

IMPACT OF THE CORONAVIRUS PANDEMIC ON THE ECONOMIC DEVELOPMENT OF UKRAINE AND LATVIA

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Abstract. The COVID-19 pandemic that has swept the world has created a number of diverse threats to the development of the countries' economies, including Ukraine and Latvia. An adequate assessment of these threats is very difficult and, moreover, often has a probabilistic character due to their singularity and novelty. The COVID-19 crisis mainly affected the tertiary sector, in particular companies involved in tourism, international passenger transport, accommodation, catering, entertainment, and cultural events, where demand fell sharply, and jobs fell. They were also followed by a contraction in demand in the manufacturing and transport sectors, which were mainly oriented towards external demand and exports. At the same time, there was a shortage of specialists and an increase in employment in areas such as information and communication technology and healthcare.

The purpose of the article is to study the state and trends of the impact of COVID-19 on the economic situation in Ukraine and Latvia, in particular, to determine the socio-economic losses incurred by countries due to quarantine.

The study identifying the possible economic policies in order to select the most appropriate instruments COVID-19 mitigation, as well as Latvian and Ukrainian economic structure improvement.

Keywords: *COVID-19 pandemic, economic growth, economic sectors, development scenarios.*

JEL code: E60, O10, O11, O50

Introduction

The entire world community, since mid-December 2019, has come under the enormous influence of the global epidemic of coronavirus disease, which is called COVID-19. The pandemic caused by this virus has already led to millions of human losses around the world, imposed significant restrictions on the socio-cultural life of the population and radically changed the trends of the global economy. Today it is difficult to predict what the final human and economic losses will be incurred by states in the short, medium and long term.

The problem of the study is to consider individual forecasts of economic development and measures that have been chosen by the governments of Ukraine and Latvia to overcome the negative consequences of the COVID-19 pandemic and to compare them.

The purpose of the article is to study the state and trends of the impact of COVID-19 on the economic situation in Ukraine and Latvia, in particular, to determine the socio-economic losses incurred by countries due to quarantine. This will help to form a real vision of the possible course of economic processes that will directly affect the standard of living of the population for using each other's experience to optimize and increase the effectiveness of the measures taken.

The tasks of the research are: to assess the impact of COVID-19 on the economic growth of Latvia and Ukraine, to compare the measures taken during the pandemic to support certain sectors, to provide an assessment of the consequences of the pandemic in cases of different action scenarios.

The methodological and information base for the study is represented by research papers, periodicals materials, official statistical publications, departmental materials, and online resources.

In analyses there are used different qualitative and quantitative analysis **methods**, such as scientific literature and empirical research analysis, modeling tables, charts and schemes, calculations of average and relative values, grouping, comparisons and other.

Research results and discussion

An active discussion of the problem of the of coronavirus disease spreading takes place in the media, where ministers, representatives of government agencies, leading economic experts, sociologists and political scientists, and other leading experts on this issue express their views. In particular, these are Grigorenko Y. (2020), Blinov A. (2020), Kulytsky S. (2020), Amelin A., Lavryk Ya., and Monin (2020), Zgurovsky M. (2020), Dolbneva D. (2020) and others.

All European Union (EU) countries conduct research and study their specific situations in order to find out as soon as possible the solutions which can have a direct recovery effect and help mitigate the impact of the crisis, including overcoming new outbreaks. In Latvia, on April 30, 2020, the government approved the State Research Program for Mitigation of Consequences of COVID-19 and allocated funds for its implementation in the amount of five million euros from the state budget (Ministry of Education and Science, 2020).

Latvia's economy has weathered the COVID-19 crisis first wave better than most EU countries. Over the second quarter of 2020, Latvia's GDP fell by 7.1% (Latvia's Macro Profile, October 2020). Factors such as balanced economic growth and sound government finances before the crisis, accommodative monetary and fiscal policy implemented already at the outset of the crisis as well as timely unwinding of the pandemic-related restrictions supported an improvement in the market participants' sentiment and, in the summer, led to a rapid recovery of several economic sectors like retail trade, manufacturing and exports of goods.

Trying to determine the future prospects of economic development under the COVID-19 conditions it is advisable to take into account the previous experience of the flow of events during epidemics. We can observe a certain cyclicity.

Over the last two decades, mass infectious diseases (pandemics) have become more frequent/ They begun to have an increasingly significant impact on human health, social development, and the economies of countries and world regions:

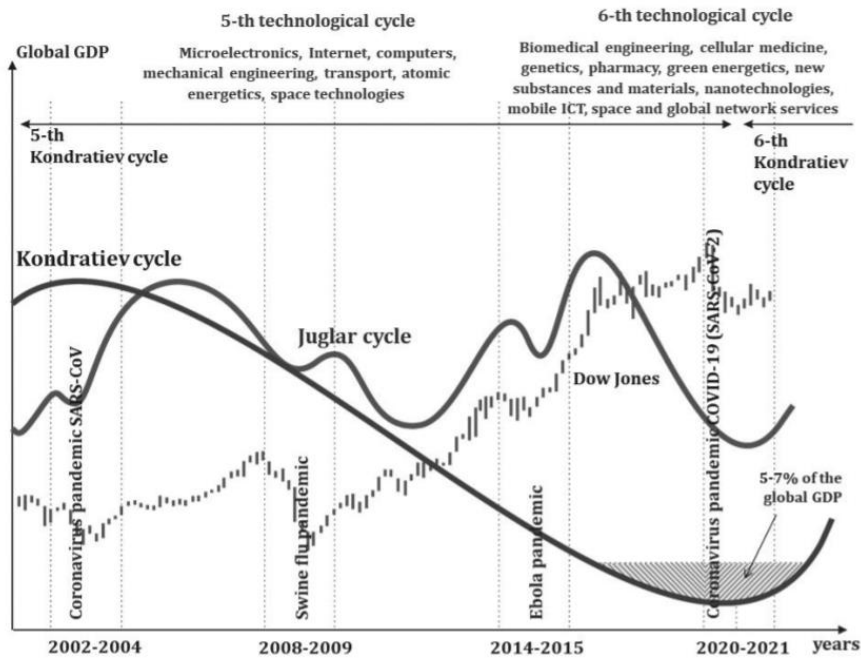
- From November 2002 to May 2004, an outbreak of severe acute respiratory syndrome (ARI) caused by the previously unknown coronavirus SARS-CoV occurred in 35 countries. A total of 8,461 cases of SARS were identified, of which 916 ended in death. Mortality was 10.83%;
- From January 2009 to August 2010, most of countries in the world were affected by the swine flu, which escalated into the H1N1 pandemic. From 700 million to 1.4 billion people suffered from the disease, 150 to 575 thousand people became its victims. The mortality rate was below 1%;
- In 2014-2015, West Africa, the USA, and Europe embraced pandemic Ebola, or so-called hemorrhagic syndrome. The number of people infected with the Ebola virus amounted to more than 9 thousand personas, 4450 people died. The mortality rate was 50%;
- The beginning of 2020 was sadly marked by the fastest and most massive coverage of almost the entire world community by the COVID-19 (SARS-CoV-2) coronavirus pandemic. As of mid-October 2020, about 29 million patients were recorded in the world, about 1 million people died. The world average death rate hovers around 3.5%;

We can observe that the occurrence of pandemics within the indicated period time interval is cyclical with an approximate occurrence period about five to six years. In order to analyze the impact of these pandemics on the global economy, let's compare them on the time axis with the following fundamental periodic processes:

- Nikolai Kondratiev's 40-50-year economic cycles based on changes of societies technological structure (Kondratiev N. A., 1979, Diebolt C., 2009);
- 7-11 year Clement Juglar's cycles associated with fluctuations in capacity utilization and fluctuations in investment in fixed assets (the focus of business investment) (Besomi D., 2009, Korotayev, A.V., Tsirel, S.V., 2010);
- the Dow Jones Industrial Average, which reflects the total capitalization of the 30 largest American companies, whose activities collectively determine the trends of the world economy.

Fig. 1 shows that in 2020-2021 the downward wave of the 5th Kondratiev cycle comes to the end Next it switches to the upward wave of the 6th Kondratiev cycle under the transition to the next techno-economics paradigm. This indicates the objective conditions for a further long-term recovery of the world economy.

At the same time, the beginning of economic recovery in the time period 2020-2021 is significantly weakened by the rupture of traditional economic chains as a result of the COVID-19 pandemic and a significant "dispersion" (lack of focus) of investments in various businesses (both outdated and prospective), that leads to reaching the next bottom of the Juglar's cycle and fall by 30-40% in the Dow Jones Industrial Average (Dow Jones Industrial Average, 2020). According to Juglar, this decline should continue for about a year, during which time investments will be redirected to technologies of the 6th order. After exceeding the contribution to world GDP by more than 5-7% due to technologies of the 6th cycle, the rise of the global economy should begin both according to Kondratiev and Juglar.



Source: Zgurovsky M. Z., 2020

Fig. 1. The impact of pandemics of infectious diseases on the economy and society development

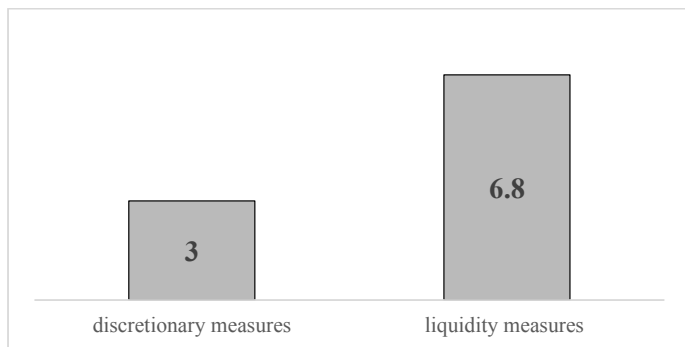
The COVID-19 pandemic, which has swept the world, has created a number of diverse threats to the development of the economies of countries, including Ukraine and Latvia. An adequate assessment of these threats is very difficult and, moreover, often has a probabilistic character due to their singularity and novelty. Pandemic significantly influenced the development of the world economy, leaving aside any country. According to expert Blinov (Blinov A., 2020), in 2020, the economic situation at the global level will be close to recession: many economies will face a reduction in exports, imports, GDP, attracting investments, incl. in the real estate market, the production sector will deteriorate significantly. Analysts predict that the losses to the global economy due to the coronavirus pandemic in the worst-case scenario could reach \$ 2.7 trillion (Orlik T., Rush J., Cousin M., Hong Bloomberg J., 2020). However, it is impossible to calculate accurately the expected losses, because the situation changes almost every day. Our states also already have some experience of their own in combating the COVID-19 pandemic on their territory. With a certain degree of convention, such measures can be attributed to the following categories: technical and organizational, financial and economic, socio-political and information-psychological. At the same time, the above division is somewhat arbitrary, since all activities are interconnected in their origin and functioning, and all of them, either directly or indirectly, affect the economic processes in the country and have a certain economic tinge, since they require appropriate funding. In particular, the problem of revealing additional financial resources for resistance the spreading of the SARS-CoV-2 coronavirus and the redistribution of the corresponding, mostly rather limited, financial and material resources is becoming acute.

Many events in Ukraine are financed by the reserve funds of the state and local authorities, sponsorship of caring citizens and philanthropists - so far without making radical changes to the state and local budgets. Ukraine requires the attraction of appropriate financial resources to purchase the necessary materials, drugs and medical equipment, especially tests to screen patients for the presence of coronavirus.

On April 13, the Verkhovna Rada of Ukraine adopted amendments to the current state budget, which provides for the creation of a fund to combat COVID-19 in the amount of UAH 64.7 billion. The fund will be administered by the Ministry of Finance. Also this year, the financing of the Pension Fund has been increased by UAH 29.7 billion. The Ministry of Health in 2020 will receive an additional UAH 15.5 billion (Kulytsky S., 2020).

Since the COVID-19 outbreak, all European countries have taken fiscal measures to address the health crisis and limit the adverse impact on the economy. The 25 countries covered in European Fiscal Monitor (EFM) have committed around EUR 1 trillion or a total of around 7% of GDP in discretionary fiscal stimulus, and injected nearly EUR 2 trillion, or about 14% of GDP into liquidity measures (EFM, 2020). But there are substantial differences between countries. Lithuania has the largest relative amount of discretionary measures (about 21% of GDP), while Latvia's discretionary

measures related to the COVID-19 crisis amounted to 3% of GDP ((EFM, 2020). Latvia's expenditure on liquidity measures, which mainly consists of loans and guarantees, was 6.8%, close to the EU average, while in Estonia and Lithuania it was 9.2% and 6.6%, respectively (see Figure 2).

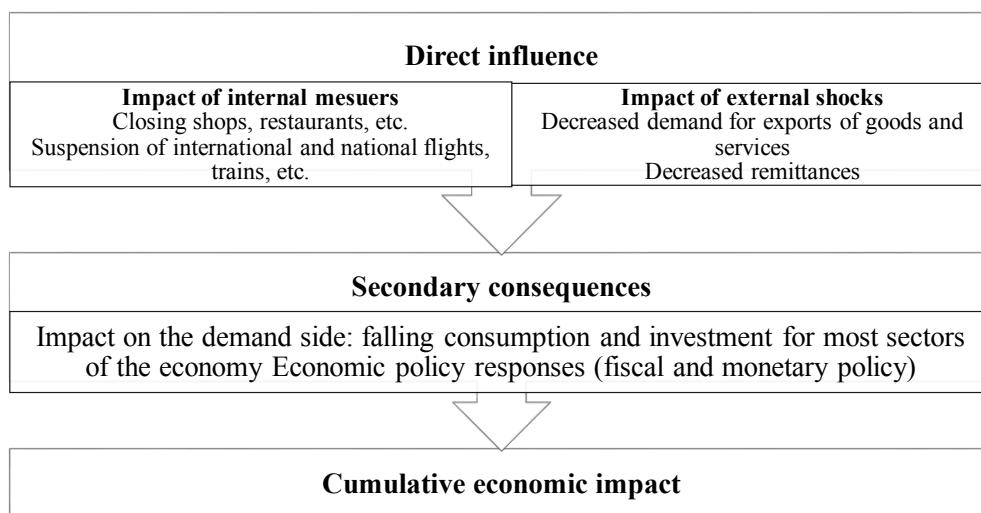


Source: LV PEAK, 2020

Fig. 2. COVID-19 -related discretionary and liquidity measures in Latvia (% of GDP)

Carrying out relevant scientific research is also extremely important now. Moreover, Ukraine and Latvia have their own material, technical and personnel base for this. It should be borne in mind that the current costs of testing the population for COVID-19, relevant biomedical research, other similar technical and organizational measures of struggle COVID-19 in countries can subsequently not only save significant amounts of funds but, possibly, repaid with certain income from the export of some drugs and medical supplies. Note that the Ukrainian pharmaceutical industry occupies an outstanding position, at least in the Post-Soviet economic space.

A significant technical-organizational step in the fight against coronavirus is the strict quarantine measures introduced by the governments of the countries: closing of shopping and entertainment centers, a ban on attending all mass events, restrictions on movement both within the country and abroad, a reduction in production (through the establishment of limits for simultaneous employees staying in the same space), etc. Some companies have transferred their employees to work from home on-line, while others are forced to send their employees on vacation. At the same time, there are cases of abuse and violations by some employers of the terms of the employment contract, which require employees to write applications for dismissal of their own free will or take leave at their own expense. All this negatively affects the well-being of the population, their financial situation and in the near future will lead to a reduction in their demand for a number of goods and services. The directions of transmission of economic consequences are shown in Figure 3.



Source: compiled by authors

Fig. 3. Directions of transmission of economic consequences

According to a number of public opinion polls conducted by the sociological group "Rating", it was revealed that 51% of respondents in Ukraine believe that the economic situation of their households has deteriorated over the past six months, 42% believe that it has not changed, and only 6% saw improvements. At the same time, assessing changes in the financial situation in the nearest future, 61% noted a deterioration over the past month, 35% mentioned that they did not feel any changes, only 3% noticed an improvement (група РЕЙТИНГ, 2020). Older people and poorer

respondents were pessimistic in their assessments. Among those who had a job prior the introduction of quarantine, 40% indicated that they continue to work as usual after the imposition of restrictions, 23% - work remotely, 11% - take paid vacation, 18% - are on vacation of their own free will and 8% - lost their job. 55% of respondents said that their savings should last for less than a month if they stopped earning income, 17% stressed that they will have enough savings for up to 2 months, 8% - up to 3 months, 9% - up to six months or more. Along with this, 82% said they had started saving money during quarantine, 16% said they did not. The latter are more among men and wealthier citizens (Ukraine under quarantine, 2020). Other organizations received similar survey results. Thus, the above research results have shown that the introduction of quarantine to fight the COVID-19 epidemic in Ukraine has already affected the economic condition, assessments and expectations of citizens.

Also in Latvia, the COVID-19 pandemic in 2020 has affected several life areas – work, shopping, rest, financial planning, socialization, opportunities to move, etc. Research results of “Swedbank” Institute of Finances show that due to pandemic 42.3% of households in Latvia have felt the worsening of the financial situation, including 14% of households indicate that situation has worsened considerably (Swedbank's Institute of Private Finances, 2020). Besides the same number of people (42%) evaluate, that financial situation has remained unchanged this year. In turn, 14% of respondents indicate that in the last 12 months financial situation of household has improved. Although statistical data indicate on the increase of household savings, however survey results show the tendency, that people have more often used savings for financing the current expenditures.

Saving amount has decreased almost for 46% respondents. Also, when evaluating financial situation for next year, households are very pessimistic. Almost 38% of respondents expect financial situation to become worse, but 26% forecast that situation will not change. Positive evaluation gives only 16% of Latvia's inhabitants. Researchers indicate that this is the strongest negative evaluation of household financial situation since 2013. Authors consider that in circumstances when activities of several sectors are limited by the government measures to limit further spread of COVID-19 pandemic, households should be granted with considerable state support to stabilize their financial situation. Without considerable state support, it will be hard for inhabitants to recover from financial turmoil.

Due to the coronavirus pandemic and the imposed quarantine measures, the decline in Ukrainian GDP, according to the Ministry of Economic Development, Trade and Agriculture, in the first half of 2020 was 6.5%. According to the forecast of the National Bank of Ukraine, the fall in GDP in 2020 may be at least 6%. At the same time, according to the IMF, the Ukrainian economy will decrease by 8.2% by the end of 2020 (Ukraine in 2020-2021, 2020).

Quarantine brought down consumer sentiment, almost stopped several industries - retail trade, hotel and restaurant business, air travel. The amount of state budget revenues has decreased. Due to the introduction of quarantine, Ukrainian companies have frozen investments and production chains.

The consumer demand sectors, where quarantines have recently eased, are recovering rapidly, primarily retail and services. The situation with industry and investment demand is worse. The fall in industrial production slowed to 12.2%. A certain activation of external demand against the background of optimism caused by the gradual easing of quarantine, and an increase in budget expenditures for the purchase of certain engineering and metallurgical products (in particular, for medical equipment, military products) led to a weakening of the decline in metallurgy, mining of metal ores and mechanical engineering. However, a deep decline remained in the production of equipment for other industries (metallurgy, agriculture, railways) and vehicles, which indicates still weak domestic demand. The gradual fading away of the rush demand for antiseptics and medicines led to a slowdown in growth in the pharmaceutical industry. The chemical industry has resumed its recession due to a decline in the production of fertilizers and cleaning products. But the use of online banking services grew at a steady pace (Impact of..., 2020).

Reduction in production leads to an increase in unemployment. According to the State Employment Service, as of 1st of July 517,284 unemployed were registered in Ukraine, as of June 1 this indicator was 511,388 people, as of May 1 - 457,005 people, as of April 1 - 349,424 people (State Employment Center, 2020). Thus, over several months of the quarantine period (from early April to early July), the number of unemployed increased by more than 48%. For comparison, as of 1st of July 2019, 287,086 unemployed were registered in Ukraine (1.8 times less than on July 1, 2020). The COVID-19 crisis has also contributed to growing structural imbalances in the Latvian labor market at the level of individual occupational groups and sectors. On November 30 number of registered unemployed in Latvia was 67,124 and From 01.03.2020. number of registered unemployed an increase of 8,552 unemployed or 15% (Latvian State Employment Service, 2020). The rise in unemployment was significantly curbed by downtime benefits, which were introduced in Latvia immediately after the declaration of the emergency (State of emergency), reducing the negative impact of the COVID-19 crisis on the labor market.

The COVID-19 crisis increased the share of remote workers in both the public and private sectors, as well as accelerated the digitalisation of the economy and the automation of jobs, thus increasing the productivity potential of the workforce on the one hand and changing the structure of skills demand in the labor market on the other.

The introduction of quarantine immediately affected wages. In April, for the first time since March 2016, real wages fell by 0.5% due to low business activity and lower demand for labor. A third of Ukrainians have completely lost their income or work, and in more than a third the regular households income has decreased.

The slowing down of the recession in the basic industries supported the labor market somewhat, although the demand for labor remained weak than in quarantine. Thus, the growth of average wages accelerated to 3.0% in nominal terms, and their growth in real terms also resumed (by 1.4%).

The most optimistic about the recovery of production volumes are construction companies, pessimistic - service sector enterprises that have suffered the most from the introduction of quarantine. Among the main concerns are a decrease in production and sales of products, services, and new orders volume, as well as a reduction in the number of employees. The sector crisis has already negatively impacted production, capital investment and employment. This worsened the financial position of a significant part of enterprises and households. The result was the first problems with servicing loans and a decrease in demand for the services of financial institutions. In general, according to National Banks of Ukraine estimates, the current crisis may result in banks losing more than 10% of their working loan portfolio.

So, the main economic consequences of the pandemic both in Ukraine and in Latvia include the following:

- 1) a decline in economic growth rates of countries, a deep protracted recession;
- 2) slowdown in the development of markets for goods and services;
- 3) a significant decrease in the income of airlines and maritime transport;
- 4) significant deterioration in the state of the tourism industry;
- 5) a decrease in the income of the population, a significant drop in the effective demand of the population;
- 6) growth of unemployment;
- 7) deterioration in the quality of life;
- 8) reduction of expenses for travel, visiting restaurants and cafes, entertainment events, will lead to a crisis in the hotel and restaurant and tourism business and services;
- 9) an increase in the production and sale of pharmaceutical products, in particular medical equipment;
- 10) deterioration of the investment climate, growth in investor demand for less risky assets;
- 11) mass bankruptcy of small and medium businesses;
- 12) deficit of external financing and narrowing opportunities for access to international capital markets
- 13) narrowing of foreign sales markets, etc.

Assessing the economic impact of the coronavirus outbreak is challenging due to the uncertainty and unpredictability of its development. Experts from the Ukrainian Institute of the Future made calculations of the losses of the Ukrainian economy from quarantine in the context of the development of two scenarios (see Table 1).

Table 1

Forecasts of experts from the Ukrainian Institute of the Future on the losses of the Ukrainian economy in the context of the development of two quarantine scenarios

Forecast	Scenario 1 "basic" Scenario 2 "moderately pessimistic"	Scenario 2 "moderately pessimistic"
Fall in official employment	860 thousand people - total in a quarter; 14 thousand people - per day of quarantine, based on the duration of quarantine 60 days	In the second quarter of 2020: 862 thousand people - in just a quarter; 14 thousand people - during the day of quarantine. In the third quarter of 2020: 845 thousand people - in just a quarter; 14 thousand people - during the day of quarantine. For two quarters of 2020, 1.7 million people will be left without a source of income.
Fall in real GDP	14.6% - for the second quarter of 2020 (against the quarter of 2019); 6.4% - at the end of 2020	14.6% - for the second quarter of 2020 (before the quarter of 2019) 23.5% - for the third quarter of 2020; 10.3% - at the end of 2020
Economic losses during quarantine	UAH 2.5 billion per day (added value lost)	UAH 2.5 billion per day per day in the second quarter of 2020 (lost added value); UAH 4.7 billion per day in the third quarter of 2020
Budget losses based on the decline in employment (estimated by the unified social contribution and personal income tax)	at the level of UAH 1.5-2 billion per month (instead of UAH 23-24 billion per month, EUB-personal income tax fees are envisaged at the level of UAH 21.5-22 billion)	at the level of UAH 5-7 billion per month
Average annual exchange rate of the hryvnia against the dollar	UAH 30	UAH 32

Source: compiled by authors based on Amelin A. et. (2020)

According to consensus estimates, Ukraine will show a deep fall - 4.2% in 2020, inflationary processes will accelerate to 7% versus 4.1% (calculated in December against December of the previous year) in 2019. All elements of demand will have negative dynamics, but the biggest fall in investment will be 14.8%. To maintain the demand of the population and mitigate the negative consequences of the introduced quarantine measures, budget support will increase, which, in the context of a reduction in income, will lead to a significant increase in the budget deficit to 5.6% of GDP [0]. Retail and wholesale trade, transport, metallurgy and mechanical engineering will hold back the economic dynamics the most. Small and medium-sized businesses will be the most vulnerable in terms of business scale.

Analysts expect that by the end of the year the transport industry in Ukraine will lose the most - 11.2% under the optimistic scenario, 14.2% under the baseline scenario and 24.1% under the pessimistic scenario. A decline is also expected in agriculture: by 7.8%, 8.9% and 12.9%, respectively (see table 2).

Table 2

Scenarios of the dynamics of the development of sectors of the Ukrainian economy at the end of 2020, %

Branch	Optimistic	Basic	Pessimistic
Agriculture	-7.8	-8.9	-12.9
Industry	-3.3	-5	-8.1
Trade, repair services	-6.4	-8	-13.1
Transport	-11.2	-14.3	-24.1

Source: compiled by authors based on Grigorenko Y. (2020)

COVID-19 pandemic has considerably changed the dynamics of sectoral development, that was reflected also in the sectoral forecast adjustments. As we can see in Table 3, at the end of 2019, analysts of the Ministry of Economics forecasted positive dynamics for the next year in all sectors except transport services sector. Already in the middle of 2020 forecasts of sectoral development were considerably adjusted. According to the evaluation of the Ministry of Economics, sectors that suffer the most from the COVID-19 pandemic are related to the gathering of the people and services – mainly these sectors are accommodation and catering, transportation services, art and recreation sectors. Most optimistic evaluations of experts about the possible “V” shape scenario of crisis management have not fulfilled, because in the autumn of 2020 the number of infected persons increased again and new measurements were introduced to limit the spread of the virus. Analysts indicate that along with the worsening of

epidemiologic situation it is expected that in the 4th quarter of 2020 economic growth rate could slow down again and could reach the annual decrease of 7-8%. In total in 2020, GDP could decrease by 5,5 percentage (see Table 3).

Table 3

Forecast of the dynamics of the development of sectors of the Latvian economy at the end of 2020, %

	estimated in 2019	estimated in 2020
Agriculture, forestry	3,3	1.9
Manufacturing	2,3	-3.4
Other industry	3,0	-1.7
Construction	1,9	1.1
Trade, accommodation	3,2	-10.7
Transport and storage	-1,4	-17.5
Other business services	3,0	-6.2
Public services	2,8	1.0

Source: compiled by authors based on *Economic Development of Latvia, 2020*

The labor market situation will remain difficult until the end of 2020. Unemployment will be long-term due to a grate economic decline and considerable structural changes. Migrants will slowly return to places of work outside of Ukraine, both due to persisting risks of infection and due to economic problems in the world. The unemployment rate will be significant. The expected reduction in employment of workers in the context of sectors of the economy due to the introduction of quarantine in Ukraine is presented in Table 4.

Table 4

Expected reduction in employment in the context of economic sectors due to the introduction of quarantine in Ukraine

Sector of the national economy	Expected reduction in employment in 2020,% per quarter	Expected reduction in employment in 2020 with the extension of quarantine,%
Temporary accommodation and catering	- 64	- 36
Arts, sports, entertainment and recreation	- 28	- 28
Trade	- 24	- 21
The property	- 20	- 32
Industry	- 19	- 17
Transport	- 19	- 21
Activities in the field of administrative and support services	- 15	- 21
Construction	- 10	- 22
Financial and insurance activities	- 9	- 21
Professional, scientific and technical activities	- 9	- 19
Health care and social assistance	- 7	- 1
Education	- 3	- 7
Information and telecommunications	- 2	- 5
Agriculture, forestry and fisheries	0	0
Public administration and defense, compulsory social security	0	- 5
Other economic activities	- 14	- 17

Source: compiled by authors based on *Dolbneva, D. V. (2020)*

The fall in production and the situation on the labor market will have a significant negative impact on the poverty of the population (the poverty level, according to experts, will increase by 10-20% compared to the level at the beginning of the year) According to experts, the biggest threats to economic recovery in Ukraine are:

- 1) long-term continuation and strengthening of internal quarantine measures;
- 2) the lack of a clear anti-crisis plan of measures to support the economy and protect the population of the country during a pandemic;
- 3) a deep drop in economic activity in the countries - main trading partners of Ukraine, in accordance with a significant deterioration in the situation on world commodity markets.

It is assumed that in 6 months after the final completion of all quarantine restrictions in the world, there will be a recovery in demand from Ukrainians for international transportation and travel services.

Changes in the investment activities of economic entities after the end of the pandemic will be insignificant, but in some sectors of the economy they can be grate due to changes in the structure of demand (as well as due to the possible introduction of incentives to invest in certain sectors)

Changes in the Ukrainian economy will accelerate towards the transition to a new quality, the processes of digitalization, robotization and the use of the “remote workplace” modality will be activated.

In 2021, economic growth in Ukraine is expected at the level of 2.4%, but it will not compensate for the fall in 2020. Inflation will slow down to 5.9% (calculated in December against December of the previous year). All elements of demand will have a positive trend. The largest growth is expected in investments - as a low base effect - 6.9%. The unemployment rate will gradually decline to 9.1%, but will not reach the pre-pandemic level.

According to Latvijas Banka's December forecasts, **Latvia's GDP is expected to decline by 4.7% in 2020 and to increase by 2.8% in 2021 (Bank of Latvia, 2020). Improvement in the economic sentiment and investment growth is expected to be supported by the financing provided to the Member States under the Next Generation EU recovery plan agreed among EU leaders.**

Conclusions

1. The speed of economic recovery from the economic downturn caused by the pandemic both in Ukraine and in Latvia will depend on the duration and depth of internal quarantine measures, external environment, state support through fiscal and monetary policy, possible future changes in consumer and investor behavior.
2. The nature of the recovery will depend primarily on the existing “adaptive quarantine” regime, as well as further measures to weaken or strengthen it. At the same time, the World Health Organization no longer recommends that states take full quarantine measures, since they affect the economy much worse than the coronavirus itself.
3. Given that the quarantine has been extended, and Ukraine is breaking records for the incidence of COVID-19, the situation for certain service and entertainment industries will remain difficult.
4. According to all forecasts, a V-shaped recovery scenario is expected for the Ukrainian economy in 2021. Most likely, the downtrend in economic development will continue until the first quarter of 2021, and the recovery will begin only in the second quarter.
5. However, the IMF warns that the recovery of the Ukrainian economy after the crisis may drag on until 2024. The National Bank of Ukraine (NBU) adds that the pace of economic recovery will be restrained by low consumer and investment demand.
6. The NBU is confident that in 2021-2022 the country's economy will grow thanks to monetary and fiscal stimulus and increased external demand, and private consumption will be the main driver of economic growth. Unfortunately, the investment component of GDP will lag significantly behind the consumption component.
7. The most optimistic evaluations of experts about the possible “V” shape scenario of crisis management in Latvia have not been fulfilled, because in the autumn of 2020 the number of infected persons increased again and new measurements were introduced to limit the spread of the virus.
8. Nevertheless, with a high degree of uncertainty regarding the further course of the COVID-19 pandemic in the world as a whole, and in Ukraine and Latvia in particular, the probable directions of development of the domestic economy analyzed above may require revision in a few months.

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