

# THE PROBLEMS OF THE ECONOMIC AND SOCIAL DEVELOPMENT OF CROSS-BORDER AREAS THROUGH THE PRISM OF SALARY DISPARITIES

## PROBLEMELE DEZVOLTĂRII ECONOMICO-SOCIALE A ZONELOR TRANSFRONTALIERE PRIN PRISMA DISCREPANȚELOR SALARIALE

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### **Abstract**

*One of the main indicators that determines the living standard of the population, the degree of happiness of the people and has an indispensable direct impact on the economic and social development of the country is the level of labour remuneration. As a result of the discrepancies between the level of labour remuneration and the minimum consumption basket of the population, which varies considerably from one country to another, there are multiple socio-economic effects with negative impact that stimulate population migration, a phenomenon largely due to the globalization process.*

*The main purpose of this article is to compare the dynamics and variation of the average wage in the Republic of Moldova with the countries of the European Union, the focus being on the comparative analysis of the situation regarding the remuneration of work in Romania.*

*The research involves a theoretical-methodological analysis of the salary as the main form of population income, being consulted the works of various famous scientists in the field. As research methods, there are used the methods of statistical analysis, synthesis, multiple regression and investigation of cause and effect, the application which allows drawing conclusions extensive and well founded as regards the level of remuneration and identifying solutions and priority areas. The results can be taken into account in order to increase the living standard of the population, ensure the economic and social development of the country and reduce the negative effects achieved as a result of discrepancies in the level of remuneration.*

*The originality and practical relevance of the research consists in identifying and highlighting the salary discrepancies between cross-border areas and European Union countries and there are argued soundly the resulting problems and practical solutions to recover the economic and social situation.*

**Keywords:** average monthly wage, GDP per capita, happiness score, migration.

**JEL:** F43, F62, E24.

### **1. Introduction**

At the global level, the process of globalization is becoming more and more pronounced, which is manifested in practically all socio-economic processes. One of the indispensable pillars of the globalization process is the phenomenon of migration registering higher and higher growth rates.

The effects of migration are complex, bringing benefits and disadvantages for both host and home countries [Balan&Radu, 2019].

Excessive population migration in the most frequent cases is related to the search for higher incomes and better living conditions. In this context, it is interesting to examine the links between different economic indicators that express the population's living standards and directly influence the attractiveness of these countries, stimulating migratory flow.

Achieving better incomes, access to a better health and education system, security provided by a stable economy and society, the opportunity for professional affirmation are counterbalanced by the difficulties imposed by the activity in a different cultural environment

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and the separation from the family even if only for a certain amount of time [Botescu I., 2019].

The gaps between the levels of development of countries are quite significant, both within a group of countries within the same community, such as the Member States of the European Union, and between countries within different geographical and economic regions. In this context, it is of particular interest to study the gaps between the incomes of the population, the main emphasis being placed on salary incomes, focusing this study on cross-border areas.

## **2. Applied research methods and materials**

Based on the basic purpose of this article, the main emphasis is on studying the variation of the average level of labour remuneration in the European Union's countries and in other European countries located in the cross-border areas. In this context, the analysis of the variation of the average monthly salary applies, in particular compared to the average level applied in the countries of the European Union. As a result of the analysis of the variation of the average monthly salary, the emphasis is on comparing the extremities of the series, namely the countries that apply the highest and lowest salaries. In addition to analyzing the variation of the average wage, the variation of the minimum level of remuneration established in the same group of countries is also analyzed, which allows to highlight discrepancies between the positions of different countries in this range: the rank of countries differs in the range and the other string.

In order to establish the impact of the salary disparities on the economic and social development of cross-border areas, a correlational analysis is applied between the average monthly wage and the GDP per capita in the European Union's countries and in other European countries.

Another direction of research involves the correlational analysis of the average monthly wage and the happiness score in the European Union's countries and in other European countries. In this sense, the factors underlying the determination of the happiness score are examined in accordance with the methodology applied in the World Happiness Report.

Following the application of research methods by applying the analysis of variation and correlation, the main problems that appear in the economic and social development of cross-border areas through the prism of salary disparities are identified and argued.

## **3. Research results and analysis**

The problem of wage differences is a problem examined quite frequently at the level of an economic entity, at the level of the economic branch, at the level of a country or at the level of a group of countries. At the same time, the problem of wage differences stimulates people's desire to persevere, and to strive for the highest level.

Globally, differences in work's remuneration from one country to another often lead to a desire to migrate from one country to another in order to continuously improve living standards, causing various regional problems.

In turn, the labour remuneration's level depends closely of the existing supply and demand on the labour market. The temporary migration of the population in search of better-

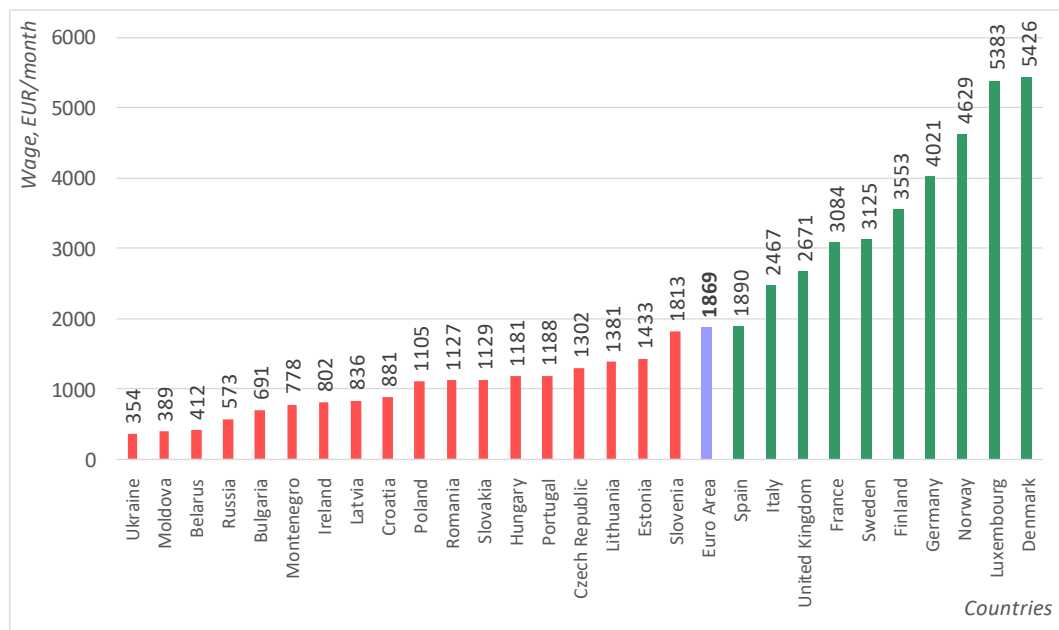
paid jobs leads to a reduction of the supply on the labour market and in response the labour remuneration's level increases [Gheorghita M., 2011].

The wage structure's effect would appear to derive from differences between unknown factors, while the composition effect can largely be explained by differences in the following areas: education, proportion of workers with supervisory responsibilities, occupational structure, and, to a lesser extent, industrial structure [Pereira&Galego, 2018].

In order to assess the real impact of the average monthly wage on the migration process in search of better living conditions and decent incomes, it is proposed to examine the variation of the average monthly wage in the European Union's countries and in some European countries situated in the cross-border areas (**Figure 1**).

As the statistics show, the average monthly salary varies considerably from one country to another. The maximum value of the average monthly wage in June-July 2020 is recorded in Denmark and amounts to 5426 EUR. Bulgaria has the lowest average monthly salary in the European Union with an average monthly salary of 691 EUR. A rather strong variation of the average monthly salary is found in the group of member countries of the European Union, the ratio between the average monthly salary registered in Denmark and that in Bulgaria, being 7.85. According to statistical data, the average monthly salary recorded in July 2020 in the Member States of the European Union amounted to EUR 1869. Romania is one of the member countries of the European Union in which the average monthly salary is below the average level for this group of countries, namely 39.70% lower.

**Figure 1.** Distribution of the average monthly wage in the European Union's countries and in other European countries in 2020



Source: Elaborate by authors based on data (2020), <https://tradingeconomics.com>, converting some data in <https://www.xe.com>

Differences between the level of the work's remuneration in the states member of the European Union in the conditions when the European Union's policies support the free movement of citizens and Cohesion Policy aims at "Promoting sustainable and quality employment and supporting labour mobility" [Key achievements of Regional Policy 2014-2020], the phenomenon of population's migration is a very pronounced from countries with lower levels of labour remuneration to countries with higher wages.

European countries' experiences with immigration have been diverse and related to geographical location, economic context, political history, and also to notions of nationhood, national belonging, and organization of government [Garcés-Mascareñas B. & Penninx R., 2016].

Empirical studies on wage differentials between European countries using microeconomic data are scarce, and therefore not much is known about the determinants of cross-country wage differences in Europe [Pereira & Galego, 2013].

As regards the pay gap between European countries located in cross-border areas and the countries of the European Union, these gaps are much more pronounced. Among the European countries located in the cross-border area, the lowest average monthly salary is registered by Ukraine with a salary of 354 EUR. In this case, the amplitude of the variation of the average monthly salary for the analysed group of countries is 5072 EUR, and the ratio between the maximum and minimum value is 15.33 times. Thus, the average monthly salary in Denmark is 15.33 times higher than the level of this indicator in Ukraine. In the Republic of Moldova, the average monthly salary exceeds by 9.89% the average monthly salary in Ukraine, but at the same time it is 2.9 times lower than in Romania or 4.8 times lower than the average monthly salary specific to the European Union's member countries.

If the European Union member states' citizens as well as cross-border areas decide to immigrate for a short or long period to another European country with the highest level of remuneration, one of the important indicators is the level of the minimum monthly wage, which in some ways can be approached as a guaranteed salary for the employee.

If the level of the average wage is determined directly by the intersection of supply and demand in the labour market, then the minimum monthly wage is set by each country and depends heavily of the state budget, the ability to pay and various macroeconomic indicators such as attests the country's level of development. Thus, in different European countries the minimum monthly wage is different.

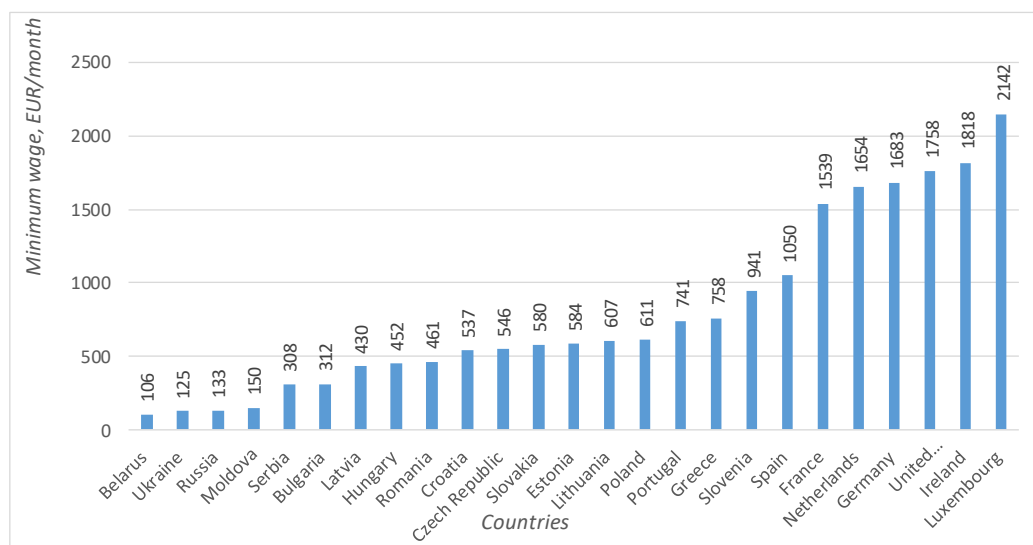
**Figure 2** shows the distribution of the minimum monthly wage in the European Union's countries and in other European countries in 2020.

Regarding the minimum monthly wage in the European Union's countries and in other European countries in 2020, its distribution is different from the average monthly wage's distribution in the same groups of countries.

The lowest level of the minimum monthly wage is registered in Belarus at the level of EUR 106, although the average salary in this country exceeds 3.89 times the minimum level established by law. In the Republic of Moldova, the minimum monthly salary consists 150 EUR, but the average level of remuneration exceeds about 2.59 times the minimum level weakened by law. In this context, for the citizens of the cross-border areas, namely from the Republic of Moldova and Ukraine, the minimum level of labour remuneration in Romania is approached as a considerably attractive one, being about 3 times higher.

Examining the European Union's countries and the other European countries' distribution according to the minimum monthly wage in 2020, we observe a non-uniform distribution, most of the analyzed countries being located in the segment up to 1000 EUR / month. Among the countries with the highest minimum wages guaranteed by the state, we can mention Spain, France, Netherlands, Germany, United Kingdom, Ireland and Luxembourg.

**Figure 2.** Distribution of the minimum monthly wage in the European Union's countries and in other European countries in 2020



Source: Elaborate by authors based on data (2020), <https://tradingeconomics.com>, converting some data in <https://www.xe.com>

In different countries, the ratio between the value of the average monthly salary in the economy and the level of the minimum wage established in the economy is different, due to the real distribution of wages by jobs and the concentration of employees in certain branches of the national economy. An important problem in this respect is also the problem of unofficial payment of "envelope" salaries, the problem especially specific to countries with a lower level of development and a very pronounced problem for countries in cross-border areas. Undoubtedly, the labour remuneration's level is closely linked to the economic development's level of the country.

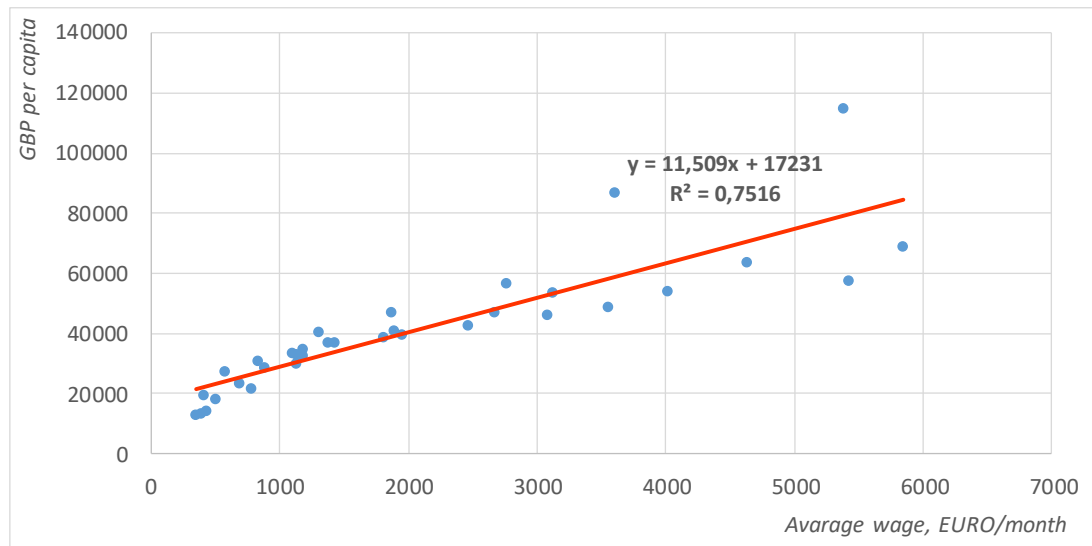
Scientists' estimates show that international migration flows are highly responsive to income per capita at destination [Ortega F. & Peri G., 2013].

**Figure 3** reflects a correlation dependence between the average monthly wage and the GBP per capita in the European Union's countries and in other European countries in 2020.

Based on the figures presented, there is a rather strong correlation between the average per month and GBP per capita, which is also confirmed by the confidence coefficient, which is 0.75. Between these two indicators, there is an obvious linear form of direct dependence. The correlation dependency equation allows to draw conclusions based on the regression

coefficient next to the factor x that with the increase of the average monthly salary by 1 EUR, GBP per capita increases by 11,5 EUR.

**Figure 3.** Correlation of the average monthly wage and the GBP per capita in the European Union's countries and in other European countries in 2020



Source: Elaborate by authors based on data (2020), <https://tradingeconomics.com>, converting some data in <https://www.xe.com>

We often wonder why most people are constantly looking for higher incomes and better living conditions. In this context, it is interesting to examine the dependence between the average monthly salary and the happiness score.

A large literature, however, observes that average emigration rates are higher in countries with sustained increases in GDP per capita than in either chronically poor countries or established rich countries [Clemens M., 2020].

In the World Happiness Report the happiness score is determined, taking into account the following factors (World Happiness Report, 2019).

- GDP per capita;
- social support;
- healthy life expectancy;
- freedom to make life choices;
- generosity;
- perceptions of corruption;
- dystopia.

According to the statistical data presented in (World Happiness Report, 2019) the first three positions in the top countries according to happiness score are held by: Finland (7,769), Denmark (7,600), Norway (7,554). If we examine the average level of remuneration in European Union and other European countries located in cross-border areas, in the respective top are: Switzerland (5850 EUR / month), Denmark (5426 EUR / month) and Luxembourg

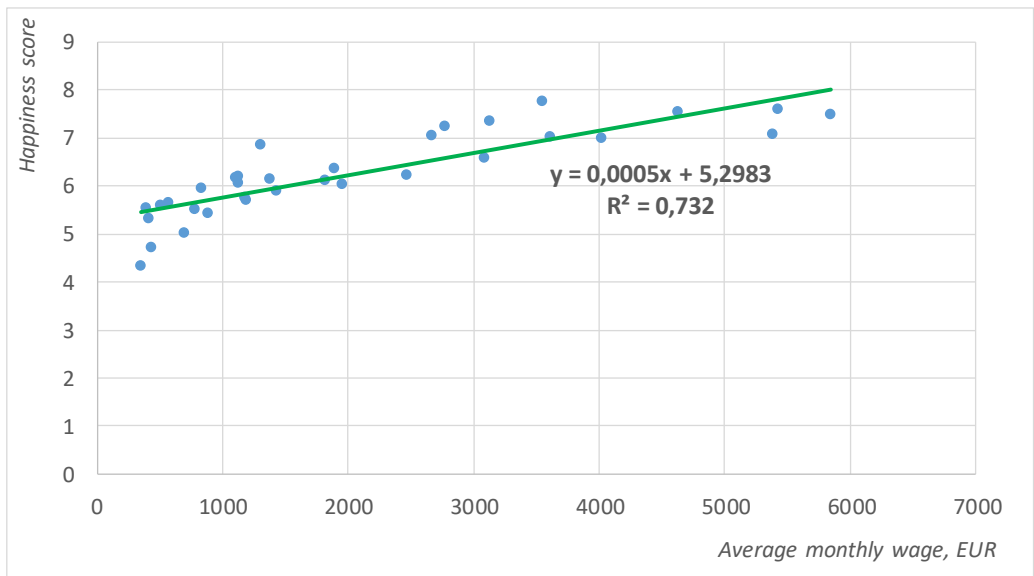
(53830 EUR / month). In both ratings Denmark is firmly on the second place, while the other two countries differ from one indicator to another. In this case, it is not necessary to deny the existence of the link between the respective indicators, nor is there a strict dependence between the average level of remuneration of the salary and the happiness score.

Scientists' studies show that feeling good about the self, excited, proud, sociable; active as well as being in the conditions for flow experience are the strongest predictors of trait happiness [Csikszentmihalyi M. & Hunter J., 2014].

Some researcher's results indicate that migration reduces the happiness of those left behind and the monetary inflows (remittances) that accompany migration do not increase happiness levels among recipients [Borraz F. & Pozo S. & Rossi M., 2008].

**Figure 4** shows the correlation dependence between the average monthly wage and happiness score in the European Union's countries and in other European countries in 2020.

**Figure 4.** Correlation of the average monthly wage and the happiness score in the European Union's countries and in other European countries in 2020



Source: Elaborate by authors based on data World Happiness Report 2019 and <https://tradingeconomics.com>, 2020 converting some data in <https://www.xe.com>

As confirmed by **Figure 4** between the average wage and the happiness score, there is a pronounced correlation link, the multiple correlation coefficient being 0.86, which attests to an intense correlation link. The confidence ratio of 0.732 also confirms a strong influence of the average wage on the happiness score.

The methodology applied in the World Happiness Report to determine the happiness score does not include salary as a separate influencing factor. However, if you examine those indicators that determine happiness score then their value certainly depends to a greater or lesser extent on the income's level. As we can conclude from **Figure 3**, in countries with high average wages the value of GDP per capita is higher, ie there is a direct linear dependence

between these two indicators. In terms of social support, in countries with higher wages, social security funds are also higher, which allows the state to provide more advanced social support. In the same way, a direct correlation dependence can be interpreted as the connection of salaries with healthy life expectancy and generosity. It is quite difficult to imagine a society with a high level of generosity, when the income of the population is below the minimum subsistence level.

In terms of such an indicator as the freedom to make life choices, this indicator is usually more pronounced in democratic countries with a fairly high standard of living, ie the population in these countries has a decent income. Analogously, it can be argued the influence of wages on the indicator called perceptions of corruption. Normally, in developed countries with a high level of GDP per capita and a high level of average monthly wage, in the sphere of justice things are quite good, the laws being functional, which reduces the corruption's level, although in this sense there are also exceptions, when in some highly developed countries there are big scandals related to corruption.

### **5. Conclusions and suggestions for further research**

Research shows that both the European Union's member states and the countries situated in the cross-border area have a high level of variation in the population's income. Wages, as the main form of population's income, vary considerably from one country to another, which guides the flow of emigrants in constant search of well-paid jobs and better living conditions.

In turn, the average wage is closely linked to the country's GDP per capita. In this way, highly developed countries with high GDP per capita values also ensure a high level of remuneration and are of interest to migrants. Although such an indicator as the average wage does not participate in the formula for calculating the happiness score used in the World Happiness Report, the applied correlation analysis demonstrated a close link between the average wage and the happiness score.

Based on the research results it can be concluded that in an open economy with free movement of citizens namely labour remuneration is an extremely important indicator that determines the level of the country's development, the population's happiness score and influences the emigrants' flows, ultimately creating multiple related issues.

For further research, we propose to investigate in detail the problems arising from the migration process and their economic impact on economic and social indicators at country and regional level.



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