

https://doi.org/10.15407/econforecast2021.02.45 JEL: E20, O11, O38

Hanna Yatsenko¹

THE FACTORS OF POST-COVID RECOVERY IN THE GROWTH OF UKRAINIAN ECONOMY IN 2021-2022

Given the negative impact of the COVID-19 pandemic on the global economy, the study focuses on the higher risk of negative long-term consequences of the pandemic in developing economies (particularly in Ukraine). This is due to the limited fiscal support of economies in these countries, in contrast to the numerous measures taken by the governments of developed countries to support citizens and businesses during the corona crisis. The devastating long-term effects of the coronary crisis on the economies and populations of poorer countries will continue until governments take steps towards economic recovery and promotion of economic growth.

Based on the identification of the main drivers of economic growth in Ukraine in 2016-2019, as well as the generalization of the experience of post-COVID economic recovery in other countries (including Australia, USA, EU, Japan and advanced Asian countries), the study proposes ways to restore Ukraine's economy and minimize adverse effects of the COVID-19 pandemic. The author proposes to promote the recovery of the Ukrainian economy through expanding domestic (both consumer and investment) demand and intensifying innovation-based development.

As shown by the analysis of international experience, consumer demand under the pandemic conditions should be encouraged, in particular through the development of domestic tourism; assistance to small businesses in diversifying their sales channels; promotion of demand in the online market. The author points out that in order to promote investment demand it is necessary to emphasize the development of infrastructure, introduction of temporary investment incentives, and transfer of losses received in previous tax periods. It is proposed to intensify the innovative development of Ukraine by creating an environment favorable to the development of small

¹ **Yatsenko, Hanna Yuriyivna** - PhD in Economics, Researcher, Department of Modeling and Forecasting of Economic Development, State Institution "Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine" (26, P. Myrnoho St., Kyiv, 01011), ORCID 0000-0003-4117-1781, e-mail: yatsenko.anna@gmail.com

[©] Hanna Yatsenko, 2021

ISSN 2663-6557. Economy and forecasting. 2021, № 2: 45-59



innovative enterprises (startups), increasing research and development costs, and integrating business, education, and research organizations.

Keywords: COVID-19 pandemic, post-COVID economic recovery, domestic demand, innovation-based development

The COVID-19 pandemic has led to a global health crisis, increased uncertainty in the economy, disruption of global supply chains, a 5.3% reduction in world trade, restricted movement of millions of people, triggered a labor market crisis², and worsened the financial condition of most companies³ (primarily in manufacturing; accommodation and food services sector; real estate activities; wholesale and retail trade; and transportation sector). Global GDP fell by 3.3%⁴ in 2020 compared with 0.1% in 2009. The state of emergency due to coronavirus continues this year⁵.

Due to the significant role of SMEs in the economy and the high share of the service sector in GDP, the decline in developed economies in 2020 has been more profound than in developing countries. However, numerous government interventions that are aimed at supporting citizens and businesses (such as unemployment benefits, temporary tax cuts and tax deferral, COVID-19 wage subsidies, extensive support to affected companies, including loan guarantees and equity injections, etc.) will allow developed countries to avoid severe negative effects of the corona crisis. But limited support for economies in developing countries will lead to negative long-term effects of the corona crisis, which will continue until governments take action to restore economic growth and stimulate economic recovery.

As Ukraine is a developing country, the purpose of this study is to identify ways of post-crisis recovery of the Ukrainian economy and mitigating the negative effects of the COVID-19 pandemic.

A review of sources on the research topic. The issue of encouraging stimulating economic recovery is actively discussed at the international level. In particular, the United Nations economists' report "World Economic Situation and Prospects" (February 2021) [5], notes that a sustainable global economic recovery is possible only on the condition of: investments in economic, social and climatic sustainability on the planet; increased international trade; and avoiding premature introduction of austerity policies.

The latest edition of Africa's Pulse: COVID-19 and the Future of Work in Africa: Emerging Trends in Digital Technology Adoption [6] points out that the prospects

 $^{^{2}}$ According to estimates by the International Labour Organization [1], as of 29 April 2020, 305 million jobs have been lost globally.

³ For example, the US airline Delta Air Lines lost 5.4 billion USD in the 3rd quarter of 2020 [2]; and last year in the processing industry there was a recession for the first time since the financial crisis of 2008-2009 (by 6.8% yoy, according to UNIDO [3] at the moment of writing).

⁴ World Economic Outlook Database: April 2021. International Monetary Fund. URL: https://www.imf.org/

⁵ As of 16 June 2021 there were over 176 million confirmed cases of COVID-19 worldwide, and 3,82 million were fatal [4].



for post-corona recovery in Africa depend on fundamental reforms to create jobs, attract investment, increase competitiveness, and reform African economies [6]. The report notes that the prospects for post-COVID recovery in Africa depend on fundamental reforms to create jobs, attract investment, improve competitiveness and reform social protection for the vulnerable.

The official website of the European Council and the Council of the European Union [7] notes that, during an informal video conference on 26 February 2021, the EU Education and Research Ministers emphasized the importance of research and innovation both in the economic recovery from the COVID-19 pandemic and in reducing the vulnerability of EU economies to future crises.

The UN Inter-Agency Task Force on Social and Solidarity Economy (UNTFSSE) [8] notes that a healthy population is an important condition for exiting the COVID-19 pandemic, while the equitable access to quality health services, education, sanitation and social protection are key factors that will help societies to be disease-resistant to future crises. Additionally, addressing the urgent climate challenges, digitalization of business, demographic transition and their implications for the labor market is key to ensuring social justice and dignified living conditions.

The 2030 Agenda adopted at the UN General Assembly in 2015, states that recovery from the crisis should be promoted through health reform, overcoming poverty, reducing gender inequalities, improving the environment and building a sustainable food system. It is also noted about the importance of cooperation between private and public sectors at various levels, as well as strengthening partnerships between stakeholders. Additionally, it is highlighted about the importance of attracting long-term investments into the country's economy.

The issues of stimulating economic recovery are also covered in the analytical materials of information agencies, ministries and other central executive bodies, as well as scientific works of Ukrainian and foreign scientists and practitioners. Thus, *Bloomberg* agency experts believe that the driver of global economic recovery will be the money accumulated by consumers during the pandemic and spent either on consumption (shopping, restaurants, tourism, leisure and entertainment, sports) or on debt settlement [9].

A report by the International Energy Agency [10] notes that fiscal incentives and the vaccination process will help the global economy recover from the pandemic.

According to a research survey, BBC Worklife journalists note that global economic recovery will be facilitated by increased short-term horizon consumption [11].

In the thematic issue of the Consensus Forecast "The influence of COVID-19 on economy and society: results of 2020 and calls and threats of post-pandemic development" [12], the officials of the Ministry of Economic Development, Trade and Agriculture of Ukraine provided the most likely scenarios for recovery of the Ukrainian economy from the COVID-19 pandemic, as well as the trajectories for transition to sustainable positive development [12].

More than 200 measures to stimulate the Ukrainian economy to overcome the consequences of the COVID-19 epidemic are presented in the Program of the



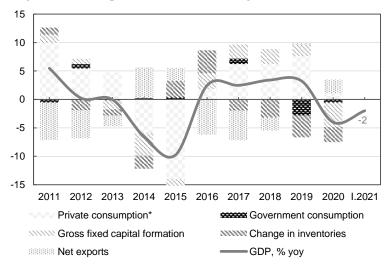
Cabinet of Ministers of Ukraine to restore the economic health of the country in all sectors [13].

Dolbnieva D.V. in her study [14] states that the impetus for the recovery of the Ukrainian economy as well as ensuring its dynamics will be provided by the delayed (unsatisfied) consumer demand.

Shevchenko V.Yu. [15] emphasizes the important role of policy in preventing the spread of coronavirus. The author notes that: short-term policy (one or two quarters) should focus on business and consumption recovery and fiscal stabilization; medium-term policy should focus on macroeconomic stability and sustainable economic growth; and long-term policy of sustainable growth should focus on structural reforms and innovation.

This paper based on the experiences of post-COVID economic revival in other countries (in particular Australia, the US, EU countries, Japan, and advanced Asian economies) attempts to expand the existing proposals on the revival of Ukraine's economy.

Presentation of basic material of the research. Ukraine's economy resumed growth in 2016 after a sharp decline in 2014-2015 (against the backdrop of the political, economic crisis and hostilities in Eastern Ukraine). By the start of the COVID-19 pandemic, the Ukrainian economy had been growing steadily, with real GDP increasing at an annual rate of 2.4-3.4%. Domestic demand was the main driver of economic growth in this period (2016-2019) (Figure 1).



* Includes final consumption expenditure of households and non-profit institutions serving households.

Figure 1. Contribution of end-use categories to percent change in real GDP *Source:* State Statistics Service of Ukraine, author's own calculations.

Sustained growth in consumer demand was supported by the rising income (wages, pensions, remittances); investment demand – by improved business expectations of companies against the background of a sufficiently favorable external price situation and the gradual improvement of the financial results of companies.



Despite the 2.4-3.4% growth in the Ukrainian economy in 2016-2019, the conditions for sustainable economic development were not established. This is evidenced by Ukraine's notable lagging behind the world's leading countries⁶ in international rankings of the quality of life. Thus, in terms of per capita GDP based on purchasing power parity (PPP), Ukraine ranked 96th out of 186 countries in 2019 and was positioned between Peru and Paraguay. Ukraine was ranked 85th in the Global Competitiveness Index 2019. It ranked 85th out of 141 (losing two positions compared to 2018), primarily due to regression in financial systems, and deterioration in macroeconomic stability and innovation capabilities. The Legatum Prosperity Index⁷ ranked Ukraine 96th out of 167 countries in 2019 (moving this country only to 92nd place in 2020). In the Numbeo rating (Quality of Life Index for Country⁸) in 2019, Ukraine was ranked 62nd (out of 71), falling below all neighboring countries. In 2021 Ukraine moved to 59th place in this ranking out of 83 countries, having positive developments in health care.

The only serious advantage of Ukraine remains education when analyzing the quality of life, whose level allows our country to maintain its position among countries with a high level of human development. In particular, Ukraine ranked 74th out of 189 countries in the Human Development Index (HDI) in 2019, with a HDI at 0.779, which is above the global average (0.737). This demonstrates that it is Ukraine's high level of human capital that should be the basis for improving the quality of public administration and, consequently, the quality of life.

Following global trends, Ukraine's quality of life deteriorated in 2020, with the economy falling by 4% yoy. The main reasons are: quarantine restrictions imposed in response to the COVID-19 pandemic, shrinking supply of goods and services, squeezed consumer demand and falling investment demand.

At the beginning of 2021, the Ukrainian economy continued to decline, with real GDP shrinking by 2% yoy⁹ in Q1. The impact of the COVID-19 pandemic is still being felt. Thus, despite coronavirus incidence rates, severe quarantine restrictions continue in Ukraine's regions, having a negative impact on the country's economy (primarily on the service sector). Against the background of general uncertainty and inability to make plans for the future, the issues of logistics and supply chain management also remain relevant.

⁶ Information from World Bank (https://data.worldbank.org/indicator/ NY.GDP.PCAP.PP.CD), World Economic Forum (https://www.weforum.org/), *Legatum* Institute (https://www.prosperity. com/rankings), *Numbeo* (https://www.numbeo.com/quality-of-life/rankingsby_country. jsp?title=2019), UN (http://hdr.undp.org/sites/default/files/hdr2020.pdf).

⁷ The Legatum Prosperity Index is a composite indicator from the UK think tank *The Legatum Institute*, which measures the achievements of countries around the world in terms of their well-being and prosperity [16].

⁸ In addition to the overall quality of life index, *Numbeo* contains a set of sub-indices that are calculated according to certain indicators. For example, purchasing power of the population, pollution level, climate, air pollution, security, crime, health care, cost of living, real estate price, housing conditions, transport, commuting time, etc. [17].

⁹ Flash estimate of GDP.



But multilateralism and unprecedented collaboration between countries on a vaccine against coronavirus and the resulting invention of vaccines¹⁰ and their worldwide distribution could stop the pandemic of coronavirus disease COVID-19 during the current year. This is likely to be the basis of economic recovery in the world and in Ukraine. However, there is high uncertainty about the deployment of vaccination. This is a consequence of, *firstly*, the public mistrust of vaccines against COVID-19. *Secondly*, the virus that causes COVID-19 mutates. As a consequence, vaccination cannot guarantee 100% human safety from the spread of the disease. *Thirdly*, the uneven distribution of vaccines between rich and poor countries in the world.

Despite the uncertainties in achieving the desired results, the mass vaccination campaign is gradually gaining momentum and provides grounds for optimism about rapid economic growth. Thus, according to the online portal of statistics STATISTA in 2021, the global economy will grow by 6.0% yoy and in 2022 the growth rate will slow down to 4.4% yoy. Emerging market economies (including China and India) are expected to grow strongly in 2021-2022. Developed economies (in particular, the US and the EU) will also grow, but at a slightly slower pace (see Fig. 2). We estimate that Ukraine's real GDP growth rate will reach 4.5% yoy in 2021 (with a subsequent slowdown to 4.1% yoy in 2022).

In 2021-2022, domestic demand is likely to be the main driver of Ukraine's economic growth. Exports of agricultural commodities and food products will also support economic growth. However, imports will recover more rapidly on the background of: the realization of pent-up demand for imported goods (including high-tech products) and rising energy import prices. As a consequence, the contribution of net exports to GDP will become negative again.

Additional factors for the post-COVID recovery of the Ukrainian economy in 2021-2022 include: an increase in venture capital investment in Ukrainian start-ups, the localization of production (in particular in the processing sector), and increased output in the services sector.

Let us dwell in more detail on the most important factors of economic growth and provide recommendations for accelerating the recovery of the Ukrainian economy in the coming years.

Consumer demand

In 2021-2022 the following factors will support consumer demand in Ukraine

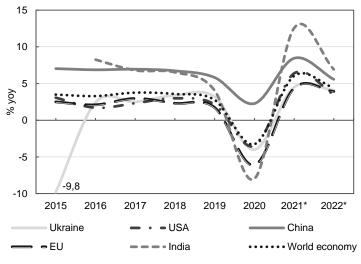
- growth of real incomes of citizens;
- subsequent increase in online sales;
- decrease in the unemployment rate and new job formation;

- expansion of supply of goods and services (as a result of taking control over the pandemic and quarantine withdrawal);

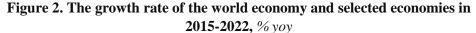
- an increase in public demand for travel.

¹⁰ There are currently 10 different vaccines available worldwide, including Comirnaty by Pfizer/BioNTech (USA, Germany); mRNA-1273 by Moderna (USA) AZD1222 by Oxford-AstraZeneca (Sweden, UK); Covaxin by Bharat Biotech (India), etc.





* - estimates; for Ukraine, the author's estimates.



Source: Statista, SSSU, author's estimates.

Active public policy measures are also aimed at stimulating consumer demand in most countries worldwide. In Japan, for example, consumer spending on domestic tourism during the pandemic has been stimulated by subsidies to tourists (as part of the Go to Travel initiative). These subsidies can cover up to half of travelers' expenses, namely: a 35 per cent discount on the total cost of the tour, plus vouchers (15 per cent of the total cost of the tour) covering other expenses during the trip. An additional means of encouraging domestic travel spending is a 50% reduction in the cost of a ticket for travel from Tokyo to:

- Hokkaido, Nagano, Niigata (from 20 August 2020 to March 2021);
- Akita, Aomori, Sendai, Hakodate (until 30 September 2021).

Australia's experience in promoting domestic tourism is also interesting. For example, the Australian Government agency Tourism Australia (TA) supported the domestic tourism industry during the COVID-19 pandemic by encouraging Australians to spend money on holidays in Australia. For this purpose, TA tailored the Aussie Specialist Program to meet the needs of the domestic tourism industry, providing travel trade operators with the latest news as well as up-to-date information on Australia's tourist attractions. Disseminating this information to Australian travelling customers encourages them to choose Australia's tourist destinations. The Australian Travel Club's YouTube channel helps to encourage people to travel around Australia and includes videos on: famous tourist destinations and wilderness areas of the 'Green Continent'; Australian flora and fauna; and the finer points of Australian travel planning.

In response to the COVID-19 pandemic, OECD governments have made significant efforts to support retail supply. For example, entry costs for new businesses (including registration and licensing costs) were reduced due to expectable closures of small businesses. In order to facilitate the supply of essential



goods, some countries temporarily eased the legal regulation of working hours (Table 1): flexible working hours were introduced (Belgium, France), employees were allowed to work overtime (Germany, France), staff transfer standards were eased (Belgium, France), and citizens were provided with the opportunity to receive unemployment benefits and work part-time in the retail sector simultaneously (Belgium, France, Great Britain).

Table 1

Country	Temporary deregulation of essential retail activities		
Belgium	Temporary easing of legal regulation:		
	- duration of working hours;		
	- movement of workers both within and between firms;		
	- flexible working hours.		
France	Temporary easing of labor law requirements, namely:		
	- movement of workers between firms;		
	- normal working hours (day, week);		
	- reducing the statutory minimum rest periods between work shifts;		
	- working on a day off.		
Germany	Legislative changes regarding:		
	- increasing the maximum allowable number of working hours per week;		
	- requirements for rest and working hours on holidays;		
	- temporary authorization for delivery of essential goods by workers without a		
	Driver Certificate of Professional Competence.		
Great Britain	According to the Coronavirus job retention scheme workers are allowed to		
Ofeat Diftaili	work in other jobs during their leave of absence.		

Temporarily	easing	regulations on	essential	retail activities	S
I Cimpor at my	casing	regulations on	costinia	i cian activitici	3

Source: compiled by the author.

As to the Asian countries, for example, in order to stimulate supply in retailing, the Korean government helped small businesses diversify their sales channels (including by entering an online sales platform). In Japan the government supported SMEs with subsidies that helped firms diversify and expand their distribution channels.

Investment demand

Investment activity of Ukrainian companies in 2021-2022 will be encouraged by:

- satisfaction of the SMEs' deferred demand for investment resources (including through the launch of the "Affordable Loans 5-7-9%" program);

- housing construction growth (due to cheapening of mortgage loans under the state program "Affordable mortgage 7%");

- establishment of supply chains;

- localization of supply chains;

- increasing budget expenditures for road infrastructure;

- the companies' improved business expectations due to reduced risks and uncertainty about future profits; improved financial results due to the relatively favorable external pricing environment.



The growth of public investment in infrastructure in 2021-2022 due to COVID-19 pandemic is in line with global trends. For example, as part of the Action Plan¹¹, signed in April 2020, G20 finance ministers and central bank heads agreed to redouble efforts to mobilize and promote quality public and private investment in infrastructure.

In order to reduce the number of bus passengers during the quarantine period, investments in cycling infrastructure have increased. For example, in March 2020 Bogotá's (the capital of Colombia) cycle tracks were expanded: an 84-kilometre network of temporary cycle tracks was added to the existing 550-kilometre network. And the city's development plan for the next four years envisages the creation of an additional 280 km of cycle lanes.

Among the factors that will constrain investment demand in Ukraine in the coming years are the following: reduction of investment in green energy facilities in case of changes in the Tax Code of Ukraine (in terms of excise tax); opening the land market to legal entities from January 1, 2024. The latter factor will in return stimulate the growth of investment "in irrigation/watering, growing crops with higher added value and introduction of the latest technologies" [19] in the long run.

Temporary tax incentives to restore investment activity of enterprises in Ukraine and in other countries

In Ukraine, the following measures are aimed at stimulating the investment demand of enterprises: loan repayment during the quarantine period, tax preferences, support for employers and employees of small and medium-sized businesses¹², and tax incentives for investors making significant investments in Ukraine.

Similar measures to support businesses under quarantine were introduced by other countries of The Eastern Partnership [20]. In particular, in Moldova the payment of corporate income tax is postponed, and the VAT rate is reduced from 20 to 15% for the accommodation and food services sector (from May 1, 2020). In Armenia, there are preferential business loans (for the purchase of equipment), in Belarus, state-guaranteed loans to enterprises by state banks, etc.

Some countries, in particular Germany, China, France, the UK and Italy, have introduced tax holidays for the period of quarantine. In Germany, for example, the VAT rate was reduced from 19% to 16% from July to December 2020. In China, tax exemptions were extended to logistics and courier companies, transport, tourism, and hotel and restaurant businesses. Italy and the UK reduced taxes and credit rates

ISSN 2663-6557. Economy and forecasting. 2021, № 2

¹¹ In response to the COVID-19 pandemic, in April 2020, at the G20 Summit, G20 leaders signed an Action Plan [18], which contains key principles for meeting the commitments of participating countries to:

⁻ promoting international economic cooperation in the context of the corona crisis;

⁻ hope for a robust, sustainable and inclusive global economic recovery.

The G20 Action Plan was updated last October.

¹² For details see: https://covid19.gov.ua/prohramy-pidtrymky-biznesu



for small businesses. France introduced a tax deferral. In the EU, some funds of the Economic Recovery Fund were used for tax benefits¹³.

In countries where capital investment is a driver of economic growth (e.g. Australia, Austria, Germany, New Zealand, some Asian countries), temporary tax incentives in the form of accelerated (bonus) depreciation have been requested to help businesses and stimulate investment activity (Table 2).

Table 2

Country	Temporary tax incentives		
Australia	1.100% depreciation of the item (new or used) used for the first time or installed for use from 12 March 2020 to 31 December 2020. The value of the property, plant and equipment being depreciated must be less than AUD 150,000.		
	2. Depreciation in the amount of 50% of the value of a new item of property, plant and equipment acquired from 12 March 2020, first installed and used until 30 June 2021. In this case, there is no limit on the value of the item of property, plant and equipment being depreciated.		
Germany	Degressive depreciation with a multiplying coefficient of 2.5 applied to the basic rate of depreciation calculated on a straight-line basis. The use of the multiplying factor applies only to items of property, plant and equipment acquired or produced in 2020 and 2021.		
Singapore	Depreciation of fixed assets (equipment and machinery) acquired in 2020 over two years: 75% of the asset value in 2020 and 25% in 2021.		

Temporary tax incentives to restore investment demand in selected countries

Source: compiled by the author.

Venture investment in Ukrainian startups

According to the Ukrainian Venture Capital and Private Equity Association (UVCA), venture capital investment in Ukrainian startups in 2019 amounted to \$509,900,000¹⁴, which was 5.8 times more than in 2016. And although Ukraine is still behind the overwhelming number of emerging countries in this indicator, the positive dynamics¹⁵ of startup investment is definitely observed.

Venture capital investment is likely to give a major boost to innovation and economic growth in the Ukrainian economy in the coming years. However, the limiting factor today is the relatively small number of successful startups. Thus, according to the latest data of *"Startup Ranking"*, Ukraine ranks 40th among 201 countries according to the analysis of the number of startups, and behind both developed economies (including the US, Australia and the EU) and developing countries (in particular, Latin America and Asia). One of the reasons for this is the unformed environment for the development of small innovative enterprises (startups), which is a direct consequence of the spontaneous and poorly organized cluster

¹³ The €750 billion EU economic recovery fund was set up to help the European economy get out of recession as soon as possible after the end of the coronavirus pandemic.

¹⁴ Three companies accounted for more than 70% of this amount: Grammarly, People.ai and GitLab.

¹⁵ By comparison, according to the Latin American Venture Capital Association (LAVCA) [21], venture capital investment in start-ups in Latin America reached USD 4.6 billion in 2019 (up from USD 0.5 billion in 2016). As for Asian countries, Singapore companies, for example, in the first nine months of 2019 reported a venture capital in the amount of 13.4 billion Singapore dollars [22].

movement in Ukraine, the lack of a single organization to represent clusters, and the lack of state programs for clusters.

Research and development form the basis for startups in the technology era, hence another reason for the low number of successful start-ups in Ukraine is the low level of R&D spending. Thus, in 2020 this figure was only 0.41% of GDP (compared to 0.43% of GDP in 2019 and 0.47% of GDP in 2018). At the same time, according to the UNESCO Institute for Statistics [23], investments in R&D in a number of emerging and developing countries showed a rapid growth in 2018 (in particular in the Republic of Korea - 4.53% of GDP, in China – 2.14% of GDP, and in Malaysia - 1.04% of GDP). Developed countries also invested heavily in R&D (including the US at 2.83% of GDP, Slovenia at 1.95% of GDP, Canada at 1.56% of GDP and Poland at 1.21% of GDP).

For Ukraine to emerge successfully from the current crisis and to achieve sustainable development, the Ukrainian government and regional authorities should pay more attention to the creation of an environment conducive to the successful development of startups and innovation.

In the EU, for example, back in 2008, the European Institute of Innovation and Technology was established to promote innovation in Europe by integrating business, education and research organizations. There is also an example of interaction between business and universities in Latin America. For example, the Argentine software company Lagash is working with universities and colleges to train software engineers and is helping the Latin American online retailer MercadoLibre to recruit talented software engineers.

Ukraine also calls for a strategic alliance between business, universities and science. It is known that in March of the current year a new edition of the Agreement on Cooperation between the Ministry of Education and Science of Ukraine and the National Academy of Sciences of Ukraine was signed to improve the efficiency of science and education. However, in order to stimulate innovation, it is the government that plays a decisive role in bringing science and education closer to business. Moreover, current conditions (including the development principles of the EU countries, which is Ukraine's main trading partner) demonstrate the relevance of innovative technologies, in particular in such areas of the Ukrainian economy as decarbonization of the economy; organic production; and artificial intelligence.

Conclusions

In order to restore the Ukrainian economy, overcome the consequences of the COVID-19 pandemic and improve the quality of life the following measures are necessary *to stimulate consumer demand*:

• encouraging Ukrainians to travel within the country. There are some possible measures of encouragement:

1) introduction of tourist vouchers;

2) reducing the cost of railway passenger tickets. And certain steps have already been taken in this direction. At the end of 2020, JSC "Ukrainian Railway" reduced the cost of advance booking services for tourist groups, introduced a flexible



discount system, and reduced the cost of tickets by 15% for first-class seats in Intercity-class high-speed trains;

3) advertisement of tourism (ski resorts, national parks, nature reserves, etc.); promotion of YouTube channels dedicated to travel in Ukraine.

In addition, the future survival of the tourism industry is also expected to depend on the establishment of tourism unions in countries (e.g., the COVID-19 free Trans-Tasman Travel Arrangement between New Zealand and Australia)

• helping small businesses to diversify their sales channels by:

- easing regulatory barriers that prevent traditional retailers from participating in online sales (e.g. permit and licensing requirements)

- stimulating demand in the online marketplace (e.g. by improving digital literacy of consumers, protecting consumer rights when buying online, and ensuring reliable and efficient payment systems);

- enabling remote working without compromising information security. Among other things, this would require a reform of the cybersecurity legislation;

in order to stimulate investment demand:

• developing cycling infrastructure in cities will encourage people to use bicycles, which means less probability for transmission of and exposure to coronavirus in public transport;

• introducing temporary investment incentives, in particular a bonus depreciation mechanism (primarily for 2021). To be effective, these temporary investment incentives need to be targeted and time-limited [24].

The use of bonus depreciation is expected to stimulate investment activity in companies that make annual capital investments for business development. This is supported by research [25], which indicates that these companies tend to respond to incentives during periods of economic volatility. Whereas companies that do not plan to make capital investments are unlikely to respond to investment incentives in times of economic uncertainty;

• tax loss carrybacks. Thus, on September 14, 2020 in order to increase state budget revenues in 2021 amendments to the Tax Code of Ukraine were approved concerning the establishment of the term during which the subjects of the Tax Code have the right to carry forward losses incurred in previous years (within five years). However, to protect businesses from the effects of the corona crisis, it seems reasonable to remove restrictions on loss carryforwards for small and medium-sized enterprises that do not receive state support through government programs;

• Adoption of the Law of Ukraine "On State Support for Investment Projects with Significant Investments";

as to stimulating innovative development in Ukraine:

• encouraging enterprises to increase expenditure on research and development (the provision of tax benefits, and grants (subsidies));

• conducting reforms aimed at attracting large and medium-sized businesses to the university R&D;



• increasing staff mobility between universities and companies (involvement of specialists from business in the research activities at universities and the possibility for university staff to work for several years in the real economy while maintaining the main place of work (position));

• establishment of an institute in Ukraine that would address the issue of stimulating innovation through the integration of business, education and research organizations.

References

1. ILO Monitor: Covid-19 and the world of work (2020, 29 April). Third edition. Updated estimates and analysis. Retrieved from https://www.ilo.org/wcmsp5/ groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_743146.pdf 2. Leslie, Josephs (2020) Delta posts another massive loss, warns recovery could take 2 wars or more *CNPC*. Patriauad from https://www.orbe.com/2020/

take 2 years or more. *CNBC*. Retrieved from https://www.cnbc.com/2020/10/13/delta-air-lines-dal-results-q3-2020.html

3. UNIDO Statistics Data Portal. Retrieved from https://stat.unido.org/database/MVA%202021,%20Manufacturing

4. World Health Organization (2021). WHO Coronavirus (COVID-19) Dashboard. Retrieved from https://covid19.who.int/

5. United Nations (2021). World Economic Situation And Prospects: February 2021 Briefing. No. 146. Retrieved from https://www.un.org/development/desa/ dpad/publication/world-economic-situation-and-prospects-february-2021-briefing-no-146/

6. The World Bank (2021). Africa's Pulse: COVID-19 and the Future of Work in Africa: Emerging Trends in Digital Technology Adoption: April 2021. No. 23. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/35342/9781464817144.pdf?sequence=10&isAllowed=y

7. The European Council and the Council of the European Union (2021). Research and innovation in the recovery and resilience plans: investments and reforms. Retrieved from https://www.consilium.europa.eu/en/meetings/compet/2021/02/26

8. United Nations Inter-Agency Task Force on Social and Solidarity Economy (2020). Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---coop/documents/publication/wcms_748794.pdf

9.Large coronacrisis. A main driver is adopted for proceeding in a world economy (2021). *UAZMI*. Retrieved from https://uazmi.org/news/post/e7NbCQhVYpr2Hji BhWRp06 [in Ukrainian].

10. Global Energy Review 2021. Retrieved from https://www.iea.org/reports/globalenergy-review-2021

11. As a coronaviruses will change our work - maybe, forever (2020). *BBC News*. Retrieved from https://www.bbc.com/ukrainian/features-54842038 [in Ukrainian].

12. Influence of COVID-19 on economy and society: results of 2020 and calls and threats of post-pandemic development (2021). Consensus Forecast No. 53. Ministry for development of economy, trade and agriculture of Ukraine. Retrieved from https://me.gov.ua/Documents/List?lang=uk-UA&tag=Konsensus-prognoz [in Ukrainian].



13. Denis Schmigal told the implementation of the Economy Stimulation Program to overcome the consequences of the COVID-19 epidemic (2020, July). Retrieved from https://www.kmu.gov.ua/news/denis-shmigal-rozpoviv-pro-vikonannya-

programi-stimulyuvannya-ekonomiki-dlya-podolannya-naslidkiv-epidemiyi-covid-19 [in Ukrainian].

14. Dolbnieva, D.V. (2020). Influence of COVID-19 on the economies of the world countries. *Problemy ekonomiky – Problems of economy*, (43), 20-26. https://doi.org/ 10.32983/2222-0712-2020-1-20-26 [in Ukrainian].

15. Shevchenko, V.Yu. (2020). Economic shocks of pandemic: main types and consequences. *Prychornomors'ki ekonomichni studii – Black Sea Economic Studies*, 56. Retrieved from http://bses.in.ua/journals/2020/56_2020/5.pdf; https://doi.org/ 10.32843/bses.56-3 [in Ukrainian].

16. The Legatum Prosperity Index. Retrieved from https://www.prosperity.com/

17. Hladun, O.M. (Ed.). (2019). The population of Ukraine. Demographic dimension of life quality. NAS of Ukraine, M.V. Ptuha Institute of Demographics and Social Research. Kyiv. Retrieved from https://idss.org.ua/arhiv/monografia_2020_.pdf [in Ukrainian].

18. Virtual meeting of the G20 finance ministers and central bank governors. April 2020. Retrieved from http://www.g20.utoronto.ca/2020/2020-g20-finance-0415.html

19. Launching the land market will accelerate the growth of Ukraine's economy to 1.5% per year (2019, November). UKRINFORM. Retrieved from https://www.ukrinform.ua/rubric-economy/2821274-zapusk-rinku-zemli-priskorit-zrostanna-ekonomiki-ukraini-do-15-na-rik-svitovij-bank.html [in Ukrainian].

20. OECD (2020, October). COVID-19 crisis response in Eastern Partner countries. 44 p. Retrieved from https://read.oecd-ilibrary.org

21. The Association for Private Capital Investment in Latin America. Retrieved from https://lavca.org/

22. Ong, Sin Wei and Kyle, Lee (2020). Venture capital investment in Singapore: market and regulatory overview. Retrieved from https://uk.practicallaw.thomsonreuters.com/5-578-7841?_lrTS=2019121315320

5588 & transition Type = Default & context Data = (sc. Default) & first Page = true

23. Science, technology and innovation. UNESCO Institute for Statistics. Retrieved from http://data.uis.unesco.org/Index.aspx?DataSetCode=SCN_DS&lang=en

24. Wen, Jean-François. (2020). Temporary Investment Incentives. Fiscal Affairs Department of the International Monetary Fund. 10 p.

25. Guceri, I., Albinowski, M. (2019). Investment Responses to Tax Policy Under Uncertainty. *CESifo Working Paper*, 7929. Retrieved from https://ssrn.com/abstract=3485478

<u>Received 16.05.21.</u> <u>Reviewed 18.06.21.</u> <u>Signed for print 29.06.21.</u>



Ганна Яценко¹⁶

ЧИННИКИ ПОСТКОВІДНОГО ВІДНОВЛЕННЯ ЗРОСТАННЯ ЕКОНОМІКИ УКРАЇНИ У 2021–2022 РОКАХ

Зважаючи на негативний вплив пандемії COVID-19 на світову економіку, в дослідженні зроблено акцент на більш високий ризик виникнення негативних довгострокових наслідків пандемії в країнах з економіками, що розвиваються (зокрема в Україні). Зазначене пояснюється обмеженою фіскальною підтримкою економік цих країн, на противагу численним заходам урядів розвинених країн, спрямованих на підтримку громадян і бізнесу під час коронакризи. Руйнівні довгострокові наслідки коронакризи для економіки та населення бідніших країн проявлятимуться до тих пір, поки уряди не вживуть заходів щодо економічного відновлення та стимулювання економічного зростання.

На основі виокремлення основних рушіїв економічного зростання України в 2016–2019 рр., а також узагальнення досвіду постковідного відновлення економік інших країн (зокрема, Австралії, США, країн ЄС, Японії та передових країн Азії) в дослідженні пропонуються шляхи відновлення української економіки та мінімізації негативних наслідків пандемії COVID-19. Запропоновано сприяти відновленню української економіки через: розширення внутрішнього попиту (як споживчого, так і інвестиційного) та активізацію інноваційного розвитку.

Як показав аналіз міжнародного досвіду, споживчий попит в варто умовах пандемії стимулювати, зокрема шляхом: розвитку внутрішнього туризму; допомоги малому бізнесу в урізноманітненні каналів продажів; стимулювання попиту на онлайн-ринку. Визначено, що для стимулювання інвестиційного попиту варто робити акцент на розвитку інфраструктури; запровадженні тимчасових інвестиційних стимулів; перенесенні збитків, отриманих попередні податкові y періоди. Запропоновано активізувати інноваційний розвиток України шляхом: створення середовища, сприятливого для розвитку малих інноваційних підприємств (стартапів); нарощення витрат на дослідження та розробки; інтеграцію бізнесу, освіти та дослідницьких організацій.

Ключові слова: пандемія COVID-19, постковідне відновлення економіки, внутрішній попит, інноваційний розвиток

¹⁶ **Яценко, Ганна Юріївна** – канд. екон. наук, науковий співробітник відділу моделювання та прогнозування економічного розвитку, ДУ "Інститут економіки та прогнозування НАН України" (вул. П.Мирного, 26, Київ, 01011), ORCID 0000-0003-4117-1781, e-mail: yatsenko.anna@gmail.com

ISSN 2663-6557. Economy and forecasting. 2021, № 2