

Effects of Coronavirus Pandemic on the Economic Performance of Bulgaria and the EU

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Abstract

The study examines the negative effects of the coronavirus pandemic, came in 2020, on the economic development of European Union countries, including Bulgaria. The negative impact on the economic performance of the European countries is investigated by analyzing the dynamics of several indicators, such as economic growth, unemployment, production in manufacturing, construction production, retail sales. The results of the analyses showed that the countries, registered the largest total number of coronavirus cases were the most negatively affected in terms of economic growth rates, unemployment, and manufacturing production. In addition, the coronavirus pandemic had stronger negative effects on the economic performance of the European countries than the international financial crisis in 2008-2009. The reason for the stronger negative effect of the health crisis on the economic development of the countries compared to the financial crisis in 2008 is its comprehensiveness and the impact on almost all sectors of the economy, and not only the impact on the financial sector.

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INTRODUCTION

The countries development depends not only on internal factors, but also on external ones. Very often one country is influenced from the crisis periods of another country, especially in case of close trade relations between countries, or in case of similar economic development because of the spillover effect. Some of the countries are more exposed to external factors, depending on their monetary regimes and exchange rate regimes.

In the twenty first century the countries faced several crisis periods, having international character. The crisis periods started from one country and after that it has been transmitted to several countries, having their negative consequences on their economic development. For example, the financial crisis started in mid-2008 in the United States, which was spread to a lot of countries in Europe and in Bulgaria too. After that followed the debt crisis in eurozone in 2012-2013, having negative effects on the countries with huge government debt, exceeding the value of the countries' GDP. Almost ten years later, the countries faced a new type of crisis so-called health crisis, caused by the coronavirus (COVID-19), which turned to economic crisis in almost all countries, due to the spreading coronavirus cases, enforcing the governments to stop enterprises to work in order to limit the virus spreading. The coronavirus pandemic continues and probably the economic situations in almost all countries around the world is likely to deteriorate.

Thus, the different types of crisis and their influence on the economic performance of countries are very important topic, which deserve to be investigated. The aim of the study is to investigate the effect of the coronavirus pandemic on the economic development of European countries, including Bulgaria.

The following hypothesis can be tested: the countries in the European Union (EU), including Bulgaria were negatively affected by the coronavirus crisis, having strong negative effect on the economic growth, unemployment, manufacturing production, construction and retail sales. Some countries, which had more coronavirus cases at the outbreak of coronavirus at the beginning of 2020, such as Italy, United Kingdom, France, Germany, Austria, Spain, were hit stronger than the other countries in the European Union. These were mostly advanced economies in the EU.

In addition, the second hypothesis can be tested: the stronger negative effects of the coronavirus pandemic on the countries' economic performance could be expected than the effects of the international financial crisis in 2008-2009 on the economic development of the same countries.

The study is structured in five parts. First part is the introduction. The second one makes a review of the literature. The next part reveals the methodology used. The fourth part is related to analyses of the results. The fifth part has the main conclusions, which come from the analyses.

REVIEW OF THE LITERATURE

There are a number of studies examining various aspects of the economic development of the countries of the European Union and / or the economic development of the individual countries in it. The World Economic Forum (2019) outlined the countries that have higher economic growth in the European Union such as Bulgaria, Poland, Slovakia, Latvia, Lithuania and Estonia in the period 2003-2015 than the others and concluded that there are regions in the countries of the European Union, which can provide a good basis for the future economic growth of the union. Chobanov (2019) examines the economic development of Bulgaria after the global financial crisis in 2008 to the second quarter of 2018. The comparison of the economic development of Bulgaria and the other 12 Central and Eastern European countries, representing the last wave of EU enlargement, was made. The author concluded that the Bulgarian economy slowed down its economic growth rate as compared to the average for other countries, due to the lack of structural reforms, which to address the problems. Nenkova and Metalova (2019) made an overview of tax policy in Bulgaria in the period 2005-2017 and pointed out that the tax system had a strong impact on economic growth, which on the other hand determines the tax revenue volume. The fiscal decentralization and its success in Bulgaria in the period 2003-2012 were examined in Nenkova (2014). The increasing local government revenue autonomy was important for the public finances in order the government to be able to use more efficiently its resources, contributing for the faster economic growth rate.

The role and importance of European Union investments for the economic development of the Western Balkans countries was analysed in Popovic, Eric (2017). By using the panel analysis and V.A.R. model the authors proved the relationship between GDP per capita and the EU investments.

The effects of the financial crisis on the economic development of the European Union is investigated in several studies. The World Economic Forum (2015) investigates the countries approaches for surviving the global financial crisis in 2008. The European countries followed the common approach in coping the financial crisis, increasing government borrowing, increasing government revenues by rising taxes and

decreasing government spending. Kovachevich (2016) tested the long-term relationship between the exchange rate regime and the government debt in Greece, Ireland, Italy, Portugal and Spain, affected by the debt crisis in the Eurozone.

The spillover effect of the global financial crisis was very strong around the world, including in the European countries. After the collapse of Lehman Brothers in 2008 the financial crisis, which initially started in the real sector in the United States, affected the Western European countries. Terazi, Senel (2011) pointed out that the financial crisis affected significantly the European Union, especially the new members such as Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovenia, Slovakia, Romania and Bulgaria. There were two main channels. The first one was related to the credit squeeze, which had subsequent negative effect on investments and consumption. The second channel was related to the downturn in the global economy, which on the other hand, had its negative effect on exports of the countries. Terazi, Senel (2011) stressed that the financial crisis in 2008 was stronger in intensity and coverage as compared to the Great Depression in 1930's. Szekely and Noord (2009) also stated that the European Union was in its deepest recession since 1930s. Ferreiro and Carrasco (2016) investigated the impact of the financial and economic crisis on European Union member states by focusing on the dynamic of a number of real and financial variables since 2003.

Atanasov et. all (2016) focused on the analysis of Bulgaria's development before and after financial crisis in 2008. They concluded that the country was highly vulnerable to the regional and global factors. The reason for that was the country's dependence on export earnings and foreign investment. The relationship between the financial crisis in the real economy and the state of the banking system was investigated by Sotirova (2012). The researcher concluded that the banking sector has experienced a healthy development and succeeded to create a favourable environment for the Bulgarian economy, which helped the country to cope with the financial crisis.

There are few studies, dedicated to the impact of coronavirus pandemic on the economic development of the countries. Chen et all. (2020) use high frequency data such as electricity usage, smartphone movements, employment for small businesses and hourly workers to analyze the economic impact of the coronavirus pandemic on the European countries and on the United States. They concluded that the countries and regions, having more sizeable COVID-19 cases, experience higher economic losses.

UNIDO (2020) also investigated which countries and manufacturing sectors were the most affected by the coronavirus crisis. The study showed that the advanced economies were hit hardest by the coronavirus pandemic, but also two emerging regions in particular emerging and developing Europe and Latin American and the Caribbean would experience above-average decline in their economic growth rates, by -7.7% y/y and -7% y/y in 2020, respectively with world average growth rate of -6.4% y/y in 2020.

Sofia Municipal Privatization and Investment Agency and Inovative Sofia (2020) investigated the impact of COVID-19 across various industries at Sofia level. There were no other studies, concentrated on the impact of the coronavirus pandemic on the Bulgarian economy.

METHODS

The impact of the coronavirus pandemic on the economic development of the European Union countries, including Bulgaria will be investigated by comparing the economic indicator for the two groups of countries: the most affected by coronavirus pandemic (mainly advanced economies) and less affected by the coronavirus health crisis.

For the purpose of the analyses the countries in the European Union will be divided on countries, which were the most affected by the coronavirus pandemic in terms of total coronavirus cases: Italy, United Kingdom, France, Germany, Austria, Spain, Belgium. The remaining countries in the European Union were less affected by the coronavirus pandemic. Despite of the fact that the United Kingdom escaped the European Union, the country is included due to the fact that for the most of the analyzed period it is part of the European Union.

Table 1. Coronavirus total cases, as of May 31, 2020

Country	Total coronavirus cases
Spain	286,509
UK	248,202
Italy	232,979
Germany	183,294
France	151,753
Belgium	58,381
Austria	16,731

Source: www.worldometers.info/coronavirus/

The period, which will be covered in the study, is 2007-2020. The longer period is necessary to test the second hypothesis and to compare the economic performance of countries in these two crisis periods. The data used for the comparative analysis are published on regular basis by the statistical offices, international organizations, Eurostat.

The study is limited from the continued uncertainties, related to coronavirus development and the possible second wave of coronavirus cases in coming months.

Economic Development of The European Union Countries

The impact of the coronavirus pandemic will be investigated on the economic activity of the European Union countries. In the first quarter of 2020 the most affected countries in the European Union (Italy, United Kingdom, France, Germany, Austria, Spain and Belgium) reported an average decline in their GDP by 3.4% as compared to the same quarter of the previous year. The less affected countries by the coronavirus pandemic in terms of number for total cases reported an average increase in the GDP by 0.1% y/y in the first quarter of 2020 as compared to the first quarter of 2019 (Figure 1 and Figure 2). As compared to the financial crisis the effect of the coronavirus pandemic on the economic development of the most affected countries was almost the same as the effect of the international financial crisis in 2008. This was valid especially for Italy and France, which reported an economic decline of -5.6% y/y and -4.7% y/y in the first quarter of 2020 versus -7.6% y/y and -4% y/y in the first quarter of 2009.

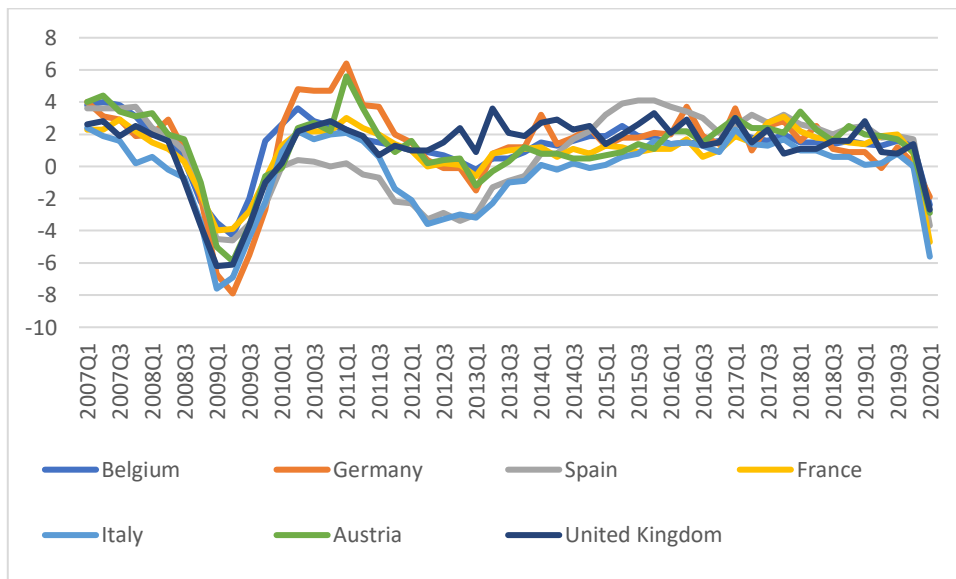


Figure 1. Economic growth rate of Austria, Belgium, Germany, France, Spain, Italy, United Kingdom, percentage change compared to same period in previous year, %
Source: Eurostat

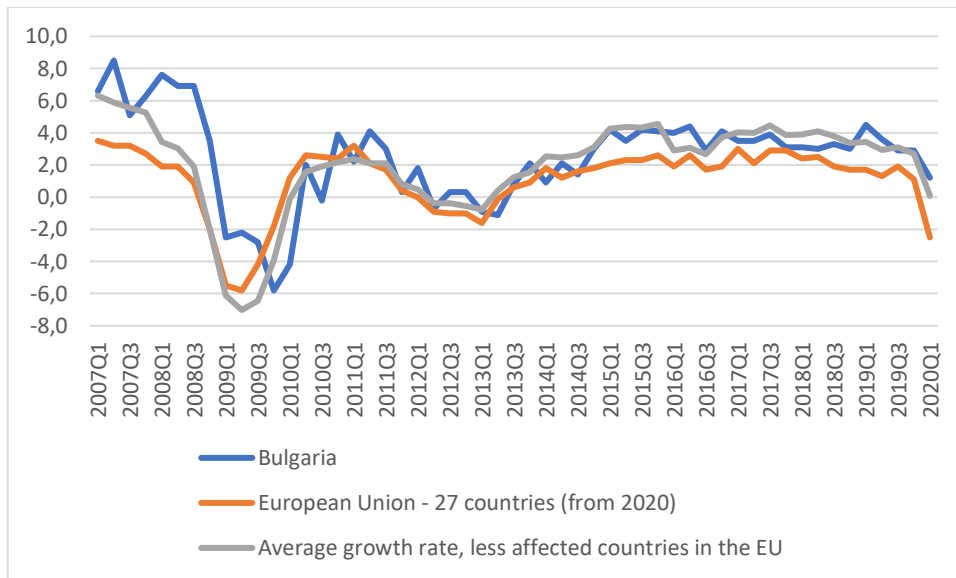


Figure 2. Economic growth rate of Bulgaria, EU and the less affected countries in the EU, percentage change compared to same period in previous year, %
 Source: Eurostat

In respect to manufacturing production, the most affected countries by coronavirus pandemic reported strong decline of 34.5% y/y in April 2020, accelerating the decline of 15.3% y/y in March 2020. The decline in manufacturing production, caused by the coronavirus pandemic, is significantly larger than the registered declines in manufacturing production during the international financial crisis. For example, manufacturing production fell by 19.8% in April 2009 in the most affected countries by coronavirus pandemic (Figure 3).

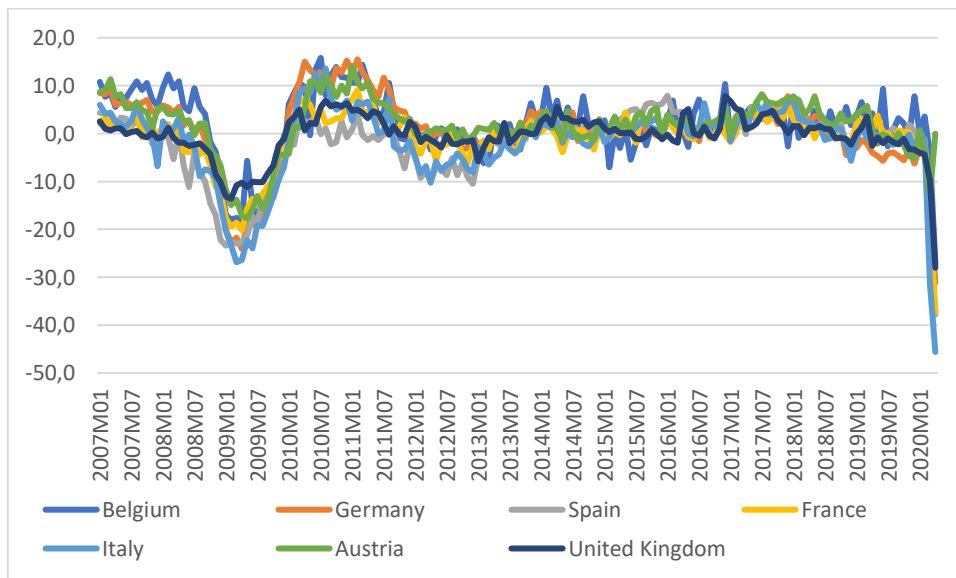


Figure 3. Production in manufacturing, Austria, Belgium, Germany, France, Spain, Italy, United Kingdom, percentage change compared to same period in previous year
 Source: Eurostat

The less affected countries by coronavirus pandemic reported decline of 20.4% y/y in April 2020, accelerating the drop of 7% y/y in March 2020. The decline in manufacturing production, caused by the coronavirus pandemic, is significantly larger than the registered drop in manufacturing production during the international financial crisis. In April 2009, the manufacturing production went down by 19.1% y/y in the less affected countries by coronavirus pandemic (Figure 4).

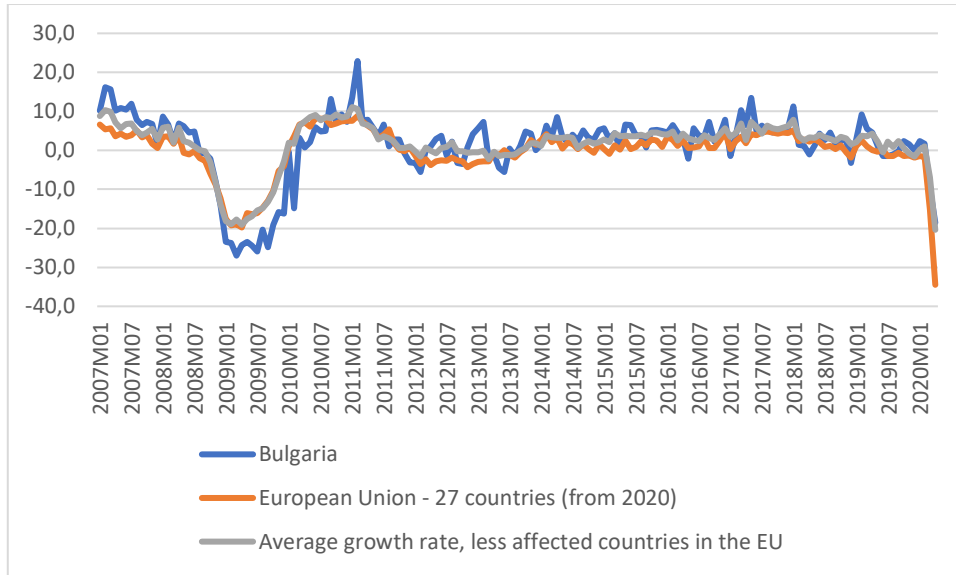


Figure 4. Production in manufacturing, Bulgaria, EU and the less affected countries in the EU, percentage change compared to same period in previous year
Source: Eurostat

In respect to construction production, the most affected countries by coronavirus pandemic recorded again strong drop of 37.8% y/y in April 2020, accelerating the decline of 18% y/y in March 2020. The strongest decline was seen in Italy, the country where the coronavirus case was met for the first time in Europe. The construction production in Italy fell by 67.8% y/y in April 2020 (Figure 5).

Again, there was a stronger decline in construction production during the coronavirus pandemic as compared to the period of the international financial crisis. In 2009, the construction production of these countries went down by 10.6% y/y in January and 11.5% y/y in February 2009.

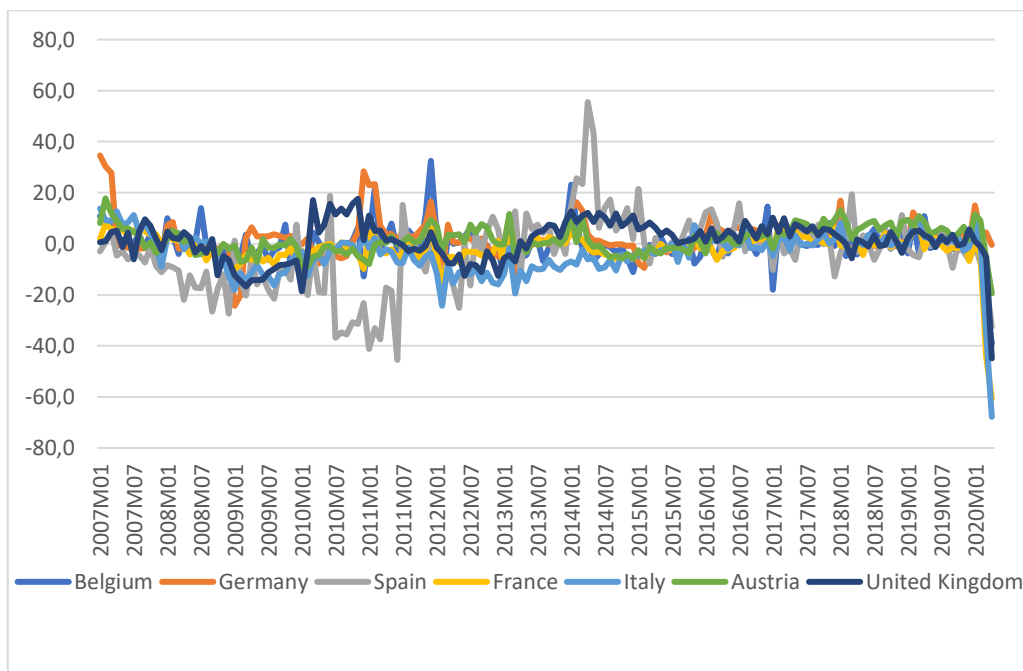


Figure 5. Production in construction, Austria, Belgium, Germany, France, Spain, Italy, United Kingdom, percentage change compared to same period in previous year
Source: Eurostat

The less affected countries by coronavirus pandemic reported decline of 6.5% y/y in April 2020, accelerating the drop of 2.8% y/y in March 2020. The decline in construction production was comparable to that recorded during the international financial crisis. The strongest decline of 8.6% y/y in construction

production of the less affected countries by coronavirus pandemic was recorded in May 2009 (Figure 6). In Bulgaria the construction production declined by higher rate of 20.4% y/y in May 2020 than the average level for the less affected countries in the EU. Despite the reported declines in the construction production in the less affected countries, the reported drops were lower that that seen in the period of the global financial crisis.

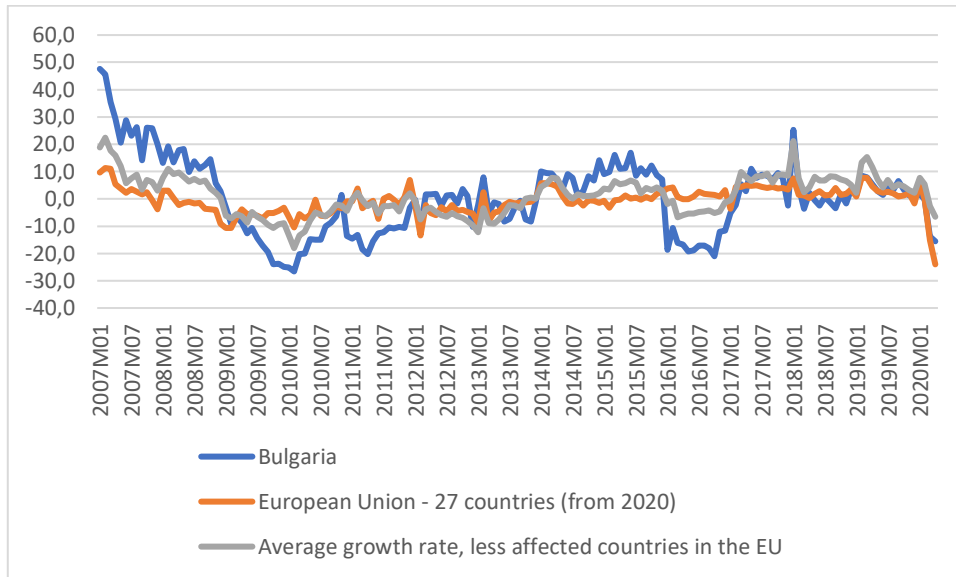


Figure 6. Production in construction, Bulgaria, EU and the less affected countries in the EU, percentage change compared to same period in previous year
Source: Eurostat

Retail trade was also negatively affected by the coronavirus pandemic. In the most affected countries by the coronavirus pandemic in terms of the total number of coronavirus cases, there was a decline of 22.1% y/y in April 2020. Again, the reported declines were stronger than that of the period of the international financial crisis. In May 2009, retail sales stepped down by only 3.1% in February 2020.

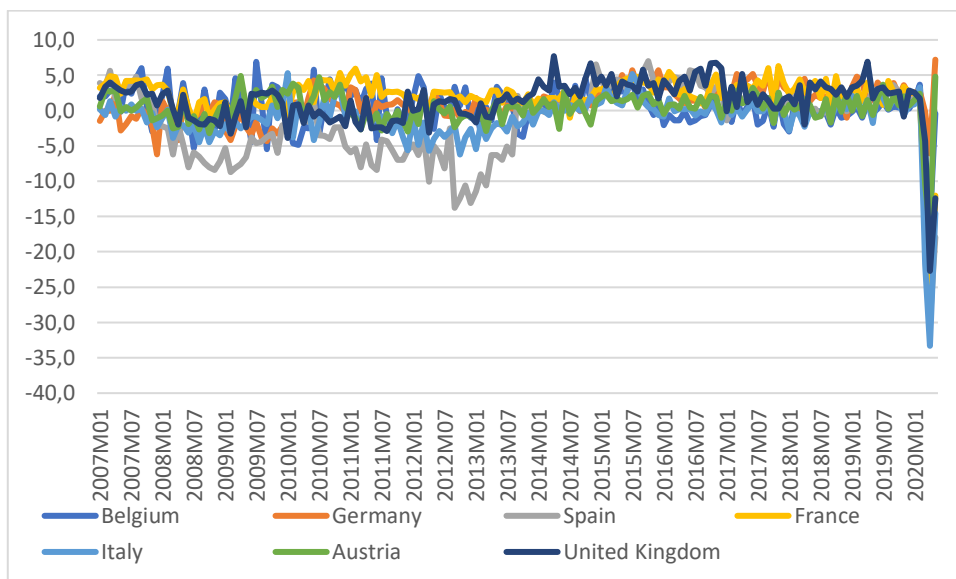


Figure 7. Retail trade, Austria, Belgium, Germany, France, Spain, Italy, United Kingdom, percentage change compared to same period in previous year
Source: Eurostat

In the less affected countries by the coronavirus pandemic reported a decline of 16.2% y/y in April 2020, while in May 2009 the registered drop was 8.4% y/y, being lower as compared to the period of the health crisis. In May 2020, the retail sales recovered, dropping by only 4.6% y/y due to the removal

of a significant part of the measures against the coronavirus pandemic in many countries and opening of trade centers and small shops.

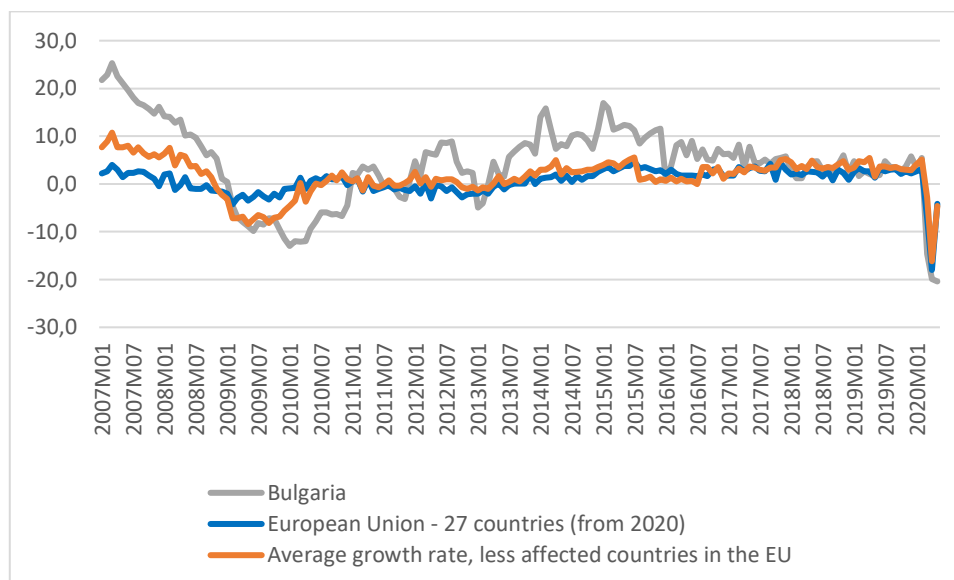


Figure 8. Retail trade, Bulgaria, EU and the less affected countries in the EU, percentage change compared to same period in previous year

Source: Eurostat

In the crisis periods the number of unemployed increases due to the decrease in the aggregate demand. In case of the coronavirus pandemic some of the businesses such as automotive industry even stopped their production, due to high costs, increasing hospital coronavirus cases and lack of exports markets due to borders closure. Trade centers, shops, some service sectors, restaurants, and coffees stopped working, which triggered the small and medium-sized enterprises' owners to lay off their workers. Governments tried to help the sectors, which were the most affected by the pandemic, to stop the fast increase in unemployment. In Bulgaria the government undertook a measure, which to pay up to 60% of the worker's salaries and the employers to keep on paying the remaining 40%. In the Austria and Germany also, the governments tried to help the enterprises and people, but aiming to prevent workers from entering the labor market during the strict coronavirus measures.

As a result of the pandemic the unemployment rate in the countries started to increase. The most affected countries reported a rise in unemployment rate. In Germany the unemployment rate rose from 3.1% at end-2019 to 4.4% in May 2020. In Spain the unemployment rate also rose from 13.7% at end-2019 to 14.3% at end-May 2020, while in Italy it stepped up from 4.3% at end-2019 to 6% at end-May 2020 (Figure 9). The unemployment rate in the most affected countries by the coronavirus pandemic rose by only 0.2pps y/y to 7.6% at end-May 2020.

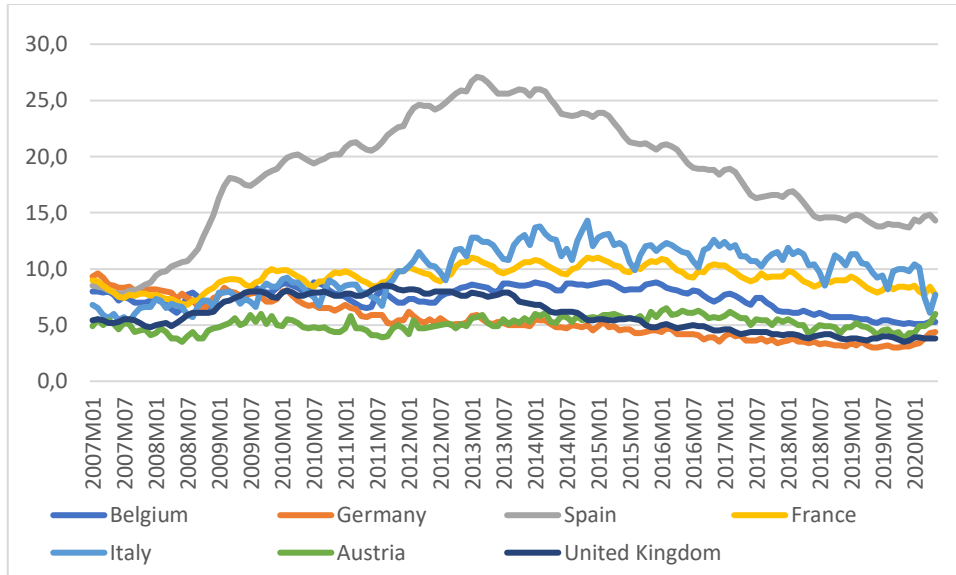


Figure 9. Unemployment rate, Austria, Belgium, Germany, France, Spain, Italy, United Kingdom, percentage of active population, %
 Source: Eurostat

The countries with less coronavirus cases reported higher increase in the unemployment rate (Figure 10). The unemployment rate stepped up from 5.6% at end-May 2019 to 6.3% at end-2020. In case of Bulgaria, the unemployment rate rose from 4.2% at end-May 2019 to 5% at end-April 2020 and decreased by 0.4% m/m at end-May 2020. The decline in unemployment rate was related to the measure undertaken by the government 60% to 40%, which helped the employers to retain their workers. In addition, in May 2020 most of the restrictive measures was lifted, and the sectors affected by the pandemic-related economic closure are recovering.

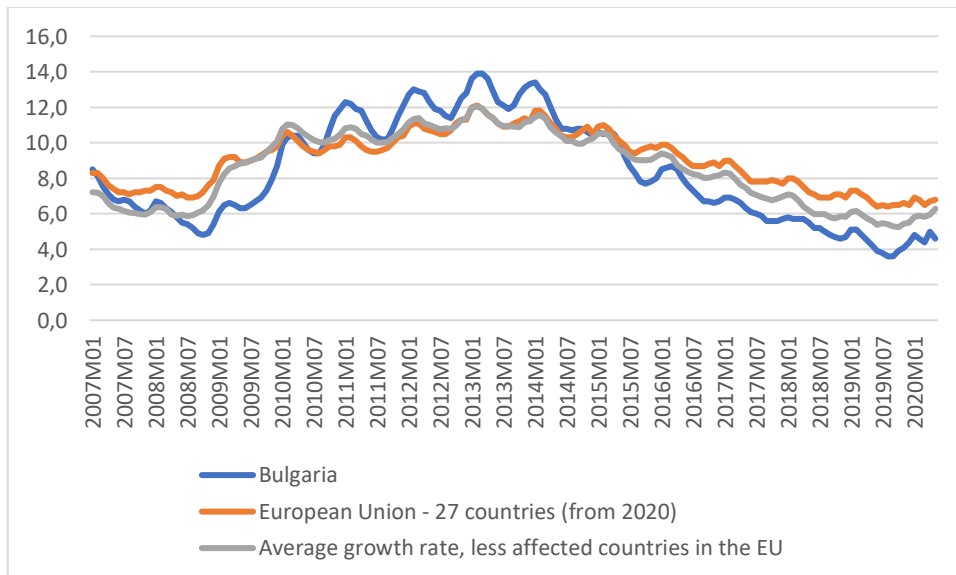


Figure 10. Unemployment rate, Bulgaria, EU and the less affected countries in the EU, percentage of active population, %
 Source: Eurostat

The analyses of the short-term indicators for the economic development in the European Union showed that there were strong negative effects on the European Union countries especially on the countries with the highest number of coronavirus cases. The negative effect was seen in the economic growth rate, construction and manufacturing production. For these countries (Belgium, United Kingdom, Germany, Spain, Italy, Austria, France) the reported declines were stronger than the drops reported during

the international financial crisis in 2008. At the same time, the less affected countries by the coronavirus pandemic in the European Union reported the comparable declines in GDP growth rate, construction, manufacturing production and retail sales to the drops seen during the international financial crisis. UNIDO (2020), quoting Ma et. al (2020), stressed that the decline in the GDP growth was less severe in low-income countries, facing the coronavirus pandemic, than the advanced countries.

The future economic development of the EU countries depends on the development of the coronavirus pandemic. In countries with more cases of coronavirus in the first months of 2020, a smoother exit from the health crisis can be observed in following months. In countries that have had fewer cases of coronavirus, the situation is yet to worsen, which will change the future development of short-term indicators. It is possible to expect even greater deterioration of indicators in these countries.

CONCLUSION

The analyses showed that there is strong negative effect of coronavirus pandemic on the economic development of the countries in the European Union, which have the most total coronavirus cases. The GDP decline in the advanced countries because of the coronavirus crisis was even stronger than the GDP drop because of the international financial crisis in 2008. In respect to the less hit economies by the coronavirus cases, the GDP declines but with lower grade as compared to the international financial crisis. The short-term indicator – manufacturing production and construction production, showed even stronger decline in April 2020 as compared to its decline during the international financial crisis. The reason for that was the fact that the health crisis affected almost all sectors in the economy, not only the financial sector as it was during the international financial crisis in 2008. Unemployment rate remained less affected by the coronavirus pandemic, but it would increase in following months as the effects are manifested in the longer term.

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