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# Measuring the Socioeconomic Development of Selected Balkan Countries and Hungary: A Comparative Analysis for Sustainable Growth

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**Abstract:** The present research aimed to provide an extensive comparative analysis regarding the socioeconomic development paths of three selected Balkan countries—Bulgaria, Croatia and Romania as well as Hungary, which was originally classified as a member of the Visegrad Four group in Central and Eastern Europe. In our paper, the Balkan states were analyzed along with Hungary, as it might be observed that since the 2008–2009 economic crisis, the latter's economy has been increasingly diverging from that of the Visegrad club in several aspects. After having undergone a protracted transition crisis escalated by the collapse of the Soviet Union, the micro-region has exhibited a truly contradictious development trajectory including periods of relatively faster economic-growth-based catching up and significant fallback stages driven by numerous endogenous or exogenous shocks. The study assumed that the region's most crucial vulnerability is the relatively high dependence on Foreign Direct Investment that contributes to the fluctuating nature of economic growth, and also, it might be viewed as an obstacle to long-term sustainable development. In the frames of the research, the authors present an alternative comparative method for specifying the actual level of economic development of the defined country group from economic, political and social perspectives, relying on the most recent data published by international organizations, NGOs and thinktanks. As a result, an aggregate ranking was established for the four countries based on 21 individual indices, taking into consideration their dependent market economy attributes and, also, unique patterns of economic growth. Furthermore, the study also provides a dynamic evaluation of the trends concerning the narrow approach of using ten indices for a protracted period, investigating whether Hungary has been converging, diverging or stagnating with respect to the three Visegrad and Balkan economies. To what extent are Bulgaria, Croatia, Hungary and Romania still affected by the historical burden of the former regime, and what perspectives might they have for realizing convergence in the near future to the more developed economies?

Keywords: socioeconomic development; Balkans; sustainable development; convergence

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Citation: Soreg, K.; Bermudez-Gonzalez, G. Measuring the Socioeconomic Development of Selected Balkan Countries and Hungary: A Comparative Analysis for Sustainable Growth. *Sustainability* 2021, 13, 736. https://doi.org/ 10.3390/su13020736

Received: 16 November 2020 Accepted: 11 January 2021 Published: 14 January 2021

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#### 1. Introduction

There seems to be no compelling reason to argue that one of the most frequently concluded observations with regard to the European Union's development path is that the economic integration is strongly affected by member states' trajectories of growth, which represent some relevant heterogeneity due to several socioeconomic as well as political reasons. The latter phenomenon is having a crucial impact on the long-term growth perspectives of the entire region, and a fluctuating, multidimensional development pattern might be best demonstrated in countries with lower economic stability and overall levels of development as well as higher rates of inequalities compared to the core economies of the EU. As can be observed since the turn of the millennium, in most cases, economic crises originally emerged within the core economies in the form of a spill-off process gradually migrating to the peripheries or semi-peripheries, where the shocks usually had a much

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longer, protracted nature in terms of time as well as depth of the crises. The latter statement might be slightly changing in 2020, when the global impacts of the COVID-19 global health pandemic seem to be atypically long, even in the most developed countries of the world [1]. Tight economic integration is also developing, accelerating interdependence among the member states, and it might be seen that since the 1980s and 1990s, there have been decreasing growth rates across the European continent [1]. According to Bartlett and Prica, certain core economies are primarily exposed to stagnation because of the existing underconsumption that must be compensated for by export revenues flowing from the less developed periphery economies to accelerate growth [2]. It might be true for Germany, Japan or Northern Italy and a few other advanced countries; still, in most core economies, there are significant trade deficits today. Furthermore, some academic literature assumes that capital inflows directed towards the peripheries or emerging economies are excessive and thus could provoke an economic crisis if growth is not sustained by other domestic factors over a protracted period of time [3].

The research presented in current paper narrows the focus of investigation to a smaller country group situated at the southeastern part of the European Union, as our comparative analysis was primarily carried out for Bulgaria, Croatia and Romania (hereinafter referred to as "B3"). Based on some earlier results, this micro-region was extended to an additional neighboring country, which is Hungary [4]. In several socioeconomic aspects, the latter's economy has been undergoing changes that are not appearing at the same pace or magnitude as in the three other members of the so-called Visegrad country group, and thus, some doubts are being raised about the appropriateness of its direct comparison with Czechia, Poland and Slovakia (further referred to as "V3") [4]. On the other hand, Bulgaria and Romania have started their catching-up path from relatively low initial levels strongly affected by the dissolution of the Soviet Union and, also, the protracted transition crisis in the first half of the 1990s. Furthermore, Croatia might be holding a comparative advantage of being a popular local holiday destination, which has served as strong motivation for developing its infrastructure as well as level of services, massively relying on the influx of tourism; however, it officially acceded to the European Union only in 2013 due to border conflicts with Slovenia. According to the World Bank's income classification method, the only economy of the analyzed group being listed as an upper-middle-income country is Bulgaria, as its per capita Gross National Income is projected to be between 4046 and 12,535 US dollars for the fiscal year of 2021 [5].

Based on some earlier empirical analysis [4], the main question of the present paper is whether Hungary, as originally a member of the V4, has been able to preserve its position within the latter country group or if it has rather been producing a diverging path over the last 10–15 years, thus making it more appropriate to compare it with Bulgaria, Croatia and Romania. Our second most important research target was to find solid proof of whether the chosen Southeast European economies of the European Union have been able to develop detectable economic catching up over recent years, and to shed light on their most critical vulnerabilities, further boosted by the phenomenon of globalization as well as the deep and protracted impacts of regime change that might be slightly observable even today.

It is rational to suppose that each group or region of the so-called emerging (or in a broader aspect, developing) countries is at a different stage of integration into the global economy due to various reasons arising from the economic, social and political as well as some other factors, which also results in individual responses to external shocks, especially the ones with a heavy impact on the more vulnerable countries of the world. For example, the 2008–2009 global turmoil also further increased the inequalities already acutely present in the periphery or semi-periphery economies. Aside from the Central and Eastern European ("CEE") countries, economies such as Portugal, Spain and Greece have also been seriously impacted by the global economic and financial crisis that provoked a set of contractionary policies introduced by the local governments in the form of several austerity-based measures directly affecting consumption, the taxes levied on the labor force, the extension of the pension age and some other policies [6]. The 2008–2009 crisis



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created a base for several economies to drift towards massively protectionist policies and thus to leave behind the previously used, more liberal approach in terms of trade and other spheres [7]. In the process of evaluating the development scenarios of emerging economies, it is necessary to reveal whether the examined countries, groups of countries or regions have been falling under the phenomenon of the middle-income trap, as it serves as a relatively reliable indicator for detecting if they have undergone one or even a few protracted slowdown phases. The referenced long-term deceleration periods are sometimes also indicated as convergence traps. In their cutting-edge paper of 2017, Pruchnik and Zowczak provide an explanation on the latter concept, according to which a given country's GDP per capita level is not able to realize convergence towards the direction of a more developed economy that serves as a reference country in the specified analysis [8].

This paper is divided into five main chapters. Following the first introductory part, Section 2 presents the most important findings of the available literature concerning the definition of economic development, long-term economic growth, catching up and, also, economic dependence in the era of capitalism. In what follows, Section 3 provides the key methodology of the research by explaining an aggregated ranking of the selected four countries' overall economic development paths combined with some social, political and other aspects relying on the most recent data. Furthermore, we introduce a regression-based econometric model targeted for the period between 2005 and 2020 from the perspective of Hungary to demonstrate the possible diverging, converging or stagnating trends towards the V3 and the B3 group. Section 4 introduces the main challenges in economic development estimation (Section 4.1), including some traditional components of economic growth such as, for example, the long-term analysis of the GDP per capita (Section 4.1.1), net Foreign Direct Investment inflows (Section 4.1.2), and Gini index (Section 4.1.3) as well as the relative position of the local currencies (Section 4.1.4), and also demonstrates, in detail, the abovementioned socioeconomic and political performance of the "Balkan Three" and Hungary through the lens of 21 individual indices by developing an aggregated ranking for the members (Section 4.2) and the dynamic time comparison of the economic trends detected in 10 chosen indicators. Section 5 evaluates the main results of the research and focuses on some further research directions in the field of Central and Eastern Europe's economic development.

#### 2. Literature Review

Before specifying the main dimensions of the selected Southeast European economies' and Hungary's socioeconomic and political performance, it is crucial to investigate the most relevant findings regarding the concept of long-term economic growth, development and dependence.

Besides such classical approaches as the so-called Kondratiev waves (also referred to as long waves or supercycles); Kuznets's construction cycles of mid-range duration associated with, among other things, demographic changes; Schumpeter's creative destruction, which is having crucial importance in developing innovative industries; and Wallerstein's world-system theory classifying the world by center, semi-periphery and periphery countries based on the international division of labor, there are also several other findings focusing on the precise illustration as well as interpretation of the cyclical essence of economic growth.

On these grounds, it is necessary to shed light on the work of a Hungarian researcher, economist and engineer, Ferenc Jánossy, who carried out his significant contribution to growth theory during the second part of the 20th century. In his analysis, Ferenc Jánossy states that a post-war upheaval of an economy does not expire when the magnitude of production approaches its pre-shock level but instead, rather at from the point when the volume of output starts to follow the trendline of the protracted economic growth. To be specific, if the examined country's growth path is relatively stable before the exogenous shock, the growth level observable before the war would be expected after the reconstruction phase. Nevertheless, Jánossy's main pillar of his analysis is the assumption that human capital is the key trigger of the long-term economic development of any country.



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It is rational to suppose that the accumulation of the latter factor impacts the slope of the abovementioned trendline, which is of a linear nature on a logarithmic scale since economic growth is exponential [9,10].

It is also relevant to refer to Ervin Rozsnyai's achievements in the field of economic development, which created the theory of transnational monopoly capitalism, highlighting that it might be viewed as a phenomenon and symptom of capitalism as well as the third variety of imperialism to emerge after the private and state monopolist era [11]. The concept was also extended by Annamária Artner [12,13]. Rozsnyai defines junction crisis as an aftermath of capitalism that can only be dissolved by a so-called internal leap—a relevant modification realized internally by the socioeconomic system—or a systemic change. Besides, it might also provoke a crisis of the key technological paradigm dominating previously, and as a result, the entire institutional structure would be heavily hit [11]. Annamária Artner's [14] assumptions seem to be well-founded when specifying that cycles are operating along a very similar logic: In frames of the innovation period, an entirely new technology is created that obviously raises competitive advantages for the innovators. Furthermore, the profit rate necessarily starts to grow, while unit labor costs must decrease over time. We might agree on such logic that long waves are arising from the technological paradigms. Notwithstanding this, in certain cases, the process or fact of development can be witnessed parallelly in the core and periphery economies, as it was experienced with the bubble burst provoking the global economic and financial crisis of 2007–2008 [15]. In her investigation into economic development, Erzsébet Szalai [16] affirms that "new capitalism" has been recently undergoing an immense crisis. The latter could also be illustrated as the final accord of a long wave. The cited phenomenon might be detected in the region of Central and Eastern Europe emerging from the area's geographical and historical features, including the change of regime at the end of the 1980s as well as the transition crisis hitting the region during the first half of the 1990s that had a severe impact on its further development path. In her research, Szalai provides an alternative variety for socialism [16]. The increasing number of alter-globalist movements across the world might be interpreted as a crisis phenomenon of the existing system. Globalization is having such a multipolar impact on the development of countries, economic sectors, societies, cities or even such elements as architecture in the fastest-growing areas of the world that its contradictious effects might be spotted more and more evidently, including the tension it is naturally provoking in the 21st century [17]. Many attempts have been made [18] to depict the transition crisis and its deep socioeconomic impacts in the form of high unemployment rates, growing social inequalities and increasing poverty, further contributing to the vulnerabilities of capitalism and current depth of globalization.

Regarding the case of the Central and Eastern European region, the question arises whether the negative impacts of the change of regime—in both economic and political terms—are still detectable from the perspective of catching up. Based on the given countries' contradictious economic performance from the most recent 10 or even 20 years, with some exceptions (for example, the Czech Republic, Slovakia or the Baltic states), it might be true. In his overview, Janos Kornai provides proof of the latter assumption [19]. To be more precise, when socialism gained more ground in CEE, it also relied on an already existing environment that had been based on the availability of certain inputs such as, for example, a wide pool of a labor force earlier engaged in production and value creation in a suboptimal way. It also meant that the accessible labor surplus provided a significant benefit for the system at the beginning, initiating a relatively rapid growth period. However, the initial dynamism gradually diminished, and the previously beneficial labor surplus turned into a scarce resource in the intensive stage of growth [19].

It is important to list the most critical targets for the analyzed region, which were clearly defined during the regime change and aimed at realizing economic convergence [20]:

 To establish conditions for free markets and competition, so the products and services created in Central and Eastern Europe might participate in international trade;



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To realize free competition and, among other actions, the possible privatization of former state-possessed assets by naturally developing an entrepreneur base;

To create efficient solutions for combatting the severe and protracted transition crisis
that caused high unemployment and inflation rates and, also, contributed to the further
escalation of income and wealth inequalities, resulting the extended impoverishment
of the local population.

One question that needs to be raised is whether the CEE economies have accomplished their original objectives after more than 30 years. However, there are no doubts that the creation of free markets has been successful; it is a fact that in several former satellite countries, it has not been possible to develop high-value-added production for the international market due to such factors as the relatively significant dependence on FDI; the distortive effect of low-impact activities, in most cases in the form of assembling (mainly for the automobile industry); and the extremely high relevance of German trade relations, which has created further vulnerabilities, for example, in the Visegrad group [4,5]. Mcneill argues that free markets are a mechanism that triggers the free competition of products and services that may thus be an integral part of global competition and contribute to the given economies' further development [21]. However, if they are not further supported by efficient public economic and urban policy decisions, they might further boost the existing inequalities [22-24]. Recent evidence obtained by Mansi et al. in 2020 concludes that asymmetries in the Balkan region, especially in the economies of the West Balkans, have further increased in terms of income inequalities and, also, GDP per capita compared to EU averages, provoking higher poverty rates [25]. According to a recent outlook for certain emerging economies of Europe, it has been specified that there had been a major slowdown in these areas that had been partially generated by the moderation of growth in the Czech Republic, Hungary and Poland, as all of these countries are maintaining very intense trade activity with Germany, which has also been undergoing a slowdown period and, thus, has been affecting its major trading partners' economic performance [26]. The novelty of the current research is that the available literature does not pay specific attention towards the comparison of EU-member Balkan states with one or a few of the Visegrad economies.

Relying on the listed literature review and the earlier findings of Soreg [4] concerning the trend of Hungary's divergence from the Visegrad group as well as the available economic-growth-related data published yearly by the World Development Indicators [5], the main hypotheses of our research were formulated as follows:

**Hypothesis 1.** After the 2008 global economic crisis, Hungary has been showing economic convergence towards the "Balkan Three"—Bulgaria, Croatia and Romania—region of Southeastern Europe and has been significantly falling behind the rest of the Visegrad economies.

**Hypothesis 2.** Since 2007, the EU-member economies—Bulgaria, Croatia and Romania—of Southeastern Europe have been undergoing an accelerated economic development path following their European Union access.

After having presented the motivations for the current research based on the most relevant literature findings and our two hypotheses, we hereby continue with the specification of the empirical methods aimed at finding answers for the core questions of the study.

# 3. Materials and Methods

In order to reveal the regional disparities of the chosen country groups, in the frames of this paper, we present a static and a dynamic multicriterial analysis, based on selected individual socioeconomic and political indicators published by international organizations, NGOs and other sources, so it might become possible to make observations regarding the development path besides the usual and, in many cases, non-informative economic-growth-



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related data that are also included in our research in Section 4. A similar approach was carried out regarding the socioeconomic impact of migration in the case of Romania that examined the effects of the latter phenomenon on the labor market in the Romanian Danube Region [27]. In the current contribution, the emphasis is rather put on such spheres as the business environment, economic competitiveness, political and press freedom, quality of life, education and innovation as well as other relevant areas from the perspective of economic convergence, income inequalities and the level of relative development of Bulgaria, Croatia, Hungary and Romania. Our empirical methods might be summarized according to the following:

- Static comparative analysis of the recent country performance (Table 1): a cross-regional comparison according to 21 chosen parameters providing an aggregated ranking of the four economies after having listed the most recent data (the years 2019 and 2020 in the case of the yearly published data) of the referenced indices and, among other results, examining the weakest and strongest spheres of the region. The main target was thus to illustrate development asymmetries dominant in the given micro-region of the European Union and to detect the main positive or negative tendencies over recent years that have strongly influenced the economies' relative positions and economic performance. For the latter, depending on the availability of data, the examined timeline was set for the period between 1996 and 2019.
- Dynamic regression-based model for the period between 2005 and 2020 (Table 2): analyzing the three Balkan economies' (Bulgaria, Croatia and Romania) and the three Visegrad countries' (the Czech Republic, Poland and Slovakia) major economic trends (long-term and recent 5-year average phase) from the perspective of Hungary over a long-term time horizon through 10 selected indicators with comparison to the 2005–2007 pre-crisis levels by exploring Hungary's deteriorating, stable or accelerating performance regarding the given indicators.

Concerning the abovementioned dynamic approach, we developed an econometric model by testing indices both individually and in aggregate with the help of two-variable regressions applied for each case regarding the 10 parameters. Besides, we also used significance tests and confidence intervals in every case to determine whether it was true that Hungary has been drifting away from the V3 club or is rather converging towards the Balkan group, as presented in Table 2.

The given method for selecting the specific rankings and indices with reference to the countries' performance was chosen because it allowed performing a static cross-sectional evaluation of the current economic development along the following three dimensions:

- Economic and business performance: Ease of Doing Business Index, WEF Global Competitiveness Report, IMD World Competitiveness Ranking, Index of Economic Freedom (Heritage Foundation), Economic Freedom of the World (Fraser Institute), WIPO Global Innovation Index, Cisco Digital Readiness Index, JRR Global Real Estate Transparency Index, Country Risk Premium (Damodaran);
- 2. Socio-political performance: Transparency International Corruption Perceptions Index, EIU Democracy Index, RSF World Press Freedom Index, Fragile States Index (Fund for Peace), WJP Rule of Law Index;
- Human development and quality of life performance: UNDP Human Development Index, UN World Life Expectancy Ranking, NUMBEO Quality of Life Index, Bloomberg Global Health Index, PISA Worldwide Ranking, The World Happiness Report.

The dynamic approach contains a narrower set of indicators, constrained by the availability of data since 2005 until 2020 with the following elements: the Global Competitiveness (WEF), Ease of Doing Business, Economic Freedom Index, Country Risk Premium, Innovation Index, Country Risk Premium, Human Development Index, Corruption Perceptions Index, Freedom of the World, Press Freedom Index and Fragile States Index.

The above-listed parameters were selected, as they have been published on a regular, yearly or even more frequent basis by independent agencies and international organizations.



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Additionally, their methodology is available for a wider audience, the rankings are freely accessible, they cover the majority of the countries across the globe, and most importantly, they serve as crucial market signals for capital owners, investors and policy makers as well as individual experts and researchers in the field of social sciences. On such grounds, Table 1 was developed to combine the chosen data for the purpose of developing an aggregated ranking for Bulgaria, Croatia and Hungary as well as Romania.

#### 4. Results

After having highlighted the most important theoretical approaches for investigating and explaining the cyclical nature of economic growth and its direct impacts on countries' development, in the current chapter we employ some classical means to examine economic growth before presenting the alternative method of the micro-region's individual development path.

4.1. Economic Development and Its Main Challenges in Southeast Europe

### 4.1.1. GDP per Capita Growth

Although it is far from a precise indicator for well-being, Figure 1 illustrates the GDP per capita growth between 1996 and 2019, relying on the World Development Indicators data [5]. As already mentioned, it might be clearly seen that after the transition crisis, Bulgaria and Romania were undergoing a severe economic fallback that turned out to be much longer than in the neighboring countries. The crisis was especially devastative in Bulgaria, as the country was struggling with hyperinflation, and the collapse of the reigning government originally started as a banking and financial crisis. In 1999, the country was affected by the Russian financial turmoil that showed its first signs in 1998 and emerged due to a massive fiscal deficit and the Asian financial crisis as well as the falling need for oil supply. Despite having a revolution in 1989, periods of very high inflation and truly pessimistic perspectives for economic growth, Romania had to deal with slightly more moderate outcomes of the long-lasting transition crisis, and the best position had been held by Croatia until 1998. Following the turn of the millennium, the four countries seemed to bond with each other regarding their per capita GDP growth patterns until the 2008–2009 global economic crisis, which brought to the surface, once again, the striking differences within the region. In this case, the most significant fallback was present in Croatia and Hungary, falling well below —5percent in their GDP per capita growth rates, and also, these two economies experienced the deepest double-dip recessions within the region. The explanation lies in the leading sectors of the two countries: Croatia serves as an important destination of international tourism, having a relatively long coastline, despite its smaller population, and Hungary is predominantly driven by the automotive industry, strongly depending on Germany. In both cases, the exact types of industries and the levels of dependence on them massively contributed to the vulnerability—as the consumption of such durable goods and services may dramatically fall back in the process of an economiccrisis—and low shock resistance of the economies. The catching-up waves rising to the pre-crisis levels continued with the same common tendency.

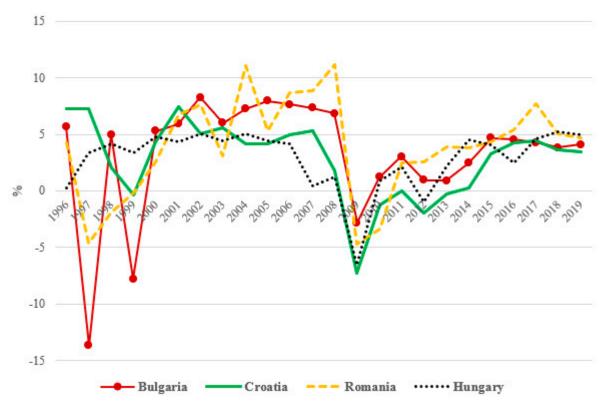
#### 4.1.2. Net FDI Inflows

To continue, from the perspective of the business environment, it is crucial to analyze the given region's attractiveness for foreign direct investment. One of the main vulnerabilities of the southeastern region of the European Union is the relatively high exposure to foreign capital. Figure 2 demonstrates the net FDI inflows as a percentage of GDP for the four economies. Following accession to the EU, Bulgaria, Hungary and Romania became new and relatively popular destinations for capital inflows, as they offered, among other factors, relatively cheap labor forces and advantageous business environments in terms of regulations and tax burdens. Before the 2008–2009 financial and economic crisis, Bulgaria had experienced the highest rates of FDI inflows, almost reaching 30% of annual GDP in 2007. The recession naturally pushed down the previously relevant volume of FDI that had



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also strongly contributed to the increasing economic growth of the countries. However, what is more important is that after the end of the turmoil, the former levels were not able to be restored through bouncing back, as the region had become less promising for foreign investors due to several reasons such as growing expenses, political instability and tightening state control. To conclude, we must add that the only economy that has been undergoing a relevant fallback in FDI inflows compared to its GDP is Hungary.

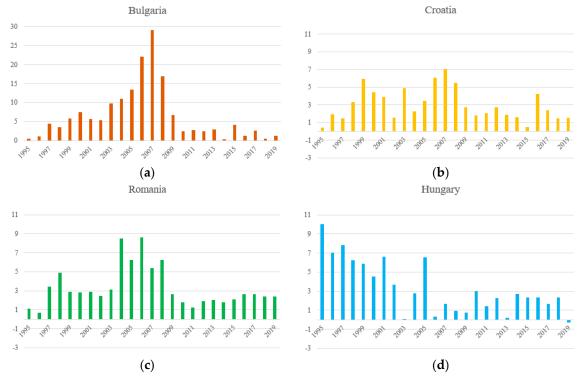


**Figure 1.** GDP per capita growth in Bulgaria, Croatia, Hungary and Romania (1996–2020). The four economies were following similar patterns after the turn of the millennium until the 2008–2009 global crisis, which shed light on their individual vulnerabilities similarly to the regional shock that emerged during the 1990s as a result of the dissolution of the Soviet Union. Source: authors' calculations based on the World Development Indicators (2020) data [5].

Figure 3 presents the same indicator by four-year intervals between 1995 and 2019 [5]. Upon observing the diagram, it becomes even more obvious that the relative ability to attract foreign investment had been increasing for approximately 10 years as a percentage of gross domestic product, and once the 2008–2009 global economic crisis was over, the previously growing tendency turned into stagnation. However, we currently have no answers about what will happen in the aftermath of the 2020 global recession within the micro-region. Bulgaria is once again an outlier member, and if we calculate the long-term average, it also takes first place (6.56% between 1995 and 2019), followed by Hungary (3.32%), Romania (3.31%) and Croatia (3.02%). Furthermore, if we take into account only the post-crisis period between 2010 and 2019 in terms of average FDI inflow as a percentage of GDP, it must be highlighted that there is only a slight difference among the "Balkan Three" (Romania: 2.1%, Bulgaria: 2.09%, and Croatia: 2.04%) economies, and Hungary holds last place (1.79%). Bulgaria experienced a property bubble before 2008; as an EU member with an easily accessible and relatively cheap resort area, it became one of the top destinations for foreign capital primarily aiming at hotel-construction-related investments. As the global crisis flooded the country, several promising projects were stopped, and as a result, poverty has increased since 2008, mostly because the construction industry is one of the main employers in Bulgaria in the category of the low-skilled labor force. According to a World Bank country report from 2017, "... unlike the usual underlying causes of

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housing bubbles, in Bulgaria the bubble was not caused by too much mortgage credit; the country continues to have the lowest share of mortgage debt among transition countries. Instead, (...) more fundamental housing market obstacles are at play. Sectoral distortions slow the sector, increase costs, reduce employment, and contribute to the country's inability to close the income gap with the EU-28." [28], p. 4.



**Figure 2.** Net Foreign Direct Investment inflows (as a % of GDP) by country (1995–2019). (a) Net FDI inflows in Bulgaria, with the highest maximum within the country group in 2007; (b) Net FDI inflows in Croatia, showing the most cyclical nature; (c) Net FDI inflows in Romania; (d) Net FDI inflows in Hungary, the only economy showing a constant decrease across the examined period. Source: authors' calculations based on the WDI (2020) data [5].

# 4.1.3. Income Inequalities: The Evaluation of the Gini Index

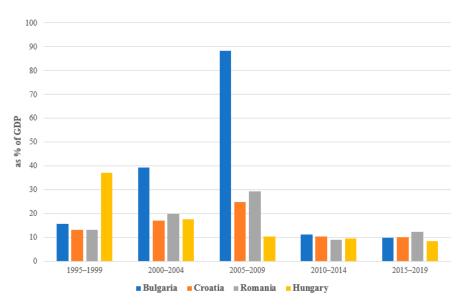
In the process of understanding the economic development path of the southeastern region of the European Union, our third parameter to examine was the Gini index, as it is neither a very classical nor an ultimately alternative way of capturing the income inequalities of a given country. One of the biggest challenges is to find appropriate data for the latter indicator, and in our case, we relied on the World Development Indicators statistics, which—as seen in Figure 4—are only available for certain shorter periods [5]. The level of the Gini index was the highest in Bulgaria and Romania, as it never fell below 30 percent within the examined period. Following 2011, Bulgaria has been developing inequalities of growing intensity, while other countries either have avoided or undergone only a slight increase in income inequality, except for Croatia.

# 4.1.4. Economic Development Reflected by Relative Positions of Local Currencies

Suppose that in a globalized world economy in the presence of free-floating currencies and high trade openness, the long-term development perspectives of countries are mirrored by substantial changes in the value of the local currency. If there is significant progress observable in such a country, it definitely becomes more attractive to foreign investors, which after a certain period of time, creates excessive demand for the local currency, resulting in gradual appreciation. We must add that certain domestic processes are also capable of influencing the exchange rate, for example, loose monetary policy and money creation. The slightly deteriorating position of the investigated micro-region might also be

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demonstrated by the weakening of local currencies over the last 10 years in the selected countries. As Bulgaria has been operating with a fixed exchange rate since 1999 (1 EUR = 1.95583 BGN), it is not visualized in Figure 5, which presents the changes in the local currencies compared to the euro as percentages of the 30.10.2010 levels (100%). In all three economies, the local currencies have devaluated against the euro to some extent; however, the most significant decrease can be observed in Hungary, while the highest stability has been maintained by Croatia. Parallelly with the weakening of the Hungarian forint, the nominal wages of Hungary expressed in euros are the lowest in the Visegrad country group, and this decreasing tendency also supports the relevance of our first hypothesis, which states that Hungary has been showing economic convergence rather towards the "Balkan Three" and not the Visegrad members [29].



**Figure 3.** Cumulative net FDI inflow by 4-year intervals (1995–2019). It might be clearly seen that following the 2008–2009 global economic crisis, the micro-region has been gradually losing its attractiveness for foreign capital compared to the previous period. The decrease is especially acute in the case of Hungary. Source: authors' calculations based on the WDI (2020) data [5].

#### 4.2. Socioeconomic and Political Performance of the "Balkan Three" and Hungary

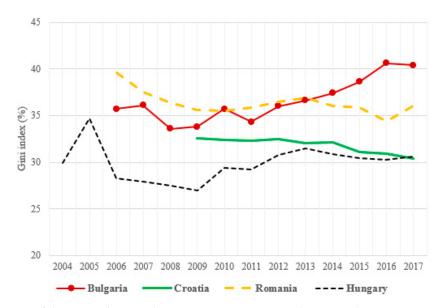
After having presented the most recent as well as long-term tendencies concerning the economic growth, ability to attract foreign capital and income inequalities in the three Balkan states and Hungary, in what follows, we introduce a comparative analysis of the region that was carried out as an alternative way of evaluating socioeconomic development in the southeastern countries of the European Union along with Hungary.

The main motivation behind the developed method was creating a dataset based on economic, social and political indicators for the latest available period and, thus, extending the traditional set of tools designed to strictly capture GDP and other growth-related parameters of economic development. On such grounds, the comparison relied on 21 individual reports, indices and rankings published by international organizations, NGOs, thinktanks or other online platforms that offer alternative approaches to the topic. Table 1 serves as a summary of the extracted data covering these alternative dimensions of the relative performance of the economies and, also, contains the aggregated rankings calculated from the 80 individual results from recent years. As a basis for comparison, the first country listed is Hungary, originally belonging to the Visegrad group yet, as expressed in the first hypothesis, showing signs of divergence from the latter club, followed by the selected southeastern economies of the European Union. Among the first, Table 1 presents business-environment-related indicators from the perspective of capital owners and foreign investors, as they have crucial importance in the allocation of their resources to a given

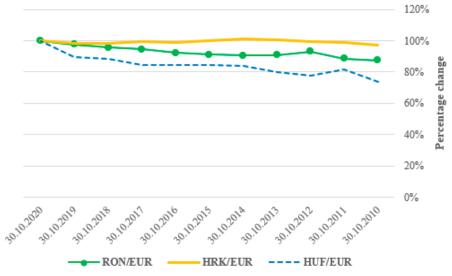


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economy. We also analyzed corruption and economic as well as press freedom, since besides a relatively stable business environment, the latter characteristics play a vital role in the risks potentially imposed on the investors along with such factors as the depth of democracy or the rule of law. By further sophisticating the scope of available rankings, from the point of view of successful global integration and competitiveness, it is truly important to prioritize innovation and, generally, technological development, as these strongly contribute to the long-term and sustainable economic growth of a country. The final block of the table lists parameters that are associated with the quality of life, education and level of happiness of the countries. It is obviously the most subjective group; still, to equalize to some extent the impact of the more accurate and measurable variables, the subjective indicators were also added to the analysis.



**Figure 4.** The evaluation of the Gini index in Bulgaria, Croatia, Romania and Hungary between 2004 and 2017 (%). Among the four countries, Bulgaria and Romania have been producing the most significant income inequalities since the mid-2000s. Source: authors' calculations based on the WDI (2020) data [5].



**Figure 5.** The 10-year change in local currency exchange rates compared to the euro as % of October 2010 levels in Romania, Croatia and Hungary. As might be seen, the Croatian kuna has shown the highest stability among the three economies, while the Hungarian forint has experienced the most significant depreciation compared to the euro. Bulgaria is not visualized, as it has been using a fixed exchange rate since 1999. Source: authors' calculations based on Excelrates (2020) data [30].



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**Table 1.** Comparative analysis of the chosen countries' socioeconomic and political performance.

	Ranking	Abbreviation	Hungary	Bulgaria	Croatia	Romania
1	Ease of Doing Business Index 2020 (out of 190) [31]	EDBI	52	61	51	55
2	WEF Global Competitiveness Report 2019 (out of 141) [32]	GCR	47	49	63	51
3	IMD World Competitiveness Ranking 2019 (out of 63) [33]	WCR	47	48	60	49
4	TI Corruption Perceptions Index 2019 [34]	CPI	70	74	63	70
5	Index of Economic Freedom 2020 (Heritage Foundation, out of 180) [35]	IEF	62	36	84	38
6	Economic Freedom of the World 2020 (Fraser Institute, out of 162) [36]	EFW	53	32	61	23
7	Country Risk Premium 2020 (out of 156)	CRP	65	59	80	65
8	EIU Democracy Index 2019 (out of 167) [37]	DI	55	47	59	63
9	RSF World Press Freedom Index 2020 (out of 180) [38]	PFI	89	111	59	48
10	Fragile States Index 2020 (Fund for Peace, out of 178) [39]	FSI	43	45	40	42
11	WJP Rule of Law Index 2020 [40]	RLI	60	53	39	32
12	Freedom in the World 2020 (Freedom House, out of 100) [41]	FIW	86	69	56	61
13	WIPO Global Innovation Index 2020 (out of 131) [42]	GII	35	37	41	46
14	Cisco Digital Readiness Index 2019 (out of 141) [43]	DRI	39	44	40	52
15	JLL Global Real Estate Transparency Index 2020 (out of 99) [44]	GRET	27	42	46	35
16	UNDP Human Development Report 2020 (out of 170) [45]	HDR	43	52	46	52
17	UN World Life Expectancy Ranking 2020 [46]	LER	70	89	48	76
18	Numbeo Quality of Life Index 2020 (out of 89) [47]	QLI	43	44	23	40
19	Bloomberg Global Health Index [48]	GHI	48	n/a	31	n/a
20	PISA Worldwide Ranking 2018 (out of 77) [49]	PISA	33	50	37	49
21	The World Happiness Report 2020 (out of 149) [50]	WHR	53	96	79	47
	Average		53.3	56.9	52.7	49.7
	Median		52	49.5	51	49
	Rank by average		3	4	2	1
	Rank by median		4	2	3	1



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In order to prepare the aggregated ranking for the selected economies, we calculated the ranks by averages based on the 21 listed indicators. As a result, our research concluded that by the combined socioeconomic and political performance, among the four selected economies, the least unstable and best performing country is Romania, second place is held by Croatia, and Hungary is followed by Bulgaria as the weakest economy of the group. It might be said that the current ranking does not contradict the findings strictly related to GDP growth, FDI or the Gini index yet is having crucial importance in revealing the pillars of the relatively high or low performance of different areas. By breaking down the performance into separate rankings, it might be noticed that generally, the four countries are performing the worst in the following three fields:

- World Press Freedom Index by RSF (average rank: 76.75);
- UN World Life Expectancy Ranking (average rank: 70.75);
- Corruption Perceptions Index by Transparency International (average rank: 69.25).

There is no surprise that the chosen southeastern EU economies are operating relatively weakly in the abovementioned spheres. In many cases, the serious malfunctioning of democracy might lead to such consequences as the erosion of the role of checks and balances, shrinking political rights, the fallback of free media and, also, in certain cases, even such a phenomenon as state capture [51]. Several studies and observations are driving attention to the phenomenon of growing corruption and connected outcomes of the latter in the wider Central and Eastern European region, showing that it has increased (almost doubled) since 2006 [52]. All four economies were listed between 63rd and 74th place on a global level in 2019 [52]. Due to the previously low standards of living during and in the aftermath of the Soviet Union's dissolution, there has been a long but difficult path covered by the affected economies, which has led to the low life expectancy of the population, massive emigration waves to more developed countries (especially from Bulgaria), poor education and healthcare systems and, also, a pattern of developing business models based on cheap labor forces to attract foreign capital and, thus, temporarily driving up economic growth. From another other perspective, the four economies are performing relatively well in the following indices:

- Numbeo Quality of Life Index (average rank: 37.5);
- JLL Global Real Estate Transparency Index (average rank: 37.5);
- WIPO Global Innovation Index (average rank: 39.75).

At first, it might be surprising that according to the quality of life parameter, the four countries rank solidly, but the costs of living are relatively low compared to the European Union average, so life is definitely more affordable in most categories. It also does not necessarily mean that the available social services or other elements are functioning at a high, satisfactory level. The real estate market transparency might be best explained by the EU membership and all the obligations and norms regarding data publishing. Lastly, innovation also appears among the stronger elements as southeastern members of the European Union and, from the broader perspective, Central and Eastern European countries are evaluated along with their Latin American and Southeast Asian global competitors, and in such a sense, it might be assumed that innovation processes are more dynamic in the listed EU economies.

Table 2 summarizes the main results based on the dynamic comparison of Hungary's performance for the period of 2005–2020 with the "Balkan Three" (B3) and "Visegrad Three" (V3) reference economies. As might be seen, our basis of comparison is the pre-crisis (2005–2008) mean compared with the 15-year trend and, also, the most recent five years' (2016–2020) average. The regressions were carried out for 10 selected indicators that have been fully available since 2005. The indices 1 to 5 measure economic performance in a non-standardized way, while the indices 6 to 10 are more related to the global ranking of the quality of life in a country. In every case, we might see whether the trends from the perspective of Hungary compared with the already-mentioned two country groups have exhibited deteriorating, stable or improving performance. It might be highlighted



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that between 2005 and 2020, no significant improvement was realized in Hungary in any case. We may also note that Hungary has been deteriorating relative to the three Visegrad economies in eight indicators out of the listed 10. The only relatively stable indices are the Ease of Doing Business (EDBI) and the Global Innovation Index (GII) according to the time series in the examined period. These might be explained by the EU accession, harmonization of the legal framework and comparative advantages in the pharmaceutical and automobile industries within the region. Meanwhile, the quality of life indices (6 to 10) in the case of Hungary all show increasing deterioration relative to the world's most developed countries; the rates of fallback in ranking positions are significant at the 1% level and are between 0.8 and 5.5 places per year, respectively. The latter finding thus serves as proof for our first hypothesis, according to which Hungary has been showing economic convergence towards the "Balkan Three" since the 2008 global economic crisis. The most significant fallback may be observed in the case of the Freedom of the World time series, which measures political and civil freedoms, the Press Freedom Index and the Country Risk Premium.

**Table 2.** Trends in Hungary's rankings for selected indices and convergence to reference country groups of B3 and V3 economies (2005–2020).

	Abbreviation	Hungary	Long- Term		Last 5-Year Average by Country Group			Hungary's	Ref.
		Initial Rank	Change/Yr	<i>p</i> -Value	Hungary	Balkan-3	Visegrad-3	Trend	Kei.
1	GCR	45.0	1.086	0.036	57.4	59.7	41.2	deteriorating	В3
1		(36.1	(+0.08	(**)	(49.0	(56.1	(37.3		
	EDBI	53.9)	+2.09)	(**)	65.8)	63.2)	45.1)		
2		52.8	-0.400	0.296	47.2	47.7	33.7	atalala	В3
2		(43.7	(-1.19	(n.s)	(42.3	(40.0	(28.8	stable	
		61.9)	+0.39)	(11.5)	52.1)	55.4)	38.7)		
•	T.P.Y	42.2	0.763	0.048	49.0	40.2	39.9	datamiamatima	
3	EFI	(37.3	(+0.01	(**)	(44.9	(36.3	(35.8	deteriorating	-
		47.1)	+1.52)	(**)	53.1)	44.1)	44.0)		
	GII	40.4	-0.349	0.254	34.6	42.5	33.6	stable	V3
4		(35.1	(-0.98	(n.s)	(32.3	(40.6	(32.8		
		45.7)	+0.28)		36.9)	44.3)	34.4)		
		$44.0^{'}$	2.385	< 0.001	68.8	69.3	35.Ź	deteriorating	В3
5	CRP [53]	(34.4	(+1.25		(63.9	(67.8	(34.1		
		53.6)	+3.52)	(***)	73.7)	70.7)	36.3)		
	HDI	41.8	0.468	< 0.001	46.4	53.4	35.0	deteriorating	
6		(41.1	(+1.25		(45.9	(52.9	(34.4		-
		42.5)	+3.52)	(***)	46.9)	53.9)	35.6)		
	CPI	42.6	1.850	< 0.001	61.4	64.4	43.6		
7		(39.4	(+1.23		(E4 E	(61.3	(40.8	deteriorating	В3
		45.8)	+2.47)	(***)	68.3)	67.5)	46.4)		
	FIW	34.6	4.139	< 0.001	81.6	60.6	41.9	deteriorating	
8		(32.1	(+3.54	(***)	(76.4	(59.1	(36.7		-
		37.1)	+4.74)		86.8)	62.1)	47.1)		
	PFI	17.4	5.582	< 0.001	77.4	74.5	37.5	deteriorating	
9		(11.6	(+5.01		(68.7	(73.5	(30.2		В3
		23.2)	+6.15)	(***)	86.1)	75.5)	44.7)		
	FSI	35.2	0.835	< 0.001	44.4	43.7	29.7		
10		(31.8	(+0.59		(43.9	(42.9	(29.3	deteriorating	В3
		38.6)	+1.08)	(***)	(43.9 44.9)	44.5)	33.1)		

\*\*: significant at 5%; \*\*\*: significant at 1%.



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#### 5. Discussion

The evidence from current research suggests that from a broader perspective, Central and Eastern Europe and, especially, certain Balkan states have exhibited a contradictious path of catching up over recent years. Despite the changes in regime, attempts carried out to open up the economies to global trade and thus attract a considerable amount of foreign capital, and accession to the European Union, it might be assumed that the economic, business, political and social environments of the analyzed countries are still underdeveloped, lack crucial comparative advantages for accomplishing further convergence, and are based on unstable pillars, regarding their growth being highly exposed to FDI and, most of all, liable to being severely hit by exogenous shocks, which in the long term, presents a major threat to sustainable economic development.

In the frames of current paper, we carried out a complex analysis of the selected southeastern EU-member economies of Bulgaria, Croatia and Romania by comparing 21 individual socioeconomic and political indicators from a broader perspective and 10 indices over a dynamic long-term horizon, adding the "Visegrad Three" countries as a reference group, according to their main economic trends as an alternative method for investigating their current positions and most significant comparative advantages. Additionally, the study highlights the most vulnerable areas of development within the micro-region besides such elements as the evolution of GDP per capita, FDI inflows, the Gini index or changes in the local currency compared to the euro. This research gives rise to many questions in need of further investigation regarding Hungary's economic development path. Originally a member of the Visegrad group, it has been undergoing the most ambivalent development pattern within the micro-region. As a result of several endogenous elements, Hungarian economic growth has been gradually moderated since 2006. One of the main reasons for its weak performance is a dual economic structure consisting of a strong and highly competitive multi- and transnationally based capital holder group that is motivated in exploiting the advantages of a cheap labor force, a favorable tax environment and other regulative allowances and, also, a fragile domestic sector lacking the incentives to successfully integrate into global trade due to low-valueadded—pre-dominantly assembly-based—industrial production and a wide pool of an uncompetitive labor force employed for relatively low wages, not being granted the chances of specialization in innovative technologies and methods to further boost the value created by the local companies. According to the aggregated ranking, the best performance has been achieved by Romania, which is followed by Croatia and Hungary. The weakest results have been experienced by the Bulgarian economy, which thus might be viewed as the country facing the biggest challenges in the near future if it does not take appropriate measures for stabilizing its economy. However, it must also be concluded that in comparison with the initial positions, the "Balkan Three" have realized considerable economic development following the protracted and deep transition crisis that emerged in the aftermath of the regime change. All four examined economies have massively benefitted from the access to the European Union, which among other positive impacts, has channeled a relevant inflow of FDI to the micro-region that, at the same time, has strongly contributed to these countries' increasing economic dependence.

Based on the presented results, the first hypothesis originally set in this study stating that since the 2008 global economic crisis, Hungary has been showing economic convergence towards the "Balkan Three"—Bulgaria, Croatia and Romania—region of Southeastern Europe and has been significantly falling behind the Visegrad countries, is fully accepted, as it is supported by Table 2's results when examining the country's relative position compared with the Balkan and the "Visegrad Three" economies' main trends. As we have shown, among the selected 10 indicators of our econometric model, Hungary has been showing diverging trend in eight different parameters. Only in the case of the Ease of Doing Business Index and the Global Innovation Index there has been neither convergence nor divergence, so the latter two elements might be viewed as relatively stable ones in

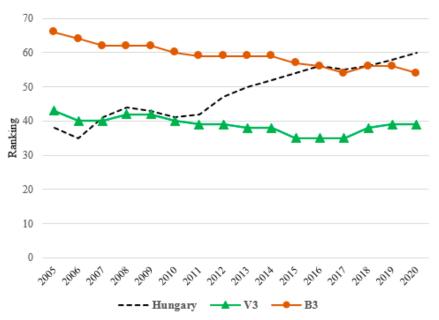


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Hungary. The most significant divergence has been in the following three indices: the Freedom of the World, Press Freedom Index and Country Risk Premium.

We must also add that Hungary had to overcome some truly deep fallback stages during the double-dip recession following the 2008 global crisis, it has been showing a general and very alarming decrease regarding FDI inflows compared to the "Balkan Three" economies and the Visegrad Four group, its local currency has been significantly weakening against the euro in the last 10 years, and, as has already been mentioned, it is currently holding the third position in terms of the aggregated ranking of the four selected countries, as we highlight in Table 1.

Figure 6 illustrates the changes in aggregate ranking calculated based on the 10 selected indicators (GCR, EDBI, EFI, GII, CRP, HDI, CPI, FIW, PFI and FSI) of our time-series approach for the period between 2005 and 2020. As can be observed, Hungary and the two reference country groups—all in all, seven countries—have been developing truly heterogenous patterns over the examined period. While the three Visegrad economies have been relatively stable for the last 15 years, with a small-scale improvement in economic performance rankings and some insignificant changes in the overall quality of life, the "Balkan Three" have been showing an improving tendency since 2008–2009, primarily due to achieving better positions for the five economic rankings. By contrast, Hungary is the only economy that has been considerably eroding since 2008; while its position was comparable to the V3 group average, it matched the mean ranking of the B3 countries around 2016. In such light, it is rational to assume that it has been losing ground within the Visegrad club for more than 10 years, as might be very clearly detected in Figure 6.



**Figure 6.** Aggregate ranking based on the 10 selected indices (GCR, EDBI, EFI, GII, CRP, HDI, CPI, FIW, PFI and FSI—for abbreviations, see Table 2) calculated for Hungary, the "Visegrad Three" and the "Balkan Three" economies (2005–2020). Higher ranking suggests relatively lower global position of the given country or country group. As might be seen, Hungary has been showing a significantly deteriorating performance since about 2007; the trend has accelerated further since 2011. The three Visegrad economies have been slightly improving, while the chosen Balkan countries have been undergoing a more considerable improvement since 2005. Source: authors' calculations based on the 10 selected rankings' comparative data.

Table 3 further specifies the main trends in the three units (Hungary, the "Visegrad Three" and the "Balkan Three") under investigation by the types of aggregates calculated from the 10 selected indicators of the dynamic approach. The results are listed as five-year average rankings and their 95% confidence intervals, as well as long-term average

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trend slopes. If we observe the final column of the table, our first finding might be Hungary's overall diverging tendency in all 10 indices. Furthermore, the *p*-value is, in every case, below 0.01. The quality-of-life-related indices have been deteriorating by almost three ranking places per year, which is definitely alarming. In case of the "all indices" group, divergence has occurred by 1.6 ranking places per year on average. Furthermore, our second group (the Visegrad countries) is either significantly improving (economic performance) or stagnating (quality of life) in the 10 chosen categories. The three Balkan economies have been exhibiting weakening performance in the quality of life (this trend is only significant at the 10% level) aspects, while there has been a strong improvement in their economic results as well as the "all indices" group. The latter conclusion might be best explained by the EU membership as well as a higher level of integration into the global economy provoked by their comparative advantages such as the relatively low-cost labor force, which means savings on production costs and naturally attracting foreign capital inflow.

**Table 3.** 2005–2020 trends by country/country group and aggregate group.

	Type of Aggregate		5-Year Averages		Long-Term	<i>p</i> -Value	Overall
			Initial	Final	Change/Year	p value	Trend
	1–5	Economic performance	45.0 (40.8 49.2)	51.2 (50.1 52.3)	0.675 (+0.28 +1.07)	0.0025 (***)	deteriorating
Hungary	6–10	Quality of life	34.4 (31.7 37.1)	64.4 (59.2 69.6)	2.722 (+2.44 +3.00)	<0.0001 (***)	deteriorating
	1–10	All indices	39.8 (36.4 43.2)	57.6 (56.1 59.1)	1.657 (+1.45 +1.86)	<0.0001 (***)	deteriorating
	1–5	Economic performance	45.6 (42.8 48.4)	36.8 (35.5 38.1)	$-0.719$ $(-0.99 \dots -0.44)$	<0.0001 (***)	improving
Visegrad-3	6–10	Quality of life	36.8 (36.1 37.5)	38.0 (35.3 40.7)	$0.084 \\ (-0.27 \dots +0.43)$	0.615 (n.s)	stable
	1–10	All indices	41.4 (40.2 42.6)	37.2 (35.4 39.0)	$-0.347$ $(-0.56 \dots -0.13)$	0.0035 (***)	improving
	1–5	Economic performance	68.4 (65.5 71.3)	52.0 (50.8 53.2)	-1.409 $(-1.691.12)$	<0.0001 (***)	improving
Balkan-3	6–10	Quality of life	57.6 (56.0 59.2)	59.4 (58.9 59.9)	$0.134 \\ (-0.02 \dots +0.29)$	0.085 (*)	deteriorating
	1–10	All indices	63.2 (61.6 64.8)	55.2 (54.2 56.2)	$   \begin{array}{c}     -0.704 \\     (-0.82 \dots -0.59)   \end{array} $	<0.0001 (***)	improving

<sup>\*:</sup> significant at 10%; \*\*\*: significant at 1%.

Following the presentation of our findings in Figure 6 and Table 3, it might be outlined that the second hypothesis claiming that since 2007, the EU member economies—Bulgaria, Croatia and Romania—of Southeastern Europe have been undergoing an accelerated economic development path following their European Union access might be accepted based on our empirical findings. Accelerated growth, in this case, must be understood as a significant improvement compared to the initial, post-regime change level. However, although it is indisputable that the three Balkan countries have been gaining several advantages from EU membership and their economic growth has been accelerating during certain periods, it has also provoked increasing economic dependency, the lack of a high-quality human capital base, and several economic and political risk factors as well as an underdeveloped R&D sector. Additionally, this serves as further proof for the first hypothesis regarding Hungary's divergence from the Visegrad club, as the listed results are truly negative in all the categories.

#### 6. Conclusions

This study has gone some way towards enhancing the interpretation of the economic development of emerging countries of the European Union that have undergone a severe transition crisis, have opened their economies to global trade to the highest extent since

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access to integration and, at the same time, have been maintaining significant exposure to exogeneous shocks, vulnerability provoked by FDI dependency and a lack of consistent economic policies as well as structural changes focusing on long-term convergence and sustainable development. The research has demonstrated that on one hand, the economy of Hungary has been positioned according to several socioeconomic parameters (for example, in the field of economic competitiveness, corruption, economic and press freedom, the rule of law or even quality of life) as well as some traditional growth-related statistics well below the average of the three other Visegrad group members. It is also alarming that the quality-of-life-related indicators have been considerably deteriorating since 2005, besides the worsening economic performance, as presented in Table 3. Such findings support our selected method of comparing Hungary with the chosen Southeast European countries of Bulgaria, Croatia and Romania, as based on the empirical research carried out, from the economic and social perspective, it would be imprecise to assume that it has been following the general trends of the Visegrad group.

On the other hand, we also provide evidence in Figure 6 and Table 3 for the fact that Bulgaria, Croatia and Romania have been showing relatively fast economic development from the second part of the 2000s compared to their initial levels of development after the change of regime. We may suppose that these countries are having considerable opportunities to stabilize their economies in the forthcoming period and more effectively combat such vulnerabilities as high-income inequalities, regional development asymmetries, high poverty and unemployment rates, and dependency on foreign capital without other solid pillars of internal growth. The key economic policy actions for triggering further convergence are, most of all, to promote significant structural changes, develop crucial business sectors to make them more competitive in the EU as well as globally, increase the percentage of services within overall economic activity while de-escalating the industrial and manufacturing dominance, and realize significant improvements in the education and healthcare sector, as there have been some deteriorating trends since 2005. It is also vital to decrease the dependence on a cheap and low-skilled labor force while investing more resources into innovation-driven sectors, technological improvements and high-value-added production for export.

Inevitably, the research presented in the current study has two major limitations. As anticipated, there were some discrepancies regarding the availability of data for the selected economies. In the process of carrying out a more extended comparison of the countries' protracted performance, certain alternative rankings or indicators could not be outsourced for the same time horizon, posing a barrier to developing a homogeneous pattern for all the 21 parameters from a 15-year perspective. Secondly, as has already been highlighted, the existing literature is rather poor concerning the socioeconomic analysis of the selected micro-region within the European Union. Findings from similar perspectives are, in most cases, focused on either the wider Central and Eastern European country group or the non-EU economies of the Balkans. On such grounds, it might be concluded that there is a gap in the empirical as well as theoretical research for the development paths of Bulgaria, Croatia, Hungary and Romania. The latter statement is also true for papers investigating Hungary's relative position and attempts to reallocate it by its status into a different micro-region based on its recent results and historical perspectives.

**Author Contributions:** Methodology, K.S.; formal analysis, G.B.-G.; writing—original draft preparation, K.S.; writing—review and editing, G.B.-G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

**Data Availability Statement:** Publicly available datasets were analyzed in this study. This data can be found here: https://databank.worldbank.org/source/world-development-indicators.

Conflicts of Interest: The authors declare no conflict of interest.



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