

ECONOMIC EFFECTS OF COVID-19 ON THE V4 COUNTRIES

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Abstract

The main purpose of this study is to examine the economic effects of COVID-19. The paper focuses on economic effects V4 countries and the effects of the epidemic. We provide an overview of the effects of the epidemic itself. We outline the emergence, spread, and measures taken of the epidemic not only in the V4s but worldwide. We used secondary data in our research to examine the most important economic impacts and economic indicators. Furthermore, we also examine the countries of the V4s (Hungary, Slovakia, Poland and the Czech Republic) and analyse the problem separately using the researched data. The main research area of the paper is the development of GDP and unemployment in the V4s in the light of COVID-19. Finally, we formulate the conclusions and outline the main points of possible future researches along the economic impacts of COVID-19.

Key words: COVID-19, V4 countries, economic effects, unemployment, GDP

JEL Code: E24, J40

Introduction

The effects of the outbreak of COVID-19 (SARS-CoV-2) coronavirus, have been widely observed and commented by governments, researchers, and the public in recent months. The rapid increase in positively diagnosed cases and the subsequent increase in the number of secondary epidemics has raised and continues to raise international concerns in many countries around the world. The spread of the disease is compared to the 1918 pandemic because of its global consequences. Consequently, the World Health Organization (WHO) declared COVID-19 as a public health emergency of international concern on 31 January 2020 and then classified it as a pandemic on 11 March 2020. (WHO, 2020)

The COVID-19 global pandemic is expected to be the most significant economic and social event in recent decades. The impact of COVID-19 is expected to have a negative or positive impact on food, education, globalization, inequality, democracy and human rights, human development, pollution and waste, urban and rural development, human poverty and

trade relations. The pandemic will accelerate the decline of economic globalization, while others call for global cooperation in public health and economic development, or science. A pandemic should not be misinterpreted as a justification for anti-globalism, but that both sides should be kept in mind to avoid over-dependence.

The COVID-19 crisis has shown financial market participants, policy makers and the general public that natural disasters can cause unprecedented direct global devastating economic effects.

In the following, our study will focus on the COVID 19 pandemic and we will analyze what impact it has had so far, what effects we are experiencing now and what else is expected of the epidemic for the global economy. Thus, our study is based on the economic effects caused by the epidemic, but the focus of our research will be on the countries of the Visegrad Group and the effects on individual countries. In our research, we examine the most important effects together and then analyze the countries and the most important economic indicators separately. We need to find a solution to curb the virus, alleviate and avoid the crisis, and restore the economy as soon as possible after the epidemic is over.

In addition to the coronavirus epidemic – which raises many direct concerns about its very real impact on human lives – there are serious fears about the significant economic downturn that is the result of the protracted battle with the novel virus. The economies of individual countries are already accounting for huge losses, more and more workers are losing their jobs in the labor market, businesses are going bankrupt, closing down and the situation does not seem reassuring for the future.

The European and American closures (and other measures to control the spread of the virus) are likely to result in the largest quarterly fall in the economy since 1933. We have never seen in modern history that people do not go to work, whole countries stay at home, and that we will all keep a fair distance from each other.

1 Theoretical background

1.1 Global and regional effects of the pandemic

The coronavirus changed the job market almost overnight. The global epidemic has had a severe impact on both the economy and job security. We can already see that it will have long lasting consequences and that the balance of power in the market will change greatly. There are sectors, companies and workers who can benefit from the effects and consequences of this epidemic. There will be several industries where individual

organizations will suffer severe damage. People living in these areas are losing their jobs and is difficult to find a new one. (Tajam, 2020)

In the following, the paper reviews the impact of the coronavirus epidemic on the world economy from two perspectives that primarily determine the outcome of the crisis for all of us:

The economy will also be affected by anti-epidemic measures. As a result, unemployment will rise at a huge rate, shops will close, companies and loan payments will fall, the market will be unpredictable and financial vulnerability will be felt. States are trying to put in place measures to avoid a series of bankruptcies, provide wage subsidies to workers in distress, stabilize the financial system and support high-risk sectors.

Public health responses to the spread of the virus can be divided into three categories:

- Strong public health responses successfully stop the spread of the virus in all countries in 2-3 months, and the phase of physical distancing can quickly be overcome, as we have seen in China, Taiwan, South Korea, and Singapore.
- Public health measures work for the first time, but physical distancing will continue for additional months to prevent the virus from “coming back”.
- Public health fails to treat the epidemic for an extended period of time until the antidote becomes available or herd immunity develops.

Secondary economic effects and economic steps can also be divided into three groups:

- Ineffective: self-reinforcing recession, widespread bankruptcies and bad loans, possible financial crisis.
- Partly effective: measures partially curb economic damage, avoid the financial crisis, but high unemployment and corporate bankruptcies weaken the recovery.
- Highly effective: strong measures to prevent damage to the economy, rapid return to pre-crisis levels.

Let's look at how the new pandemic could affect the labor market and individual actors in the short term. According to the latest reports, the following effects may occur on the market:

- Sectors where demand is significant will demand more from their existing workforce and may hire new temporary staff without question.
- Sectors with drastically low demand are laying off workers, increasing their tendency to deceive labor exploitation.
- The risk of labor exploitation is exacerbated by home-based labor executive

agencies and audit firms.

- As growing sectors struggle to meet demand, the number of counterfeit goods, which are closely linked to labor exploitation, is expected to increase. (Dias et al., 2020; Donthu, Gustafsson, 2020; Tajam, 2020)

In the following, it is worth mentioning the so-called. supply shock. The economic effects of the coronavirus are not primarily due to the direct health consequences of the disease, but to the steps taken to prevent the spread of the virus. In order to avoid a widespread epidemic, regulations have been made restricting the movement and meeting of persons. Travel bans and quarantines have led to factory closures, service outages, supply difficulties, and fragmentation of global value chains. This is called a supply shock. The performance of the economy (Y) is declining because the production process is hampered. These types of shocks may in themselves lead to an increase in prices (P), as unchanged demand meets less and / or higher cost supply. (Donthu, Gustafsson, 2020; Tajam, 2020)

In the case of a primary supply shock, it should be mentioned that once the epidemic subsides, the effect quickly disappears and production resumes. Moreover, if demand is not damaged in the meantime, part of the lost production will be made up. This supply adjustment may be typical of industrial sectors in particular. (Donthu, Gustafsson, 2020; Tajam, 2020)

The demand shock has a logical effect on demand – which is declining. Interest in transport services, tourism, hospitality, and event management is waning due to people's cautious behavior. The consequence is a decline in economic activity (Y) and a fall in prices (P). The primary demand shock includes declining demand in the commodity markets and in the transport sector due to lost production. (Donthu, Gustafsson, 2020; Tajam, 2020)

In these cases, economies have their own tools and I try to make up for lost demand with the tools of fiscal and monetary policy. The budget can respond with additional spending and tax cuts, and monetary policy with lower interest rates. (Donthu, Gustafsson, 2020; Tajam, 2020)

The coronavirus epidemic causes both supply and demand shocks in the economy. According to the most positive scenario, the world economy will overcome the epidemic with a slight first-round effect of supply and demand shocks. However, if the ideal situation is to be ignored and the epidemic drags on and uncertainty persists, a deterioration in business confidence could reduce consumer and investment demand, leading to a further, wider decline in economic performance. Production disruptions, weak economic activity threaten the stability of corporate management, productivity growth is stalled, and lost revenue can drive indebted companies to insolvency and mass redundancies may increase. (Tajam, 2020)

1.2 Economic effects of the COVID-19 pandemic in the world and in Europe – reactions

The paper first outlines the forecasts for the economies that the epidemic caused so far and may cause in the future. Following the global perspective, the paper discusses European relations in more detail, as the countries of the Visegrad Group are also in Europe and the members of the European Union.

The simplest is to take a look at the effects and steps taken by the governments and authorities of each country from the outbreak.

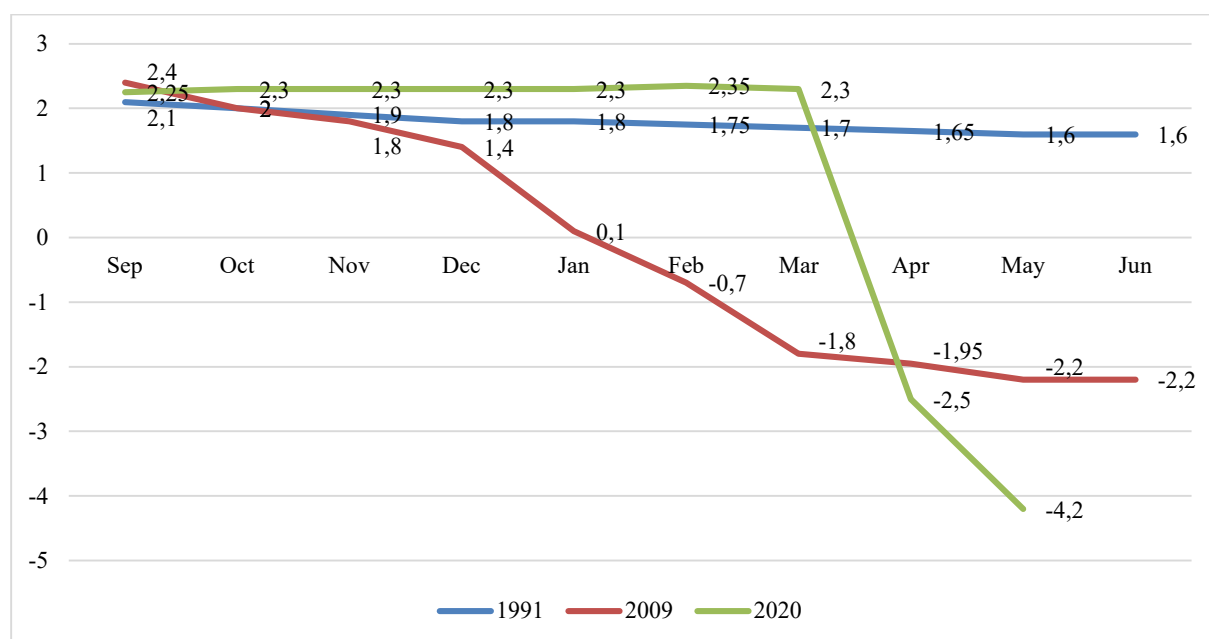
In the first phase, the authorities tried to follow the routes of infection to stop the disease. At that time – apart from some local restrictive measures – we could not see particularly strong action. The economic effects were mainly due to the fact that interest in tourism, hospitality, event organization or transport services declined or disappeared due to people's cautious behavior. (Barua, 2020; Donthu, Gustafsson, 2020)

When it became clear to the governments that mass disease could not be avoided, the epidemic went from the first stage to the second stage. Territorial and personal quarantines, restrictions on the movement of people, and the possibility of further transmission have had and continue to have a serious impact on the economy in all European countries and globally too. The steps have led to factory closures, service outages, supply difficulties, and disruption of global value chains. These economic challenges are already threatening companies outside of tourism, going far beyond the direct, severe economic impacts. (Barua, 2020; Tajam, 2020)

Prolonged uncertainty and deteriorating business confidence could reduce consumer and investment demand, leading to a further, broader decline in economic performance. Production disruptions, weak economic activity threaten the stability of corporate finances, productivity growth is stagnant or completely stalled, lost revenue can push indebted companies to insolvency and additional real risks lurk for companies. (Barua, 2020; Tajam, 2020)

The recessions caused by COVID-19 cover almost all countries and the recessions caused by the current epidemic have resulted in the fastest and steepest downgrade of the global recessions since 1990, which can also be observed in the following figure. (Tilles, 2020)

Fig. 1: Global GDP forecast (%) during recessions



Source: Tilles (2020)

1.3 Economic impacts on V4 countries

The V4 governments implemented containment measures fairly early on. These include restricting cross-border travel, moving citizens, closing schools, banning public events, closing retail stores (with critical exceptions), restricting production in industry and enforcing quarantine where necessary. The experience of countries so far shows that the early introduction of containment measures – at the point where only a few cases were detected – was crucial in curbing the outbreak.

Looking at several analyzes in relation to the Visegrád Group, we can mention several serious economic effects. The economic effects are highlighted in the following main points:

- Hundreds of thousands of jobs will be lost – the governments of all 4 countries declare hundreds of thousands of jobs to be lost – try to reduce the number of jobs lost through various measures and support packages
- Tourism, hospitality and related “service” industries suffer huge losses
- The construction industry is in a difficult situation, large projects may slip. Due to the border closure due to the epidemic, there will be a loss of work due to a shortage of goods, as well as a shortage of building materials due to the slower delivery of goods, which may lead to temporary shutdowns, which may cause delays in several projects.
- Recession – GDP decline (Bartik et al., 2020; Czech et al., Milani, 2020)

2 Aim and research methodology

The main aim of this study is to examine the economic effects of COVID-19 in V4 countries (Hungary, Slovakia, Czechia and Poland). We conducted a secondary research in our paper. The results of the research show the economic situation of V4 countries. We used several data and research. In the case of Hungary we used the data from the Central Statistical Office (KSH) and Hungarian National Bank (MNB). The Slovak data were mainly from Eurostat and other research. We collected data from the Czech Statistical Office (CSU) and in the case of Poland we used the article written by Tilles (2020) who used data from World Bank.

3 Results of the research

The countries of Central and Eastern Europe (Poland, Hungary, the Czechia and Slovakia) countries grouped in a regional cooperation platform called the Visegrad Group (V4), faced the SARS-CoV-2 epidemic at a similar time. In the Czech Republic, three confirmed cases of coronavirus were reported for the first time on 1 March, two were registered in Hungary on 4 March, although only one case was reported in Poland on this day and the first case of coronavirus was reported in Slovakia on 6 March.

Therefore, we also conducted our research along the effects of this epidemic and examined the economic effects of the epidemic on the V4 countries using secondary data. First, we show the effects on V4 in general, and then analyze each country separately in terms of the issues outlined.

3.1 Hungary

According to the data published by the KSH (2020), Hungary's gross domestic product (GDP) decreased by 13.6 per cent in the first quarter and by 13.5 per cent in the second quarter compared to the same period of the previous year, according to seasonally and calendar-adjusted and balanced data.

As a result of the emergency situation caused by the coronavirus epidemic, the production of most branches of the national economy fell, and both services and industry contributed greatly to the development of economic performance. (KSH, 2020)

The data outlined show that the rate of decline in Hungary is lower than the European Union average. According to Eurostat estimates, the economies of the member states shrank by an average of 14.4 percent in the second quarter, so the Hungarian economy proved to be more resilient to the crisis than the EU average. (KSH, 2020)

According to a report by the KSH – at the end of April (KSH, 2020) – 56,000 people lost their jobs in March, of whom 54,000 became economically inactive and 2,000 were unemployed. (KSH, 2020)

The Magyar Nemzeti Bank carried out a research on the coronavirus involving 5,000 companies, and in addition to the many measures that have been announced, consider it most important that maintaining liquidity does not run into problems, while the role of targeted subsidies increases. (MNB, 2020)

Hungary spends almost five percent of its gross domestic product on controlling the epidemic – investing, raising wages, protecting jobs and creating new ones, acquiring assets and providing tax benefits. (MNB, 2020)

3.2 Slovakia

Slovakia was negatively affected too by the COVID-19 epidemic. The extremely high openness of the Slovak economy is a major vulnerability for the external real economy, but it also causes other shocks, which we are currently witnessing. (Baša et al., 2019; Nosková, Peráček, 2019; Poór et al., 2017)

Slovakia's economy – as mentioned – is very open and exports accounted for 96% of GDP in 2018 and is also highly dependent on the functioning of the automotive industry. If we look at the composition of Slovakia's GDP then we can see the following numbers: agriculture 2,4%, industry 30,1%, services 57,5% (Eurostat, 2020a; b; Mészáros, Divékyová, 2019).

3.3 Czechia

More than six years of growth in the Czech economy came to a halt in the first quarter and, taking into account the effects of the epidemic, represents a further decline.

According to the first estimate, the decline in GDP was caused by a significant deterioration in the foreign trade balance and a decline in investment activity. Household consumption was subdued, while the economy was stimulated by government consumption.

Marek Rojíček – head of the Czech Statistical Office – said of the economic situation, that industrial production was moving towards the cyclical slowdown last year and that the dynamics did not change much in January or February. During March, however, in response to the fight against the spread of the coronavirus, a number of companies reduced production and, in several cases, virtually stopped it. As a result, production in the automotive industry fell by more than a quarter, while the nearest subcontractors fell by a tenth. (CSU, 2020)

The decline of more than 15% in March also affected engineering, computer, electronic and optical equipment and beverage production. The situation of the industry was later reflected in the negative developments in exports. On the one hand, due to increased demand in March, production increased slightly in the food industry as well as in the pharmaceutical and paper industries, but the construction industry has not been significantly affected so far. (CSU, 2020)

In general, all services that are also related to tourism in the Czech Republic have declined significantly. In the full quarter, sales of services decreased by 4.3% year-on-year, of which the decline was more than 10% in March. So sales of hospitality, accommodation, restaurants fell by half in March. In contrast, growth was characterized by information and communication activities as well as courier and postal services. (CSU, 2020)

3.4 Poland

The Polish economy is projected to be the least affected country in the EU in light of the negative effects of the COVID-19 pandemic, despite the fact that the virus has put an end to ongoing economic growth in Poland. (Tilles, 2020)

According to the World Bank's chief analyst specializing in Poland's economy, Poland's fiscal position is better than that of other countries in the region and its economy is more resilient to the effects of the coronavirus pandemic. However, Poland is the only EU member state where inflation will rise this year, but experts say inflation itself is under control. (Tilles, 2020)

However, Poland's economy cannot escape the coronavirus and its economic effects the suffering of supply and demand, uncertainty among consumers and investors, and the recession between the country's largest trading partners are having a negative impact on exports. (Tilles, 2020)

However, the Polish economy cannot be sure in success, as there is an additional danger as time goes on and the epidemic continues to evolve. Lower domestic demand and a second wave of the epidemic could have more serious consequences for the labor market and therefore pose a risk of permanent job losses in the sectors most affected by the crisis. (Tilles, 2020)

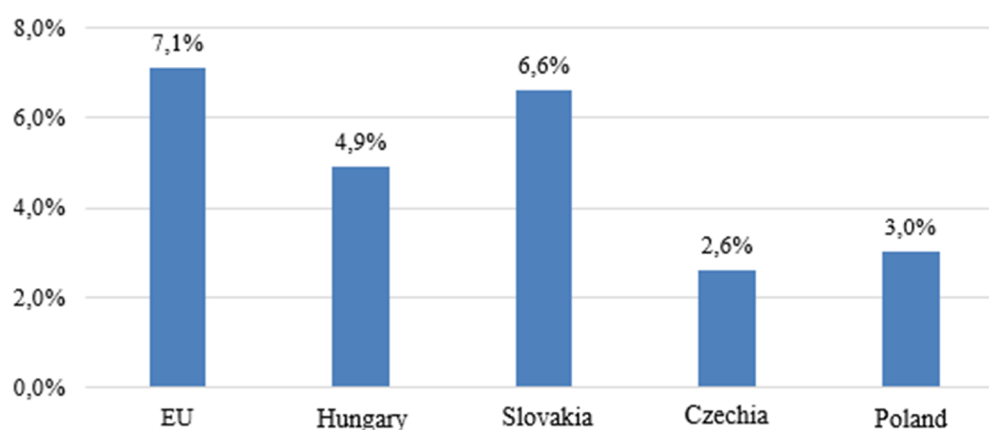
According to the experts, in the medium term, Poland could benefit from reorganizations within global supply chains. At the time of the pandemic, due to the disruption of trade and the shortage of certain goods, the EU and countries and businesses, including EU manufacturing companies, want to relocate operations to other competitive

markets and in this case Poland could be one. (Tilles, 2020)

3.5 The most important economic impacts for the Visegrad Four

Figure 2 shows the evolution of unemployment according to the latest Eurostat report. We can see that the average unemployment rate in the European Union is at 7.1 per cent and the V4s are all below this value. The current unemployment rate is 6.6 per cent in Slovakia, 4.9 per cent in Hungary, 3 per cent in Poland and 2.6 per cent in the Czech Republic. For all 4 countries, unemployment rates have risen since the pandemic. (Czech et al., 2020)

Fig. 2: Change in unemployment – June 2020



Source: Own editing based on Eurostat (2020b)

In Table 1 the the volume of GDP growth based on seasonal data in 4 quarters. We have supplemented the last two quarters of 2019 with the first quarter of 2020, and thanks to the latest reports, GDP data for the second quarter of 2020 are already available and have been used.

Tab. 1: Volume of GDP growth in the V4 countries

Volume of GDP growth (based on seasonal data)	Percentage change on the same quarter last year			
	2019Q3	2019Q4	2020Q1	2020Q2
<i>EU</i>	1,6	1,2	-2,5	-14,1
<i>Hungary</i>	4,7	4,4	2,0	-13,5
<i>Slovakia</i>	1,9	2,0	-3,8	-12,1
<i>Poland</i>	4,1	3,5	1,7	-7,9
<i>Czechia</i>	2,3	2,0	-2,0	-10,7

Source: Own editing based on Eurostat (2020a; b)

It can be seen that in the last two quarters of 2019 the Visegrad Four were still able to produce positive values, but in 2020, the economic recovery slowed down and then an unexpected catastrophe occurred – the appearance of the COVID-19 pandemic and the economic effects caused by it. We can see that in the first quarter of 2020, the growth of the European Union came to a halt and the economies of Slovakia and the Czechia already felt the declining trend. Hungary and Poland were able to record even smaller GDP growth in the first quarter, with growth of 2 percent and 1.7 percent, respectively. The second quarter reports for 2020 have already been much worse than expected due to the effects of the epidemic. The European Union can record an average GDP decline of more than 14 percent. Hungary is approaching this average with a 13.5 percent reduction. GDP growth in the Czech Republic and Slovakia is slightly better, with the Czech Republic forecast a decline of 10.7 percent and Slovakia 12.1 percent. Poland stands out a bit out of the Visegrad Four, as the epidemic has not worn the Polish economy as much as its other countries so far, and a report released in the second quarter of 2020 puts the GDP at 7.9 percent. (Czech et al., 2020; Eurostat, 2020a; b)

In Table 2, we can see the development of seasonal unemployment divided into 5 periods going back to the last 1 year. The observed period extends from June 2019 to the end of June 2020 using the most up-to-date Eurostat data, and the table also shows the unemployment in another period, but here we examine the number of specific numbers of persons expressed in thousands (that how many unemployed are registered in that country). (Eurostat, 2020a; b)

Tab. 2: Seasonal unemployment in the V4 countries (% and number of unemployed in thousands)

	Arány (%)					Személyek száma (ezerben)				
	<i>June 19</i>	<i>March 20</i>	<i>Ápríl 20</i>	<i>May 20</i>	<i>June 20</i>	<i>Jun 19</i>	<i>March 20</i>	<i>Ápríl 20</i>	<i>May 20</i>	<i>June 20</i>
<i>EU</i>	6,6	6,5	6,7	7	7,1	14 199	13 808	14 324	14 742	15 023
<i>Hungary</i>	3.4	3,7	4,1	4,8	4,9	161	169	191	222	265
<i>Slovakia</i>	5,8	5,8	6,4	6,5	6,6	157	158	175	179	181
<i>Poland</i>	3,3	2,9	2,9	2,9	3	553	490	492	500	520
<i>Czechia</i>	1,8	2,1	2,2	2,4	2,6	98	111	117	126	139

Source: Own editing based on Eurostat (2020b)

We can see that the measured period shows an increasing trend from the EU average

through the V4 countries. The EU average is 7.1 percent and it is true that all V4s are below average – Slovakia, 6.6 per cent, Hungary 4.9 per cent, Poland 3 per cent, Czechia 2.6 per cent. Forecasts, however, suggest that these values will rise further. (Eurostat, 2020a; b)

After examining the percentages, we look at the exact numbers of unemployed by country. In Czechia, the number of unemployed – including the effects of the coronavirus – has skyrocketed to 139,000, in Slovakia there are currently 181,000, in Poland there are 520,000 and in Hungary the estimated number of unemployed is high at around 265,000.

Conclusion

It can be concluded from the study that the countries of the Visegrad Group also felt strongly the effects of the coronavirus epidemic in the spring of 2020 – mainly from an economic point of view. According to preliminary reports from the four countries and the latest published data, the decline in GDP is significant, but according to the Eurostat June report it has moderated somewhat from March forecasts, but this process is not over and the epidemic may have a major impact on economies of some countries. There are similarities in terms of unemployment, as more than 10,000 workers became unemployed in the first months in each of the countries studied, and as we move towards the end of the year, these numbers could reach 100,000, but it should also be noted that the epidemic and government action could further transform this.

Overall, therefore, due to the economies of the four countries operating on similar principles, there are similarities in their responses to the epidemic as in the economic downturns caused by individual measures. Among the V4s, Poland could be mentioned as a minor exception, as the country's economy was less dependent on the car industry than the other three countries, but in other areas Poland also performed poorly and the recovering epidemiological situation could further transform future prospects.

In order to support EU citizens, businesses and member states – in recovering from the economic downturn caused by COVID-19 – EU leaders have agreed to develop an EU recovery plan. On 21 July, EU leaders agreed on a total budget for the period 2021-2027, set at € 1,824 billion. The Multiannual Financial Framework (MFF) and the Next Generation EU (NGEU) emergency recovery package will help to rebuild the EU after COVID-19 and support investments in green and digital switchover. (European Commission, 2020)

These instruments complement the three safety nets, totaling € 540 billion, that the EU has previously set up to support workers, businesses and EU countries. Of course, this

financial framework can also provide an opportunity for the V4 countries to recover as soon as possible. (European Commission, 2020)

In light of these disturbing prospects, tackling the health crisis and mitigating short-term economic damage is a top priority for policy makers. In the longer term, the authorities need to implement comprehensive reform programs to improve the key drivers of economic growth once the crisis is over. (European Commission, 2020)

The outbreak of the COVID-19 epidemic has forced many businesses to close, disrupting trade in an unprecedented way in most industries. Retailers and brands have faced and are facing many short-term challenges in areas such as health and safety, supply chain, labor, cash flow, consumer demand, sales and marketing. However, a successful response to these challenges does not guarantee a promising future or a future in general. The reason for this is that as soon as we get through this pandemic, we end up in a completely different world than we experienced before the outbreak. With the passage of time and the development of vaccinations or treatments for COVID-19, it is becoming increasingly likely that a pandemic will have a lasting effect on the structure of the economy. It is unlikely that all sectors will be equally affected, but some will certainly face difficulties or even have lasting effects that will be seen in changes in habits, preferences and technologies. (Dias et al., 2020; Donthu, Gustafsson, 2020)

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