

# Chapter 4

## Spillover of COVID-19: Impact on the Global Economy

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### ABSTRACT

*How did a health crisis translate to an economic crisis? Why did the spread of the coronavirus bring the global economy to its knees? The answer lies in two methods by which coronavirus stifled economic activities. First, the spread of the virus encouraged social distancing which led to the shutdown of financial markets, corporate offices, businesses and events. Second, the exponential rate at which the virus was spreading, and the heightened uncertainty about how bad the situation could get, led to flight to safety in consumption and investment among consumers, investors and international trade partners. We focus on the period from the start of 2020 through March when the coronavirus began spreading into other countries and markets. We draw on real-world observations in assessing the restrictive measures, monetary policy measures, fiscal policy measures and the public health measures that were adopted during the period. We empirically examine the impact of social distancing policies on economic activities and stock market indices. We also empirically the effect of COVID infection cases and COVID deaths on macroeconomic performance during the 2020 to 2021 period. The findings reveal that the increasing number of lockdown days, monetary policy decisions and international travel restrictions severely affected the level of economic activities and the closing, opening, lowest and highest stock price of major stock market indices. We also find that the rising number of COVID cases and rising death cases led to a significant increase in global inflation rate, global unemployment rate, and global energy commodity index.*

### 1. INTRODUCTION

This paper explores the spillover effect of COVID-19 on the global economy. In 2019, there was anxiety about the impact of a US-China trade war, the US presidential elections and Brexit on the World

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Economy. On account of these, the IMF had predicted moderated global growth of 3.4 percent. COVID emerged in late 2019, and was declared a pandemic in January 2020. COVID-19 – the disease caused by SARS-CoV-2 – metamorphosed into the Delta variant in 2021, the omicron variant in 2021 and the Deltacron variant in 2022. The emergence of COVID-19 unexpectedly changed global outlook. Due to fear and uncertainty, and to rational assessment that firms' profits are likely to be lower due to the impact of COVID-19, global stock markets erased about US\$6 trillion in wealth in one week from 24th to 28th of February of 2020. The S&P 500 index lost over \$5 trillion in value in the same week in the US while the S&P 500's largest 10 companies experienced a combined loss of over \$1.4 trillion (Reuters, 2020), although some of these were recovered in the subsequent week. Some of the loss in value was due to rational assessment by investors that firms' profits would decline due to the impact of the coronavirus.

The International Air Transportation Association (IATA) stated that the air travel industry would lose US\$113 billion if the COVID-19 outbreak was not quickly contained (IATA, 2020). The IMF downgraded its growth projection for the global economy as the COVID-19 outbreak threw its earlier projection into serious doubt. The tourism industry was affected as the travel opportunities for Chinese tourists, who usually spend billions annually, were severely curtailed. There were increased flight cancellations, cancelled hotel bookings and cancelled local and international events worth over \$200 billion. The flow of goods through global supply chains vastly reduced significantly given that China was the world's largest manufacturer and exporter, and the Chinese government ordered the closure of major factories in the country. Countries like Iran, Italy and France issued stay-at-home nationwide policies to control the spread of the virus, which had already caused multiple deaths and was putting pressure on the national public healthcare infrastructure. Such stay-at-home policies planted the seeds of recession in developed countries, and there was a general consensus among economists that the coronavirus pandemic would plunged the world into a global recession (Financial Times, 2020). The International Monetary Fund in March stated that it expected a global recession that would be at least as bad as the 2007-8 global financial crisis followed by a recovery in 2021. (Georgieva, 2020).

The literature on the cause of recessions is vast (see Jagannathan et al, 2013; Stiglitz, 2010; Gaiotti, 2013; Bezemer, 2011; Mian and Sufi, 2010; Bentolila et al, 2018; Bagliano and Morana, 2012). But the cause of the 2020 global recession was novel in modern history. The coronavirus triggered a new type of recession that was different from the past triggers of a recession. For instance, the Asian debt crisis of 1997 was caused by the collapse of the Thai baht in July 1997, which created panic that caused a region-wide financial crisis and economic recession in Asia (Radelet and Sachs, 1998). The 2008 global financial crisis, which translated to a recession, was caused by loose monetary policy which created a bubble, followed by subprime mortgages, weak regulatory structures, and high leverage in the banking sector (Allen and Carletti, 2010). The 2016 recession in Nigeria was caused by the fall in the price of crude oil, balance of payment deficit, adoption of a fixed-float exchange rate regime, an increase in the pump price of petrol, activities of pipeline vandals and infrastructure weaknesses. The 2010 recession in Greece was caused by the after-effect of the global financial crisis, structural weaknesses in the Greek economy, and lack of monetary policy flexibility as a member of the Eurozone (Rady, 2012).

In this paper, we show how the coronavirus outbreak led to spillovers into major sectors of the global economy, and how fast policy response by several governments either triggered and prolonged the recession while trying to save the lives of citizens. We also investigate the effect of social distancing policies on the level of economic activities and stock index prices.

The discussion in this paper contributes to the financial crisis and pandemic literature (Allen and Carletti, 2010; Jagannathan et al, 2013; Mian and Sufi, 2010; Stiglitz, 2010; Ozili, 2020a). This paper

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