

# THE EFFECTS OF THE COVID-19 PANDEMIC ON ECONOMIC GROWTH

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## **Abstract**

The COVID-19 pandemic that originated in China has now affected almost every nation. With the absence of any targeted cure, nations have introduced measures to attenuate its spread. These measures (especially reducing the interaction between people) have significantly limited the activities of numerous sectors, especially the service sector. Thus, this pandemic will substantially impact economic growth in developed and developing countries. However, it is the pandemic's complete duration, coupled with the time when we return to normal economic life, that will determine its absolute effect on the economy. In this study, the effects of the COVID-19 pandemic on both global as well as Turkey's economic growth are evaluated.

**Keywords:** COVID-19 pandemic, economic growth, Turkey

## Introduction

The COVID-19 pandemic that originated in Wuhan, China, has now (as of this writing, June 2020) affected 213 countries, infecting over 9 million people and, causing at least 497,067 deaths (Worldometers, 2020).

Pandemics cause significant social, political, and economic challenges by engendering sudden and widespread disease and death (Madhav et al., 2018: 317). Although pandemics have occurred since ancient times, COVID-19 is the most severe since the 1918 Spanish flu pandemic because of the threat and the global effects it engendered (Ferguson et al., 2020).

COVID-19 pandemic differs from the previous pandemics by its distinctive features (Fernandes, 2020):

- It is global.
- It is not exclusive to low-income and middle-income countries.
- It emerged when global interest rates were very low.
- It emerged when the World was intensively integrated economically.
- It has engendered spill-over effects on global supply chains.
- It has caused destructive effects on market supply and demand.

Given low global interest rates, the probability of inducing an increase in the supply and demand through monetary policy decreases, thus restricting the range of effective policy tools to alleviate the pandemic's negative economic effects. Hence, COVID-19 is likely to lead to severe contracted economic growth rates in most nations if the necessary economic measures are not implemented effectively and on time. The potential effects of the COVID-19 pandemic on global as well as Turkey's economic growth rates will be evaluated in the following sections.

### **The Effect of the COVID-19 Pandemic on Global Economic Growth**

The COVID-19 pandemic has affected economic activities across various sectors, including tourism, supply of medical equipment, global supply chains, electronic and financial markets, energy, and food services, while also significantly impacting social activities (Congressional Research Service, 2020). In conjunction with the pandemic, the disruption of production in China has caused severe interruption of global supply chains, and the contraction of production in firms that import raw materials and intermediate goods from China (McKibbin and Fernando, 2020). Furthermore, the restriction of

international transportation has significantly decelerated economic activities (McKibbin and Fernando, 2020).

In order to evaluate a pandemic's economic effects, and especially to predict the induced revenue loss, traditionally death rate and number of ill people are used (Fernandes, 2020). Furthermore, the time spent by health workers at their jobs because of the pandemic and their incomes, along with the direct expenditures on medical care and support services are also included (Fernandes, 2020). However, this traditional approach is likely to underestimate the actual economic cost of the COVID-19 pandemic which is spread quickly and whose vaccine has not been invented yet (McKibbin and Fernando, 2020). The change of the course of COVID-19 pandemic day by day and the high uncertainty on how long the pandemic will last and when it will be returned to the normal economic life after the pandemic complicate the prediction of the effect of the pandemic on economic growth. However, some researchers have made a number of predictions by taking into account existing data and by using various scenarios. McKibbin and Fernando (2020) estimated GDP loss caused by the COVID-19 pandemic in 24 countries and regions by a simulation analysis with seven different scenarios. More specifically, the first three scenarios confine the pandemic to China, while the last four assume it will be a global phenomenon (McKibbin and Fernando, 2020). Furthermore, the first six scenarios assume the pandemic-caused shock will be temporary, while the seventh assumes it will be permanent (McKibbin and Fernando, 2020). Since the COVID-19 pandemic has already become global, only the last four scenarios become relevant (McKibbin and Fernando, 2020)

- In the fourth scenario (the severity of the shock is low), the global economy's GDP loss in 2020 is \$US 2,330 billion (McKibbin and Fernando, 2020).
- In the fifth scenario (the severity of the shock is moderate), the global economy's GDP loss in 2020 is \$US 5,305 billion (McKibbin and Fernando, 2020).
- In the sixth scenario (the severity of the shock is high), the global economy's GDP loss in 2020 is \$US 9,179 billion (McKibbin and Fernando, 2020).
- In the seventh scenario (the shock is permanent and the severity of the shock is low), the global economy's GDP loss in 2020 is \$US 2,230 billion (McKibbin and Fernando, 2020).

Barro, Ursua, and Weng (2020) state that the Spanish flu Pandemic which was occurred between 1918-1920 represents the worst scenario with regard to the evaluation of the COVID-19 pandemic. According to a simulation analysis based on this scenario, Barro, Ursua and Weng (2020) argue that a typical country experiences a decrease of 6% of its

GDP and 8% of its private consumption expenditures as a result of COVID-19 pandemic and they put forward that this pandemic can cause an economic contraction at the global level (Barro, Ursua and Weng, 2020).

Fernandes (2020) investigated the economic effects of COVID-19 in Brazil, Canada, China, France, Germany, Italy, Japan, Portugal, Spain, the UK, and the USA by using three scenarios, i.e., the duration of the economic downturn is 1.5 months, 3 months, and 4.5 months, respectively. According to the first scenario, the economic cost of COVID-19 ranges between 2.9% of GDP and 4.6% of GDP (Fernandes, 2020). Moreover, according to this scenario, economic growth rates of the countries, except China, will decrease between 0.8% and 3.2% in 2020 (Fernandes, 2020). According to the second scenario, economic growth rates will decline between 0.6% and 6.9% (Fernandes, 2020). According to the third scenario, economic growth rates will decrease between 3.7% and 10.7% (Fernandes, 2020).

International economic organizations also have empirically assessed the economic effects of the COVID-19 pandemic. The OECD's interim report assumes that the 2020 global economic growth rate will decline to 2.4%, and in the first quarter of 2020, economic growth will probably be negative (OECD, 2020a). Table 1 lists the economic growth estimations for the World and G-20 countries, and indicates the deviation of these estimations from the November 2019 estimations.

<b>Table 1. OECD Economic Growth Estimations as of 2 March 2020</b>		
	<b>Interim Economic Outlook Projections (% Change)</b>	<b>Difference from the November Economic Outlook (% Change)</b>
<b>World</b>	2.4	-0.5
<b>G-20</b>	2.7	-0.5
<b>Australia</b>	1.8	-0.5
<b>Canada</b>	1.3	-0.3
<b>European Region</b>	0.8	-0.3
<b>Germany</b>	0.3	-0.1
<b>France</b>	0.9	-0.3
<b>Italy</b>	0.0	-0.4
<b>Japan</b>	0.2	-0.4
<b>Korea</b>	2.0	-0.3
<b>Mexico</b>	0.7	-0.5
<b>Turkey</b>	2.7	-0.3
<b>United Kingdom</b>	0.8	-0.2

<b>USA</b>	1.9	-0.1
<b>Argentina</b>	-2.0	-0.3
<b>Brazil</b>	1.7	0.0
<b>China</b>	4.9	-0.8
<b>India</b>	5.1	-1.1
<b>Indonesia</b>	4.8	-0.2
<b>Russia</b>	1.2	-0.4
<b>Saudi Arabia</b>	1.4	0.0
<b>South Africa</b>	0.6	-0.6
<b>Source:</b> OECD, 2020a.		

As Table 1 indicates, the OECD revised its November 2019 economic growth projections downward for the G-20 countries in March 2020 because of COVID-19 pandemic. According to table 1, China has the highest decrease in economic growth rate at 0.8%. The OECD is more optimistic regarding the impact of COVID-19 on economic growth than other researchers (McKibbin and Fernando, 2020; Barro, Ursua and Weng, 2020; Fernandes, 2020). However, the shifting course of the pandemic causes the OECD to regularly revise its estimates. At the beginning of April, the OECD indicated that the tough restrictions or lockdowns in various nations applied because of the COVID-19 pandemic will result in a decreasing effect up to 2% on annual economic growth rates every month and accordingly, if these restrictions continue for three months they will result in a decline of annual economic growth rates between 4% and 6% in major economies (OECD, 2020b).

The IMF has also revised its economic growth projections, given the COVID-19 pandemic. In the World Economic Outlook report published in January 2020, the IMF estimated that the global economy would grow 3.3% in 2020 (IMF, 2020a). However, IMF president, Kristalina Georgieva stated (23<sup>rd</sup> March) that global economic growth will be negative in 2020, and countries will experience a recession similar to the times of the 2008/2009 global financial crisis (or worse), although the IMF expects a recovery in 2021 (IMF, 2020b). In April 2020, in a revised World Economic Outlook, the IMF projected that for the global economy, developed countries and emerging markets and developing countries, GDP will contract by 3.0%, 6.1%, and 1.0%, respectively in 2020 (IMF, 2020c).

In a report published by the United Nations' Department of Economic and Social Affairs (1 April), if the worst scenario (it assumes that a wide range of restrictions on economic activities in the European Union and the United States would be implemented until the middle of the second quarter) holds it is stated that global GDP will decrease 0.9% in 2020

and if the economic restrictions continue in the third quarter the contraction of the global economy will be higher (UN Department of Economic and Social Affairs, 2020).

Combining the above explanations, it can be stated that the COVID-19 pandemic will lead to an economic contraction in almost all countries similar to the 2008/2009 Global Financial Crisis, and perhaps, it may even be more severe. However, the global economy's contraction will change according to the duration of the economic restrictions. If the economic restrictions last a short time a quick recovery will be possible, however, if the economic restrictions will last a long time countries will experience a severe economic recession.

Another important point is that restrictions on people's mobility will impact the service sector and especially retail trade, the entertainment and hospitality sector, recreation and transport services within this sector (UN Department of Economic and Social Affairs, 2020). Hence, the negative effects of the pandemic will be severely experienced by those countries wherein the economic share of these sectors is high. The fact that these sectors are labour intensive indicates that a significant unemployment may also occur.

### **The Effect of the Covid-19 Pandemic on Turkey's Economic Growth**

Although the COVID-19 pandemic spread to Turkey later than elsewhere, the number of cases has been steadily increasing since the day that the first case announced. Soon after the first case was announced, Turkey tried to prevent the disease' spread by the measures taken. Specific measures adopted to decrease the interaction between people have impacted numerous sectors, especially the service sector.

McKibbin and Fernando (2020) predicted Turkey's GDP loss to be US\$ 33 billion, US\$ 75 billion, and US\$ 130 billion, respectively, should the shock severity be low, middle and high; while if the shock is permanent with a low severity, Turkey's GDP loss is expected to be US\$ 30 billion.

In the OECD's interim report (2020a), published 2<sup>nd</sup>, March, the economic growth projections for Turkey were revised: economic growth will be 2.7% declining by 0.3% in 2020. However, it should be noted that this evaluation was made when the COVID-19 pandemic had not spread to Turkey yet and hence, it does not show the effect of the pandemic.

Taymaz (2020) used an Input-Output table prepared for 2012 and assumed that exports are directly affected by household consumption expenditures to determine the effect of the COVID-19 pandemic on Turkey's GDP and employment. The industries and sectors most affected by the pandemic are: hospitality and food services industry, travel agencies, tour

operators, other reservation and related services; creative arts, performance arts, and recreational services; library, archives, museum, and other cultural services; and air transport services (Taymaz, 2020). Taymaz (2020) predicts that value-added and employment will decrease by 7.2% and 10,7%, respectively.

Similar to other nations, we cannot estimate the net effect of the COVID-19 pandemic on Turkey's economic growth without knowing the pandemic's duration, how long economic activities are restricted, and when normal economic life will resume. Similar to other nations, the COVID-19 pandemic will negatively affect value-added and employment in the service sector in Turkey in the second quarter in which the economic activities are restricted.. However, if the restrictions remain for a short-term, a quick economic recovery becomes possible; on the other hand, if the pandemic lasts a long time and the restrictions on economic activities are not removed for a long period, then the pandemic may have severe negative effects on Turkey's economy.

### **Conclusion**

The COVID-19 pandemic has spread to almost all countries in the World in a short period of time. Various measures have been implemented to minimise the number of deaths. These measures have severely affected the service sector and especially retail trade, transport and tourism sectors within this sector.

Although the pandemic was seen later in Turkey in comparison to the European countries and the USA, the number of cases has quickly spiked. Similar to other countries, Turkey has implemented a range of measures to mitigate the effects of the pandemic, which have largely curtailed activities in some industries within the service sector.

Given the massive disruption of global supply chains, and the negative effects on the service sector in almost all nations, the pandemic will lead to an economic contraction. However, it is not possible to exactly estimate its magnitude and duration without knowing the pandemic's duration, when the restrictions on economic activities will be lifted, and when normal economic life resumes. The empirical assessments made for Turkey and other countries are based on the assumptions of a number of scenarios. Hence, while the scenarios based on pessimistic assumptions lead to high levels of economic contraction and economic loss, the scenarios based on optimistic assumptions project a short economic contraction period and a quick economic recovery.

At this juncture, it is crucial to control the pandemic swiftly, and if possible, it is necessary to successfully conclude the vaccination studies. If the pandemic is controlled quickly, the return to normal economic life will occur rapidly and all sectors (especially the service sector) will recover in a short period of time. However, if the pandemic is not quickly controlled, the decrease in economic growth and employment will be high. Hence, we must firmly abide by the measures applied by the authorities to control the pandemic. Providing incentives and economic support to all sectors (especially to those most impacted by the pandemic) will accelerate the economic recovery after the pandemic. Moreover, providing economic support by inter-country cooperation may effectively mitigate the pandemic's global negative effects.

## References

- Barro, R. J., Ursua, J. F., & Weng, J. (2020). The coronavirus and the great influenza pandemic: lessons from the "Spanish Flu" for the coronavirus's potential effects on mortality and economic activity, *NBER Working Paper Series, Working Paper No: 26866*, Retrieved from. <https://www.nber.org/papers/w26866.pdf>
- Congressional Research Service (2020). *Global economic effects of covid-19, CRS Report*, Retrieved from <https://fas.org/sgp/crs/row/R46270.pdf>
- Fernandes, N. (2020). Economic effects of coronavirus outbreak (COVID-19) on the world economy, Retrieved from. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3557504](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3557504)
- IMF (2020a). *World economic outlook update tentative stabilization, sluggish recovery*, Retrieved from <https://www.imf.org/en/Publications/WEO/Issues/2020/01/20/weo-update-january2020>
- IMF (2020b). *The great lockdown: worst economic downturn since the great depression*, IMF managing director Kristalina Gerogieva's statement following a G20 ministerial call on the coronavirus emergency, *Press Release No: 20/98*, Retrieved from <https://www.imf.org/en/News/Articles/2020/03/23/pr2098-imf-managing-director-statement-following-a-g20-ministerial-call-on-the-coronavirus-emergency>.
- IMF (2020c). *World economic outlook, april 2020: the great lockdown*, Retrieved from <https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>
- Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E., & Wolfe, N. (2018). Pandemics: risks, impacts, and mitigation. In D. T. Jamison, H. Gelband, S. Horton, P. Jha, R. Laxminarayan, C. N. Mock, R. Nugent (eds), *Disease Control Priorities Improving Health and Reducing Poverty* (pp.315-345). US: The World Bank, Retrieved from [https://www.ncbi.nlm.nih.gov/books/NBK525289/pdf/Bookshelf\\_NBK525289.pdf](https://www.ncbi.nlm.nih.gov/books/NBK525289/pdf/Bookshelf_NBK525289.pdf)
- McKibbin, W., & Fernando, R. (2020). The global macroeconomic impacts of covid-19: seven scenarios, *Centre for Applied Macroeconomic Analysis (CAMA) Working Paper 19/2020*, Retrieved from [https://cama.crawford.anu.edu.au/sites/default/files/publication/cama\\_crawford\\_anu\\_edu\\_au/2020-03/19\\_2020\\_mckibbin\\_fernando\\_0.pdf](https://cama.crawford.anu.edu.au/sites/default/files/publication/cama_crawford_anu_edu_au/2020-03/19_2020_mckibbin_fernando_0.pdf)
- OECD (2020a). *OECD interim economic assessment corona virus the world economy at risk*. Retrieved from <https://www.oecd.org/berlin/publikationen/Interim-Economic-Assessment-2-March-2020.pdf>.
- OECD (2020b). Evaluating the initial impact of covid-19 containment measures on economic activity, Retrieved from <https://www.austaxpolicy.com/news/oecd-evaluating-the-initial-impact-of-covid-containment-measures-on-activity/>



- Taymaz, E. (2020). Covid-19 tedbirlerinin ekonomik etkileri ve politika önerileri. Retrieved from <https://sarkac.org/2020/03/covid-19-tedbirlerinin-ekonomik-etkileri-ve-politika-onerileri/>
- UN Economic and Social Affairs (2020). Covid-19: disrupting lives, economies and societies, *Monthly Briefing on the World Economic Situation and Prospects, No: 136*. Retrieved from [https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/Monthly\\_Briefing\\_136.pdf](https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/Monthly_Briefing_136.pdf)
- Worldometers (2020). *Worldometer covid-19 coronavirus pandemic*. Retrieved from <https://www.worldometers.info/coronavirus/>