

Economic implications for Moldova of the war in Ukraine and the sanctions against Russia

Updated version: 6 April 2022

**Dr Ricardo Giucci, Robert Kirchner, Veronika Movchan,
David Saha, Manuel von Mettenheim,
Rouven Stubbe, Carolin Busch**

Berlin, March 2022

Summary

- **MDA economy** strongly hit by war in UKR and sanctions against RUS
 - **Exports** are likely to drop by USD 190 m or 1.6% of GDP in 2022
 - Strongest impact on apples (½ of total export drop) & medicaments (ca. ⅙)
 - Apples and medicaments could be shipped to UKR; role of donors in financing
 - Increase of EU tariff rate quotas (TRQs) for Moldovan plums, grapes and cherries would help to soften the shock
 - **Remittances** from RUS to drop by USD 129 m or 1.0% of GDP in 2022; facilitation of labour access of Moldovans in EU would help
 - Shock due to higher energy prices (3.5% of GDP); risk of disruption of RUS **gas transit** via UKR; in such a case, MDA could face sizeable electricity shortages
 - Higher commodity prices (esp. food and energy) further fuel **inflation** in MDA; National Bank needs to combat inflation; no room for supporting the economy
 - **Public finance** heavily burdened by weak economy and UKR refugees; budget deficit likely to amount to 7.5% of GDP in 2022
- **Strong balance of payments and fiscal shocks; need for donor support**

Outline

1. Introduction
2. Economic outlook in Russia in 2022
3. Implications for exports to Russia
4. Implications of higher energy import prices
5. Implications for energy security
6. Implications for remittances from Russia
7. Macroeconomic implications

1. Introduction

The war in UKR and sanctions against RUS affect MDA economy in many ways:

- The RUS economy is severely weakened; as a result, MDA exports to RUS, but also remittances from RUS will suffer
- Traditional transport routes to RUS via UKR are not feasible anymore and alternative routes are too costly for MDA exports to RUS
- Risk of interruption of gas deliveries from RUS exists
- Furthermore, energy and food prices have increased significantly, putting additional pressure on already high inflation in MDA
- Finally, the weaker growth outlook and a high influx of refugees from UKR will burden public expenditure

Aim of the briefing:

- Analysis of key economic implications of war in UKR & sanctions against RUS
- Recommendations on policy reaction to this shock

***Disclaimer:** we do not analyse the impact on foreign trade of disrupted logistics (Odesa port not functioning) and of lower economic growth in trading partners*

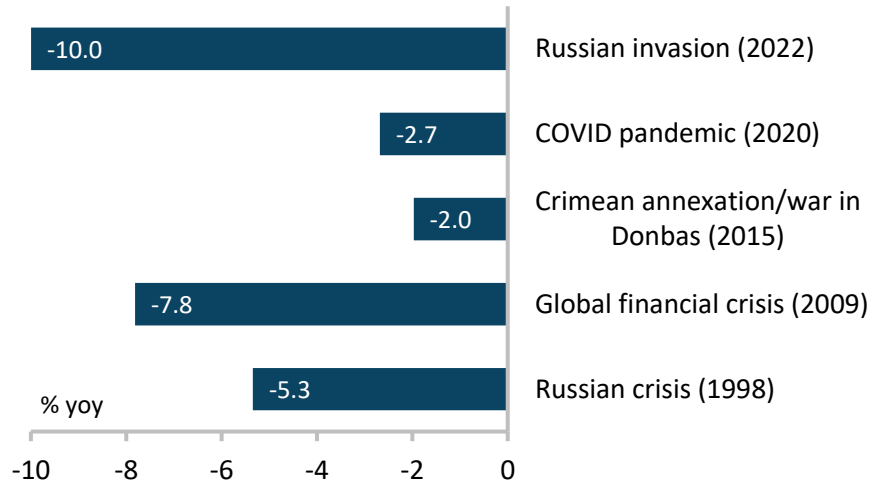
2. Economic outlook in Russia in 2022

Selected economic indicators

Indicators	2022
Real GDP growth, %	-10%
Nominal USD GDP growth, %	-34%
Inflation, % eop	20%
Exchange rate, RUB/USD	120

Sources: Goldman Sachs, CBR, own assumptions/calculations

Historic GDP declines



Sources: Rosstat, own calculations

Severe economic and financial damage

- The war has led to a wave of sanctions on Russia by Western countries
 - Significant impediments to trade (including logistics) as well as to foreign investments
 - Russia reacted by tightening financial conditions, e.g. emergency CBR rate hike to 20% p.a.
 - Material risk that RUS defaults, ratings only slightly above „Default“ status

Still high uncertainty

- As war continues, new sanctions may follow & target the crucial energy sector
- **Russia's real GDP likely to decline by 10% in 2022, which is unprecedented in modern history**

3. Implications for exports to Russia

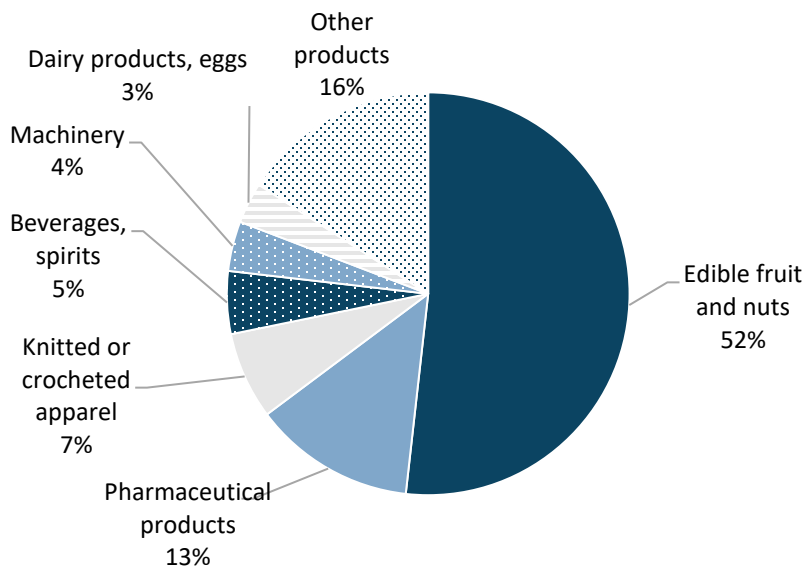
MDA exports of goods to RUS



MDA exports of goods to RUS, 2021:

- USD 276 m, 8.8% of total exports
- Share in GDP: 2.3%
- **RUS is a relevant destination**

Structure of MDA exports of goods to RUS



Export structure by sectors, 2020*:

- Agriculture & food: 64%
- Chemicals & pharma: 13%
- **Exports of agro-food most exposed**

Outlook for 2022

- Full disruption of exports likely
- Reason: transport via UKR not feasible, other routes too expensive

Source: National Bureau of Statistics of Moldova, own estimates

* No data available for 2021 on the product structure of exports

Estimation of impact on exports

		MDA exp to RUS, USD m, 2020	Exp loss to RUS, USD m, 2022*	Total exp loss, USD m, 2022*
1	Fresh apples	76.9	-76.9	-76.9
2	Medicaments for therapeutic purposes	25.6	-25.6	-25.6
3	Fresh grapes	12.2	-12.2	0.0
4	Fresh plums and sloes	10.8	-10.8	-1.5
5	Cheese	7.1	-7.1	-7.1
6	Wine of fresh grapes, incl. fortified wines	6.6	-6.6	0.0
7	Fresh cherries (excluding sour cherries)	4.9	-4.9	0.0
8	T-shirts and other vests of textile materials	4.2	-4.2	-4.2
9	Women's or girls' nightdresses and pajamas	3.0	-3.0	-3.0
10	T-shirts, singlets and other vests of cotton	2.6	-2.6	-0.2
	Other products (assumption: 50% loss)	63.0	-63.0	-31.5
	Total	216.8	-216.8	-150.0

Source: ITC TradeMap. * Own estimates, based on 2020 data

- Based on 2020 data: estimated losses in exports account for USD 150 m
- However: exports in 2021 (product structure not available) 27% higher than in 2020

➤ **Rough estimation using 2021 export data: losses of USD 190 m or 1.6% of GDP**

Policy recommendations on exports

Apples

- Search for new markets
- But: reorientation difficult in the short-term
- Options in case new markets are not found:
 - a) Processing fresh apples (e.g. juice concentrate) and export of processed products
 - b) Ship to UKR: higher demand due to war-related disruptions, but payment capacity unclear; possible role of donors

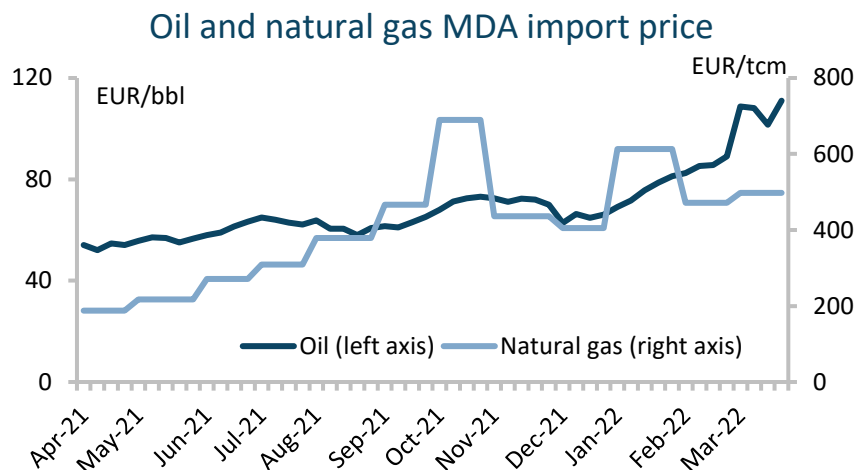
Medicine

- Access to new markets unlikely in short-term
- Possible reorientation to UKR: strong demand due to war-related disruptions, but payment capacity unclear; possible role of donors

Plums, grapes and cherries

- Increase of EU tariff rate quotas (TRQs) for Moldovan imports could enable full reorientation of exports to EU

4. Implications of higher energy import prices



Energy imports and aggregate price shock

	Oil	Natural gas
Net quantity imported p.a.	6.7 m bbl	1.24 bcm (excl. left bank)
Import price (Sep-20 2021)	63.07 EUR/bbl	466 EUR/tcm
Current import price*	110.96 EUR/bbl	527 EUR/tcm
Price differential	47.89 EUR/bbl	61 EUR/tcm
Additional cost p.a.	EUR 322 m	EUR 76 m

Additional cost p.a., % GDP **2.8 %** **0.7 %**

Source: Eurostat, U.S. EIA, Moldovagaz, Moldstreet, own calculations; *28 March 2022 for oil, average price Q1-22 for gas

© Berlin Economics

Oil

- Oil prices increased strongly due to war in UKR & sanctions against RUS
- Assuming prices remain high, MDA will face additional expenditures of EUR 322 m or 2.8% of GDP in 2022

Gas

- MDA faced significant import price increases before the war
- Based on avg. price in Q1-22, add. costs in 2022 would amount to EUR 76 m or 0.7% of GDP
- **Balance of payments shock of 3.5% of GDP due to higher energy prices**
- On top: higher inflation, see 7.

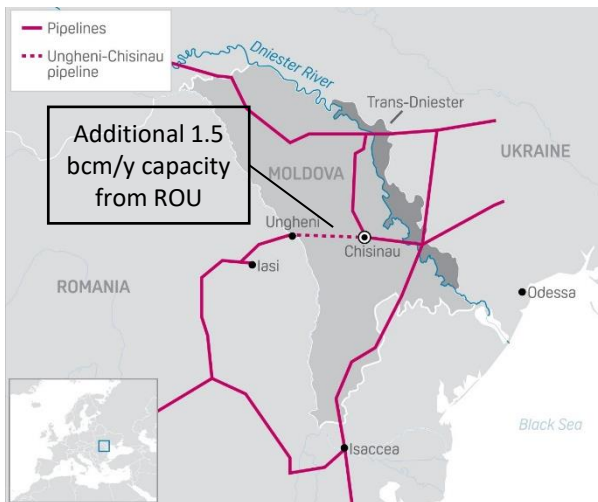
5. Implications for energy security

MDA energy supply and Russian imports

	Share in TES*	Gross import share	RUS share in imports	RUS share in TES*
Solid fossil fuels	3%	90%	91%	2%
Oil and oil products	25%	100%	9%	2%
Natural gas	56%	100%	100%	56%
Renewables	17%	-	-	-

*Total Energy Supply; Source: IEA, Eurostat, own calculations

MDA gas pipeline network



Source: S&P Global Platts, ENTSOG

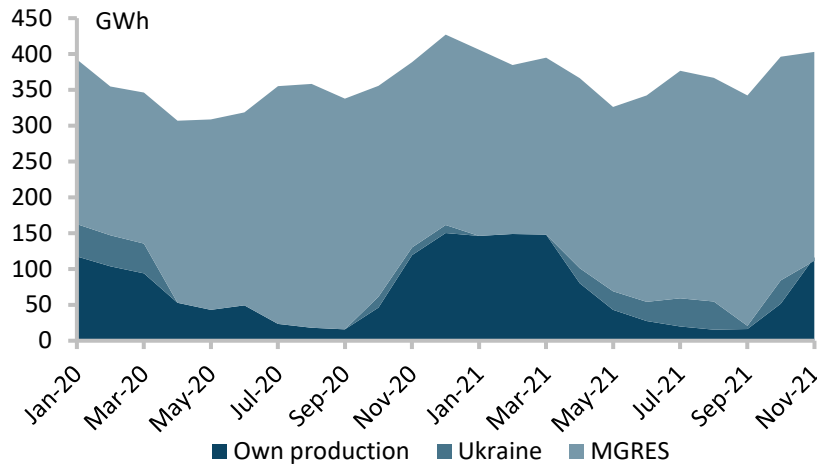
- **Coal:** imports mainly from RUS, but low importance for energy sector
- **Oil:** only 9% of imports from RUS
- **Gas:** by far most important energy source, 56% in total energy supply
- Demand: 1.2 bcm/y (excl. left bank) covered by RUS imports via UKR

Risk due to war in UKR

- Disruption of gas transit via UKR
- Pipeline from ROU sufficient to cover demand in right-bank MDA
 - But: not enough for electricity generation by MGRES in left bank (TN), i.e. by the main electricity supplier for right-bank MDA

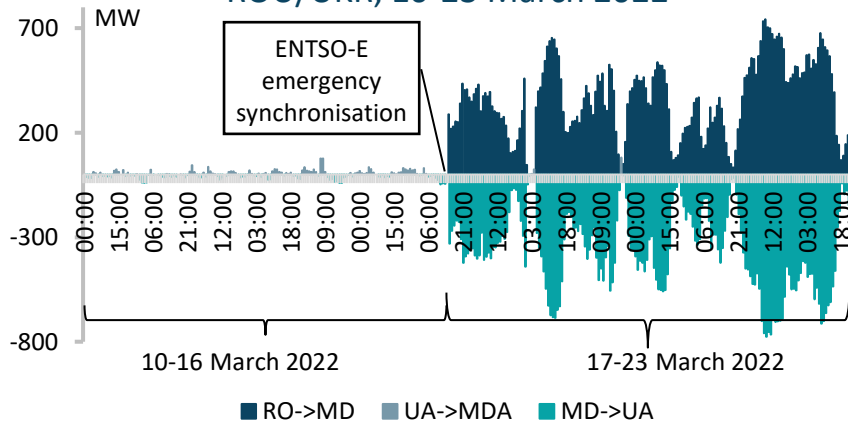
Implications for the electricity sector

Right-bank MDA monthly electricity balance, 2020-2021



Source: Moldelectrica

Hourly physical electricity flows between MDA and ROU/UKR, 10-23 March 2022



Source: ENTSO-E Transparency Platform

© Berlin Economics

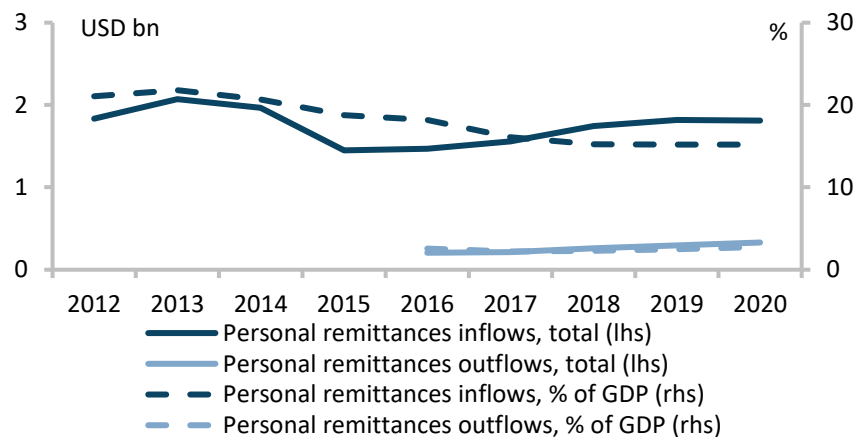
- Gas-fired MGRES (located in TN) covers 75% of total electricity supply for right-bank MDA
 - Requires around 1.3-1.5 bcm/y gas
- 16 Mar 22: emergency synchronisation with ENTSO-E
 - Increase in physical electricity flows with ROU and UKR to balance the electricity system possible
 - Transmission capacity with ROU (310 MW) not sufficient to replace MGRES

Risk due to war in UKR

- In case of disruption of gas transits via UKR, MDA could face a sizeable shortage, if electricity imports from UKR not available

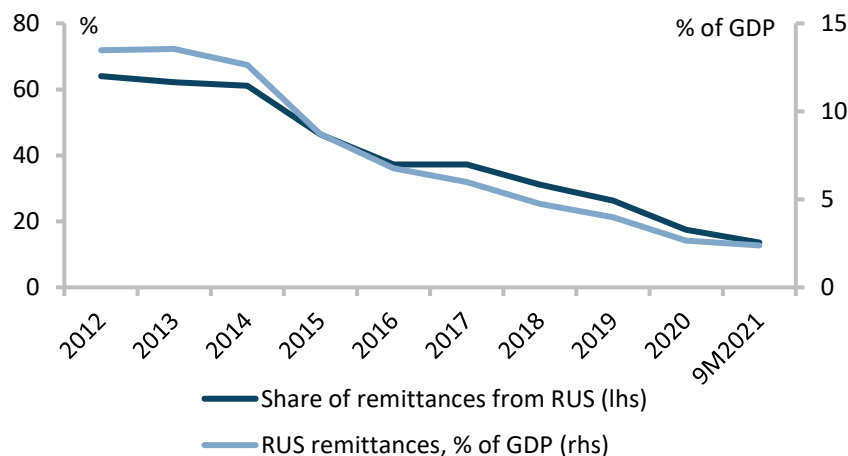
6. Implications for remittances from Russia

Personal remittances inflows to Moldova (gross)



Sources: National Bank of Moldova, IMF, own calculations

Personal remittances inflows from Russia



Sources: National Bank of Moldova, IMF, own calculations; note: for 2017 – 2021 share of Russia is estimated based on latest available country-level data

© Berlin Economics

- Remittances play a key role for the economy of MDA
 - USD 1.8 bn or 15.2% of GDP in 2020
 - No component of GDP but support economic demand
- Share of RUS has decreased but remains important
 - 2012: USD 1.2 bn, 13.5% of GDP
 - 2020: USD 316 m, 2.7% of GDP
 - In parallel: remittances from the EU increased to USD 893 m or 7.5% of GDP in 2020

➤ **Remittances from RUS still an important source of income for many households**

Expected shock and economic effects

	Shock: Reduction in remittances from Russia		Effect on GDP		Effect on consumption		Effect on investment	
	USD m	% of GDP	USD m	% of GDP	USD m	% of GDP	USD m	% of GDP
Expected shock	-129.2	-1.0%	-40.4	-0.3%	-57.3	-0.4%	-24.5	-0.2%
Maximum exposure	-224.1	-1.7%	-79.0	-0.6%	-117.4	-0.9%	-42.6	-0.3%

Source: Own calculations; note: economic effects calculated as a short-term demand shock caused by declining remittances, methodology analogous to GET MDA, PP/03/2014

- Economic sanctions will decrease remittances from Russia by ca. 50%
- Effects on GDP, consumption and investment are moderated by high import share in Moldovan economy and usage of savings by recipients of remittances
- Effects are likely most severe for individual households
- **Sizeable economic effects: -1.0% of GDP in remittance income, -0.3% of GDP effect on growth in already difficult times**
- **Possible policy responses: targeted social assistance, facilitation of labour access of Moldovans in EU**

7. Macroeconomic implications

Russia's invasion of Ukraine has various macroeconomic implications beyond the transmission channels discussed above, to which policy makers have to react:

Monetary policy must address inflationary pressures

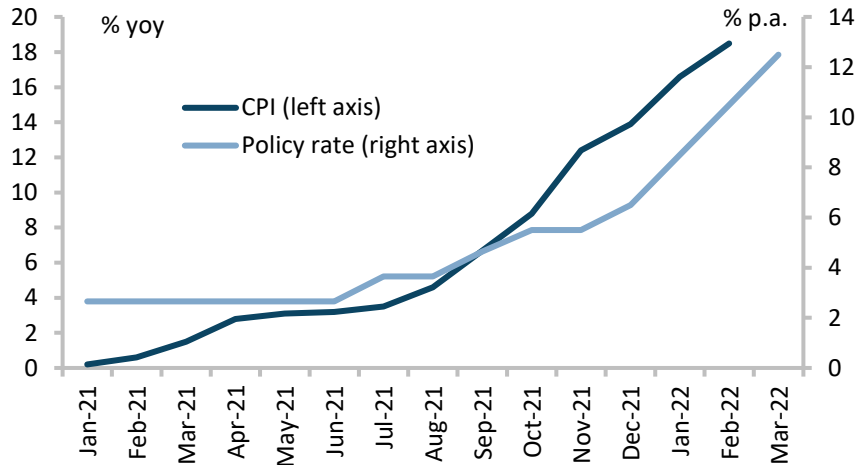
- Inflation will accelerate from the supply shock on top of existing pressures
- Depreciation pressures on the Leu will deepen as currency inflows from remittances are affected

Fiscal policy will play a key role in limiting the implications on the real economy

- Measures to support the economy and households, as well as additional expenditure on refugees
- Financial support by IFIs and partner countries will be key

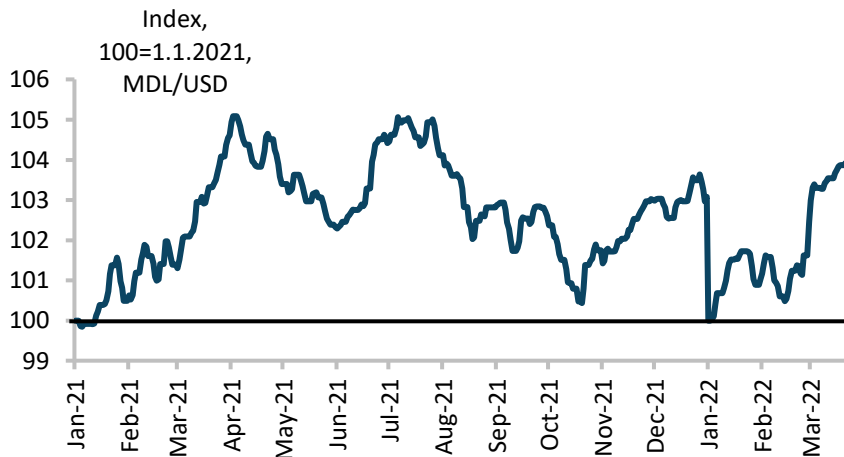
Monetary and exchange rate policy

Inflation and policy rate



Source: NBM, own calculations

Exchange rate

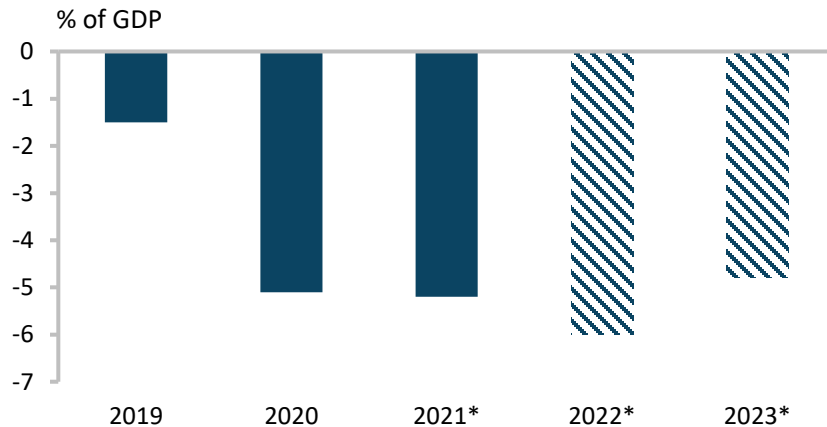


Source: NBM, own calculations

- High inflation: 18.5% in Feb-22
 - War leads to higher commodity prices, esp. for energy and food
 - Thus: further pressure on inflation, esp. due to high share of food and energy in CPI basket (36.6% and 6.1% resp.)
 - NBM increased its policy rate to 12.5%
 - Additional hikes might be needed to bring inflation back to target
 - FX currently under control as Leu depreciated by 4% vs USD since Jan-22
- **War puts further pressure on inflation**
 - **Tight monetary policy stance will need to be continued**
 - **Monetary policy cannot support the economy, despite sizeable shock**

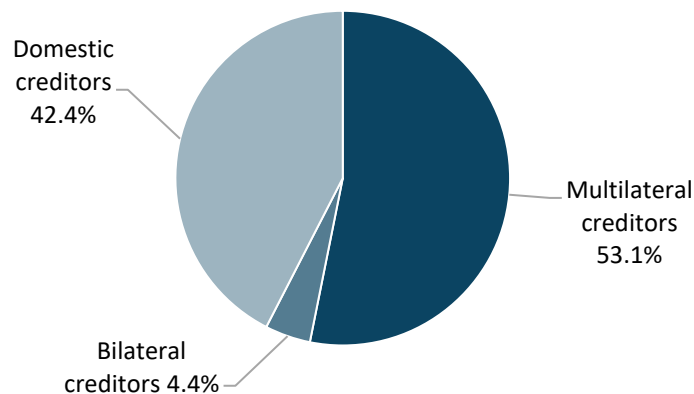
Fiscal policy

Budget balance



Source: IMF, *estimate/forecast before the war

Public debt structure



Source: IMF, data for 2020

© Berlin Economics

- Budgetary risks due to war
 - Weaker economy (0.3% GDP growth in 2022 instead of 4.5%, acc. to IMF) leads to lower revenues
 - Higher expenditures to deal with refugee challenge
- Implication: budget deficit likely to reach 7.5% of GDP in 2022
- Financing of deficit is an issue, given the recent increase of public debt from 28.3% in 2019 to 38.1% of GDP in 2021
- Thus: key role of donors
 - Additional financing was announced
 - Augmentation of IMF programme
- **Fiscal policy is a key challenge**
- **Financing support by IFIs and partner countries is essential**

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.

CONTACT

Carolin Busch, Project Manager Moldova
busch@berlin-economics.com

German Economic Team
c/o BE Berlin Economics GmbH
Schillerstraße 59
10627 Berlin

Tel: +49 30 / 20 61 34 64 0
info@german-economic-team.com
www.german-economic-team.com

Implemented by

