فايروس كورونا (COVID-19) وتأثيره على عينة من الأسواق المالية العالمية
Coronavirus (COVID-19) and Its Impact on a Sample of Global Financial Markets

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الملخص

إنَّ فيروس كورونا (COVID-19) سريع الانتشار وهذا يزيد من حالة الخوف بين المستثمرين والشركات للدخول في عقد صفقات داخل الاسواق المالية العالمية، فضلاً عن خسارة عدد كبير من المستثمرين والشركات بفترة زمنية قصيرة جداً، وهذا الانتشار للفايروس قضى على ما لا يقل عن 5 تريليونات دولار أمريكي من قيمة أسواق الأسهم في غضون أسبوع ، والذي أثر بشكل سلبي على الجانب الاقتصادي لمختلف دول العالم وأدى إلى حدوث حالة من الركود لمختلف القطاعات وخاصة الأسواق المالية العالمية. تمثلت مشكلة البحث بالتساؤل الاتي (ما هي الاثار الاقتصادية العامة لجائحة كورونا ، وهل تأثرت الأسواق المالية العالمية بجائحة كورونا؟). جرى جمع بيانات يومية لمجموعة من أهم مؤشرات الاسواق المالية بالعالم وهذه البيانات ابتدأت من قبل ظهور جائحة كورونا بأشهر قليلة ، وذلك من أجل توضيح التحركات في المؤشرات قبل وبعد انتشار وباء كورونا. وهذه المدة هي من 2018/May/1 الى 2020/May/20. جرى التوصل الى أنَّ العلاقة بين فيروس كورونا والاسواق المالية هي علاقة عكسية ، كلما زادت اعداد الاصابات ينخفض حجم التعاملات المالية بالأسواق المالية بشكل مباشر. كما نستنتج أن ردود افعال الاسواق المالية مرتبطة بدرجة عالية مع خطورة تفشي المرض في كل بلد .

الكلمات المفتاحية: فيروس كورونا ، (كوفيد –19) ، مؤشرات السوق المالية ، الاقتصاد.

Abstract:

Coronavirus (COVID-19) is rapidly spreading, and this increases the state of fear among investors and companies to enter into deals in global financial markets, in addition to losing a large number of investors and companies in a very short period of time. This spread of the virus wiped out at least 5 trillion US dollars of the value of the stock markets in one week, which negatively affected the economic side of various countries of the world and led to a state of recession for various sectors, especially the global financial markets. The research problem was the following question (What are the general economic impacts of the Corona pandemic, and have global financial markets been affected by the Corona pandemic?). Daily data was collected for a group of the most important financial market indicators in the world, and this data began a few months before the outbreak of the Corona pandemic, in order to clarify the movements in the indicators before and after the spread of the Corona epidemic. This period is from 1/May/2018 to 20/May/2020. It was concluded that the relationship between the Coronavirus and the financial markets is an inverse relationship, the more the number of infections increases, the volume of financial transactions in financial markets directly decreases. We also conclude that financial market reactions are highly correlated with the severity of the disease outbreak in each country.

Key Words: Coronavirus, (COVID-19), Financial Market Indicators, Economy.

Introduction

Today humanity is living in distress in the midst of the Coronavirus pandemic that has led to a massive health crisis and at the same time the global economy is entering a recessionary path that is now described as an economic crisis from almost all sides. Therefore, there is a justification for talking about a double health and economic crisis. It is clear that the first has priority because it entails heavy losses in human lives. In addition to its direct impact on human life, it also has major economic effects. These economic effects have important consequences for social welfare and indirect health effects if not directly fatal. Therefore, fear of the new Corona epidemic and its consequences is increasing. As there are increasing numbers of deaths, it is expected that these numbers will rise when the indirect costs associated with them due to lost productivity are taken into consideration. Thus, the economic impacts are not only harmful to public health systems but also to trade, industry, agriculture, travel, education, markets, retail chains and others. Nowadays, global stock markets are collapsing and the real economy is already back into recession despite efforts by most governments to support them. The first signs indicate a decrease in production and an increase in unemployment. In this modern world, all of the world's economies are closely integrated so that when anything happens in any part of the world it will have a medium to high level of impact around the world. Therefore, the impact on one of the largest economies such as China will greatly affect all economies of the world, because China is the second largest economy in the world, with a value of $ 13.6 trillion, its position after the United States of America, as China contributes 16% of the global gross product.

Research Methodology :

1. Research Problem:

Corona pandemic is one of the main causes of the decline in the economic level of various countries, and this decline is caused by the state of fear and panic among investors and companies to enter into financial deals within the financial markets, so the main problem of research is the following question (What are the general economic effects of the Corona pandemic, and whether it has been affected The main indicators of global financial markets?) .

2. Importance of Research:

importance of the research is to give a scientific vision in an integrated framework of theoretical and analytical developments that show the impact of the Corona pandemic on some financial market indicators, as it is a vital topic that has not received an adequate share of study by academic and research institutions.

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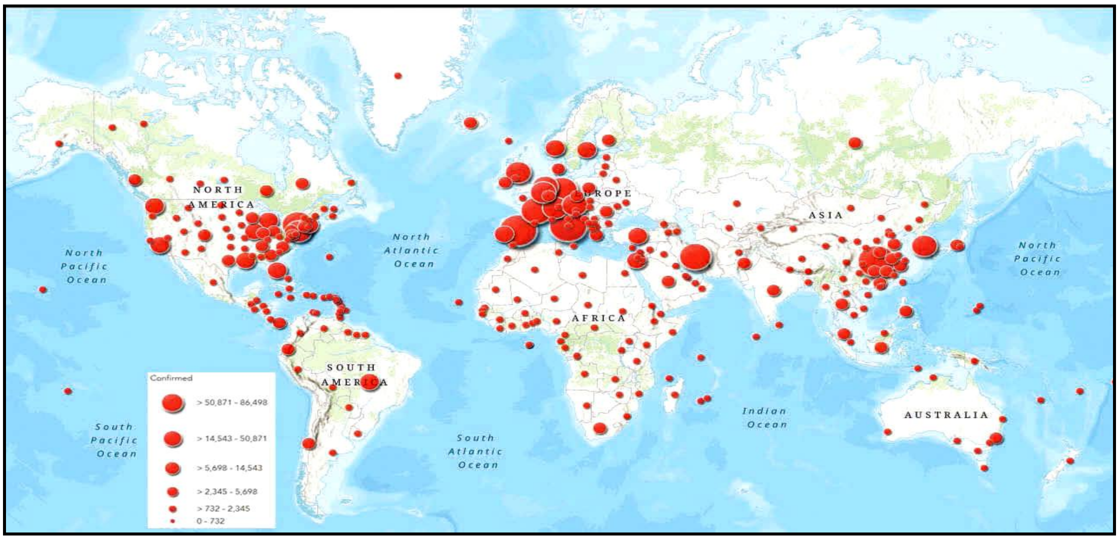
4. Research Limits:

Daily data was collected for a group of the most important financial market indicators in the world, and this data began a few months before the outbreak of the Corona pandemic, in order to clarify the large movements in the indicators before and after the spread of the Corona epidemic, and this period is from 1 May 2018 to 20 May 2020.

First: Concept and Development Coronavirus (COVID -19) :

Coronavirus is viral, respiratory disease caused through the Coronavirus, and Coronaviruses are a great group of viruses that cause range of illnesses ranging from a common cool to sharp respiratory syndrome (sars.CoV.2). It was first discovered in December, 2019 in Wuhan China. Symptoms of infection are similar to symptoms of influenza, such as cough, sore throat, fatigue, and shortness of breath (Evans, 2020: 3). (Rasheed, 2020: 1) He indicated that coronavirus causes mild respiratory infection that is rarely fatal, and that corona virus was discovered in the 1960s and that the first viruses detected were infectious bronchitis in birds especially chickens, and OC43,229E virus that infects Humans with cold. Then, other elements were discovered, including: sars-CoV in 2003, NL63 virus in 2004, HKU1 virus in 2005, MERS virus in 2012, and the new nCoV-2019 virus. Most of these viruses cause respiratory infections. In Arabic, it means "wreath" or "crown" because of its distinctive appearance that appears under the electron microscope in the presence of surface projections, which gives it an appearance in the form of a king's crown, as these projections are proteins that fill the surface of the virus. The World Health Organization announced the first human condition of COVID-19, a disease caused by the new coronavirus, later renamed "SARS-CoV-2", by officials in Wuhan, China, in December 2019 , The infected cases were identified through investigations carried out by the Chinese authorities with the onset of symptoms in early December 2019 (WHO, April 2020) . Then the epidemic moved from China to all countries of the world, as shown in Figure (1).

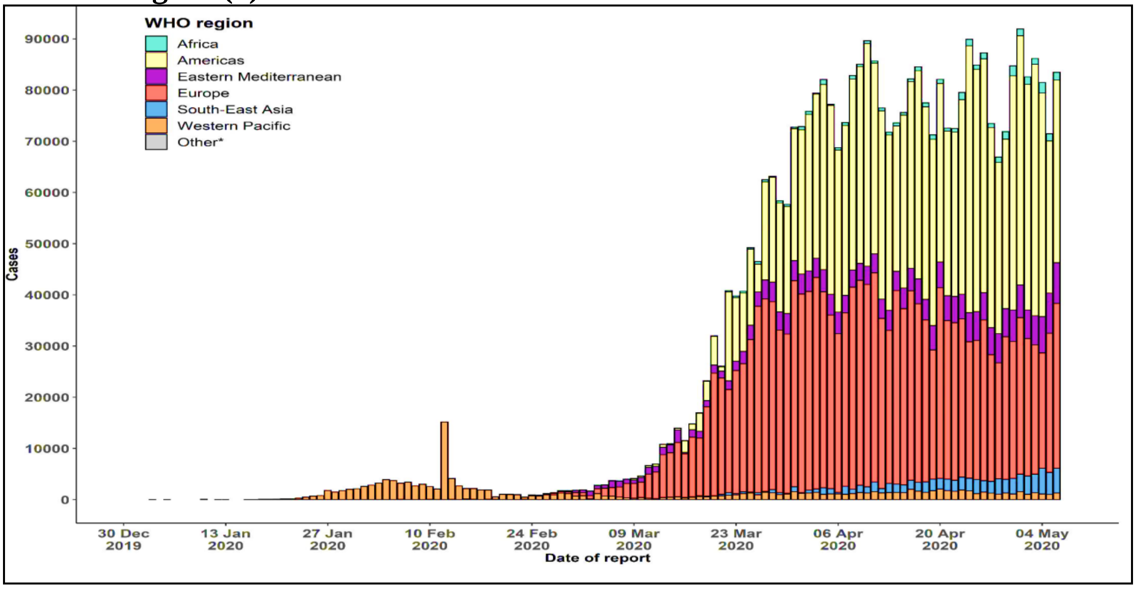
Figure (1) Spread Coronavirus (COVID-19) In Worldwide



Sources: "World Health Organization and the National Health Commission of the People's Republic of China". March 23, 2020.

Reports show that the Corona pandemic has hurt international development by closing companies and restricting consumer spending. However, it is difficult to estimate the magnitude of the impact due to the lack of economic data. Despite the delay in publishing official GDP figures, daily data can supply an early image of China's growth in the first quarter as the outbreak of the coronavirus reduced China's real gross domestic product by an annual rate of 32 per cent, which led to lower growth on an annual basis From 6% in the fourth quarter of 2019 to 3.8% in the first quarter of 2020 (Lyu & Jun, 2020: 1). Because of the rapid spread of the virus around the world, almost all western countries have taken root procedures to contain or delay the spread of the virus. Most countries have placed restrictions on daily social and economic life, such as border closures and a general curfew to limit proliferation (Krisztin, 2020: 2). Figure (2) shows confirmed cases of coronavirus in the world, since its first appearance on 1/October/2019 to 4/May/2020.

Figure (2) confirmed cases of coronavirus in the world 2019-2020



Source: World Health Organizations , Coronavirus disease (COVID-19) , Situation Report – 108 , https://reliefweb.int/report/world/coronavirus-disease-2019-covid-19-situation-report-108-7-may-2020

Second: The Economic Effects Of The Corona Pandemic:

The rapid geographic spread of coronavirus Covid-19 has resulted in nearly 100,000 infections in 80 countries as of 4 March 2020, spreading fear around the world and disrupting global economical activity. Stock markets about the world suffered the loss of trillions of dollars in the US in one week February 28 in the worst week for the financial markets since the financial crisis in 2008. Although the spread of the coronavirus began in 1/12/ 2019, Financial markets did not respond instantly, as little information was available about how long it could last and whether China could easily contain it and prevent it from spreading to other countries. It was only a matter of time before the latest threat interacted with the financial markets. The crash eventually took place in week ending February 28, when main stock markets about the world faced their worst week since financial crisis of 2008. (Obeid, 2020: 1) . Coronavirus, also known as COVID-19, is spreading rapidly. According to the WHO report, the outbreak that started at the end of last year in Wuhan, China, infected nearly 17,000 people by February 3, and the Chinese government and authorities in more than 20 other countries have confirmed that more than 360 people due to the virus so far. Given the poor record of Chinese authorities in revealing the extent of past negative events such as the SARS pandemic, which also originated in China in 2003, and the Tianjin eruption in 2015, it would not be surprising if the infections and deaths caused by coronaviruses are much higher than stated. Reliable estimates indicate that the number of infections is actually five times higher than reported (Abinraj, 2020: 1). The "World Health Organization" has declared that more than 4,900 people have died and more than 132,000 people have been infected globally on March 13, 2020. According to the 48th report on (COVID-19), on March 8, 2020 more than 100 countries have now reported confirmed cases of COVID19. The report stated that 105,586 confirmed cases were reported globally 3656 new cases, while 80,859 deaths were confirmed in China (46 new cases) 3100 deaths (27 new cases) and outside China 24,727 deaths (3610 new cases) 484 deaths 71 new cases) (Kumar, 2020: 301). negative result of this pandemic on another countries are large, including the direct disruption of global supply chains and weak request for imported goods and services. On a broader scale, the decline in international tourism and economic travel has led to rising risk rates on financial markets with a low interest rate of 10 years decrease The US benchmark rate and stock values have fallen sharply, commodity prices have fallen, and consumer confidence has fallen relative to similar episodes in the past, as was the case with the 2003 SARS outbreak and China playing a large

part international trade and tourism product and currency markets and grow other countries ' economic effect of China's passive shock. Even if the peak of the disease outbreak proves to be short-lived, and despite a gradual recovery in production and demand over the next few months, it will still negatively affect global growth in 2020 (OECD, Interim Economic Assessment, 2020: 3) .
shocks have caused the economy Real to three major developments in the global financial markets (United Nations, 2020: 1):
a) Extreme volatility in the global financial markets.
b) Large capital inflows and pressures on exchange rates and reserves of many developing countries.
c) A significant increase in the risks of public and private debt.
As these financial effects feed on the real economy, which increases the size and duration of the recession . Since the shock of Coronavirus (COVID-19) became widely recognized in early March, global financial markets have suffered significant losses and extreme fluctuations that we have not seen since the beginning of the 2008 global financial crisis, as financial markets in Asia, Europe and the Americas collapsed, with the Dow Jones recording The second largest percentage drop in history on March 16, valuations declined across asset classes as evidenced by increased credit margins (i.e. the cost of interest paid to borrowers above the benchmark) such as US Treasury bonds on corporate and government bonds.
Third: Concept Of Financial Markets and The Indicators:
The"financial market" is defined as the market in which different financial tools and assets are deal or exchanged, as the price of those assets depends on request and supply in the respective market and it is a physical location where traders exchange agreements to buy or sell specific financial assets with a high degree of transparency in prices and order sizes and that All financial and economic activities in a country depend on these financial markets. The first known stock exchange was established in 1531 in Belgium, where various forms of bonds were traded. Stock exchanges were formed in Amsterdam in 1602, London in 1773 and New York in 1792. Today, most financial markets are traded via an electronic system that can For traders to place orders and see how prices evolve. The exchange usually organizes trading in various ways as to how to make and settle applications and their permissible sizes (Cocozza, 2018: 1). There different ways to classify "financial" markets, as they are classified accord to the financial instruments that are being traded the features of the services provide, the trading procedures, the main participants in the market, as well as the origin of the markets and the most important classifications:
a) The money market: It is the market that includes short-term financial instruments whose maturity date is one year or less from the date of issuance.
b) Capital Market: It is the market in which long-term financial instruments are traded by companies and governments.
The term long term refers to a securities with an original maturity of more than one year, There are two types of securities in the capital market and it is a proprietary instrument in the form of ordinary and preferred shares that are issued by companies, and the debt instrument that is represented by bonds or debts issued by government and local companies And governments (Darškuvienė, 2010: 14).
The primary purpose of indicators in financial markets is to provide a measure to know the direction of the overall market movement. As the increase in the index indicates a rise in the market and a decrease indicates a decline in the market, thus, market indicators enable us to calculate the market return, which represents the rate of return gained through investing in a portfolio bearing the identity of the market portfolio. Market returns and risk are often used as primary criteria to judge the performance of an investment in a portfolio. Technical analysts are trying to predict future price activity by looking at the behavior of past price direction. Where market indicators also enable us to examine the factors that affect the movements of total stock prices, and securities analysts, portfolio managers and academics research these

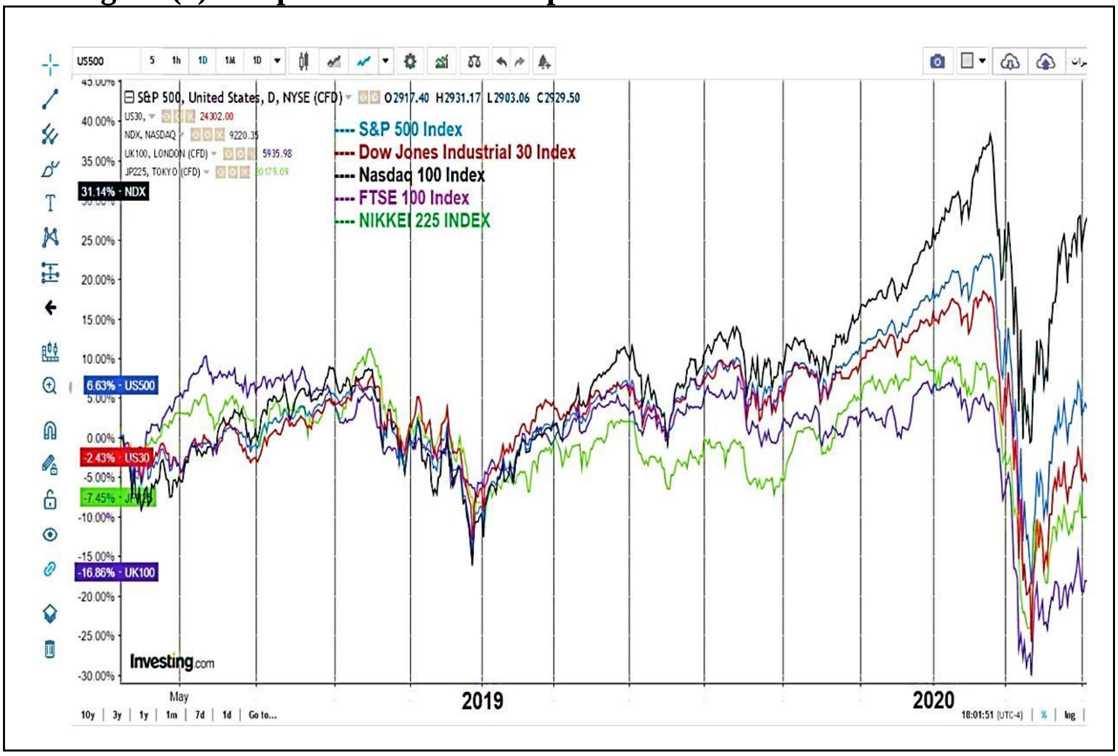
factors that impact the performance of market. Global financial markets have two kinds of indicators, public indicators that measure the market case in general, and sectorial indicators that measure the market case according to a specific sector such as banking, industry, agriculture, telecommunications, and other sectors. We mention some of the most important and well-known indicators. (CMA, 11)

- Dow Jones Industrial 30: It is a major index that contains four sub-indices, the most known of which is the "Dow Jones" Industrial Average. The value of the index is calculated on the basis of shares of the thirty largest industrial companies in the USA.
- Standard and Poor's 500: Including the shares of the (500) leading company in several areas, including (manufacturing, transportation, utilities, money, banking, insurance, technology, and services), these companies appear approximately (0.80) of the market value of stocks traded on the "New York Stock Exchange".
- NASDAQ 100: It is the largest of all US indices, it contains the shares of 3200 companies, most of them in the technology sectors.
- FTSE 100: One of the largest British stock indices, as it includes the shares of the largest hundred British companies on the London Stock Exchange.
- Nikkei 225: Japan's main stock market index on the Tokyo Stock Exchange.

Fourth: Analysis Of Financial Market Indicators:

Daily data was collected for a group of the most important financial market indices in the world for the period from (1 May 2018) to (20 May 2020) in order to discover the extent of the impact of the "Corona pandemic" on the financial markets, based on a study of the most important financial indicators that represent a huge group of international companies in Various economic sectors, and these indicators are (Dow Jones Industrial 30, Stand & Poor 500, Nasdaq 100, FTSE 100, Nikkei 225). Indicator data has been downloaded from investing.com. These indicators can be illustrated by the following figure (3):

Figure (3) Sample Of The Most Important Financial Market Indicators



Source :Investing .com : https://www.investing.com/indices/us-spx-500

We observe through Figure (3) a comparison between the set of financial indicators for the study sample for the period (8 / May / 2018 to 8 / May / 2020) that the financial markets witnessed clear fluctuations in the volume of transactions and financial deals during the past period, especially in the last period of the year 2020. Regarding the last half of the year 2018, the financial markets witnessed some relative stability in the volume of transactions in securities between investors and other companies. The Stand & Poor Index 500 achieved during the last half of the year 2018 financial transactions that ranged between (-9%) to (5%)), And the Dow Jones Industrial Average 30 indexed close turnover during the last half of 2018 and The lowest rate (-13%) and the highest rate (5.1%) were recorded. As for the Nasdaq 100 index, it witnessed a clear decrease compared to the rest of the other indicators. This indicates a decrease in the volume of securities trading for companies included in this indicator during this period of 2018 at a rate ranging between (-16%) to (7%). As for the FTSE 100 index, it recorded its lowest level during the last half of 2018 at a rate of (-12%) and the highest rate (10%).The Nikkei 225 achieved a rate ranging between (-7%) to (11%), and we conclude that the indicators in 2018 were all almost close to their performance and transactions in the financial markets, and they achieved a significant decrease at the end of 2018 due to political and economic tensions between the United States and China and the slowdown The global economist, which made investors and companies worried about investing in securities in the market. As for the year 2019, the financial indicators gradually resumed their activity and the commercial and financial activities of the investors and companies increased with slight fluctuations in the financial indicators down and up, at the end of the year 2019, specifically in December, the start of the global health crisis from the Chinese city of Wuhan, which is known as (COVID19). That began to spread quickly among the population within the city, which led to the complete suspension of companies and financial investments in China, then the disease rapidly developed in the beginning of 2020, specifically in January, to reach a group of other countries in Europe, North America, Asia and this spread of the disease has a direct negative impact on the economic side of the various countries of the world and led to the occurrence of a state of recession for various sectors, especially the global financial markets.

Conclusions and Recommendations:

The COVID-19 virus is a new epidemic that has affected people all over the world, which has hindered production, services, transportation, and tourism and weakened supply and demand, due to confusion and uncertainty that has led to reduced investment and spending, and the collapse of oil prices has a negative impact on the mood of investors, as the regional quarantine has led To hinder production, disrupt supply, and weaken global demand, its material and moral impact has affected the global financial markets, which have witnessed collapses and the worst performance since the outbreak of the global financial crisis in 2008, and thus financial markets give a negative indication of investors' feeling of the trends of the virus's impact on the global economy. We note from the charts that the European financial markets witnessed unprecedented collapses due to the outbreak of the epidemic during the first quarter of 2020. Also, the financial market indicators of the study sample have achieved close performance during the time period, all of which recorded increases and decreases at the same time, depending on the exceptional circumstances experienced by most of the countries. From the comparison between Figures (2) and (3), we conclude that the relationship between the Corona epidemic and the financial markets is an inverse relationship, meaning that the greater the number of cases of the disease, the lower the volume of financial transactions in the financial markets directly. We also conclude that the financial market risks have increased dramatically in response to this dangerous epidemic, in other words that the financial market reactions are highly correlated with the severity of the disease outbreak in each country. Financial markets have become extremely volatile and unpredictable due to the great uncertainty that accompanied the epidemic and the associated financial losses.

Therefore, the need for governments to act quickly and forcefully to overcome the coronavirus and its economic impact, to take effective and well-resourced public health measures to prevent infection, and to implement well-targeted policies to support health care systems, in addition to launching a large-scale and coordinated stimulus package that includes a significant increase in access to concessional financing . And strengthening the global financial safety net and embarking on a debt moratorium in the medium term to build a more sustainable future. These measures should complement other national and international actions to address the health, social and economic impacts of the crisis.

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