German Economic Team

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POLICY STUDY BELARUS

The outlook on Belarus' GDP in 2023/2024: forecast update

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Executive Summary

- During 2020/2021, the EU/USA/UK and other Western countries introduced **sanctions on Belarus** in response to the political crisis. Additional sanctions were introduced in 2022 due to Belarus' continued involvement in the Russian invasion of Ukraine
- At the same time, since 2022 Russia plays an important role in softening sanctions effects on Belarus
- This policy study provides an update of a previous **quantitative assessment of the economic impact** on Belarus during 2022/2023, using a model-based approach (see: The impact of the war in Ukraine and the sanctions on Belarus' GDP: Forecast update, August 2022)
- We now forecast **real GDP change** in Belarus:
  - 2023E: 2.0%, and
  - 2024F: 0.1%
- In 2023, **Russian support**, such as debt repayment postponement, new credits, and oil rents due to cheap crude oil deliveries provided a series of positive shocks to Belarusian GDP after the decline in 2022
- **High level of uncertainty** must be stressed, as the war in Ukraine is ongoing

Structure

1. Introduction
2. Sanctions overview
3. Approach for estimating the impact of sanctions
4. Identification and quantification of shocks
5. Estimation of the impact

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
  - In 2022, real GDP fell by 4.7% -- the largest decline since 1995
- Key question: How strong and lasting is the impact of sanctions and the war in Ukraine on the Belarusian economy?

Purposes of this Policy Study

» Identification of the different shocks caused by the sanctions

» Estimation of the economic impact in 2023 and 2024 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 products
- 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)

6 DECEMBER 2021

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

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

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

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)

Model strategy

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 17 variables, and annual data of 4 variables

» The first quarter of observation is Q1 1995, the last quarter of observation is Q1 2023

» Most data series are not seasonally adjusted. Here, those variables were seasonally adjusted with the ARIMA-X12 methodology

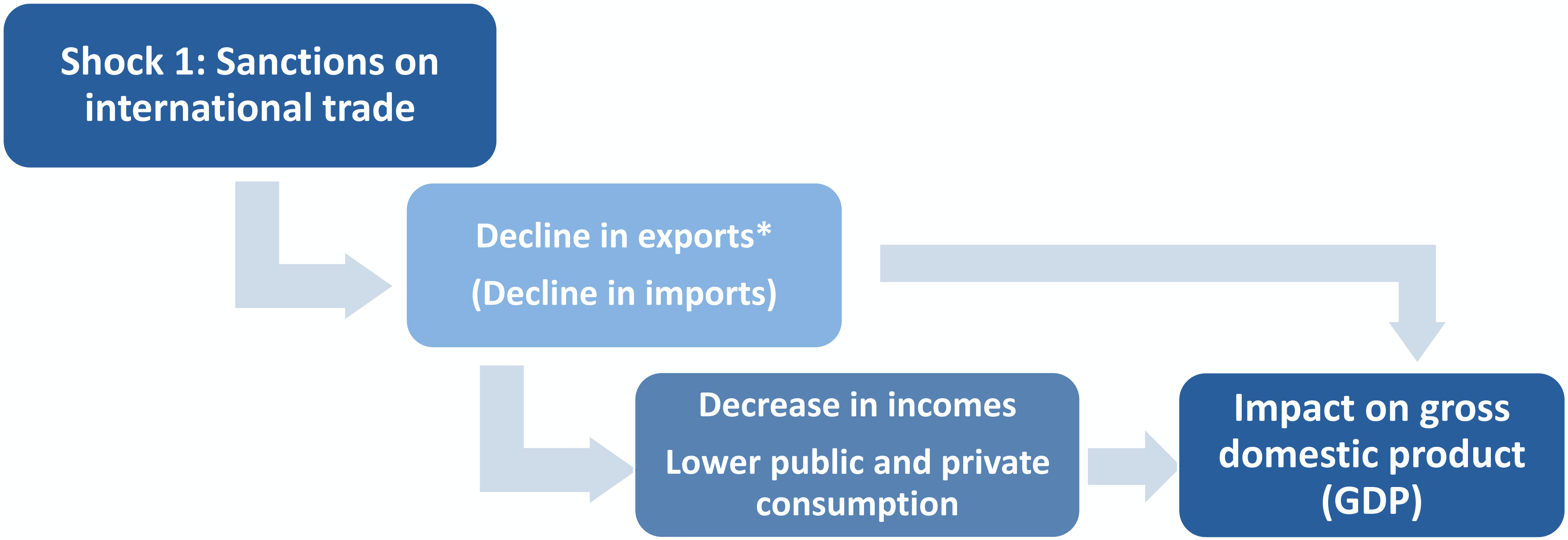
» Most relevant data sources:

- 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
  - 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 (stronger demand from Russian/ lost of Ukrainian market, logistics, etc.)
  - Shock 2: Sanctions on public debt
    - De facto ban on international issuance and refinancing of public debt
    - Russia – postponed debt repayments, Belarus defaulted on Eurobonds. As a result, only minimal debt service to China + new Russian loans
  - Shock 3: Oil rents due to Brent/Urals discount
    - Belarus buys Urals oil at a discount, refines it, and sells oil products at market prices (function of Brent's price) to third countries
- The different shocks are then put inside the baseline model in order to obtain a single forecast for GDP in 2023/2024
- In the following, we describe the expected transmission channels of the shocks and the main assumptions behind them

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) from Jun-21/Dec-21
- 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)
- Overall, significant impact expected, but to a large extent mitigated by Russia:
  - EU and UK represented 20% of Belarusian exports. Banned goods are likely to be exported to other jurisdictions, but at a discount
  - Ukraine represented 10% of Belarusian exports. Trade stopped completely
  - Russia represented 40% of Belarusian exports (up to 70% as of Q2 2023). Sanctions on Russia and shrinkage of its economy decreased the demand for Belarusian goods. This effect is offset by the closure of other imports to Russia and Belarus taking some of their positions. Overall exports to Russia grew in 2022 and are expected to grow further in 2023
  - Logistic complications are likely to decrease export re-orientation options; previously expected re-orientation through Russian ports is ongoing but at a slow pace due to sanctions on Russia
  - The main non-recovered area is potash with exports amounting to 60-70% relative to the pre-sanction level
  - Moreover: Losses for transportation service providers; unlikely to be recovered

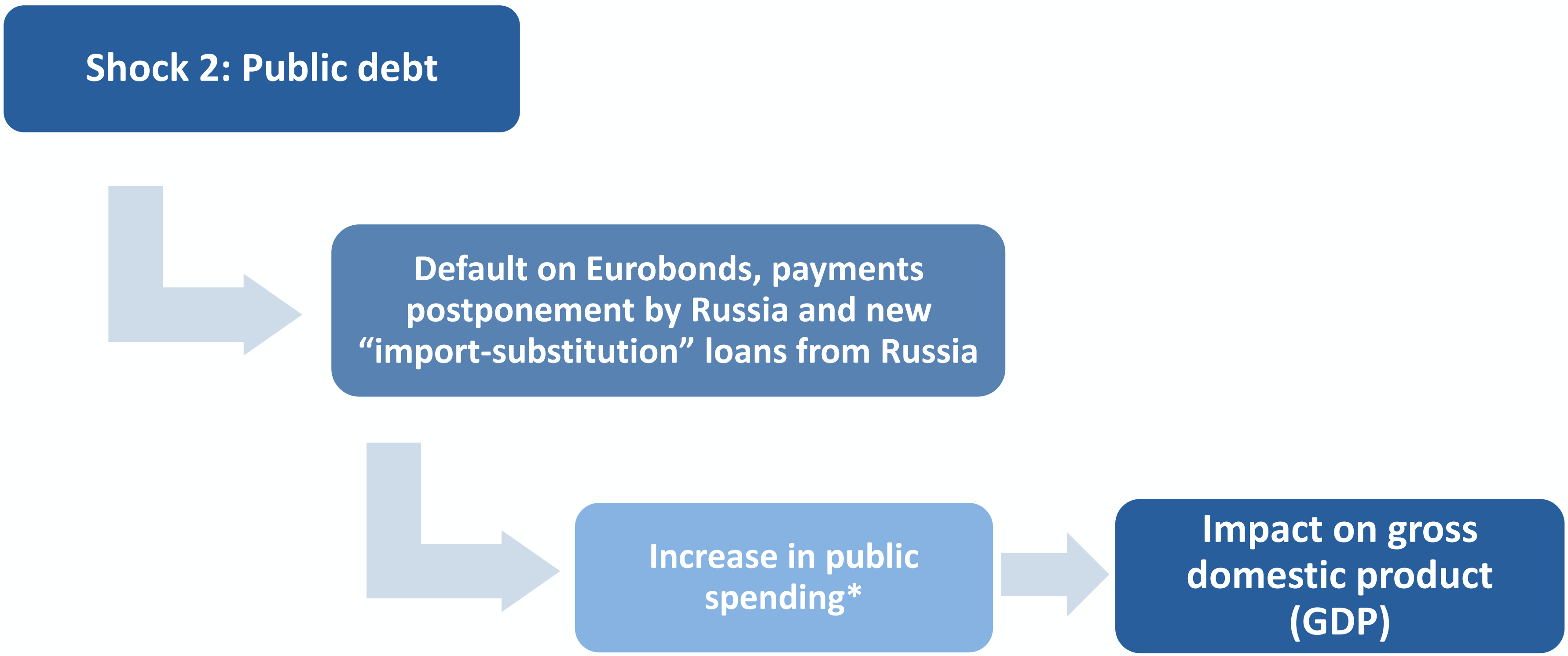
Shock 1 – Quantification

- We assume a 20% loss of sanctioned exports to the EU in 2023 and 2024. Export sanctions apply to 7.3% of GDP
- We also assume the loss of 80% of exports to Ukraine in Q1-22 to Q4-24 (20% would be re-routed to other countries)
- Moreover, we expect the loss of service exports to amount to 1% of GDP in 2023 and 0.8% in 2024 (transportation in Q2-22: Q4-24, IT in Q3-22: Q4-24)
- Imports are falling 50% faster than exports due to the nature of sanctions, and potentially some import substitution measures
- The quarterly distribution of the international trade shock is shown below

	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Goods exports shock (% of GDP)	-1.3	-1.1	-0.7	-0.5	-0.5	-0.5	-0.5	-0.5
Services export shock (% of GDP)	-0.4	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2

Source: own calculations

Shock 2: Public debt



* variable directly shocked inside the model

Source: own display

Shock 2 – Main assumptions

- Belarus has a relatively moderate public debt-to-GDP ratio (2022: 44%). 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
- Russia agreed to postpone all debt payments for at least two years
- Russia agreed to provide USD 1.5 bn “import-substitution” loan
- Belarus defaulted on its Eurobonds

Shock 2 – Quantification

- In the public debt shock scenario, we assume that Russia would refinance all of the Belarusian debt
- The government will increase public consumption, with new loans from Russia and money previously reserved for debt repayments and through excess money emission

	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Shock in public consumption (% GDP)	+1	+1.5	+0.9	+0.7	0	0	0	0

Source: own calculations

Shock 3: Oil rents

Shock 3: Price cap on Russian oil

Belarus is able to buy Urals oil at a discount to Brent and sell oil products to third countries at market prices

Increase in Net Exports

Impact on gross domestic product (GDP)

*** variable directly shocked inside the model**

Source: own display

Shock 3 – Main assumptions

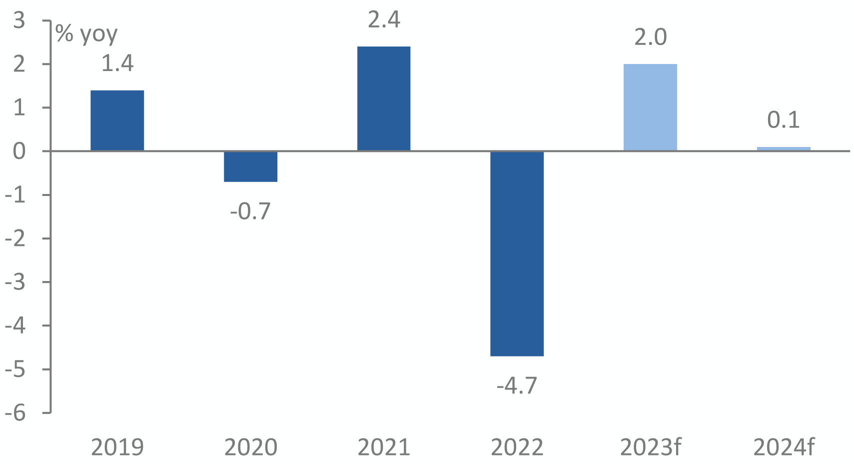
- In order to decrease Russian oil revenues, G7 came up with the oil price cap mechanism
- The mechanism was partially effective, with Russian oil sold at a significant discount to Brent (20-30%) yet, sometimes above the introduced price cap
- Belarus buys Russian Urals oil at a discount, refines it and sells to third countries via Russian logistics infrastructure, thus earning a profit due to the discount
- Additional profits from Urals/Brent discount are estimated to reach USD 2.7 bn in 2023

	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Oil rents (% GDP)	+1	+1.5	+1	+1	0	0	0	0

Source: own calculations

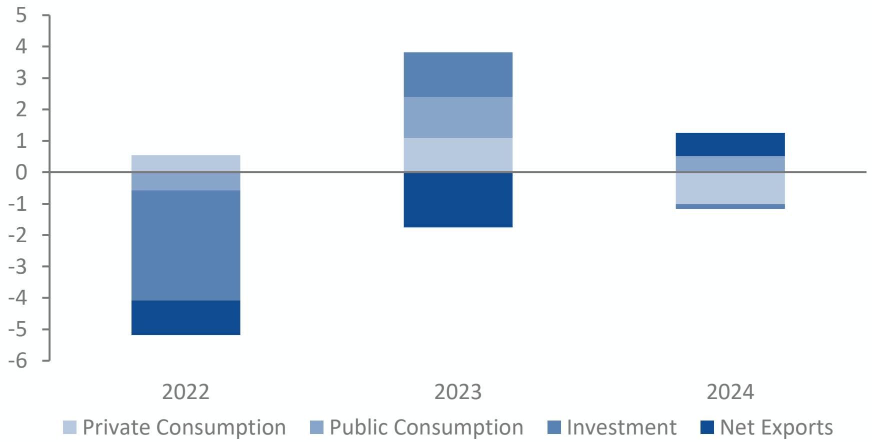
5. Estimation of the impact

Real GDP growth



Source: Belstat, 2023 and 2024 – GET forecast

Contributions to real GDP growth: demand side



Source: Belstat, 2023 and 2024 – GET forecast

Annual GDP 2023/2024

- » Economic growth of 2.0% in 2023, implying a deceleration over the rest of the year
- » Positive export shocks (processing of cheap Russian oil) and financial shocks (new loan from Russia and default on Eurobonds)
- » Stagnation in 2024 with growth of only 0.1%

Other forecasts for 2023/2024

- » World Bank: 2023: 3.0%; 2024: 0.8%
- » Eurasian Development Bank: 2023: 2.2%; 2024: 1.0%
- » EBRD: 2023: 2.0%; 2024: 1.3%
- » IMF: 2023: 1.6%; 2024: 1.3%
- » BEROC: 2023: 2.5%; 2024: 1.1%

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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