SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2025
ORGANIZATION AND MANAGEMENT SERIES NO. 215

THE IMPACT OF THE COVID-19 VIRUS ON THE ECONOMIC SITUATION OF ENTERPRISES IN EU COUNTRIES

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Purpose: The aim of this article is to present the diversity of EU countries in terms of the economic situation of enterprises, characterised by key indicators describing, among other things, turnover per employee, employment growth and investment growth per employee. In addition to presenting the differentiation of EU countries in terms of the economic situation of enterprises, the dynamics of change of the selected indicators in 2020 compared to 2015 and in 2015 compared to 2010 are also presented.
Methodology: The economic situation of enterprises in EU countries was assessed using annual data from 2010 to 2020. Increase rates were used to describe the time series. In a second step, EU countries were classified by the economic situation of enterprises using a synthetic variable.
Findings: Based on the results obtained, it can be seen that the country with the highest investment per worker in recent years is Ireland, which has the most favorable values of the analyzed indicators and is in the first position in the ranking. Ireland's economy is characterized by significant foreign investment in the booming technology sector. However Germany, thanks to its strong economy, regularly increases its investment per employee, which supports its long-term growth. Lithuania has also recorded a significant increase in investment per employee, which may be due to the country's dynamic economic development.
Countries with relatively low labour costs, such as Poland and Slovakia, are dominated by industrial sectors where the share of labour costs (W_3 and W_4) is relatively low compared to the value of production. In contrast, in countries such as Austria and France, high labour costs, extensive social systems and more labour-intensive sectors make personnel costs a larger share of total production costs. The transition to remote working caused by the COVID-19 pandemic meant a reduction in employment, automation and digitisation of business processes, which negatively affected the value of W_5 in 25 of the 27 countries analysed and caused a reduction in employment in these countries.
The COVID-19 pandemic has had a diverse impact on businesses in the EU. Although many companies struggled with the crisis and the decline in turnover and the need to reduce staff, some sectors managed to adapt and even develop. In the long term, the pandemic accelerated digital transformation processes and the need to invest in the automation.

Originality/value: The impact of the Covid 19 pandemic on employment has been of great importance. Therefore, an innovative approach to analyzing this issue becomes essential for current and future research in this area. This is confirmed by the presented research.
Keywords: economic indicator, UE countries, personnel cost.
Category of the paper: research paper.

1. Introduction

The COVID-19 pandemic has had a significant impact on businesses in European Union countries, leading to numerous changes in economic activity, the labour market and production structures **(**Lopez-Garcia, Szörfi, 2021; Żak, Garncarz, 2020; Privara,2022**).** As a result of lockdowns, border closures and restrictions on international trade, many businesses, particularly in sectors such as tourism, catering, transport and retail, experienced a drastic drop in turnover **(**Meyermans, Rutkauskas, Simons, 2021; Bloom, Brynjolfsson, Davis, Mizen, 2021**)**. Countries heavily dependent on tourism, such as Spain and Italy, have suffered the most. Turnover per person employed in these sectors fell significantly, which meant a reduction in revenue per employee.

The COVID-19 pandemic has significantly affected turnover and thus turnover per person employed in companies in EU countries. Many industries, especially tourism, retail and services, experienced declines in turnover per employee due to lockdowns and business restrictions. Countries such as Spain, Italy and Belgium have seen declines in this indicator as a result of business closures and reduced demand. Nevertheless, some countries, such as Germany, remained stable due to better economic conditions.

The pandemic has also caused liquidity problems for many companies, especially in the small and medium-sized enterprise (SME) sector (Fana, Tolan, Torrejón, Urzi Brancati, Fernández-Macías, 2020; Hamann, Niebuhr, Roth, Sieglen, 2023; Sapir, 2020) Declining demand and difficulties in raising investment capital have resulted in reduced investment. Companies have had to delay or abandon planned investment projects, negatively affecting their long-term growth.

In response to the pandemic, many companies have had to adapt their procedures, increasing operational costs. Examples include costs associated with complying with new hygiene standards, the introduction of remote working and the reorganization of supply chains. Companies have also had to adapt to changing national health and safety regulations. The pandemic has resulted in redundancies and job cuts in many sectors.

Frims have been reducing the number of employees in response to reduced demand. At the same time, there has been a surge in flexible working arrangements, such as remote working, which has affected the structure of employment in the EU. Sectors related to information technology and services have been able to adapt more quickly to this change, while other, more traditional sectors, have found it more difficult.

In response to the pandemic crisis, many companies have accelerated their digitalization processes, investing in technologies related to e-commerce, remote working tools and automation.

Companies began to look for more local suppliers and to invest in technology that would enable greater automation and independence from global disruptions to international trade. Sectors such as technology, e-commerce and pharmaceuticals have seen increases, while others such as tourism, air transport and catering have experienced the biggest declines. In countries such as France, Croatia, Spain and Italy, where tourism is an important part of the economy, the pandemic caused severe difficulties, while in technologically strong countries such as Luxembourg, Sweden and Ireland, the impact was milder.

2. Materials and Methods

An assessment of the economic situation of enterprises in EU countries was carried out using annual data from 2010, 2015, 2020. Six indicators were selected for analysis (Table 1).

Table 1.
Indicators describing the economic situation of companies in EU countries

Variable	Full name
W_1	Turnover per person employed [thousand €]
W_2	Gross value added per employee [thousand €]
W_3	Share of personnel costs in production [%]
W_4	Average personnel costs (personnel costs per employee) [thousand €]
W_5	Growth rate of employment [%]
W_6	Investment per person employed [thousand €]

Source: Own study based on Eurostat. Available online: https://ec.europa.eu/Eurostat, 15 October 2024.

Their selection was preceded by a literature review, data availability and statistical analysis (Table 2).

Table 2.
Basic numerical characteristics of indicators of the economic situation of enterprises in EU countries

Variable	2010				2015				2020			
	min	max	mean	CV*	min	max	mean	CV*	min	max	mean	CV*
W_1	48,60	501,50	171,79	62,98	63,40	591,60	188,40	65,31	77,30	569,40	194,57	64,37
W_2	9,70	92,80	45,91	56,05	13,70	153,40	51,03	62,79	20,10	197,90	57,28	66,62
W_3	13,30	30,30	19,88	22,60	13,20	26,40	19,64	19,76	10,00	28,10	21,34	18,95
W_4	4,50	49,50	26,26	59,38	6,50	55,60	28,00	58,66	10,10	62,50	31,02	52,59
W_5	-6,80	6,10	-1,71	184,71	-9,00	6,70	1,64	191,19	-6,80	2,10	-2,50	79,78
W_6	3,40	22,30	8,15	53,00	3,20	20,60	8,66	53,47	2,90	25,80	9,00	57,20

*CV – coefficient of variation.

Source: Own study based on Eurostat. available online: https://ec.europa.eu/Eurostat, 15 October 2024.

The greatest coefficient of variation between presented EU countries over the analysed period was in terms of the growth rate of employment (Table 2). In 2020, the coefficient of variation for this characteristic was at 79.78% and was much lower compared to 2015 and 2010. A large impact on such a change was due to the COVID-19 pandemic, which caused a reduction in employment in many sectors especially tourism. Another indicator that significantly differentiated EU countries was gross value added per employee. In this case, the coefficient of variation in 2020 was 66.62%.

A synthetic indicator for assessing the economic situation of enterprises in EU countries for each country in each surveyed year was determined according to the formula (Hellwig, 1968)

$$Q_i = 1 - \frac{d_i^+}{d_0} \tag{1}$$

where:

$$d_i^+ = \sqrt{\sum_{j=1}^{m} (z_{ij} - z_j^+)^2} \tag{2}$$

$$d_0 = \overline{d} + 2S_d \tag{3}$$

where:

Q_i - synthetic indicator for assessing the development of the i-country;

$z_{ij} = \begin{cases} \dfrac{w_{ij} - \overline{w}_j}{S_j}, & W_j - stymulant \\ \dfrac{\overline{w}_j - w_{ij}}{S_j}, & W_j - destymulant \end{cases}$ - normalized value *j*-synthetic indicator for assessing the development of the *i*-th country;

$z_j^+ := \max_i \{ z_{ij} \}$;

$\overline{d}, S_d$ - the arithmetic mean and standard deviation of the vector coordinates, respectively $d = \left[d_1^+ \quad d_2^+ \quad \ldots \quad d_n^+\right]$.

The highest value Q_i indicates the best object in terms of the phenomenon under study. Correlation analysis was carried out using the Pearson correlation coefficient.

The values of the synthetic measure made it possible to divide the studied objects into groups according to the following rules:

- group I (very high level): $Q_i \in \left(\overline{Q} + S_Q; \max_i Q_i\right]$,
- group II (high level): $Q_i \in \left(\overline{Q}; \overline{Q} + S_Q\right]$,
- group III (medium level): $Q_i \in \left(\overline{Q} - S_Q; \overline{Q}\right]$,
- group IV (low level): $Q_i \in \left[\min_i Q_i; \overline{Q} - S_Q\right]$,

where $\overline{d}, S_d$ - the arithmetic mean and standard deviation of the values, respectively Q_i defined by formula (1).

Correlation analysis was performed using Pearson's linear correlation coefficient.

3. Results

Indicators: W_1, W_2 and W_6 and are stimulants, the remaining indicators are destimulants, hence the rankings of countries by indicator values in 2020 shown in Figure 1 are in ascending or descending order.

European Union countries varied widely in terms of turnover per person employed (W_1). The highest values of turnover per person employed occurred in Luxembourg and Ireland in 2020, at EUR 569 000 and EUR 528 000 respectively (Fig. 1). The situation is much worse in Croatia and Bulgaria where the lowest values of this indicator were observed at EUR 80 000 and EUR 77 000 respectively. Luxembourg and Ireland have highly developed high value-added sectors such as finance, technology and corporate services. These industries are capital-intensive rather than labour-intensive, which means that the value produced per employee is much higher than in more traditional sectors such as industry or agriculture.

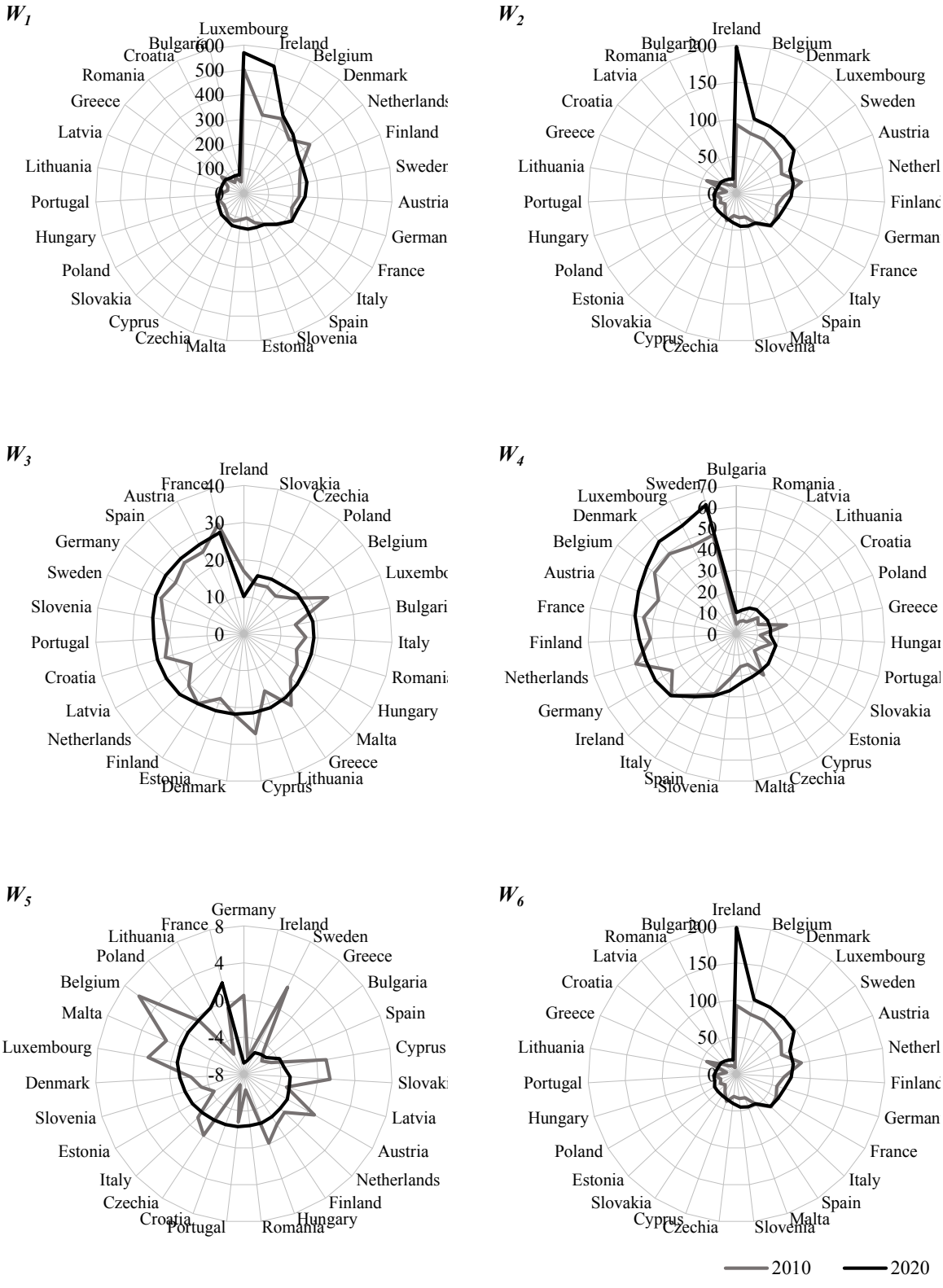

Figure 1. Rankings of EU countries by indicator values in 2020 with 2010 values given.

Source: Own study based on designations as in Table 1.

Another factor contributing to this result is the presence in Ireland of companies such as Apple, Google and Facebook, which significantly increases the turnover per employee ratio. Luxembourg, on the other hand, is dominated by companies in the financial sector, as well as the headquarters of international investment funds, leading to a high turnover per employee. Both Luxembourg and Ireland are known for their favorable tax conditions, which attracts multinational corporations.

The flow of large capital flows through these economies contributes to the high turnover generated per worker. The economies of Bulgaria and Croatia are still dominated by lower value-added sectors such as agriculture, tourism and light industry. Differences in the level of human capital and the conditions for doing business contribute to the limited ability to generate higher turnover per employee.

The gross value added per employee (W_2) indicator obtained the highest values for Ireland and the Benelux countries. The differences in the level of gross value added per employee between countries such as Ireland (€197,000) and Belgium (€103,000) and Romania (€21,000) and Bulgaria (€20,000) are due to different levels of economic development, the structure of the economy, the level of technological advancement and the amount of investment in human capital.

The indicator share of personnel costs in production (W_3) shows what percentage of a country's production costs are wages and other labour costs. The values of this indicator are important for the competitiveness of the economy, as they affect production costs and thus the competitiveness of companies on international markets. In 2020, the lowest values of the indicator were recorded in Ireland (10%), Slovakia (16.1%) and Poland (16.8%). In Poland and Slovakia, foreign companies play a significant role in the economy as they intend to reduce costs by relocating production to these countries. Low labour costs, combined with relatively high productivity, mean that the share of labour costs in production costs remains low. For countries such as Austria (26.9%) and France (28.1%), the share of labour costs in production is much higher. The Austrian and French economies are largely based on labour-intensive sectors such as manufacturing, construction or public services. In such sectors, labour costs account for a significant proportion of total business costs.

Average personnel costs (W_4) were highest in Western European countries such as Austria (€50,000), Belgium (€50,000), Denmark (€53,000), Luxembourg (€ 7,000) and lowest in Eastern European countries such as Bulgaria (€10,000), Romania (€11,000), Lithuania (€13,000) and Latvia (€14,000), the main reason being differences in labour costs.

Growth rate of employment (W_5), in 25 out of the 27 countries analysed, decreased, which is the result of introducing new technologies, besides the COVID-19 pandemic and the related economic consequences are also an important factor. The employment rate fell in Germany (by 6.8%), Ireland (by 6.5%), Sweden (by 5.4%). The introduction of lockdowns, business closures, restrictions in international trade and the service sector have led to mass layoffs, halted

recruitment and a reduction in the number of available jobs. Sectors such as tourism, catering, transport as well as retail were hit the hardest, contributing to the sharp decline in employment.

The Investment per person employed indicator (W_6) measures the amount of investment per employee. High values of this indicator mean that companies are investing heavily in infrastructure development, modern technologies, training and upgrading the skills of employees. This is an important indicator that directly affects productivity and the long-term competitiveness of the economy. In 2020, the highest values of the investment per employee indicator were recorded in Ireland (€25,800), Belgium (€19,100) and Sweden (€15,400). Companies in the finance and new technology sectors which are leading in these countries are required to continuously invest in new technologies and human capital to remain competitive.

In Bulgaria (€4900), Malta (€4500) and Cyprus (€4100), labour costs are relatively low, limiting the pressure to invest in automation and modern technology. Low wages mean that companies have weaker incentive to invest in human capital and technology, as the cost of employment remains low.

Table 3.

Increases in indicators of the economic situation of companies in EU countries 2005-2010 (a) and 2020-2015 (b)

Country	W_1		W_2		W_3		W_4		W_5		W_6	
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
Austria	13,7	9,8	6,1	6,4	0,6	1,6	5,2	5,1	0,0	-3,4	-0,7	1,1
Belgium	18,8	-4,8	11,4	8,7	1,2	0,7	4,3	0,4	-5,2	-1,4	1,2	1,1
Bulgaria	14,8	13,9	4,0	6,4	1,1	3,7	2,0	3,6	6,8	-6,2	0,4	1,1
Croatia	5,9	1,6	1,2	2,3	-0,8	3,0	0,0	2,3	5,8	-1,2	0,3	-0,6
Cyprus	2,1	9,4	-3,4	0,5	-2,4	-3,2	-2,8	0,4	2,7	-7,3	-4,1	0,9
Czechia	4,8	14,7	2,6	7,0	-0,4	2,8	0,5	5,7	2,3	-4,3	0,0	1,3
Denmark	3,0	22,3	4,9	14,5	-0,6	0,5	1,0	6,6	4,0	-2,8	2,3	-2,4
Estonia	22,5	23,0	6,0	7,5	1,5	2,0	3,7	5,3	5,8	-3,1	2,5	0,2
Finland	3,2	8,0	3,1	6,2	0,5	-0,5	3,8	1,6	0,2	-1,2	3,1	0,9
France	22,7	-24,0	6,6	-3,7	-3,9	1,7	5,9	-1,8	-5,1	7,9	0,9	0,5
Germany	12,0	14,0	3,5	7,1	1,2	2,1	3,9	5,4	0,6	-7,9	0,6	1,9
Greece	-3,6	-15,3	-10,5	-7,1	-4,3	1,7	-5,6	-2,2	-4,3	3,8	-1,2	-1,3
Hungary	5,3	4,9	2,6	5,9	0,1	2,4	0,9	4,1	5,1	-7,4	1,3	2,1
Ireland	129,2	74,1	60,6	44,5	-3,7	-3,2	3,2	-2,9	11,6	-11,9	-1,7	5,2
Italy	17,9	-21,1	2,5	-3,6	1,1	1,1	2,1	-1,3	1,7	-2,4	-2,7	0,0
Latvia	10,5	12,2	3,2	5,4	3,4	4,3	2,5	4,1	5,4	-5,1	0,3	1,1
Lithuania	12,3	16,0	5,4	8,5	1,8	3,0	2,4	5,0	8,3	-2,7	1,4	0,7
Luxembourg	90,1	-22,2	14,6	6,7	-4,8	-1,6	6,3	4,4	0,1	-3,3	4,6	-0,8
Malta	31,1	0,8	10,9	2,0	-0,6	3,1	2,9	4,5	5,6	-7,3	2,5	-6,4
Netherlands	-73,2	12,0	-18,5	7,7	0,1	3,3	-10,6	5,6	4,5	-5,1	-0,9	1,2
Poland	13,6	8,3	2,3	6,6	1,6	1,9	1,6	3,2	3,3	-3,2	1,4	0,1
Portugal	1,6	-3,7	0,5	0,9	0,4	3,3	0,4	2,0	6,5	-6,0	-0,5	0,6
Romania	10,5	14,5	1,5	6,9	0,8	3,4	1,7	3,8	8,0	-4,1	1,7	-0,4
Slovakia	21,0	4,8	0,9	5,4	-0,3	2,7	1,8	4,6	2,7	-7,0	0,3	-0,2
Slovenia	14,9	5,4	5,2	6,5	-0,5	3,5	1,7	4,6	5,3	-3,5	-0,8	0,7
Spain	12,3	-10,1	1,5	-2,8	-0,8	2,3	0,6	0,4	9,1	-8,1	-0,9	0,0
Sweden	31,4	-1,9	9,7	12,2	1,3	0,3	7,7	6,9	-0,5	-7,4	2,6	0,6

Source: Own study based on designations as in Table 1.

The analysis of indicators W_1 to W_6 carried out for the European Union countries in 2015 and 2020 shows significant differences in the dynamics of economic development between countries. The selected indicators show changes in areas such as average turnover generated per employee, gross value added, the share of personnel costs in the value of production or the value of investment per person employed.

Between 2010 and 2015, Ireland, Luxembourg and Sweden recorded the highest increases in turnover per employee. Ireland stands out with the highest growth at €129,200, reflecting the success of the Irish economy, based on foreign investment and characterized by a growing share of the technology sector in total output.

Between 2015 and 2020, countries such as Denmark and Estonia recorded gains of between €22,000 and €24,000. Ireland in particular stood out with an increase of €74,000, which may indicate significant improvements in labour efficiency in these countries.

On the other hand, France, Italy and Luxembourg showed the largest decreases. In France, this was a change of €24,000, which may be the result of structural changes in the country's economy and also the COVID-19 pandemic. Italy and Luxembourg also recorded decreases of €22,200 and €21,100 respectively between 2015 and 2020, reflecting the challenges of the COVID-19 pandemic and the global economic downturn.

Ireland also recorded significant increases in gross value added per employee (W_2) between 2010-2015 and 2015-2020. The performance of the economy in Ireland significantly outperforms other EU countries and indicates that it is one of the most dynamically developing economies in the EU countries. A favourable trend was also observed in Denmark and Sweden where the companies benefited from technological innovation and increasing labour productivity where gross value added per employee increased by €14,500 and €12,200 respectively. In Greece, France, Spain and Italy, 2020 gross value added per employee decreased compared to 2015, which may have been caused by the pandemic crisis as well as the global economic slowdown and a significant reduction in tourist arrivals.

The share of personnel costs in production (W_3) increased significantly in Latvia, Lithuania and Poland in 2015 compared to 2010, which is mainly a result of rising wages and improved working conditions in these countries. These increases suggest that labour costs are starting to play a greater role in the economy, which could affect the structure of production costs.

Reductions in the share of employment costs in total production costs were observed in Luxembourg (-4.8%), Greece (-4.3%), France (-3.9%) and Ireland (-3.7%). Between 2015 and 2020, Latvia, Bulgaria, Slovenia and Romania recorded the largest increases in the range of 4.3% to 3.4%, mainly reflecting the cost of rising wages. On the other hand, Ireland, Luxembourg and Cyprus had relatively low increases or even decreases, which may reflect the stabilization of labor costs.

The increase in average personnel costs (W_4) between 2010 and 2015 was highest in Sweden, Luxembourg and France, which was mainly related to increases in employee welfare packages. Average personnel costs increased by €7700 in Sweden and €5900 in France,

respectively. The high increases in personnel costs may indicate improvements in working conditions and the attraction of skilled workforce.

Between 2015 and 2020, the largest increases in average personnel costs were recorded in Sweden, Denmark, and the Czech Republic. which shows that some EU countries continued to invest in increasing wages or extending social packages for employees. Ireland, Greece and France showed the largest decreases in average personnel costs as a result of the financial crises, which forced these countries to cut budgets and reduce labour costs. Low wages in Bulgaria, Malta and Cyprus mean that companies have less incentive to invest in human capital and technology as the cost of employment remains low.

Employment decreased in 25 out of 27 countries in 2020 compared to 2015. The largest decreases were observed in Ireland (-11.9%), Spain (-8.1%) and Germany (-7.9%), which was probably a result of the reduction in employment due to the pandemic.

The pandemic also affected investment per worker (W_6) especially in countries that rely heavily on tourism. Investment was reduced the most in Malta and this was a decrease of -6.4% in Greece there was a decrease of (-1.3%) in Croatia (-0.6%). In Spain and Italy, investment was unchanged.

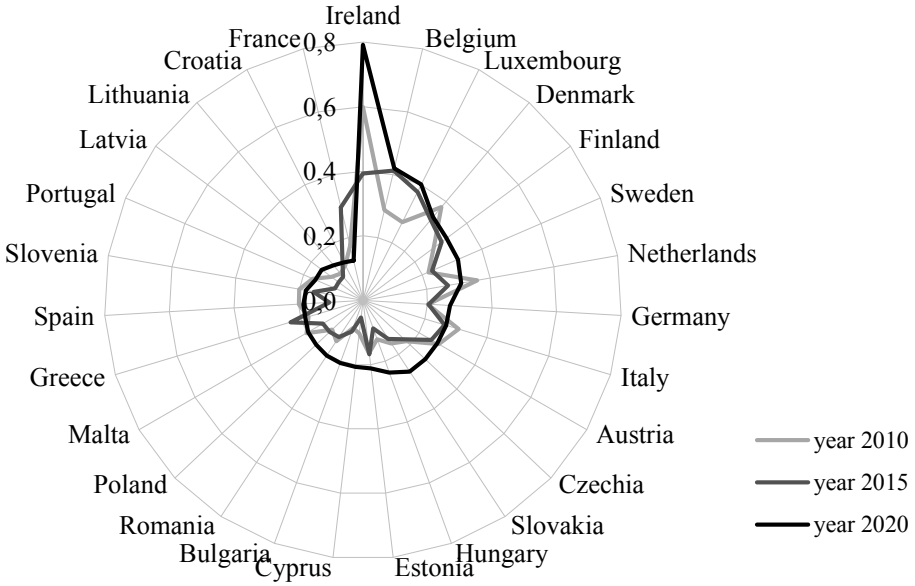

Figure 2. Rankings of EU countries by indicator value Q_i in 2020 with values in 2010, 2015, 2020 given.

Source: Own study based on Eurostat.

Ireland was ranked highest in 2020, ranking first in terms of the synthetic measure throughout the 2010-2020 analysis period. This was followed by the Benelux and Scandinavian countries. The top-ranked countries predominantly base their economies on new technologies and process automation, which largely reduces labour-related costs and determines investment in new technologies. Compared to 2010, 13 countries have improved their ranking.

The most positive developments were in Bulgaria and Cyprus, which moved up 11 places from 27th to 16th and 26th to 15th respectively, reflecting positive developments in the areas of increasing turnover, reducing staff costs and increasing investment. France and Slovenia worsened their ranking by 10 positions during the period under review, indicating a decrease in the efficiency of these economies.

Table 4.
Pearson correlation coefficients between indicators showing the economic situation of companies in EU countries in 2020 and the increments of these indicators

Specification	**Year 2020**						Q	
	W_1	W_2	W_3	W_4	W_5		Year 2010	Year 2015
W_2	0,904					Year 2015	0,788	
W_3	-0,265	-0,287				Year 2020	0,872	0,714
W_4	0,798	0,769	0,213					
W_5	-0,050	-0,209	0,099	0,015				
W_6	0,864	0,934	-0,249	0,755	-0,102			

Source: Own study based on designations as in Table 1.

The indicators for assessing the economic situation of enterprises in EU countries in 2010, 2015, 2020 show a strong correlation (Table 4), hence the grouping of EU countries was made on the basis of the indicator in the last year studied, i.e. 2020. A strong correlation of more than 0.7, was observed between indicators W_1 and W_4 and W_6. And also between W_2 and W_4 and W_6 and W_4 and W_6.

Table 5.
Selected characteristics of indicators in groups of EU member states

Specification			W_1	W_2	W_3	W_4	W_5	W_6
	Ireland							
group		value	528,70	197,90	10,00	42,60	-6,50	25,80
group I	Belgium, Luxembourg, Denmark, Finland, Sweden							
		min	258,70	73,90	18,00	46,00	-5,40	11,90
		max	569,40	103,10	25,90	62,50	-0,50	19,10
		mean	350,02	94,80	21,30	55,04	-2,04	14,80
group II	Netherlands, Germany, Italy, Austria, Czechia, Slovakia							
		min	124,90	34,60	16,10	19,50	-6,80	5,90
		max	270,60	78,60	26,90	50,30	-1,90	12,70
		mean	198,58	60,30	21,42	35,93	-3,17	8,67
group III	Hungary, Estonia, Cyprus, Bulgaria, Romania, Poland, Malta, Greece, Spain, Slovenia							
		min	77,30	20,10	16,80	10,10	-5,20	2,90
		max	151,00	47,60	26,50	31,20	-0,40	7,90
		mean	119,02	34,13	20,92	19,28	-2,64	5,70
group IV	Portugal, Latvia, Lithuania, Croatia, France							
		min	80,10	23,30	21,20	13,60	-2,90	4,40
		max	223,50	64,80	28,10	48,60	2,10	12,80
		mean	118,56	34,30	24,40	22,26	-1,06	6,86

Source: Own study based on designations as in Table 1.

Ireland was ranked highest in 2020, with a much higher score for its business situation than the other countries, so the grouping was carried out excluding this country. The Benelux and Scandinavian countries with the highest turnover per employee and investment per employee were classified in group I.

Group II, where 5 countries are classified, is characterised by the lowest employment reduction rates. The COVID-19 pandemic had a very negative impact on the economies of these countries and companies in these countries were forced to reduce employment even though these countries had the lowest minimum, maximum and average values of costs related to the employment of workers.

The 10 countries with the lowest turnover and investment per person employed were in group III.

Group IV had the lowest average labour costs and the most favourable characteristics describing the growth rate of employment.

4. Conclusion

Analysis of indicators W_1-W_6 confirms the strong economic divergence between EU countries. Countries with stable economic foundations, such as Ireland, Germany or Lithuania, have been able to continue their growth despite global challenges. In contrast, countries struggling with structural problems and economic crises, such as Greece, Spain or Italy, have experienced declines in a number of key indicators, which may require further reforms and a review of these countries' economic policies and especially investment decisions.

The discrepancies in the turnover per employee index between countries such as Luxembourg and Ireland and Croatia and Bulgaria are the result of differences in the structure of the economy, the level of technological advancement, investment in human capital and investment attractiveness. Countries with dominant high-value-added sectors and a strong presence of multinational corporations generate significantly higher turnover per worker compared to countries whose economies are based on labour-intensive and low-value-added sectors. More developed countries, led by the technology and financial sectors, are able to generate significantly higher value added per worker. In contrast, countries with a lower level of development, dominated by traditional and lower productivity sectors, have a limited capacity to achieve high values for this indicator. In order to improve performance, Romania and Bulgaria, Latvia and Greece need to increase investment in innovation and infrastructure development to gradually improve labour efficiency and increase the value added generated per worker.

In countries such as Poland and Slovakia, wages are relatively lower compared to Western European countries, which means that the share of labour costs in total production costs remains relatively low. In Poland and Slovakia, foreign companies play a significant role in the economy as thry relocate production to these countries in order to reduce costs. Low labour costs, combined with relatively high productivity, mean that the share of labour costs in production costs remains low. These differences also reflect broader economic trends in Europe, with Eastern European countries being more cost-competitive and Western European countries investing in human capital and raising labour standards, but with higher labour costs.

As a result of the pandemic, many companies reduced the scope of their operations or suspended them altogether, which resulted in lower demand for employees. Weaker economic performance and uncertainty about the future led companies to cut back on staff to reduce operating costs. The shift to remote working in some sectors has meant less need for traditional office jobs, and some companies have opted to downsize by introducing automation and digitisation of business processes.

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