The economic and social impact of the coronavirus crisis worldwide and in Slovakia

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Abstract: The sudden outbreak of COVID-19 pandemic has changed the usual stereotypes of state institutions, businesses, hospitals, schools and all other structures where people have been existing. Containment measures affected lifes of the people and the professional performance of both public and private sectors of individual states as well. It hit the world trade. The slow-down of economic activities has evoked new challenges nations have to cope with. The paper intends to zoom in the economic and social impact of the coronavirus pandemic worldwide and in Slovakia.

Key words: COVID-19 pandemic, The World Pandemic Uncertainty Index, GDP, containment measures

Abstrakt: Náhle prepuknutie pandémie COVID-19 ovplyvnilo fungovanie štátnych inštitúcií, firiem, nemocníc, škôl ako aj všetkých ostatných spoločenských štruktúr. Zavedené bezpečnostné opatrenia ovplyvnili životy ľudí a tiež profesionálnu výkonnosť verejného a súkromného sektora jednotlivých štátov. Oslabilo sa obchodovanie na svetových trhoch. Spomalenie ekonomiky prinieslo nové problémy, ktoré budú musieť štáty riešiť. Článok približuje ekonomický a spoločenský dopad pandémie koronavírusu vo svete a na Slovensku.

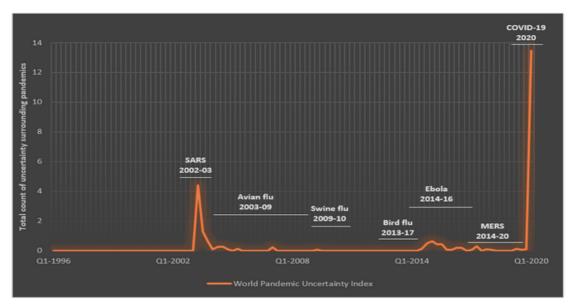
1. The COVID-19 pandemic outbreak

The COVID-19 pandemic has been the most severe global health crisis since the Spanih flu that hit people after the World War 1 in 1918. As many other negative events that impact human lives, this one has influenced the individual well-being of the men and the prosperity of the states worldwide as well. The characteristic feature of this pandemic is its rapid global spread, that has been supported by the modern lifestyle of the mankind in which people have been transporting themselves worldwide. Its fast transmission has also been caused by carriers without symptoms. This state has affected the creation of the containment policy of the states with the aim to protect the health of citizens. These restrictions from the economic point of view has led to the slow-down or even stop of the economic activities.

The spread of the coronavirus from China in winter 2019 to Europe finally reached Slovakia on 6th March 2020 confirming here the zero case of this disease. Its rapid and widespread effect led to the slow-down of the economy worldwide. Nowadays the so-called coronacrisis affirms the cyclic nature of the economy.

In connection with the coronacrisis the International Monetary Fund (IMF) has published the World Uncertainity Index (WUI) demostrating the relevant feature of the current situation - the uncertainity in the economic context. The index is constructed by counting the number of times the term 'uncertainty' is mentioned in connection with the terms 'pandemic' or 'epidemic' in the Economist Intelligence Unit (EIU) country reports [1].

The WUI is computed by counting the percent of word "uncertain" (or its variant) in the Economist Intelligence Unit country reports. The WUI is then rescaled by multiplying by 1,000,000. A higher number means higher uncertainty and vice versa. For example, an index of 200 corresponds to the word uncertainty accounting for 0.02 percent of all words, which—given the EIU reports are on average about 10,000 words long—means about 2 words per report. [2].



Picture 1. The World Pandemic Uncertainty Index

Source: [1]

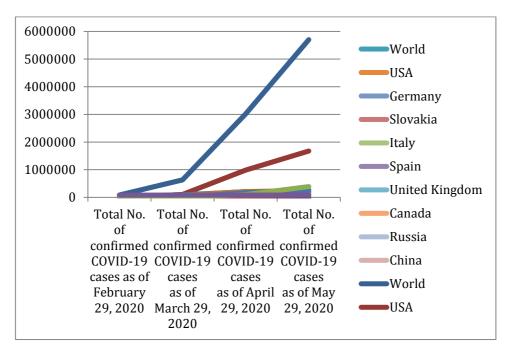
As already have been mentioned, the COVID-19 spread rapidly throughout the whole world. The table 1 specifies the number of confirmed COVID-19 cases in detail in the chosen countries. The sharp increase of cases can be observed in the period from February 29, 2020 to March 29, 2020. This tendency continued in the further periods, too.

Table 1: The total No. of confirmed COVID-19 cases in the chosen countries and the chosen period

	Total No. of confirmed COVID-19	Total No. of confirmed COVID-19	Total No. of confirmed COVID-19	Total No. of confirmed COVID-19	
	cases as of February 29, 2020	cases as of March 29, 2020	cases as of April 29, 2020	cases as of May 29, 2020	
World	85,403	634,813	3,018,681	5,701,337	
USA	62	103,321	983,457	1,675,258	
Germany	57	52,547	157,641	180,458	
Slovakia	0	295	1,384	1,520	
Italy	888	92,472	201,505	231,732	
Spain	32	72,248	210,773	238,278	
United Kingdom	20	17,093	161,149	269,131	
Canada	14	4,757	49,014	87,902	
Russia	2	1,534	99,399	387,623	

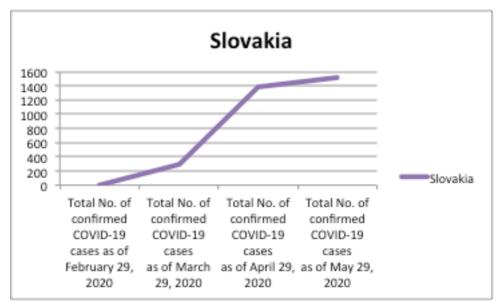
China 79,394 82,341 84,369 84,547

, Source: [3], own work



Picture 2. The total No. of confirmed COVID-19 cases in the chosen countries and the chosen period

Source: [3], own work



Picture 3. The total No. of confirmed COVID-19 cases in Slovakia in the chosen period

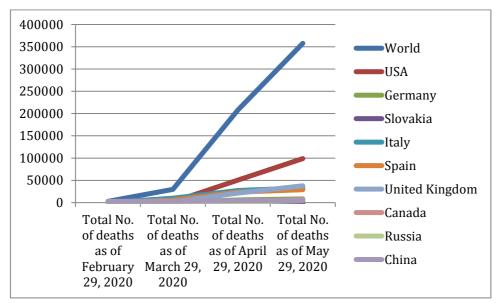
Source: [3], own work

Unfortunately, as many other diseases this one has its victims, too. As the number of confirmed cases rised, the total number of deaths increased, too. The situation has been calming in Europe since June, reporting no new confirmed cases in some countries, e. g. Slovakia.

Table 2: The total No. of deaths caused by COVID-19 in the chosen countries and the chosen period,

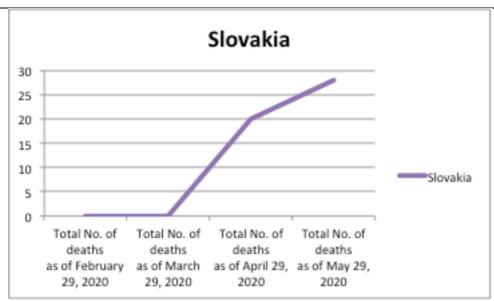
	Total No. of deaths as of February 29, 2020	Total No. of deaths as of March 29, 2020	Total No. of deaths as of April 29, 2020	Total No. of deaths as of May 29, 2020
World	2,924	29,891	207,973	357,688
USA	0	1,668	50,492	98,889
Germany	0	389	6,115	8,45
Slovakia	0	0	20	28
Italy	21	10,023	27,359	33,142
Spain	0	5,69	23,822	29,037
United Kingdom	0	1,019	21,678	37,837
Canada	0	55	2,766	6,799
Russia	0	8	972	4,374
China	2,838	3,306	4,643	4,645

Source: [3], own work



Picture 4. The total No. of deaths caused by COVID-19 in the chosen countries and the chosen period

Source: [3], own work



Picture 5. The total No. of deaths caused by COVID-19 in Slovakia in the chosen period

Source: [3], own work

2. The economic and the social impact of the coronavirus crisis

Due to the COVID-19 pandemic the economic activity worlwide has been slowing down. The World Economic Outlook projects the global economy to contract sharply by –3 percent in 2020, much worse than during the 2008–09 financial crisis [4]. The assumptions for the improvement of the economy have been focusing on the year 2021 and the growth by 5.8 % has been expected in the mentioned year with the help of state institutions. Specific fiscal and monetary measures have to be adopted to support affected households and businesses.

The table 3 shows the data concerning the real GDP in the chosen advanced and developing economies as well as emerging markets in 2019 and the projections for the years 2020 and 2021.

Table 3: The real GDP, annual percent rate

Real GDP, annual percent change	2019	2020	2021
	%	%	%
World Output	2.9	-3.0	5.8
Advanced Economies	1.7	-6.1	4.5
United States	2.3	-5.9	4.7
Euro Area	1.2	-7.5	4.7
Germany	0.6	-7.0	5.2
Italy	0.3	-9.1	4.8
Spain	2.0	-8.0	4.3
United Kingdom	1.4	-6.5	4.0
Canada	1.6	-6.2	4.2
Other Advanced Economies	1.7	-4.6	4.5

Emerging Markets and Developing Economies	3.7	-1.0	6.6
Emerging and Developing Asia	5.5	1.0	8.5
China	6.1	1.2	9.2
India	4.2	1.9	7.4
Emerging and Developing Europe	2.1	-5.2	4.2
Russia	1.3	-5.5	3.5
Latin America and the Caribbean	0.1	-5.2	3.4
Brazil	1.1	-5.3	2.9
Mexico	-0.1	-6.6	3.0
Middle East and Central Asia	1.2	-2.8	4.0
Saudi Arabia	0.3	-2.3	2.9
Sub-Saharan Africa	3.1	-1.6	4.1
Nigeria	2.2	-3.4	2.4
South Africa	0.2	-5.8	4.0
Low-Income Developing Countries	5.1	0.4	5.6

Source: [4]

The data concerning the GDP in constant prices in Slovakia, calculated according to the procedure of data volume chaining to the reference year 2015, was EUR 89,295.3 millions as of 2019 and EUR 87,203.7 millions as of 2018. It represents the annual percent change 2.3 %. The prognosis for Slovakia for the year 2020 is the decline up to 8%. At present the data have been available only till May 2020. According to the Infostat statistics the concrete value is - 8.3 % as of May 2020 [5]. The Slovak Statistical Office stated the decline of the efficiency of the economic activities in Slovakia within the 1st quarter of the year on -3.7 %, the decrease of export and the increase of the unemployment that has been on the level of 6 % as of May 2020.

The COVID-19 pandemic has brought the tough times to many businesses pushing the pressure on state institutions and reflecting their ability to cope with the current situation. Suddenly the life of common people has changed in many aspects. The schools have been closed. Teachers, students and pupils have started their experimental online form of the education that has not been able to fully cover all the requirements on the quality education, not mentioning the social aspects of such a situation. Hospitals, offices, shops have launched containments measures giving emphasis on the fulfillment of the health criteria. Restaurants have been closed. State borders have been closed in some countries as well, making problems to cross-border workers commuting to work to the neighbouring state or those people who have been living in the neighbouring country but still having the citizenship and the nationality of their native land. Many employees could stay at home to do their working duties via the home office. The next table 4 shows the containment measures in the chosen European coutries.

Table 4: Containment measures in the chosen European states and the United States

Country	Schools	Hospitality	Non-essential shops	Factories	Borders
USA	closed in some states	closed in some states	closed in some states	open	closed for Europe, China, Iran
Germany	closed	closed	closed	open	closed
Slovakia	closed	closed	closed	open	closed
Italy	closed	closed	closed	closed	open
Spain	closed	closed	closed	open	closed
United Kingdom	closed	closed	closed	open	open

Source: [6], own work

The economic activities have been declined worlwide in many fields of industry. This state could lead to the further economic damages raising from the economic shutdown. There will be hardly some output contribution from bankrupt firms and surely some difficulties in the supply chain.

In Slovakia as well as in some other countries of the world some industries have been hit by the pandemic more some of them less.

The table 5 shows the decline of particular sectors of industry in the chosen period. Current data can be compared with the figures as of the last year. The sharpest values can be observed in March 2020. The whole index of the industry decreased on the value of 80,43~% in March 2020. It means it has been the drop of 19.57~%.

The deepest downcome has been noticed in the automotive industry in Slovakia on the level of 10.45 %. The automotive industry belongs to the leading industry in this country. The one-sidedly orientation on this industry could cause more severe problems, if the economy of the state dropped.

Table 5: The production of industry in Slovakia in the chosen period,

	2020				2019		
	January	February	March	January - March	January	February	March
Industry total	0.55	-1.67	-19.57	-7.34	7.29	5.65	7.46
Mining	0.28	0.29	0.12	0.22	0.04	0.00	-0.26
Industry production	-0.50	-2.70	-18.42	-7.59	6.76	4.77	6.21
Production of groceries, beverages, tobacco products	-0.08	0.07	0.03	0.01	0.21	0.21	0.17
Production of textile, garments, leather, leather products	-0.25	-0.17	-0.48	-0.31	-0.36	-0.35	-0.45
Production of wooden and paper products, press	-0.09	0.13	-0.17	-0.05	-0.09	0.01	0.01
Production of coke and refined oil products	-0.21	0.14	-0.16	-0.08	-0.20	0.13	1.06
Production of chemicals and chemical products	0.04	-0.02	-0.03	-0.01	-0.38	-0.11	0.04
Production of basic pharmaceutical products and appliances	-0.35	-0.23	-0.10	-0.22	0.10	0.05	0.00
Production of products from gum, plastic and other nonmetal mineral products	-0.11	0.26	-1.67	-0.54	-0.62	-0.33	-0.16
Production of metal and metal construction apart from machineries	-0.96	0.00	-0.95	-0.64	-0.82	-1.39	-1.18
Production of computer, electronical and optic products	-1.06	-0.45	-1.57	-1.04	-0.39	0.08	0.26
Production of electric devices	1.15	1.07	0.27	0.81	0.31	0.78	0.48
Production of machineries and devices	-0.58	-0.94	-1.75	-1.11	1.90	2.01	2.00
Production of vehicles	2.43	-2.16	-10.45	-3.65	7.54	3.76	3.51
Other production, repair and instalation of machineries and device	-0.43	-0.40	-1.39	-0.76	-0.44	-0.08	0.47
Supply of electricity, gas, steam and cold air	0.77	0.74	-1.27	0.03	0.49	0.88	1.51

Source: [7]

According to the Slovak Statistical Office the construction production in the building industry in Slovakia increased to 3.2 % and achieved the volume of EUR 1,055.4 millions within the first three months of the year 2020 comparing to the same period in 2019. The construction production comprises all the activities performed in the construction, the reconstruction, the renewal, the repair and the maintance of construction objects including assembly works and the value of built-in materials [7].

In the mentioned period the production realized in the inland increased to $1.3\,\%$. The volume of construction works on repairs and maintances rised to $0.9\,\%$ and on the new construction including the modernization and reconstruction to $0.9\,\%$ as well.

The construction production after the first two months (January, February) of increase finally decreased in March 2020 on the level of 3.1 % when comparing with the March 2019. Its whole volume was on the level of EUR 392.4 millions. Comparing the data between March 2020 and February 2020 the decline of 6.5 % was noticed. In the same period the outbreak of COVID-19 pandemic was observed in Slovakia, tougher times started for many businesses and the containment measures slowly started to come in use.

The real estate market was not extensively hit by the spread of the pandemic in Slovakia. There has been no significant change in the average prices of the real estates during the first quarter of the year

2020, that was according to the National Bank of Slovakia during the mentioned period on the level of EUR 1,671 per m2 [8].

The tourist industry nowadays belongs to the popular sector widely consumed by the people living their modern life style. Therefore the containment measures launched because of the pandemic in many countries of the world have caused the decline of the number of visitors in the accommodation facilities. There was the favourable development of this sector in Slovakia in January and February 2020. The considerable change has occured in March 2020 accompanied by the sharp decline of the accommodated people and the number of the overnight accommodation evocated by the coronacrisis. The number of visitors in the accommodation facilities in March 2020 was cut by 65 % comparing to March 2019. During the same period the number of overnight accommodations was lower in 56 %.

3. Conclusions

The COVID-19 pandemic has brought tough times in the economies of countries, world trade and many restrictions to the lives of ordinary people. At present in the first half of June 2020 the situation regarding the coronavirus pandemic has been calming down and has not been so critical in Europe. The containment measures have been clearing down. The state borders have been opening again and so making it easier for entrepreneurs to fulfill their duties, for cross-border workers to do their tasks abroad in the neighbouring state, for students to freely commute to their foreign university city and to all the people that intend to travel abroad for their holiday.

The decline of the pandemic in Europe thanks to the summer period enables the normal function of businesses, thus contributing to the better condition of economies of states. The latest update has been alarming. The prognosis of the National bank of Slovakia as of 10th June 2020 predicts the decline of the Slovak economy on the level of 10.3 %. The economic recovery will be consecutive. It has been assumed that the level of Slovak economy that used to be in the country before the coronavirus crisis will be reached in the first half of the year 2022 [9]. At present there is the strong emphasis on the automotive industry in Slovakia. As noted in the paper there have been observed the sharp decline of this sector as of March 2020. Therefore the structure of high-power sectors of economy should be diversified.

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References

- 1. Unido. Coronavirus: The Economic Impact of Covid-19: the catchphrase may be uncertainty, but the losses are real. 2020. Online: https://www.unido.org/stories/coronavirus-economic-impact
- 2. World Uncertainty Index. Online: https://worlduncertaintyindex.com/
- 3. WHO. Online: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200529-covid-19-sitrep-130.pdf?sfvrsn=bf7e7f0c_4, cited: 29. 5. 2020
- 4. World Economic Outlook. Online: https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020
- 5. Infostat. 2020.Online:
 - http://www.infostat.sk/web2015/sk/index.php?option=com_content&view=article&id=504&Itemid=234
- 6. Jan van Harn, E., Michiel van der Veen. 2020. Online: https://economics.rabobank.com/publications/2020/april/covid-19-economic-dashboard/
- 7. Štatistický úrad Slovenskej republiky. Online: statistics.sk
- 8. Národná banka Slovenska. Online: nbs.sk

^{9.} Národná banka Slovenska. Makroekonomické predikcie vybraných bánk na koniec aktuálneho roka (december). Online:

 $https://www.nbs.sk/_img/Documents/_Statistika/VybrMakroUkaz/MakroPredVybrBank/MPVB_t-2020.pdf$