

CHARACTERISTICS OF EDUCATION AND EMPLOYMENT IN EUROPEAN URBAN AREAS

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Abstract

The highest proportion of jobs in the economy could be found in the urban areas of the European Union. Therefore, the characteristics of the labour force are different in the urban environment from the rural one. Also, urban areas are characterized by high social mobility. This allows the inhabitants to benefit from a high variety of available occupations. The implementation of modern production technologies requires the presence on the labour market of graduates with high qualifications. The present article analysis aspects concerning the level of education of the urban population, as well as of the employment rates of recent graduates.

Keywords: employment; education; European Union; population; urban environment.

1. INTRODUCTION

Urban areas are considered areas with the most opportunities for development. At the same time, it can be considered that urban areas are also possible points where social conflicts can arise (Androniceanu, 2017). The new development models of some cities have changed their traditional role. Cities and suburbs in the European Union provide a large proportion of the total number of jobs available in the economy (Sanda & Krupka, 2018). Also, in the European Union, the most important source of employment in urban

areas is provided by services. Thus, professional, financial or IT services benefit from the input of highly qualified personnel.

Compared to rural areas, in urban areas social mobility is higher. The level of pay is higher and productivity is increased. All these aspects make urban areas contribute to economic growth at regional and local level. Compared to rural areas, employment rates in cities are considerably higher. Female people in cities have higher participation rates in the labour market. Thus, in the countries of the Eastern European Union, due to the employment rates and the higher earnings in cities, there is an expansion of the population from the rural to the urban areas.

Economic, social and political processes can be influenced by the changes manifested in the structure by age groups. The aging of the population means that the periods of time in which the elderly benefit from medical assistance and material support are greater. The decrease in the number of the young population produces long-term effects for the sustainability of the social insurance and health funds. Changing the way financial resources are allocated can cause certain social and political pressures. It is recognized that, for the well-being of the people and for the economic development of a society, education is a necessity, but also a right (UNESCO, 2018). Involvement in personal life and outside of it, in the workplace, is correlated with the degree of use of skills at work and in everyday life. At the same time, the characteristics related to the workplace influence the way in which the competences in the workplace are used (OECD, 2016b).

2. ASPECTS CONCERNING EDUCATION AND EMPLOYMENT

The level of education gives us an image of the share of the population that has a certain level of education and has acquired a qualification for that level. Thus, a qualification certifies the type of skills, knowledge and skills that the graduates have acquired. A high level of education is associated with high individual and social outcomes (OECD, 2015).

From the point of view of population structure, the demographic old-age dependency ratio gives us an image of the degree to which the active population is burdened.

Thus, this represents the ratio between the number of persons aged 65 and over (the age when they are generally economically inactive) and the number of persons between the ages of 20 and 64 (per 100 persons). The demographic old-age dependency ratio gives us an image of the degree to which the active population is burdened.

According to the data available on the Eurostat website, the evolution of this indicator for the member countries of the European Union, for the period 2010-2019, is presented in Table 1.

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TABLE 1 - THE EVOLUTION OF THE DEMOGRAPHIC OLD-AGE DEPENDENCY RATIO (PER 100 PERSONS)

Countries	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria	:	:	:	29,2	29,6	:	:	:	:	:
Belgium	28,6	28,5	29,0	29,4	:	30,4	:	31,3	31,8	:
Bulgaria	27,7	28,0	30,0	30,6	31,4	32,4	33,4	34,1	34,9	:
Cyprus	20,1	20,8	20,2	20,8	21,9	23,3	24,2	:	:	:
Czechia	:	25,3	26,5	27,5	28,5	29,5	30,7	31,7	:	:
Denmark	:	28,5	29,6	30,6	:	:	:	:	:	:
Estonia	27,5	28,8	28,7	29,3	30,0	30,9	31,5	32,3	32,9	:
Finland	28,3	29,3	30,6	31,9	33,2	34,4	35,5	36,4	37,5	:
France	28,7	29,3	29,9	30,7	31,7	32,6	33,6	:	:	:
Germany	34,1	33,8	33,8	33,9	34,1	34,6	34,7	35,2	35,5	:
Greece	:	32,0	:	:	:	:	:	:	:	:
Hungary	26,5	:	26,9	27,4	28,0	28,7	29,4	30,2	30,8	:
Ireland	:	18,9	:	:	:	:	:	:	:	:
Italy	33,7	33,9	34,5	35,2	35,7	36,4	37,0	37,6	38,0	:
Latvia	:	29,8	30,1	30,3	30,9	31,7	32,3	33,1	33,7	:
Lithuania	:	29,7	:	30,0	30,3	30,8	31,3	31,9	32,6	:
Luxembourg	:	28,2	:	:	:	:	:	:	:	:
Malta	:	:	:	:	:	29,3	29,9	30,4	30,1	:
Netherlands	25,1	25,6	26,8	28,0	29,0	29,9	30,6	:	:	:
Poland	20,7	21,2	21,9	22,8	23,7	:	:	:	:	:
Portugal	29,9	30,7	31,4	32,0	32,9	33,8	34,6	35,5	36,3	37,0
Romania	22,4	22,6	22,7	23,0	23,7	24,3	:	25,5	26,0	:
Slovakia	18,8	19,3	19,5	20,0	20,6	21,4	22,2	23,3	24,3	25,3
Slovenia	:	25,7	:	26,9	27,6	28,5	29,6	30,7	:	:
Spain	26,6	27,6	27,6	28,2	29,0	30,0	30,5	31,0	31,5	:
Sweden	31,6	31,5	:	:	:	:	:	34,5	34,7	:
United Kingdom	:	:	:	:	:	30,3	30,6	30,9	:	:

From the data presented in the previous table, it is observed that, compared to 2010-2011, in the years 2018-2019, the demographic report of dependency for elderly persons increased in the following countries: Finland (+9,2 persons), Bulgaria (+7,2 persons), Portugal (+7,1 persons), Slovakia (+6,5 persons), Czechia (+6,4 persons), The smallest increases were recorded for Germany (+1,4 persons), Lithuania (+2,9 persons) and Sweden (+3,1 persons).

Besides the demographic structure, another important aspect is the level of education of the population. Thus, Table 2 shows the level of education of the population in the age group 15-64 years, for the year 2018 (%).

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TABLE 2 - THE LEVEL OF EDUCATION OF THE POPULATION IN THE AGE GROUP 15-64 YEARS, 2018 (%)

Countries	Less than primary, primary and lower secondary education (levels 0-2)	Upper secondary and post-secondary non-tertiary education (levels 3 and 4)	Tertiary education (levels 5-8)
European Union	25,5	45,8	28,7
Austria	18,9	51,0	30,1
Belgium	26,3	37,7	36,0
Bulgaria	21,5	53,6	24,8
Croatia	18,7	59,3	22,0
Cyprus	21,9	38,7	39,4
Czechia	12,1	66,2	21,7
Denmark	26,1	41,1	32,7
Estonia	16,8	47,3	35,9
Finland	17,7	45,1	37,3
France	24,4	42,8	32,8
Germany	19,6	55,2	25,2
Greece	28,7	43,6	27,7
Hungary	20,2	58,1	21,7
Ireland	21,5	38,0	40,5
Italy	40,3	42,6	17,1
Latvia	15,3	54,7	30,1
Lithuania	11,7	52,3	36,1
Luxembourg	27,6	34,2	38,3
Malta	44,7	31,1	24,2
Netherlands	26,0	40,9	33,0
Poland	13,5	59,3	27,2
Portugal	49,8	27,6	22,5
Romania	26,3	58,2	15,5
Slovakia	14,4	63,6	22,0
Slovenia	16,4	54,9	28,7
Spain	40,8	25,2	34,0
Sweden	21,2	41,8	37,1
United Kingdom	19,7	41,0	39,3

It is noted that the countries in which the population share of levels 5-8 is higher are: Ireland (40.5%), Cyprus (39.4%), United Kingdom (39.3%), Luxembourg (38.3%), Finland (37.3%), Sweden (37.1%), Lithuania (36.1%), Belgium (36%). Also, the countries with the lowest values are: Romania (15.5%) and Italy (17.1%).

For levels 0-2 of education, the countries where the weights are the lowest are: Lithuania (11.7%), Czechia (12.1%), Poland (13.5%), Slovakia (14.4%). At the same time, for levels 0-2 of education, the countries in which the weights are highest are: Portugal (49.8%), Malta (44.7%), Spain (40.8%), Italy (40.3%), Greece (28.7%), Luxembourg (27.6%), Belgium (26.3%), Denmark (26.1%), Holland (26.0%).

From the data presented in Table 2 it follows that in several countries the population share of levels 0-4 is preponderant. These countries are: Romania (84.5%), Italy (82.9%), Czech Republic (78.3%), Hungary (78.3%), Croatia (78%), Slovakia (78%), Portugal (77.4%), Malta (75.8%), Bulgaria (75.1%).

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Given that cities represent densely populated urban areas, and towns and suburbs are considered urban areas with intermediate density, the population weights for the age group 15-64 years, for 2018 (%) are presented in Figure 1 and Figure 2.

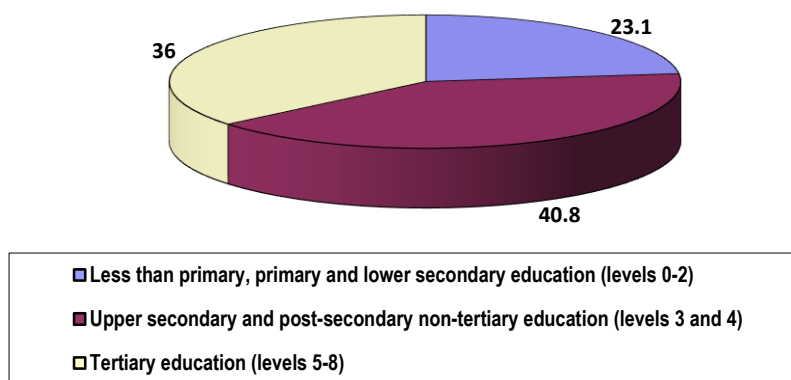


FIGURE 1 - THE POPULATION WEIGHTS IN CITIES FOR THE AGE GROUP 15-64 YEARS, 2018 (%)

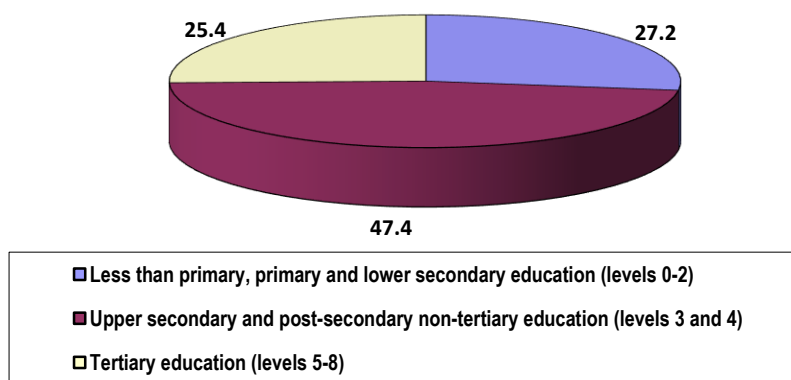


FIGURE 2 - THE POPULATION WEIGHTS IN TOWNS AND SUBURBS FOR THE AGE GROUP 15-64 YEARS, 2018 (%)

It is observed that for both situations, the highest weights are represented by the population with 3-4 levels of education. For Cities, the share of the population with levels 5-8 of education is higher than for the population of Towns and suburbs (36% versus 25,4%). Countries where the population of levels 5-8 of education in cities have the highest weights are: Luxembourg (64,5%), Lithuania (49,2%), Ireland (48,7%), Sweden (46,5%), Cyprus (45,8%). At the same time, in the following countries the share of the population in cities with the level of education 3-8 is the highest: Lithuania (92,2%), Slovakia (91,1%), Poland (90,5%), Croatia (89,8%), Latvia (89%), Hungary (88,5%).

Considering the importance of a higher level of education, Table 3 presents the evolution of the population weights of level 5-8, from the age group 30-34 years, for the period 2004-2018 (%).

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TABLE 3 - THE EVOLUTION OF THE POPULATION WEIGHTS OF LEVEL 5-8, 30-34 YEARS, 2004-2018 (%)

Countries	2004	2006	2009	2012	2015	2018
European Union	26,9	28,9	32,3	36	38,7	40,7
Austria	20,9	21,1	23,4	26,1	38,7	40,7
Belgium	39,9	41,4	42	43,9	42,7	47,6
Bulgaria	25,2	25,3	27,9	26,9	32,1	33,7
Croatia	16,8	16,7	21,3	23,1	30,8	34,1
Cyprus	41	46,1	45	49,9	54,5	57,1
Czechia	12,7	13,1	17,5	25,6	30,1	33,7
Denmark	41,4	43	40,7	43	47,6	49,1
Estonia	28,3	32,5	36,3	39,5	45,3	47,2
Finland	43,4	46,2	45,9	45,8	45,5	44,2
France	35,6	39,7	43	43,3	45	46,2
Germany	26,8	25,8	29,4	31,8	32,3	34,9
Greece	25,1	26,9	26,6	31,2	40,4	44,3
Hungary	18,5	19,4	24	29,8	34,3	33,7
Ireland	38,6	41,9	50,4	52,2	53,8	56,3
Italy	15,6	17,6	19	21,9	25,3	27,8
Latvia	18,2	19,3	30,5	37,2	41,3	42,7
Lithuania	30,9	39,4	40,4	48,6	57,6	57,6
Luxembourg	31,4	35,5	46,6	49,6	52,3	56,2
Malta	17,6	20,7	21,9	26,3	29,1	34,2
Netherlands	33,6	34,2	38,3	42,2	46,3	49,4
Poland	20,4	24,7	32,8	39,1	43,4	45,7
Portugal	16,3	18,3	21,3	27,8	31,9	33,5
Romania	10,3	12,4	16,8	21,7	25,6	24,6
Slovakia	12,9	14,4	17,6	23,7	28,4	37,7
Slovenia	25,1	28,1	31,6	39,2	43,4	42,7
Spain	36,9	39,4	40,7	41,5	40,9	42,4
Sweden	33,9	39,5	43,9	47,9	50,2	52
United Kingdom	33,6	36,4	41,4	46,9	47,9	48,8

At the European Union level, the evolution of this indicator is shown in the Figure 3.

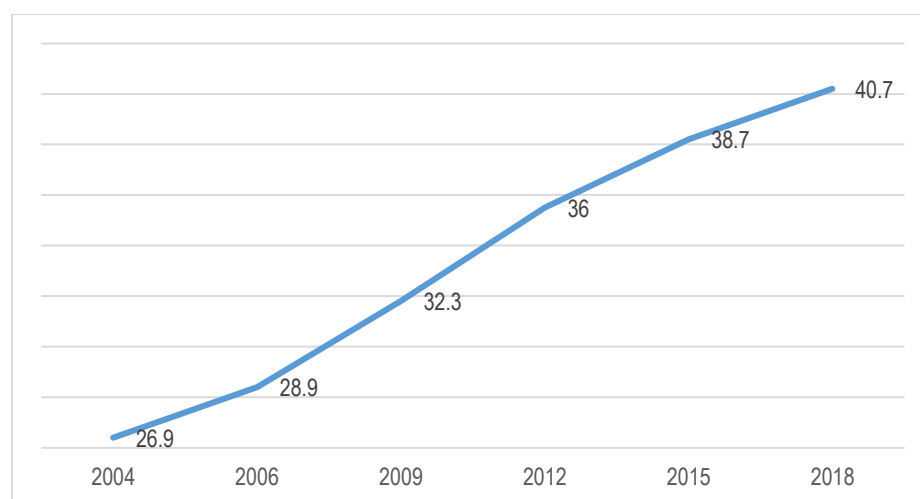


FIGURE 3 - THE EVOLUTION AT THE EUROPEAN UNION LEVEL OF THE POPULATION WEIGHTS OF LEVEL 5-8, 30-34 YEARS, 2004-2018 (%)

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For the period 2004-2018, there is an increase in values from 26,9% in 2004, to 40,7% in 2018. Also, in all countries, for this period analyzed, the level of tertiary education has increased. Compared to 2004, in 2018, the most significant increases were registered in: Lithuania (+26,7%), Poland (+25,3%), Slovakia (+24,8%), Luxembourg (+24,8%), Latvia (+24,5%), Czech Republic (+21%). Also, in 2018, the level of tertiary education was the highest in: Lithuania (57,6%), Cyprus (57,1%), Ireland (56,3%), Luxembourg (56,2%), Sweden (52%).

In the labour market, the demand for skills is constantly changing. Thus, both the structure of employment and the qualification requirements are modified. For this reason, more and more competences deficiencies and deficiencies are emerging (OECD, 2016a).

The link between education and the labour market is provided by the degree to which graduates are placed on the labour market. Thus, Table 4 presents the evolution of the employment rates of recent graduates for the population in the age group 20-34 years of upper secondary, post-secondary non-tertiary and tertiary education (levels 3-8), for the period 2007-2018 (%).

TABLE 4 - THE EVOLUTION OF THE EMPLOYMENT RATES OF RECENT GRADUATES FOR THE POPULATION IN THE AGE GROUP 20-34, LEVELS 3-8, 2007-2018 (%)

Countries	2007	2009	2012	2015	2018
European Union	80,9	78,3	75,9	76,9	81,7
Austria	89,7	87,9	90,6	86,9	88,6
Belgium	82,1	81,0	80,9	79,5	83,4
Bulgaria	72,3	73,6	67,3	74,6	78,6
Croatia	72,7	76,3	60,2	62,9	71,2
Cyprus	82,3	81,1	73,0	68,9	78,9
Czechia	87,6	84,5	82,3	82,2	89,6
Denmark	90,9	87,9	84,1	81,7	85,9
Estonia	86,4	67,7	74,9	80,4	81,7
Finland	82,8	77,8	80,7	75,5	81,7
France	79,7	77,3	76,4	72,4	78,0
Germany	84,2	85,3	88,9	90,4	92,1
Greece	68,0	65,2	43,0	45,2	55,3
Hungary	80,0	75,5	73,3	80,4	87,5
Ireland	90,4	77,3	70,8	77,9	84,3
Italy	66,2	60,6	54,1	48,5	56,5
Latvia	81,3	69,7	74,3	78,8	84,1
Lithuania	83,9	73,0	75,6	82,1	84,7
Luxembourg	88,0	85,5	84,6	84,7	87,9
Malta	93,4	92,9	92,5	95,0	94,8
Netherlands	93,5	92,3	88,1	88,2	92,0
Poland	74,8	78,4	73,3	77,4	83,1
Portugal	81,2	82,4	67,5	72,2	80,6
Romania	79,3	77,6	70,2	68,1	77,4
Slovakia	81,0	74,4	68,6	75,2	83,4
Slovenia	81,6	82,3	73,2	71,5	84,2
Spain	86,0	73,0	63,6	65,2	75,4
Sweden	85,3	81,6	83,2	85,9	88,5
United Kingdom	85,7	80,1	81,5	85,8	86,7

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It is noted that in 2018 the highest employment rates of recent graduates, levels 3-8, were registered in: Malta (94,8%), Germany (92,1%), Holland (92,0%), and the lowest in: Greece (55,3%) and Italy (56,5%).

It is also noted that most countries have experienced the crisis triggered in 2008. Values are lower in 2009 compared to 2007. Subsequently, employment rates increased gradually, so that in 2018 many countries had the highest values in 2018 the last ten years. The biggest increases compared to 2009 are observed in: Latvia (+14,4%), Estonia (+14%), Hungary (+12%), Lithuania (+11,7%), Slovakia (+9%) , Ireland (+7%). The evolution of this indicator, at European level, is shown in Figure 4.

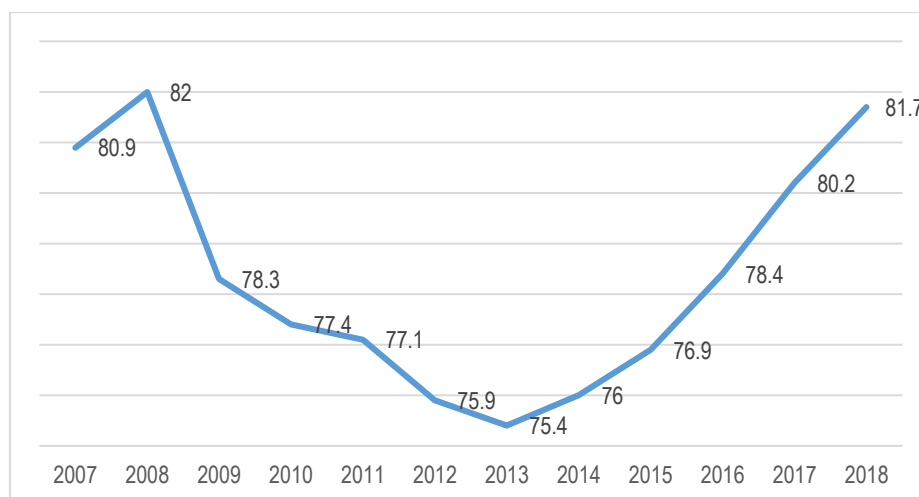


FIGURE 4 - THE EVOLUTION AT THE EUROPEAN UNION LEVEL OF THE EMPLOYMENT RATES OF RECENT GRADUATES FOR THE POPULATION IN THE AGE GROUP 20-34, LEVELS 3-8, 2007-2018 (%)

Thus, at European level, there is a decrease for the period 2008-2013, followed by an increase in the employment rates for the period 2013-2018. Also, the value registered in 2018 is approximately equal to that registered in 2008 (82%).

3. CONCLUSIONS

Education, vocational training and lifelong learning play an essential role in the economic and social strategies of the European Union.

The aging of the population leads to an increase in the demographic report of dependency of the elderly for all the Member States of the European Union.

In the last years, due to the technological advances, the share of the population of level 3-8 of education has increased, and the cities offer the highest weight for 5-8. The analysis shows that, at European level, in 2004, the share of the population with level 5-8 education was 26.9%. In 2018, this indicator rose to 40.7%.

In some countries, in high density cities, the population of level 5-8 of education approaches 50%, and in others the population of level 3-8 of education is about 90%.

Employment rates have increased gradually, so that in 2018 many countries had the highest values in the last ten years.

The highest share of jobs in the economy is provided by cities, towns and suburbs. In some large European cities, services are the most important source of jobs. Thus, in Paris and Inner London, the service sector provides over 90% of jobs (EC, 2016b).

The major social and financial challenges that may arise in the future, in the member countries of the European Union, can be avoided by overcoming the barriers regarding both the socio-economic status and those regarding the status of immigrant. Thus, educational policies should aim to increase the level of motivation to learn, explore and improve attitudes (EC, 2016a).

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