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Assessment of the Economic Situation of Post-socialist EU Countries

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Abstract: *The economic development of Slovakia, as well as other former socialist countries, was largely marked by the transition from a centrally planned economy to a market economy. This process was long and difficult. Post-socialist countries were forced to adopt a broad complex of political, social, economic and institutional reforms that made the business environment in the country more attractive and strengthened economic growth. This process of transformation continues and despite progress there is room for further improvement even in the most developed post-socialist countries. In addition, the economy of individual countries, as well as the world economy, is currently significantly affected by the ongoing pandemic, and it has also been negatively affected by the war conflict in Ukraine and the emerging energy crisis.*

In the article, we will focus on evaluating and comparing the development and economic situation of former socialist countries that have since become members of the European Union. Based on selected macroeconomic indicators, we will assess the level of the economy of individual countries. Subsequently, we will use the ranking method and compile and evaluate the ranking of the analyzed countries.

1. INTRODUCTION

The economic situation has recently been subject to turbulent developments. The pandemic has affected economic development worldwide. The object of our investigation will be the evaluation of the state of development of basic macroeconomic indicators in post-socialist countries that are currently members of the European Union. These are the following countries: Bulgaria, the Czech Republic, Estonia, Croatia, Latvia, Lithuania, Hungary, Poland, Romania, Slovenia and the Slovak Republic. The economic development of these countries was marked by the existence of the communist regime in the past.

The recovery of the economy from the consequences of the centrally controlled economy was difficult and took many years. Also, for this reason, the mentioned countries became member states of the European Union. We will compare the economic strength of countries in the period of 2012-2021, focusing on selected macroeconomic indicators.

Based on a wide range of data from the Eurostat databases, we selected the following comparable indicators: GDP per capita, employment rate, unemployment rate, nominal productivity per employed person, purchasing power parity, public administration deficit/surplus and inflation. These macroeconomic indicators are statistical data that express the current state of the

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economy of a certain country, or they assess the level of development of the economy. The goal of this contribution is to analyze, compare in the mentioned time interval and create a ranking of these countries using selected macroeconomic variables.

2. ANALYSIS OF SELECTED INDICATORS

For an objective comparison of different countries, we analyze GDP per capita. We can express it as the share of the total GDP production in constant prices to the population of the selected country (Bayerová, 2021). Through this indicator, we can monitor how many products per inhabitant on average.

Table 1. GDP per capita (€)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	5 390	5 390	5 470	5 700	5 910	6 120	6 330	6 630	6 380	6 690
Czechia	15 170	15 160	15 480	16 290	16 670	17 490	17 990	18 460	17 400	18 020
Estonia	12 320	12 540	12 960	13 230	13 620	14 410	14 970	15 510	15 010	16 260
Croatia	10 420	10 420	10 430	10 770	11 240	11 750	12 200	12 700	11 730	13 460
Latvia	9 680	9 980	10 260	10 750	11 110	11 590	12 140	12 530	12 130	12 800
Lithuania	10 330	10 810	11 290	11 620	12 070	12 760	13 400	14 050	14 030	14 690
Hungary	10 120	10 330	10 800	11 220	11 500	12 030	12 690	13 270	12 710	13 660
Poland	9 980	10 100	10 440	10 890	11 240	11 790	12 420	13 020	12 750	13 580
Romania	6 500	6 770	7 040	7 290	7 670	8 280	8 700	9 120	8 820	9 380
Slovenia	17 360	17 160	17 620	17 990	18 550	19 440	20 240	20 720	19 720	21 260
Slovakia	13 180	13 250	13 600	14 300	14 550	14 960	15 510	15 890	15 180	15 660

Source: Eurostat

In the monitored period, we noted a growing trend for the GDP per capita indicator in all countries. The highest increase in the last year of the mentioned period compared to the first year was recorded by Romania, by 44.3%, and Lithuania by 42.2%. Slovakia and the Czech Republic increased the value of GDP per capita by only 18.8%, which represented the lowest increase of the mentioned countries. For all countries, a slight decrease in the indicator between 2019 and 2020 can be seen, which was probably caused by the onset of the pandemic and subsequent socio-economic measures that also affected the economies of these countries.

Table 2. Employment (%)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	62.4	62.9	64.4	66.5	67.0	70.6	71.7	74.3	72.7	73.2
Czechia	71.5	72.5	73.5	74.8	76.7	78.5	79.9	80.3	79.7	80.0
Estonia	73.1	74.1	75.0	76.7	77.0	79.2	79.7	80.5	79.1	79.3
Croatia	58.1	57.2	59.2	60.6	61.4	63.6	65.2	66.7	66.9	68.2
Latvia	67.9	69.5	70.6	72.5	73.0	74.6	76.8	77.3	76.9	75.3
Lithuania	68.5	69.9	71.8	73.3	75.2	76.0	77.8	78.2	76.7	77.4
Hungary	63.8	65.2	68.7	70.9	73.7	75.4	76.7	77.6	77.5	78.8
Poland	62.9	63.2	64.9	66.3	68.2	70.0	71.4	72.3	72.7	75.4
Romania	56.8	56.9	58.0	59.2	60.3	62.7	63.9	65.1	65.2	67.1
Slovenia	67.8	66.7	67.3	68.6	69.5	72.9	74.9	75.9	74.8	76.1
Slovakia	66.9	66.9	67.8	69.6	71.8	73.2	74.5	75.6	74.6	74.6

Source: Eurostat

Another indicator we examined is employment, or the employment rate. In all countries surveyed, we have seen an upward trend in employment rates. A slight decline was observed

between 2019 and 2020 for several of the following indicators. This was due to the global pandemic and the measures associated with it.

Unemployment is a macroeconomic as well as a societal problem, reflecting the state of the economy when those able and willing to work cannot find employment (Čaplánová & Martincová, 2014). It is a manifestation of an imbalance in the labor market where the able-bodied population offers more work than firms are willing to employ. One of the most used indicators to measure the severity of this phenomenon is the unemployment rate. It explains what percentage of the available population in a country (aged 15-64) is out of work (Muchová, 2021).

Table 3. Unemployment (%)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	13.3	13.9	12.4	10.1	8.6	7.2	6.2	5.2	6.1	5.3
Czechia	7.0	7.0	6.1	5.1	4.0	2.9	2.2	2.0	2.6	2.8
Estonia	9.9	8.6	7.3	6.4	6.8	5.8	5.4	4.5	6.9	6.2
Croatia	16.0	17.3	17.3	16.2	13.1	11.2	8.5	6.6	7.5	7.6
Latvia	15.1	11.9	10.9	9.9	9.7	8.7	7.4	6.3	8.1	7.6
Lithuania	13.4	11.8	10.7	9.1	7.9	7.1	6.2	6.3	8.5	7.1
Hungary	10.7	9.8	7.5	6.6	5.0	4.0	3.6	3.3	4.1	4.1
Poland	10.4	10.6	9.2	7.7	6.3	5.0	3.9	3.3	3.2	3.4
Romania	8.7	9.0	8.6	8.4	7.2	6.1	5.3	4.9	6.1	5.6
Slovenia	8.9	10.1	9.7	9.0	8.0	6.6	5.1	4.4	5.0	4.8
Slovakia	13.9	14.1	13.1	11.5	9.6	8.1	6.5	5.7	6.7	6.8

Source: Eurostat

In all countries surveyed, we have observed a downward trend in the unemployment rate. A slight increase was observed between 2019 and 2020. We observed the lowest unemployment rate in all subjects in 2019.

Table 4. Nominal labor productivity per person employed (%)

year / country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	44.0	43.1	44.3	44.7	45.9	46.2	46.2	49.1	50.7	51.3
Czechia	77.0	77.8	80.0	80.5	80.5	82.5	82.5	85.6	86.0	85.0
Estonia	73.4	73.5	75.1	71.9	73.3	74.5	74.5	77.8	80.7	84.5
Croatia	74.9	76.3	73.3	73.2	74.7	74.9	74.9	74.4	71.5	74.7
Latvia	63.2	62.5	64.7	64.8	65.7	67.4	67.4	69.0	70.0	73.1
Lithuania	73.2	74.3	74.6	72.9	71.9	75.2	75.2	78.8	81.7	83.0
Hungary	73.5	73.4	71.8	71.4	68.1	67.9	67.9	70.6	71.5	72.2
Poland	74.0	73.7	73.5	74.6	74.2	75.0	75.0	79.5	81.9	82.6
Romania	55.5	56.2	56.9	58.6	63.0	66.0	66.0	72.5	75.0	84.2
Slovenia	80.7	81.2	81.6	80.7	81.0	81.8	81.8	82.5	82.6	83.9
Slovakia	83.4	84.1	84.2	83.7	77.1	73.9	73.9	72.5	73.3	72.6

Source: Eurostat

Labor productivity is a measure of a country's competitiveness and economic performance. In most countries in the monitored period, we can observe an increase in labor productivity per person. We recorded the highest increase in Romania, by almost 30% and in Estonia by less than 10%. A balanced course was recorded in Croatia. In Slovakia, as the only country studied, we recorded a drop in productivity of more than 10%.

In analyses of economic developments, the phenomenon of inflation must also be given due attention. We can speak of consumer inflation if there is a general increase in the prices of goods and

services included in the consumer basket in the economy. It should be noted that this phenomenon is not natural for the economy in the long term. In fact, if there were no inflation of the money supply, the prices of consumer goods and services should naturally fall in the long term because of scientific and technological progress. We interpret price fluctuations through the inflation rate, measured by the consumer price index (CPI for short) (Čaplánová & Martincová, 2014).

Although the phenomenon of inflation from an economic point of view can also bring some positive effects (at a low level), its existence brings an increase in costs to households due to a reduction in the purchasing power of the monetary unit. For this reason, it is desirable that the European Central Bank and the political representatives of the given state take responsible measures. Interventions to control inflation/deflation can leave more damage to the economy than the manifestations of the phenomena. Before the regulation itself, however, it is necessary to know the current and past issues. Economic analyzes also serve these purposes. The issue of comparability of data from the CPI in European countries was because each country reported a different number of representative items in the consumer basket and also different item weights. For this reason, the Harmonized Index of Consumer Prices (abbreviated as HICP) was created for the purpose of comparing changes in consumer prices (Habánik, 2021). The aim of its creation was not to establish an identical consumer basket, but to apply the same principles and rules for all countries, taking national differentiation into account. Its results are naturally slightly different from the CPI, but its informative value when applying the comparison of several different countries is significantly higher.

Table 5. HICP - inflation rate (%)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	2.4	0.4	-1.6	-1.1	-1.3	1.2	2.6	2.5	1.2	2.8
Czechia	3.5	1.4	0.4	0.3	0.6	2.4	2.0	2.6	3.3	3.3
Estonia	4.2	3.2	0.5	0.1	0.8	3.7	3.4	2.3	-0.6	4.5
Croatia	3.4	2.3	0.2	-0.3	-0.6	1.3	1.6	0.8	0.0	2.7
Latvia	2.3	0.0	0.7	0.2	0.1	2.9	2.6	2.7	0.1	3.2
Lithuania	3.2	1.2	0.2	-0.7	0.7	3.7	2.5	2.2	1.1	4.6
Hungary	5.7	1.7	0.0	0.1	0.4	2.4	2.9	3.4	3.4	5.2
Poland	3.7	0.8	0.1	-0.7	-0.2	1.6	1.2	2.1	3.7	5.2
Romania	3.4	3.2	1.4	-0.4	-1.1	1.1	4.1	3.9	2.3	4.1
Slovenia	2.8	1.9	0.4	-0.8	-0.2	1.6	1.9	1.7	-0.3	2.0
Slovakia	3.7	1.5	-0.1	-0.3	-0.5	1.4	2.5	2.8	2.0	2.8

Source: Eurostat

The development of the HICP was fluctuating during the monitored period. Comparing the first and last year of the monitored period, we can state that the values returned to the same, or comparable level. However, the year 2022, even if the worst period of the pandemic is behind us, appears to be the most problematic. It is a consequence of the fading anti-epidemic measures and, war conflicts in Ukraine. As a result, the EU imposed several embargoes on imports and exports to Russia, which also affected the economies associated with Ukraine and Russia. In August 2022, according to Eurostat data, the average inflation in the EU zone is at the level of 9.1%. Double-digit HICP values were recorded in the monitored countries. The highest was in Estonia 25.2 %, Lithuania 21.4 %, and Latvia 21.1 %.

The balance (i.e., deficit or surplus) of the general government budget is the difference between total revenue (excluding credit revenue) and total expenditure (including interest service) of the general government, more precisely of the general government sector, in a given budget period,

usually a calendar year. It is most often expressed as a percentage of the gross domestic product (ŠTATISTICKÝ ÚRAD SR). A negative figure indicates a situation where government expenditure exceeds government revenue - a deficit is created. A positive number indicates a situation where revenue exceeds expenditure - a surplus is generated. A general government budget deficit means an increase in government debt (Habánik, 2021).

Table 6. General government deficit/surplus (Percentage of gross domestic product)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bulgaria	-0.8	-0.7	-5.4	-1.9	0.3	1.6	1.7	2.1	-4.0	-4.1
Czechia	-3.9	-1.3	-2.1	-0.6	0.7	1.5	0.9	0.3	-5.8	-5.9
Estonia	-0.3	0.2	0.7	0.1	-0.4	-0.5	-0.6	0.1	-5.6	-2.4
Croatia	-5.5	-5.5	-5.5	-3.4	-0.9	0.8	0.0	0.2	-7.3	-2.9
Latvia	-1.4	-1.2	-1.6	-1.4	0.0	-0.8	-0.8	-0.6	-4.5	-7.3
Lithuania	-3.2	-2.6	-0.6	-0.3	0.3	0.4	0.5	0.5	-7.3	-1.0
Hungary	-2.3	-2.6	-2.8	-2.0	-1.8	-2.5	-2.1	-2.1	-7.8	-6.8
Poland	-3.8	-4.2	-3.6	-2.6	-2.4	-1.5	-0.2	-0.7	-6.9	-1.9
Romania	-3.7	-2.1	-1.2	-0.6	-2.6	-2.6	-2.8	-4.3	-9.3	-7.1
Slovenia	-4.0	-14.6	-5.5	-2.8	-1.9	-0.1	0.7	0.4	-7.8	-5.2
Slovakia	-4.4	-2.9	-3.1	-2.7	-2.6	-1.0	-1.0	-1.3	-5.5	-6.2

Source: Eurostat

The resulting deficits in all countries have been affected by increases in expenditure (including COVID measures, of which the largest share is accounted for by "first aid" measures) as well as reductions in general government revenue in the most recent years under review (Vlachynský, 2022).

3. EVALUATION OF RESULTS

We used the simplest method to evaluate the results - the quick ranking method. This method evaluates the position of countries according to a ranking scale given by the number of subjects.

Table 7. Ranking method in 2012

Indicator/ country	Employment	Unemployment	GDP per capita	General government deficit/surplus	HICP - inflation rate	Nominal labor productivity	∑	Average
Bulgaria	9	7	11	2	2	11	42	7.00
Czechia	2	1	2	8	6	3	22	3.67
Estonia	1	4	4	1	8	7	25	4.17
Croatia	10	11	5	11	5	4	46	7.67
Latvia	4	10	9	3	1	9	36	6.00
Lithuania	3	8	6	5	4	8	34	5.67
Hungary	7	6	7	4	9	6	39	6.50
Poland	8	5	8	7	7	5	40	6.67
Romania	11	2	10	6	5	10	44	7.33
Slovenia	5	3	1	9	3	2	23	3.83
Slovakia	6	9	3	10	7	1	36	6.00

Source: Own processing

The ranking is determined from 1, 2,…n according to the number of countries so that the subject with the best score gets the lowest value. The final ranking is obtained by summing the achieved values of each indicator for a particular country. The specific sum is divided by the arithmetic mean, or weighted arithmetic means, and the country's ranking is assigned on that basis.

Table 8. Ranking method in 2021

Indicator/ country	Employ-ment	Unem-ployment	GDP per capita	General government deficit/surplus	HICP - inflation rate	Nominal labor pro-ductivity	Σ	Average
Bulgaria	9	5	11	5	3	11	44	7.33
Czechia	1	1	2	7	5	1	17	2.83
Estonia	2	7	3	3	7	2	24	4.00
Croatia	10	10	8	4	2	7	41	6.83
Latvia	7	10	9	11	4	8	49	8.17
Lithuania	4	9	5	1	8	5	32	5.33
Hungary	3	3	6	9	9	10	40	6.67
Poland	6	2	7	2	9	6	32	5.33
Romania	11	6	10	10	6	3	46	7.67
Slovenia	5	4	1	6	1	4	21	3.50
Slovakia	8	8	4	8	3	9	40	6.67

Source: Own processing

Using the data in Tables 7 and 8, we have constructed country rankings in 2012 and 2021 to compare changes in the ranking of these countries.

Table 9. Comparison of ranking using the ranking method

	ranking		
year / country	**2012**	**2021**	**change in ranking**
Bulgaria	8	9	-1
Czechia	1	1	0
Estonia	3	4	-1
Croatia	9	8	+1
Latvia	7	10	-3
Lithuania	5	5	0
Hungary	6	6	0
Poland	4	3	+1
Romania	7	8	-1
Slovenia	2	2	0
Slovakia	4	7	-3

Source: Own processing

By examining and comparing selected economic indicators between 2012 and 2021, we see that the Czech Republic and Slovenia performed best among the post-socialist EU Member States. These countries retained the first and second positions in our ranking. Thus, there was no change in location in the compared years in the Czech Republic and Slovenia, and also in Lithuania and Hungary. The mentioned countries are consistently placed in the first half of the table. The biggest drop was recorded by Latvia and Slovakia, which moved down three places in 2021. This put Latvia in last place on the table. Croatia and Poland recorded a positive shift (up one position). This moves Croatia from last place in 2012 to closer to the middle of the table and Poland to third place in 2021.

4. CONCLUSION

The transition of the countries of Central and Eastern Europe from socialism to the current establishment is considered an economic success story, even if it was accompanied by many difficulties. After thirty years of transformation, the best economic situation is clearly in the Czech Republic and Slovenia. In the ranking of countries, which we compiled using the ranking

method, they retained the first and second places. These two countries have the highest gross domestic product per capita, the indicator most often used to measure a country's economic strength. At the same time, they also maintain the highest standard of living of residents from post-socialist countries. Although Bulgaria and Romania have taken a big step forward, they remain the poorest members of the EU.

The Slovak Republic entered the transformation as a moderately developed country. During the analyzed period, Slovakia dropped in the ranking by 3 places. Among other things, the reasons can be found in the absence of the rule of law in the past, which led to the distortion of the business environment. Without a healthy economic environment, businesses have no incentive to move forward and invest. One of the fundamental problems is the unpredictability of the business environment (frequent changes to key laws), which reduces the competitiveness of the Slovak Republic in the long term.

A high-quality business environment creating conditions for achieving long-term sustainable economic growth is a basic prerequisite for business development and increasing the competitiveness of the Slovak Republic on an international scale. Therefore, it is necessary to focus on removing unjustified regulatory and financial barriers, bureaucracy, cost, and time burden, on ensuring the stability and predictability of the business environment.

References

Bayerová, V. (2021). *Makroekonomie 1.* Brno: Akademické nakladatelství Cerm.

Čaplánová, A., & Martincová, M. (2014). *Inflácia, nezamestnanosť a ľudský kapitál z makroekonomického pohľadu*. Bratislava: Wolters Kluwer.

EUROSTAT. Available on: https://ec.europa.eu/eurostat

Habánik, J. a kol. (2021). *Makroekonómia.* Trenčín: FSEV TnUAD.

Muchová, E. a kol. (2021). *Makroekonómia*. Praha: Wolters Kluwer.

ŠTATISTICKÝ ÚRAD SR. Available on: https://slovak.statistics.sk

Vlachynský, M. (2022). *Drahý nový rok.* [online]. Bratislava: INESS. 28.s. Available on: https://iness.sk/sites/default/files/documents/pdf/IPN/drahy_novy_rok.pdf