unicef
for every child
Ukraine

MINISTRY FOR DEVELOPMENT OF ECONOMY, TRADE AND AGRICULTURE OF UKRAINE

Ukraine in 2020-2021:
AFTERMATH OF THE PANDEMIC

CONSENSUS FORECAST

51

DEPARTMENT FOR STRATEGIC PLANNING AND MACROECONOMIC FORECASTING

Kyiv 2020

WWW.ME.GOV.UA

MINISTRY FOR DEVELOPMENT OF ECONOMY, TRADE AND AGRICULTURE OF UKRAINE

unicef for every child Ukraine

In response to the situation caused by the COVID-19 pandemic, the Ministry for Development of Economy, Trade and Agriculture of Ukraine, in cooperation with the UNICEF in Ukraine, prepared a thematic issue of the Consensus Forecast entitled "Ukraine in 2020-2021: Aftermath of the Pandemic".

"Ukraine in 2020-2021: Aftermath of the Pandemic" Consensus Forecast has been prepared in order to highlight a consensus-based vision of future trends and provide an unbiased assessment of the risks and challenges facing both the global economy and the economy of Ukraine due to the global recession and the restrictive measures established in Ukraine as part of combatting the pandemic of the COVID-19 acute respiratory infection caused by SARS-CoV-2 coronavirus (hereinafter named as COVID-19). To shape an optimal package of measures to support Ukraine's economic development during and after the pandemic, forecast calculations according to the most probable scenario for 2020-2021 were undertaken.

The Consensus Forecast publication is a periodical of the Ministry for Development of Economy, Trade and Agriculture of Ukraine prepared by the Department for Strategic Planning and Macroeconomic Forecasting, the main activity goal of which is to formulate economic policy recommendations as regards ensuring stable and balanced economic growth of Ukraine and to provide macroeconomic forecasts of the country's possible development scenarios.

It will be useful to the government officials, experts of central and local executive authorities, academia, representatives of non-governmental organizations, and everyone interested in the matters of the country's socio-economic development and macroeconomic forecasting.

The publication has been prepared and produced with support from the UN Children's Fund (UNICEF) in Ukraine. The opinions expressed in this publication are those of the authors and do not necessarily represent the UNICEF's policies and views.

Reference to sources of materials is mandatory.

51

© Ministry for Development of Economy, Trade and Agriculture of Ukraine, Kyiv, April 2020

CONTENTS

UKRAINE'S SOCIO-ECONOMIC DEVELOPMENT SITUATION BEFORE THE PANDEMIC 5

REVIEW OF FORECAST ANALYTICAL ESTIMATES (AS OF 15 APRIL 2020) 9

Global level 10

National level 11

CONSENSUS FORECAST FOR 2020–2021 12

Forecast for 2020–2021 13

Scenarios of Ukrainian economy's development in 2020 17

INTEGRAL ASSESSMENT OF RISKS (PHENOMENA) FOR 2020–2021 19

Endogenous (domestic risks or phenomena that will have impact) 20

Exogenous (foreign risks or phenomena that will have impact) 20

EXPERT PROPOSALS TO OVERCOME CRISIS DEVELOPMENTS 23

For a short-term period (when quarantine measures are in force) 24

For a medium-term period (after the quarantine and during the next few years) 24

ANNEXES 26

Annex 1. CONSENSUS FORECAST FOR 2020–2021 27

Annex 2. EXPERT ESTIMATES OF THE GLOBAL ECONOMIC DEVELOPMENT INDICATORS, BY SCENARIO 28

Annex 3. EXPERT ESTIMATES OF KEY ASSUMPTIONS FOR UKRAINE, BY SCENARIO 29

Annex 4. METHODOLOGICAL EXPLANATIONS 30

The CONSENSUS FORECAST has been calculated on the basis of materials provided in early April 2020 by the experts of the Ministry for Development of Economy, Trade and Agriculture of Ukraine, the Ministry of Finance of Ukraine, the National Bank of Ukraine, SI "Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine", Ptukha Institute for Demography and Social Studies of the National Academy of Sciences of Ukraine, the Institute for Economic Research and Policy Consulting, the Educational and Scientific Institute for Security Management of Krok University, SE "Derzhzovnishinform", the International Centre for Policy Studies, ICU investment banking company, Ukrsybbank JSC, VoxUkraine independent analytical platform, etc.

We express our sincere gratitude to all the specialists involved in this work. Please note that all the forecast indicators presented by the survey respondents are expert estimates only rather than official forecasts of the institutions.

The Consensus Forecast is averaged values of the main forecast economic development indicators of Ukraine calculated as a median based on expert estimates by the survey respondents – leading experts in macroanalysis and forecasting. For the first time ever, this issue contains both a consensus forecast by the experts designed thereby on the basis of their own assumptions and their own economic development scenario, and an averaged value of expert-estimated key forecast indicators based on common assumptions and on a common consensus scenario of economic development. These assumptions (both external and internal within the framework of one scenario, estimated as the most probable by the experts) were received from the experts in the course of the questionnaire survey, averaged, and sent back to the experts for refinement and re-calculation.

Global experience shows that any crisis comes to an end. The COVID-19 pandemic crisis will also come to its end but now it is important to prepare for adverse consequences of the crisis to reduce their scale and mitigate their impact on business and people's living standards as well as for new challenges that will emerge in the post-crisis period. To minimize negative socio-economic implications of the COVID-19 pandemic, we need to anticipate developments, forecast trends, and undertake calculation efforts to obtain data that will inform well-reasoned managerial decision-making amid limited resources. Overcoming the crisis requires making prompt decisions usually being of a tactical nature. However, what is necessary is a longer-term vision. Ukraine is facing the COVID-19 pandemic control challenges in the context of continued reforms, macroeconomic stability support, encouragement of economic growth, and response to the on-going conflict in the east of the country.

UKRAINE'S SOCIO-ECONOMIC DEVELOPMENT SITUATION BEFORE THE PANDEMIC

Ukraine has travelled a difficult path over the past years:

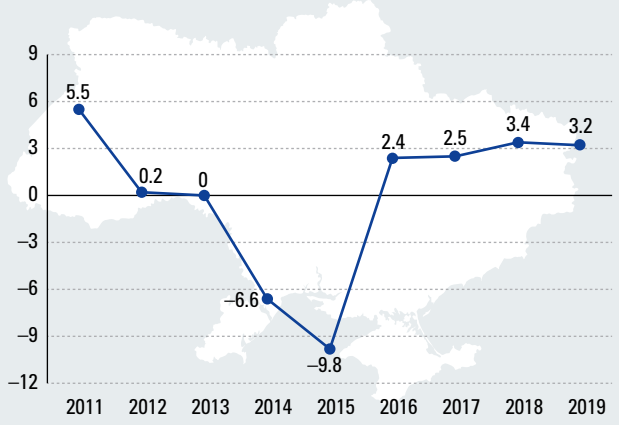
- from a severe crisis in **2014-2015** to a recovery growth **since 2016;**
- from an economy making the products competitive mostly in the markets of the CIS and other developing countries to an economy able to compete in the markets of highly developed EU and other countries;
- from a country with a limited flow of labour force and capitals to that with a free flow, gradually becoming part of the global free space;
- from an economy with conditions not enabling development of business and attraction of investments to an economy experiencing transformation and becoming friendly for business and investments.

Transformational changes were occurring in a difficult time for the country. On the one hand, it felt impact of external factors (pressure caused by the military and trade aggression on the part of the Russian Federation), while on the other hand, existing internal contradictions slowed down the pace (neither economy nor authorities nor society were ready for rapid change). The losses the economy suffered from the damage in the east and the crisis were not offset by growth (actual GDP for 2019 was 5.6% lower than the 2013 level.

During 2016-2018, even in the face of new challenges the country faced (imposition of trade restrictions by the Russian Federation in 2016, limitation of international transit cargo traffic across the Russian Federation, termination of cargo transfer by railway and road across the contact line within Donetsk and Luhansk oblasts in 2017, etc.), it began to recover gradually. Ukraine overcame the manifestations of the crisis and proceeded to an economic recover phase however with a modest growth rate.

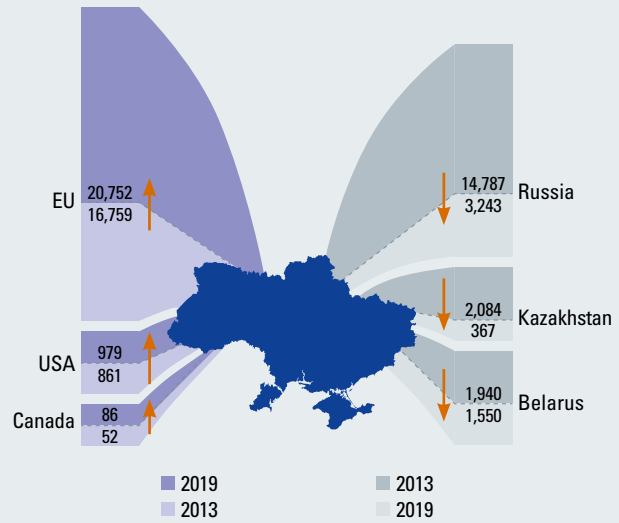
During 2019, Ukraine still had key macroeconomic stability signs present as real GDP growth for the year amounted to 3.2%. Growth was taking place in almost every economic activity (except industry).

Fig. 1. Real GDP change, % versus previous year



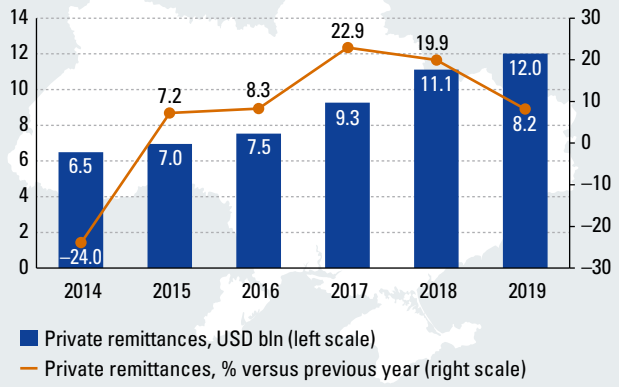
Source: SSSU

Fig. 2. Volume of exports of goods to certain countries, 2013 and 2019, mln USD



Source: SSSU, MDETA calculations

Fig. 3. Private remittances, 2014–2019



Source: National Bank of Ukraine

FOR REFERENCE:

growth rate was 23.6% in construction; 10.5% in retail trade turnover; 0.1% in wholesale trade turnover; 1.1% in agriculture; 2.1% in cargo turnover; and 2.6% in passenger turnover; whereas industrial output decreased by 0.5%.

In 2019, like in the previous year, the growth was mainly supported by expansion of domestic – both consumer and investment – demand. Domestic demand was backed up by a prolonged wage growth (*nominal monthly average wage of full-time employees increased by 18.4% in 2019)* against the backdrop of an inflation decreasing trend *(consumer inflation slowed down to 4.1% in December 2019 and was ultimately closer to the lower limit of the target range of 5% +/- 1 pp).*

Upscaling of capital investment volumes in Ukraine continued for four yeas in a row due to high activity of domestic investors – business and the public sector. Increase in the absorbed capital investment volumes was 15.5% in 2019.

Despite a worse external economic environment, exports of goods and services continued to growth at a rather higher rate, about 7.2% (*according to the National Bank of Ukraine*).

FOR REFERENCE:

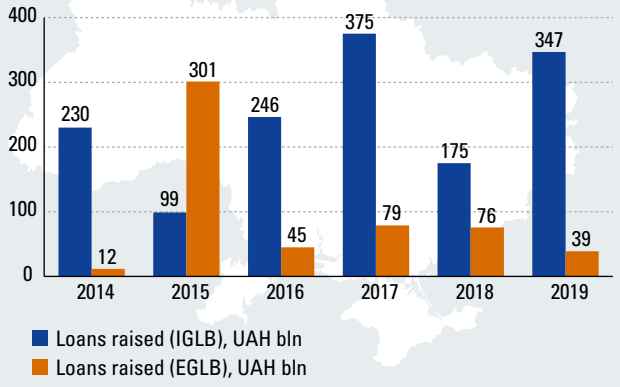
the value of imports of goods and services (according to the National Bank) increased by 7.5% compared to 2018.

There was an active increase in portfolio investments (*net inflow of portfolio investments in 2019 totaled USD 5.1 bln versus 2.1 bln inflow in 2018)* as well as in foreign investment inflow to Ukraine *(net inflow of foreign direct investments was USD 2.4 bln in 2019 (as per the balance of payments methodology)).*

The gains achieved and implementation of reforms allowed Ukraine to improve its standing in the Doing Business 2020 ranking to the 64th position among 190 countries (it ranked 71st in the previous year).

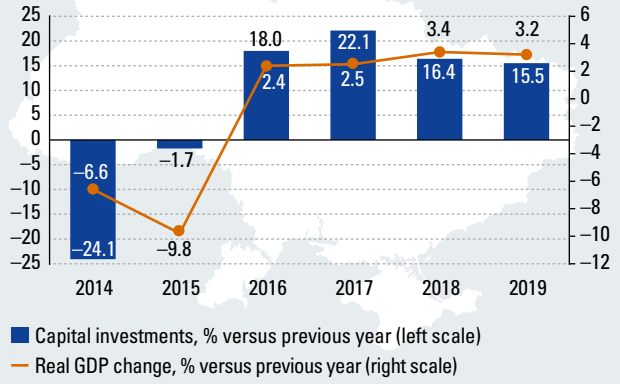
All that, amid lower financial and investment risks and further implementation of reforms, shaped positive expectations of the country's

Fig. 4. Loans raised to finance the budget deficit, UAH bln



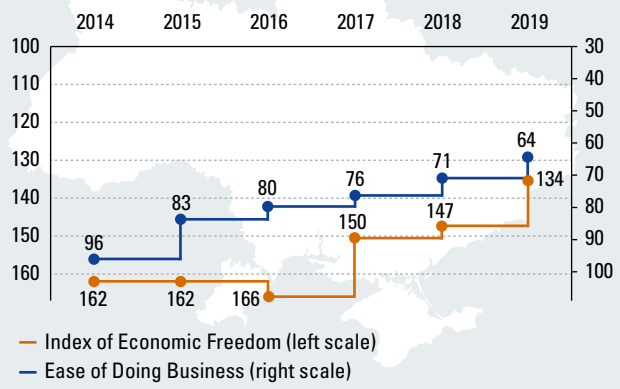
Source: Ministry of Finance

Fig. 5. Real GDP change and capital investments, 2014–2019, % versus previous year



Source: National Bank of Ukraine

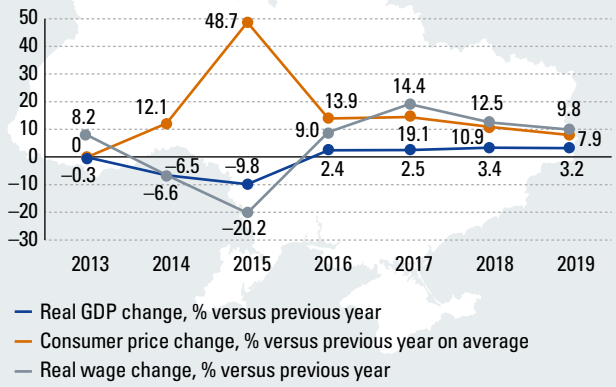
Fig. 6. Ukraine's position among other countries in indices and rankings in 2014–2019



Source: Doing Business, Wall Street Journal i Heritage Foundation, Transparency International

future development prospects. For example, the previous forecast for 2020 offered real GDP growth by 3.7%. However, due to unforeseen processes unfolding, the forecast was revised and approved by the Cabinet of Ministers of Ukraine Resolution No. 253 of 29 March 2020. According to the updated official government macro-forecast, a 4.8% GDP decline is expected in 2020.

Fig. 7. Changes in real GDP, consumer prices, and real wage, % versus previous year

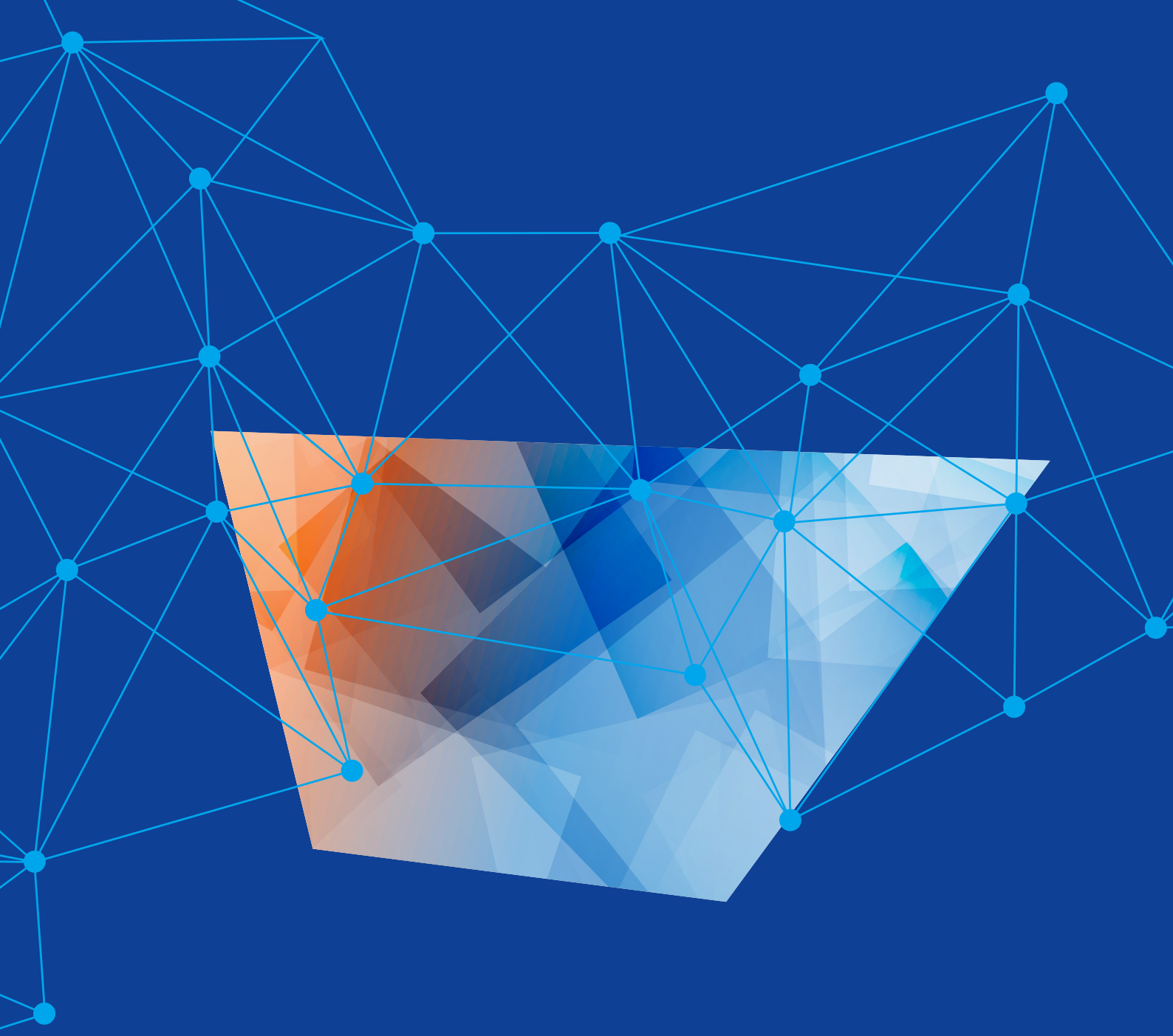


Source: SSSU

MAIN MACROECONOMIC INDICATORS FOR 2013–2019[1]

Indicators	2013	2014	2015	2016	2017	2018	2019
GDP							
Nominal GDP	1,465.2	1,586.9	1,988.5	2,385.4	2,983.9	3,560.6	3,974.6
Real GDP, % year-on-year	0	–6.6	–9.8	2.4	2.5	3.4	3.2
Output of certain economic sectors, %, year-on-year							
Agriculture	13.6	2.2	–4.8	6.3	–2.2	8.1	1.1
Industrial production	–4.3	–10.1	–12.3	4.0	1.1	3.0	-0.5
Inflation, index (%)							
Consumer price index (annual average)	99.7	112.1	148.7	113.9	114.4	110.9	107.9
Dec. versus Dec. of the previous year	100.5	124.9	143.3	112.4	113.7	109.8	104.1
Industrial producer price index (annual average)	99.9	117.1	136.0	120.5	126.4	117.4	104.1
Dec. versus Dec. of the previous year	101.7	131.8	125.4	135.7	116.5	114.2	92.6
External sector							
Exports of goods and services, % year-on-year	–5.5	–19.9	–26.9	–3.9	17.1	9.8	7.2
Imports of goods and services, % year-on-year	–3.5	–28.1	–28.3	4.5	19.2	12.8	7.5
Foreign direct investments (inflow), USD mln	3.9	0.3	3.0	3.3	2.6	2.4	2.4
Rate of exchange, UAH/USD							
Average	7.99	11.89	21.84	25.55	26.60	27.20	25.85
End of period	7.99	15.77	24.00	27.19	28.07	27.70	23.69
Public finance, % GDP							
Consolidated budget balance	–4.3	–4.9	–1.6	–2.3	–1.4	–1.9	–2.2
Government debt (direct and guaranteed)	39.9	69.4	79.0	80.9	71.8	60.9	50.3
Social indicators							
Unemployment rate (as per the ILO methodology), % of the labour force aged 15-70	7.3	9.3	9.1	9.3	9.5	8.8	8.2
Real monthly average wage of workers, % year-on-year	8.2	-6.5	-20.2	9.0	19.1	12.5	9.8

[1] Data for 2013 are provided without including the temporarily occupied territory of the Autonomous Republic of Crimea and Sevastopol city, and data since 2014 are provided also without some part of the temporarily occupied territories.



REVIEW OF FORECAST ANALYTICAL ESTIMATES

(as of 15 April 2020)

GLOBAL LEVEL

The pandemic of the COVID-19 acute respiratory infection caused by SARS-CoV-2 coronavirus became the factor that forced the entire world to re-think its being, not only revise its development forecasts, its short-term economic and social policies but also realize that a new transformational stage is beginning in which it is necessary to change approaches to shaping priorities for a long-term period. The lessons learned by the mankind from the pandemic are able to change not only the future management models but also the mankind's social behaviour.

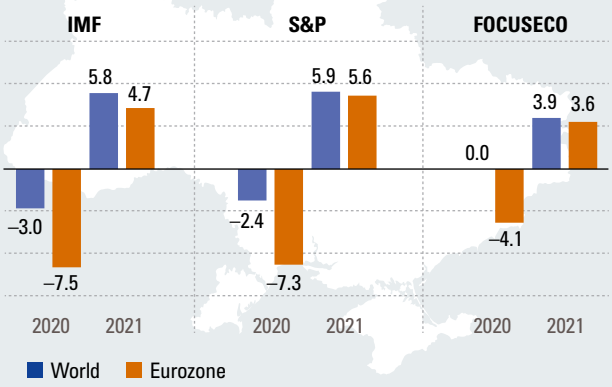
In response to the COVID-19 pandemic, major changes have occurred in life activities of many countries:

- introduction of the state of emergency in the entire country or in some of its regions or sectors: China, USA, Italy, Spain, Germany, the Czech Republic, Poland, Latvia, Estonia, Hungary, Bulgaria, Japan, the Republic of Korea, etc.;
- introduction of sanitary and epidemiological measures in almost every country (quarantine areas, temperature checks, cancellation of public events, closedown of educational, cultural and recreational facilities);
- imposition of restrictions on entry to/exit from countries and on movement inside countries;
- strengthening the public administration role in emergency settings;
- dramatic decline of economic activity due to quarantine measures, and imposition of restrictions on the working life;
- introduction of new remote forms of work and education.

Such unprecedented steps entail slowdown in economic development with expected GRP drop, decline of consumer activity, and contraction of production in all the countries where COVID-19 cases were found. Accordingly, this adversely affects the global demand development generally.

The International Monetary Fund's forecast (World Economic Outlook, April 2020)[2]. Following the developments caused by the pandemic, the IMF decreased its global economic growth projections. According to the IMF estimates, production outputs are expected to fall in 2020 down to the level never seen before since the Great Depression in the 1930s. If the epidemic situation is not brought under control in the second half of 2020, the global economy may face an estimated -3% negative shock by the end of 2020. If the epidemic continues in 2021, the global economy will experience an even deeper downfall in 2021 (by 8%).

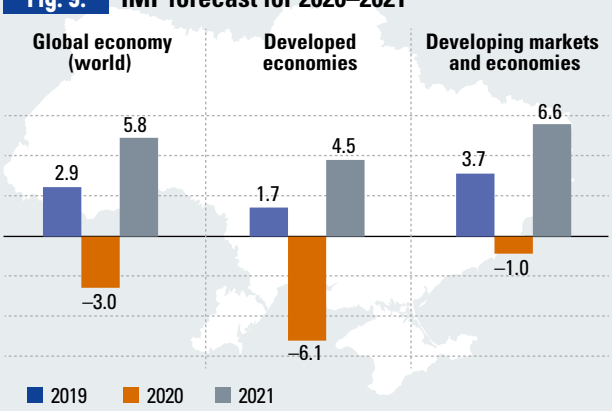
Fig. 8. GDP Forecast for 2020–2021



Forecast by the S&P GLOBAL RATINGS international rating agency[3]**:** Due to dramatic deterioration of macroeconomic prospects, the experts lowered their GDP forecasts for the year considerably. The economic impact of the pandemic proved to be "longer and more intense than thought", and services will suffer greater loss than production. Besides, the COVID-19 pandemic will hit smaller businesses harder than larger ones.

FOCUSECONOMICS[4] **(Consensus forecasts from the world's leading economists).** The world outlook was dramatically decreased in response to the March events. The COVID-19 will be accom-

Fig. 9. IMF forecast for 2020–2021



panied by both domestic and external demand decline, which will push regional economies to recession in 2020.

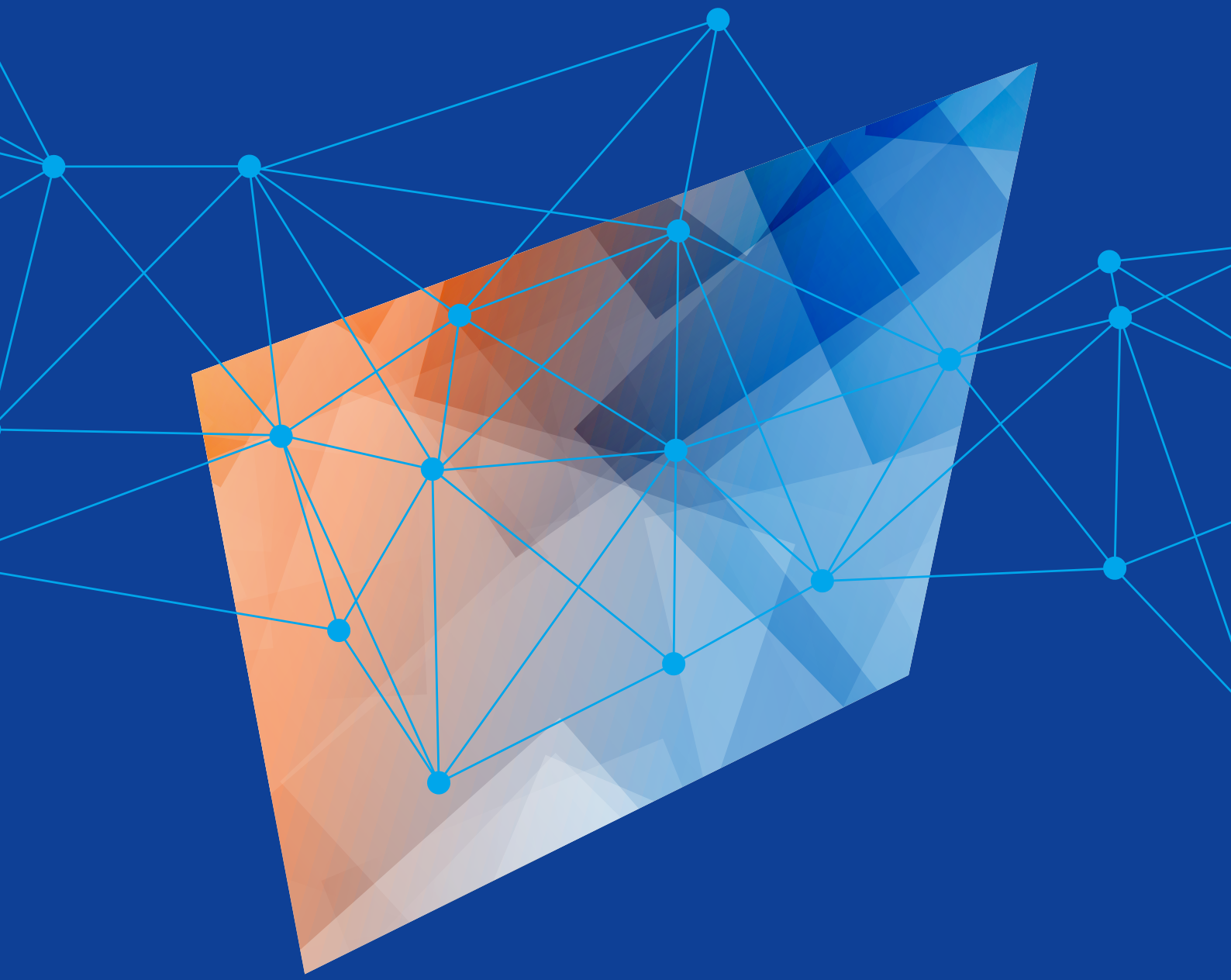
NATIONAL LEVEL

In response to the COVID-19 pandemic, Ukraine imposed the state of emergency in all oblasts to maximize mobilization of resources and protect public health. Besides, it imposed restrictive measures: airway and railway traffic suspended, intercity and international bus service stopped. The measures to control the spread of COVID-19 include: a combination of preventive non-medication measures including home isolation, social distancing for persons older than 60, restrictions on visits to parks and recreational areas, etc.; capacity building of health care facilities to provide care; testing to assess the situation, collection of relevant data; formation of the country's Stabilization Fund for rapid procurement of medical equipment; raising payments to health care professionals involved in combatting the coronavirus infection; expediting the customs clearance procedures for all the supplies required to overcome the epidemic, etc.

Governmental forecast. Slowdown of the global economic development, the fall of international prices for main domestic export goods caused thereby, and the strict preventive measures implemented by Ukraine to contain the COVID-19 spread constituted substantial grounds to revise the forecast for 2020. The forecast was revised and approved by the Cabinet of Ministers of Ukraine Resolution No. 253 of 29 March 2020. The governmental macro-forecast provides for a 4.8% GDP drop in 2020[5].

MAIN FORECAST MACRO-INDICATORS
of Ukraine's economic and social development for 2020[6]

Indicator	2020 (forecast)
Gross domestic product:	
nominal, UAH bln	3,985.5
year-on-year, percent	95.2
Consumer price index:	
average year-on-year, percent	106.8
Dec. to Dec. of the previous year, percent	111.6
Industrial producer price index (Dec. to Dec. of the previous year), percent	112
Profit of profit-making enterprises, UAH bln	749.3
Payroll budget for labour remuneration for employees and cash allowances for military servicepersons, UAH bln	1,235.5
Gross monthly average wage of workers	
nominal, UAH	10,706
nominal, adjusted to the consumer price index, percent year-on-year	95.5
Number of persons engaged in economic activities, aged 15-70, mln	16.33
Unemployment rate of the population aged 15-70 as per the International Labour Organization's methodology, percent of the labour force of respective age	9.4
Labour productivity, percent year-on-year	96.7
Balance of trade, calculated according to the balance of payments methodology, USD mln	–8,289
Exports of goods and services:	
USD mln	59,911
percent year-on-year	94.5
Imports of goods and services:	
USD mln	68,200
percent year-on-year	90



CONSENSUS FORECAST FOR 2020–2021

FORECAST FOR 2020–2021

Indicator	Questionnaire survey[1]		Consensus forecast[2]		Governmental forecast[3]		IMF forecast[4]		World Bank forecast[5]	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
GDP, *% real change*	–4.4	2.3	–4.2	2.4	–4.8	x	–7.7	3.6	–3.5	3.0
Consumer price index,										
annual average	107.1	108.6	105.8	107.7	106.8	x	104.5	107.2	108.9	105.0
Dec. to Dec. of the previous year	110.0	107.5	107.0	105.9	111.6	x	107.7	105.9	x	x
Rate of exchange, *UAH / USD*										
average	28.5	29.0	28.85	30.0	30.0	x	x	x	x	x
end of period	30.0	30.0	29.5	30.75	29.5	x	x	x	x	x
Unemployment rate, *% of the labour force aged 15–70*	9.7	9.1	9.4	9.1	9.4	x	10.1	9.3	x	x

1 Averaged values of several main forecast indicators, estimated by experts, on the basis of common assumptions and a common consensus scenario of economic development.

2 Averaged values of main forecast indicators of Ukraine's economic development, calculated as a median on the basis of the survey respondents' own assumptions and economic development scenario.

3 Indicators presented in the CMU Resolution No. 253 of 29.03.2020.

4 https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020

5 https://openknowledge.worldbank.org/bitstream/handle/10986/33476/9781464815645.pdf

Comparing the forecasts obtained when preparing this issue – the consensus forecast and the averaged forecast provided by the experts based on a common scenario and assumptions of that scenario – we should note that differences in terms of GDP and unemployment indicators are not significant. At the same time, consumer price index estimates differ rather considerably: they are higher under the common scenario-based forecast; the rate of exchange parameters also differ, especially in 2021 when currency devaluation is higher. At the same time, the averaged forecast is substantially closer in its parameters to the governmental forecast (except for the rate of exchange). The IMF's forecast of the GDP pattern in Ukraine is the most pessimistic among all compared forecasts. Inflation parameters are as close as possible to those of the consensus forecast.

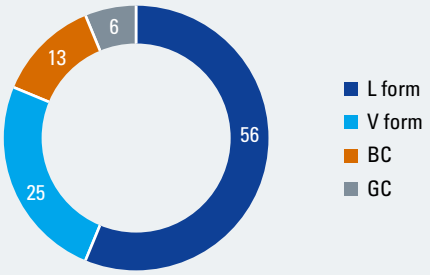
Despite uncertainty concerning the COVID-19 pandemic duration and its consequences for the economy, Ukraine should design its own anti-crisis policy. From today's perspective, it is hard to estimate future changes and even harder to predict trends and plan appropriate actions for a short term. How long will the pandemic last? How deep is economic downfall? Which economic activity areas will be hit most of all? – answers were received from key experts to these and some other questions upon the MDETA's initiative. The consensus forecast survey experts provided their own estimates of global economic development amid considerable uncertainty when no forecasts were available from leading international financial institutions (as of early April, namely 14 April 2020, the IMF's forecast was published).

SUMMARIZED EXPERT OPINION

QUESTIONNAIRE SURVEY RANKING RESULTS, % of total

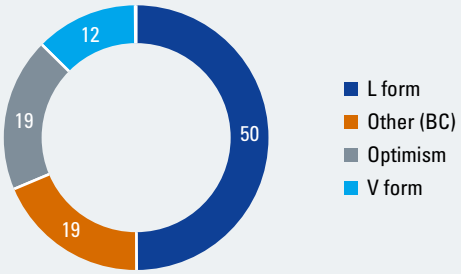
According to the consensus forecast, the global economy will fall by 0.6% in 2020. Economic recovery of the countries will follow the L form: the pandemic will be stopped in the immediate future, however, economic losses will be rather considerable, which will cause slow recovery of the global economy beginning from the second half-year. In 2021, growth will be 2.3%.

The most realistic scenario for global economy development amid COVID-19 spread



According to the consensus estimates, Ukraine will demonstrate a deeper decline – 4.2% in 2020. The recovery pattern will be the same, L form: the quarantine measures already implemented in Ukraine will be additionally strengthened and remain in force until the end of the second quarter, which will have more negative impact upon its economy, and recovery will be very slow as a result. In 2020, inflationary processes will speed up to 7% versus 4.1% (December to December of the previous year) in 2019 (due to devaluation processes, the average annual rate of exchange will be 28.85 UAH/USD).

The most realistic scenario for Ukraine



All components of demand will have a negative pattern, however reduction of investments will be the most significant, by 14.8%.

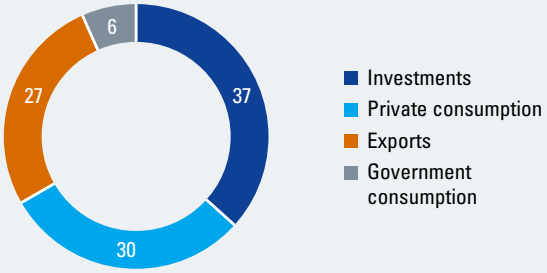
To maintain consumer demand and mitigate adverse implications of the implemented quarantine measures, budget support will grow, which, amid reduced incomes, will cause a major increase in the budget deficit to 5.6% GDP.

The economic dynamics will be hindered most of all by retail and wholesale trade, transport, metallurgy, and machine-building.

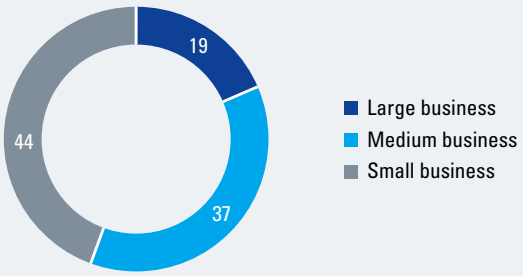
Small and medium business will the most vulnerable in terms of the scale of business.

Spheres/sectors that will first of all hinder the country's economic development during and after the pandemic in 2020

a) by demand component

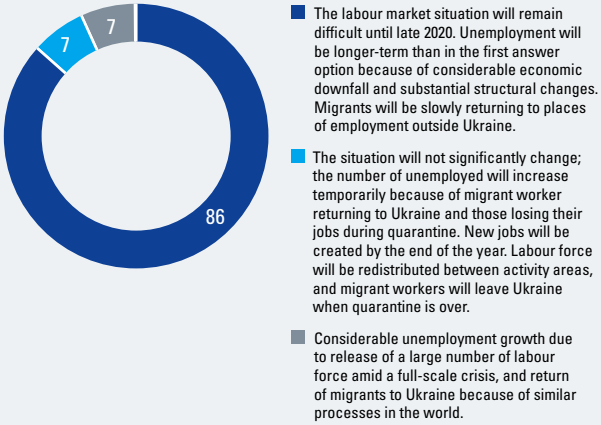


б) by scale of business



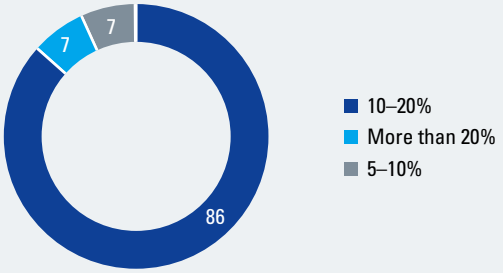
The labour market situation will remain difficult until late 2020. Unemployment will be protracted, with considerable economic downfall and substantial structural changes. Migrants will be slowly returning to places of employment outside Ukraine both due to there still being contagion risks and because of economic problems in the world. Unemployment rate will be high.

Labour market prospects



Production output decline and the labour market situation will have a strong adverse impact on people's poverty (as estimated by the experts, poverty rate will increase by 10-20% compared to the year beginning).

Poverty rate growth

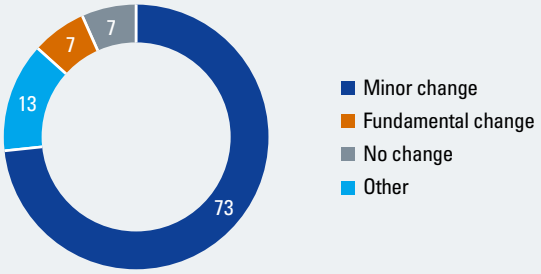


In the experts' opinion, the greatest threats to Ukraine's economic recovery include: 1) protracted extension and strengthening of domestic quarantine measures; 2) lack of a clear anti-crisis action plan to support the economy and protect citizens during the pandemic; and 3) deep downfall of economic activity in the main trade partner countries, hence major deterioration of the situation at global commodity markets.

The greatest threats to Ukraine's economic recovery, scored by the degree of their impact upon the situation

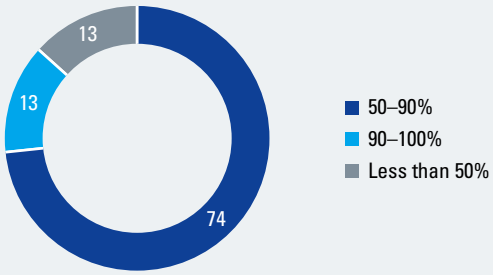
In the experts' opinion, minor changes in behaviour of economic entities are expected after the pandemic. In particular, people's behaviour and demand structure (economic activity area change, healthy lifestyle, hygiene and sanitation, globalization and active movement, attitude to vaccination, etc.) will not change fundamentally when the pandemic is over.

People's behaviour and demand structure after the pandemic



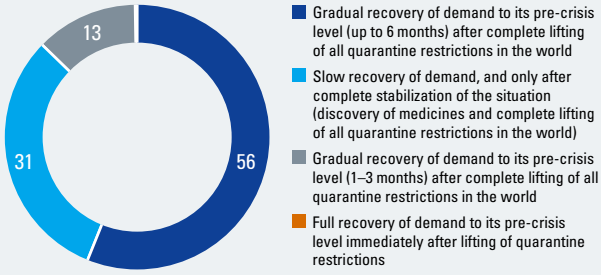
The EU countries will continue to pursue their policy of engaging labour force from abroad, though in a more moderate way. The domestic labour market situation will not substantially change compared to the pre-pandemic period. As a consequence, a considerable percentage of migrant workers can return to employment outside Ukraine when the pandemic is over.

Percentage of migrant workers returning to employment outside Ukraine



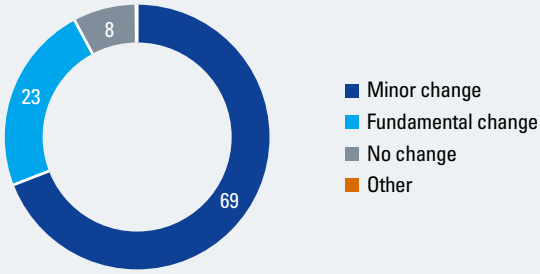
It is expected that the Ukrainians' demand for international transport and tourist services will recover in about 6 months after complete lifting of all quarantine restrictions in the world.

Recovery of the Ukrainians' demand for international transport and tourist services



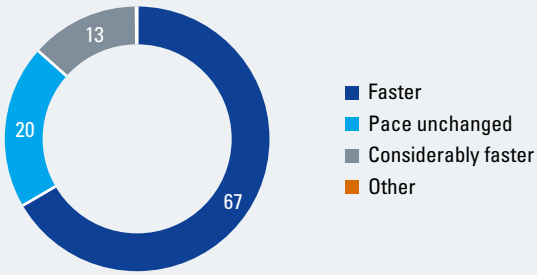
Changes in investment activities of economic entities after the pandemic will be minor, however they can be considerable in some economic sectors due to demand structure change (and owing to possible introduction of incentives for investing in certain sectors).

Investment activity of economic entities after the pandemic



Ukrainian economy's changes towards transition to a new quality will become faster, with processes of digitalization, robotization and using the "remote workplace" modality becoming more active.

Ukrainian economy's changes towards transition to a new quality



Economic growth at the rate of 2.4% will take place in 2021, however it will not offset the 2020 decline. Inflation will slow down to 5.9% (December to December of the previous year). All the demand components will follow a positive pattern. The greatest growth, 6.9%, is expected in investments – as an effect of a low baseline. Unemployment rate will be gradually decreasing to 9.1% but without reaching its pre-pandemic level.

SCENARIOS OF UKRAINIAN ECONOMY'S DEVELOPMENT IN 2020[8]

The COVID-19 spread posed a challenge to all countries. In response to rapid situation changes, the forecasting organizations both globally and in Ukraine revised their forecasts and scenarios on several occasions in a short time. Evolution of forecasts in Ukraine was as follows.

In March 2020, forecast estimates of the country's economic situation were rather optimistic:

first of all, the virus reached Ukraine later than most European countries, and timely stringent measures and restrictions to slow down the COVID-19 spread were imposed as soon as middle of March 2020;

secondly, it was assumed that strong fiscal and monetary incentives in developed countries would enable the global economy to recover rather actively from the temporary short-range shock as soon as beginning from the 3rd quarter, in the so-called V format.

Therefore, the following scenarios were considered as the most realistic to Ukraine in the third decade of March 2020:

Scenario 1: the preventive measures adopted by Ukraine will allow containing the mass COVID-19 spread in Ukraine, and the quarantine measures will be cancelled in the middle of April.

Accordingly, economic and consumer activities were expected to recover in the 2nd half-year after short-term losses. The forecasts included low profitability of export-oriented companies that would hold back investment activity because prices and demand in the world market under this scenario were still expected to be lower than predicted earlier.

Global GDP growth in 2020 was predicted to be about 1.5–2% whereas Ukrainian GDP growth under such conditions could be up to 1%. No tangible impact on the consumer market price behaviour was expected. Besides, the rate of exchange was also expected to remain rather stable (with minor depreciatory fluctuations during late March and early April). Moderate unemployment was predicted due minor job losses in the SME sector.

Scenario 2: the measures taken by the country will allow containing the mass COVID-19 spread but the quarantine measures in Ukraine and globally will remain in force until early May.

Under this scenario, it was expected due to a prolonged quarantine that losses in private consumption would be greater, an investment pause will be longer, and investment decline overall would be deeper owing to a more negative response from the global economy. Considerably greater adverse effects were also expected for the labour market because of some SME closures.

For example, most export prices were expected to drop by about 10% in case of the 1.3% global GDP growth. Change in exports under this scenario in real terms was predicted to be negative, however a drop in imports was expected to be event greater. The currency rate of exchange under this scenario was estimated by the experts as 29 UAH/USD on average for 2020 and 30.5 UAH/USD at year end. They projected that inflation could move beyond single-digit numbers and reach 11% (December to December). No GDP growth (i.e. 0%) or a minor decrease was expected under this scenario.

The COVID-19 spread situation in the world is rapidly changing, and everyone now understands that the pandemic will last much longer and that consequences of the crisis occurrences unfolding in the world will be devastating. Transformation of scenarios and forecast estimates concerning the development of global and Ukrainian economies begun. Almost every week saw new forecast expectations emerging, according to which the most realistic sce-

[8] As estimated by a group of independent experts (with account of dynamic situation changes).

nario appeared to be the one under which the pandemic will be successfully brought under control during the 2nd quarter of 2020, however economic losses will be rather significant, thereby causing slow recovery of the global economy. It means that economic development during 2020 and 2021 will be following the L form. As soon as early April, some international forecasting organizations started to lean towards the scenario according to which attempts to stop the pandemic will fail, therefore economic losses will be much greater, thereby entailing escalation of a global world crisis, the most challenging since World War II.

The Ukrainian economy has also experienced a major adverse impact of the drastic quarantine measures, as long as 2 months by now (from 13 March to 12 May 12). Restriction of operations in some economic activities will be tangible amid emerging negative sentiments among the population and deterioration of the world market environment for some goods. The L-form scenario of slow economic recovery, the same as globally, during 2020-2021 (consensus forecast) and the conditionally pessimistic scenario remain to be the most probable ones.

The L-form scenario: it assumes that the quarantine measures in Ukraine will last until the end of the 2nd quarter, which will have a negative impact upon its economy, and recovery will be very slow as a result.

National economies will be recovering according to the L form: the pandemic will be stopped in 2020, however economic losses will be rather significant, causing slow recovery of economic and consumer activities in the world from the 2nd half-year. Prices of main export goods in global markets will be falling down (by more than 10% on average). Ukraine will demonstrate a deeper decline than the global economy, namely 4.2% in 2020. Inflationary processes will accelerate to 7% (December to December) on the back of depreciatory patterns (average annual rate of exchange will be 28.85 UAH/USD). Such estimates are lower than offered by scenario 2 (prepared in March) due to the experts' revision of the pandemic impact on prices. Under such conditions, a decline in both domestic and external demand is expected in Ukraine; besides, migrant workers' remittances will decrease substantially.

To maintain consumer demand and mitigate adverse implications of the implemented quarantine measures, budget support will grow, which, amid reduced incomes, will cause a major increase in the budget deficit to 5.6%. The labour market situation will remain difficult until late 2020. Unemployment will be protracted because of considerable economic downfall and substantial structural changes. Migrants will be slowly returning to places of employment outside Ukraine both due to there still being contagion risks and because of economic problems in the world.

The conditionally pessimistic scenario: it assumes that containment of the mass COVID-19 spread will become the country's top-priority objective and that the quarantine measures in Ukraine will be extended to a longer period.

Aggravation of the situation can be caused by such adverse occurrences as acceleration of the disease propagation rate and a dramatic rise in the number of patients in need of medical attention. This will result in losses and deterioration of the social infrastructure and life support systems. The general crisis can lead to difficulties in providing essential services, medical aid, social and educational services, etc., to people. Under this scenario, economic decline and unemployment growth are possible as a result of enterprise closures, broken economic ties, reduced production capacities, restricted financial and banking and transport infrastructure operations, etc. Under such conditions, there will be low external and domestic demand as a result of hindered economic growth and reduced people's purchasing power due to real income drop. Given such circumstances, GDP will contract by 7-8% in 2020. Hryvnia will depreciate considerably, to 31 UAH/USD on average, inflation will be 12-13% (December to December), and the budget deficit will reach 8%.

INTEGRAL ASSESSMENT OF RISKS (PHENOMENA) FOR 2020–2021[9]

[9] Risks were assessed on a scale from 0 to 4 by two criteria: probability and impact of the risk on the economy of Ukraine. See methodological explanations in Annex 4.

ENDOGENOUS
(domestic risks or phenomena that will have impact)

Among the domestic risks (phenomena) suggested to the experts for review, significant growth in the state budget deficit and cash gaps in the PFU and other state social insurance funds turned out to be the most significant one (integral estimate 14 in 2020 and 13 in 2021 out of maximum 16). This risk was estimated by experts as rather significant in the previous years (average integral estimate 8 in 2017-2019) but it became the most probable in the COVID-19 pandemic context.

High estimates (above 10) for 2020 were given to 7 of 12 newly suggested domestic risks related to the COVID-19 pandemic:

- *substantial decline of people's effective demand* (integral estimate 13 in 2020, 10 in 2021);
- *considerable unemployment due to return of migrant workers, mass dismissal of workers* (13 / 11);
- *exponential COVID-19 spread, the health care system's inability to stop the pandemic in Ukraine* (12 / 10);
- *sharp deterioration of people's life quality, first of all in the most vulnerable populations* (12 / 8);
- *mass medium and small business bankruptcies* (12 / 8);
- *deep prolonged recession* (11 / 9);
- *acceleration of inflationary processes* (11 / 9).

Estimates of some permanent risks / phenomena remained high for 2020-2021:

- *increase of economic agents' negative expectations* – 12 in 2020 (7 in the previous survey), and 9 (6) in 2021;
- *expansion of the real economy's insolvency* – 12 (7) in 2020, 10 (6) in 2021;
- *remaining low credit activity of commercial banks in the real economy* – 11 (8) in 2020, 10 (7) in 2021;
- *slow privatization processes* – 11 (6) in 2020, 10 (6) in 2021;
- *persistently high level of corruption* – 11 (10) in 2020, 10 (10) in 2021.

The domestic risk / phenomenon of considerable increase of housing and utility tariffs for households due to energy carrier price growth was estimated by the experts as the least significant to economy: integral estimate 4 in 2020 and 5 in 2021.

EXOGENOUS
(foreign risks or phenomena that will have impact)

Among the **foreign risks (phenomena),** high integral estimates for 2020 and 2021 remain for risks that are assessed not for the first time:

- *deficit of external funding and shrinkage of possibilities of access to the international capital markets* – integral estimate 13 in 2020, 10 in 2021 (integral estimate of this risk in the previous survey was 8 in 2020 and 7 in 2021);
- *shrinkage of foreign sales markets because of high competition* – 12 in 2020 (7 in the previous survey), 9 (8) in 2021;
- *new global crisis (due to disruption of well-established production ties and to bankruptcy of some industrial producers in the EU countries/world)* – 11 (8) in 2020 , 9 (7) in 2021;
- *withdrawal of non-residents from IGLBs* – 10 (8) in 2020, 8 (not estimated) in 2021.

A high integral estimate was given to a new foreign risk, *second COVID-19 pandemic wave in the world* – 11 / 7.

Besides, the following risks / phenomena were estimated in 2020 for the first time: *considerable surge of inflation because many economies are filled with resources of stabilization funds designed to combat COVID-19* (8 / 6) and *deficit of food products because of protracted quarantine measures, which will eventually lead to contraction in demand and,*

accordingly, in output of food products as well as to bankruptcy of farms (8 / 6).

The risk of *refusal to cooperate with the IMF* was estimated by the experts as the least significant of foreign risks: integral estimate 3 in 2020 and 2 in 2021. According to the previous estimates, impact of this risk was somewhat greater: 5 in 2020 and 4 in 2021.

FOREIGN RISKS / PHENOMENA (April 2020)

Foreign risks / phenomena	Integral estimate	
	2020	2021
Deficit of external funding and shrinkage of possibilities of access to the international capital markets	13	10
Shrinkage of foreign sales markets because of high competition	12	9
New global crisis (due to disruption of well-established production ties and to bankruptcy of some industrial producers in the EU countries/world)	11	9
Second COVID-19 pandemic wave in the world	11	7
Withdrawal of non-residents from IGLBs	10	8
Substantial decrease of prices at the world markets of raw (non-energy) commodities	8	7
Escalation of hybrid threats to national security of Ukraine, including active military stand-off in the east of the country	8	9
Considerable surge of inflation because many economies are filled with resources of stabilization funds designed to combat COVID-19	8	6
Imposition of new trade barriers to domestic exports by other countries	8	7
Deficit of food products because of protracted quarantine measures, which will eventually lead to contraction in demand and, accordingly, in output of food products as well as to bankruptcy of farms.	8	7
Commissioning of the Nord Stream 2 and the Turkish Stream pipelines	8	9
Failure to obtain planned financing from the iMF	8	8
Food inflation growth in the world	8	7
Receipt of minor donor assistance amounts	7	7
Substantial increase of prices at the world energy markets	6	5
Full blockade of the Azov Sea ports	5	6
Imposition of additional sanctions/restrictions against Ukraine by the RF	5	4
Imposition of additional sanctions/restrictions against the RF by Ukraine	4	4
Refusal to cooperate with the IMF	3	2

– Most significant domestic risks

DOMESTIC RISKS / PHENOMENA (April 2020)

Domestic risks / phenomena	Інтегральна оцінка	
	2020	2021
Significant growth in the state budget deficit and cash gaps in the PFU and other state social insurance funds	14	13
Substantial decline of people's effective demand	13	11
Considerable unemployment due to return of migrant workers, mass dismissal of workers	13	10
Expansion of the real economy's insolvency	12	10
Exponential COVID-19 spread, the health care system's inability to stop the pandemic in Ukraine	12	10
Sharp deterioration of people's life quality, first of all in the most vulnerable populations	12	10
Increase of economic agents' negative expectations	12	9
Mass medium and small business bankruptcies	12	8
Remaining low credit activity of commercial banks in the real economy	11	10
Acceleration of inflationary processes	11	9
Deep prolonged recession	11	9
Persistently high level of corruption	11	10
Slow privatization processes	11	10
Aggravation of problems in the banking system:		
growing gap between credits and deposits in terms of amounts and periods, and increasing credit riskiness (failure to repay and prolongation)	10	9
further decline of trust in the banking system	8	7
drop in the banking system's profitability and decline in its functioning stability	8	7
Panic in the currency market	10	7
Insufficiently fast implementation of reforms	10	8
Manifestation of substantial devaluation tendencies in the currency market	9	7
Persistence/strengthening of people's distrust in the banking system (reduction of long-term deposits)	9	9
Low yield of grain crops	9	7
Acceleration of food inflation processes amid mass farm bankruptcies	8	7
Social protests amid deep prolonged recession	8	7
Stoppage of production capacities in sectors with a continuous work cycle	8	6
Default on foreign debts	7	6
Logistical problems in freight rail transport	7	5
Implementation of the land reform	7	9
Deficit of energy resources in the country (including coal)	6	6
Considerable upward revision of social standards	6	7
Introduction of a tax on withdrawn capital	5	4
Considerable increase of housing and utility tariffs for households due to energy carrier price growth	4	5

– Most significant domestic risks

EXPERT PROPOSALS TO OVERCOME CRISIS DEVELOPMENTS

FOR A SHORT-TERM PERIOD
(when quarantine measures are in force)

Support to business – key proposals by experts:

- increase the budget deficit to at least 6% to shape sufficient fiscal incentives;
- grant tax exemption or delay in tax payment for the period of quarantine to the economic entities activities of which are prohibited by the CMU Resolution No. 211 of 11.03.2020, namely the economic entities activities of which provide for reception of visitors, particularly public catering facilities, shopping and recreation centres, other entertainment establishments, fitness centres, cultural establishments, sales outlets, and consumer service facilities. This list can also include the economic entities engaged in tourist business, and passenger motor carriers;
- grant targeted financial aid to those employees who were forced to take unpaid leave or a childcare leave for the quarantine period, at the stabilization fund expense;
- implement a package of financial measures to support small business and individual entrepreneurs.

Support to the population – key proposals by experts:

- provide state financial aid to the most vulnerable populations to mitigate social tension and encourage demand;
- restrict export of socially important goods;
- introduce temporary government regulation of prices of socially important goods;
- exempt the persons having lost their jobs from repayment of mortgage loans on the temporary basis, until the end of the year, without imposing a fine or accruing interest;
- expand the list of medicines in the Affordable Medicines programme for the population.

FOR A MEDIUM-TERM PERIOD
(after the quarantine and during the next few years)

Government policy measures considering the lessons learned from the response to COVID-19: key proposals by experts

In public health care:

- design protocols of actions in case of the pandemic (in public health care, transport, education, public and local authorities, organization of the VRU meetings);
- provide protocols of dealing with the individuals returning from the territories where the pandemic threat risk is higher;
- increase financing for public health care, including to restore the sanitary epidemiological service, particularly by implementing a nationwide programme for arrangement (construction) of infectious disease departments across the country (with bed count calculated as % of the city/village population) with a complete package of modern equipment and necessary supplies), etc.;
- create (support) closed cycles of domestic production of goods, pharmaceutical drugs, equipment, and raw materials necessary for effective control of the challenges and threats of pandemic and other serious diseases (cancer, HIV, tuberculosis, etc.).

In the socio-economic sphere to neutralize the adverse impact of the pandemic consequences on the economy:

- support business, provide social support to the most vulnerable populations and ensure their further social inclusion;
- improve efficiency of public administration;
- increase financing of innovation-oriented scientific research;
- actively promote dissemination and popularization of the use of digital technologies in order to provide the opportunities for work and education on the remote basis.

Most experts believe that people's behaviour and demand structure (economic activity area change, healthy lifestyle, hygiene and sanitation, globalization and active movement, attitude to vaccination, etc.) will change after the pandemic but not fundamentally. At the same time, most experts believe that the processes of digitalization, robotization and using the "remote workplace" modality will become faster. In the experts' opinion, the crisis can open a "window of opportunity" to change the Ukrainian economy towards a transition to a new quality.

All components of the crisis are able to affect macroeconomic stability of any country adversely. Destructive consequences of the crisis developments unfolding can turn out to be extremely disruptive and cause a chain reaction of disbalance of all the national development macroeconomic indicators. Absent proper stabilization measures, the situation can change rapidly, with the crisis exacerbating. Every country pursues its own anti-crisis policy in response to COVID-19, for example by implementing social protection programmes.

As of April 2020, 45 countries have implemented, adapted or expanded social protection programmes in response to COVID-19. The measures of response are carried in all regions except Africa. The most common measures include: cash payments (30 programmes), wage subsidies (11), sick leave subsidies (10), various forms of subsidies for contributions to social security and unemployment insurance funds, tax holidays, support to small and medium business, etc.

ANNEXES

Annex 1. CONSENSUS FORECAST FOR 2020–2021

(as of 15 April 2020)

Indicator	2020	2021	2020		2021	
	Median		MIN	MAX	MIN	MAX
National accounts						
Nominal GDP, UAH bln	4,054.3	4,536.6	3,930.0	4,551.7	4,394.8	5,069.9
Real GDP, % year-on-year	–4.2	2.4	–6.6	1.4	1.5	4.4
Consumption, index (% year-on-year)	–3.0	2.3	–13.6	0.9	1.3	3.2
Gross accumulation of the fixed capital, index (% year-on-year)	–14.8	6.9	–45.0	9.2	5.1	10.0
Exports of goods and services, index (% year-on-year)	–7.9	4.0	–36.0	1.9	1.0	13.0
Imports of goods and services, index (% year-on-year)	–12.2	5.0	–39.0	3.4	1.0	8.3
Output of certain economic sectors, %, year-on-year						
Agriculture	–1.1	2.1	–8.0	0.9	1.0	3.6
Industrial production	–6.1	2.2	–8.8	2.0	0.2	3.2
Inflation, Index (%)						
Consumer price index (annual average)	105.8	107.7	103.2	111.8	105.0	110.1
Dec. versus Dec. of the previous year	107.0	105.9	105.2	118.3	105.0	107.9
Industrial producer price index (annual average)	100.3	108.6	96.8	110.3	103.0	112.9
Dec. versus Dec. of the previous year	109.9	109.6	105.0	123.8	105.8	110.6
External sector, USD bln						
Current account	–3.9	–4.0	–1.7	–8.0	–2.2	–7.1
Exports of goods and services	54.4	63.2	49.7	68.2	57.5	72.8
Imports of goods and services	–62.6	–70.0	–51.3	–82.0	–65.0	–87.8
Financial account	–2.1	–4.0	–9.0	2.6	–3.4	–10.0
Foreign direct investments	–0.5	0.3	–3.5	2.0	–2.8	3.0
Gross NBU international reserve, USD mln	22.1	22.8	16.7	25.0	17.2	29.0
External sector, % year-on-year (nominal)						
Exports of goods and services	–14.3	6.4	–21.6	7.5	5.2	13.0
Imports of goods and services	–17.4	7.1	–32.3	8.1	–15.2	10.2
Rate of exchange, UAH/USD						
Average	28.85	30.00	27.50	30.00	28.00	30.70
End of period	29.50	30.75	28.00	30.50	28.50	31.30
Public finance, % GDP						
Consolidated budget revenues	29.8	28.6	19.3	30.1	20.8	33.1
Consolidated budget expenditures	35.3	31.5	27.6	35.9	25.3	34.9
Consolidated budget balance	–5.6	–3.0	–1.9	–8.2	–2.1	–4.5
Government debt (direct and guaranteed)	60.4	54.8	57.0	64.9	46.4	60.1
Social indicators						
Unemployment rate (as per the ILO methodology), % of the labour force aged 15-70	9.4	9.1	8.1	10.8	8.0	12.4
Real monthly average wage of workers (nominal, adjusted to the consumer price index), % year-on-year	–13.9	3.2	–8.4	–18.3	–0.3	6.0

Annex 2. EXPERT ESTIMATES OF THE GLOBAL ECONOMIC DEVELOPMENT INDICATORS, BY SCENARIO

averaged values

Indicator	V form		L form		GC		BC		Consensus forecast (04/20)	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
GDP, % real change:										
World	–1.2	2.1	–0.6	2.3	–3.0	1.5	x	x	x	x
USA	–2.4	3.1	–1.5	1.7	1.6	1.7	–2.0	1.5	–1.2	1.7
EU	–4.7	2.5	–3.0	1.9	0.6	1.4	–5.0	4.5	–2.8	1.7
China	2.9	5.5	1.3	4.0	3.0	5.0	x	x	2.6	5.0
Russian Federation	–3.6	1.6	–2.7	1.0	0.5	1.0	–2.6	2.0	–2.3	1.7
Middle East, Central Asia	0.5	1.7	–0.9	1.9	2.1	2.8	x	x	x	x
Sub-Saharan Africa	2.0	2.5	0.4	2.5	2.8	3.1	x	x	x	x
Price behaviour										
Average annual price of Brent oil, USD/barrel	31.0	39.8	33.8	43.2	40.0	45.0	30.0	45.0	35.0	45.0
Average annual price of imported natural gas, USD/1,000 m3	132.5	159.0	118.4	149.5	160.0	170.0	130.0	200.0	130.0	170.0
Index of global prices of basic metals, average annual increase/ decrease, %	–12.8	6.5	–16.4	5.3	0.4	1.0	–10.0	5.0	-10	5.0
Global price of iron ores, average annual increase/decrease, %	–19.0	–2.1	–21.9	4.5	–0.8	1.0	–20.0	10.0	-20	5.0
Global price of fertilizers (carbamide), average annual increase/ decrease, %	–9.3	3.1	–19.6	6.8	2.0	1.5	x	x	-7.5	5.0
Global price of maize, average annual increase/decrease, %	–7.2	2.7	–8.1	5.8	1.8	1.7	–5.0	10.0	-5.0	2.3
Global price of wheat, average annual increase/decrease, %	–1.4	6.3	–6.8	5.8	2.1	1.5	–5.0	10.0	-5.0	2.0

Annex 3. EXPERT ESTIMATES OF KEY ASSUMPTIONS FOR UKRAINE, BY SCENARIO

averaged values

Indicator	Optimism		V form		L form		GC		BC		Consensus forecast (04/20)	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Increment of foreign direct investments (as per the balance of payments methodology), USD bln	1.5	2.8	1.8	2.5	0.6	1.9	x	x	0.2	–0.2	x	x
Loans from the IMF, USD bln	5.2	1.8	4.9	1.5	4.0	3.3	x	x	4.7	2.5	4.3	2.0
NBU discount rate, % p.a. as of the period end	9.0	7.5	7.0		8.5	7.7	x	x	9.8	8.5	8.5	7.8
Private remittances, USD mln	8,350	10,900	9,550	12,300	5,632	8,043	x	x	8,500	12,000	x	x
Travels (imports of services), USD mln	5,500	7,900	5,450	7,300	2,570	3,160	x	x	4,867	4,750	x	x
State budget deficit limit, % GDP	7.7	2.7	1.5	2.8	7.1	3.3	x	x	5.3	3.0	x	x
Share of capital investments of the consolidated budget, % GDP	3.0	3.0	3.6	3.3	4.5	5.8	x	x	6.5	10.5	x	x
Government debt limit, % GDP	54.0	53.5	60.0	53.0	59.0	56.7	x	x	54.2	52.8	x	x
Revenue from privatization of state property, UAH bln	1.0	6.0	0.5	3.0	0.8	3.4	x	x	3.0	0.9	0.5	4.5
Weighted average minimum wage, UAH	4,723	5,206	4,723	5,003	4,814	5,233	x	x	4,865	5,189	4,723	5,134

Annex 4. METHODOLOGICAL EXPLANATIONS

Methodological explanations to risk assessment. Risks were assessed by two criteria: realization probability of a specific risk, and impact of the risk on the economy of Ukraine. Based on the materials provided, an integral estimate of risks was calculated as a product of the estimates of phenomenon occurrence probability and the phenomenon's impact on the economy of Ukraine, weighed by the number of respondents. The highest possible integral value of both foreign and domestic risks is 16.

The risks and the impact of the relevant event or phenomenon occurrence on the economy of Ukraine were assessed according to the following scale:

ESTIMATE OF PHENOMENON OCCURRENCE PROBABILITY	ESTIMATE OF IMPACT OF THE OCCURRENCE ON THE ECONOMY OF UKRAINE
Considerable probability (50% or higher) of the phenomenon occurrence – 4	Significant impact – 4
Medium probability (30-49%) of the phenomenon occurrence – 3	Moderate impact – 3
Moderate probability (10-29%) of the phenomenon occurrence – 2	Low impact – 2
Low probability (less than 10% of the phenomenon occurrence – 1	Insignificant impact – 1
Phenomenon is not probable – 0	No impact – 0

Methodological explanations to tables. The aggregated nominal values and indices were calculated as a median of the relevant indicators provided by all the forecasting organizations (experts) participating in the survey, to reduce the impact of the indicators lying outside the largest set of forecast estimates, considering that due to quickly changing events in the national economy, uncertainty of and threats to its further development considerable variations / ranges of the forecast estimates provided by all the forecasting organizations arise during the expert survey.

The generalized values of the indicators being forecasted as percentage of GDP (particularly indicators of the external sector and budget) were calculated as a ratio of the median of the indicator's nominal value to the respective GDP value also calculated as median. The indicators forecasted in US dollars were calculated as a percentage of GDP using the exchange rate median.

Consensus values of the budget deficit/surplus were calculated as a difference between the median of revenue and expenditure indicators. When drafting this issue, the organizations (experts) participating in the survey provided the following materials;

- forecast assumptions regarding the economic policy to be pursued in 2020-2021, and some quantitative exogenous parameters of development;
- forecast of the main macroeconomic indicators for 2020-2021;
- expert assessment of risks for 2020-2021;
- answers to survey questions on assessment of the challenges and risks facing the Ukrainian economy due to imposition of restrictive measures in Ukraine to combat the COVID-19 pandemic.

The issue was prepared by:

Serhii Nikolaichuk
Natalia Horshkova
Valeriya Voytenko
Liudmyla Khmeliuk
Artur Ayvazov
Natalia Sitnikova
Inna Mohilat

Contact information:

MINISTRY FOR DEVELOPMENT OF ECONOMY, TRADE AND AGRICULTURE OF UKRAINE

Department for Strategic Planning and Macroeconomic Forecasting, Ministry for Development of Economy, Trade and Agriculture of Ukraine

Email: lkhmelyuk@me.gov.ua

Contact phone number: (044) 200-44-68