POLICY STUDY 03 | 2022

German Economic Team

BELARUS

The impact of the war in Ukraine and the sanctions on Belarus' GDP: Forecast update

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Executive Summary

- During 2020/2021, the EU/USA/UK and other Western countries introduced a number of **economic and financial sanctions on Belarus** in response to domestic political developments
- Additional sanctions have been introduced in 2022 due to Belarus' involvement in the Russian invasion of Ukraine
- The war and the sanctions create **significant uncertainties** for Belarus' future GDP development
- This policy study provides an update of our initial **quantitative assessment of the economic impact** on Belarus during 2022/2023, using a model-based approach made in April 2022
- We forecast **real GDP change** in Belarus:
  - 2022E: -6.2% (from -4.1% in April), and
  - 2023E: -0.4% (from 0.6%)
- **Net exports and investments** are the main drivers of the decline in 2022
- **High level of uncertainty** must be stressed, as the war is ongoing

Content

1. Introduction

Background

- Political crisis after the disputed presidential election in August 2020
  - After several rounds of escalation, including the forced downing of an EU aircraft: Introduction of sanctions from EU/USA/UK and other Western countries in 2021
- Support of Russia's invasion of Ukraine led to a further escalation
  - New round of sanctions, which significantly broadened the scope of the 2021 restrictions in both trade and financial sector
  - Together with the direct impact of the war in Ukraine on trade and logistics, significant deterioration of the economic situation to be expected
  - First impact already visible in aggregated macro data
- Key question: How strong is the impact of sanctions and the war in Ukraine on the Belarusian economy?

Purposes of this Policy Briefing

- Identification of the different shocks caused by the sanctions
- Estimation of the short- to mid-term economic impact based on a quantitative model of the Belarusian economy

2. Sanctions overview (1/2)

- After the disputed presidential elections in 2020 and further escalation in 2021, several packages of sectoral and company specific sanctions were introduced by EU/USA/UK and other Western countries
- As a reaction, Belarus introduced counter-sanctions in Dec-21, which are – on a weaker magnitude – quite similar to the Russian counter-sanctions from 2014
- In our analysis, we focus on the following sanctions ("shocks"):
  - Sanctions affecting international trade
  - Sanctions affecting the financial sector, including public debt
  - We do not consider sanctions related to individuals and the defence/security sector

24 JUNE 2021

EU sanctions
- Prohibitions on petroleum products, fertilizers and tobacco production goods
- Prohibitions on new loans, including new government debt issues

9 AUGUST 2021

US sanctions
- Sanctions directly on exporters (Belaruskali, GTF Neman, NNK)

UK sanctions
- Alignment with EU sanctions on trade and finance

(very similar sanctions by CAN on 06.08.21 and CHE on 11.08.21)

2 DECEMBER 2021

EU sanctions
- Sanctions directly on exporters (Grodno Azot, Belorusneft, Belshina)

US sanctions
- Alignment with EU/UK financial sector sanctions
- Additional sanctions on exporters (Belarus Potash, Slavkali,Transaviaexport)

6 DECEMBER 2021

BLR sanctions
- Sanctions on meat, milk, vegetables, fruits and nuts, etc. imports from EU, UK, USA and other

Source: own display

2. Sanctions overview (2/2)

- While the 2021 sanctions would have had a significant impact on the Belarusian economy on their own, they were clearly overshadowed by the war and its impact
- Due to the involvement of Belarus in Russia's invasion of Ukraine, the previous sanction packages were significantly broadened
- The **measures introduced on 2 March and 9 March 2022 by the EU** include:
  - Significant extension of the sectoral sanctions (tobacco, mineral fuels, wood, cement, iron and steel, rubber, fertilizers)
  - SWIFT ban of three Belarusian banks (Belagroprombank, Bank Dabrabyt, and the Development Bank of the Republic of Belarus)
  - Prohibition on transactions with the National Bank of Belarus (management of reserves and investment transactions)
  - Limits on financial inflows from Belarus to the EU and prohibitions on the provision of euro-denominated banknotes
- In addition, due to its close economic and financial ties with Russia, but also to some extent with Ukraine, Belarus will be heavily affected by the weakened Russian economy and the complete loss of Ukraine as an export market

3. Approach for estimating the impact of sanctions

- We created a **structural model** for Belarus that allows us to model the main economic indicators **(baseline model)**
- After calibrating the baseline model, we identify the specific shocks related to sanctions in several steps and forecast their impact
- In this **forecast update**, we adjust the specific shocks and feed them into the model (steps 3 and 4 below)

<u>Model strategy</u>

1. Calibration of the baseline model for Belarus
2. Identification of the impact channels of sanctions on the Belarussian economy
3. Quantification of the shocks based on assumptions regarding their timing, magnitude and other factors
4. Update of the baseline model to incorporate the shocks and produce a GDP forecast

➢ **Result: Model-based forecast of GDP and main economic indicators taking into account all shocks**

Description of the model (1/2)

- The forecast was produced using the structural macroeconomic model of the German Economic Team (GET macro model)
- In its approach, it is comparable to the FRB/US Model of the Federal Reserve, the FR-BDF Model of the Banque de France or the new ECB semistructural model ECB-BASE
- It is grounded in the system of national accounts
- The model looks at GDP and its components based on expenditures
- The whole model is estimated and afterwards simulated over the forecast period with a non-linear solver (Gauss-Seidel)
- The final result of the GDP forecast is based on forecasts for each component
- The model can be used for two purposes:
  - Forecasting economic developments of the GDP components
  - Simulation of country-specific exogenous shocks (e.g., a foreign finance shock or a trade sanctions shock)

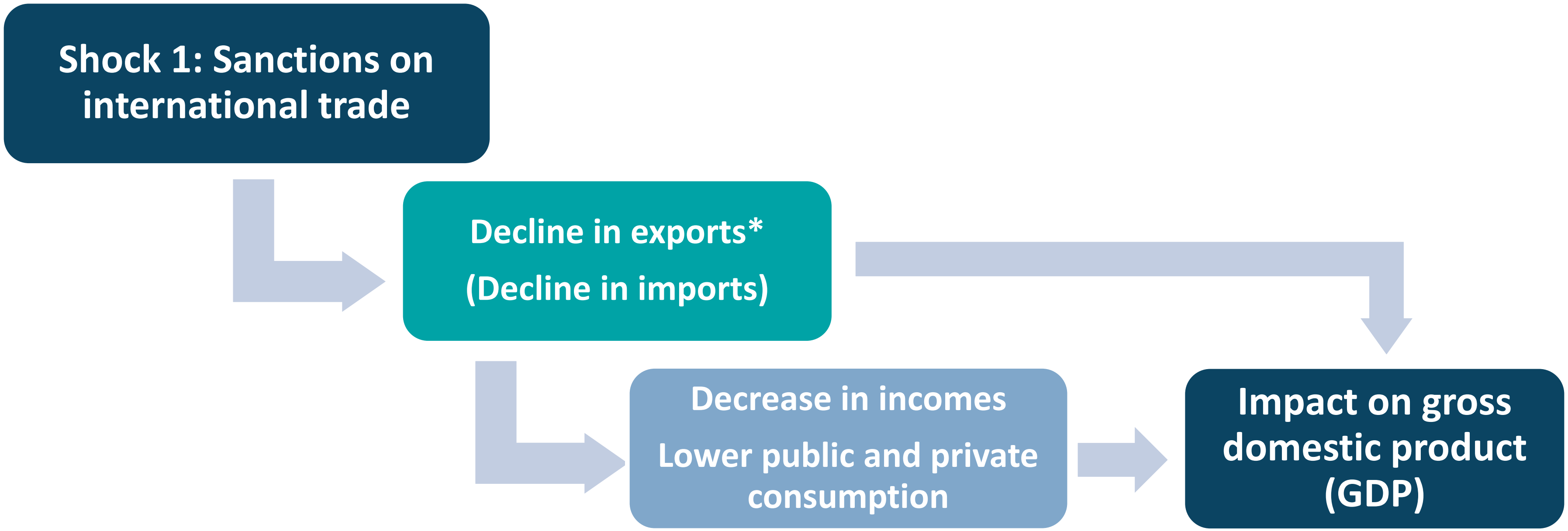
Description of the model (2/2)

- For Belarus, we use quarterly data of 34 variables, annual data of 50 variables and monthly data of 22 variables
- The first quarter of observation is Q1 1995, the last quarter of observation is Q4 2021
- Most data series are not seasonally adjusted. Here, those variables were seasonally adjusted with the ARIMA-X12 methodology
- Most relevant data sources:
  - National Statistical portal of Belarus (Belstat)
  - IMF International Financial Statistics
  - OECD Economic Outlook
  - European Commission (EU GDP forecast)

4. Identification and quantification of shocks

- In order to adjust our baseline model, we identify several shocks that are likely to impact economic growth in 2022/2023. It should be noted that it is difficult to have a clean separation of the shocks, as their impact channels are closely linked together
  - **Shock 1: Sanctions on international trade**
    - 2021 and 2022 packages of EU/UK sectoral sanctions on Belarusian exports/imports
    - US sanctions on specific enterprises
    - War-related shocks (weaker demand from Russian/Ukrainian markets, logistics, etc.)
  - **Shock 2: Sanctions on public debt**
    - De facto ban on international refinancing of public debt
    - Russia – lender of last resort – also weakened by sanctions
  - **Shock 3: Financial sanctions**
    - Financial sanctions and BYN depreciation create problems for enterprises (esp. SOEs) in servicing FX debt and lowers their investment
- The different shocks are then put inside the baseline model in order to obtain a single forecast for GDP in 2022/2023
- In the following, we describe the expected transmission channels of the shocks and the main assumptions behind them (as of August 2022)

Shock 1: Sanctions on international trade



*** variable directly shocked inside the model**

Source: own display

Shock 1 – Main assumptions

- Sanctions on international trade (especially on Belarusian exports) enacted in Jun-21/Dec-21 allowed to fulfill existing contracts. Depending on the maturity of contracts, sanctions were likely to come gradually into effect only in 2022-2023
- War-related sanctions from Mar-22 enhanced the 2021 restrictions by closing several loopholes (especially expanding potash restrictions), adding new sectoral sanctions (wood, metals, rubber) and complicating financial transactions and logistics
  - Major difference compared to 2021: All contracts concluded before 2 March 2022 are affected (grace period until 4 June 2022)
  - Thus: Impact expected to be already seen in the short term
- Overall, significant impact expected:
  - EU and UK represent 20% of Belarusian exports. Banned goods are likely to be exported to other jurisdictions, but at a discount
  - Ukraine represents 10% of Belarusian exports. It is unlikely that trade with Ukraine will be resumed in the near future
  - Russia represents 40% of Belarusian exports. Sanctions on Russia and shrinkage of its economy is likely to decrease demand for Belarusian goods. This effect will be offset by closure of other imports to Russia and Belarus taking some of their positions. Overall exports to Russia are expected to grow
  - Logistic complications are likely to decrease export re-orientation options; previously expected re-orientation through Russian ports questionable due to sanctions on Russia
  - Moreover: Losses for transportation service providers; unlikely to be recovered

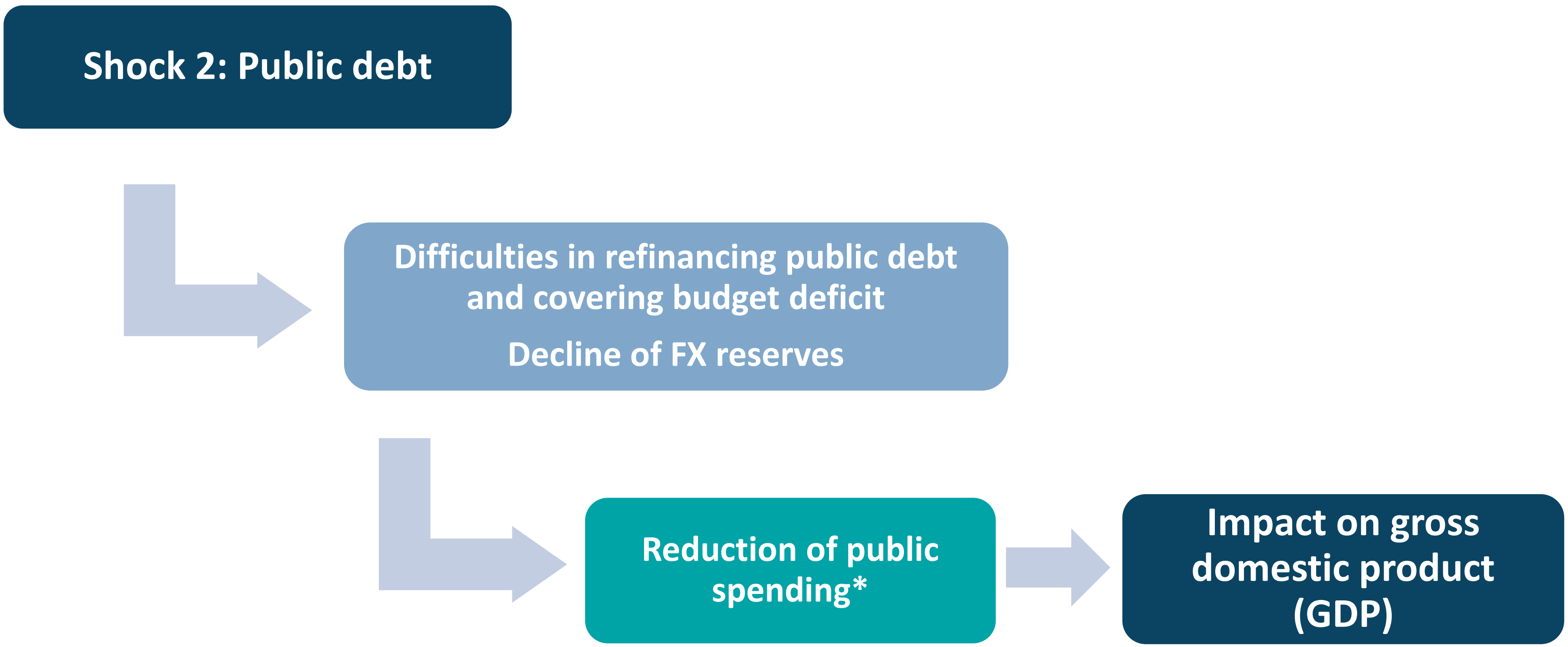
Shock 1 – Quantification

- We assume a 50% loss of sanctioned exports to the EU in 2022 and 30% in 2023. Export sanctions apply to 7.3% of GDP
- We also assume the loss of 80% of exports to Ukraine in Q2-22 to Q4-23 (20% would be re-routed to other countries) and a direct loss of 1% of GDP worth of exports due to the slowdown of the Russian economy
- Moreover, we expect the loss of service exports to amount to 2.3% of GDP in 2022 and 1% of GDP in 2023 (transportation in Q2-22: Q4-23, IT in Q3-22:Q3-23)
- Imports are falling 50% faster than exports due sanctions nature and, potentially, some import substitution measures.
- The quarterly distribution of the international trade shock is shown below

	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Goods exports shock (% of GDP)	-0.5	-1.5	-2.9	-2.9	-2.0	-1.6	-1.1	-0.8
Services export Shock (% of GDP)	-0.001	-0.4	-0.95	-0.95	-0.4	-0.2	-0.2	-0.2

Source: own calculations

Shock 2: Public debt



*** variable directly shocked inside the model**

Shock 2 – Main assumptions (1/2)

- Belarus has a relatively moderate public debt-to-GDP ratio (2021: 45%). However, almost all its debt is nominated in foreign currency
  - Belarus heavily relies on FX revenues, which are strongly impaired by Shock 1
- Already in 2020/2021 it became clear that the only foreign source of finance for Belarus is Russia, as Belarus has been de facto blocked from the major financial markets. This includes (external) debt refinancing as well as budget deficit financing
- The 2022 financial sanctions further isolated Belarus, as prohibitions on reserve related transactions with the National Bank, a SWIFT ban for several banks and further limitations were imposed
  - Like Russia, Belarus announced that it plans to pay part of its FX debt in national currency. This would imply a default
- Further financing from Russia – Belarus' lender of last resort – also appears not to be guaranteed, as Russia is heavily hit by sanctions itself
  - Russia agreed to postpone debt payments, this would lessen the burden on the budget

Shock 2 – Main assumptions (2/2)

- The availability of Russian financial resources for Belarus is largely a political matter
  - In 2020/2021, Russia agreed to refinance large portions of Belarusian debt payments
  - We assume that Russia will still be able/willing to fully finance most of Belarus' public debt needs in 2022/2023
  - According to the external debt payment schedule, Belarus has to pay USD 3.4 bn in 2022 and USD 3.9 bn in 2023
- In addition to debt repayments, Belarus planned to run a budget deficit of about 2-3% GDP in the upcoming years. Possibility of that fully depends on Russia
- Belarus defaulted on Eurobond payments during the summer of 2022, which alleviated debt pressure

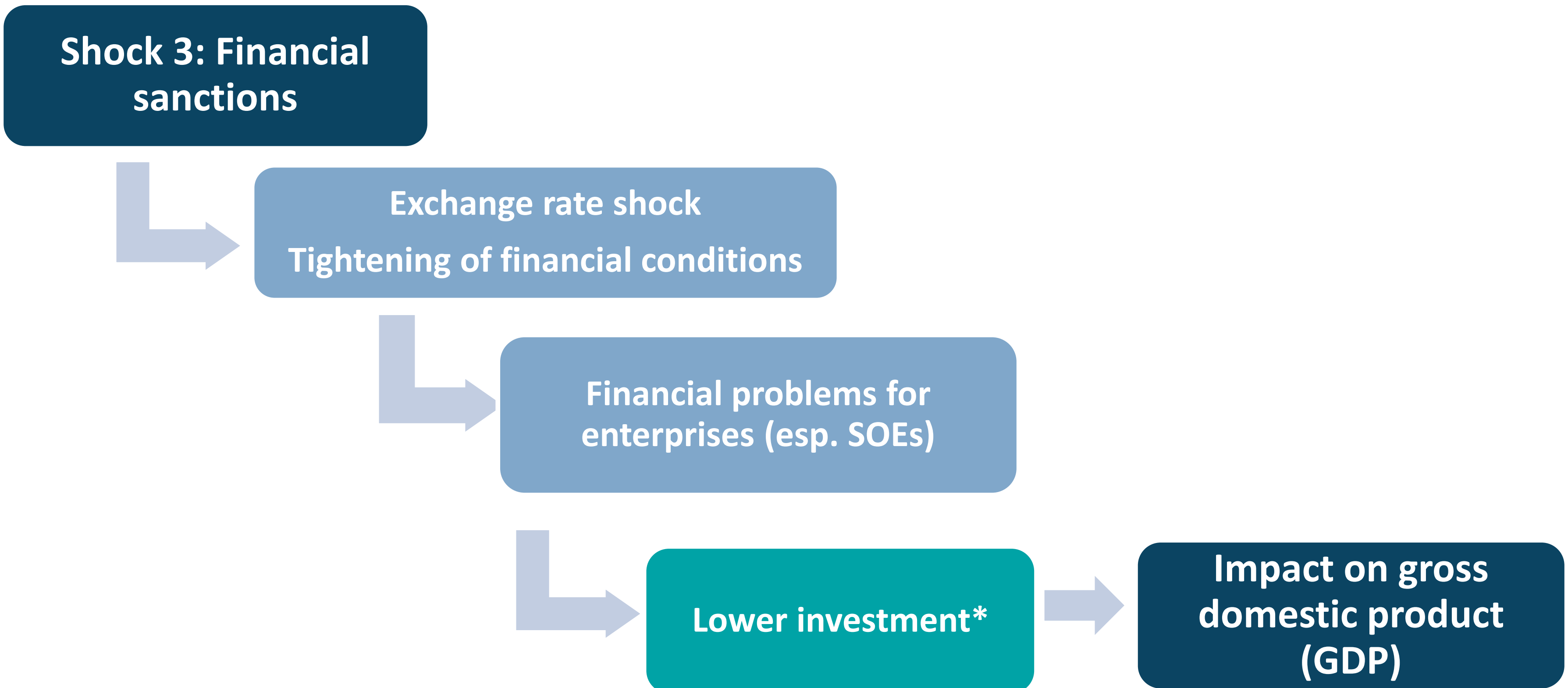
Shock 2 – Quantification

- In the public debt shock scenario, we assume that Russia would refinance all of the Belarusian debt
- But government will still need to cut public consumption, as budget revenues will decrease due to export sanctions

	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Cut in public consumption (% GDP)	0	-0.4	-1.05	-1.05	-0.4	-0.2	-0.2	-0.2

Source: own calculations

Shock 3: Financial sanctions



*** variable directly shocked inside the model**

Shock 3 – Main assumptions

- As outlined in Shock 2, Belarus might not be able to support the BYN
  - FX reserves are small and potentially frozen
  - Necessity to spend them to partially finance budget deficit
  - Russian ruble depreciation and general uncertainty
- An exchange rate shock may cause a crisis in the banking system and lead to the bankruptcies of several SOEs, which have large amounts of debt nominated in foreign currency
- Moreover: Inflation is expected to be up to 25%. Thus, National Bank is expected to tighten its monetary policy and hike interest rates
- Government had to implement strict price controls to fight inflation

Shock 3 – Quantification

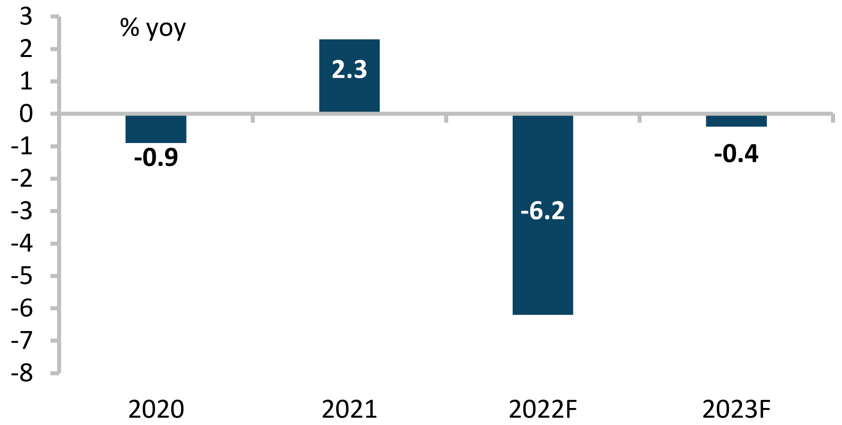
- High inflation and stress of the financial system will result in a decrease of investment demand
- Based on historical data, this could translate into a 12% decrease in investments
- The situation in 2022 may be worse since investment has already been on its down trajectory. In addition to that, other non-financial considerations are likely to increase negative effects in 2022
- In 2023, it is possible that investments will have already reached a low point and will have no room for a further decrease

	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Cut in Investment (% GDP)	0	-1	-1	-0.73	0	0	0	0

Source: own calculations

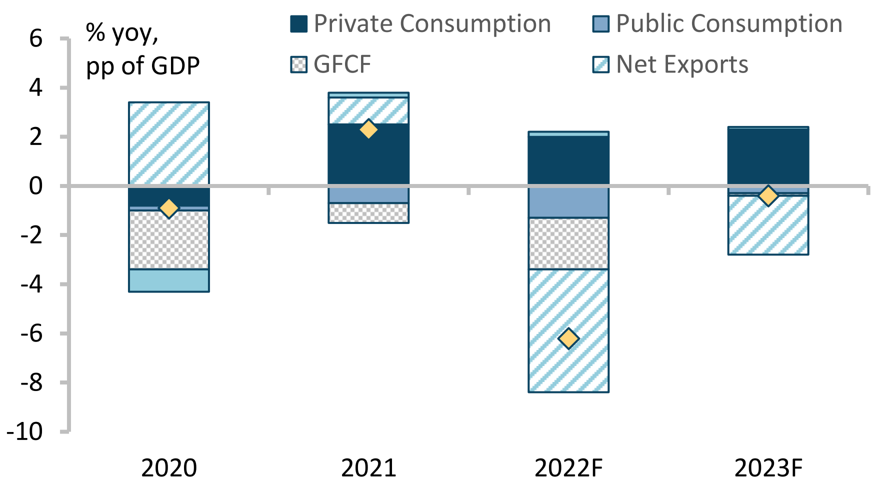
5. Estimation of the impact

Real GDP annual growth



Sources: Belstat, GET forecast

Demand-side contribution to real GDP growth



Source: Belstat, GET forecast

Annual GDP 2022/2023

- Real GDP to decrease by 6.2% in 2022
- Economic stagnation in 2023 with GDP to decrease by 0.4%

Demand-side contributions

- In line with the sanctions shock, net exports deliver a negative contribution to growth in both 2022 and 2023
- Private consumption is stagnating
- Investments continue to have a negative growth contribution in 2022 and 2023
- Overall deterioration of our forecasts vs. the April edition

About the German Economic Team

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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