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10 March 2020

Online at <https://mpra.ub.uni-muenchen.de/101623/>
MPRA Paper No. 101623, posted 13 Oct 2020 13:25 UTC

Mohajan, H. K. (2020). Most Fatal Pandemic COVID-19 Outbreak: An Analysis of Economic Consequences. *Annals of Spiru Haret University. Economic Series*, 20(2), 127-146, doi: <https://doi.org/10.26458/2026>

Most Fatal Pandemic COVID-19 Outbreak: An Analysis of Economic Consequences

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Abstract

The novel (new) coronavirus (CoV) fatal disease (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2 or 2019-nCoV). It has been identified as the causative agent of the viral pneumonia outbreak in Wuhan, China, at the end of 2019. At present it becomes great global public health concern and as well as global economic depression. The International Monetary Fund (IMF) estimates that due to COVID-19 outbreak cost the world economy up to \$9 trillion. After COVID-19 outbreak, home quarantines, lockdown, widespread restrictions on labor mobility and travel, border closings and closing of economic activities affect global supply chains, oil prices, travel and tourism, restaurants, conferences, sporting events, government budget, etc. The amount of the global economic damage is very uncertain at present, but it is estimated that it will be large depending on the length of COVID-19. The paper discusses the social, economic, and health impacts on the world's poorest countries. The purpose of this study is to examine the economic impacts due to COVID-19 pandemic outbreak. An attempt has been taken here to discuss the current economic situation of the world and analyses the potential consequences on global economy in future.

Keywords: SARS-CoV-2, COVID-19 outbreak, pandemic, lockdown, economic consequences

JEL Codes: I100, I120, I150, I180

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1. Introduction

The 2019 novel coronavirus (SARS-CoV-2) is a new human coronavirus which emerged at the end of December 2019 in Wuhan, Hubei Province, China. The diseases spread outward from Hubei Province at the late December 2019 (Li et al., 2020). The outbreak of COVID-19 has spread quickly all over the world (Zhu et al., 2020). It affects lungs, with severe acute respiratory illness that develop a fever, dry cough, fatigue, and shortness of breath. The epidemic has spread very quickly taking only 30 days to expand from Hubei to the rest of Mainland China (WHO, 2020a). On 30 January, the WHO declared the outbreak a “*Public-Health Emergency of International Concern (PHEIC)*” as the outbreak could spread to countries with fragile health systems (Callaway, 2020). On 11 March 2020, the WHO declared the global outbreak as a pandemic to minimize the infection and mortality rate. The COVID-19 has created significant global public health threat (WHO, 2020b). On 8 April 2020, total 209 countries and territories around the world are affected; global total infection reached to 1,455,987, total recovered 310,108, and total death became 83,687. The infections are moving to new locations and new countries of the world. On 2 June 2020, total deaths in the world reached to 377,000 and total infected person became more than 6.2 million with total recovery 2.6 million (Worldometer, 2020). Public health responses for SARS-CoV-2 are isolation, quarantines, travel restriction, stop of workplace and educational institution closures, and ultimately lockdown (Rothan & Byrareddy, 2020).

The outbreak of COVID-19 has significant short- and long-term economic consequences. But there is a great uncertainty about what economic effects it will have due to many unknown factors, such as the severity of the virus, lockdown, closing of education institutions, length of the pandemic and economic disruption, government monetary and fiscal policies to combat the economic consequences of the health crisis, etc. (McKibbin & Fernando, 2020).

From February 2020, manufacturing and service sector activities declined dramatically in China, which is the start of the global financial crisis (Gopinath, 2020). The COVID-19 outbreak creates macroeconomic impacts on investments, growth, production, prices, supply chain, travel, trade, finances, banking, exchange rates, and cross-border cooperation. It also creates a shortage of medicines and healthcare equipments (Baldwin & di Mauro, 2020).

The COVID-19 has attacked the industrial giants or economically developed countries, such as the USA, the UK, Brazil, Spain, Italy, France, Japan, Germany, China, Russia, India, etc. These countries supply raw materials and as well as final

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products globally. China exports an enormous amount of industrial goods worldwide. Global supply has reduced due to closing borders, but demand has remained unchanged. Demand of some newly essential items, such as hand sanitizers, soap, bleaching powder, mask, globes, personal protection equipments (PPEs) have increased; consequently, the prices of various commodities have increased. As a result global economy becomes sloth. Economies are connected globally by cross-border flows of goods, services, financial capital, foreign direct investment, international banking, and exchange rates. Some of these face severe economic shocks (Baldwin & di Mauro, 2020). African countries will need additional \$10.6 billion health spending on the pandemic (African Economy, 2020).

As the epidemic situation is evolving by the day, it is more difficult to project the economic outlook. China is a major source of demand in the world economy and many core European industries are highly dependent on the Chinese market. China accounts for 17% of global GDP, 11% of world trade, 9% of global tourism, and more than 40% of global demand for some commodities. The International Air Transport Association (IATA) estimates that the aviation industry could face a loss of 29 billion of passenger revenues and cause a loss of about \$113 billion. It is expected that the average global GDP decline is 1.5 % (Boone et al., 2020; di Mauro, 2020).

After the COVID-19 outbreak, significant disruptions in the global supply chain, factory closures, cutbacks in many service sector activities; a decline in business travel and tourism, declines in education services, a decline in entertainment and leisure services. Global trade is declined by 1.4% in the first half of 2020 and by 0.9% in the whole year (Boone et al., 2020).

The International Energy Agency (IEA) expects that the global demand for oil to fall by 435,000 barrels per day in the first quarter of 2020 and by 365,000 barrels per day in the whole year. OPEC countries decided to reduce the production of 600,000 barrels a day as an emergency measure on top of the 1.7 million barrels a day already pledged (IEA, 2020). The price of Brent oil dropped from \$68.90 a barrel on 1 January to \$50.5 a barrel as of 28 February 2022 for the negative impact on oil demand from COVID-19 (Arezki & Nguyen, 2020). Most severely COVID-19 hit countries' exports will fall if supply shock extent, and imports will fall if demand shock extent (Baldwin & Tomiura, 2020).

During the FY 2019, in Illinois, Medicaid expenditures of the USA crested to \$19 billion. The COVID-19 emergency annual Medicaid expenditures could easily increase by \$4 to \$5 billion (21% to 26%); state public health expenditures jump to \$450 million in FY2020-21; human services for needy, disabled, and vulnerable populations, such as assistance with child care, employment, daily life, housing, and food expect to reach \$5.5 billion in FY2020-21 (Kass et al., 2020).

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2. Literature Review

Muhammad Adnan Shereen, Suliman Khan, Abeer Kazmi, Nadia Bashir, and Rabeea Siddique have discussed origin, transmission, and characteristics of COVID-19 diseases. They state that SARS-CoV-2 is phylogenetically related to SARS-like bat viruses; therefore bats could be the possible primary reservoir. There is no clinically approved antiviral drug or vaccine to cure COVID-19 (Shereen et al., 2020). Stefan E. Pambuccian provides an assessment of the current state of knowledge about the COVID-19 disease and its pathology, and the potential presence of the virus in cytology specimens. He also discusses the measures that cytology laboratories can take to function during the pandemic, and minimize the risk to their personnel, trainees, and pathologists (Pambuccian, 2020). Hussin A. Rothan and Siddappa N. Byrareddy highlight the symptoms, epidemiology, transmission, pathogenesis, phylogenetic analysis and future directions to control the spread of COVID-19 (Rothan & Byrareddy, 2020).

Richard Baldwin and Beatrice Weder di Mauro in their editorial report indicate that global supply chains have been disrupted when the COVID-19 outbreak was triggered in December 2019 in the city of Wuhan, Hubei province of China. The COVID-19 is most definitely spreading economic suffering worldwide and global economic activities have slowed down. Every country of the world will face both short-term and long-term economic impacts; global GDP will decrease remarkably. They estimate that the USA, China, Japan, Germany, Britain, France and Italy together account for 60% of world GDP, 65% of world manufacturing, and 41% of world manufacturing exports that will affect the COVID-19 outbreak (Baldwin & di Mauro, 2020). International Labour Organization (ILO) shows the COVID-19 will affect the global labor markets. It indicates the vulnerabilities and key policies to mitigate the impacts (ILO, 2020).

Joseph B. Sobieralski analyzes the effects of uncertainty shocks on airline employment for the travel restrictions during global pandemic COVID-19. The estimated job loss is about 7% of the airline workforce with an upper bound of over 13%. The recovery of uncertainty shocks is estimated to take 4 to 6 years (Sobieralski, 2020). The African Economy indicates that COVID-19 is disrupting an interconnected world economy through the global value chains. After COVID-19 attack abrupt falls in global commodity prices, fiscal revenues, foreign exchange receipts, foreign financial flows, travel restrictions, declines of tourism and hotels, frozen labor market, etc. (African Economy, 2020). Oxfam estimates that more than half a billion people of the world (most of them live in Africa and Asia) will be poor who were above the poverty line before pandemic outbreak COVID-19. It hopes that

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Governments and international organizations should take four actions to form powerful economies, a safe society and reduce the global poverty due to COVID-19: 1) immediate debt cancellation, 2) the creation of new international reserves by the IMF, 3) the adoption of emergency progressive taxes, and 4) a massive injection of aid funds (Oxfam, 2020b).

Stephen G. Cecchetti and Kermit L. Schoenholtz argue that banks are highly vulnerable to the economic shocks and they compare the challenge with that of stemming a bank run (Cecchetti & Schoenholtz, 2020). Stefano Ramelli and Alexander Wagner show the stock returns by industry in China and the USA from January to February 2020 after COVID-19 outbreak. They have observed that the semiconductor sector gained sharply in China, but lost in the USA; utilities lost in China, but gained strongly in the USA (Ramelli & Wagner, 2020b). Joseph B. Sobieralski analyzes the effects of uncertainty shocks on airline employment in the light of the current global pandemic COVID-19 outbreak. He shows that the airline industry has faced many threats throughout history, but none quite as rapid and severe as the spread of COVID-19 (Sobieralski, 2020).

Inoue Hiroyasu and Todo Yasuyuki try to quantify the economic effect of a possible lockdown of Tokyo to prevent the spread of COVID-19. The negative effect of such a lockdown becomes supply and demand shortages. They find that when Tokyo is locked down for a month, lead to a total production loss of 27 trillion yen in Japan, which is 5.3% of its annual GDP (in the earthquake or tsunamis in 2011, the production loss was 11 trillion yen, or 2.3% of GDP of Japan) (Hiroyasu & Yasuyuki, 2020). Warwick J McKibbin and Roshen Fernando estimate that the spread of COVID-19 would reduce GDP of China, Japan, the UK, and the USA by 6.2%, 9.9%, 6.0%, and 8.4%, respectively (McKibbin & Fernando, 2020). Amanda Kass, Kenneth Kriz, and David Merriman stated that the COVID-19 pandemic has caused disorder in the US economy but there is great uncertainty about the depth and duration of the disruption. The COVID-19 pandemic will increase the need for state expenditures to protect vulnerable populations from the health and economic consequences. They estimate that tax revenue will drop, local tax collections will shortfalls, Medicaid expenditures will increase, etc. (Kass et al., 2020).

3. Methodology of the Study

Research indicates a careful, systematic, patient study and investigation in some fields of knowledge, undertaken to establish facts or principles (Grinnell, 1993). So 'research' means a systematic investigation or activity to gain new knowledge of the already existing facts. Research is also considered as the application of scientific method in solving the problems efficiently. Therefore, research is an essential and powerful tool in leading a researcher towards progress (Pandey & Pandey, 2015). In

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research, ‘method’ is a strategy and technique employed to acquire knowledge and categorizes to study, and manipulates data. Therefore, a research method is a way of conducting and implementing research efficiently (Punch, 2013).

Methodology is the guidelines to approach and perform activities. Research methodology provides us the principles for organizing, planning, designing and conducting a good research. Therefore, we consider that it is the science and philosophy behind all researches (Legesse, 2014). The methodology of this article is to discuss the global economic consequences due to pandemic outbreak of COVID-19. In the study we have observed that the disease is spreading in every country, and both infection and deaths are increasing in a geometrical rate. This study is descriptive nature having quantitative as well as qualitative merits. We tried to discuss the global pandemic COVID-19, along with the impact on global economy. Reliability and validity are essential parts for a good research. In this study reliability and validity are maintained in a concise, but precise manner (Mohajan, 2017; 2018). This study is a review work. In this study we have used the secondary data. The data are collected and designed the article from books of famous authors, published, submitted and preprint articles, websites, theses, conference papers, case studies, and various research reports.

Since December 2019 to 8 May 2020, more than 3.85 million people of the world are infected from this disease, more than 1.28 million are recovered, and more than 270,000 died. On 2 June 2020, total deaths in the world reached to 377,000 and total infected person became more than 6.2 million with total recovery 2.6 million. Both the infection and deaths are fluctuating every day and there is no sign of control of the disease (Worldometer, 2020). In this study we have tried to enrich the research of global pandemic of disease COVID-19.

4. Objective of the Study

The main objective of this study is to discuss the global economic consequences of ongoing pandemic outbreak of the COVID-19 virus. The other specific objectives due to the effects of COVID-19 are as follows:

- to highlight the fatality of this disease,
- to show the global economic losses, and
- to analyze the economic recovery.

5. Economic Consequences

The COVID-19 has already brought considerable human suffering and jeopardized global economies. According to the International Monetary Fund (IMF), the COVID-

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19 pandemic will cost the world economy up to \$9 trillion, which is the combined GDP of Japan and Germany, or roughly half that of the USA. It is estimated that global lose could be up to 18% of the usual output. Small and medium sized enterprises (SMEs) are completely closed during COVID-19 infections. China deals more than 18 million SMEs. About 80% of enterprise jobs and 50% of private firms' exports are partially or completely closed. It has affected workplaces throughout the world. It shocks to both the supply and demand for goods and services that effect on the economy (Yang et al., 2020). The EU, the USA and Japan account for half of the world's GDP, the Chinese economy accounts for about 16% of global GDP, and these economies are based on trade, services and industries. Closing borders, lockdown, and home quarantine drastically reduce global economic activities (African Economy, 2020).

The COVID-19 will create both short-term and long-term global economic losses. Home quarantines, lockdown, widespread restrictions on labor mobility and travel, border closings and closing of economic activities, such as closing of shops, business firms and industries; make the global economy shamble and less healthy (Haider et al., 2020). The lockdown and home quarantines have stuck production and service supply chains both nationally and internationally, which cause significant job losses (Organisation for Economic Co-operation and Development, or OECD, 2020).

5.1 Tourism and Travel Sector

The top tourism destinations in the World are France with about 89 million tourist arrivals per annum, Spain with about 83 million; the USA (80 million), China (63 million), Italy (62 million), Turkey (46 million), Mexico (41 million), Germany (39 million), Thailand (38 million), the UK (36 million), etc. Tourism together with travel supports one in 10 jobs (319 million) in the world and generates 10.4% of world GDP (African Economy, 2020).

The airline industry always faces many threats, such as oil embargo, airline deregulation, terrorist attacks, storm, and rough weather. For example, the attacks on 9/11 caused a significant reduction in air travel (Franke & John, 2011). But none quite as rapid and severe as the one posed by the pandemic outbreak of COVID-19. Since the spread of COVID-19 to May 2020, about 7-13% workers lost their jobs in the airline workforce. Air travel restrictions have created negative impacts to numerous industries (Sobieralski, 2020). Reduction of international tourism and travels is of course an economic implication of infectious pandemics COVID-19. About 20-80% of international flights are remaining closed due to this pandemic (Wanjala, 2020).

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From the spread of COVID-19 national and international airlines remain partially or fully closed. Global tourism and travel are reduced for the COVID-19 outbreak. The airline industry has experienced a decrease in capacity of roughly 60–80% at major carriers. The International Air Transport Association (IATA) estimated \$30 billion loss of revenue for airline and tourist companies (Josephs, 2020).

According to the United Nations World Tourism Organization (UNWTO) latest estimate, there will be a decline in international tourism exports of \$300-450 billion. The international tourist arrivals will fall by 20% to 30% in 2020 when compared with 2019 figures. The Hotel and Hospitality Industry would lose 20% of its turnover and this percentage can be as high as 40% to 60% (African Economy, 2020).

The top five African economies (Nigeria, South Africa, Egypt, Algeria, and Morocco) account more than 60% of Africa's GDP. The tourism and petroleum sectors represent on average a quarter (25%) of the economy of these countries. Top tourism destinations in Africa include Morocco with around 11 million tourist arrivals per annum, Egypt (11.35 million), South Africa (10.47 million), Tunisia (8.3 million) and Zimbabwe (2.57 million). IATA estimates the economic contribution of the air transport industry in Africa at \$55.8 billion, supporting 6.2 million jobs and contributing 2.6% of African GDP. African airlines have already lost \$4.4 billion in revenue by 11 March 2020 and expect more loss in rest of the year (IATA, 2020).

5.2 Business Sector

Business disruptions have lowered both production and consumption that create economic shocks in nations. Disruptions increase business costs and create a negative productivity shock that reduce economic activity. Lockdowns and quarantines drop in capacity of utilization. Domestic and international firms which rely on supply chains may be unable to get the parts they need. For example, China is an important supplier of intermediate goods, mainly electronics, automobiles, and machinery and equipments, to the rest of the world (Gopinath, 2020).

Firms are unable to pay their salaries to the jobless workers for loss of income which affects severely some sectors, such as tourism and hospitality. Business firms which are loaded up on debt due to Covid-19 become bankruptcies. These firms compel to reduce the cash flows. The bankruptcy of one firm can move other firms in danger (Baldwin & di Mauro, 2020).

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5.3 Stock Markets

COVID-19 creates a substantial adverse impact on financial stock markets globally. Major stock market indexes have fallen by an average of 10% in most of the countries. The IMF has announced that investors have withdrawn \$83 billion from emerging markets since the start of the crisis (African Economy, 2020).

The stock markets are tumbling, central banks are slashing interest rate, and industrial production is almost zero resulting into massive job loss and a financial crisis; disaster for the poor will be extreme (Haider et al., 2020). After the Black Monday episode (March 9), the main stock markets indices have just experienced one of the worst developments in their history in decades. The Dow Jones lost almost 3,000 points in one day. FTSE plunged by about 5% and losses are estimated at over \$90 billion (African Economy, 2020).

In the USA the stock markets revolve 5 to 10% a day, sometimes up but mostly down. For example, airline stock prices have been hit disproportionately in the USA (Gopinath, 2020). Investors in stock market have started to discount the liquidity risk in stock prices. Since the COVID-19 outbreak to April about \$23 trillion value has been destroyed in global stock market (Ramelli & Wagner, 2020a).

6. Global Economic Effects

After COVID-19 attack, economy of China shrinks to 6.8%, Eurozone economies shrink to 14.8%, and the US economy shrinks to 4.8%. As transport and production in the most countries are postponed, demand of oil decreased and global oil prices have declined sharply. The shortage of production will result into the shortage of supply and consequently will end as loss of jobs and employment for millions of people around the world. Short-term economic impacts fall on the most sensitive sectors, such as manufacturing supply chains; transportation, tourism and services relationships; retail and entertainment; and energy and commodity demand and prices (Barrero et al., 2020). Disruptions to production have now spread to supply chains across the world. Some economic sectors are rail system, ecommerce industry, automobile sector, restaurants industry, information technology and software services, travels and tourism industry, etc. All businesses, regardless of size, are facing serious challenges that lead to a potential global economic recession (OECD, 2020). Any state gets most of its tax revenue from three sources: i) individual income tax, ii) corporate income tax, and iii) sales tax; account for over three-fourths of total tax revenues and almost half of all state revenues. In every nation, tax revenues will decrease dramatically. The size of the loss will depend on the severity and length of the pandemic and economic disruption (McKibbin & Fernando, 2020).

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Due to COVID-19 a nation on average will experience a 6% decline in consumption and an 8% decline in GDP (Barro et al., 2020). ILO estimates that global unemployment may increase from 5.3 million (low scenario) – 24.7 million (high scenario) people; with mid scenario 13 million. Global GDP may drop 2–8%. Overall losses in labor sector are expected \$860–3,440 billion depending on the length of closing (ILO, 2020). More than 1.2 billion global populations will be extremely poor whose per capita income is \$1.90 per day or less. The number of people living below poverty line on \$5.50 a day or less will be 4 billion. The situation will worsen if the pandemic situation be longer (Oxfam, 2020a).

Experts and pundits estimated that in 2020 the US GDP will decrease 3.8–6.3% (\$0.81–1.45 trillion) from 2019 depending on the length of lockdown. The US Senate passes \$2.2 trillion aid package to fight COVID-19 to meet the liquidity needs of the credit market and to support markets (McKibbin & Fernando, 2020). It is expected that the USA, the EU and China would see GDP shrink by 2.6%, 3.2% and 0.9%, respectively in 2020 (Oxford Economics, 2020).

The direct economic impacts of COVID-19 increase in the unemployment rate, decline of the future economic growth, investment fall, fall of consumption, decline foreign direct investment (DFI), and decline in the assets price. It affected supply chains, oil prices, travel and tourism, restaurants, conferences, sporting events, and government budget. About \$23 trillion in global market value has been destroyed since the outbreak (Morath, 2020). United Nations Conference on Trade and Development (UNCTAD) suggests that DFI flows could fall 30–40% during 2020–2021 (UNCTAD, 2020). Saudi Arabia suspended entry of pilgrims to the holy sites due to severely infection of COVID-19 in the country (Arezki & Nguyen, 2020)

The US the federal deficit is projected to remain at \$1 trillion in fiscal year (FY) 2021 (short-term) and steadily increase to \$1.7 trillion in FY 2030 (long-term). Within 10 years the US debt owed to the public is projected to increase by 76% (CBO, 2020). It is estimated that the US GDP will decline up to 6% in 2020 and quick recovery and returning to trend growth of 2% per year by 2022 (McKibbin & Fernando, 2020). Just in three weeks of lockdown, the statistics on 4 April shows that the USA unemployment increase to 6.6 million and total unemployment reached to 17 million. But about 28 million persons filed new claims for unemployment benefits over the six-week period ending 25 April 2020 (US Department of Labor, 2020). Due to the global nature and severity of the shock of COVID-19, it is estimated that the airline workforce may be a reduction of over 13% (Sobieralski, 2020).

The COVID-19 imposes long-term impacts in school and university closures. It also imposes long-term impacts in the society, such as infant and maternal mortality,

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under-nutrition and malnourishment, and in school and university closures will create restriction on educational development. The World Food Programme (WFP) has warned that 265 million people could be pushed into acute food insecurity due to Covid-19. As a result the number of undernourished people in net food importing countries, majority in low-income countries, would increase by 14.4 million to 80.3 million (FAO, 2020). The World Trade Organization (WTO) expects world merchandise trade to drop by 13–32% in 2020 (WTO, 2020).

7. Economic Recovery Steps

The economic loss globally is estimated to be \$3-6 trillion (World Bank, 2020a). The UN is calling for \$500 billion in aid to help low- and middle-income countries to face the pandemic. This aid must be used for supporting prevention measures, health systems, social protection, and food security (UN, 2020). Oxfam calculates that OECD countries' fair share of this response would be closed to \$300 billion, which is also less than the combined wealth of the world's three richest men. Donors must urgently respond to food insecurity caused by coronavirus and provide food directly low- and middle-income countries mostly in Africa and Asia. Donors must uphold humanitarian principles; provide feminist humanitarian assistance; protect refugees, migrants and internally displaced persons; and work towards protecting civic space for the vulnerable people. They must continue humanitarian aid to protect future famine; help to keep gender equality and women's rights in the low- and middle-income countries (Oxfam, 2020b). The Food Crisis Prevention Network (RPCA) is expected that between June and August 2020 food insecurity and malnutrition will effect from 17 to 50 million people only in West Africa (RPCA, 2020).

In March, the European Central Bank, added €120 billion and later €750 billion to its bond-buying program. EU leaders proposed for a possible European recovery fund for transfers of €1.5 trillion. In the USA, real consumer spending drops by 20% and household labor income falls by 16%. In response to the crisis, the US Government declared \$2.2 trillion stimulus package under the Coronavirus Aid, Relief, and Economic Security (CARES) Act, and signed into law 27 March 2020 (Muellbauer, 2020). In March, the United States Federal Reserve System also announced a similar \$700 billion program. In the second week of April, it announced new loan facilities of \$2.3 trillion to deliver credit to small businesses and municipalities (FAO, 2020). In March 2020, the Spanish Government has announced a €200 billion package, which is equivalent to about 20% of GDP (Baldwin & di Mauro, 2020). On 27 March 2020, the G20 countries pledged \$5 trillion to defend the global economy against COVID-19 (G20, 2020).

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8. Financing for SARS-CoV-2

There are some major sources of money for the epidemic response activities. These could be used to support pandemic outbreak. UN releases \$15 million from the Central Emergency Response Fund (CERF) to help fund global efforts to contain the COVID-19 virus. The WHO has called for \$675 million to fund the fight against COVID-19. Some such sources of funding are as follows (Center for Health Security, 2020b):

8.1 The World Bank

The World Bank Group's Pandemic Emergency Financing Facility (PEF) has a fund to respond during pandemics. It has a cash window and an insurance window. The cash window provided about \$50 million for Ebola epidemic in the Democratic Republic of the Congo (DRC) (World Bank, 2019). The COVID-19 pandemic that killed more than 21,500 people would trigger a full payout of the Class B notes, raising \$95 million. It would also trigger a 16.67% payout of the Class A notes, raising an additional \$37.5 million (IBRD, 2017). The World Bank has announced \$160 billion in long-term financial support over the next 15 months (World Bank, 2020b).

8.2 IDA Crisis Response Windows

The International Development Association (IDA) is the part of the World Bank that gives loans (credits) to low resource countries for development. For IDA credits, a country must have a per capita annual income of less than \$1,145. IDA meets every 3 years to raise money and decide how the funds will be spent; these are called Replenishment meetings. The 18th Replenishment (IDA18) finances projects from 1 July 2017 to 30 June 2020. Most IDA money is used for long-term development projects (IDA, 2017). The Crisis Response Window (CRW) is a special pool of money devoted to help countries respond to disasters. It spent \$420 million to fight the 2014-2016 West Africa Ebola outbreaks. The IDA18 replenishment raised \$3 billion for crisis response, and as of early 2020, \$2 billion was still unspent and available for immediate use. The IDA19 allocated \$2.5 billion to the CRW, to become available on 1 July 2020 (IDA, 2019).

8.3 IMF

The International Monetary Fund (IMF) has about \$1 trillion fund to lend, which are not for aid. If any country borrows any amount from this fund with negotiation, after a stipulated period must be repaid with interest (IMF, 2019).

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8.4 Private Charity

The total endowment of the top forty wealthiest charitable foundations is currently about \$500 billion but many of these are not involved in health. In certain circumstances part of this fund might be used for pandemic (Wikipedia, 2020b).

8.5 National Governments

Total international development aid from governments is about \$200 billion per year. A partial amount of it could be used for a pandemic. But with a sufficient global coordination, the total amount might be used for a pandemic (Wikipedia, 2020a).

9. Conclusions and Recommendations

In this study we have tried to discuss aspects of economic consequences of the pandemic outbreak of COVID-19. On 25 May 2020, total deaths in the world reached to 344,760 and total infected person became more than 5,400,608 with total recovery 2,165,782. On 2 June 2020, total infected person became more than 6.2 million with total deaths 377,000 and total recovery was 2.6 million. It is uncertain when the infections and deaths due to COVID-19 will stop. New locations and countries are severely infected. Timely diagnosis, isolation, quarantine, reduced traveling, etc., can reduce both infections and deaths. Hand washing, maintain of healthy habits, masks use, and supportive treatments can reduce the fatality of this disease. Distribution of more PCR-fluorescent probe kits and PPEs among healthcare providers can control the outbreak. Invention of COVID-19 vaccine can prevent the disease in future and the developed countries in medicine can take bold steps in this regard.

The outbreak of the COVID-19 is spreading fears around the globe and is severely disrupting the global economy. It creates many serious challenges at national, regional, and global levels. Global economics decline remarkably during the pandemic COVID-19. Most people are under quarantine and isolation, and much of the rest of the populace has been told not to go to work and to stay in their homes. Most business firms and industries of the world remain closed for months. Closing of the aviation, tourism and hospitality industries, and Small and Medium Enterprises (SMEs) create threat of significant declines in revenue. Some countries are in fully or partially lockdown. It is estimated that global GDP will decrease significantly. Also government tax will be down fall and foreign currency reserves will be affected adversely. The developing and lower developing countries will suffer much for it. As a result global economic loss will become a large amount. It is estimated that more than 2 billion people (addition of new half a billion) of the world will be extremely poor (whose income is \$1.90 a day) due to the pandemic COVID-19. The

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governments, civil societies and employers must take necessary actions to minimize the economic losses and mitigate the economic damages due to COVID-19 outbreak.

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