# **Economic - cultural aspects of the situation** arising from the worldwide spread of Covid - 19

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**Abstract.** The ongoing situation with the new Covid-19 virus has hit a huge number of countries whose populations and economies are under a tough test. No one expected such a catastrophic scenario in 2020. Coronavirus is a major topic in the whole world as no other up to now. Individual countries have chosen various approaches to fight the virus. These approaches have been influenced by a number of factors that either make the situation better or worse. Timely response, strict measures, discipline of the population, political position of countries, access or ability to produce or provide medical protective equipment - being the most desirable and precious goods of today, represent the salient role in coping with the situation.

## Introduction

We are currently in a situation that greatly affects countries around the world. Occurrence and the speed of the spread of a new virus that has been transmitted throughout the world from China, called Covid-19, has caused major changes beyond our imagination. Countries affected by the virus have been fighting hard trying to mitigate its effects on the health and the economy [16]. Most countries have gradually tried to adopt measures, however, not always have the measures been successful. The virus is therefore multiplying at a rapid rate and penetrating into other countries that have perhaps learned from the mistakes made by other countries and shall be better prepared to cope with the situation. It is not yet certain how long the virus will persist and do harm, but we already know that it reveals and focuses on weaknesses and brings significant changes to which we will have to adapt [17].

Mankind remembers many momentous epidemics throughout its existence. Some of them had devastating consequences, and higher lethality of infected people. However, the population on the planet is growing causing the emergence of more densely populated city districts. They can be considered the source for the rapid occurrence and spread of viruses, Covid-19 in this particular case, which has, unfortunately, succeeded in a significantly negative impact on our lives today.

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# 1 Status of infected people in individual countries and an approach to testing

The number of countries hit by the virus reached 171 as of 1.4.2020. The virus was firstly detected in China, namely in the city of Wu-chan at the end of 2019. Here is the beginning of the global pandemic. In just a few months, the virus managed to affect a huge part of the world's population. The first case in Slovakia appeared, or was confirmed on 6.3.2020. In the Czech Republic it was a little earlier - on 1.3.2020.

**Table 1.** Status in Slovakia since the first confirmed case (6.3. do 31.3. 2020) [13]

Date	<b>Total Cases</b>	Tests
6.3.2020	1	307
7.3.2020	3	392
8.3.2020	5	496
9.3.2020	7	548
10.3.2020	7	590
11.3.2020	10	634
12.3.2020	21	853
13.3.2020	32	985
14.3.2020	44	1191
15.3.2020	61	1436
16.3.2020	72	1595
17.3.2020	97	1913
18.3.2020	105	2138
19.3.2020	123	2439
20.3.2020	137	2807
21.3.2020	178	3247
22.3.2020	185	3489
23.3.2020	204	3736
24.3.2020	216	3940
25.3.2020	226	4416
26.3.2020	236	4751
27.3.2020	269	5664
28.3.2020	292	6411
29.3.2020	314	7131
30.3.2020	336	7532
31.3.2020	363	8220

**Table 2.** Status in the Czech Republic since the first confirmed case (1.3. - 31.3.2020) [14]

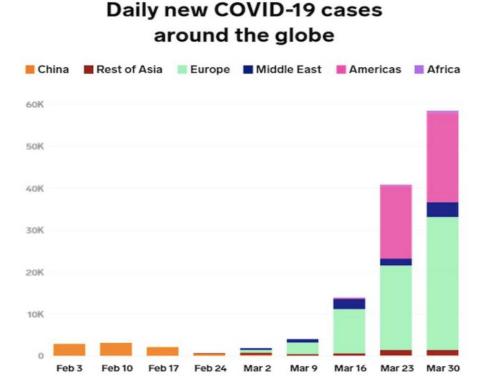
Date	<b>Total Cases</b>	Tests
1.3.2020	3	211
2.3.2020	3	262
3.3.2020	5	340
4.3.2020	5	407
5.3.2020	8	483
6.3.2020	19	594
7.3.2020	26	787
8.3.2020	32	928
9.3.2020	38	1193
10.3.2020	63	1358
11.3.2020	94	1816
12.3.2020	116	2353
13.3.2020	141	3094
14.3.2020	189	4065
15.3.2020	298	5068
16.3.2020	383	6302
17.3.2020	450	7664
18.3.2020	560	9402
19.3.2020	765	11619
20.3.2020	889	13704
21.3.2020	1047	15584
22.3.2020	1161	17377
23.3.2020	1287	19624
24.3.2020	1472	22600
25.3.2020	1763	26698
26.3.2020	2022	31127
27.3.2020	2395	36374
28.3.2020	2657	40700
29.3.2020	2817	43498
30.3.2020	3001	48811
31.3.2020	3308	55017

Tables 1 and 2 contain daily data since the confirmation of the first cases in Slovakia and the Czech Republic. To compare, it can be seen that we approach the testing as a state and country which is very close to us. Number of inhabitants in Slovakia is just half of that of the Czech Republic. Number of the tests made in the Czech Republic, however, exceeds the number of the tests made in Slovakia several times. Due to the low number of tests, the real

numbers of the infected people can be unclear and deviate from reality. Wrong information can lead to wrong decisions about the further measures and steps. The only effective way how to prevent people from getting infected is their isolation, movement restriction, an order to wear protective equipment. All these measures, however, impact and weaken the economy. According to the Council for Budget Responsibility, the pandemic may have an impact on Slovakia's general government deficit in the range from 2 to 6% of GDP [12].

#### 1.1 Development of positive cases by area

Some time has passed since the outbreak of Covid-19 in Asia, and the virus has spread to other continents, while Asia has successfully reduced the numbers of infected people.



Data reflects the number of new confirmed cases for each specific date listed.

Fig. 1. Daily new COVID-19 cases around the globe [1]

Since February, the number of cases has been gradually decreasing in Asian countries which implemented strict measures to prevent inhabitants from being infected. The occurrences of Covid-19 have, however, increased in European states and in the USA. We can even talk about numbers higher than in Asian countries. There is a real threat that the corona virus will persist longer then in the Asian countries.

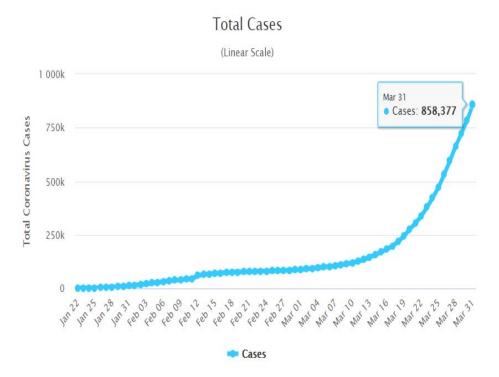


Fig. 1. Total Covid-19 cases (22.1.2020 – 31.3.2020)

The Fifure 2 shows the total number of confirmed cases of Covid-19 virus for the selected period. Nearly a million cases in a few months. With this number we are approaching the most unpleasant epidemic so far in terms of the number of infected people in 2009 influenza A virus subtype H1N1 with a total of 1 million people infected.

#### 1.2 Testing

The most common tests for COVID-19 are called "PCR tests". The first PCR tests for COVID-19 were developed very quickly - within two weeks after the disease detection and they are now a part of the World Health Organization (WHO) protocol to address this disease. The testing capacity of COVID-19 is, unfortunately, still too low in a lot of countries around the world. Furthermore, it should not be forgotten that not all tests are reliable. Also, for this reason, we still do not have sufficient knowledge of the spread of the pandemic. There is a positive correlation between performed tests and confirmed cases. This does not necessarily mean that countries which have run more tests do indeed have more cases, although in many cases it will be like that.

Several studies have shown that in countries such as South Korea, Singapore and Taiwan, where the epidemic has been brought under control, citizens have been massively tested. Most notably, the data show that South Korea has run far more tests than other countries. This means that we can expect that in South Korea the number of confirmed cases of positive tests is closer to the actual number of infected people than in other countries. It is therefore encouraging to see that the number of confirmed cases in South Korea had been decreasing daily. South Korea was able to quickly produce and use a huge number of tests, proving thus that it is possible. Testing is crucial; therefore, it is essential that other countries follow the South Korean leader.

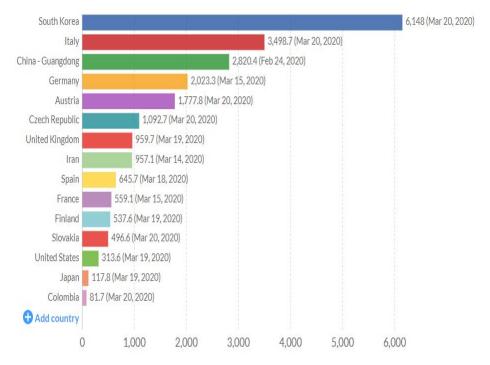


Fig. 3. Total tests performed per million people [3]

Figure 2 includes several countries where it indicates the number of tests performed per million inhabitants. Slovakia ran 496.6 tests per 1 million inhabitants as of March 20, 2020, which was more than in the case of the United States of America, but significantly less than in case of our Czech neighbors with a value of 1092.7 tests on the same date. Of the countries shown, North Korea has been really able to test intensively, up to 6,148 tests per 1 mil. residents.

# 2. Cultural-political aspect

The approach to the current situation and its solution by the national authorities and the attitude of the population to the pandemic is largely influenced by the culture and mentality of the population of the countries, or areas. These differences affect and transform scenarios in the development of the conditions of the countries concerned. Is it even possible to quantify how much influence the culture itself, or mentality of the people have on how the countries cope with this problem? [20,21]

The sharp fall in the number of infected people in Asia gives also the European countries a chance and hope that they can put the situation under control. The steps taken by governments and population behavior in the Eastern and Western world, however, differ significantly [22].

The differences can result in much worse course of pandemic in the Western world. Asian countries experienced a strong SARS epidemic in 2003, increasing thus their readiness for a new epidemic. Many of them, such as Singapore or Hong Kong, took strong precautionary measures a few days after the announcement of the Wu-chan virus outbreak. While prevention worked in many smaller countries, an epidemic, similar to the one in China, broke out in South Korea. Both states, however, immediately came up with the strict measures to

limit the spread of the virus. Quarantine, digital monitoring of potential disease carriers and mass population testing. The Chinese government checked the mobile phones of citizens to see if they really comply with the quarantine regulations.

All who violated them had to pay a high fine and attend mandatory lectures on safety and personal hygiene. Democratic South Korea launched a similar citizen tracking by monitoring credit card transactions in addition to mobile phones. Several Asian countries set up systems that controlled the movement of each potentially infected person to warn the remaining population. By stringent and well-managed measures, Asian states have been able to prevent the further spread of epidemic. But it was at the beginning when the serious problem occurred, causing today's alarming situation around the world. Chinese doctor Li Wenliang had issued a warning about an unknown new virus before it actually posed a threat of today's scope. He was summoned by health officials and police early in January and forced to sign a statement condemning his warning as unfounded and illegal gossip. The Chinese authorities ordered not to disclose any information concerning the disease. By suppressing the truth that a deadly coronavirus had appeared on its territory, the Chinese regime endangered not only its own people, but also the entire international community. [2]

Unfortunately, the situations just like that may arise as a result of the Chinese regime, which is significantly different from the one in Europe. [6]

The circumstances in Europe are fundamentally different. While in Asia, the family takes the priority over the state in the hierarchy of values, in Europe it is the individual[23]. It turns out that not only Europe's unreadiness for epidemic, but especially Western individualism is the greatest threat to the spread of the epidemic on the old continent. Europe has lagged far behind in prevention, planning, testing potentially infected, collecting and evaluating data, but also in the approach of individuals to the spread of the epidemic. Measuring citizens' temperature and monitoring their mobile devices would be considered a violation of GDPR. According to the protection of personal data, data about citizens belong to them and therefore their use must be subject to the consent of the citizen. [9]

In the United Kingdom, up to a quarter of the population absolutely refuses to change their habits because of the coronavirus. Therefore, also due to their attitude, the British government has not taken any stricter measures, such as the cancellation of social events, or the closure of schools. Government chief scientific adviser Patrick Vallance even said it was desirable that up to 60 percent of the British population would be infected with the virus, creating thus collective immunity against the disease.

Italian people are typical for their temperament and the strong need to socialize, which implies the current lack of discipline and disregard for the regulations which in any way had been introduced too late. Moreover, taking into consideration the seriousness of the situation and the fact that in Italy there is a large proportion of elderly people who are at-risk category and can develop severe symptoms, the measures were totally insufficient. According to statistics, Italy is the country with the second highest number of people over 65 years. These difficulties point to the fundamental problem of how to control a dangerous epidemic in a democratic country that values basic freedoms, such as freedom of movement. Italian measures are less restrictive than one might expect. [11]

Two mutually admiring allies: Donald Trump and Boris Johnson have also become allies in denial of potential problems. The reaction of the US President was initially expressed by the promise that the virus would disappear, by playing golf, blaming China, blaming the media, blaming the Democrats, deceiving and claiming that his respond to coping with the situation was perfect. B. Johnson was not as eccentric in his view as D. Trump, but just as irrational. His chief scientific adviser advised him on a strategy for the British population to gain collective immunity. Such a solution would, according to him, bring a drastic and rapid epidemic but would cause less economic damage.

A similar attitude was presented by the US government on the Spanish flu after the First World War. The President Woodrow Wilson did not mention the outbreak of the epidemic in the country, although nearly 700,000 Americans had died of it. The strategy to ignore the epidemic could have been implemented in times when 16 percent of the US population got their food by farming, fishing and forestry. Naturally, social distancing was relatively high. Nowadays, people live together in cities, which greatly increases the threat of rapid spread of disease to a large proportion of the population. [10]

European politicians start to take action only after a month and a half after the outbreak in China. Only days after the epidemic hit Europe.

The new situation of the world transforms various views, opinions, people and much more including economic or political powers of countries. Several countries benefit from positive international relations. There is a struggle to get medical supplies that everyone needs now. The positive relations with the countries that have sufficient stock of them, or can provide enough of them can be greatly beneficial for selected countries and their strengths. [19]

China is more or less coping with the disease and the government decided to work on a new task: to change the image of the country from which the disease spread into the world to the country which helps the world during the pandemic. [7]

The criticized positive relations of the Czech President Milos Zeman with China have now been turned and the country benefits in this difficult situation from this relationship in the form of an assistance with the import of necessary medical supplies. The Czech Republic gains precious sources for health care system and they helped also Slovakia with providing us with contacts in China, therefore also the necessary medical supplies for Slovakia could have been arranged. [14]

Serbian President Vucic switched to anti-European rhetoric when he received help from China and at the same time, he promoted Chinese President Si Jinping from a friend to a "brother". [7]

They are not the only ones. Italian government also asked officially for medical supplies, but the European allies had ignored the demand. China, however, has responded positively by supplying the required material. And it continues like that also in case of other countries. [24]

# 3. Rarity during crises

As already mentioned, political struggles prevail, the winners of which receive the most valuable goods at the moment - medical protective equipment. Under normal circumstances, these goods are available, not very expensive and not difficult to manufacture. The high societal demand caused by the crisis for inferior commodities as consumer medical supplies in particular facial masks, has made their value higher than under normal circumstances. There is a lack of protective equipment around the world, which makes it rare, although it is not minerals. In this crisis, human perception of rare goods has changed [18,25]. We have come to a situation when the rare goods (medical supplies and medical protective equipment) have higher value for the world population threatened by Covid-19 than diamonds or gold being more valuable under normal circumstances. Increased price of the masks on the market represents a profitable opportunity for entrepreneurs. Even those, who would not otherwise be willing to sell the masks are now making them at home and sell them over the Internet. For example, Zornice, a company that is a well-known domestic manufacturer of shirts from Bánovce nad Bebravou. The company adapted to market needs and sells the masks to the state at a price of  $\in$  2.25 per piece, which is definitely the price higher than the price in a crisis-free situation. Nevertheless, people are grateful and willing to pay for this opportunity. Well, ultimately, it is about saving human lives which are invaluable [5].

### Conclusion

Who could have expected the current situation? Crises, whether epidemiological or economic, have at least one common feature: they can be stopped. Several states in Asia have shown already how to stop the spread of the dangerous virus and almost completely eliminated it. It is a tough fight. Either from managerial, or state point of view. But it is not impossible. If rapid and effective steps are taken and the spread of the virus is stopped in the first phase, as has been done, for example, by Singapore, the economic consequences are minimal. If the infection becomes an epidemic, however, the steps are much more complicated and more painful. South Korea also shows that such a situation can be managed. Well, in the end, also Wu-chan managed it. There is a simple global rule in relation to this crisis: the regime's ideology does not primarily matter, also not the level of democracy, or whether the regime is European or Asian. The governments that tell people the truth, act quickly and listen to experts stand a much better chance of coping with the coronavirus.

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#### References

- 1. *Businessinsider*, China used technology that aims to trace every single COVID-19 case. https://www.businessinsider.com/chinas-coronavirus-quarantines-other-countries-arent-ready-2020-3#the-country-implemented-large-scale-contact-tracing-in-the-early-2000s-8. (2020)
- 2. Čínska vojna proti pravde o koronavíruse, https://www.konzervativnyweb.sk/c/22355814/cinska-vojna-proti-pravde-o-koronaviruse.html. (2020)
- 3. E. Ortiz-Ospina, J. Hasell, How many tests for COVID-19 are being performed around the world?, https://ourworldindata.org/covid-testing. (2020)
- 4. European Centre for Disease Prevention and Control. Situation update worldwide, https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases. (2020)
- 5. *Hnonline*, Zornica: Rúška budú. Dostať ich majú všetci. https://finweb.hnonline.sk/ekonomika/2113450-zornica-ruska-budu-dostat-ich-maju-vsetci. (2020)
- 6. Ch. Buckley, *Nytimes*, Chinese Doctor, Silenced After Warning of Outbreak, Dies From Coronavirus https://www.nytimes.com/2020/02/06/world/asia/chinese-doctor-Li-Wenliang-coronavirus.html (2020)
- 7. M. Tóda, *Dennikn*, Orbán nie je sám. Autokratickí lídri využívajú koronavírus, aby si upevnili moc, https://dennikn.sk/1831960/orban-nie-je-sam-autokraticki-lidri-vyuzivaju-koronavirus-aby-si-upevnili-moc/?ref=tema. (2020)
- 8. P. Stach, *Euractiv*, Koronavírus ako argument v prospech európskej federácie. https://euractiv.sk/section/buducnost-eu/news/modra-vlna-koronavirus-ako-argument-v-prospech-europskej-federacie/. (2020)
- 9. R. Ižip, *Etrend*, Čierna labuť sa vrátila. Hrozí najväčšou ekonomickou krízou našej doby https://www.etrend.sk/ekonomika/cierna-labut-sa-vratila-hrozi-najvacsou-ekonomickou-krizou-nasej-doby.html?split=2 (2020)

- 10. R. Ižip, *Etrend*, Štúdia, ktorá otriasla politikmi, priniesla pre Slovensko dobrú aj zlú správu, https://www.etrend.sk/ekonomika/studia-ktora-otriasla-politikmi-priniesla-pre-slovensko-dobru-aj-zlu spravu.html?itm\_site=etrend&itm\_template=article&itm\_area=article&itm\_module=top-articles&itm\_position=1. (2020)
- 11. *Dennikn*, Talianska karanténa testuje hranice demokracie, https://dennikn.sk/1794139/talianska-karantena-testuje-hranice-demokracie/?ref=list. (2020)
- 12. *Trend*, Slovensko a svet, 12-13, 6 (2020)
- 13. Úrad verejného zdravotníctva Slovenskej republiky, http://www.uvzsr.sk/index.php 1-7 (2020)
- 14. Úrad vlády Slovenskej republiky. Na Slovensko dorazilo lietadlo so zdravotníckymi *pomôckami* z Číny, https://www.vlada.gov.sk//na-slovensko-dorazilo-lietadlo-so-zdravotnickymi-pomockami-z-ciny/. (2020)
- 15. Základní přehledy dle hlášení KHS a dle pozitivních nálezů laboratoří, které jsou určeny pro další šetření. https://onemocneni-aktualne.mzcr.cz/covid-19. (2020)
- 16. N. Goda, M. Čiefová, Cultural Diplomacy of Selected Countries in a Comparative Perspective. Folia Geographica 61, 2, 172–189 (2019).
- 17. P. Puškárová, Assessing the magnitude of globalization-induced technology flows in expanded EU-sample: a multi-channel approach. Globalization and higher education in economics and business administration, GEBA 2013. Elsevier 20, 544-552 (2015).
- 18. K. Jančovičová Bognárová, R. Sivák, The Effect of financial and non-financial performance measures on managerial behavior. *SGEM* 443-448 (2015).
- 19. H. Majdúchová, B. Siváková, D. Rybárová, S. Šagátová, Quantification of the systematic risk in industries. *Ekonomický časopis* 65, 7, 602-617 (2017).
- 20.A. Remišová, A. Lašáková, Z. Kirchmayer, Infuence of Formal Ethics Program Components on Managerial Ethical Behavior. *Journal of Business Ethics* 160, 151-166 (2019).
- 21. M. Bohatá, A. Putnová, M. Rašticová, M. Bédiová, A. Cebáková, Social Effectiveness of Public Institutions Through the Eyes of Citizens. *Proceedings of the 12th International Scientific Conference*. PUBLIC ADMINISTRATION, 18-27 (2018).
- 22. A. Lašáková, A. Remišová, On Organisational Factors that Elicit Managerial Unethical Decision-Making. *Ekonomický časopis* 65, 4, 334 354 (2017).
- 23. K. Beličková, Z. Staríčková, Current Problems of the Financial Position of Slovak Households. Economics and Finance 11, 4-12 (2018).
- 24. S. Ludwig, P. Markovič, Business acquisition in the People's republic of China: developments and conditions. *Liberec Economic Forum 2017*. International conference. Liberec Economic Forum 513-521 (2017).
- J. Blštáková, Z. Joniaková, Z. Skorková, I. Némethová, R. Bednár, Causes and Implications of the Applications of the Individualisation Principle in Human Resources Management. AD ALTA journal of interdisciplinary research. MAGNANIMITAS 9, 2, 323-327 (2019).