

Economic forecast for 2022: War causes huge uncertainty

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Executive Summary

- In 2021, Ukraine's economy grew by 3.4%, recovering from the COVID shock, but did not reach its pre-crisis level.
 - While moderate growth rate was expected for 2022 before the war, Russia's full-scale invasion changed the outlook dramatically.
 - As a result, we estimate a **30.3%** real GDP decline for **2022**. **Nominal GDP** will decline from **USD 200 bn (2021)** to **USD 154 bn**.
 - Households demand drops, as many households were displaced or lost their incomes.
 - Investments decline due to the war and the associated uncertainty.
 - Exports drop due to transport limitations and war damage to supply.
 - Supply side: broad contraction of all sectors with exception of national security and defence.
 - Infrastructure damages of USD 104 bn are estimated as of 8 June.
 - **Inflation** is forecasted at 20% (annual average) and 26% at end-2022.
 - The **current account** will turn into surplus (6.1% of GDP) due to capital controls and inflow of international support.
- **Overall, the forecast is subject to large uncertainty related to further duration and intensity of the war, the possibilities to unblock export routes and immediate financial support by partner countries and organisations.**

Structure

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3. Assumptions underlying the forecast
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1. Introduction

Background:

- On 24 February 2022, Russia started a full-scale invasion which has been continuing to the current moment in time.
- It has been causing humanitarian and social suffering and economic damages.
- Infrastructure damages of USD 104 bn (8 June) as well as blocked export routes, internal and external migration, income losses, lost production capacities and lost access to currently occupied territories led to massive decline of economic activities.
- This macroeconomic forecast provides an understanding of the implications of the war on economic activity, but as the war is ongoing without any clear perspective on a quick end, the forecast is subject to unusual high uncertainty.

Purposes of this Policy Briefing:

- Present the forecast of key macroeconomic parameters for 2022.
- Discuss main risks of the forecast.

2. Economic Review: March - May 2022

- According to IER estimates real GDP dropped by 46% yoy in March and 39% yoy in April and May:
 - Large part of economic activity in areas affected by military action was suspended.
 - Some industrial and storage facilities were damaged or destroyed by Russian bombing.
 - Logistic difficulties with supplies of inputs and deliveries of ready products, reduced demand led companies in safer areas to reduce operations.
 - According to the NBU enterprise survey over 35% of enterprises stopped their activity (14%) or slashed output by over 50% (21%) in late-May.
 - This is an improvement from early March when ca. 53% of enterprises were in similar situation.
- Logistics became an important bottleneck :
 - All sea ports accounting for over 60% of goods trade in value in 2021 are blocked since Russia`s full-scale invasion has started, Danube river ports are limited in capacity.
 - Significant capacities of railway in March were busy with evacuation of people.
 - There is limited capacity for railway cargo both on Ukrainian as well as EU side.
 - Restricted access to fuel in April and May.
 - Estimated infrastructure damage of USD 104 bn as of 8 June, appr. 40% are related to logistics.

Inflation and current account

- CPI accelerated to 13.7% yoy in March and 18.0% yoy in May.
 - Includes sharp increase in prices in occupied Kherson oblast.
 - Increase in food prices in particular for fruit and vegetables.
 - In some cases restricted exports increased domestic supplies.
 - Smaller price increases for lesser used goods and services in wartime (clothing, recreation and entertainment etc).
- NBU reported CA surplus of USD 1.3 bn in March and USD 1.1 bn in April. In April exports of goods dropped by 51% yoy and import of goods reduced by 46% yoy.
 - However numbers reported are very much subject to revisions.
 - According to the NBU in March exporters received minimum payments for exports. There was improvement in April but export receipts remained low likely due to delayed deliveries.
 - Imports of goods and services include estimates of refugee spending abroad and value of humanitarian aid.

Economic policies review

NBU:

- Official USD/UAH exchange rate pegged at UAH/USD 29.25.
- Reduced regulatory requirements for banks and provided emergency refinancing.
- Tight capital controls to preserve international reserves and to prevent bank-runs.
 - Some restrictions were lifted, different exchange rates are used for trade, international card payments and cash exchange.
 - Transfers and purchases of foreign currency are not allowed for imports not included in the critical imports list approved by the Government (in May covered ca 90% of imports).
- Beginning of June, the key policy rate was hiked by 15pp to 25% p.a.

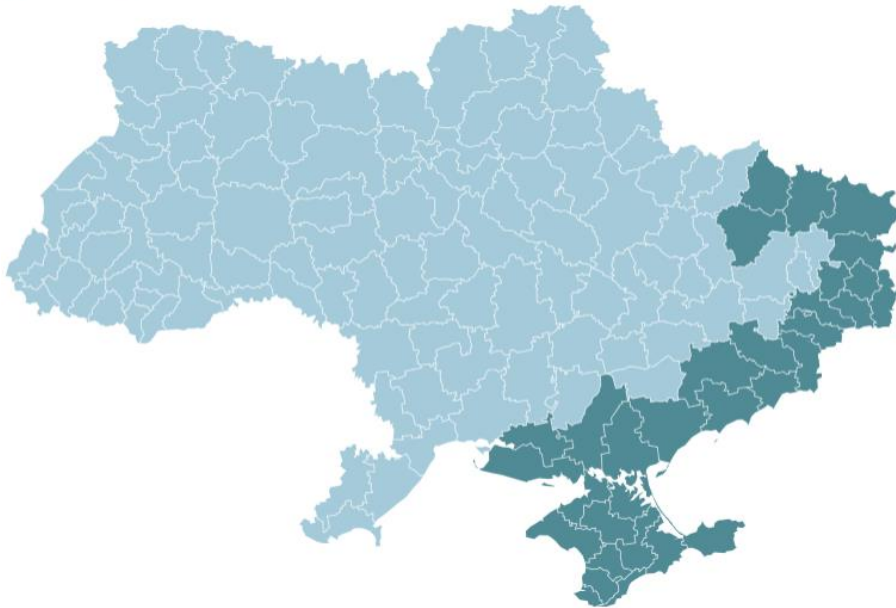
The Parliament voted for tax and customs changes, including:

- Introduced option of single tax at 2% of turnover for all companies except for those noneligible for the use of STS by their activity (regardless their size and number of employees).
- Cancelled excise and reduced VAT to 7% on fuel.
- VAT and custom duties on imports (including used cars), which were cancelled at the beginning of war, will be restored since July 1.
- An exemption from VAT payment on imports by entrepreneurs on STS.
- An exemption from payment of single tax and single social contribution by small entrepreneurs (STS groups I and II).

Damages and migration

Territories occupied by Russia

■ Occupied ■ Controlled



Source: Own illustration, mid-Jun-22

- Currently, ca. 20% of Ukraine's territory are occupied (incl. Crimea and territories occupied before 24-Feb 2022 in Donetsk and Luhansk Oblast).
- War led to massive population movements:
 - Internally displaced (ca. 7 m)
 - Persons receiving temporary protection abroad (> 3 m).
- Infrastructure damage has accumulated to ca. USD 104 bn (KSE, as of 8 June)
 - 40% are public logistic infrastructure
 - 38% are residential buildings
 - 11% are industrial objects
 - 11% others.
- Black Sea ports accounting for >60% of goods trade in value has been blocked or occupied.

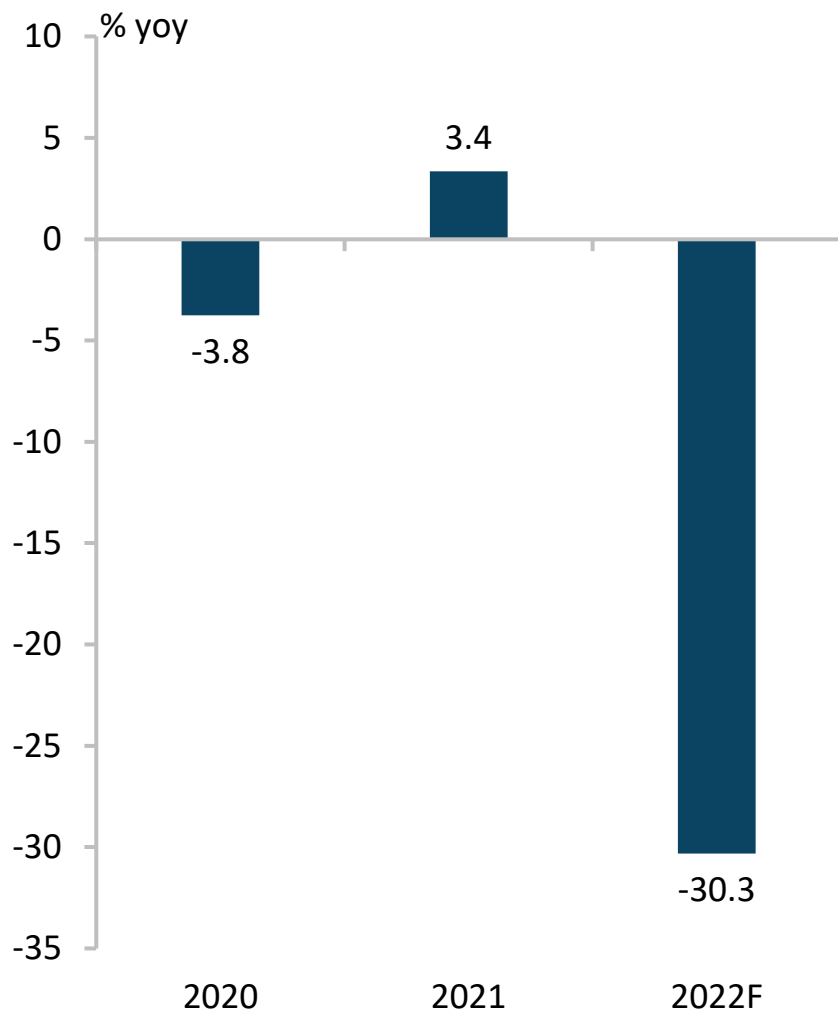
3. Assumptions underlying the forecast

MAIN ASSUMPTIONS:

- Intensive fighting will gradually subside in September-October 2022.
- Black Sea ports are blocked by Russia until the end of 2022.
- Since July, the possibility to export Ukrainian products through ports of other countries will increase.
- The United States and other international partners will deliver on commitments to provide the financial and military support to Ukraine.
- The NBU will largely maintain the capital controls but will move exchange rate closer to UAH 35 per USD by the end of the year.
- Financial sector will remain stable in 2022.
- The Government will keep energy prices for households fixed at least until the end of the year.

4. Key forecast indicators for 2022

Ukraine's real GDP change



Source: Ukrstat, own forecast for 2022

Key GDP parameters for 2022:

- Real GDP is estimated to drop by 30.3% yoy.
- Nominal GDP: UAH 4,761 bn (USD 154 bn).

Key driving forces:

- Households demand drops as many households were displaced or lost their incomes.
 - Private consumption decline is the largest driver of the GDP fall.
 - Social assistance payments so far were paid in full we expect that no significant arrears will accumulate in 2022.
- Gross fixed capital accumulation is supported by key maintenance and rebuilding needs.
- Exports dropped primarily due to logistic limitations and war damage to supply.
- Supply side: broad contraction of all sectors with exception of national security/defence.

GDP forecast: demand side

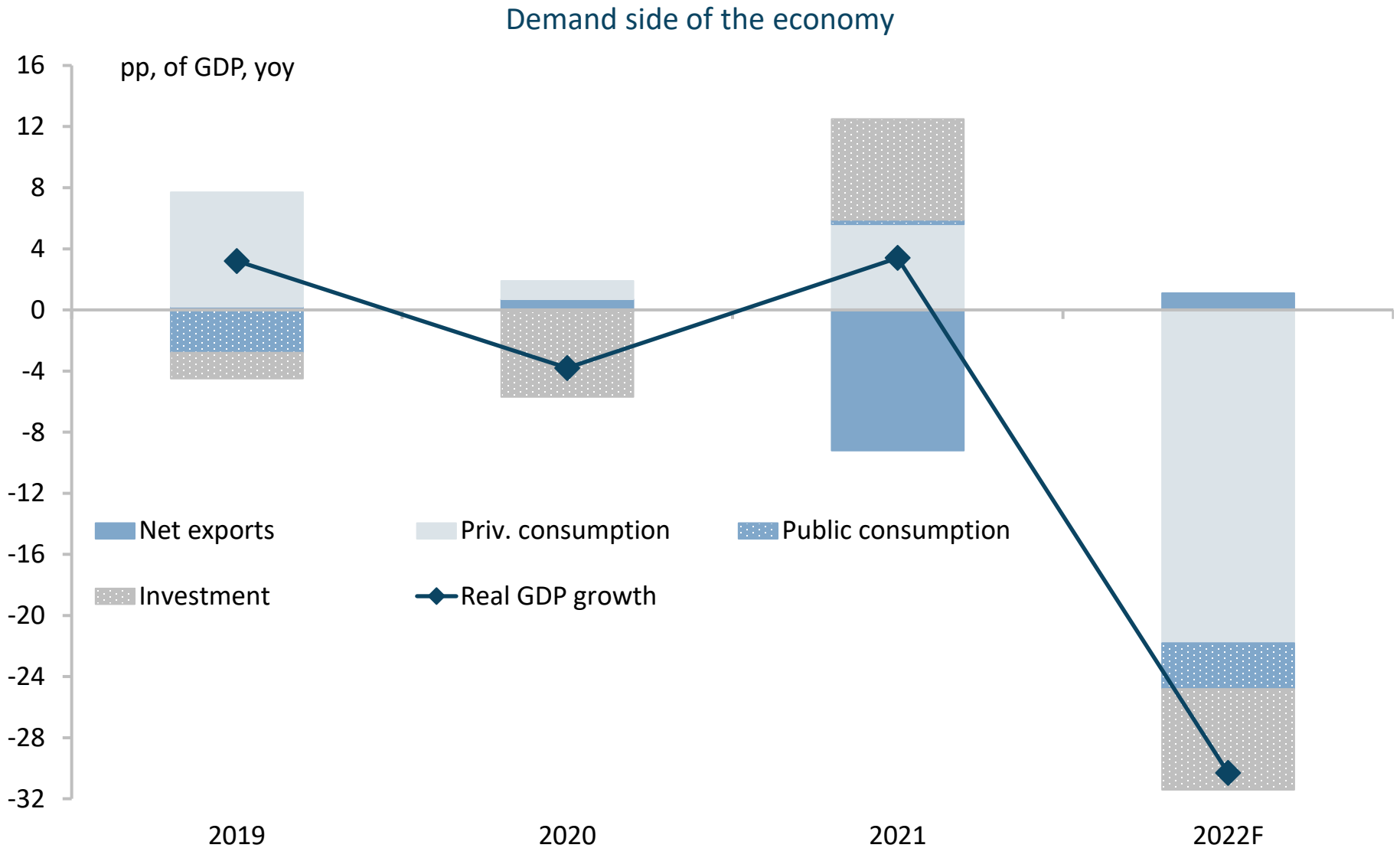
Real GDP forecast: demand side (change in %)

	2019	2020	2021	2022F
GDP	3.2	-3.8	3.4	-30.3
<i>Including</i>				
Private consumption	10.9	1.7	7.7	-31.9
Government consumption	-13.6	-0.7	1.8	-16.8
Fixed capital accumulation	11.7	-21.3	7.5	-46.0
Exports	7.3	-5.8	-10.4	-43.1
Imports	5.7	-6.4	12.7	-44.6

Source: Ukrstat, own forecast for 2022

- Private consumption dropped due to contraction of real household disposable income caused by higher inflation, larger unemployment as well as migration.
- Real exports fell sharply primarily due to blocked seaports, which accounted for 62% of total exports of goods by Ukraine in 2021 (based on customs data). Exports decline also reflected relatively low statistical base in 2021.
- Real imports declined primarily due to lower domestic demand, logistic difficulties for energy imports, and critical imports restrictions in the first months of the war.

Contributions to real GDP growth



Source: Ukrstat, own forecast

GDP forecast: supply side

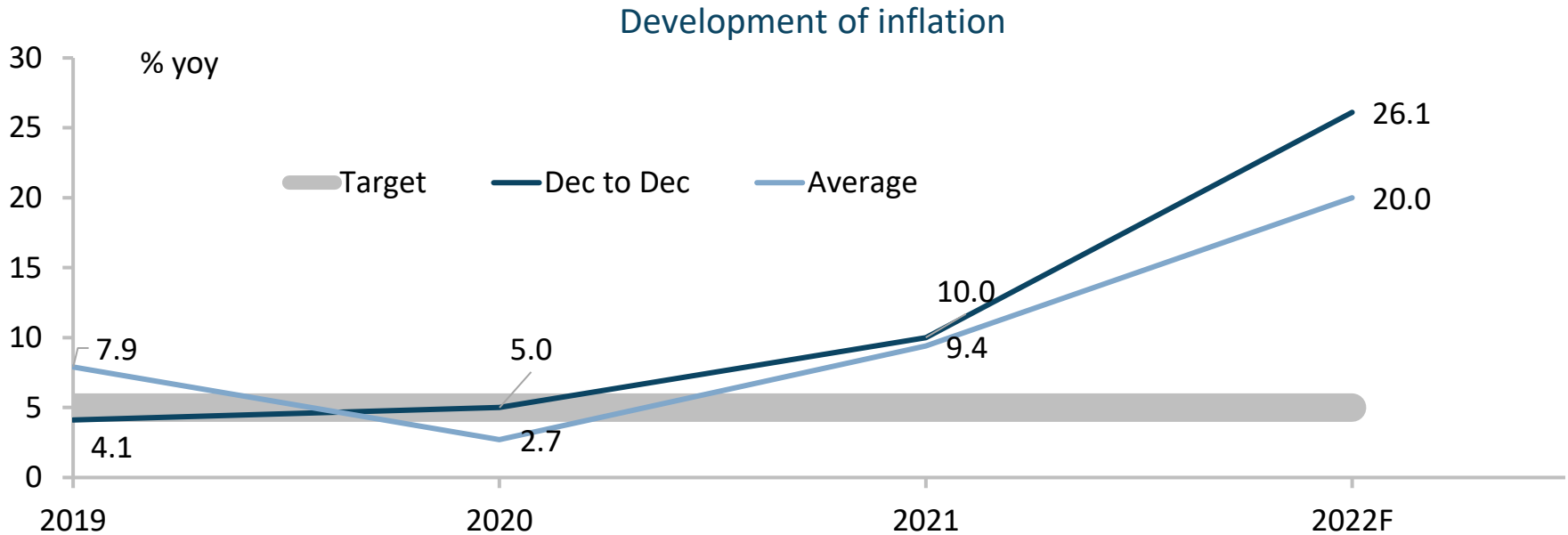
Real GDP forecast: supply side (change in %)

	2019	2020	2021	2022F
GDP	3.2	-3.8	3.4	-30.3
<i>including</i>				
Agriculture	1.0	-10.7	14.4	-17.9
Industry	-0.6	-4.3	1.7	-31.8
Trade	3.5	5.1	-0.6	-40.9
Transport	3.9	-16.0	3.3	-33.5

Source: Ukrstat, own forecast for 2022

- Real GVA in agriculture will drop due to smaller area harvested and due to lower yields because of a shortage of fertilizers. Grain harvest expected at appr. 60 m t.
- Industrial sector suffered due to damages from Russian shelling and bombing. Some companies froze their activities, while some were relocated to Western Ukraine.
- Trade reduced due to both lower domestic consumption and smaller external trade.
- Air transportation is not in operation since the start of war, while seaports are blocked. Danube ports are limited in capacity.

Inflation forecast



Source: Ukrstat, own forecast for 2022

- Fixed exchange rate and administrative measures helped reduce price pressure in the short term.
- Price increases in the spring months reflect mostly supply-side issues and scarcity will continue to drive up prices for some goods throughout the year.
- In the second half of the year weaker hryvnia, second-round effects, limited outlets for spending and tight labour market for some professions will also play a role.

Current account forecast

Current account

		2019	2020	2021	2022F
Current account balance	USD bn	-4.1	6.2	-2.6	9.1
Current account balance	% of GDP	-2.7	4.0	-1.3	6.1
Exports of goods	USD bn	46.1	45.2	63.1	38.4
Imports of goods	USD bn	-60.4	-51.8	-69.7	-47.1
Balance of services	USD bn	1.8	4.8	4.3	8.3
Transfers and remittances	USD bn	19.2	15.3	18.3	22.4 (12.4)*

Source: Ukrstat, own forecast for 2022

- Current account forecast is tentative, as many components other than trade are even more uncertain than trade estimates. Also see our notes on slide 6.
- High services surplus is due to our exclusion of refugee spending abroad and sharp drop in travel spending abroad.
- (*)Transfers and remittances are gross (wage income plus secondary transfers) and include grants to the state budget at USD 10 bn.

5. Key risks of the forecast

Downside risks:

- Continuation of the war and increase of occupied territory, and/or increasing infrastructure destruction all over Ukraine.
- Delays in the financial assistance from IFIs and bilateral donors.
- Lower improvement in freight flows than expected.

Upside risks:

- De-occupation of Ukrainian territory, removal of Russian troops.
- Logistics breakthroughs – unblocking of ports or high-capacity corridors to foreign ports.
- Early start of massive reconstruction.

Risk comparison:

- Estimates of 2022 real GDP drop submitted to consensus forecasting exercises in May range from 25% to 40%. Median forecast were more pessimistic than our estimate of 30% drop.
- In our opinion 25-40% range reasonably reflects uncertainty over current state of economy and potential impact of upside and downside risks. Downside risks outweigh potential upside.

About the German Economic Team



Financed by the Federal Ministry for Economic Affairs and Climate Action, the German Economic Team (GET) advises the governments of Ukraine, Belarus*, Moldova, Kosovo, Armenia, Georgia and Uzbekistan on economic policy matters. Berlin Economics has been commissioned with the implementation of the consultancy.

**Advisory activities in Belarus are currently suspended.*

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Annex: Forecasting notes

Limitations of the estimate:

- To simplify forecasting we decided to disregard impact of the humanitarian and military aid received by Ukraine.
 - No impact on headline GDP growth and current account balance but higher inventories, investment and consumption, current transfers and imports.
- We also exclude from our estimate the spending of Ukrainian refugees in the EU and other countries.
 - Again, no impact on headline GDP, some impact on current account.

In our judgement:

- Critical imports restrictions have minimal effect on import level going forward, import is driven primarily by demand.
- Logistic capacity is the defining factor of the export volume for agricultural commodities.

Annex: Technical note on modelling

- Forecast was produced using the IER short-term macroeconomic forecasting model. Model is based on iterative-analytical techniques, grounded in the system of national accounts
- Model looks at GDP and its components based on production and expenditures. The final result of the GDP forecast is based on forecasts for each component.
- The forecast for each component is produced using scenario assumptions and historical relationships. The forecast is built on a system of built-in proportions, which are expected to stay fairly constant
- Components of the GDPs by production and by expenditures are interconnected.
- The real GDP growth is determined by the summation of the contributions of each component. If the two sides of the GDP accounting equation are not balanced, then another iteration begins. The iterations continue until the two methods of GDP produce balanced results.

Annex: Forecast indicators

	2019	2020	2021	2022F
Real Economy				
Nominal GDP, UAH bn	3 977	4 222	5460	4761
Nominal GDP, USD bn	154	157	200	154
Real GDP, % yoy	3.2	-4.0	3.4	-30.3
GDP Deflator, % yoy	8.2	9.8	25.1	25.2
Consumer price index, aop, % yoy	7.9	2.7	9.4	20
Consumer price index eop, % yoy	4.1	5.0	10.0	26.1
Balance of Payments				
Current account balance, % of GDP	-2.7	4.0	-1.3	6.1
Exports of goods and services, % yoy	7.3	-5.6	-10.4	-43.1
Imports of goods and services, % yoy	5.7	-9.5	12.7	-44.6
Exchange rate (official), aop, UAH/USD	25.84	26.96	27.26	30.90