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Economic Challenges and Pathways in the Visegrad Countries: Growth and Sustainability

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Abstract

The economic development of the Visegrad countries (V4)—the Czech Republic, Hungary, Slovakia, and Poland—offers valuable insights into the complexities of regional competition and collaboration in Central and Eastern Europe. This study investigates key economic indicators, including GDP performance, trade dynamics, and labor market trends, to assess the region's developmental trajectory over recent decades. Particular attention is given to Hungary's comparative position, highlighting its strengths, weaknesses, and long-term growth potential within the V4 framework. The research explores how historical, political, and economic transitions, such as European Union accession and structural reforms, have shaped the region's economic landscape, revealing both opportunities and persistent disparities among the V4 nations. A pivotal focus of this study is the integration of circular economy principles, such as resource efficiency, waste reduction, and sustainable innovation, into regional and national policies. These principles, increasingly prioritized by the European Union, have the potential to address critical environmental challenges while fostering economic resilience. By adopting circular economy practices, V4 countries can enhance competitiveness, attract sustainable investments, and achieve long-term economic stability. The findings emphasize that circular economy strategies not only align with global sustainability goals but also support regional objectives by optimizing trade efficiency, reducing dependency on non-renewable resources, and strengthening industrial competitiveness. Moreover, the study identifies key challenges facing the V4 economies, including labor market disparities, productivity gaps, and uneven regional development, particularly between urbanized and peripheral areas. Quantitative analysis reveals that countries adopting coordinated policies and leveraging EU resources effectively are better positioned to mitigate these challenges and maintain sustainable economic growth. By drawing comparisons across the V4 countries, this research provides actionable insights for policymakers, scholars, and stakeholders seeking to balance economic growth with environmental sustainability, thereby enhancing the region's integration into global markets. The study underscores the critical need for a holistic approach that integrates circular economy principles, technological advancements, and cross-border cooperation to achieve shared developmental goals.

Keywords: *Circular Economy, Visegrad Countries, GDP, Sustainability, Regional Disparities, EU Integration.*

Introduction

The analysis of the level of economic development is an indispensable tool of governance, essentially a method to provide economic management with the necessary information to understand, assess and improve business activity. Analysis is an activity aimed at examining and evaluating the results of management and development and governance. The purpose of economic analysis is to identify and quantify the circumstances that affect the management of the country, the preparation of government decisions and the implementation of the measures taken. The main purpose of economic analysis is to assist more efficient and effective management. It should provide the information needed to prepare economic decisions. The aim of the elaboration of different possible solutions is also to facilitate optimal

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decisions and to determine the appropriate direction of development. Of course, the economic results actually achieved must also be examined in many ways. In addition to the results, the causes of shortcomings and losses must be identified and proposals made for remedying the shortcomings. (Jánossy, 1963)

The thesis aims to present an economic analysis aimed at providing a basis for economic decisions, preparing the economic tasks of the enterprise, measuring trends in development, assessing the implementation of the tasks set, identifying the causes of discrepancies, examining the efficiency and profitability of production, assessing the economic impact of economic interventions and monitoring management. The public expected EU accession to bring explosive growth and immediate prosperity, which has not materialised as expected. This was initially due to a lack of infrastructure and, in some cases, a lack of structural reforms, a capital-starved economy, lower GDP growth than expected, and left these economies vulnerable to global crises. This has led to political uncertainty, which has undermined competitiveness and made catching up difficult (Berend T. , 2021). Based on this, I assume that countries that have integrated more quickly and effectively with the EU (e.g. the introduction of the Euro) can expect a more stable economy and faster growth. In this context, I examine whether countries that not only produce for the EU internal market but have also developed better trade relations with countries that are engines of global development (e.g. On this basis, I will try to analyse Hungary's economic situation in comparison with the Visegrad countries, using different methods and data, and to examine the effectiveness of the development policies implemented by the countries concerned. In addition, my aim is to investigate the involvement of major economic actors outside the European Union and their influence on the domestic economy, and to use the tools of economics to examine the development of Hungary since its accession to the European Union. On this basis, I have put forward three main hypotheses.

Hypothesis 1: Countries that have integrated more quickly and effectively into the EU economic community will enjoy more stable economies and faster growth

Hypothesis 2: Hungary is lagging behind the countries of the region in terms of development, and a possible EU exit would put it at a competitive disadvantage compared to the countries of the region, but would not put it in a more competitive position than its regional competitors to enter new markets. Therefore, such a move would lead to a rapid economic decline.

Hypothesis 3: Economic development cannot be sustained in the long term without social satisfaction behind it

The thesis is based on quantitative research, mainly using deductive methods to analyse secondary data.

Literature Review

Introducing the Visegrad Countries

In recent decades, the Visegrad Group, or the V4, has functioned as a separate geographical area and an object of political and economic competition between Eastern and Western markets. This cooperation has caused various tensions and initially presented the image of economic subdivisions operating in separate branches rather than a structurally coherent whole. The main reason was that it lacked a common EU accession policy. The economic policy in this direction changed when the V4 countries joined the European Union. In 2004 they entered the EU as economically rather weak nations, but with huge growth potential. With a population of over 64 million, or about 13% of the EU-28, the Visegrad countries accounted for only 3.7% of the EU-28's economic output. The V4's position during this transition also reflects broader regional dynamics, such as the correlation between governance quality and environmental indicators (Kálmán et al., 2024c). After 10 years of EU membership, the V4 countries are much stronger economically and have become major players in the European Union. The V4's economic strength in terms of GDP compared to the EU-28 has halved in the last decade to 5.4% of the EU-28's. The economic importance of the Visegrad Four is most visible in external trade. The share of V4 exports in relation to the EU-28 has increased to 9.1% from 5.8% a decade ago. This highlights the bloc's ability to integrate its trade priorities with sustainable development efforts, akin to practices observed in other regional frameworks like

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geoparks (Kálmán et al., 2024d). The V4's emergence from the economic crisis has drawn the attention of the EU community to these Member States as a bloc that can collectively stimulate the transformation of the European Union itself. (Tulok , et al., 2018)

The research on production stability and technological advancements by Bacsi and Hollósy (2019), together with the sustainability and economic analyses of Portrusching et al. (2024), align with the core tenets of the circular economy, emphasizing resource renewal, the creation of sustainable systems, and long-term equilibrium. Membership has also meant that, in their efforts to strengthen their position, the V4 countries have often expressed strongly opposing views to EU policies, while at the same time using common and mutually encouraging solutions such as the International Visegrad Fund (IVF). Its main role is to support research, education, the development of cultural cooperation or tourism, which allow not only intra-country but also cross-border cooperation. The role of sustainable tourism in regional development, particularly within the V4 countries, has been analyzed in recent research focusing on Budapest and Mumbai (Kálmán et al., 2024a). This highlights the significance of tourism in fostering both cultural and economic collaboration across borders.

In discussions on the future of business in the region, it is important to highlight the main challenges facing the V4 countries to both the country and EU leaders. They are developing projects that explore the challenges and trends that have emerged over the past decades. The OECD is one of the bodies responsible for this. The main challenges are grouped by the nature of the OECD and non-OECD countries. The Czech Republic, Hungary, Poland and Slovakia are in Group 2, i.e. countries with high long-term unemployment, low labour market participation in some groups and large productivity gaps. In addition to identifying weaknesses and strengths, the OECD also provides actual reform proposals for policymakers to boost growth based on countries' ability to improve long-term material living standards through higher productivity and employment.

Further research underscores how issues such as corruption and financial inclusion present nuanced challenges and opportunities for countries like Hungary, particularly when contrasted with global perspectives, including those in Mexico (Kálmán et al., 2024b). Common policy challenges foreseen for the V4 economies include raising productivity growth continuously and effectively, and addressing specific labour market imperfections such as low internal mobility and excluded population groups. (Tulok , et al., 2018)

Czech Republic

With the so-called Velvet Revolution of 1989, Czechoslovakia freed itself from communist control and began to adapt its economy to the free market. The government introduced a programme to fix its price policy, open up its foreign trade to markets and allow for major investment, while achieving internal convertibility of the country's currency and introducing a successful tax reform policy. While the Czech Republic and Slovakia were the successor states to the federal state, long-standing inequalities in economic development gave the Czechs a distinct advantage over the Slovaks. The rigid economic partitioning under the KGST (Council for Mutual Economic Assistance) made Slovakia, with its mineral resources and hydropower potential, a major producer in the former communist countries of Eastern Europe. In contrast, the Czech economy remained diversified and stable. It owed this to its more favourable geography and stable position. With political rupture seeming inevitable, the Czechs and Slovaks faced the unprecedented challenges of the distribution of Czechoslovakia's economy and wealth. The Czech Republic possessed military facilities and equipment that caused major problems of optimal distribution between the two countries. (MKI, 2021)

By contrast, arms production, which fell sharply with the collapse of communist markets, accounted for a large part of Slovakia's military components. Its main advantages were a well-educated and skilled workforce, proximity to Western Europe and low levels of foreign debt. The result was that it had the lowest unemployment and a successful economic performance as an independent economy. The main drawbacks were the country's outdated and inefficient manufacturing structure, which stagnated for a long period. The success of its economic policy has thus been reflected in the reduction of unemployment and

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inflation, while maintaining steady growth. In terms of tourism, visitors have helped the tourism industry and the services sector to boom relatively rapidly, creating new jobs. Within a few years, it became clear that the government had failed to take interventions that led to mismanagement and corruption, resulting in a series of failures of major banks in the country. In 1997, the government responded to the economic crisis with a package of austerity measures and the introduction of a floating exchange rate, which led to a significant devaluation of the koruna and the state currency. Nevertheless, in the late 1990s, the Czech Republic entered a recession, with falling gross domestic product (GDP) and wages, a widening external deficit and rising unemployment (MKI, 2021). By the beginning of the 21st century, the country's economy had recovered, stagnated for a short period and then returned to growth. By 2004, it was one of the fastest growing countries, which led to its successful accession to the European Union that year. The country is characterised by a high standard of living, but employment rates and consequently living standards vary from region to region. In the early 2000s, less than a tenth of the labour force was unemployed. While the euro area was struggling with a debt crisis during this period, which started in 2009 following the outbreak of the financial crisis, the Czech Republic continued to experience minimal growth. This was partly due to the country's position within the European Union. While it had access to foreign trade markets and EU subsidies, it had not yet adopted the euro as its currency, and was therefore not threatened by a recession. The country's federal monetary system was initially essentially intact. However, the rapid economic separation of the two republics ended this arrangement after only a month and separate currencies were introduced. The National Bank supervises all financial institutions in the country. Following entry, a number of commercial and joint venture banks were established, providing a full range of financial services to their clients (Marján , et al., 2006).

Improper lending practices and a series of embezzlements led to the failure of one of the largest banks, Kreditni, and the country was hit by one of the worst crises it has ever experienced. In response, the government has called for the privatisation of the entire banking sector. Since then, a number of joint ventures between foreign and Czech companies have been set up and there has been significant foreign investment in the country. German banks, companies and individuals were the first to become leading investors, but investors from the United States, the Netherlands, Switzerland, France and Austria have also come in. The country was one of the largest foreign traders in Eastern Europe until its dissolution in 1991. In the early 21st century, Germany was the main destination for exports and the main source of imports. Other important trading partners were Slovakia and Austria. Machinery and transport equipment accounted for the largest share of both exports and imports, which enabled it to successfully develop its logistics markets. (Marján , et al., 2006)

Hungary

Hungary became a member of the European Union on 1 May 2004, together with ten other Central and Eastern European countries, in order to achieve its long-standing goal of joining the EU. After years of communist rule, Hungary was once again part of the European family and defined its values in line with the EU's core values. Hungary was then a "free state", which had made significant progress in political rights and civil liberties. The establishment of institutional links and closer cooperation with the European Union completed this period. During the accession negotiations, Hungary was required to meet a number of criteria, but political dealings and legal harmonisation laid the foundations for Hungary's success in becoming a member state of the European Union. Based on its foreign trade orientation, Hungary was already integrated into the EU economy before accession. However, the biggest question was whether firms could cope with the competitive pressures and market forces that were a prerequisite for EU accession (Lengyel, 1999; Németh, Kálmán, & Malatyinszki, 2024). Hungary has made significant progress in redirecting both production and trade. Between 1989 and 1992, with the collapse of the former KGST markets and the liberalisation of imports and the exchange rate regime, exports to the European Union expanded, while exports of manufactured goods were largely directed to Western markets. During this period of expansion, which was characterised by a complete restructuring and explosion of trade, the value of Hungarian exports increased by 84 per cent. In 1993, export growth slowed down and EU-oriented exports fell by 12 per cent. In the second period of expansion, which lasted until 1997, exports returned to strong performance, growing by 132 per cent, as a result of restructured and rapidly changing export supply.

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There was also a dramatic shift in resource management, which resulted in a shift from an export basket dominated by low value-added products to a producer-driven basket, leading to a rapid growth in machinery products. Exports of machinery and transport equipment to the EU rose from 12 percent to more than 50 percent in 1997. Natural resources and unskilled labour were directed towards technology- and capital-intensive products, suggesting that they represented a much higher integration potential for the government based on their value added. Tightening EU environmental regulations affect a relatively small and declining share of Hungary's exports. Although the Hungarian share of EU imports of polluting products has increased, they have not been predominant in Hungarian exports. Their share has therefore fallen from 26% to 16% over a 10-year period (1989-1996). Foreign-owned firms appeared, which were mostly export-oriented. Hungary has been one of the most successful economies because it has been receptive to foreign direct investment from the outset. As a result, until 1997 they absorbed roughly half of the foreign capital invested in Central Europe. Hungary's political transformation has had very different economic implications across the country. In Western Europe, there were two major phenomena: a very rapid process of economic privatisation, partly by Western investors, and steps to overcome the recession caused by restructuring, which was seen as temporary. Both phenomena were considered very important, as the public sector's share of GDP fell from 80% to 30% within ten years. In 1998, 70% of GDP was private sector, 49% of which was domestically controlled and 21% foreign-owned. Compared to the other Eastern Bloc countries, Hungary had the highest foreign working capital per capita and was ahead in absolute terms only of Poland, with three times the population. In less than five years, industrial output fell by 32%, agricultural output by 35% and GDP by 18%. Hungary's industrial output fell by only 20% in the wake of the 1929 crash and the subsequent global economic crisis. Unemployment fell from 0.3% in 1989 to 13.2% in 1993, to 6% between 2000 and 2004, before rising again to 11-12% in 2008. In a few years, real wages fell by 25% and pensions by 30%. Since Hungary joined the EU in 2004, relations between Hungary and the EU have been relatively stable. However, the financial crisis and economic downturn after accession led the next Hungarian government to become Eurosceptic in 2010. The 2010 elections and the rise to power of Orbán called into question not only domestic political developments but also the future of EU-Hungarian relations. Since then, a number of domestic reforms have been adopted - the implementation of the new Hungarian constitution in 2011, a judicial reform reducing the prerogatives of the Constitutional Court, the increase of the quorum to a two-thirds majority in the National Assembly. policy areas, and a new media law. For many years, Hungary was seen as a model country among EU Member States. Hungary was the only country in the Eastern bloc that led its political transformation through a process of development, although the most important role was played by the former communist party. The leaders of the Hungarian Socialist Workers' and Peasants' Party (USAP) were seen in Western Europe as followers of European integration, which for many years attracted the majority of foreign working capital, making its political system appear stable. The public was clearly in favour of EU membership in opinion polls, with 83% voting in favour in 2003. Western Europe therefore assumed that the road to democracy in both Hungary and the Czech Republic would be quicker and less painful than in other states. In the first ten years after 1990, Hungarian political life seemed balanced. The conservative and social-liberal parties were equally strong, and every election saw a change of government. But this political balance was not long-lasting, as it became clear that the free market economy was becoming increasingly unpopular, while state socialism was favoured by all political parties. (Losoncz, 2004)

Slovakia

After the break-up of Czechoslovakia, many feared that economic growth would be harder to come by in what is now Slovakia, one of the poorer regions of historic Hungary, but this was not the case.

Table 1. Economic Indicators for Slovakia Before the Introduction of the Euro

	2004	2005	2006	2007	2008	2009
GDP at current prices (USD)	42,21	47,94	55,96	75,26	95,24	88,21
GDP per capita (USD)	7839,00	8896,21	10375,19	13935,09	17598,53	16281,93

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Inflation (%)	7,46	2,79	4,26	1,89	3,93	0,92
Unemployment rate (%)	18,1	16,15	13,3	11,02	9,57	12,05
General government revenue (%)	35,3	35,2	33,5	32,5	32,5	34,0
General government deficit (%)	41,49	34,18	30,46	29,33	27,68	35,66
Current account balance (%)	-7,82	-8,49	-7,84	-5,26	-6,59	-3,19

Source: based on IMF website www.imf.org own ed.

The table shows the evolution of Slovak GDP immediately before their accession to the European Union (2004-2009).There is a strong improvement in performance from 2006 to 2007, but also a marked decline from 2008 to 2009, which can be seen as a result of the economic crisis. The evolution of GDP also follows the evolution of GDP per capita, while inflation volumes have fluctuated continuously over the period. In the post-crisis period, however, inflation almost disappeared, thanks to the introduction of the euro. Between 2000 and 2008, the Slovak economy grew by more than 60% in real terms. This significant expansion was one of the highest in the European Union. As a result, Slovakia has substantially narrowed the economic gap with more advanced Western European countries. GDP per capita increased from 43% in 2000 to 64% in 2008. Between 2008 and 2014, the economy grew by only 7.6%, an average annual growth rate of 1.2%. In terms of productivity, manufacturing, for example, grew by 10.4% per year between 1997 and 2010. Since 2010, however, manufacturing productivity has increased by only 10%, which represents an annual growth rate of 1.3%. Before the crisis, Slovakia had a strong labour force, which contributed to the rise in productivity. Since the financial crisis of 2008, productivity has stagnated minimally, leading to a decline in unemployment and GDP (European Commission, 2015).

Poland

Poland's integration into the EU economy has been a gradual and lengthy process, which formally began on 16 December 1991, when Poland and the EU signed the Europe Agreement. In 1993, the European Council formally invited Poland and several other Central and Eastern European countries to apply for membership and set out the so-called Copenhagen criteria, preconditions that had to be met for membership. EU negotiations with Poland formally began in March 1998 and lasted four years. Poland's economy has undergone fundamental changes affecting all sectors. During the 1990s, it continued to liberalise its economy, with mixed results. State-owned small and medium-sized enterprises were privatised and a law was adopted to encourage the development of new enterprises in the private enterprise sector and thus stabilise the economic sector. The agricultural sector has been hampered by structural problems such as low productivity, lack of investment and surplus labour. Public health, training and education, and the pension system are all areas of the country where the reforms implemented have exacerbated the already conservative fiscal policy. Reducing the budget deficit, controlling monetary policy and reducing inflation are priorities for the Polish government. All these economic changes have been made to prepare for accession to the European Union. Finally, Poland was integrated on 1 May 2004 and has since become a full member and one of the most dynamic economies. As a result, Poland was one of the few countries in the EU not to experience a recession during the 2008 financial crisis. Poland received €85.2 billion from the EU between 2004 and 2014, making it the largest beneficiary of net resources from countries that joined in the early 2000s. The Polish economy's GDP growth in 2007 reached 6.5% and exceeded the EU average of 2.9%, driven by strong growth in exports, investment and industrial production. Favourable labour market conditions and low interest rates have led to an increase in consumption and investment, with the unemployment rate gradually falling (Aleks, 2011).

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For research methods, I have chosen research based on the analysis of quantitative secondary data. Data will be collected and evaluated mainly from national and international databases, in order to use them to confirm or refute hypotheses. The research is structured according to a deductive method, using literature from textbooks and journal articles. Tables, ratios, graphs and diagrams are used to analyse the data, reflecting the possible results and thus successfully drawing the appropriate conclusions.

Slovakia

Over the past two decades, Slovakia has enjoyed a stable economy and a successful growth path. It is also important to mention that between the two world wars it was known as a truly developed economy, while during the communist period the emphasis was mainly on developing the Slovak side and minimising its gap with the Czech Republic. At the time of the change of regime, Slovakia was the only country that did not experience a drastic devaluation of its currency, i.e. it managed to manage economic change without hyperinflation and currency depreciation. After the split, it was hoped that the Slovak koruna would depreciate sharply against the Czech part. In contrast, a difference of only 10 percentage points between the exchange rates of the two currencies emerged, resulting in Slovakia, not the Czech Republic, adopting the euro in early 2009. The new country's economy started to grow in 1994, with GDP expanding by 6.5 percent in 1995. At the turn of the millennium, the Slovak economy slowed down somewhat, but then entered the fastest phase of the catching-up process, with economic output expanding by 8.5 and 10.8 percent in 2007-2008. This may be the reason why the adoption of the European single currency was firmly decided at the time of EU entry. The 2008 financial crisis brought a 5.4% decline in 2009, but this was recovered in the following year. Afterwards, however, there was a sharp slowdown, with growth falling below 2% per year. This was partly due to the changeover to the euro, where the Slovak koruna was fixed at too strong an exchange rate, causing shocks to households and the labour market. From 2015, the rate returned to above 3-4%, but in this period the economies of the other Visegrad countries, including Hungary and Poland, grew at a similar pace. Slovakia's indebtedness remained relatively moderate until 2019, when the pandemic again caused a severe downturn in economic activity. (Burgerné Gimes, 2010)

Figure 1. Unemployment Trends Between 2000 And 2020.

Source: based on Horbulák (2019) and KSH (2021) own editing

The principles of the circular economy, which aim for efficient resource reuse and sustainable development, also create opportunities to reduce unemployment by fostering new industries, such as waste management, innovative technologies, and alternative energy sources. This is highlighted by Rahmat et al. (2024) in their

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study on progress towards sustainable goals. Unemployment has been a major problem in Slovakia since the change of regime. It has been consistently high since the 1990s, with an improvement only in the second half of the 2010s. It peaked between 2013 and 2014, reaching a peak of 14.6% for this period. Thereafter, there was a steady decline until 2020. Then the early period of Covid 19 saw the unemployment percentage rise again. The main reason for this is the high death rate and the drastic reduction in the number of jobs. The graph above compares the country's unemployment figures with those of its immediate neighbours Poland, the Czech Republic, Hungary and Austria, as well as with the unemployment rates of the EU25 Member States.

Economic Performance

	Slovakia Total	Slovakia per capita	EU Total	EU per capita
GDP	105.17 bn USD	19,266.51 USD	15,291.93 tn USD	29,710.69 USD
Gross national product	103.28 bn USD	18,920.56 USD	15,330.84 tn USD	29,786.28 USD
Gross debt	72.45 bn USD	13,272.36 USD	15,068.26 tn USD	29,276.12 USD
Budget deficit	7.06 bn USD	1,294.12 USD	799.24 bn USD	1,552.84 USD

Table 2. Economic Performance

Source: HCSO (2021)

Gross public debt refers to the total amount of money owed to other countries, communities or institutions. On the other hand, gross debt does not include the country's claims on foreign countries. Slovakia's gross debt ranged between USD 7.0 billion and USD 72.5 billion between 1998 and 2021. The highest level in recent years, USD 72 billion, was reached in 2021. The budget deficit in the same year was USD 7.1 billion. Based on the number of inhabitants in Slovakia, this represented a debt of USD 13 272 per capita. Over the same period, the average debt per capita in the EU was USD 33 674. Consumer price inflation in Slovakia has ranged between -0.5% and 23.3% over the last 29 years. Inflation is projected to reach 3.1% in 2021. The average annual inflation rate over the period 1992-2021 was 5.5%. Overall, the price increase was 364.33%. (Carol, et al., 2021)

Import and Export Trends

	Slovakia Total	Slovakia per capita	EU Total	EU per capita
Imports	88.05 bn USD	16,129.86 USD	7,340.01 bn USD	14,260.90 USD
Exports	90.53 bn USD	16,583.55 USD	7,939.04 bn USD	15,424.75 USD

Table 3. Trends in Imports and Exports in Billion US Dollars 1993-2020

Source: based on data from KSH (2021) own editing

Slovakia became a full member of the European Union, and this also meant adopting the EU's common commercial policy. With the harmonisation of trade policy with the EU, the country has also seen a significant increase in its foreign trade. In 2020, 79% of Slovak exports and 80% of imports were with EU member states. (Bara, et al., 2006)

The integration of export-import principles with circular economy strategies is evident in the tourism-focused analysis by Kabil et al. (2024). They emphasize the importance of efficient resource reuse and

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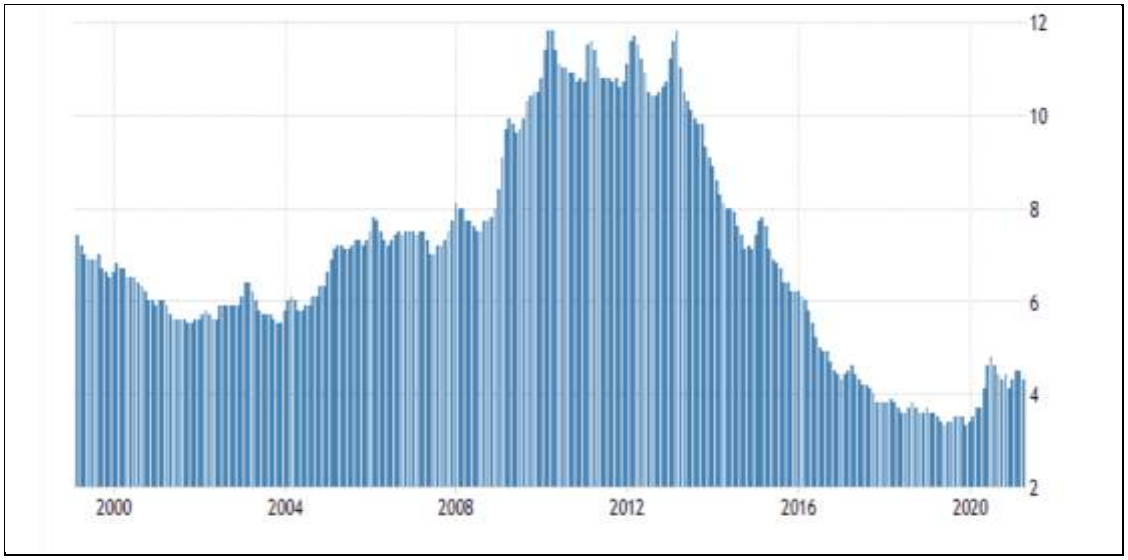
sustainable supply chain management, highlighting the economic benefits of reducing waste and promoting local procurement. Circular economy principles can drive sustainable economic growth through the optimization of import-export processes, reducing dependency on non-renewable resources and fostering regional economic resilience. This approach aligns with global trade practices while addressing environmental challenges.

Hungary

Figure 2. Unemployment Trends



Source: based on Fellegi (2021)

In Hungary, economic growth and integration into the world economy began to bear fruit in the early 2000s. It was then that the more drastic economic growth started, which led to a reduction in unemployment. The result was that unemployment fell to 6 % by 2001. In the years that followed, stagnation was noticeable, but it could not be said that there was full employment in our country. However, a study of the last few years has shown that unemployment figures of 3-4% are in fact a labour shortage. The main reasons include the fact that unemployment is not measured by matching advertised vacancies with unemployed people and that the right people are not filling the positions where the right experience is required, but it is also clear that this is leading to a high rate of emigration from the country (Fellegi, 2021).

Economic Performance

The recovery from the financial crisis of 2008 is a long process, and Hungary is many years behind the development levels of other countries in the region, but its performance is not very poor when looking at the whole period. The performance of the economy in the first six months of the 2000s was in line with the region, but between 2006 and 2012 it was completely behind its competitors (Czech Republic, Slovakia, Romania or Poland). However, looking at my GDP data for 2017, it is striking that on average over the last five years it has again lagged behind the average performance of the region. In 2015 the Hungarian economy grew by 4%, so the minimal expansion in 2016 can be considered as temporary. However, even the slight growth in 2017 was not enough to catch up with its immediate regional competitors, as Poland, Romania and the Czech Republic were also on much stronger growth paths. The growth performance of the Hungarian economy over the 2010 decade as a whole was much better than in previous years by international standards. However, it is also important to bear in mind that 2009 saw a global economic shock the likes of which only occurred in 2020 at the onset of the pandemic. After the onset of the financial crisis in the early 2010s, our country's economy grew less rapidly than its productive potential, but by the

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end of the period under review it was characterised by a strong recovery. By the end of the decade, Hungary's economy had expanded well above its potential. The revival of the economy, fiscal policy, and accelerated wage and investment growth were in line with the deliberate ambitions of economic policy. The result has been accelerating inflation and a decline in the export surplus. (Fenyves, et al., 2019)

The 1990s saw an increase in the number of people who were unable to pay their rent, maintain their housing or pay other debts on their own, leading them to resort to borrowing to fill the holes in their household budget. These loans, which were mainly personal loans, were typically granted by credit institutions at higher interest rates and for shorter terms. The advantage was that they did not require as many conditions to be met as a home loan. Following the financial crisis, unsecured loans and the tightening of conditions for access to mortgages led to a greater role for housing loans and open-ended mortgages. In addition to the housing-related debts described above, the debt of lower-income households is also accumulating. These include various utility charges, consumer loans or other debts to, for example, mobile phone operators (Bajomi & Pinkasz , 2018). Since 2010, Hungary's imports and exports have consistently exceeded 160% of GDP. Between 2010 and 2019, the stock of foreign direct investment (FDI) has been growing steadily, which has linked the Hungarian economy more closely than ever to global value chains and world economic developments. Thanks to the accession to the European Union in 2004 and the preparations made in the period before, Hungary's export openness index has also started to increase between 2010 and 2020. (Bajomi & Pinkasz , 2018)

Poland

Unemployment Trends

The unemployment rate in Poland was 4.89% in 2017, a decrease of 1.27% compared to 2016. This was followed by 3.85% in 2018, a decrease of 1.04% compared to 2017 data. For 2019, there was a slight decrease compared to the previous year's data, as the unemployment rate reached 3.28%. This represented a decrease of 0.57% compared to 2018. The unemployment rate for 2020 was 3.55%, an increase of 0.27% compared to the previous year.

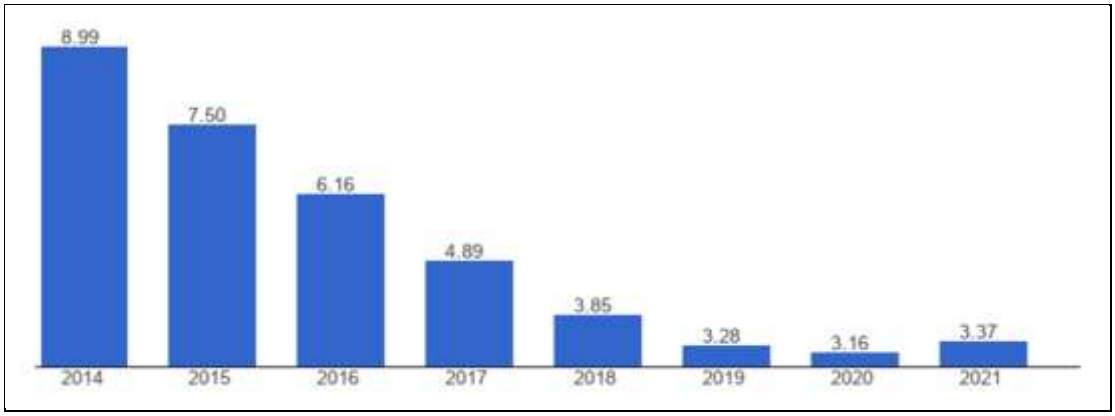

Figure 3. Unemployment Trends 2014-2021.

Source: HCSO (2021)

Poland's average for the period 2014-2021 was 11.15 percent, with a minimum of 3.16 percent in 2020 and 19.89 percent in 2002. The most recent value for 2021 is 3.37%. If I want to compare it with the world average, we can say that in 2021, based on the world average of 181 countries, the unemployment rate in Poland is 8.46% (Kobeszko, 2020).

Economic Performance

	2019	2020	2021	2022

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Real GDP growth (%)	4,8	-2,7	4,5	5,0
Average annual inflation (%)	2,1	3,7	4,1	3,1
General government balance (GDP %)	-0,6	-6,9	-5,6	-3,5
Gross public debt (% of GDP)	46,3	58,5	61,1	60,3
Current account (GDP %)	0,5	3,6	1,8	1,3
Net FDI (% of GDP)	1,6	1,3	0,7	0,7
Import coverage indicator (month)	4,6	5,8	4,2	3,9

Table 4. Key Economic Indicators

Source: based on Exim (2021) own editing

GDP growth is expected to remain buoyant in 2019, mainly driven by strong consumer demand and investment. In 2020, economic expansion is expected to slow somewhat but remain solid. After strong GDP growth in 2021, the war in Ukraine will take its toll. Real GDP is forecast to expand by 5.0% in 2022. Consumption and, to a lesser extent, investment growth are expected to slow significantly, partly offset by fiscal policy. Energy price increases are slowing and inflation is expected to peak by the end of the year as monetary policy tightens (Kobeszko, 2020).

Debt of Households

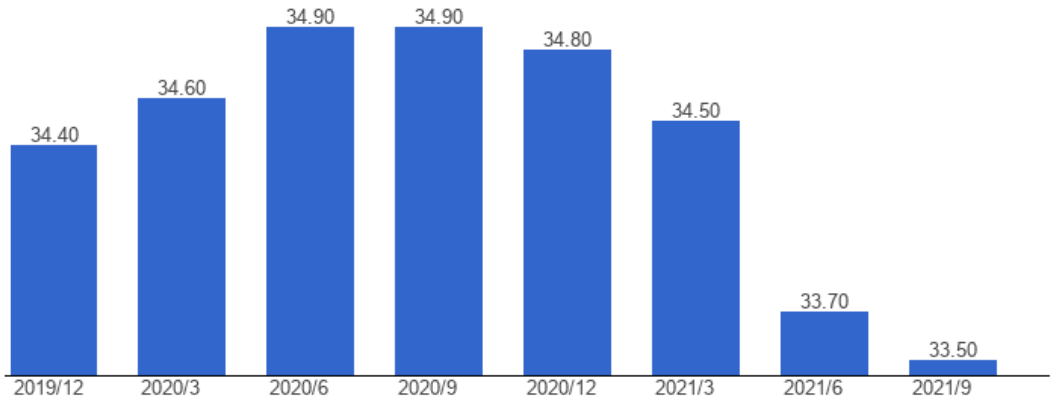

Figure 4. Poland's Household Debt

Source: https://www.theglobaleconomy.com/Poland/household_debt_gdp/

The graph above shows household debt as a percentage of GDP. In Poland. For this indicator, data for Poland between September 2019 and September 2021 have been presented. The average value of Poland's household debt was 34.40% in the first year, peaking in September 2020 at 34.9%. At the onset of the pandemic, the debt ratio steadily declined and stood at 33.5% in September 2021. (Kobeszko, 2020)

Import and Export Trends

The table below shows the evolution of Poland's trade balance and coverage rate over the period 2010-2021.

Date	trade balance	coverage rate	trade balance % GDP
2021	$-432.5M	99.87%	0.10%

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2020	$13,902.1M	104.67%	2.01%
2019	$2,015.3M	100.50%	0.22%
2018	$-5,389.1M	98.00%	0.92%
2017	$552.1M	100.24%	0.12%
2016	$4,310.0M	102.16%	0.91%
2015	$2,651.0M	101.35%	0.55%
2014	$-3,503.9M	98.43%	0.65%
2013	$-2,622.9M	98.74%	0.50%
2012	$-13,685.6M	93.12%	2.75%
2011	$-21,900.6M	89.60%	4.14%
2010	$-18,325.3M	89.71%	-3.82%

Table 5. Poland's Trade Development 2010 - 2021

Source: based on data from KSH (2021) own editing

The coverage ratio or trade coverage rate is an indicator of trade. It measures the percentage of exports covered by imports. All this, over the same period. In this way, we can find out whether the volume of exports and foreign exchange inflows into the country is greater or less than the volume of foreign exchange going abroad due to imports. In terms of Poland's trade, it can be noted that the trade balance was highly volatile and experienced a steady decline until 2019, when the pandemic hit and the balance reached $13.902 Billion. The coverage rate showed a similar upward trend until 2017. It then returned to a stable trajectory after a slight decline. (Kobeszko, 2020)

Czech Republic

year	unemployment rate (%)
2021	2,60
2020	2,94
2019	2,01
2018	2,24
2017	2,89
2016	3,95
2015	2,05
2014	6,11

Table 6. Unemployment Trends

Source: KSH (2016)

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From 2014 onwards, there were positive trends in the labour market. Employment data showed an increase, resulting in unemployment falling to 6.11%. The unemployment rate from 2015 onwards was significantly lower than in the year immediately preceding the crisis, at 2.05%. In the following years it fluctuated between 2.5% and 4%, before falling to 2.01% in 2019. In 2020, the Covid -19 effect increased to 2.94%, an increase of around 0.93% compared to the previous year. (Bara, et al., 2006)

GDP

Czech GDP has been on a steady upward trend since 2019, with the exception of 2020, the year hardest hit by the crown virus epidemic.

	2019	2020	2021	2022	2023
Real GDP growth (%)	2,2	-5,7	2,5	5,0	3,2
Average annual inflation (%)	2,6	3,3	2,4	2,5	2,5
General government balance (GDP %)	0,3	-5,3	-6,5	-3,8	-2,3
Gross public debt (% of GDP)	30,2	42,8	44,7	42,9	42,2
Current account (GDP %)	-0,3	3,3	1,2	0,0	0,3
Net FDI (% of GDP)	1,1	0,7	0,7	1,3	1,2
Import coverage indicator (month	10,4	12,4	10,9	10,6	10,6

Table 7. GDP Trends

Source: Exim (2021)

Real GDP growth was 2.2% in 2019, then fell back to -5.7% in 2020 during the pandemic, a sharp decline from the previous year. By 2021, it had fallen back to 2.5%, before reaching 5.0% by mid-June 2022. 3.2% is forecast for 2023. It is important to note that the annual average inflation rate is 2.6%, rising by a further 0.7% the following year. The following year saw a sharp decline. For 2022 and 2023, experts forecast a rate of 2.5% (Bara, et al., 2006). A connection between the GDP of the Czech Republic and the circular economy concept as discussed in the tourism-related article by Kabil et al. can be made by emphasizing the role of sustainable practices in boosting economic indicators. The circular economy principles, such as waste reduction, resource efficiency, and sustainable tourism development, directly contribute to improving regional GDP by fostering green innovations and reducing dependency on resource imports. This approach aligns with broader economic strategies that enhance GDP growth through sustainable practices, which can be integrated into sectors like tourism and hospitality.

Debt of Households

The average monthly income in the national economy almost doubled between 2000 and 2011, reaching 24 436 kronor at the end of last year. It is important to note that the average monthly pension increased from 2734 kronor in 1993 to 10 543 kronor in 2011. Statistics also show that over the last 20 years, household bank debt has increased significantly, almost 20-fold overall. While in 1993 Czech households collectively owed 92.8 billion crowns to banks, at the end of 2011 they owed 1,098 billion crowns. (Bara, et al., 2006)

Comparative Analysis of the V4 Countries

The V4 population of 63.6 million represents 8.5% of the 750 million European population, and 14.2% of the EU population, which has been reduced to 448 000 000 following the withdrawal of the UK. While 19.4% of the EU population is aged 65 and over, the average for the V4 countries is the same for Hungary and the Czech Republic. At the same time, 16.5% of the population in Poland and only 15% of the population in Slovakia are of retirement age. The productivity rates of all four countries are in line with the EU average.

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However, there are significant differences in performance between countries, measured in terms of GDP at purchasing power parity. The EU average is €30,000 in GDP per capita, while in Hungary and Poland it is only 2/3 of that value, i.e. €20,300 and €20,900 for countries 1 to 1. In Slovakia the figure is as high as € 22 900, while in the Czech Republic it is much higher at around € 26 900. The evolution of the poverty threshold is also close. In Hungary 13.4%, in Slovakia 12.4%, in Poland 15% of the population and in the Czech Republic 9.1% of the population live below the poverty threshold. In terms of unemployment rates, the analysts highlighted that the V4 countries are performing much better than the EU average. This means that while the average unemployment rate in the EU is 7.6%, it is 8.1% in Slovakia, 4.9% in Poland, 4.2% in Hungary and 2.9% in the Czech Republic. The level of development of the V4 regions shows a similar picture. The economic development of regions further west in each country or around the capitals is much higher than in the eastern regions close to the borders. This is mainly because most investment and foreign investment is concentrated around capital cities and in regions that are much closer to more developed neighbouring countries, as most trade takes place in these parts of the country (Newspaper, 2021). As Bai et al. (2023) discuss, government-imposed environmental constraints significantly influence economic activities. V4 nations could benefit from coordinated policies that leverage circular economy principles to create competitive advantages while addressing shared environmental challenges.

The following tables give an overview of the performance of the Visegrad Four. All of them cover the period 2000 to 2009 in relation to the Maastricht criteria. The Republic and Poland met most of the criteria for most of the period under review. Inflation and interest rates remained within the predefined limits and public debt exceeded 60% of GDP in both countries. The Czech Republic was the best performing of the Visegrad Four over the period. It also shows that it has made huge strides towards meeting the criteria. While in 2000 the GDP was around 12.3%, by 2008 the country had drastically reduced its deficit, inflation and interest rates, and by that year the budget deficit was only 2.1%. No V4 country has achieved such strong measures and positive results.

The Weight of the Visegrad 4 in the European Union

Indicator	Year	Indicator	
		Value	in EU-28 %
Area, thousand km²	2015	532,8	11,7
Population on 1 January, million persons	2017	63,8	12,5
Gross domestic product (GDP), billion euros	2017	866,1	5,7
Households and non-profit institutions serving households final consumption expenditure of institutions, billion euro	2017	470,9	5,5
Gross fixed capital formation, billion euros	2017	176,9	5,7
Agricultural area, million hectares	2015	25,9	14,0
Forest area, million hectares	2015	16,1	10,0
Agricultural output at basic prices, billion euro	2017	39,2	9,6
Gross value added in industry, billion euros	2017	214,3	8,0
Gross value added in the manufacture of transport equipment, billion euros	2015	24,6	8,4
Number of nights spent in accommodation, million	2016	172,3	6,7
Foreign trade in goods, imports, billion euros	2016	460,6	9,7
Foreign trade in goods, exports, billion euros	2016	492,1	10,1
Foreign direct investment in working capital stock, billion euros	2016	405,0	6,0

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Stock of foreign direct working capital exports, billion euros	2016	70,7	0,9
Number of persons employed, million	2016	27,7	12,7
Number of unemployed, million persons	2017	1,4	7,5
R&D expenditure, billion euros	2016	9,1	3,0
Number of students in higher education, million	2015	2,6	13,1

Table 8. Weight of the Visegrad Group in the European Union

Source: KSH (2018)

These four countries account for more than 1/10 of the EU's territory and total population, contributing almost 6% of the EU's economic output in terms of GDP. The graph above compares Slovakia's unemployment figures with those of its immediate neighbours Poland, the Czech Republic, Hungary and Austria, as well as with the unemployment rates of the EU25 Member States. It is also clear to see that over this period Slovakia has consistently been among the countries with one of the highest unemployment rates in the region and in the European Union, with the exception of one year under review (Németh, 2019).

Success of Regional Competition for Hungary

Six shorter periods in the evolution of labour productivity in Hungary can be identified over the last two decades. The first is the period between 1998 and 2001, the main feature of which is that labour productivity increased rapidly while capacity utilisation remained at an optimal level. The second period, 2002-2006, was characterised by relatively rapid productivity growth, but overcapacity led to a rebalancing and a decline in competitiveness. At the end of the 2000s, economic policy mistakes and the global financial crisis led to operational problems such as excessive indebtedness, deteriorating investment rates and drastic reductions in labour productivity. The period between 2010 and 2012 was the next period in which productivity showed an upward trend for about 2 years, but capacity utilisation continued to decline. After 2012, it was on a growth path until 2017, thanks to reform measures and the change in monetary policy. However, from 2017 onwards, rising investment activity and an unchanged equilibrium maintained, while labour productivity increased. Until 2019, the domestic economy grew at an average rate of 3.8%, more than 2 percentage points ahead of the EU.

Employment rate by county and region [%]								
Name of the territorial unit	Territorial unit level	2015	2016	2017	2018	2019	2020	2021
Budapest	capital city, region	62,4	65,5	66,2	65,6	66,5	67,2	68,1
Pest	county, region	59,6	61,7	62,6	64,2	65,3	65,3	66,1
Central Hungary	Greater Region	61,3	63,9	64,7	65,0	66,0	66,4	67,3
Central Transdanubia	region	60,9	61,7	63,6	63,8	63,9	63,6	64,9
Western Transdanubia	region	60,5	62,0	63,7	65,2	65,8	65,0	65,4
Southern Transdanubia	region	53,2	55,1	55,4	56,6	57,1	56,2	57,2
Dunántúl	Greater Region	58,4	59,8	61,1	62,1	62,5	61,9	62,8
North Hungary	region	52,6	54,8	56,2	58,1	58,6	57,6	57,4
Northern Great Plain	region	53,6	55,8	57,7	59,3	59,7	58,6	59,4
Southern Great Plain	region	55,5	58,5	59,8	60,9	61,5	60,5	62,0
Plain and North	Greater Region	54,0	56,4	57,9	59,5	60,0	58,9	59,7
Total country	Country	57,5	59,7	61,0	62,0	62,6	62,1	63,0

Table 9. Regional Employment Rates

Source: HCSO (2022)

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According to data from the Central Statistical Office, the employment rate has increased steadily from 2015 until 2021, which applies to all counties and regions throughout the country. While in 2015 the employment rate for the whole country was 57.5%, the years 2016 and 2017 saw an increase of 2.2% and 1.3% respectively compared to the previous years. Information from the KSH revealed that the average duration of job search was 9 months. Thanks to investment, FDI and increasing labour demand, the employment rate has also become outstanding compared to the V4 countries, which has further improved its efficiency by restructuring the economy. In terms of performance, I can say that those countries that are able to achieve sustainable growth above their international competitors - such as Hungary - have the drivers that keep them on this stable growth path. I have identified the drivers of economic development that could boost the Hungarian economy in the coming years. The study has shown that to maintain a successful growth path, economic elements such as increased investment are needed to help boost the development and efficiency of infrastructure and local businesses. It is also important to support foreign direct investment (FDI), which contributes to increasing the productivity of the economy through the resulting technology and capital transfers. The third and most important factor is the workforce itself and the skills and experience that need to be developed to achieve adequate employment, i.e. the skills that exist in the labour market need to be adapted to meet the demands of both domestic and foreign markets. R&D and innovation are also important instruments for economic development. Increasing the focus on innovation, increasing investment in technology and digitalisation, and strengthening the future adaptability of domestic companies are all aspects that serve the development of the economy. The final element of growth-enhancing factors is the development of the supporting institutions themselves, where it is important to simplify existing regulations, introduce growth-enhancing measures and create the right enabling environment. The analysis of the data shows that despite its best position, the Czech Republic is performing poorly in terms of dynamism and expected growth. Poland scored relatively well in all the areas assessed, while Slovakia scored poorly in all three areas, lagging far behind the other three countries, with the result that it is a medium to low attractor of foreign capital.

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References

Aleks, S. (2011): Poland Within the European Union: New Awkward Partner or New Heart of Europe? (Routledge Advances in European Politics) Routledge.

Bacsi, Zs., & Hollósy, Zs. (2019). The yield stability index reloaded – The assessment of the stability of crop production technology. Agriculturae Conspectus Scientificus, 84(4), 319–331.

Bai, T., Xu, D., Yang, Q., Piroska, V. D., Dávid, L. D., & Zhu, K. (2023). Paths to low-carbon development in China: The role of government environmental target constraints. Oeconomia Copernicana, 14(4), 1139–1173. DOI: 10.24136/oc.2023.034

Bara, Z., Estélyi , K., Kovács, P. & Mikóczy , I. (2006). Kempelen Farkas Society, Komárom, pp. 177-187.

Berend T. , I. (2021). Kossuth Kiadó.,Budapest, pp. 15-17., pp. 23-39, pp. 151-157., pp. 179-183.

Bródy, L. S. & Pósfai, Z. (2020): Household indebtedness in Hungary. Periphery Public Policy and Research Centre, Budapest, pp. 9-15.

Burgerné Gimes, A. (2010) The economies of the new and candidate countries to the European Union. Dialóg Campus, Budapest.

Carol, F., Hudcovsky, M., Karol, M. & Tomas, J. (2021) Economic Development of Slovakia in 2020 Focused on: How the Coronavirus Crisis Is Changing the Economy, Institute of Economic Research of Slovak Academy of Science, Slovaki

Discourse Moaaz, ,Al Fauzi , Hegedüs , Galovics and Dávid, Journal of Circular Economy https://doi.org/10.55845/HGWO7144 Volume 2, Issue 1 1 Review Circular Economy and Tourism: A Bibliometric Journey Through Scholarly 4,* Handling Editor: Julian Kirchherr Received: 21.12.2023 /

European Commission (2015): Economic growth in Slovakia:Past successes and future challenges, Publications Office of the European Union, Luxembourg, pp.3-10.

Fenyves, V., Pető, K., Harangi-Rákos, M. & Szenderák, J. (2019). Economics, Vol. 6, No. 6 (459-473), pp. 3.

Horbulák, Z. (2019) Unemployment in the southern regions of Slovakia. Z., Zulu, Hungary.

Jánossy, F. (1963) The measurability of economic development and a new method of measuring it. Budapest, Közgazdasági és Jogi Könyvkiadó., pp.53-59.

Volume: 3, No: 8, pp. 8168 – 8184
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.5434

Kabil, M., Rahmat, A. F., Hegedűs, M., Galovics, B., & Dávid, L. D. (2024). Circular economy and tourism: A bibliometric journey through scholarly discourse. Journal of Circular Economy, 2(1). https://doi.org/10.55845/HGWO7144

Kálmán B. G., Grotte J., Lakshmi, V., Tóth A., Módos-Szalai Sz., Zugor Zs., & Malatyinszki Sz. (2024a). Sustainable city tourism—A systematic analysis of Budapest and Mumbai. Journal of Infrastructure, Policy and Development (JIPD), 8(9). ID: 7933. http://doi.org/10.24294/jipd.v8i9.7933

Kálmán B. G., Malatyinszki Sz., Bárczi J., & Zéman Z. (2024b). Corrupción e Inclusión Financiera en Hungría y México [Corruption and Financial Inclusion in Hungary and Mexico, in Spanish]. Revista Mexicana de Economía y Finanzas Nueva Época // Mexican Journal of Economics and Finance (REMEF), 19(2). ID: e1015. http://doi.org/10.21919/remef.v19i2.1015

Kálmán B. G., Malatyinszki Sz., Zugor Zs., & Szőke B. (2024c). Perceived Corruption in Light of Green Transition Indicators. Revista de Gestão Social e Ambiental // Environmental and Social Management Journal (RGSA), 18(3). ID: e07855. http://doi.org/10.24857/rgsa.v18n3-166

Kálmán B. G., Dávid L., & Malatyinszki Sz. (2024d). The Role of Geoparks in Sustainable Tourism Development: A Case Study Approach. Geojournal of Tourism and Geosites (GTG), 17(4spl)

Kobeszko, Ł. (2020) Market Guide to the Republic of Poland. Budapest, Hungarian Chamber of Commerce and Industry, pp.4-14.

Lengyel , M. (1999): Hungary's accession to the European Union. The European Union (1999).

Losoncz, M. (2004):European Union challenges and Hungarian responses. Osiris Publishers. Osrisos, Osiris, Budapest, pp. 22-26:

Marján , A. (2006) The Economy of the European Union. HVG Publishing Company, Budapest, pp. 149-157.

MKI (2021): Market Guide to the Czech Republic. The Hungarian Chamber of Commerce and Industry International Directorate, Budapest, pp. 4-5., p24.

Németh E., Kálmán B. G., & Malatyinszki Sz. (2024). Pénzügyi biztonság Magyarországon: a 2023-as OECD-felmérés eredményeinek kettős nézőpontú elemzése [Financial security in Hungary: A dual perspective analysis of the 2023 OECD survey results, in Hungarian]. Statisztikai Szemle // Hungarian Statistical Review, 102(9), pp. 896–915. https://doi.org/10.20311/stat2024.09.hu0896

Rahmat, A. F., Bujdosó, Z., & Dávid, L. D. (2024). What is going on in global goals projects, is agenda filled? Highlighting circular economy literature within sustainable development goals–review-based. Discover Sustainability, 5, Article 399. https://doi.org/10.1007/s43621-024-00621-8

Tulok , P. (2018): The significance, structure and values of the Visegrad Four. Institute for Foreign Affairs and International Economics. Budapest, pp. 21-34.

Online source

Exim (2021): country risk information

Source:https://exim.hu/ru/doc-list/orszagtajekoztatok/3576-lengyelorszag-orszagkockazati-tajekoztato/file [date of download: 24.06.2022.]

Bajomi, A. Z. & Pinkasz , A.(2018): Indebtedness and arrears. Annual report on housing poverty.

Source: https://habitat.hu/mivel we-are-dealing/residents-reporters/residents-reports-2018/eladosodottsag-es-hatralekossag/[downloaded 20.06.20.2022]

Fellegi, T. (2021) Unemployment since the change of regime: from collapse to labour shortages.

Source: https://novekedes.hu/elemzesek/munkanelkuliseg-a-rendszervaltas-ota-az-osszeomlastol-a-munkaerohianyig [date of download: 17.06.2022.]

KSH (2018):Main indicators of the Visegrad Cooperation countries.

Source: https://www.ksh.hu/docs/hun/xftp/idoszaki/pdf/v4_fobbadatok.pdf [downloaded 25.06.2022]

Németh, P. E. (2019). Reduced unemployment in Slovakia - also in districts inhabited by Hungarians..

Source: https://felvidek.ma/2019/02/csokkent-a-munkanelkuliseg-szlovakiaban-a-magyarok-altal-lakott-jarasokban-is/[Downloaded on 21.06.2022].

Újhelyi, K. (2021) Post-COVID in the V4: Macroeconomic environment.

Source: https://weborvos.hu/tajkep_csata_utan/post-covid-a-v4-eknel-makrogazdasagi-kornyezet-267648, [download date: 22.05.2022].