

WORLD ECONOMY AND PANDEMIA: IMPACT AND FORECASTS**Batrakova T. I., Hevorhian H. A.***Zaporizhzhia National University*
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ORCID 0000-0002-5710-9416, 0000-0003-1640-1995**Key words:**

coronavirus, pandemic, economy, global economy, crisis, forecast.

The article deals with the problem of ensuring the viability of the world economy during a pandemic. The end of 2019 and the beginning of 2020 caused panic by the outbreak of the coronavirus, which, in addition to the great human suffering, has caused damage to the world economy, the worsening of economic, social and political climate in the world. The epidemic has become one of the biggest threats to the global economy and financial markets. Most financial institutions and banks have stopped predicting the future of the global economy. Meanwhile, fears of the impact of the coronavirus on the global economy have shaken the world's securities markets, actively changing currency rates and so on. Most economists in the world believe that the current epidemic can lead to very severe economic shocks, even at relatively low mortality, this pandemic is worse than the trade wars. Severe epidemics rarely occur, and the magnitude of damage has affected the global economy for decades. Economists estimate epidemic losses at 0.7% of world income in terms of each year (including years when there are no epidemics). The more severe the epidemic is, the higher is its relative cost (in other words, each death in the event of a severe case will cost to the world economy more expensive than in the milder case). With regard to the coronavirus pandemic, according to the Oxford Economics analyst, global GDP will decline by 1.1 trillion in 2020 (1.3%) if it turns into a worldwide, widespread epidemic. It is difficult to say what the world is expecting even in the near future, because the situation is uncertain enough, but most of all the world economy is facing a protracted recession and a new stage of the global economic crisis. Experts from economists at Moody's Analytics believe that the impact of the 2020 epidemic on the global economy can be far worse than the effects of the global recession of 2008-2009. Therefore, at this time, the governments of the countries need to analyze the situation in a timely manner and act effectively, using the tools to combat economic crises, to make rational decisions regarding the increase of budget expenditures.

СВІТОВА ЕКОНОМІКА ТА ПАНДЕМІЯ: НАСЛІДКИ ТА ПРОГНОЗИ**Батракова Т. І., Геворгян Г. А.***Запорізький національний університет*
*Україна, 69600, м. Запоріжжя, вул. Жуковського, 66***Ключові слова:**

коронавірус, пандемія, економіка, глобальна економіка, криза, прогноз.

Статтю присвячено проблемі забезпечення життєздатності світової економіки під час пандемії. Кінець 2019 та початок 2020 року світ охопила паніка через спалах коронавірусу, який, окрім людських страждань, завдав значних збитків світовій економіці, погіршив економічний, соціальний, політичний клімату у світі. Спалах епідемії став однією з найбільших загроз для світової економіки та фінансових ринків. Багато фінансових установ та банків перестали прогнозувати майбутнє глобальної економіки. Тим часом, побоювання впливу коронавірусу на глобальну економіку похитнули світові ринки цінних паперів, відчутно змінили курси валют тощо. Більшість економістів світу вважають, що теперішня епідемія може призвести до дуже тяжких економічних потрясінь, навіть при відносно низькій смертності ця пандемія гірша, ніж торгові війни. Тяжкі епідемії виникають рідко, а масштаби їхніх збитків впливають на світову економіку впродовж десятиліть. Економісти оцінюють збитки від епідемій у 0,7% світового доходу в перерахунку на кожен рік (включаючи роки, коли епідемій не буває). Чим тяжча епідемія, тим вища її відносна ціна (інакше кажучи, кожна смерть у разі тяжкого випадку «коштуватиме» світовій економіці дорожче, ніж у більш легкому випадку). За розрахунками аналітичної компанії Oxford Economics світовий ВВП у 2020 році скоротиться на 1,1 трлн (1,3%) у тому разі, якщо коронавірусна хвороба перетвориться на світову епідемію. Важко казати про те, що очікує світ навіть у найближчому майбутньому, бо ситуація є досить невизначеною, але дійсно світову економіку чекає тривала рецесія та новий етап світової економічної кризи. Експерти-економісти компанії Moody's Analytics вважають, що наслідки епідемії 2020 року для світової,

глобальної економіки, можуть бути значно гіршими, ніж наслідки глобальної рецесії 2008-2009 років. Отже, у такі часи урядам країн необхідно своєчасно аналізувати ситуацію та ефективно діяти, використовуючи інструменти для боротьби з економічними кризами, приймати раціональні рішення, що стосуються збільшення бюджетних трат.

Statement of the problem

Economists involved in the study of disasters have considered the epidemic inevitable. Nowadays, the globalization of the economy, which gives rise to the interconnection and interaction with many industries in the global markets, the emergence of new mechanisms and forms of cooperation has revealed both new positive and negative challenges.

So researchers at the University of Bocconi (Italy) have conducted a series of studies on the impact of economic growth on the spread of viral infections. Comparing the incidence data with the dynamics of the country's GDP, they came to the conclusion that the growth of the economy is directly related to the spread of viruses. This is due to the fact that people have more opportunities to spread communication, and this contributes to the spread of viruses in large areas. In these circumstances, each country seeks to preserve its human and economic potential, using all possible tools, available resources and management effectiveness. Survival at this time is regarded as one of the important criteria for assessing the effectiveness of the countries as a socio-economic system.

Analysis of recent studies and publications

The scientific works of such scientists and economists as O. Adentov, V. Koshkin, Martin Melzer, Nancy Conks, Keiji Fukuda, Warik McKibbin, A. Sidorenko and others are devoted to the study of the problems of the impact of economic growth and globalization of the economy on the spread of viruses. Thus, according to McKibbin and Sidorenko, coronavirus pandemic, compared to the Spanish flu pandemic, will lead to a fall in US GDP by 3% and in Japan by 8.3%. Researcher Julian Jones, chief economist at Capital Economics, believes that the main damage to the economy is not so much connected with the epidemic rather than ineffective measures taken by governments, and the fact that, under the influence of panic, people's economic behavior becomes unreasonable.

Therefore, the above-mentioned problems require the systematization and generalization of theoretical and methodological developments in order to shape the viability of the world economy during a pandemic. Therefore, the question of identifying and researching the main components of the impact on the conservation of human and economic potential of the world is becoming more urgent.

Objectives of the article

The objective of the article is to analyze the economic situation of the world, in accordance with the impact of the dangerous virus COVID-19. Also, the article has certain other goals:

- find a link between the pandemic and the underlying economic processes;
- to try to form a possible forecast for the further development of events.

The main material of the research

Economists, theorists have anticipated a global epidemic that would lead to the global economic crisis. Since 2000, the World Bank has created a panel of experts to investigate the likelihood of epidemics and advise world leaders on what to do to prevent them. The World Bank has every year issued reports warning that the likelihood of an epidemic is increasing catastrophically, but most countries in the world have not yet prepared for it.

Coronavirus outbreak has already brought significant human suffering and losses. A new type of coronavirus, which has firstly appeared in China in December 2019, has already infected more than 130,000 people in at least 116 countries worldwide, according to the World Health Organization (at the moment of writing of the article).

The outbreak of the epidemic has become one of the biggest threats to the world economy and financial markets. Most financial institutions and banks have ceased to predict the future of the global economy. Meanwhile, fear of coronavirus influence in the global economy has shaken world stock markets, exchange rates are changing rapidly, and so on.

At the G-20 meeting in Riyadh on 24 February 2020, Japanese Finance Minister Taro Aso said that the spread of the new coronavirus is a public health crisis that could pose a serious risk to the macro economy through the halt in production activities, interruptions of people's movement and cut-off of supply chains [1].

First, the impact of the pandemic is too early to be discussed, because it is possible will only be analyzed over a certain period of time. According to the WHO, the pandemic of coronavirus can cause death of approximately 15 million people [2].

According to the American scientist, immunologist Anthony Fauci, the COVID-19 vaccine will be available no earlier than in 1.5 years, and it will be as much as 18 months. Until that time, the virus will continue to affect countries and kill people, destroying all economic processes on the planet [3].

And during these 18 months (we should remember that this number is approximate) a number of areas of human activities will feel stagnation.

Starting with talking about the impact of COVID-19 on the economy, it is worth to start with the Chinese economy, due to the economy of that country is the most affected during the epidemic. Before the virus spreading China's economy was active and developed, it occupied a significant share of the world economy (Fig. 1). China has managed to become the central manufacturing center of most businesses operations. Any disruption or interruption of production in China is expected serious consequences in other countries.

China's Purchasing Managers' Index (PMI), the critical manufacturing index, fell by about 22 points this February. This figure is strongly correlated with exports,

and this decline implies a reduction of about 2 % annually in exports. Shipping figures also include a decline in Chinese exports for February.

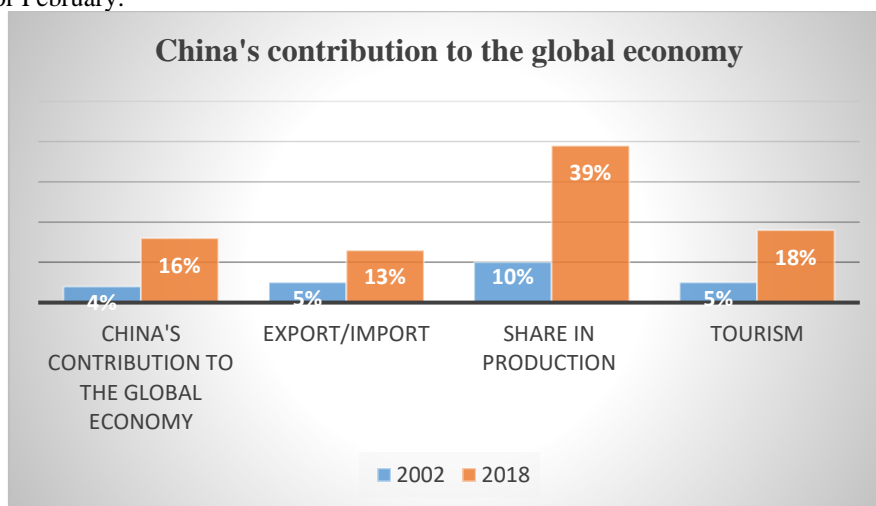


FIG. 1. China's contribution to the world economy

Source: [7]

In China efforts to contain the coronavirus have included quarantine and extensive restrictions on labor and travel mobility, resulting in unexpected delays in restarting factories after the Chinese New Year, and severe cutbacks in many services. These measures provide a significant effect of reducing the impact of the virus, although the effects of the outbreak persist. Further outbreaks in other countries, including Korea and Italy also demanded containment measures, such as quarantine and border closure, albeit on a smaller scale.

The adverse effects of these developments on other countries are significant, including direct disruptions to the global supply chains, weak final demand for imported goods and services, regional declines in international tourism and business travel. The sphere of air services around the world has suffered considerably [1].

China hosts more than 18 million small and medium-size enterprises that have been hit hard by the coronavirus, which has accounted for about 80% of the country's jobs and 50% of private firms' exports.

While uncertainty about the impact of COVID-19 on Chinese productivity remains, recent statistics point to a significant slowdown. The full effect of COVID-19 on global economic chains will become more apparent in the coming months.

The effects of the coronavirus in other economies that are less integrated with China are predicted to be relatively benign, especially in the United States and Canada. Unfortunately, the consequences for Ukraine could be more tangible, as China is one of the largest partners in many industries.

Growth in the euro – zone is expected to remain below 1% per year on average in 2020-21 years, although the impact of the virus outbreak will weaken the results in the first half of 2020.

Forecasts for the United Kingdom and the euro – area are based on the assumption that the basic free-trade agreement for goods will take effect from the beginning of 2021. Even if it implements without problems, it is likely to result in higher costs for services exports and non-tariff administrative barriers to exports and increased output by 2021.

A gradual but modest recovery in many market economies is projected for the period 2020-21, but the extent of this recovery is uncertain. Recovery requires positive reform effects, support for monetary policy in India and Brazil, and targeted policy measures in Mexico. Turkey should stimulate sustained growth as well as a gradual recovery of commodity exporters.

The virus, the crisis, the change in oil prices, the collapse of markets around the world are all fundamentally changing the world around us. After the COVID-19 pandemic, the world and the economy in particular will change beyond recognition, so every possible tool must be used effectively to preserve the human and economic potential of the world.

The crisis is not only a problem, but it is also a new opportunity. We will analyze stock prices of "Apple" (Fig. 2). Because of the epidemic and the decline in production in China, the company could suffer losses, but the company's shares cost 277 dollars (\$11 more than the previous day) [4].

Apple's stock price growth is associated with the presence of "Apple Music" and "Apple TV", which are the largest platforms with music, films and soap operas. With the onset of the crisis, online sales on the above-mentioned platforms have increased, and this is only the beginning. American cities, cinemas, shops and other public places in the United States are not yet closed to quarantine. But people are already trying to sit at home and watch more movies and listen to music accordingly.

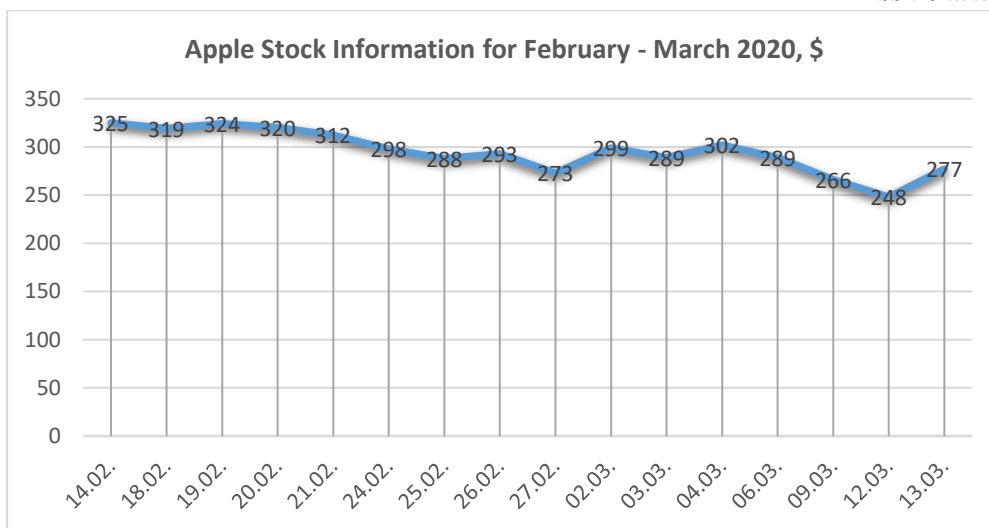


Fig. 2. Apple Shares for February - March 2020
Source: [4]

Online platforms for education are booming. Eight major universities of USA have announced the closure of their campuses and the transition to online education [5], so companies, which are developing Internet-based learning products, have become more popular.

Sales on Amazon's website are increasing due to people buy napkins, water, toilet paper, virus masks, hand sanitizers and other products online, since in ordinary stores these goods are already in deficit or there are no goods at all [6].

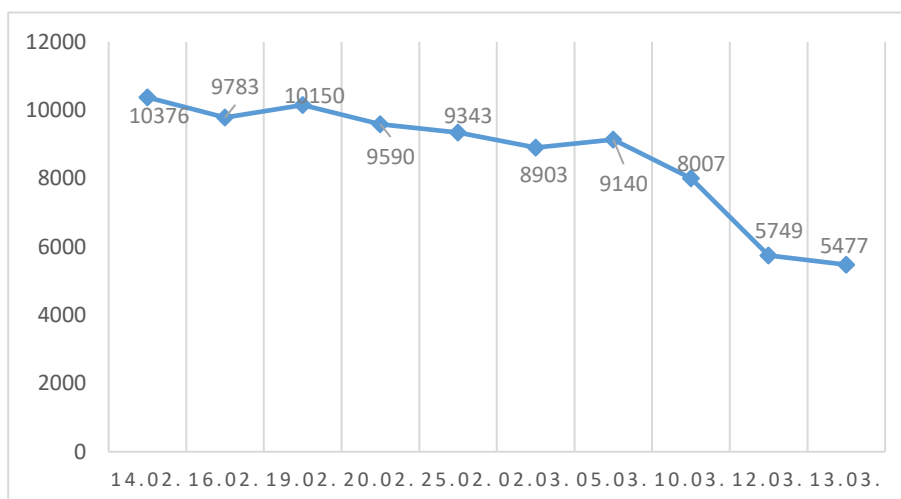


Fig. 3. The rate of Bitcoin to the United States dollar
Source: [8]

The cryptocurrency market is changing, particularly the Bitcoin rate. (Fig. 3). The graph shows that cryptocurrencies have “fallen” by 50% in a short period of time. This is one of the biggest declines in the history of that cryptocurrency. But, despite the high volatility, the payment of cryptocurrencies is becoming increasingly popular.

So we can assume that the amount of electronic money will increase in circulation very soon during the pandemic in Europe and the US, and will crowd out paper money, which are known to carry the virus and one of the possible forms of infection.

Conclusions

So, summarizing, it is worth noting that the development of the world economy and its globalization are directly related to the spread of viruses. It is connected with an increase in the standard of life, people ability to travel, which contributes to the spread of infection.

Infection, now known as COVID-19, has negatively affected the economies of the world, and took lives of people from different parts of the world. Despite the World Bank’s warnings, most countries were unprepared for the pandemic. Economic losses are fueling panic, undermining trade and intensifying the economic crisis. Most of the world economy’s losses are not about the epidemic itself, but about the response to it. It is worth noting that it is people’s panic and fear that can have more negative consequences than the disease itself. Among the

negative consequences of the disease in 2020 are the following:

- the decline in international trade and economic growth;
- stagnation in many industries;
- falling of stock markets and global financial crisis.

But, despite all the misery, the current global economic situation is not as critical as it was in 2008. The world has become economically strong and more ready for challenges. The crisis is not only a problem, but also an opportunity. Only rapid response to changes in the current and effective manner should be planned and effective measures implemented as soon as possible to preserve the human and economic world potential, using all available instruments

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