
THE NOVELTY CORONA VIRUS PANDEMIC AND ITS EFFECTS ON THE GLOBAL ECONOMY

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Abstract:

This study aimed to show the economic effects of the spread of the Coronavirus on various developing and developed countries, It is noticeable that the results of this crisis are the worst and most influential if compared to previous crises in the global economy.

Its consequences, in addition to the large human losses witnessed by the world as a whole, included economic losses, especially in the financial markets.

The tourism and aviation sector ... given that this virus hindered production, export and air transport, and at a time when many economic sectors were affected by the Corona epidemic.

Other sectors have realized gains, for example, such as the pharmaceutical industry, the mask industry, and the digital economy. On the other hand, the environment is the largest recipient of the repercussions of the crisis .Thousands of factories around the world have stopped pumping their toxic gases, This resulted in a significant reduction in CO2 emissions.

Keywords : Financial markets, gross domestic product, international trade, environment, poverty and unemployment.

JEL Classification Codes: E44 , Q43 F01, F18, N10.

Résumé :

Cette étude visait à montrer les effets économiques de la propagation du coronavirus sur divers pays en développement et développés. Il est à noter que les résultats de cette crise sont les pires et les plus influents par rapport aux crises précédentes de l'économie mondiale.

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Ses conséquences, en plus des pertes humaines importantes dont le monde entier a été témoin, comprenaient des pertes économiques, en particulier sur les marchés financiers.

Le secteur du tourisme et de l'aviation... étant donné que ce virus a entravé la production, l'exportation et le transport aérien, et à un moment où de nombreux secteurs économiques étaient touchés par l'épidémie de Corona.

D'autres secteurs ont réalisé des gains, par exemple, comme l'industrie pharmaceutique, l'industrie du masque et l'économie numérique. D'autre part, l'environnement est le plus grand destinataire des répercussions de la crise. Des milliers d'usines à travers le monde ont cessé de pomper leurs gaz toxiques, ce qui s'est traduit par une réduction significative des émissions de CO₂.

Mots clés : Marchés financiers, produit intérieur brut, commerce international, environnement, pauvreté et chômage.

Code de classification Jel : E44 , Q43 F01, F18, N10.

1- Introduction:

The Corona pandemic is considered a global epidemic that has a direct impact on international commercial and political transactions. As the spread of this epidemic Where imposed to the countries to take a set of measures and Preventive measures, Isolation,confinemant social distancing, and travel bans, As it reflected in a negative way on the economy, as it became in a state of severe recession and sudden contraction, and thus an unexpected global economic crisis has appeared.

Thus, an unexpected global economic crisis appeared, after the economic forecasts for the year 2020 predicted a year of steady growth or increased growth. The outbreak of the virus caused a big shock to the global economy, and in this context we saw that the problematic of our research is as the following :

what degree is the global economy affected by the effects of the spread of the Coronavirus (Covid 19)?

Assumptions of the research paper:

- In addition to human losses, the Corona virus had economic results that led to a significant contraction in global growth rates and trade in the global economy;
- The social repercussions of the Corona virus will lead to an increase in unemployment and poverty in the global economy.

Research aims :

The purpose of our reliance on this topic aims to achieve the following objectives:

- Identify the extent to which the various basic economic, financial and social evidence in the global economy has been affected by the effects of the Coronavirus.
- Provide an exploratory view on the future of international economic relations after Corona .

Themes of the research paper:

This research paper focuses on the descriptive approach and the analytical approach, by talking about the effects of the Corona virus on the global economy, and the study reviews the following axes: At the beginning we talk about the reality of the global economy before the emergence of the Corona virus. Let's talk in the second axis on providing statistics about the spread of the Corona virus in The global economy, and we conclude in the third axis with the effects of the Corona virus on the global economy.

2- The reality of the global economy before the emergence of Corona:

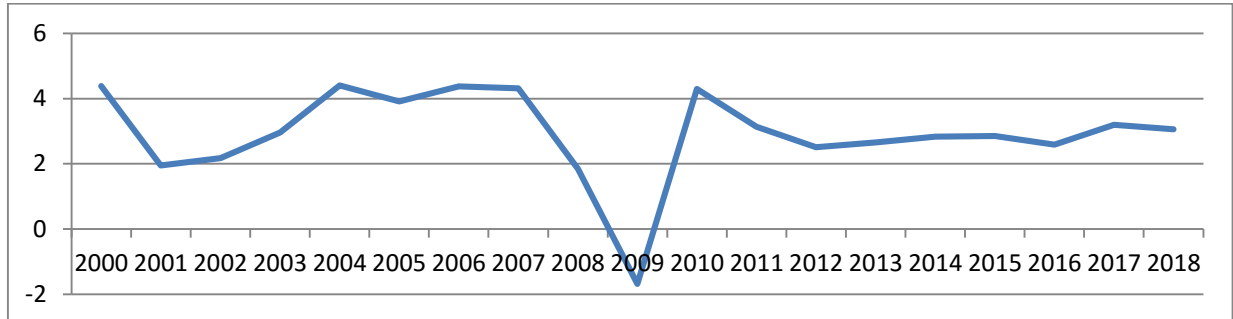
We are trying to clarify the global economic reality before the emergence of the Coronavirus by identifying several economic, financial and even social indicators:

2-1. Economic indicators:

The gross domestic product is the best indicator for estimating the growth and development of productive activity, as it measures the value of goods and services produced inside the country during a certain period of time, usually a year or three months.

2-1-1. Gross domestic product (GDP growth:

Figure No. (01): The evolution of the percentage of GDP growth in the global economy during the period (2000-2018)

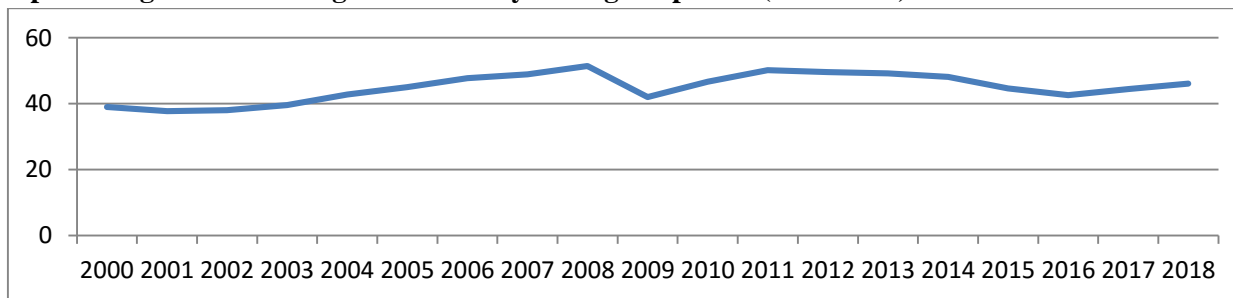


Source: Prepared by the researcher, based on World Bank statistics.

After the significant decline in global GDP in 2009 as a result of the global mortgage crisis, the global GDP rate has witnessed a recovery during the years 2017 and 2018, recording an average of 3%. (World Bank, 2020).

2-1-1. International Trade:

Figure No. (02): The evolution of merchandise trade out of total GDP in percentage terms in the global economy during the period (2000-2018)



Source: Prepared by the researcher, based on World Bank statistics.

International commodity trade has developed significantly, especially with the beginning of the twenty-first century, as a result of global economic development and the development of global growth rates. After it represented 37.78% of the global GDP in 2001, it became 46.13% in 2018. (World Bank, 2020).

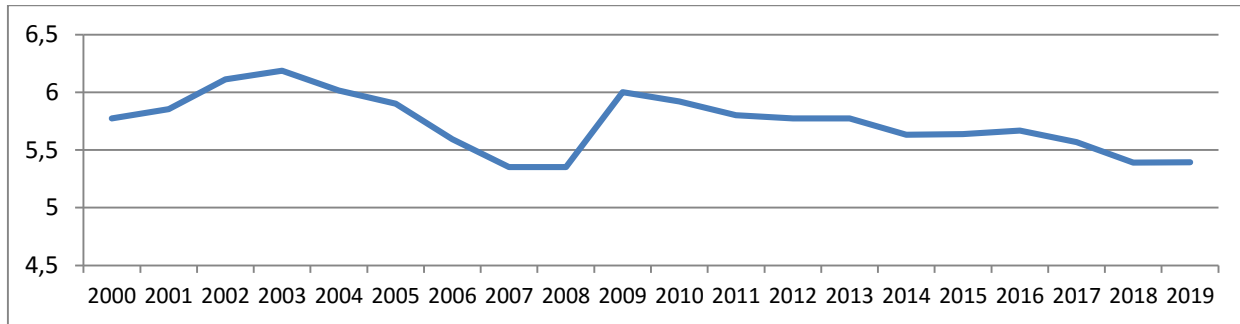
2-2. Social indicators:

We focused on the following Indications:

2-2-1. Unemployment rate:

The unemployment rate is an important economic indicator that reflects the social level of countries' economies.

Figure No. (03): The evolution of the unemployment rate in percent in the global economy during the period (2000 to 2019)



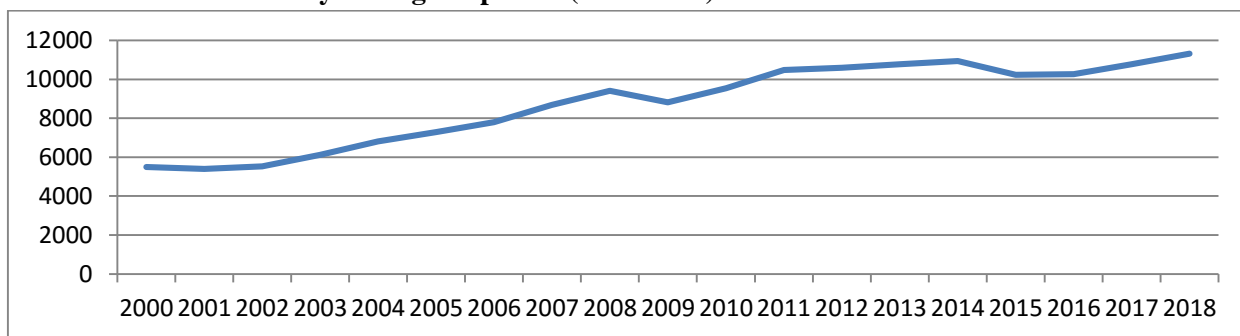
Source: Prepared by the researcher, based on World Bank statistics .

The global economy witnessed a decline in the unemployment rate from about 6% in 2003 to 5% in 2019, so reducing unemployment rates is a concern of various economic policies for various countries, both developed and developing.

2-2. Share of individual international income:

In the global economy, many countries aim, through the Millennium Developmental Goals, to double the per capita income of urban and rural residents to build a moderately well-lived society.

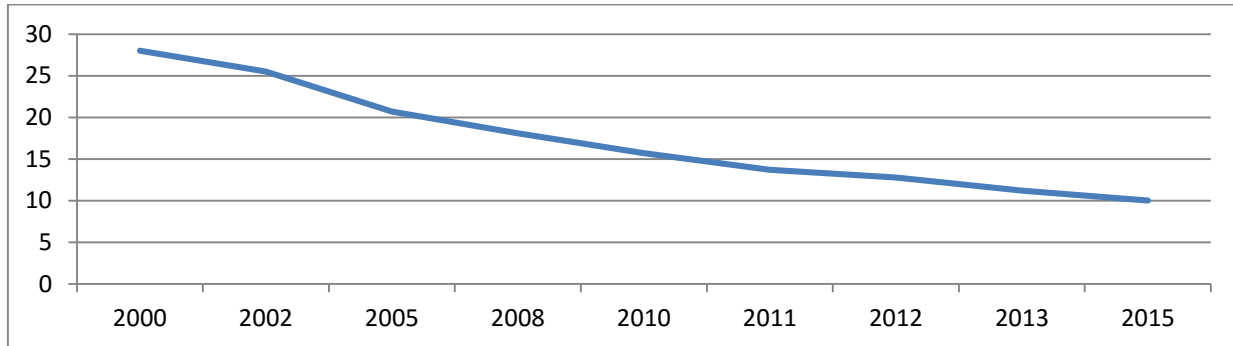
Figure No. (04): individual international income in the international economy during the period (2000-2018)



Source: Prepared by the researcher, based on World Bank statistics.

The per capita income of the national income in the global economy has increased significantly in recent years, from 7803.50 dollars in 2006 to 10479.57 dollars in 2010, to 11,317.27 dollars in 2018.(World Bank,2020).

Figure No. (05): the global poverty rate during the period (2000-2015)



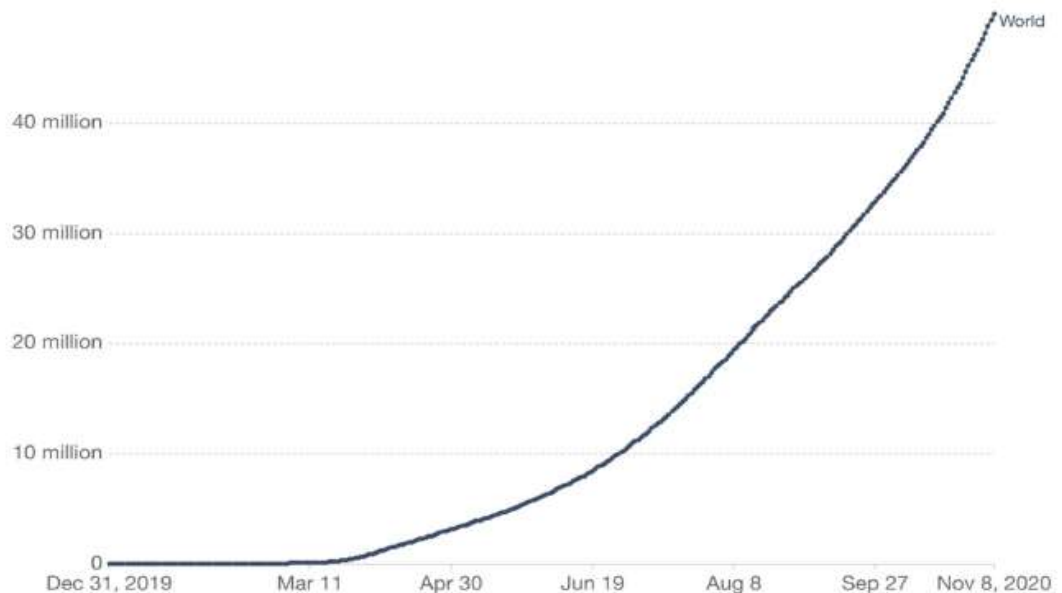
Source: Prepared by the researcher, based on World Bank statistics.

The poverty rate in the global economy has decreased significantly in recent years, from 28% in 2010 to 13% in 2011 to 10% in 2015 and this is a result of global economic strategies that have become concerned with the social aspect significantly due to the importance of this aspect in economic of developing countries.(World Bank,2020).

3- Corona virus spread in the international economy:

The spread of Corona virus has expanded dramatically and rapidly in the world, which has led to a significant increase in human and economic losses, and despite advances in technology, drug discovery is still a long and costly road

Figure No. (06): Confirmed cases of COVID-19(31/12/2019-08/11/2020)



Source: Max Roser and other(2020) Coronavirus Disease (COVID-19) ;OXFORD
Matin School; available at
: <https://ourworldindata.org/coronavirus>.visited:(20/11/2020).

Confirmed cases of COVID-19 have passed 47.4 million globally, according to the Johns Hopkins Coronavirus Resource Center. The number of confirmed deaths stands at more than 1.21 million. (worldeconomic forum;2020).

The United States remains the worst-affected country, with more than a quarter of confirmed cases (353.60 cases) and a third of the world's deaths.(Max Roser;2020

4- The effects of the Corona virus crisis on the global economy:

The global economy has entered a severe recession as a result of the repercussions of the spread of the Coronavirus. Through this axis, we will try to show the extent of its impact on the global economy by studying the impact on the most important economic, financial and even social indicators.

4-1. The impact on economic indicators:

The study focused to clarify the economic effects to the spread of the Corona virus on the following indicators:

4-1-1. Impact on growth rates:

Table No. (01): Actual and projected growth rates in the most important global economies (2019-2021), by percentage

Countries	2019	2020	2021
U.S.	2.3	1.3	3.2
Eurozone	1.2	2	3
China	6.1	2.9	8.4
India	5	3.5	7.3
China	0.8	1.2	1.8
Russia	1.3	0.8	3.8
Brazil	1.1	0.7	2.9
the world	2.9	0.4	4.9

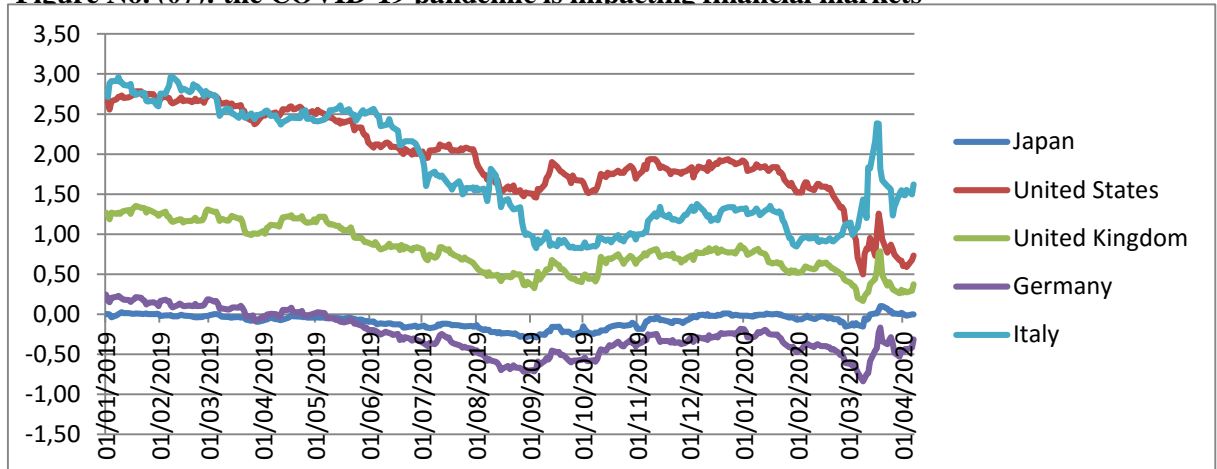
Source :Paul F Gruenwald (2020)EconomicResearch: The Escalating Coronavirus Shock Is Pushing 2020 Global

GrowthTowardZero;availableat<https://www.spglobal.com/ratings/en/research/articles/200330-economic-research-the-escalating-coronavirus-shock-is-pushing-2020-global-growth-toward-zero-11413969>;visited :(2020/11/01).

The International Monetary Fund expects the global economy to grow by 0.4% this year and that the national product of the global total shrinks by more than a trillion due to the exceptional impact of the Corona virus, and these expectations would be the lowest since the economic collapse in 1982 when the economy expanded by only 0.43%. Before the spread of the epidemic, it was expected that the global economic growth would reach 3.3% in 2020, and it is expected that the decline may affect the United States and the euro area more severely.(World Economic Outlook ;2020;P Htm).

4-1-2. Impact on financial markets:

Globally, the COVID - 19 shock is severe even compared to the Great Financial Crisis in 2007–2008.(Nuhu A Sansa ;2020).

Figure No. (07): the COVID-19 pandemic is impacting financial markets

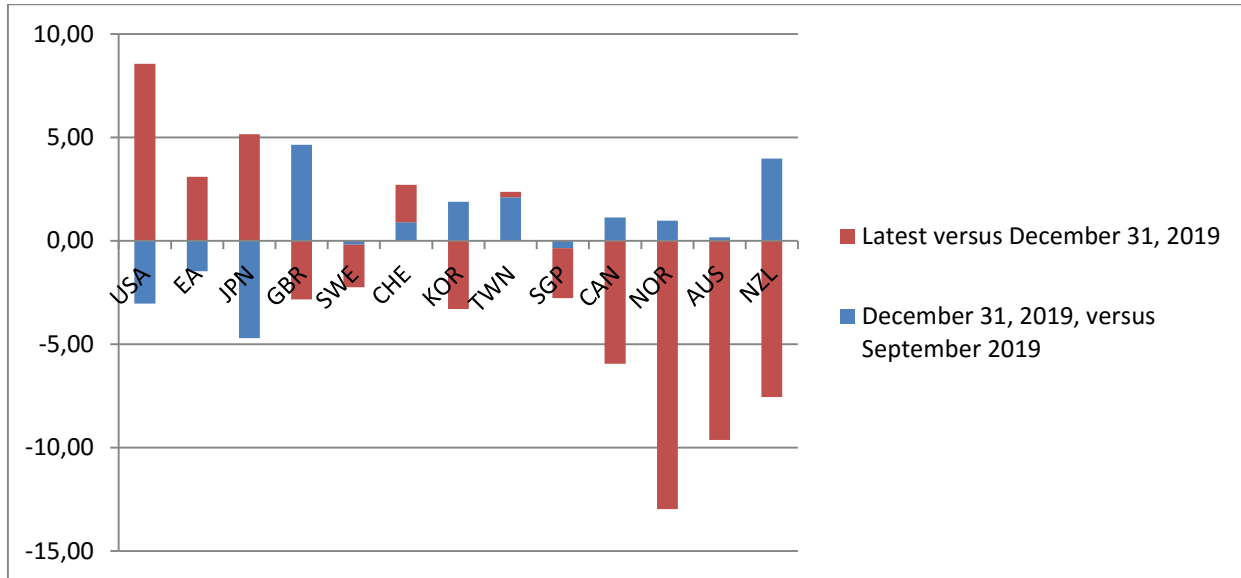
SOURCE: INTERNATIONAL MONETARY FUND (April 2020)"WORLD ECONOMIC OUTLOOK REPORTSWorld Economic Outlook, :availableat<https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020>? : visited:(.2020/11/01) .

Financial markets around the world have suffered historic losses as a result of the intensifying sell-off associated with the spread of the new Corona virus. The Dow Jones Industrial Average, the FTSE in London, and the Nikkei index witnessed the largest quarterly declines since the global financial crisis in 1987, dropping by 23% and 25%. And the Standard & Poor's 500 Index lost 20 percent during the first quarter, which is its worst since 2008. Experts believe that the decline in stock prices at the present time is worse than the global financial crisis of 2008. If the coronavirus is partially to blame for the market losses due to the ambiguity surrounding the economic consequences of the outbreak, according to some analysts a sizeable market correction was overdue anyway, as some stocks were overpriced and readjustment was needed to rebalance. The coronavirus outbreak was just the spark that ignited the fire. (KazuhiroNogi; 2020).

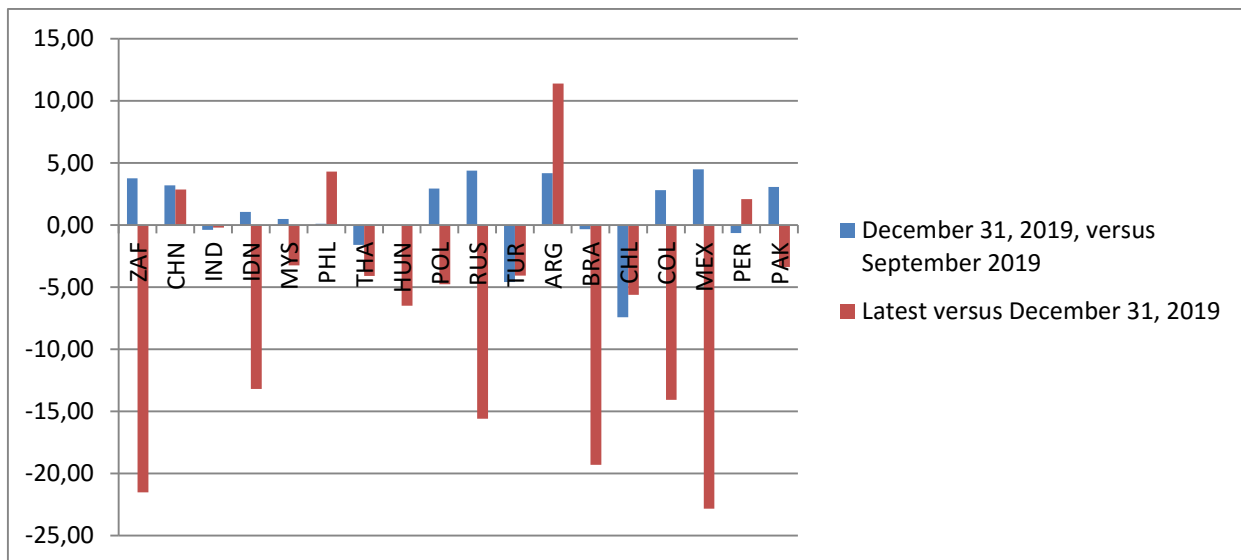
4-1-3. The effect on exchange rates:

Figure No. (08): Real effective exchange rate changes for a group of developed and emerging countries: September 2019 - April 2020.

- Advanced Economies:



- Emerging Market Economies:



SOURCE: INTERNATIONAL MONETARY FUND (April 2020)"WORLD ECONOMIC OUTLOOK REPORTSWorld Economic Outlook, :availableat<https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020?> : visited:(.2020/11/01) .

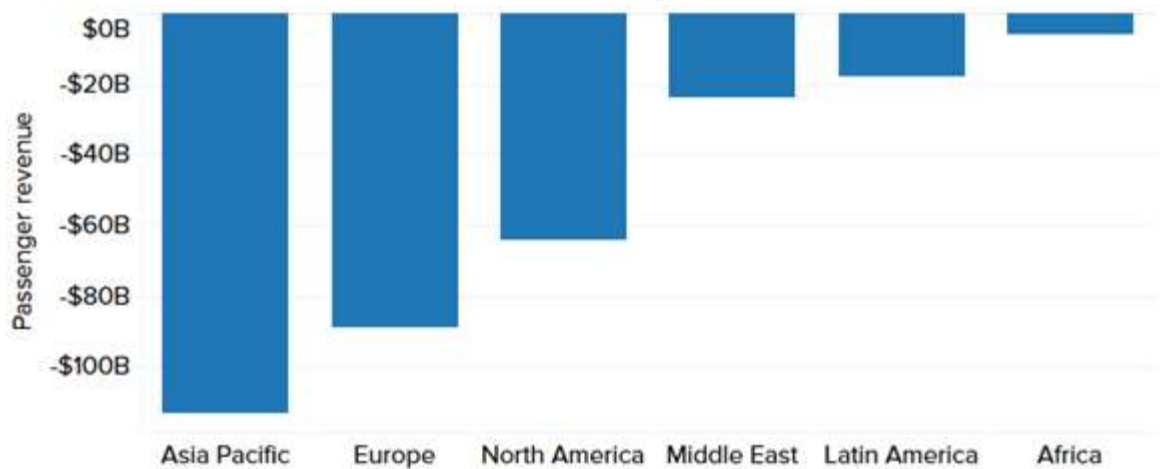
The exchange rates have fluctuated between high and low as a result of the spread of the repercussions of the Corona virus, for example, the

dollar rose, as shown in the previous figure, by 8.55% and the euro by 3.09%. By -13.20%. (International Monetary Fund;2020).

4-1-4. Tourism and air transport sector:

The aviation industry has suffered serious damage, with the decline in aircraft movement, the reduction of airlines, and the cancelation of travelers reservations for business trips and holidays, as this resulted in the tourism sector reaping great losses at the global level as well as paralysis of all tourist destinations in the world.

Figure No. (09):revenue to delinearas in 2020 compared to 2019

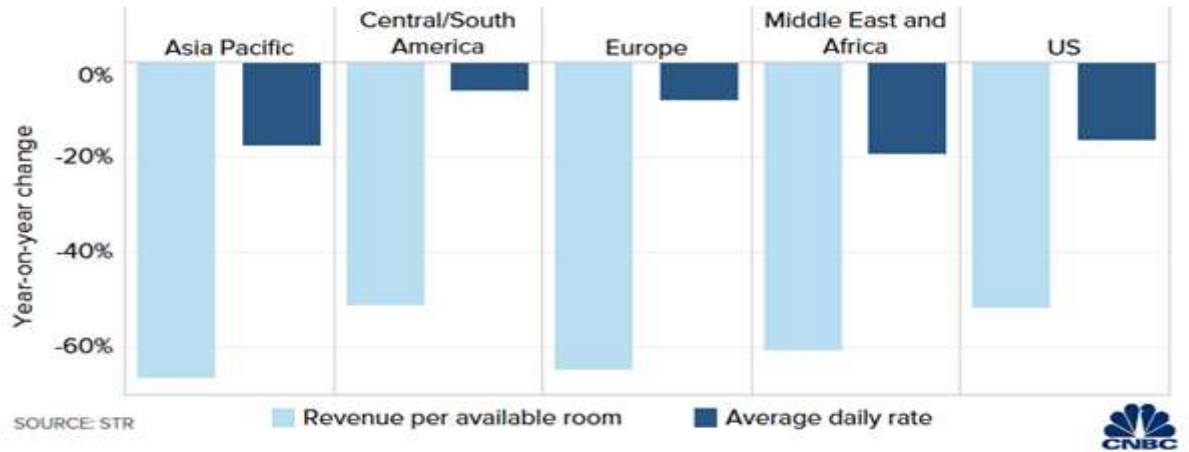


Source: Yen Nee Lee(2020) . 5 charts show whichtravelsectorswereworst hit by the coronavirus.availableat: <https://www.cnbc.com/2020/05/06/coronavirus-pandemicsimpact-on-travel-tourism-in-5-charts.html>;visited2020/11/01).:(

Still, passenger revenue for airlines is estimated to plunge by \$314 billion in 2020 — or a 55% drop from 2019 levels In addition to airlines, hotels have also been hit by the reduction in travel.Hotel rates fell across all regions in March, according to data by STR, an analytics firm that tracks the hospitality sector.

(Yen Nee Lee;(2020).

Figure No. (10): Corona virus impact on hotels



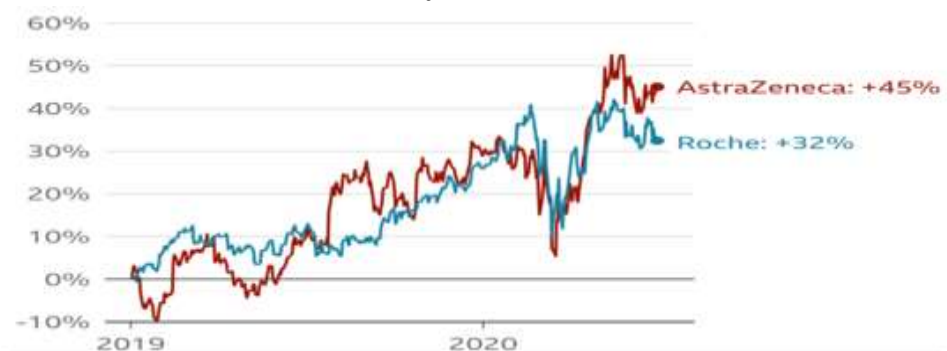
Source: Yen Nee Lee(2020) . 5 charts show which travel sectors were worst hit by the coronavirus. available at: <https://www.cnbc.com/2020/05/06/coronavirus-pandemic-impact-on-travel-tourism-in-5-charts.html>; visited 2020/11/01).:(

It came as several major hotel chains announced layoffs and reduction in wages.(Yen Nee Lee;2020)

4-1-5. Impact on the pharmaceutical industry:

Governments around the world have pledged billions of dollars for a Covid-19 vaccine and treatment options. A number of pharmaceutical firms are in a race to develop and test potential drugs that could help nations get back to "normal".

Figure No. (11): Corona virus impact on the pharmaceutical industry



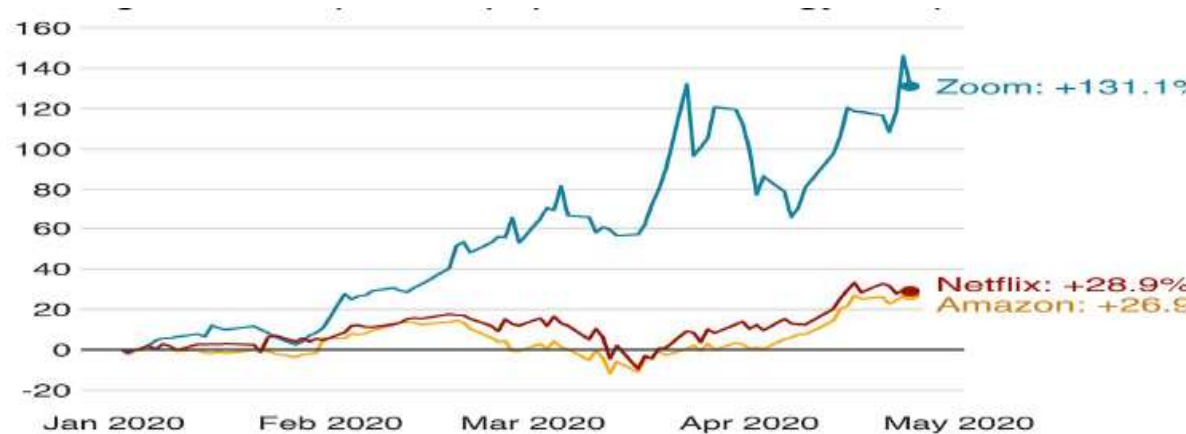
Source: Lora Jones, Daniele Palumbo & David Brown(2020) **Coronavirus: A visual guide to the economic impact** ; BBC News; available at: <https://www.bbc.com/news/business-51706225>; visited:(05/11/2020).

Shares in some companies have shot up on the hope that some will be approved and distributed at scale. AstraZeneca's share price, for example, has hit record highs. The drug company says it will be able to produce two billion doses of a vaccine. (Lora Jones; 2020).

4-1-6. Digital economy:

The global crisis resulting from the Coronavirus epidemic has pushed further growth towards a digital world. The (Corona) crisis has made clear to us the importance of digital technologies to the economy, management and society.

Figure (12): The revenues of technology companies during the first quarter of 2020.



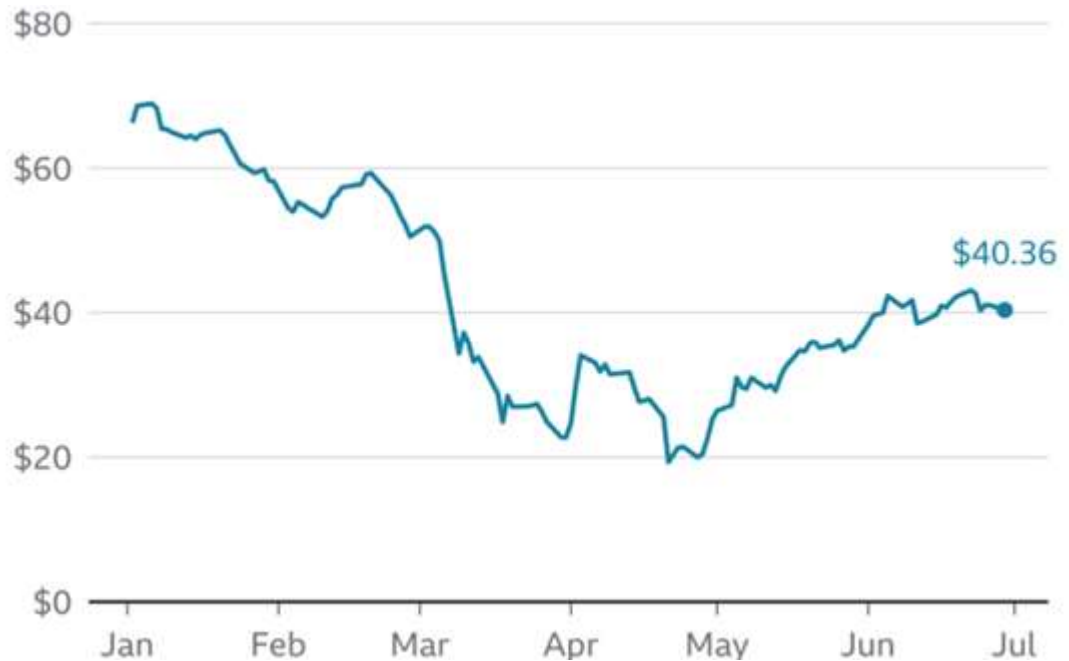
Source :Lora Jones, Daniele Palumbo & David Brown(2020)Coronavirus: A visual guide to the economic impact ; BBC News; available at: <https://www.bbc.com/news/business-51706225>; visited:(05/11/2020).

Governments around the world have required employees to work from inside the home where possible. The demand for video conference calls and e-mail to hold meetings or complete tasks increased, resulting in a rise in shares in technology companies such as Zoom, and the demand for online shopping and entertainment increased, so technology stocks reached high levels.(Lora Jones;2020).

4-1-7. Oil prices:

Demand for oil all but dried up as lockdowns across the world kept people inside. The crude oil price had already been affected by a row between Opec, the group of oil producers, and Russia. Coronavirus drove the price down further.

Figure No. (13): Corona virus impact on the oil prices



Source : Lora Jones, Daniele Palumbo & David Brown(2020)**Coronavirus: A visual guide to the economic impact** ; BBC News; available at: <https://www.bbc.com/news/business-51706225>; visited:(05/11/2020).

Brent crude is the benchmark used by Europe and the rest of the world. Its price dipped below \$20, to the lowest level seen in 18 years. Prices have recently regained ground as travel restrictions in some countries have been relaxed, boosting demand for fuel.

4-2. Social indicators::

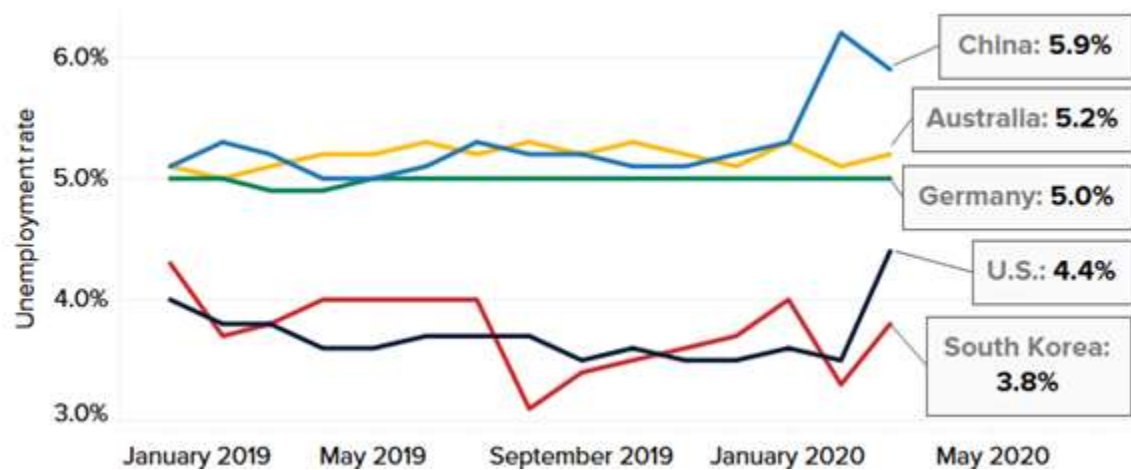
4-2-1. Impact on poverty:

Overall, 1% lower growth in the world economy would translate into an increase in the global extreme poverty rate of between 1.6% and 3% the range due to the fact that poverty impacts are quite sensitive to whether the slowdown is through productivity or trade disruption shock differences. For the temporary, partial paralysis of business activity caused by COVID-19 containment measures, global poverty would increase by a simulated **14 million people** . But this number would increase to **22 million (3.0% increase)** if trade channels were disrupted.(Rob Vos;2020).

4-2-2. Impact on unemployment:

Many economists have warned that lockdown measures around the world will accelerate job losses — that’s already showing up in unemployment numbers in several economies.

Figure No. (14):coronavirus hit jobs(unemployment ratesin selected economies)



Source: Yen Nee Lee(2020) .7 charts show how the coronavirus pandemic has hit the global economy. available at: <https://www.cnbc.com/2020/04/24/coronavirus-pandemics-impact-on-the-global-economy-in-7-charts.html>;visited:(.2020/11/01) .

In the U.S., the world’s largest economy, more than 26 million jobs . The country’s unemployment rate of 4.4% in March was the highest since August 2017, according to the Bureau of Labor Statistics. The U.S. is not alone in dealing with rising unemployment. Australia and South Korea and Germany also registered an uptick in unemployment rates, with some economists warning that the situation could become worse.

4-2-3. Impact on the environment:

The environmental impacts in the short term are even harder to calculate, though some, like the fall in greenhouse gas emissions and the improvements in air quality, are more instantaneously measurable.

Nevertheless, recent advances in satellite and ground-based mapping technologies enable the real-time monitoring of a number of pollution types, notably emissions of greenhouse gases, and urban air quality. Early indications are that there has been a dramatic fall in pollution. Coal-fired power station utilisation, already in decline in most major economies outside China, Japan and India, has fallen back sharply, and especially in China in the early months of the pandemic. Footnote 1

There has been a sudden and sharp decline of transport, and with it the burning of oil. These energy-related emissions reductions are not, however, replicated in agricultural emissions, which do not appear to be significantly affected so far. (Dieter Helm; 2020).

5- Conclusion:

It is difficult now to determine the level of the various effects of the spread of the Corona virus on the global economy because the effects of this pandemic have consequences in the medium and long term, but so far the effects of the pandemic have been comprehensive for various economic sectors leading to a decline in international trade and global growth (the first hypothesis is correct) and also comprehensive for social indicators. It is a high rate of poverty and unemployment (the second hypothesis is correct);

The coronavirus pandemic, which was first detected in China, has infected people in 188 countries;

- The risks to our baseline forecast remain firmly on the downside since the translation from health outcomes to economic variables remains highly uncertain;
- As the spread of COVID-19 goes global, the economic effects of social-distancing measures to contain the virus, along with plummeting consumer and business confidence, have delivered a sharp blow to near-term growth prospects and roiled financial markets. In addition to the fast-rising human toll of the virus (i), we are entering a period of unprecedented rates of decline in economic activity and financial-asset prices, and equally fast and unprecedented policy responses to both combat and offset these declines (Paul F Gruenwald; 2020).
- The Coronavirus pandemic has greatly supported the pharmaceutical industry, as this industry has proven to be one of the most successful local and regional industries in order to maintain drug safety;
- The service sector was the most affected by the consequences of the crisis, while the virtual economy was the biggest beneficiary of the pandemic. The Corona crisis showed the severity of the gap between the north and the south of the European continent, and the lack of solidarity between its member states, and revealed the deficit of the European and global health system, and the Corona crisis revealed that the European Union was below the level in facing the challenge; This does not apply

to all other groupings, for example the Association of Southeast Asian Nations (ASEAN) agreed to strengthen cooperation processes among them to deal with the challenges of the Corona pandemic as a forward-looking vision;

- In the latter _It can be said that it is not unlikely that the role of the global economy will change after Corona from exporting goods to exporting technology, to overcome the commodity trade obstacles and the challenges it poses, and the global economic power balance may change in favor of the Chinese economy, which has sought as much as possible. To help curb the epidemic so that the trade exchange movement returns to its previous state .

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