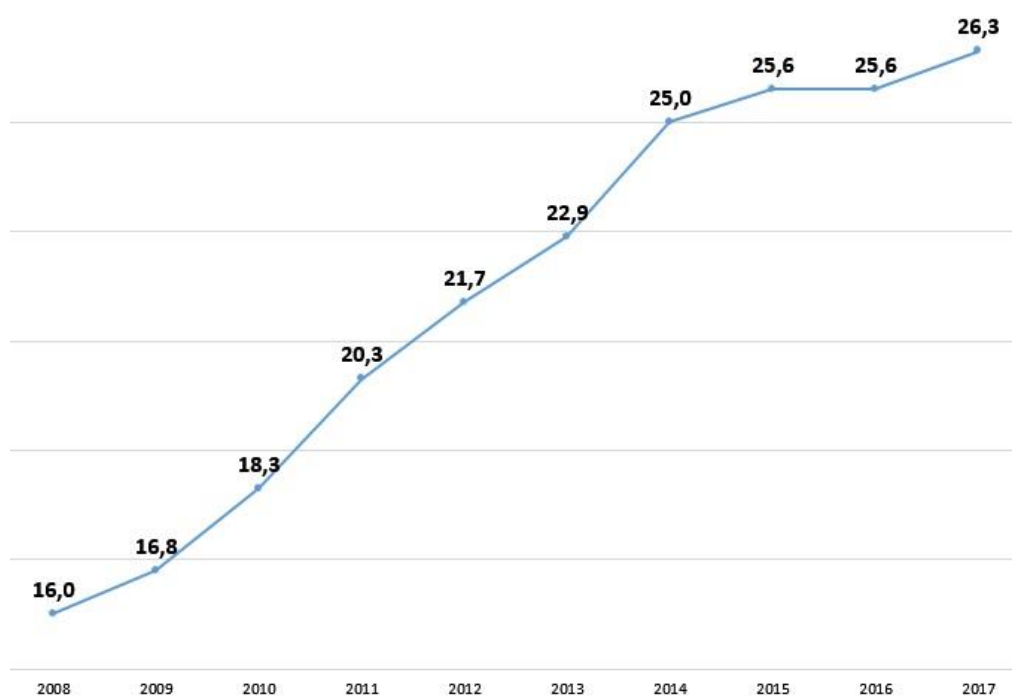


Figure 4. Evolution of the share of graduates in higher education



*Source:* made by the authors based on data published on website of the Eurostat, 2018.

For the period 2008-2017, there is an increasing trend.

The International Standard Classification of Education (ISCED) is a framework used to compile and analyze statistics on education. ISCED has been reviewed several times. The latest revisions were made in 2011 and 2013. In 2011, the review consisted in changing education levels by introducing a classification of qualifications-based levels of education. In 2013, the review focused on education and training (ISCED-F) (UNESCO, 2015).

The main areas are:

- 00 General programs and qualifications
- 01 Education
- 02 Arts and Humanities
- 03 Social sciences, journalism and information
- 04 Business, administration and law
- 05 Natural Sciences, Mathematics and Statistics
- 06 Information and Communication Technology
- 07 Engineering, production and construction
- 08 Agriculture, forestry, fish farming and veterinary sciences
- 09 Health and social work
- 10 Services

From this point of view, the following table shows the weights of ISCED-F graduates, of all graduates, for the years 2014, 2015 and 2016, in Romania.

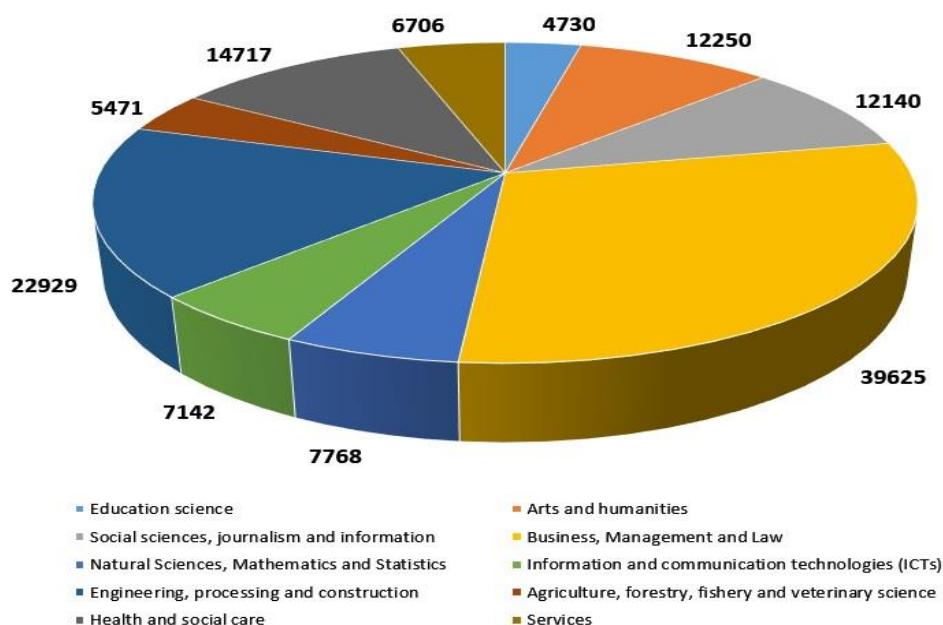
**Table 4.- Population by Tertiary education degree graduates for ISCED-F**

	2014	2015	2016
ISCED-F 2013: Education science	3,54	4,15	4,96
ISCED-F 2013 Arts and humanities	9,18	9,77	9,05
ISCED-F 2013: Social sciences, journalism and information	9,10	9,10	8,64
ISCED-F 2013: Business, Management and Law	29,69	28,39	27,67
ISCED-F 2013: Natural Sciences, Mathematics and Statistics	5,82	5,71	5,33
ISCED-F 2013: Information and communication technologies	5,35	4,92	5,57
ISCED-F 2013: Engineering, processing and construction	17,18	18,14	18,23

	2014	2015	2016
ISCED-F 2013: Agriculture, forestry, fishery and veterinary science	4,10	4,02	4,40
ISCED-F 2013: Health and social care	11,03	10,30	11,60
ISCED-F 2013: Services	5,02	5,50	4,54

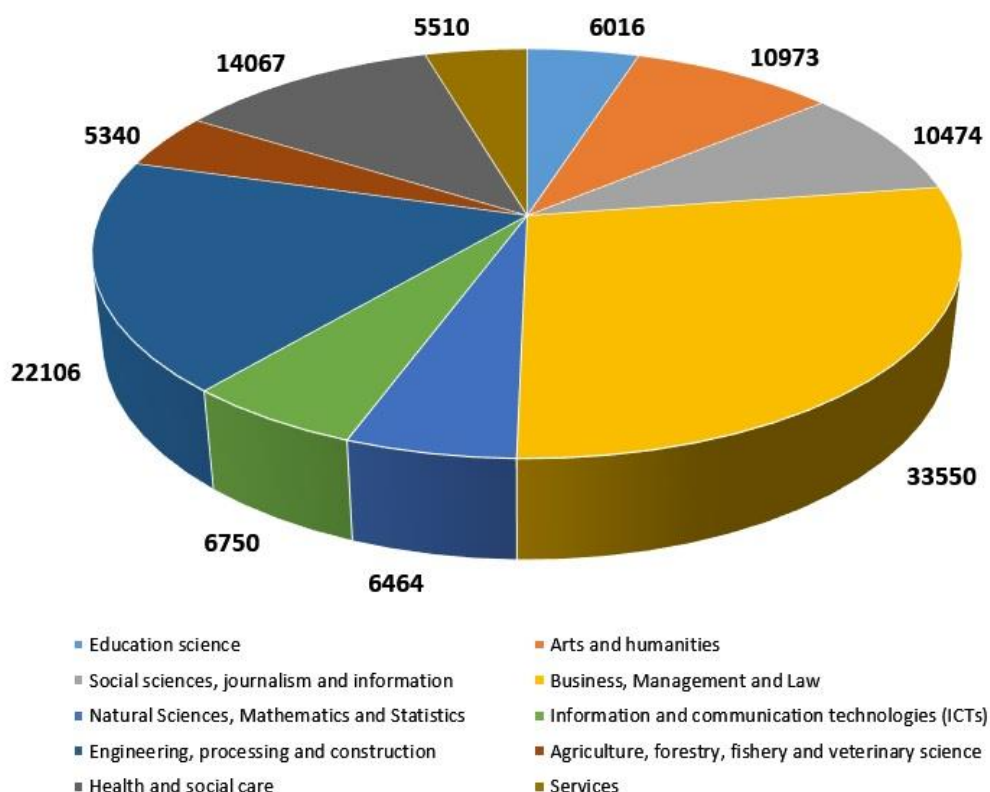
Source: made by the authors based on data published on website of the NIS, 2018.

For 2016, there is a decline in graduates in business, management and law. Also, the share of graduates in engineering, processing and construction has increased. Observations noted for the graduates' weight are also valid for Figures 5 and 6.



**Figure 5. Graduates by ISCED-F for 2016**

Source: made by the authors based on data published on website of the NIS, 2018.



**Figure 6 - Graduates by ISCED-F for 2014**

*Source:* made by the authors based on data published on website of the NIS, 2018.

It can be said that it is quite difficult to make changes to the educational policies known as national education systems are quite specific and are not easy to change in the short term. However, the growing need for new skills justifies constantly updating curricula and adjusting content to fit emerging needs.

The rapid digital transformation of the economy has led to many jobs requiring a certain level of digital competence.

Strengthening human capital formation in Europe does not necessarily mean spending more (public) money on education than spending it more efficiently. The rethinking of national education policies (possibly involving structural reforms) seems necessary to achieve better performance. Thus, a smart and efficient use of human capital will require the application of specific national measures (Canton et al., 2018).

## 2. CONCLUSIONS

The implications of the globalized economy influence the preservation and growth of international competitiveness. The transformation of centralized economies into market economies required increased openness and integration and was accompanied by improved international competitiveness in most Central and Eastern European countries (Mulliqli et al. 2018).

The existence of a high percentage of people with higher education in a community, irrespective of its size, has important implications for increasing competitiveness.

In addition to simple technical skills, business models have changed in recent years. Thus, opportunities and new working patterns have been created, involving different sets of competencies, and require access to skills upgrading opportunities. Thus, these challenges involve the

implementation of investment measures in the digital skills training for the entire education and training system, starting from early education.

In order to attract new student groups and provide students with appropriate knowledge for future society, changes in engineering education and training are required so that engineers cope with contemporary societal changes (Berge et al. 2018).

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