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COVID-19 AND ITS IMPACT ON UKRAINIAN ECONOMY

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Introduction. Since December 2019, the world economy is in shock due to the epidemic of coronavirus COVID-19. The pandemic has caused significant human losses, and has a negative impact on the socio-cultural life of the population, economic stability and development of each country. Due to the uncertainty of the duration of the COVID-19 virus and related restrictions, it is impossible to predict the further state or development of the economic and social situation in the country.

As of today, it is difficult to develop an effective long-term action plan, but it is possible to form a short-term perspective of the economy. To perform this, it is necessary to consider individual forecasts of economic development and analyze the measures taken by the governments of the world's leading countries to overcome the negative effects of the COVID-19 pandemic. It will enable to form a real vision of possible economic processes course and develop an effective strategic action plan.

Analysis of recent research sources and publications. There is a global and lively discussion of the coronavirus infection spread problem in the media and social networks. Opinions and statistics are published by Ministries and World Health Organizations, state leaders, representatives of coronavirus control headquarters and statistical agencies, leading economists, political scientists and other experts.

Purpose of the article is to study the COVID-19 impact on the economic situation in Ukraine, to determine socio-economic losses and to analyze the world experience in overcoming the negative consequences of the pandemic.

Research results. The pandemic of acute respiratory illness COVID-19 has become a factor that has forced the whole world to rethink its existence, revise development forecasts, short-term economic and social policies. The number of infected is growing every day around the world, and Ukraine in the end of 2020 year [1], in terms of the number of new cases, ranked 4th among countries in the world, as shown in Table 1.

Table 1

Number of new cases of COVID-19 in the end on 2020 year

No	Country	Total cases	New cases	Total Deaths	Total
	J				Recovered
World		47 457 209	+133 176	1 213 534	34 112 159
1.	Poland	414 844	+19 364	6 102	159 986
2.	Russia	1 673 686	+18 648	28 828	1 251 364
3.	Iran	637 712	+8 932	36 160	495 473
4.	Ukraine	411 093	+8 899	7 532	168 868
5.	Netherlands	375 890	+7 743	7 576	N/A
6.	Romania	258 437	+7 733	7 273	181 175
7.	Belgium	447 355	+6 337	11 858	25 999
8.	Switzerland	182 303	+6 126	2 439	83 400
9.	Hungary	86 769	+3 989	1 973	20 856
10.	Mexico	933 155	+3 763	92 100	687 420

The economy of Ukraine was significantly affected by restrictive measures [2], which were introduced on the territory in connection with the announcement of all-Ukrainian quarantine:

- closure of shops, restaurants, catering establishments;
- suspension of international and national flights and transport connections;
- suspension of nightclubs;
- closure of shopping and entertainment centers;
- restrictions on holding mass events;
- reducing demand of goods and services exports;
- lack possibility to import goods;
- money transfers reduction;
- reduction of investments in all sectors of the economy.

All these restrictions led to negative forecasts of GDP (Fig. 1), which is clear from the forecasts of the International Monetary Fund [3], the World Bank [4] and the consensus forecast of the Ministry of Economic Development, Trade and Agriculture of Ukraine [5].



Fig.1. Forecast level of Ukrainian GDP

The projected decline of Ukraine's economy is a consequence of global shocks: unfavorable situation in important commodity markets for Ukraine, closure of commodity markets for Ukrainian exporters, changes in global production chains, the burden on the medical sector, social uncertainty.

^{*} compiled by the authors on the basis of [3,4,5]

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The forecast of the level of GDP according to the US Economic Research Service, given in Table 2 [6], coincides with the forecast of the World Bank and the consensus forecast and is at the level of 3%. This is a rather optimistic forecast due to the impossibility of determining the duration of the pandemic.

Analysis of forecast world economies GDP growth rates

Table 2

Countries	2016	2017	2018-2020	2021-2025	2026-2030			
Developed economy								
USA	1,5 %	2,3 %	2,2 %	2,1 %	2,1 %			
South Korea	2,9 %	3,1 %	2,7 %	2,0 %	2,0 %			
United Kingdom	1,9 %	1,8 %	1,6 %	1,7 %	1,8 %			
Eurozone	1,8 %	2,4 %	1,7 %	1,2 %	1,1 %			
France	1,2 %	1,8 %	1,6 %	1,3 %	1,2 %			
Germany	1,9 %	2,2 %	1,6 %	1,1 %	1,0 %			
Japan	0,9 %	1,7 %	1,1 %	0,8 %	0,9 %			
Emerging economy								
India	7,1 %	6,6 %	7,8 %	7,6 %	6,8 %			
China	6,7 %	6,9 %	6,1 %	5,4 %	5,0 %			
Indonesia	5,0 %	5,1 %	5,2 %	5,0 %	5,0 %			
Brazil	-3,5 %	1 %	2,7 %	3,2 %	3,1 %			
Russia	-0,2 %	1,5 %	1,4 %	1,5 %	1,6 %			
Ukraine	2,3 %	2,5 %	2,7 %	3,4 %	3,4 %			

Let's analyze the impact of the pandemic on more specific industries, according to the information and analytical data of the Economic Incentive Program to overcome the consequences of COVID-19: «Economic Recovery» (Fig. 2).

In terms of economic importance, industry, wholesale and retail trade, and agriculture generate the most added values and create the most jobs.

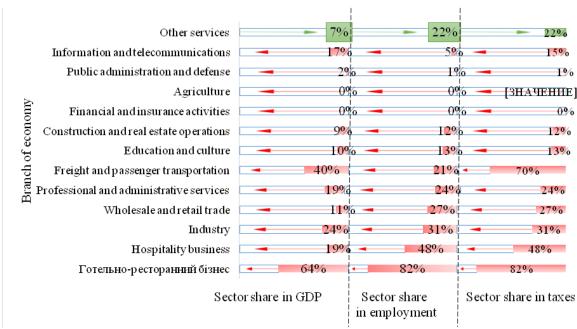


Fig.2. Quarantine measures and its negative impact on economy * compiled by the authors based on [7]

Retail trade in non-food products, hotel and restaurant business, service and entertainment, industry suffer the most from restrictions imposed in response to the spread of the virus, as they involve direct contact

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with customers. Despite fact that the share of hotel and restaurant business in economy is relatively small, a large share of small businesses in need of support is concentrated in this sector.

So, quarantine restrictions create a safe environment for people to live in, but cause significant damage to all sectors of the economy, due to its unpreparedness for the crisis, thus reducing its level of stability and security.

According to the periodical of the Ministry of Economic Development, Trade and Agriculture of Ukraine "Consensus forecast" Ukraine in 2020-2021: the consequences of the pandemic "[5], experts of the consensus forecast survey provided their own assessment of the world economy and formed a scale of major threats to economic recovery in Ukraine (Fig. 3). All of them are relevant not only for Ukraine, because no one was ready and, moreover, no one could have predicted how long and crisis the pandemic would turn out to be.

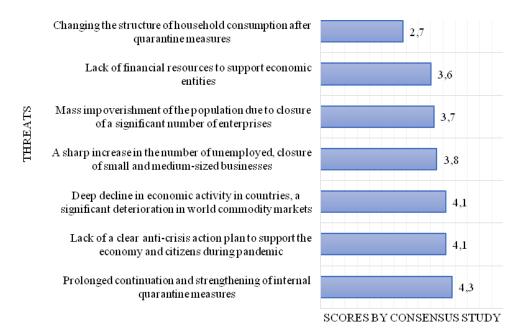


Fig.3. The biggest threats to economic recovery in Ukraine

World experience shows that all crises are over. However, it is necessary to prepare for the negative consequences in order to reduce their scale of impact on business and living standards, as well as for the new challenges that will arise in the post-crisis period. According to these reasons the Ministry of Economic Development, Trade and Agriculture of Ukraine [5] has formed a set of actions to overcome the crisis, which are shown in Table 3.

The set of actions consists of two areas: short-term and medium-term perspective. It is advisable to formulate a long-term strategy after the end of the pandemic, because due to its uncertainty it is difficult to predict the scale of consequences and, accordingly, it is impossible to determine specific measures to address them in the future.

As for now, an action plan based only on the experience gained (in Ukraine, quarantine restrictions apply from March 2020) and world experience can be developed. However, given the uncertainty in the duration of COVID-19 viral infection, it is difficult to predict and assess the consequences that will result in the future.

The head of the European Central Bank, Christine Lagarde, said that Europe could face a serious economic shock, which resonates with global 2008 financial crisis, if world leaders don't take urgent action against the coronavirus outbreak [8].

That is why Ukraine must formulate its own anti-crisis policy, which will protect its interests and determine the main stages in restoring economic stability.

The set of actions to overcome the crisis in Ukraine

SHORT-TERM PERSPECTIVE (during quarantine measures)	MEDIUM-TERM PROSPECTS (after quarantine for the following years)		
Business support	Public health support		
 exempt from payment or provide a deferral of payment of taxes for the period of quarantine, business entities whose activities are prohibited; provide targeted financial assistance to employees who are forced to go on leave at their own expense or to care for a child, at the expense of the stabilization fund; introduce a set of financial measures to support small businesses and sole proprietors. 	 build action protocols in case of a pandemic; have protocols for the treatment of citizens returning from areas at high risk of a pandemic increase funding for health care, including for the restoration of the sanitary-epidemiological service; create closed cycles of domestic production of goods, pharmaceuticals, equipment, raw materials necessary for effective response to the challenges and threats of pandemics, etc. 		
Population support	Socio-economic support		
 provide public financial assistance to the most vulnerable segments of the population to reduce social tensions and stimulate demand; limit the export of socially important goods; introduce temporary state regulation of prices for socially important goods; release population from payment on mortgage loans without accrual of interest and interest; expand the list of medicines in the "Affordable Medicines" program for the population. 	 have anti-crisis measures packages implemented to provide social support to the population; business support; social support of the most vulnerable groups of the population and their further social involvement; increase the efficiency of public administration; increase funding for innovation-oriented research; actively promote and disseminate using digital technologies. 		

To form effective and operational plan to minimize the impact of pandemic on Ukraine's economy, it will be useful to analyze key elements of economic and social measures in some countries to limit the pandemic negative effects and compare them with measures introduced in Ukraine (Table 4).

Table 4

World experience in counteracting and minimizing the consequences of COVID-19

Austria

- 1. The total budget package announced on March 15 is 38 billion euros (about 9.5% of GDP in 2019), which includes:
- — €4 billion for health care, long-term treatment, short-term work and compensation for self-employment, family and micro-businesses for loss of earnings due to illness;
- €9 billion in guarantees to companies, including exporters and the tourism industry;
- €10 billion for deferred payment of income tax on individuals and legal entities (for 2020), social security contributions (3 months) and VAT payments (until the end of September 2020).
- 2. €22 million has been allocated for the study;
- 3. Households have postponed the payment of rent until the end of 2020 and postponed debt service for 3 months;
- 4. New tax measures have been introduced, including €500 million in tax benefits for the hotel sector and € 700 million in support for non-profit organizations;
- 5. The budget package has been increased to \leq 50 billion (13% of GDP), which includes investments in climate protection, affordable housing, health care and digitalization, as well as one-off support for the unemployed and families;
- 6. Reduced the minimum income tax rate from 25% to 20% by January 2020.

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Continuation of table 4

Azerbaijan

- 1. Increased expenditures on health care practices (8.3 million manat or 0.01% of GDP);
- 2. The COVID Public Health Response Fund was established (AZN 114 million or 0.14% of GDP), the government transferred AZN 20 million (0.02% of GDP) to the Fund, with additional contributions from the public and private sectors);
- 3. Support for affected legal entities and individuals in the amount of 3.3 billion manat (4.1% of GDP);
- 4. Introduced tax benefits for the annual exemption from land tax and property tax for certain sectors, including tourism, passenger road transport and cultural facilities;
- 5. Income taxpayers received 75% of the exemption, and taxpayers under simplified procedures 50% of the exemption;
- 6. Rental property tax in areas affected by COVID reduced from 14% to 7%;
- 7. A one-time extension of social assistance announced on April 4 as part of a package of assistance to unemployed and low-income people who have lost their earnings due to a special quarantine regime.

Canada

- 1. \$ 20 billion (0.9 percent of GDP) has been allocated to the health care system to support expanded testing, vaccine development, medical supplies, mitigation measures and greater support for indigenous peoples. communities:
- 2. About \$ 249 billion (11.6 percent of GDP) in direct aid to households and companies;
- 3. About \$85 billion (3.9 percent of GDP) in the form of liquidity support through tax deferral;
- 4. The federal government has announced \$ 95 billion in credit lines (including \$ 13.8 billion in bad loans) to lend to stressed companies;
- 5. Farm Credit Canada will receive support from the federal government, which will provide producers, agribusinesses and food processors with an additional \$ 5.2 billion in loans.

USA

- 1. The wage protection program and the Law on Improving Health Care include:
- \$ 321 billion for additional non-repayable loans from the Small Business Administration and guarantees to help small businesses that retain employees;
- \$ 62 billion for the Small Business Administration to provide grants and loans to support small businesses;
- \$ 75 billion for hospitals;
- \$ 25 billion to expand virus testing.
- 2. Approximately \$ 2.3 trillion (about 11% of GDP) is included in the CARES Act, which includes:
- USD 293 billion for the provision of one-time tax benefits to individuals;
- 268 billion US dollars to expand unemployment benefits;
- \$ 25 billion to create a food security network for the most vulnerable;
- 510 billion US dollars to prevent corporate bankruptcy by providing loans, guarantees;
- \$ 349 billion in non-repayable loans and guarantees from the Small Business Administration to help small businesses that retain employees;
- \$ 100 billion for hospitals:
- \$ 150 billion in transfers to state and local governments;
- \$ 49.9 billion for international assistance.

China

- 1. Fiscal measures of 4.6 trillion yuan (4.5% of GDP), which include:
- increase the cost of preventing and combating epidemics;
- production of medical equipment;
- accelerated payment of unemployment insurance and its extension for migrant workers;
- tax benefits and waiver of social security contributions, public investment;
- 2. Delay in loan payments with extension of the deadline until the end of March 2021;
- 3. Easing restrictions on the size of online loans and other credit support measures.

Continuation of table 4

Japan

- 1. Adopted the Extraordinary Economic Package against COVID-19 in the amount of 117.1 trillion yen (21.1% of GDP in 2019), which includes:
- develop preventive measures against the spread of infection and strengthen the therapeutic potential (0.5% of GDP in 2019);
- protect employment and enterprises (16% of GDP in 2019);
- recovery of economic activity after containment (1.5 percent of GDP in 2019);
- restoration of a stable economic structure (2.8% of GDP in 2019);
- increasing readiness for the future (0.3% of GDP in 2019);
- deferral of taxes, social security contributions, soft loans from public and private financial institutions.
- 2. The second draft of the supplementary budget for fiscal year 2020 (worth 117.1 trillion yen) (21.1% of GDP in 2019) was adopted:
- health measures;
- support of enterprises, households;
- transfers to local authorities;
- raising the level of the COVID-19 reserve fund.
- 3. In October, Japan announced a new contribution of \$ 10 million to the COVID-19 Crisis Initiative.

Germany

- 1. Two additional budgets of €156 billion (4.9% of GDP) were adopted in March and €130 billion (4% of GDP) in June;
- 2. Costs of medical equipment, vaccine production;
- 3. Expanded access to short-term work, provided subsidies to preserve jobs and income of employees;
- 4. Expanded childcare allowance for low-income parents and easier access to basic income support for the self-employed;
- 5. Grants of €50 billion for small business owners and the self-employed, severely affected by the pandemic;
- 6. Increased the term of unemployment insurance, child care benefits; local governments have announced their own measures to support their economy in the amount of 141 billion euros in direct support and about 70 billion euros in state loan guarantees.

Ukraine

- 1. Fines for certain violations of tax legislation were abolished from March 1 until the last day of quarantine;
- 2. Moratorium on tax audits:
- 3. Land rent was not accrued and was not paid for March 2020;
- 4. Parliament has passed a law increasing the thresholds for a simplified tax regime;
- 5. 300% supplement to the salary of medical staff working with patients with COVID-19;
- 6. Permission for households to deduct the cost of medicines from COVID-19 from the calculation of personal income tax;
- 7. A one-time increase in the pension of low-income pensioners by UAH 1,000 in April and a regular monthly pension supplement of UAH 500 for pensioners aged 80 and over;
- 8. Medicines, medical devices and other equipment used to prevent or combat COVID-19 are exempt from import duties and VAT;
- 9. State insurance for medical workers who became disabled as a result of an illness related to COVID-19;
- 10. Reduced access to a number of social support programs;
- 11. The minimum amount of unemployment benefits has been increased from 650 to 1,000 hryvnias for applicants.

* compiled by the authors according to [9]

Analyzing the data shown in Table 4, it can be argued that all countries have suffered significant losses and economically negative consequences. To maintain a stable economic and social balance, tax regulation measures were taken, people were provided with the necessary products and medicines, and benefits were provided for enterprises and small businesses. That means each country tries to financial support and ensure the viability of its economy through the centers of entrepreneurship, because it is the most vulnerable in this situation (provide jobs, pay taxes, insurance, rent, and so on).

A positive factor is that the countries are forming a system of measures taking into account the world experience of pandemic response, which will directly allow to develop an effective system of response to destabilizing factors.

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Most experts believe that people's behavior and demand structure will change after the end of the pandemic, but not significantly. However, most experts believe that the processes of digitalization (digitization), robotics and the use of modality "remote workplace" will accelerate. According to experts, the crisis may open a "window of opportunity" to change the Ukrainian economy in the direction of transition to a new quality [5].

Conclusion. The results of the study suggest that the economic crisis triggered by the COVID-19 pandemic is global. Each country has felt the direct impact of the pandemic in all areas of the economy and the social well-being of the population.

Given the uncertainty surrounding the duration of the coronavirus, specific figures are difficult to predict for both Ukraine's economy and the global economy as a whole.

However, it is possible to minimize the negative effects of a pandemic. To minimize the impact of the virus, it is necessary to forecast trends and perform calculated work to obtain data. The results of the analysis will be the basis for making informed management decisions in conditions of limited resources. The basis for overcoming the crisis should be rapid tactical decisions.

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Онищенко Володимир Олександрович, доктор економічних наук, професор. Сівіцька Світлана Павлівна, кандидат економічних наук, доцент. Черв'як Анна Володимирівна, аспірантка. Національний університет «Полтавська політехніка імені Юрія Кондратюка». Аналіз впливу COVID-19 на економіку України. Досліджено вплив COVID-19 на економічну ситуацію в Україні. Визначено темпи приросту захворюваності на території України й інших країн світу. Виконано аналіз та визначено соціально-економічні втрати у різних галузях економіки. Визначено перелік запроваджених карантинних заходів на території України, які мали найбільш вагомий негативний результат. Досліджено галузі економіки, котрі мали змогу продовжувати свою діяльність в умовах карантину й збільшили свої прибутки. Здійснено порівняльний аналіз прогнозованого рівня ВВП за різними джерелами інформації на наступний період. Проаналізовано експертну оцінку стану світової економіки за результатами консенсус-прогнозу та сформовано шкалу найбільших загроз для економічного відновлення в Україні. Досліджено комплекс дій з подолання кризових явищ, який складається з двох напрямів: коротко- й середньострокової перспективи. Аргументовано доцільність та аспекти впровадження кожного з напрямів. Визначено необхідність для України формування власної антикризової політики, короткострокових заходів і методів мінімізації негативних проявів пандемії, що визначать основні етапи у відновленні економічної стабільності. З метою формування актуального, дієвого та оперативного плану мінімізації впливу пандемії на економіку України було проаналізовано ключові елементи економічних і соціальних заходів країн світу, спрямованих на обмеження негативних впливів пандемії й порівняно їх із заходами, уведеними на території України.

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Ключові слова: виклики, загрози, економічна безпека, пандемія, рівень ВВП.

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Onyshchenko Volodymyr, DSc (Economics), Professor. Sivitska Svitlana, PhD (Economics), Associate Professor. Cherviak Anna, Postgraduate Student. National University «Yuri Kondratyuk Poltava Polytechnic». COVID-19 and Its Impact on Ukrainian Economy. The impact of COVID-19 on the economic situation in Ukraine is studied in the article. The growth rates of morbidity on the territory of Ukraine and other countries of the world are determined. The analysis is carried out and social and economic losses in various branches of economy are defined. List of implemented quarantine measures on the Ukraine territory, which had the most significant negative results, is determined. The branches of the economy that were able to continue their activities under quarantine and increase their profits are studied. A comparative analysis of the projected level of GDP from different sources of information for the next period is performed. Key elements of economic and social measures world countries for formation actual, effective and operative plan of minimization pandemic influence on Ukraine economy are analyzed by authors.

Key words: challenges, threats, economic security, pandemic, GDP level.