

# Education and Employment in European Urban Communities

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## Abstract.

**Research background:** In the context of globalization, education processes are of great importance for the development of urban communities. Identifying the needs of the labour market should be the goal of any organization that provides education and training.

**Purpose of the article:** Globalization leads to the emergence of new specializations and qualifications. In order to facilitate the acquisition of competencies and abilities specific to new qualifications and specializations, it is necessary to involve education and training providers.

**Methods:** The article analyses the evolution of the employment rate, respectively of the unemployment rate. Urban communities need to respond to new societal, economic and environmental challenges.

**Findings & Value added:** One of the major problems of urban communities is the risk of poverty and social exclusion. Thus, for the Member States of the European Union, the article presents the comparative situation of people at risk of poverty and social exclusion. For the Member States of the European Union, the evolution of the participation rate in education and training programs is followed in this article. The article also presents an analysis of the level of education of the urban population. Due to urban concentrations, the launch of new products and services is much easier.

**Keywords:** *European Union; education; training; employment*

**JEL Classification:** *I21; I25; J21*

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## 1 Introduction

In the context of globalization, education processes are of great importance for the development of urban communities. Identifying the needs of the labour market should be the goal of any organization that provides education and training. The labour market is changing as a result of digitalization, automation, technological progress. Population mobility has also begun to increase due to the digitization process. These changes put pressure on education and training systems. Often, the skills required by the labour market differ from the skills that graduates present themselves with when they want to occupy a job. Thus, there is a need to invest in education [1]. Investments in research and innovation have also led to the emergence of new technologies.

At European level, recognizing the value of the potential of education and training systems contributes to the realization of the European area of education. One of the challenging tasks for any society is given by the creation and implementation of new models in the field of education [2]. Economic growth, by focusing on the development of digital skills, allows the creation of new jobs [3].

Demographic characteristics, as well as social and economic characteristics, influence the educational needs of pupils and students. Graduates' performance may increase based on a high quality of education received [4]. An increased ability to adapt to change is a consequence of acquiring and possessing appropriate social, civic as well as entrepreneurial competences. Changes in education at the level of members of a society reduce inequities and influence social issues [5]. An increase in the number of tertiary graduates contributes to increased productivity, but it is considered that, for educational investment, this measure should be based on long-term planning strategies.

Students' participation in debates about the life of a society is facilitated by approaching familiar or comfortable topics. Otherwise, this can be a difficult endeavor, and student involvement becomes a challenge [6]. Recommended learning methods for students include learning through discovery and reflection. One of the models that has changed in recent years is given by technology education. The evolution from an emphasis on skills to an emphasis on technology education has enabled the acquisition of higher-level thinking skills, which has involved decision-making, critical thinking or problem solving [7]. This demonstrates the decisive role that teachers play in the process of academic and social integration of students [8]. Thus, by applying different training methods, knowledge can be developed and improved much more easily [9]. For different learning environments we identify different training practices [10]. In order to develop appropriate work habits, for the development of their own careers, students need training and volunteering internships [11]. Also, the development of professional and personal skills allow the acquisition of skills and competencies of employment [12]. However, the approach to solving well-framed problems in the education process does not involve solving multidimensional, complex problems in the workplace [13].

Globalization leads to the emergence of new specializations and qualifications. In order to facilitate the acquisition of competencies and abilities specific to new qualifications and specializations, it is necessary to involve education and training providers. The chances of finding a job are greatly diminished when contact with the labour market is lost [14]. Improving the quality of education and training processes can lead to the creation of new opportunities for young people [15, 16]. In educational contexts, collective learning, through cooperation between colleagues, is considered to lead to better academic results [17]. Achieving by the tertiary level graduates the best possible results in the workplace is also based on how they have learned to organize their time and resources [18]. Employment does not mean that the danger of poverty or social exclusion has disappeared.

Unemployment and low wages lead to loss of protection against poverty. Education and training can help to remove marginalization and the risk of social and economic exclusion [19]. Education and training processes allow members of a community to identify answers to local problems [20]. In this way, education and vocational training also participate in efforts to improve the quality of life. It is considered that in urban communities, health conditions as well as infrastructure contribute to increasing the quality of education [21].

The challenges in the labour market are easier to overcome if the members of society are people with high competences. Technological progress has led to a decrease in the number of jobs that require a low level of training. This has led older generations of graduates to focus on updating competences or acquiring new competences. As the number of tertiary graduates increases, the labour market reacts by providing a higher number of jobs for higher education graduates [22]. Through university-type teaching, those competencies are transmitted that bring the world of education closer to the world of work [23]. At work, an employee has to perform increasingly complex tasks. For this reason, in order to prevent certain discrepancies, intervention measures are needed both in the labour market and in the field of education. The new skills requirements also call for measures to adapt education and training systems. In this sense, correct decisions can be made by knowing the labour force needs, respectively the labour market trends.

## **2 Methods**

For the period 2010-2019, the article presents the evolution of the share of the European population in the 15-64 age group, depending on the educational attainment level and degree of urbanization. Also, the evolution of the unemployment rate for the period 2010-2019 is presented, for the population living in cities, respectively in towns and suburbs, as well as the comparative situation, for the population aged between 15 and 64 years.

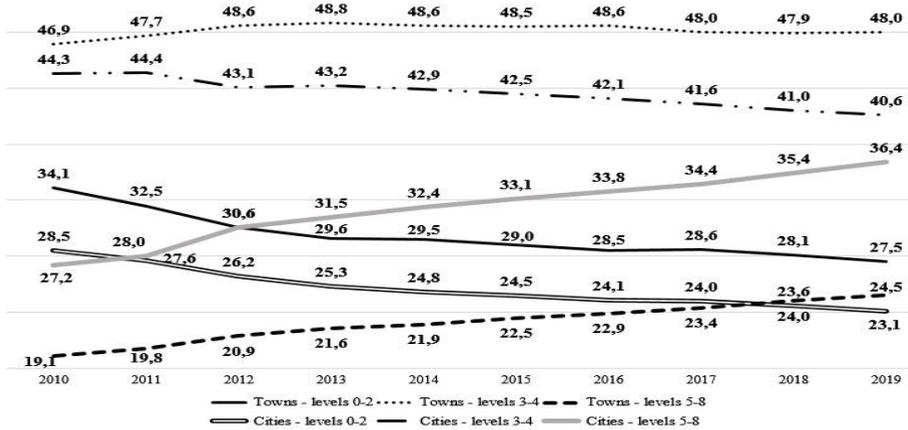
For the period 2010-2019, the evolution of employment rates for people living in cities and towns and suburbs is analyzed. At the same time, for 2019, the comparative situation of employment rates by educational attainment level and degree of urbanization is presented, for people in the age group 15-64 years.

From the point of view of the field of education, as well as of the labour market, it is important to know the share of people exposed to the risk of poverty and social exclusion. The article presents the comparative situation of the share of people exposed to the risk of poverty and social exclusion, for 2010 and 2018, for cities and towns and suburbs.

## **3 Results and Discussions**

At the level of the European Union, the evolution of the share of the population in the age group 15-64 years, depending on the educational attainment level and degree of urbanization, for the period 2010-2019, is shown in Figure 1. It was taken into account that cities are considered to be more densely populated areas, and towns and suburbs are those areas that have an intermediate density.

It is observed that the highest share is for the population of towns and suburbs which has 3-4 levels of education (upper secondary and post-secondary non-tertiary education). For the period 2010-2019, the share of the population of levels 3-4 in towns and suburbs, together with the share of the population of education levels 5-8 (tertiary education) in cities, respectively towns and suburbs, had an increasing trend. Also, the share of the population of levels 0-2 (less than primary, primary and lower secondary education) had a decreasing trend.



**Fig. 1.** The evolution of the share of the population in the age group 15-64 years, depending on the educational attainment level and degree of urbanization, for the period 2010-2019 (%).

In 2019, the countries where the share of the population from cities, with education levels 5-8, was over 45% are: Luxembourg (70.4%), Lithuania (50.6%), Ireland (48.9%), Sweden (47.3%), Cyprus (46.9%), Finland (45.6%). Also, the countries where the share of the population in towns and suburbs, with education levels 5-8, was over 34% are: Ireland (39.1%), Belgium (35.8%), Cyprus (35.7%), Finland (35.7%), Sweden (34.6%), Luxembourg (34.0%).

From a regional point of view, the European regions where the share of population with education level 5-8 is the highest are: Warszawski stoleczny (Poland) (49.9%), Sostines regionas (Lithuania) (49.4%), Prov. Walloon Brabant (Belgium) (47.9%), Basque Country (Spain) (46.6%), Stockholm (Sweden) (45.9%). This means that one in two people has a level of education between 5 and 8. At the same time, the European regions with the lowest shares are in Romania: North-East (9.9%), South-Muntenia (11.2%), South-East (12.2%). This means that in these regions, one in ten people between the ages of 15 and 64 has a higher education (levels 5-8).

**Table 1.** The comparative situation of the unemployment rate for the population aged 15 to 64, living in cities, towns and suburbs, respectively for the entire population (%).

Degree of urbanisation	Total			Cities			Towns and suburbs		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Gender									
European Union	6,8	6,5	7,2	7,7	7,7	7,8	6,6	6,2	7,1
Belgium	5,4	5,8	5,0	9,0	9,7	8,2	3,7	4,0	3,5
Bulgaria	4,3	4,6	3,9	2,5	2,5	2,4	4,1	4,7	3,4
Czechia	2,1	1,8	2,4	2,0	1,8	2,3	2,3	2,0	2,6
Denmark	5,1	4,9	5,4	6,2	6,2	6,3	4,9	4,5	5,3
Germany	3,2	3,6	2,8	4,3	4,9	3,7	2,9	3,2	2,5
Estonia	4,6	4,1	5,1	4,3	3,3	5,3	4,7	4,5	4,9
Ireland	5,1	5,4	4,8	4,8	5,1	4,6	6,2	6,9	5,3
Greece	17,5	14,1	21,7	18,4	15,2	22,2	18,1	14,5	22,6
Spain	14,2	12,5	16,1	13,9	12,7	15,2	14,7	12,6	17,3
France	8,5	8,6	8,4	9,9	10,5	9,3	8,7	8,5	8,9
Croatia	6,7	6,2	7,3	6,1	6,8	5,4	7,2	6,0	8,6
Italy	10,2	9,3	11,3	11,1	10,8	11,3	9,6	8,5	11,2
Cyprus	7,3	6,5	8,1	7,0	7,0	7,0	7,8	6,0	9,7
Latvia	6,5	7,3	5,7	6,2	6,8	5,6	4,9	5,8	4,1
Lithuania	6,5	7,3	5,7	4,5	5,0	4,1	7,7	7,2	8,3
Luxembourg	5,6	5,7	5,5	6,5	7,7	5,0	6,4	5,8	7,0

Degree of urbanisation	Total			Cities			Towns and suburbs			
	Gender	Total	Males	Females	Total	Males	Females	Total	Males	Females
Hungary		3,5	3,4	3,5	2,6	2,2	3,1	3,6	3,4	3,9
Malta		3,5	3,3	3,7	4,8	4,5	5,1	2,3	2,2	2,3
Netherlands		3,4	3,4	3,4	3,9	4,0	3,8	2,7	2,7	2,8
Austria		4,6	4,7	4,4	8,1	8,9	7,3	3,9	3,8	4,0
Poland		3,3	3,1	3,7	2,9	2,9	2,9	3,5	3,3	3,9
Portugal		6,7	6,1	7,3	7,2	6,9	7,5	6,3	5,7	6,8
Romania		4,0	4,4	3,5	2,7	3,1	2,2	4,6	4,8	4,3
Slovenia		4,5	4,1	5,0	5,2	5,1	5,3	4,3	3,9	4,7
Slovakia		5,8	5,7	6,0	3,5	3,7	3,3	6,0	5,5	6,6
Finland		6,8	7,4	6,3	7,4	7,9	6,9	6,8	7,3	6,2
Sweden		7,0	6,9	7,1	7,5	7,5	7,6	6,9	6,8	7,0

From the existing data on the EUROSTAT website [24], at European level, the participation in education and training, in formal and non-formal context, increased for the period 2007-2016. Thus, for the population of cities the weights increased from 36.2% (in 2007) to 48% (in 2016), and for the population of towns and suburbs the weights increased from 33.9% (in 2007) to 44.4% (in 2016). In 2016, the countries with the highest values, both for the population living in cities and for the population living in towns and suburbs, are: Netherlands, Sweden and Austria.

For 2019, Table 1 presents the comparative situation of the unemployment rate for the population aged 15 to 64, living in cities, towns and suburbs, respectively for the entire population.

It is noted that for the population aged 15 to 64, the highest unemployment rates are in: Greece (17.5%), Spain (14.2%) and Italy (10.2%). The situation is similar in the case of the analysis made for cities; Greece (18.4%), Spain (13.9%) and Italy (11.1%), respectively for towns and suburbs: Greece (17.1%), Spain (14.7%) and Italy (9.6%).

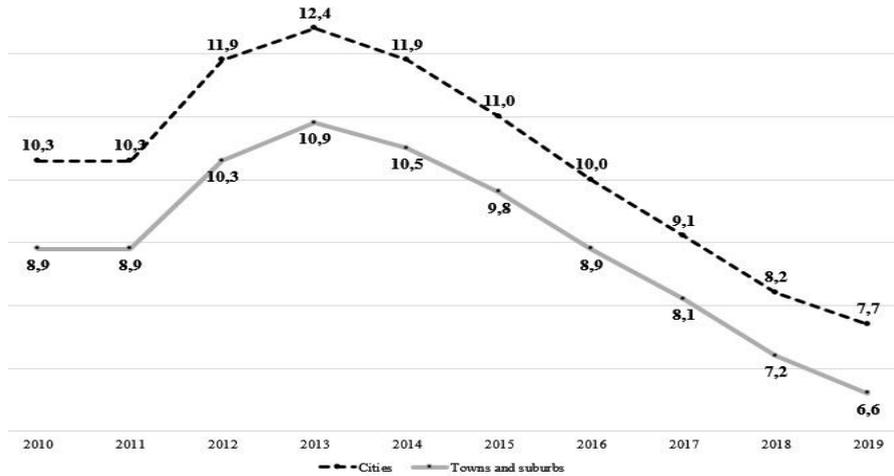
In these three countries, the situation remains the same whether it is males or females. It is observed that for females, in Greece, one person in 5 does not have a job, the shares of the unemployment rate being over 20%.

However, there are several countries where the unemployment rate is low. Of the total population, the countries with the lowest shares are: Czechia (2.1%), Germany (3.2%), Poland (3.3%), Netherlands (3.4%), Hungary (3.5%), Malta (3.5%). For the population living in cities, the countries with low weights are: Czech Republic (2.0%), Bulgaria (2.5%), Hungary (2.6%), Romania (2.7%), Poland (2.9%). For the population living in towns and suburbs, the countries with low weights are: Czech Republic (2.3%), Malta (2.3%), Netherlands (2.7%), Germany (2.9%), Poland (3.5%).

Figure 2 shows the evolution of the unemployment rate for the period 2010-2019, for the population living in cities, respectively in towns and suburbs.

It is observed that in the period 2010-2011, the unemployment rate was constant, and in the period 2011-2013, the unemployment rate increased. For the period 2013-2019, in both situations (cities, respectively towns and suburbs), the trend of the unemployment rate was a decreasing one. Thus, in 2019, the values were lower than those recorded in 2010.

Regarding the situation by region, according to data published by EUROSTAT, in 2019, the regions with the lowest unemployment rates were in: Praha (1.3%), Střední Čechy (1.3%), Jihozápad (1.6%), Severovýchod (1.7%) and Jihovýchod (1.9%), all from the Czech Republic, respectively Nyugat-Dunántúl (1.8%) and Közép-Dunántúl (1.9%), both from Hungary.



**Fig. 2.** The evolution of the unemployment rate for the period 2010-2019, for the population living in cities, respectively in towns and suburbs (%).

By contrast, the highest unemployment rates were recorded in: Mayotte (France) (30.3%), Ciudad Autónoma de Ceuta (26.0%) and Ciudad Autónoma de Melilla (Spain) (27.1%), respectively Dytiki Ellada (24.4%) and Dytiki Makedonia (Greece) (24.8%).

For 2019, Table 2 presents the comparative situation of employment rates by educational attainment level and degree of urbanization, for people in the age group 15 - 64 years.

**Table 2.** The comparative situation of employment rates by educational attainment level and degree of urbanization, for people in the age group 15 - 64 years (%).

Degree of urbanisation	Cities			Towns and suburbs		
	Levels 0-2	Levels 3 - 4	Levels 5-8	Levels 0-2	Levels 3 - 4	Levels 5-8
European Union	43,4	68,5	84,6	46,4	72,9	84,7
Belgium	31,2	60,0	81,6	39,1	70,3	85,0
Bulgaria	35,4	73,9	89,0	36,1	78,0	88,7
Czechia	28,1	80,1	86,4	28,5	80,7	83,9
Denmark	50,5	75,4	86,3	53,5	81,8	88,0
Germany	46,6	76,9	88,0	51,0	82,0	89,4
Estonia	40,5	80,5	87,5	39,8	77,0	85,2
Ireland	36,0	69,5	86,2	32,1	68,9	84,1
Greece	28,8	50,3	76,3	32,4	55,4	74,4
Spain	50,8	60,3	80,5	53,0	62,0	80,1
France	36,9	60,7	82,1	39,4	65,6	83,2
Croatia	17,2	63,9	84,9	25,1	65,8	79,7
Italy	40,8	63,2	80,6	45,0	65,8	78,3
Cyprus	42,9	68,5	83,7	47,8	73,3	84,2
Latvia	32,4	73,0	89,9	34,9	75,1	88,1
Lithuania	18,4	73,1	91,9	26,6	71,5	88,6
Luxembourg	37,1	63,0	86,5	46,1	65,4	84,2
Hungary	33,5	72,9	86,2	36,2	75,2	84,4
Malta	63,2	74,5	86,4	62,5	74,6	90,6
Netherlands	57,4	77,4	87,7	65,5	82,9	90,4
Austria	41,4	69,7	80,9	51,8	76,5	87,0
Poland	21,9	67,4	89,1	21,4	67,7	87,4
Portugal	57,6	72,4	86,8	63,8	74,8	84,8

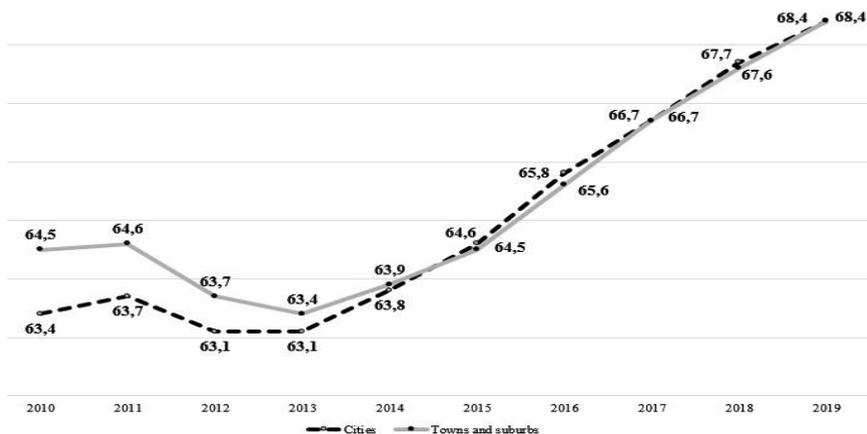
Degree of urbanisation	Cities			Towns and suburbs		
Educational attainment level	Levels 0-2	Levels 3 - 4	Levels 5-8	Levels 0-2	Levels 3 - 4	Levels 5-8
Romania	28,3	67,1	90,5	38,5	67,8	87,3
Slovenia	29,0	69,2	89,3	34,4	73,6	88,7
Slovakia	13,6	75,8	83,2	18,5	73,9	79,9
Finland	37,7	71,4	86,2	38,2	74,7	86,1
Sweden	44,2	78,8	87,5	45,5	83,6	89,8

From the presented data it is observed that, both for the population living in cities and for the one in towns and suburbs, the employment rate for people with less than primary, primary and lower secondary education (levels 0-2) is over 50% in the countries: Malta, Portugal, Netherlands, Spain, Denmark, Germany.

Also, for people with upper secondary and post-secondary non-tertiary education (levels 3-4), the employment rate is over 75% for the population living in cities in: Estonia, Czechia, Sweden, Netherlands, Germany, Slovakia, Denmark. The employment rate for people with upper secondary and post-secondary non-tertiary education (levels 3-4) is over 80% for the population living in towns and suburbs in: Sweden, Netherlands, Germany, Denmark, Czechia.

For people living in cities and having tertiary education (levels 5-8), the employment rate is over 88% in: Lithuania, Romania, Latvia, Slovenia, Poland, Bulgaria, Germany. At the same time, the employment rate is over 88% for the population living in towns and suburbs and has tertiary education (levels 5-8) in the countries: Malta, Netherlands, Sweden, Germany, Bulgaria, Slovenia, Lithuania, Latvia, Denmark.

Figure 3 shows the evolution of employment rates for people living in cities and towns and suburbs, for the period 2010-2019.



**Fig. 3.** The evolution of employment rates for people living in cities and towns and suburbs, for the period 2010-2019 (%).

It is observed that if in the period 2011-2013 the trend was decreasing, for the period 2013-2019, the employment rates trend is an increasing one. Thus, in 2019, both for those living in cities and for those living in towns and suburbs, the employment rate is 68.4%.

Knowing the share of people at risk of poverty and social exclusion is important both in terms of education and the labour market. Thus, Table 3 presents the comparative situation of the share of persons exposed to the risk of poverty and social exclusion, for 2010 and 2018, for cities, respectively towns and suburbs.

**Table 3.** The comparative situation of the share of persons exposed to the risk of poverty and social exclusion, for 2010 and 2018, for cities, respectively towns and suburbs (%).

Degree of urbanisation	Cities		Towns and suburbs	
	2010	2018	2010	2018
European Union	22,2	21,4	20,5	19,8
Belgium	24,5	29,2	16,4	15,6
Bulgaria	38,1	24,3	53,0	29,1
Czechia	12,5	12,0	14,3	12,9
Denmark	21,8	20,8	15,9	15,1
Germany	20,8	22,4	17,1	16,1
Estonia	18,2	22,1	25,9	20,4
Ireland	24,3	17,6	27,8	25,8
Greece	23,7	30,5	23,3	30,1
Spain	22,5	23,2	28,3	26,9
France	21,2	19,7	16,7	19,2
Croatia	23,9	18,3	24,6	23,5
Italy	24,4	29,2	24,8	26,1
Cyprus	24,3	20,4	20,9	28,3
Latvia	35,4	24,2	41,6	30,2
Lithuania	30,0	19,4	:	28,7
Luxembourg	21,7	24,2	12,2	25,1
Hungary	22,1	14,2	30,4	18,9
Malta	21,1	19,5	22,8	15,0
Netherlands	15,8	19,8	14,0	12,4
Austria	25,3	25,5	14,9	13,5
Poland	21,1	13,4	26,8	16,0
Portugal	22,4	20,0	25,9	19,8
Romania	29,1	18,6	39,6	24,9
Slovenia	16,8	16,3	17,3	15,6
Slovakia	15,9	10,4	19,1	16,4
Finland	16,0	16,6	16,0	16,2
Sweden	19,5	16,9	15,5	17,0

From the data presented in Table 3, it is observed that for the population living in cities, in 2018, the countries with the highest values for people at risk of poverty or social exclusion are: Greece (30.5%), Belgium (29.2%), Italy (29.2%), Austria (25.5%).

Also, for towns and suburbs, the countries with the highest values are: Latvia (30.2%), Greece (30.1%), Bulgaria (29.1%), Lithuania (28.7%), Cyprus (28.3%), Spain (26.9%), Italy (26.1%), Ireland (25.8%).

However, compared to 2010, in 2018, for some countries, the share of people at risk of poverty or social exclusion decreased. Thus, for the population of cities we have: Bulgaria (-13.8%), Latvia (-11.2%), Lithuania (-10.6%), Romania (-10.5%). For the population of towns and suburbs we have: Bulgaria (-23.9%), Romania (-14.7%), Hungary (-11.5%), Latvia (-11.4%), Poland (-10.8) %).

## 4 Conclusions

Within the European Urban Agenda, local communities have an important role to play in employment and education. Cities contribute to the economic and social development of a region. The predominant manifestation of innovation and creativity in urban areas allows the realization of partnerships, which help to identify the necessary solutions for a sustainable local urban development.

The analysis of the evolution of the share of the population in the age group 15-64, depending on the educational attainment level and degree of urbanization, for the period 2010-2019, showed that the highest share is for the population in towns and suburbs, with education levels 3-4. For the period 2010-2019, the share of the population with education levels 3-4 in towns and suburbs, together with the share of the population of education levels 5-8 in cities and towns and suburbs, respectively, had an increasing trend. Also, the share of the population with education levels 0-2 had a decreasing trend. It was found that, at European level, in the period 2007-2016, participation in education and training, in a formal and non-formal context, increased. For the period 2013-2019, in both situations (cities, respectively towns and suburbs), the trend of the unemployment rate was a decreasing one. Thus, in 2019, the values were lower than those recorded in 2010. At the same time, both for people living in cities and for people living in towns and suburbs, the period 2013-2019, the trend of employment rates was an ascending one. Sustainable urban growth in the European Union is based on job creation and economic recovery [25]. Investments in education and training also make a special contribution to economic growth. Through the contribution of education and training, the acquisition of new skills and abilities increases employment capacity. Demographic changes and environment changes, also, lead to changes in the labour market.

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