A new decade for social changes
The impact of the pandemic crisis on employment in the context of urbanization

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Abstract. The level of economic and social development of a country is closely linked to the degree of urbanization. Continuous urbanization will bring new opportunities for and challenges to sustainable development, which is closely correlated with the general level of economic and social development. Thus, the global urbanization trend has been accompanied by changes in employment, representing both a goal and a means of sustainable development at the level of all the branches of national economies. A major test for all the countries was the crisis caused by the Covid-19 pandemic, which severely impacted the labor market in Europe and beyond. This research aims to produce an overview on the employment situation in urban and rural areas for 31 countries in Europe, as well as on the impact of the Covid-19 pandemic on employment for the analyzed countries. Although cities are development centers for their countries in terms of economics and quality of life, there is also a need to improve the living conditions of rural residents and increase the attractiveness for all population segments, in order to reduce the rural-urban imbalance in terms of employment opportunities.

Keywords: Employment, urban and rural areas, urbanization, Europe.

1. Introduction

The level of economic and social development of a country is closely linked to the degree of urbanization. Urbanization is the process by which the population moves from rural to urban residence, and which, as a consequence, leads to a gradual increase in the share of the people living in urban areas.

According to the United Nations Report (2019), the world's urban population is at a record high, with the urban population share projected to account for two-thirds of the global population in 2050. The urbanization process, sometimes associated with modernization, industrialization, globalization, and the sociological process of rationalization has both positive and negative effects (Chaolin, 2020), the economic development and the existence of jobs through accessibility to the city makes these areas become attractions for the working age population. On the other hand, most rural areas are characterized by labor migration, which leads to the gradual aging of the rural population and the lack of skills in the affected areas; thus, urban areas are expanding and attracting more and more people in terms of employment. However, there are some rural regions that completely contradict this image, as they enjoy not
only economic growth, but also substantial job creation (Berkowitz and Schulz-Greve, 2001) in the pre-existing context of accentuated development disparities between urban and rural.

Therefore, a careful examination of employment in urban and rural areas is needed, taking into account the phenomenon of urbanization, given that it poses many challenges to the general well-being of people and the quality of life as a whole, being the most important factor which influences development.

2. Literature review

Continuous urbanization will bring new opportunities and challenges for sustainable development, which is closely correlated with the general level of economic and social development.

The 2030 Agenda for Sustainable Development (UN, 2015) tackles the global challenges by addressing the issue of achieving sustainable development on the three dimensions (economic, social and environmental) in a balanced and integrated way, designating 17 Sustainable Development Goals (SDGs), with a total of 169 associated targets covering key areas, such as poverty, human rights, food security, health, sustainable consumption and production, economic growth, employment, infrastructure, sustainable natural resource management, oceans, climate change and gender equality. The European Union and its Member States are strongly committed to the full implementation of the 2030 Agenda. Moreover, the Europe 2020 Strategy, which aims to make Europe smart, sustainable and inclusive, also aims to find the right means to create new jobs.

The Covid-19 pandemic was a major shock for the global and the European economy. Therefore, the Joint Employment Report from the European Commission and the Council (Bruxelles, 2020) shows that after six years of positive developments towards the employment target set out in the Europe 2020 Strategy, the employment rate moved away from the target in 2020 due to the crisis caused by the Covid-19 pandemic which severely affected the results of the labor market in the European Union. Therefore, governments took drastic measures by adopting regulations to limit and stop the spread of the disease (Stan, Rus and Tasențe, 2020), taking all the necessary measures to maintain the economic infrastructure and avoid job losses and closure of businesses operations (Stan, 2021).

The global trend of urbanization has been accompanied by changes in employment, being both a goal and a means at the level of the economy. The amount of workforce is determined by the existing economic opportunities at the level of the urban and rural areas, i.e., by the dynamics of the economic agents, and at the same time it is an important asset for stimulating economic development by correlating it with the investment dynamics (Aivaz, 2021a). At this point, governments and administrations play an important role by implementing strategies and policies regarding the infrastructure of education, health, housing, transport, water supply and sewerage, leisure and other basic public services, funding public investment programs and projects for local and regional development. Therefore, at the territorial level, solving the complex problems of the cities requires a partnership between the public and private sectors that can often lead to viable and efficient solutions for both parties (Stan, 2014).

The analysis of business development in the emerging economies has long been the focus of theoreticians’ research. The predilection for asset management and work efficiency are current issues in all countries, the most analyzed topics being those related to the evolution of workforce, turnover and investments, in a study perspective of a correlative nature (Aivaz, 2020; Mirea and Aivaz, 2016). Identifying the discrepancies between these indicators and the levels recorded in various regions have become a growing concern for the awareness of business...
opportunities and the particularities of different sustainable development strategies (Tofan and Aivaz, 2022), given that legislative developments require the establishment of insurance on environmental issues, which must be assumed by companies (Brășoveanu, 2016).

In terms of urbanization, cities offer important opportunities for economic and social development, always being focal points for economic growth, innovation, and employment (Cohen, 2006). On the other hand, rural areas sometimes offer insufficient or underpaid jobs, which leads to a migration of the active population to the cities. Thus, the focus of the economy has shifted from rural to urban areas (Erdin and Ozkaya, 2020), the employment prospects are better in cities, but the migration generated by the transition of the population from rural to urban environments can cause serious problems in terms of labor markets. Labor migration generates a shortage of skilled human capital, on the one hand, and on the other hand, there are certain sectors of economic activity in which the lack of labor in general is beginning to stand out.

Depending on the level of development of European countries, small and medium-sized enterprises dominate economic life, representing the backbone of the European economy, producing 58% of the European Union's GDP and representing 67% of all private sector jobs.

3. Methodology and data
This research aims to present an overview on the situation of the employed population aged 20-64, from urban and rural areas, in 31 European countries. The countries chosen for the analysis have the following structure: EU-27 Member States (from 2020) and 4 other European countries, of which 2 are members of the European Economic Area (EEA).

The specific research objectives are: (i) an analysis of employment in urban and rural areas, by sex, for the 31 European countries; (ii) the impact of the Covid-19 pandemic on employment in Europe.

For the undertaken analysis we have used the data provided by Eurostat, the Statistical Office of the European Union, for the 2019-2021 period. The analyzed database, which includes 31 European countries, was created by applying several filters: the topic general and regional statistics, the degree of urbanization (cities and rural areas), the indicator employment by sex, age, seniority in the workplace and degree of urbanization were selected. The 31 European countries resulted after applying the filters are the following: all EU-27 Member States (from 2020) - Austria (AT), Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Cyprus (CY), Croatia (HR), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (EL), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), Hungary (HU); Iceland (IS) and Norway (NO) - EEA Member States; Switzerland (CH) and Serbia (RS). The centralization and systematization of data, as well as obtaining the indicators used in the statistical description were performed with the help of the Statistical Program for the Social Sciences (SPSS).

4. Results and discussion
This article analyzes the absolute values recorded in terms of the number of the employed population aged 20-64, from urban and rural areas, in 31 European countries, compared to the calculated mean value. The quantitative analysis of the data set covering the 2019-2021 interval was represented in graphs in relation to the mean deviation. Consequently, the position of the countries above the horizontal axis indicates the fact that the values recorded
in terms of the number of employed population aged 20-64 in urban and rural areas is above the calculated mean level, and those below have values below the average level.

Recent studies on the analysis of the gender gap at the level of European labor markets (Castellano and Rocca, 2019) have shown that European countries show significant differences in employment rates for men compared to women. Eurostat statistics show that in 2018 the employment rate in the EU (for the 20-64 age group) was the highest (73.1%), being higher among men than women. In 2019, the average European EU-27 employment rate was 73%, down from the value recorded in 2018. In addition to this, labor market interventions, through measures to reduce the impact of the Covid-19 pandemic, left their mark on the years 2020 and 2021. Thus, the effect of the measures taken by the governments generated in the EU economy in 2021, over 5.2 million jobs, thus drawing an additional 3.5 million people to the labor market, according to the European Commission.

Over time, specialized literature has analyzed gender equality at the level of the labor market under a variety of dimensions, such as institutional and macroeconomic conditions (Brunet and Jeffers, 2019) or education, political regime, unemployment, pay, etc.

Figure 1 graphically shows the number of employed (for the 20-64 age group) male population in cities for the 31 countries in Europe. One can notice that, by far, Germany is the country that registers in all the 3 years analyzed the largest number of male employees in the urban area, being on an upward trend, well above the calculated annual mean values. Thus, in 2019 the employed male population recorded a value of 7,629.4 thousand, in 2020 - 7,974.2 thousand, increasing by 4.51% compared to 2020, and in 2021 a value of 8,026 thousand, increasing by approximately 0.65% compared to the year 2020.

Along with Germany, in 2019, the countries with values above the mean level of 1,341.9 thousand were: Spain (5,574.8 thousand), France (5,852.3 thousand), Italy (4,131.8 thousand), the Netherlands (2,435.3 thousand), Poland (3,138.9 thousand) and Romania (1,591.5 thousand).
thousand). In Europe there are areas where urban expansion is recorded - those with a high population density, due to a dynamic economic development, such as Germany, France, Italy, the Netherlands and areas with declining populations, but recording an increase in land use, such as Poland and Hungary.

For 2020, the calculated mean value was 1,335.4 thousand people, decreasing by 0.48% compared to the mean value of 2019. The year of Covid-19 pandemic’s emergence, for some of these states, brought significant decreases in the number of men employed, such as: Spain (5,380.5 thousand) and Italy (4,059.1 thousand) – countries which were strongly affected by the impact of the SARS-CoV-2 virus, in which some economic activities were temporarily or permanently closed. The Netherlands (2,433.4 thousand), Poland (2,966.5 thousand) and Romania (1,557.2 thousand) recorded a slightly downward trend, whereas France recorded a slight increase of 1.91% compared to 2019.

For 2021, the calculated mean value was 1,355.6 thousand people, increasing by 1.51% compared to the mean of the year 2020, amid the return of the economic situation to normal. Thus, out of the 7 countries that registered values above the average level, the only one that had a decrease rate of 2.16% compared to the year 2020 was Romania, amid the complete recovery of economic activity in 2021.

The other 24 countries which were studied recorded values below the average level (negative mean deviation) in the 3 years analyzed for the male population in cities. Thus, the number of male employees in: Luxembourg in 2019 was 35.1 thousand, in 2020 - 36.1 thousand and in 2021 - 37.8 thousand; Iceland in 2019 - 60.9 thousand, in 2020 - 61.0 thousand and in 2021 - 62.1 thousand; Malta in 2019 - 71.3 thousand, in 2020 - 72.9 thousand and in 2021 - 70.5 thousand. In Luxembourg, the problem is the factors which influence land use; in Malta the rate for young people living in cities is higher than for young people living in cities and semi-dense areas or in rural areas (European Commission et al., 2020), and Iceland, although being one of the most urbanized countries in Europe, has at the same time a very low population density (Hlynsdóttir, 2020).

Regarding the number of employed female population (for the 20-64 age group) in cities for the 31 European countries analyzed, one can see from Figure 2 that the participation of women in the workforce is similar to that of men.

Furthermore, in terms of the employed female population in the urban area, Germany is by far the country with the highest values above the average, as follows: 6,833.9 thousand in 2019, 7,176.5 thousand in 2020 (up 5.01% compared to 2019) and 7,166.6 thousand in 2021, with a 0.13% decrease compared to 2020. One can notice that for this country there are no gender gaps in terms of employment, due to the rapid economic transformation as a result of appropriate economic and social policies.

At the level of the year 2019, the countries with values above the average level of 1,245.0 thousand of the employed female population in the urban area were: Spain (5,036.2 thousand), France (5,761.7 thousand), Italy (3,375.0 thousand), the Netherlands (2,189.9 thousand), Poland (2,825.1 thousand) and Romania (1,444.4 thousand).

For the year 2020, the calculated mean value was 1,241.0 thousand people, down by 0.32% compared to the average of 2019. Therefore, the restrictions introduced as a result of the health crisis affected its level, with states such as Italy, Spain and Germany being red zones. Thus, Spain (4,874.9 thousand) and Italy (3,247.3 thousand) - countries strongly affected by the impact of the Covid-19 pandemic recorded decreased values compared to the previous year. Also, Poland (2,735.9 thousand) and Romania (1,427.9 thousand) registered a slightly downward trend. On the other hand, France (5,879.9 thousand) and the Netherlands (2,197.8 thousand).
thousand) registered a slight increase compared to 2019. In the context of the closure of some economic activities and remote work, as well as of the inactivity of educational institutions, the pressure on women to withdraw from the labor market has grown even more.

Figure 2. Employed female population in cities (Source: Author’s work)

The 2020 employment target in the EU was 75% for people aged between 20 and 64 (women and men alike) and has not yet been reached by the vast majority of the countries (European Commission, 2020).

For the year 2021, the calculated average value was 1,270.3 thousand people, increasing by 2.36% compared to the average of the year 2020, amid the return to normal of the economic situation and under the effect of the changes in employment arrangements in Europe, in the direction of a greater flexibility promoted from a socio-economic perspective (Van Aerden et al., 2015).

The other 24 countries in the examined sample recorded values below the average level in the 3 years analyzed for the employed female population in the cities. As in the case of employed male persons (for the 20-64 age group), for the employed female persons in urban areas, the same countries with the lowest values apply: Luxembourg, Iceland and Malta. The countries which deviate from the negative mean value are generally those in the Central European region, where women's progress on the labor market can be hampered by the social norms regarding women's participation in the labor market and their aspirations (Brooks, Mueller and Thiede, 2021).

In urban areas, women's access to the labor market is generally based on their level of education, skills, competencies, given that organizations have introduced modern services and relevant changes, on the one hand, and on the other hand, health and general well-being indicators, literacy, women's status, and social mobility are usually higher (Cohen, 2006).
Figure 3 graphically shows the number of employed male population (for the 20-64 age group) in rural areas for the 31 countries in Europe. One can notice that, by far, France and Germany are the countries that register in all the 3 years analyzed the highest number of employed men in rural areas.

At the level of the year 2019, the countries that registered values above the average level (965.3 thousand) of the employed male population in rural areas were: Germany (4,874.1 thousand), France (4,829.6 thousand), Poland (3,345.1 thousand), Italy (3,150.3 thousand), Romania (1,893.6 thousand), Spain (1,380.5 thousand) and the Czech Republic (1,038.8 thousand).

For the year 2020, the calculated mean value was 944.7 thousand people, down by 2.13% compared to the average of the year 2019. The impact of the Covid-19 pandemic and movement restrictions at national and international level were strongly felt by the workforce in the rural areas of Europe, as follows: France (4,833.0 thousand), Germany (4,302.6 thousand), Poland (3,369.5 thousand), Italy (3,110.4 thousand), Romania (1,894.3 thousand), Spain (1,337.7 thousand) and the Czech Republic (1,030.1 thousand). One can notice that the countries that registered a slight increase in the year 2020 were France, Poland, and Romania. The rural areas of these countries were not as severely affected by the restrictions imposed by the pandemic, consisting of large areas of agricultural land where traditionally the main economic activity is agriculture. The activity of agriculture carried out in rural areas has undergone significant changes over time, not only in terms of its position within the national economies, but also in terms of its importance at the regional level. Almost every country directs a large part of its resources towards agricultural subsidies, the most important subsidization being directed towards the agricultural sector (Aivaz, 2021b). EU measures in the field of agriculture are an integral part of the Common Agricultural Policy, which focuses on
agricultural productivity and an adequate standard of living for farmers, supporting market
stability, in particular the stabilization of imports and exports (Aivaz, 2021c). There have also
been exemptions from the restrictions on the spread of Coronavirus for the people who carry
out activities or meet essential needs, such as seasonal workers in agriculture. The vast majority
of the European countries are dependent on their activity.

For the year 2021, the calculated average value was 905.8 thousand persons, decreasing
by 4.11% compared to the average of 2020, the same mentioned states registering the following
absolute values: France (4,932.2 thousand), Germany (4,346.7 thousand), Poland (3,347.4
thousand), Italy (2,112.4 thousand), Romania (1,669.1 thousand), Spain (1,379.0 thousand) and
the Czech Republic (1,022.9 thousand). Moreover, in the year 2021 the downward trend in
terms of the number of employed male population (for the 20-64 age group) in rural areas was
maintained for the following countries: Poland, Italy, Romania and the Czech Republic. Even
though economic growth was positive, the devastating effects of the pandemic, with temporary
closures in the year 2021, had negative effects on the business environment, in particular, and
on business, in general.

Moreover, for the employed male population in rural areas, the other 24 countries
recorded values below the average level (negative mean deviation) in the 3 years analyzed.
Thus, the number of employed male persons from: Malta in the year 2019 was 4.2 thousand, in
2020 - 4.2 thousand and in 2021 - 4.1 thousand; Iceland in 2019 - 15.7 thousand, in 2020 - 14.5
thousand, and in 2021 - 19.2 thousand; Cyprus in 2019 - 38.8 thousand, in 2020 - 41.9 thousand,
and in 2021 - 42.6 thousand. One can notice that in the case of Malta and Iceland the same trend
is maintained as in the case of the cities, namely although they are heavily urbanized, they have
a very low population density, Cyprus lagging behind the current trend of sustainable urban
development and the compact city model (Hadjipetrou and Stathakis, 2019).

Figure 4 graphically represents the number of employed female population (for the 20-64
age group) in rural areas for the 31 countries in Europe. One can observe that, by far, France
and Germany are the countries that register in all the 3 years analyzed the highest number of
employed women in rural areas.
At the level of the year 2019, the countries that recorded values above the average level (774.3 thousand) of the employed female population in rural areas were: France (4,467.1 thousand), Germany (4,248.3 thousand), Poland (2,401.2 thousand), Italy (2,171.3 thousand), Romania (1,185.6 thousand), Spain (1,011.2 thousand) and the Czech Republic (781.3 thousand).

For the year 2020, the calculated mean value was 751.9 thousand people, down by 2.89% from the mean value of the year 2019. The Covid-19 pandemic exacerbated many of the known problems in rural areas, highlighting the effect on the workforce in the rural areas of Europe, thus: France (4,435.1 thousand), Germany (3,771.4 thousand), Poland (2,391.6 thousand), Italy (2,103.0 thousand), Romania (1,133.7 thousand), Spain (990.6 thousand) and the Czech Republic (768.6 thousand). One can notice that the slight decrease in 2020 in all of these countries is due to the fact that women played a key role during the pandemic in rural areas, taking on the responsibility for the care of their children and families, on the one hand, and on the other hand, they are employed in sectors of the economy where work cannot be done remotely.

For the year 2021, the calculated mean value was 730.0 thousand persons, down by 2.91% compared to the average of the year 2020, the same mentioned states recording the following absolute values: France (4,601.7 thousand), Germany (3,824.8 thousand), Poland (2,471.4 thousand), Italy (1,444.2 thousand), Spain (1,044.3 thousand), Romania (883.6 thousand) and the Czech Republic (759.1 thousand). One can observe that in 2021 there was a revival in terms of the number of employed female population (for the 20-64 age group) in rural areas for the following countries: France, Germany, Poland and Spain against the background of the relaxation of the conditions for the entry into the country of foreign seasonal workers.
who come to work in agriculture. Most of the workforce is coming from Poland, Romania and Bulgaria and is of vital importance to the farms in Germany and France.

Similarly, for the employed female population in rural areas, from the other 24 countries examined, values below the average level (negative mean deviation) were registered in the 3 years analyzed. Thus, the number of employed male persons from: Malta in 2019 was 3.0 thousand, in 2020 - 2.7 thousand and in 2021 - 3.3 thousand; Iceland in 2019 - 12.0 thousand, in 2020 - 12.0 thousand and in 2021 - 17.3 thousand; Cyprus in 2019 - 33.3 thousand, in 2020 - 34.2 thousand and in 2021 - 37.7 thousand; in Luxembourg in 2019 - 48.5 thousand, in 2020 - 52.7 thousand and in 2021 - 54.9 thousand. One can notice that, as in the case of the employed male population (for the 20-64 age group) in rural areas, these countries have the lowest levels recorded.

As a result of the carried-out analysis, one can see that for the 4 categories of examined data: the employed male / female population (for the 20-64 age group) in cities, the employed male / female population (for the 20-64 age group) in rural areas, Germany, France, Italy, Spain, Poland, and Romania recorded a deviation from the positive mean. From the perspective of gender distribution, one can notice that there are no significant gender gaps in terms of employment in the 31 European countries studied.

At European level, the economic performance in Germany, France, Italy, Spain, and Poland is mainly attributed to urbanization, economic development, and tourism. Thus, Germany has half the population of Europe's largest economy, by population and economic production, living in 30 main urban agglomerations (Hennig, 2019); in France the consequences for the rural population and employment are influenced by the size and growth of urban centers (Schmitt and Henry, 2000), and in Spain the depopulation process of the rural areas has been improved by creating living conditions in ruralized areas (Nieto Masot, Cárdenas Alonso and Engelmo Moriche, 2020). Romania, which is in a period of economic recovery after the Covid-19 crisis, still has discrepancies from the European mean value in terms of labor distribution. Romania, Bulgaria, Spain, Southern Italy, regions in Northern France export workforce, while countries such as Germany, the Netherlands, Denmark, Southern France attract workforce (Antonescu, 2022).

In the cities of the Netherlands, the acceleration of urbanization took place against the background of economic and social development (the economy ranked 17th in 2021) determined by education infrastructure, health care services, transport, and opportunities for business communities, on the one hand, and on the other hand, the Dutch labor market has relatively strict regulations for employers, with employee protection.

In the Czech Republic, the number of employed population (for the 20-64 age group) in rural areas recorded values above the calculated mean level, as it has the largest average size of farms in the European Union that absorbs workforce. It also provides support to all agricultural entrepreneurs, well-paid jobs, therefore a good quality of life for the citizens (Agro BUSINESS, 2021).

Many coastal countries have witnessed a rapid and chaotic development as global trade has created jobs and stimulated economic growth (Nguyen et al., 2020), given that the main urban centers are concentrated in coastal areas and in industrial centers consolidated by development plans (Nieto Masot, Cárdenas Alonso and Engelmo Moriche, 2020), with the urbanization of tourism being the way in which cities cover significant parts of the coastal Europe.

The Covid-19 pandemic has led to the reduction of economic activity, and the measures taken in many countries have been an unprecedented economic disaster and an unexpected
stress test for the functioning of local labor markets (Ascani et al., 2021), the impact on the labor market in developing countries in Europe, in particular, has drawn attention, as governments imposed restrictions on the business activities of entities, leading to a deterioration of the financial situation of the workforce (Mikołajczak, 2022). Moreover, compared to urban areas, in rural areas, deadlocks have led to a greater increase in economic insecurity, especially for women and households with children (Arin et al., 2022), as the role of caregiver for women has increased over the pandemic period, further exacerbating gender inequalities on the labor market. However, as a result of the support measures for job retention adopted by the authorities, as well as the gradual resumption of activity in many sectors, the job market has returned to normal.

5. Conclusions

Population growth, together with the current trend of globalization and rapid technological advances are among the main causes of urbanization at European and global level, and the use of the positive effects of urbanization and the avoidance of the negative effects can favor the evolution and continuous progress of human settlements (Chaolin, 2020).

Consequently, cities are centers of development and productivity for their countries in terms of economics and quality of life. Cities need to find ways to solve the urban problems brought by urbanization, especially with regard to employment by reconciling public projects with those financed by the private system, because in addition to the economic problems, the urban positivist discourse considers them a solution to the current economic, social and environmental crises (Ungureanu, Iancu and Petrișor, 2022).

On the other hand, in order to reduce the rural-urban imbalance in terms of employment opportunities, there is a need to improve the living conditions for the people living in rural areas and to increase their attractiveness for all population segments, especially young people. The diversification of jobs and changes in the field of traditional agriculture will stop the migration of the population to urban areas that offer them jobs and better living conditions. Continued efforts are also needed to eliminate gender disparities and to move towards a dual model in which both men and women can bring in income and care for the family (European Commission, 2020).

In conclusion, in the context of urbanization, an efficient labor market management is needed for the European countries, which would suggest realistic approaches to a sustainable development, with urbanization becoming a new branch of politics and science (Erdin and Ozkaya, 2020).

References


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