



German  
Economic  
Team

# From emergency response to reform support: medium-term development perspectives for Moldova

by Carolin Busch and Dr Ricardo Giucci

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**POLICY PAPER**  
**MOLDOVA**

## 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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## Executive summary

- » This paper was prepared upon request by the Moldovan government in preparation for the Moldova Support Platform conference scheduled for October 2023 in Chisinau. The paper gives an overview of the current economic situation, main challenges, and reform priorities in Moldova to inform international partners.
- » The paper describes three phases: 1) economic situation until 2021, 2) economic impacts of the crises between 2021 and 2022, 3) outlook from 2023 onwards. We identify both structural problems that have persisted for many years and which were revealed or exacerbated by the crises, as well as measures and reform priorities of how to address them.
- » The goal of the proposed measures is for Moldova to become more resilient to external shocks, but also to boost economic growth. As such, we show that international support should shift from emergency response to helping Moldova improve its medium-term development perspectives.
- » The paper offers a non-comprehensive look at three key policy areas, which we believe should be tackled first: energy, infrastructure, and growth drivers for the economy.
- » Besides these three policy areas, Moldova's capacity to absorb international financial aid remains a challenge. The country has recently undertaken considerable measures to improve absorption capacity, but additional efforts may be needed.
- » Until 2021, underinvestment in energy and transport infrastructure as well as a deficit of growth drivers created structural problems in Moldova, many of which persist until today.
  - ENERGY: Large dependence on Russia for natural gas and on the Transnistrian region for electricity created vulnerability. Lack of investment in energy infrastructure further enhanced this dependence. Low tariffs and energy efficiency in buildings sector incentivised high consumption of energy.
  - INFRASTRUCTURE: Reliance on Ukrainian and Romanian logistics infrastructure for exports allowed Moldova to neglect its own road, rail, and port infrastructure. Poor quality of road and railway networks increased cost of transport.
  - LACK OF GROWTH DRIVERS: The business climate has been characterized by a high level of bureaucracy and corruption. The labour force participation rate has been extremely low, which inhibits economic growth. Large potential in the agriculture sector remains untapped.
- » In 2021 and 2022, Moldova faced multiple crises, which revealed considerable vulnerability to shocks and exacerbated structural problems.
  - ENERGY: Dependence on Russia became a problem and gas prices increased significantly under new contract. Large increase in gas tariffs and support for

vulnerable consumers were needed. Electricity crisis revealed the risks of dependence on MGRES.

- **INFRASTRUCTURE:** Due to the war against Ukraine and closure of the Odessa port, Moldova experienced a significant congestion of its logistics infrastructure. This created problems for Moldovan exports and increased transport costs.
- » **LACK OF GROWTH DRIVERS:** A perceived increase in political risk in Moldova due to the war against Ukraine worsened the business sentiment in Moldova. As a result, investment decreased considerably in 2022 and remains low in 2023. To increase resilience and improve Moldova’s medium-term development potential, the country needs to implement structural reforms. To implement reforms, financial assistance from international partners will be needed as well as technical assistance.
- » We propose to focus on the following measures and reforms:

ENERGY	INFRASTRUCTURE	LACK OF GROWTH DRIVERS
<ul style="list-style-type: none"> <li>» Continue diversification of natural gas supply</li> <li>» Building up of natural gas stocks</li> <li>» Financing energy efficiency programmes (for public and residential buildings)</li> <li>» Capacity building for Energy Efficiency Agency</li> </ul>	<ul style="list-style-type: none"> <li>» Improve quality of road infrastructure</li> <li>» Increase capacities and quality of railroad transport</li> <li>» Increase capacities of Giurgiulesti port</li> </ul>	<ul style="list-style-type: none"> <li>» Reforms to decrease bureaucratic burden on businesses, incl. through digitalisation</li> <li>» Continue improving the rule of law</li> <li>» Targeted investment attraction measures</li> <li>» Improve quality and access to childcare</li> <li>» Reform university education to make students enter labour market sooner</li> </ul>
<ul style="list-style-type: none"> <li>» Implementation of power lines construction projects</li> <li>» Facilitation of ENTSO-E market integration</li> <li>» Support increase in capacities for renewable energy generation</li> </ul>		<ul style="list-style-type: none"> <li>» Facilitate industrialisation of the agriculture sector</li> <li>» Facilitate investment, incl. FDI, in the agriculture sector</li> <li>» Increase diversification of export markets for agricultural products</li> </ul>

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## 1. Introduction

Besides Ukraine itself, Moldova has been one of the countries most heavily impacted by the Russian war against Ukraine. This was the reason why international partners instituted the Moldova Support Platform to help the country in dealing with the crisis' impacts. After three conferences within the Moldova Support Platform and considerable financial assistance in 2022, the economic situation in Moldova has somewhat stabilised for the moment. Nevertheless, many problems persist, which Moldova cannot tackle on its own. Thus, the Moldova Support Platform remains an important coordination mechanism for assistance to the country. The next conference of the Platform is scheduled to take place in Chisinau in October 2023. The German Economic Team has been asked by the Moldovan government to assist in the preparation of this conference by drafting a paper, which would help international partners to better understand the current economic situation in Moldova as well as the persisting challenges, which the country needs to address.

Within this paper we outline three distinct phases of relevance for Moldova's current economic situation and policy priorities going forward: 1) the economic situation until 2021 prior to the crises, 2) the impact of the energy crises and war against Ukraine on Moldova, and 3) the economic reform and policy priorities for the next years. We focus on structural problems that existed prior to the crises and vulnerabilities revealed by them as well as proposed measures to address these problems through reforms. In this context, we outline why reforms are crucial to ensure that financial assistance will be effective and how they can contribute to improvements in Moldova's medium-term development perspectives. We focus on a non-comprehensive selection of topics, which we consider the most important to tackle first: energy, infrastructure, and growth drivers for the economy.

## 2. Economic situation in Moldova until 2021

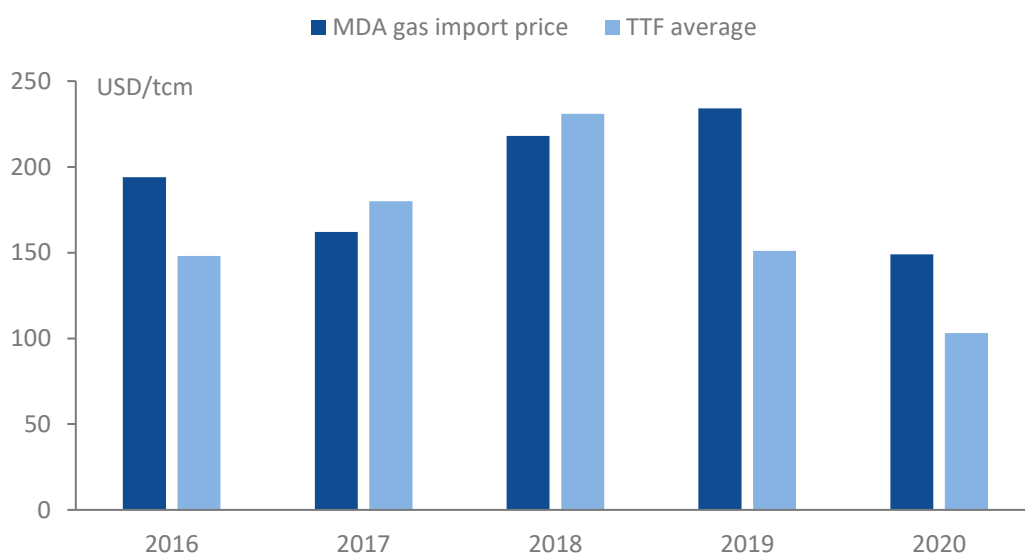
Despite moderate economic growth leading up to the Covid-19 pandemic, until 2021, the Moldovan economy was characterised by multiple structural deficits and a need for reforms that remained largely under-addressed. Particularly, the energy and infrastructure sectors harboured considerable vulnerabilities. At the same time, a deficit of growth drivers inhibited higher levels of economic growth and convergence with EU countries' living standards. The following sections outline the structural problems in each of these spheres, many of which persist until today.

### 2.1 Energy sector

#### Gas

Natural gas is a key energy carrier for Moldova used primarily for heating and electricity generation, but also for cooking and other purposes by private households as well as industry. Until 2021, Moldova had been importing 100% of its natural gas supply from Russia via a long-term contract with Gazprom. Within this contract, prices had been stable and relatively low, albeit comparable to market prices in Europe as illustrated in Figure 1.

Figure 1: Average Moldovan gas import price and Dutch TTF price



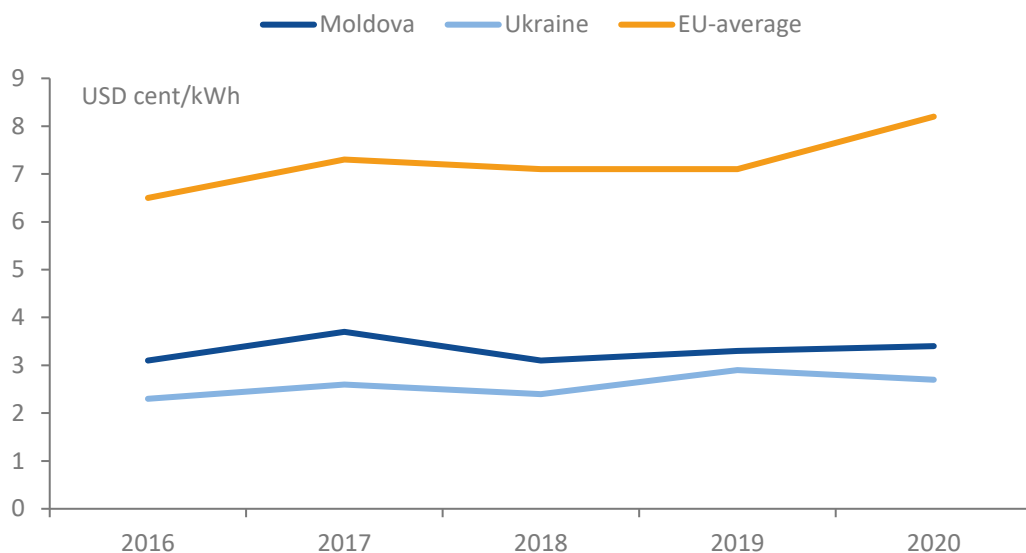
Source: ANRE, Barchart.com

Moldova does not have gas storage facilities on its territory and did not build up gas stocks in neighbouring countries' storages prior to 2021.

Considering the absence of heavy industry in Moldova (excluding the Transnistrian region), the majority of gas consumption occurs in the buildings sector, especially within residential buildings. Close to 70% of gas consumed in Moldova is used for heating. At the same time, energy usage in the country has been very inefficient. The average energy consumption of a residential apartment building in Moldova for example is 172 kWh/m<sup>2</sup>/year compared to an average of 90 kWh/m<sup>2</sup>/year in the EU. One factor for this low level of energy efficiency in residential buildings

are the gas tariffs, which, until October 2021, were considerably lower than average tariffs in the EU, albeit slightly higher than for example in Ukraine, as shown in Figure 2.

Figure 2: Final gas tariffs for households

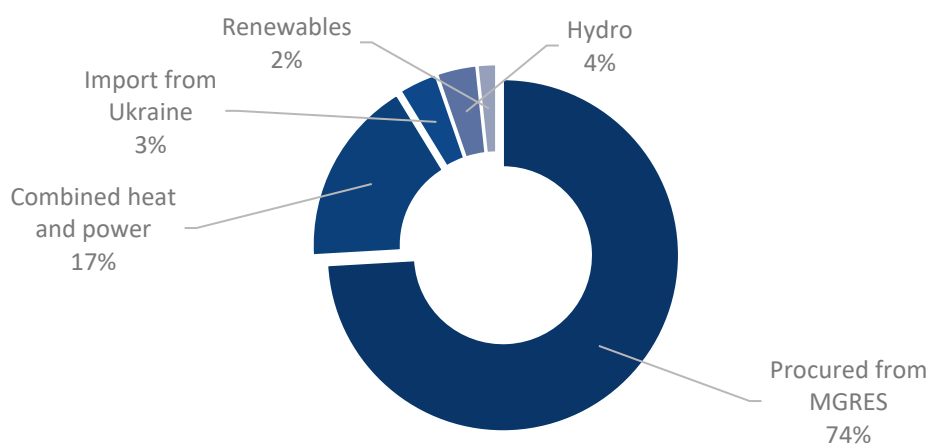


Source: Energy Community

## Electricity

In the electricity sector, Moldova has also had a large dependence on only one supplier, the MGRES power plant located in the Transnistrian region, which runs on gas supplied by Russia via the same contract with Gazprom. Besides this power plant, Moldova had and still has very limited own generation capacities. During the winter, the combined heat and power (CHP) plants in Chisinau and Balti provide up to 25% of the consumed electricity. During the summer, the share of the MGRES power plant in the electricity mix regularly goes above 90% due to the absence of the CHPs. In addition to a small share of renewable energy, Moldova also imported electricity from Ukraine as shown in Figure 3.

Figure 3: Share of electricity supply by technology



Source: Moldelectrica, data for 2021



The electricity contract between right-bank Moldova and the Transnistrian region's power plant presented a source of mutual dependency between the two sides. Moldova was dependent on cheap electricity from the Transnistrian region, whereas the Transnistrian region was dependent on the revenues from electricity sales to the right-bank for the budget of the region's de-facto authorities. Thus, the electricity supply contract has always been a political bargaining chip rather than a purely commercial transaction. This means that any deterioration in political relationships between right-bank Moldova and the Transnistrian region could affect the stability and affordability of electricity supply. The impacts of this vulnerability, which still exists today, were revealed during the electricity crisis in 2022, which will be outlined in chapter 3.

Besides a lack of own generation capacities, Moldova had and still has deficiencies in terms of energy infrastructure. The electricity grid in particular presents considerable vulnerabilities due to the concentration of high-voltage transmission power lines in the Transnistrian region surrounding the MGRES power plant as shown in Figure 4.

Figure 4: Moldovan electricity grid



Source: Moldelectrica

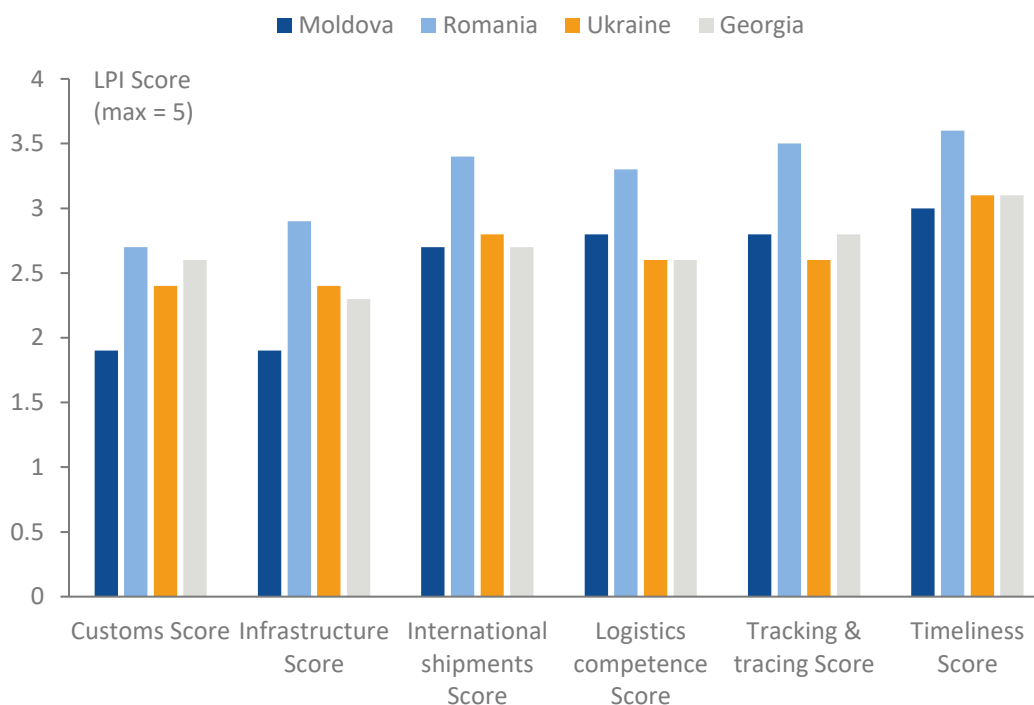
Built during Soviet times, this energy infrastructure was centralized around the power plant, which supplied electricity to Moldova as well as neighbouring regions of Ukraine. This concentration of infrastructure in the Transnistrian region, which is not controlled by the Moldovan government, poses considerable risks of potential manipulation or disruptions of transborder electricity transmission from Romania or Ukraine. Despite one high-voltage power line from Ukraine to Moldova, Moldova does not have sufficient cross-

border transmission capacities not passing through MGRES to supply all of the country with electricity.

## 2.2 Infrastructure

Considering the small size of Moldova's domestic market, international trade plays a large role for the country's development potential. Since it is a landlocked country, road and rail infrastructure as well as river ports are key elements for its international trade prospects. However, Moldova has been lagging behind its regional peers on key logistics performance indicators as illustrated in Figure 5. Especially in terms of infrastructure quality, considerable deficiencies persist due to a lack of sufficient investment over the years.

Figure 5: Logistics performance index – Moldova vs regional peers



Source: World Bank, data for 2023; Note: survey-based scoring of between 1 (very low) to 5 (very high); 2023 as reference year due to limited data availability

The railway network has received particularly little investment and has thus been in a desolate condition with low capacity and long freight times. The average speed within the network was only 34.5 km/h. Moreover, Moldovan railways rely exclusively on diesel traction since the network lacks electrified lines. As a result, rail freight transport accounts for only 17% of all freight shipping in Moldova and is used mainly for grain exports. Despite some improvements since 2021, the condition of the Moldovan railway network remains problematic.

Capacities for maritime transport are also limited, as Moldova has only one port, which is located in Giurgiulesti, on the Danube River. Due to the location of the port, capacities are naturally limited by the size of vessels that can be used, which is up to 7,000 t only

(compared to the standard of dry bulk vessels for long distance seaborne transport of 60,000 – 70,000 t). The port of Giurgiulesti has five terminals, two of which are limited to grain and one limited to oil only. The overall capacity of the port is about 2 m tonnes per year, although the processed volume in 2021 was only 1.4 m tonnes. Compared to the ports of Odessa in Ukraine (50 m tonnes of cargo per year) and Constanta in Romania (about 56 m tonnes per year), these volumes are very small. However, Moldovan exporters have been using these two ports, especially Odessa, as well as the Ukrainian Danube port, Reni, in addition to Giurgiulesti, thus reducing incentives to invest into local port infrastructure.

## 2.3 Deficit of growth drivers

### Business climate

A key burden for economic growth in Moldova has been the business climate, which is characterised by a high level of bureaucracy and insufficient rule of law. The ease of doing business ranking published by the World Bank illustrates the performance of Moldova across several dimensions in this regard as shown in Table 1. Particular problems accordingly exist in the area of construction permits, enforcing contracts, resolving insolvencies and access to electricity, among others.

Table 1: Ease of doing business ranking – Moldova vs regional peers

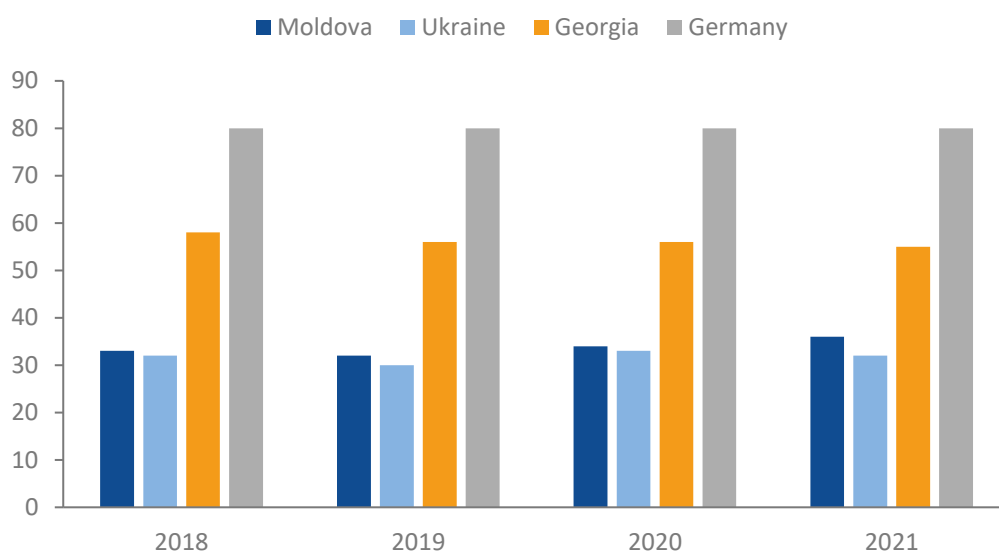
	Moldova	Ukraine	Georgia
Starting a business	7	15	2
Dealing with construction permits	21	4	5
Getting electricity	15	19	9
Registering property	7	16	2
Getting credit	14	12	4
Protecting minority investors	11	11	2
Paying taxes	6	15	2
Trading across borders	12	18	16
Enforcing contracts	16	17	3
Resolving insolvency	16	23	15

Source: World Bank, ranking for 2019; Note: within group ranking from 1 (highest) to 24 (lowest)

Another important factor affecting the business climate and especially investment, including foreign direct investment (FDI), is the perceived level of corruption. The perceived level of corruption in Moldova improved only slightly from 2018 to 2021 and was comparable to that of Ukraine. On the other hand, perceived corruption was

considerably higher than for example in Georgia and still far from Western European levels, as illustrated by Germany.

Figure 6: Corruption perception index – Moldova in comparison

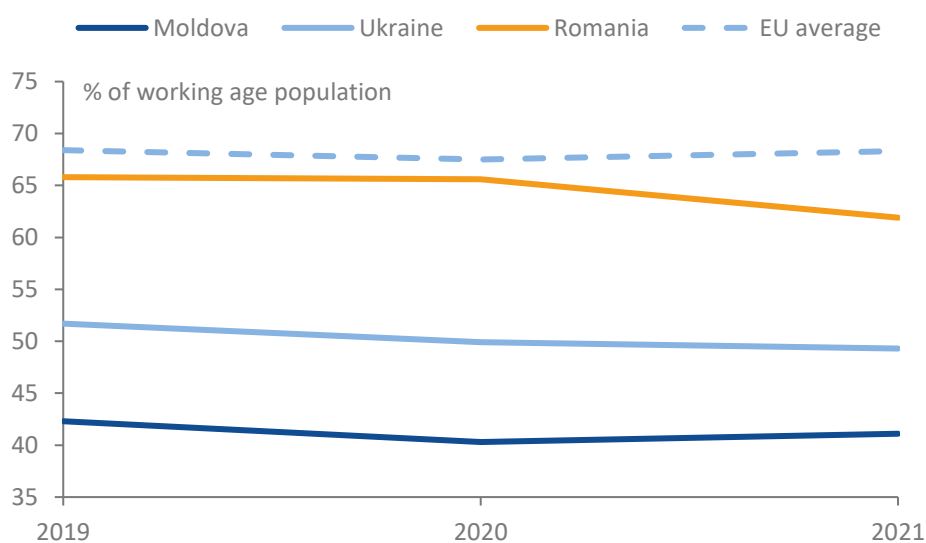


Source: Transparency International; Note: higher scores indicate less corruption

### Labour force participation

Besides the business climate, a key inhibitor of economic growth in Moldova has been the lack of labour. Many companies in Moldova have been reporting that they cannot find sufficient people to fill vacancies. In some cases, for example in agriculture, companies already reported hiring temporary labour migrants from countries like Uzbekistan. Compared to other countries in the region and the EU, Moldova has a very low labour force participation rate of only roughly 40%, as shown in Figure 7.

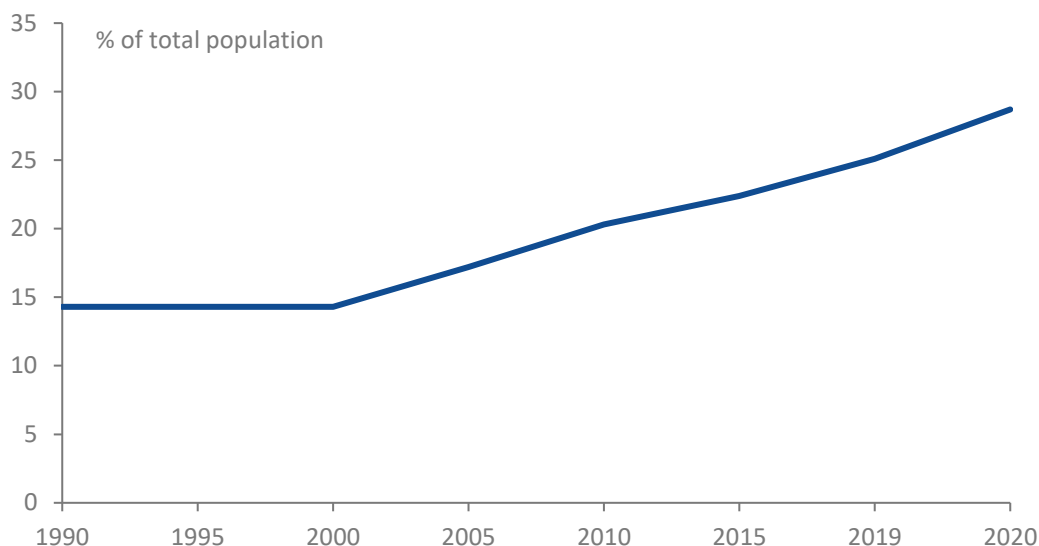
Figure 7: Labour force participation rate – Moldovan vs peers and EU average



Sources: National Bureau of Statistics Moldova, Ukrstat, Eurostat

This is much lower than the EU average of about 70% and lower even than in neighbouring Ukraine, where it is about 50%. Labour force participation in Moldova has been particularly low among women. In addition to the low participation rate of labour within the country, Moldova has seen continuous high levels of emigration, particularly of younger individuals.

Figure 8: Emigrants stock (as % of total population)

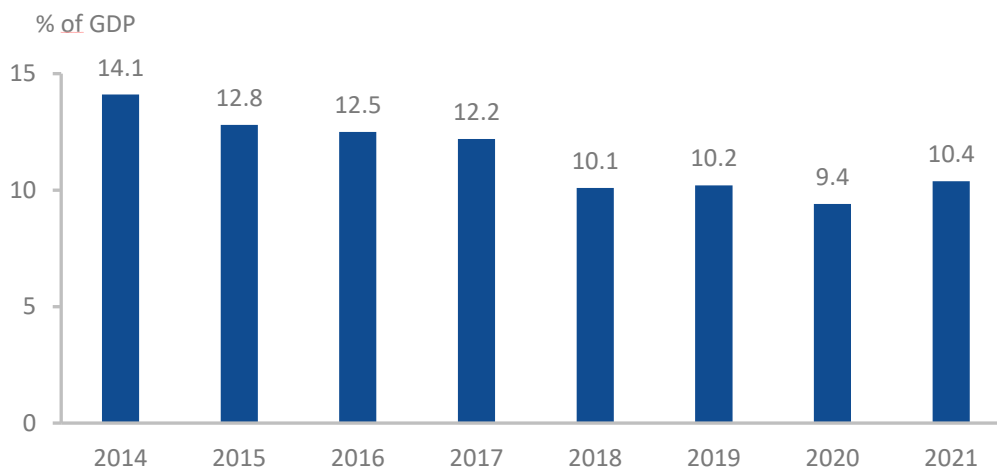


Source: UN DESA; Note: number of Moldovan emigrants living outside Moldova as a share of the total population of Moldovan citizens, incl. those living abroad

### Limited usage of growth potential in agriculture

Moldova has very good natural conditions for agriculture and even though the overall economic importance of the sector has decreased over time, it was still very significant with above 10% of GDP in 2021.

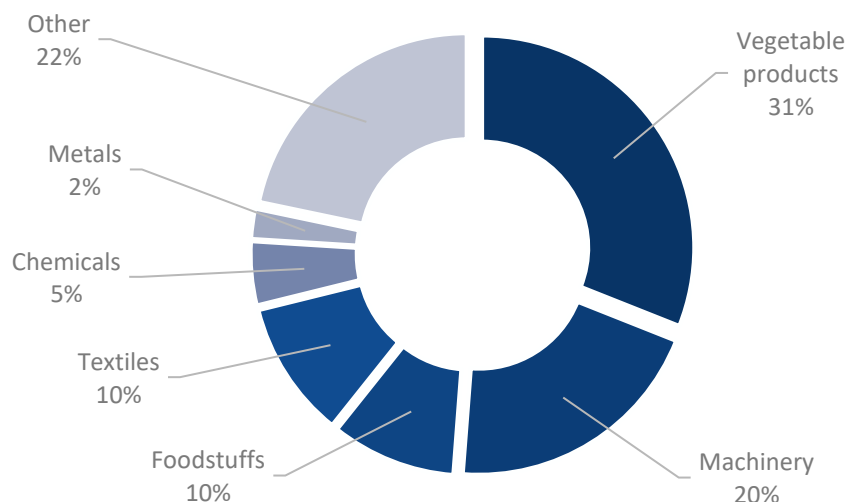
Figure 9: Agriculture share in GDP



Source: National Bureau of Statistics

For Moldova's exports the sector plays an even larger role. Around 30% of all exports were vegetable products in 2021 and another 10% processed foodstuffs.

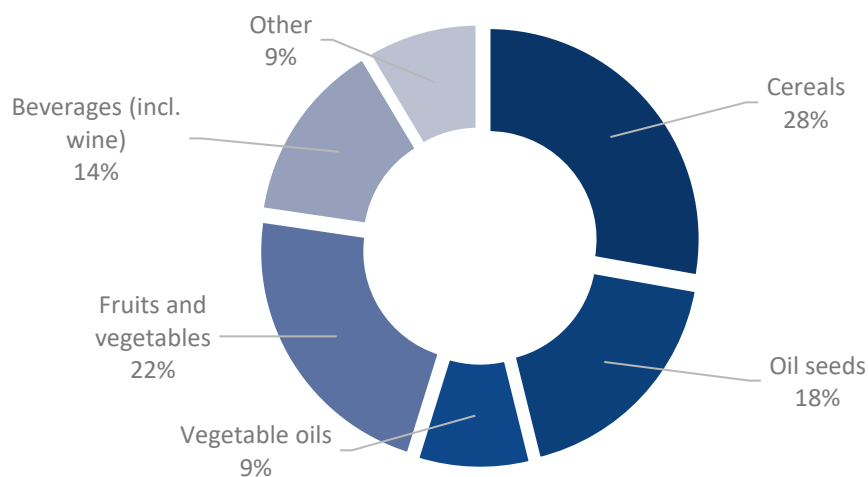
Figure 10: Structure of Moldovan exports



Source: National Bureau of Statistics, data for 2021

On the other hand, the majority of agri-food exports consist of unprocessed raw commodities such as cereals and oilseeds as well as fresh fruits and vegetables, as shown in Figure 11. This illustrates that Moldova has not sufficiently made use of the potential for up-scaling and industrialisation within the sector, which could increase value added and boost growth.

Figure 11: Structure of agri-food exports



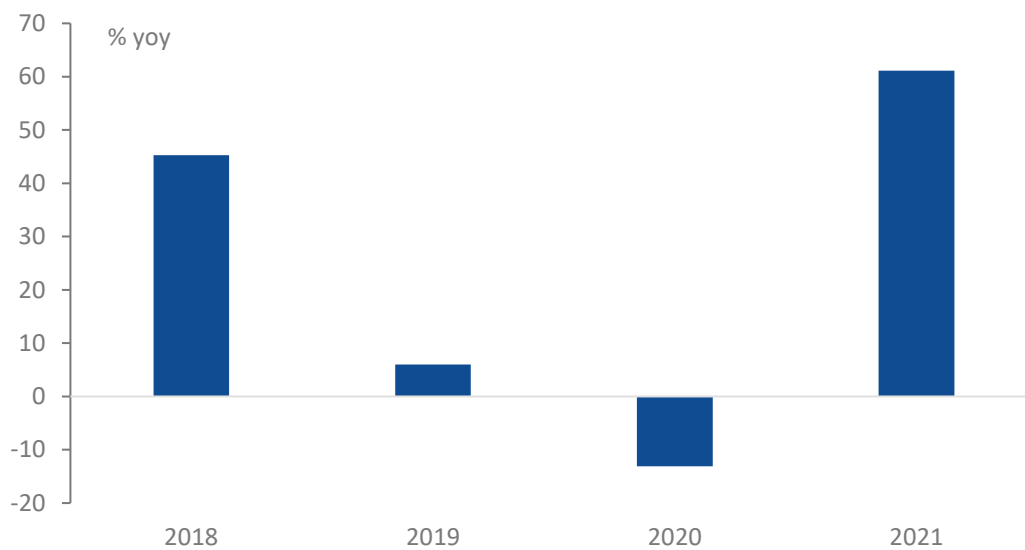
Source: National Bureau of Statistics, own calculations, data for 2021

To further industrialise the sector, additional investment, including FDI, would be needed. So far, FDI in the sector has accounted for less than 2% of all FDI. In 2021 for example,

only 1.5% of the total FDI stock in Moldova was in agriculture. This extremely low share of FDI has been influenced by multiple factors, which include difficulties for foreigners to lease land for sufficiently long timeframes.

Due to the low level of industrialisation the sector is very vulnerable to external shocks related to climatic conditions, but also to price developments on international markets. Figure 12 illustrates the production performance of the Moldovan agricultural sector from year to year in value terms. Since irrigated agriculture is not largely practised in Moldova, output is heavily dependent on weather conditions. In recent years, Moldova has been experiencing more frequent droughts, for example in 2020, which have had severe negative impacts on agricultural production. Considering the impact of climate change on the country, the frequency of drought events can only be expected to increase.

Figure 12: Value of agricultural production dynamics

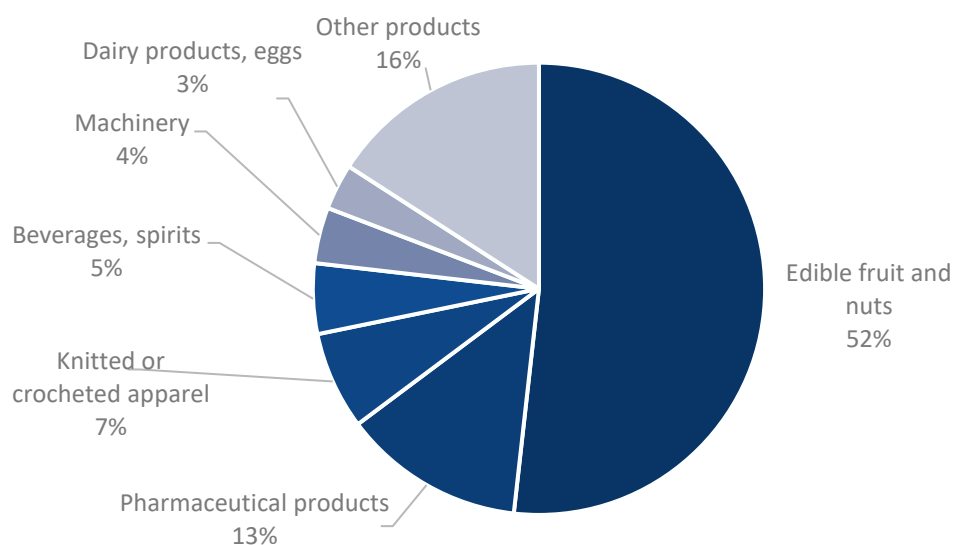


Source: National Bureau of Statistics

Another important factor for the value of production are commodity prices, which can also fluctuate heavily from year to year. Since processing and storage facilities are limited, Moldovan farmers often have difficulties responding to variations in output and prices. Storing products for several months after harvest time for example can be one solution for farmers to optimise their profits. While Moldova has already taken some measures to improve processing and storage facilities, more investment into this area is needed. Such facilities would also help to ensure final product quality, thus improving export potential, especially to the EU, where quality requirements tend to be high.

Furthermore, for some Moldovan agricultural products, export destinations have been highly concentrated. The EU has become the most important export destination for Moldovan exports since the signing of the Association Agreement and the coming into effect of the Deep and Comprehensive Free Trade Agreement (DCFTA), significantly reducing the dependence on Russia as an export destination. Nevertheless, some agricultural products were still primarily exported to Russia.

Figure 13: Structure of Moldovan exports to Russia



Source: National Bureau of Statistics of Moldova, own estimates, data for 2020

A high reliance on the Russian market persisted especially for apples (97% of all exports went to Russia in 2021), strawberries (83% to Russia in 2021) and cherries (73% to Russia in 2021). Considering various trade measures that Russia has unilaterally imposed on Moldovan exports over the years, this dependence increasingly became a vulnerability.



### 3. Economic shocks on Moldova in 2021 and 2022

The new government elected in 2021 brought with it extensive reform plans for the country. However, the implementation of these reforms was affected by the onset of multiple crises, starting with the gas crisis in October 2021, against the backdrop of the already serious socio-economic consequences of the Covid-19 pandemic. The gas crisis and later electricity crisis in 2022 revealed the considerable vulnerabilities in the energy sector. In addition, the start of the war against Ukraine in February 2022 impacted Moldova in multiple ways. The country faced a large influx of refugees from Ukraine, for which Moldova was highly unprepared and which presented a large administrative and financial burden for the country. Furthermore, the war illustrated the persisting weaknesses of the Moldovan logistics infrastructure and impeded international trade, including the export of Ukrainian products via the EU-Ukraine Solidarity Lanes. In addition, the deficit of growth drivers existing before the war did not improve over these two years and in some cases worsened further. Thus, Moldova faced immediate emergencies due to the war, but also larger crises' impacts brought on by the lack of resilience to external shocks due to structural problems and reform backlog.

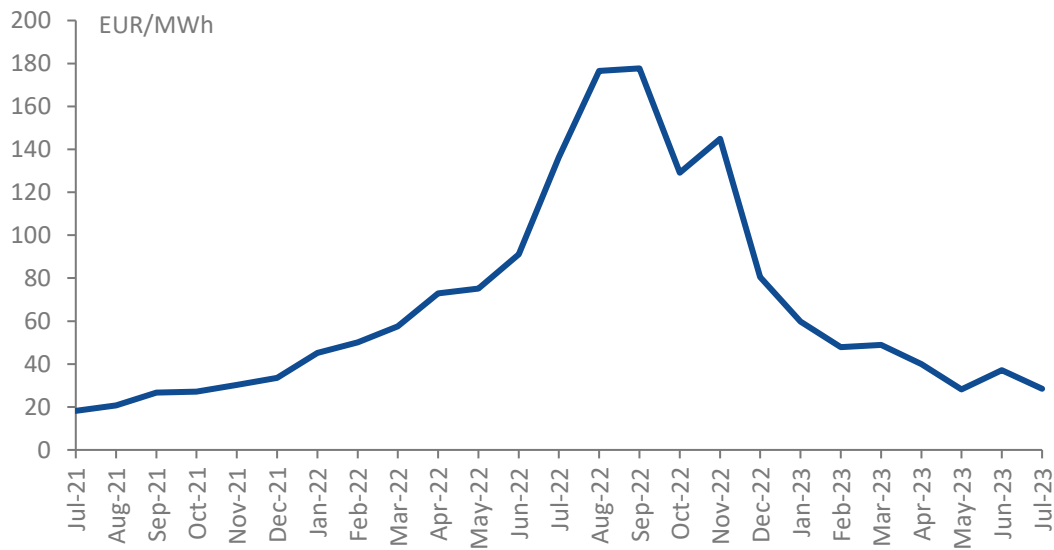
#### 3.1 Energy sector

##### Gas

The first crisis faced by Moldova was the gas crisis, which started in October 2021, and which revealed the vulnerabilities in the energy sector. The full dependence on Russia for natural gas, became a problem for Moldova when the previous long-term contract ended in September 2021. The negotiations for a new contract proved difficult, as Russia was unwilling to offer conditions as in the past insisting on a price formula, which was closely linked to current market prices for natural gas and oil. Considering that market prices had already risen to historically high levels at this point, the new contract signified a strong increase of import prices.

This also resulted in significantly increased gas tariffs for industry and household consumers in Moldova from 4.64 to 11.1 MDL/m<sup>3</sup> (including VAT) in November 2021. Consequently, the Moldovan government, with support from international donors, implemented a large compensation scheme to ensure the affordability of gas during the heating season for private households. Initial expectations were that the financial pressure would ease after the winter, when gas prices typically decrease. However, due to the start of Russia's war against Ukraine, international gas prices remained at record levels, as shown in Figure 14. As a result, gas prices continued to pose a considerable burden on Moldova, which could only be shouldered thanks to international financial support.

Figure 14: Dutch TTF gas price mid-2021 to today



Source: Barchart.com

### Electricity

In October 2022, Russia reduced gas supplies to Moldova by over 50%, which turned the gas crisis into an electricity crisis. The main supplier of electricity in Moldova, the MGRES power plant located in the Transnistrian region and operating on Russian gas, ceased electricity supplies to Moldova claiming insufficient quantities of gas. Moreover, because of the destruction of parts of the Ukrainian electricity infrastructure caused by Russian bombardments, Ukraine stopped all exports of electricity, including to Moldova. Thus, Moldova was forced to purchase electricity from Romania at much higher prices, as this was the only available source at the time.

In this situation, the German Economic Team analysed the additional cost for electricity purchases that Moldova would have had to incur over six months under different scenarios, the results of which are outlined in Table 2. This analysis shows the large role of the MGRES power plant for affordable electricity supply in Moldova and the high importance of a supply deal. As such, it also illustrates the vulnerabilities in the electricity sector caused by this dependence.

Table 2: Electricity cost scenarios Nov-22 to Apr-23 compared to previous year's corresponding months

<i>EUR m</i>	S1 Worst-case	S2 MGRES deal	S3 ROU additional subsidized capacity	S4 Best-case
<b>Scenario Parameters</b>	<ul style="list-style-type: none"> <li>» No deal with MGRES</li> <li>» 85 MW of ROU capacity secured</li> <li>» LB maintains consumption</li> </ul>	<ul style="list-style-type: none"> <li>» <b>Deal with MGRES secured</b></li> <li>» 85 MW of ROU capacity secured</li> <li>» LB maintains consumption</li> </ul>	<ul style="list-style-type: none"> <li>» <b>Deal with MGRES secured</b></li> <li>» <b>180 MW of ROU capacity secured</b></li> <li>» LB maintains consumption</li> </ul>	<ul style="list-style-type: none"> <li>» <b>Deal with MGRES secured</b></li> <li>» <b>180 MW of ROU capacity secured</b></li> <li>» <b>LB decreases consumption</b></li> </ul>
<b>Projected cost Nov22-Apr23</b>	<b>484</b>	<b>321</b>	<b>250</b>	<b>203</b>
<b>Additional cost vs Nov21-Apr22</b>	<b>349</b>	<b>186</b>	<b>114</b>	<b>68</b>
<b>Additional cost % of GDP</b>	<b>3.0%</b>	<b>1.6%</b>	<b>1.0%</b>	<b>0.6%</b>

Source: GET/MDA/PP/03/2022, own modelling results and calculations

The crisis could be managed due to support from international partners and a subsequent deal with MGRES on continued electricity supply at low prices. As a result, the situation is currently stable. Nevertheless, the dependence on MGRES remains a risk factor, considering also that it relies on the continued gas supply from Gazprom to the Transnistrian region. Additional reductions in gas supply for example could endanger generation. Furthermore, the convergence of power lines at the power plant adds a further element of vulnerability, as MGRES could theoretically disrupt imports from Romania transmitted via those power lines.

### 3.2 Infrastructure

The impact of the war against Ukraine revealed the massive problems with Moldovan infrastructure, including vulnerabilities created by the reliance on Ukrainian and Romanian maritime infrastructure for exports. As the port of Odessa became no longer accessible and the Ukrainian Danube ports at Reni and Ismail were fully used by Ukrainian exporters, Moldovan exporters only had the port of Giurgiulesti available for grain exports. The very limited capacities of this port created considerable challenges. In addition, much of Moldovan transport infrastructure, roads, railways, and ports, was also used by Ukrainian exporters leading to significant congestion, especially at the border crossings. The same was true for alternative logistics routes through the Romanian port of Constanta. Due to the limited capacities of its own export infrastructure, Moldova exported between 1.4 and 1.9 m tonnes of grain through other countries in 2022.

This was a challenge in particular for exporters of agricultural products, for whom logistics costs increased sharply. For the Policy Study 05/2022, GET conducted key stakeholder interviews with exporters and producers of grains and oilseeds in Moldova. Based on these interviews, an increase in export costs from 25 USD/t prior to the start of the war to 70 USD/t during the 2022/2023 marketing year was estimated. Recent airstrikes on the port infrastructure of Reni and Ismail are likely to further exacerbate the situation and lead to an increased reorientation of Ukrainian exports to Moldova's port and roads.

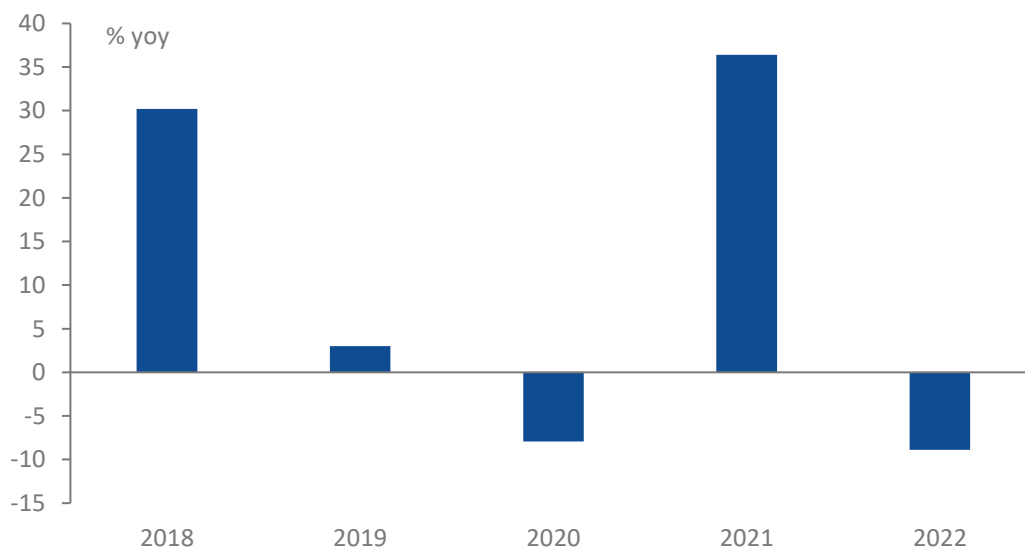
In addition, the deficits in Moldova's infrastructure have made the country a key bottleneck for the EU-Ukraine Solidarity Lanes. Despite the facilitation efforts for transit of Ukrainian cereals to the EU, the transport corridors through Moldova have limited capacities. This includes for example several bridges on the Moldovan-Romanian border, which are currently undergoing maintenance work. Investments into the quality of Moldova's infrastructure would thus also benefit Ukraine as well as those importers relying on Ukrainian grain. This is true for cereals exports in the short term but will also remain relevant in the context of the reconstruction of Ukraine after the end of the war.

### 3.3 Deficit of growth drivers

Due to the multiple crises facing Moldova in 2021 to 2022, the deficit of growth drivers in the economy remained largely unaddressed. In some cases, the situation even worsened due to the impacts of these crises.

The business sentiment in Moldova further worsened due to the large uncertainty created by the war against Ukraine as well as the energy crises. Perceived geopolitical risk in Moldova increased due to the war, which inhibited investment. In 2022, investment decreased by close to 9% as shown in Figure 15. Recent data on FDI is not available, but anecdotal evidence suggests that foreign investors have been postponing investments in Moldova due to perceived higher country risk.

Figure 15: Development of gross fixed capital formation in Moldova



Source: National Bureau of Statistics

Migration data is published with a large time lag and with 2021 constituting the most recent year for which data is available. Thus, the impact of these crises on emigration from Moldova cannot be determined. However, it is possible that the perceived decline in the security situation in the country could have increased emigration further.

## **4. Medium-term reform needs and economic development potential of Moldova**

As outlined above, Moldova was adversely affected by external shocks in 2021 – 2022 related to the energy crises and the war against Ukraine, which were exacerbated by the structural deficits in the country. Thus, it is important - beyond emergency response - to increase Moldova's resilience to external shocks and improve the country's mid- to long-term development perspectives through economic policy reforms. This has become even more relevant now that Moldova has been accepted as a candidate country for EU membership. Economic stability and growth are needed for Moldova to successfully become a member of the EU and eventually converge to the living standard of other member states.

To achieve these goals, reforms across many sectors will be needed, especially in the energy and infrastructure fields, but also in addressing the persistent lack of growth drivers. Since the Moldovan economy is still weakened by the impact of the recently experienced shocks, Moldova needs continued support from international partners to implement these reforms.

Another overarching topic for reforms is institutional capacity building and improvements in Moldova's capacity to absorb external financial assistance. In 2022 for example, Moldova planned a budget deficit of 6.2% of GDP, but only realised a budget deficit of 3.3% despite sufficient financial resources. One of the key reasons for this lower deficit, besides higher than expected revenues, was the limited institutional absorption capacity. While absorption capacity remains a challenge, Moldova has recently undertaken some actions to improve these capacities on strategic planning as well as the operational level. Specific measures have included the establishment of a project management office within the State Chancellery as well as a project delivery unit and a centralised project management system. In addition, a more comprehensive reform of the State Chancellery to enhance its capacities as a centre of government is scheduled to be adopted by the end of November 2023. Nevertheless, this issue should be monitored, and additional measures may be needed.

### **4.1 Energy sector**

#### **Gas**

Moldova should continue its efforts at diversifying the supply of natural gas. The ability to purchase gas on the European joint gas purchase platform has already contributed to a significant increase of resilience. Furthermore, Moldova should continue to build up gas stocks in its neighbouring countries to prepare for unexpected supply shocks. As of

02 May 2023, Energocom held gas stocks of 150 m cubic meters, which accounts for about 15% of the yearly consumption (excluding the Transnistrian region).

Another important measure to increase resilience related to gas is to decrease consumption through energy efficiency measures. Moldova has plans for energy efficiency programmes in public buildings as well as an Energy Efficiency Fund for residential buildings. Such programmes require funding, which could in part be provided by international partners. Furthermore, capacities for the implementation of such programmes are scarce in Moldova given the limited experience with energy efficiency programmes. This includes the capacities of the Energy Efficiency Agency, which has recently been restructured and is foreseen to manage the Energy Efficiency Fund for the residential sector. International partners could support Moldova in the setting up of these new programmes, their implementation as well as the building up of own capacities in the country. Such support could draw on international experience from countries with similar energy efficiency programmes.

In addition to energy efficiency programmes, cost-covering gas tariffs are another important tool to incentivise prudent energy use. If high tariffs create problems for affordability by private households, targeted social support systems can be used to protect the most vulnerable segments of the population. The Energy Vulnerability Reduction Fund established in 2022 is a useful first step in this direction. The feasibility and effectiveness of this new programme should be carefully assessed in order to further improve the support scheme.

### **Electricity**

In the electricity sector, infrastructure is a key priority. The new power lines with Romania (Vulcanesti-Chisinau and Balti-Suceava) will be an important first step in this direction, as they would reduce the dependence on MGRES for electricity transmission. Implementing and finalising these projects as soon as possible will be very important for increasing the resilience of Moldova's electricity supply.

In addition, the market integration with ENTSO-E is important for Moldova to receive full access to the EU's electricity markets. This would give Moldova increased flexibility in choosing from different European suppliers and would likely reduce electricity cost in case of imports. To complete the market integration, Moldova needs to continue implementing all required reforms including those relating to its domestic electricity market.

Furthermore, Moldova needs to increase its own electricity generation capacities to reduce the dependence on MGRES and imports. To ensure long-term affordability, the focus should be on renewable energy sources considering that the prices of fossil fuels are expected to remain high, and that Moldova would eventually have to implement the EU's Emissions Trading Scheme. To speed up the development of generation capacities, Moldova should launch the planned auctions for large renewable energy projects as soon as possible. To make investments into the sector more attractive, reforms aimed at making the electricity market more competitive should be implemented. In addition, international partners may want to consider financially supporting investments into renewable energy to make them more attractive. To successfully increase the share of variable renewable energy generation that can be integrated into the Moldovan grid, balancing technologies are also needed.

Additional feasibility studies and assessments are needed to determine the optimal generation mix and balancing options for Moldova. Subsequently, financial support may be needed to incentivise investments into balancing technologies, for example when considering battery storage or other innovative approaches.

## 4.2 Infrastructure

A higher quality and increased capacities of transport infrastructure could reduce the cost of logistics and thus facilitate Moldova's international trade. Considering the key role of Moldova as a logistics bottleneck for the EU-Ukraine Solidarity Lanes, improvements to Moldova's infrastructure would also contribute to strengthening Ukrainian exports as well as to food security in markets dependent on Ukrainian grain imports. In terms of roads, infrastructure quality should be the highest priority.

For the railways, an increase in capacities (number of railway wagons and locomotives) as well as enhanced efficiency should be considered as well as improvements in rail infrastructure, which would decrease transport times.

Another important area for infrastructure investment is the port in Giurgiulesti. Capacity expansion could help ease current congestion constraints as well as prepare for future shocks. One aspect to include in considerations here is the building up of logistics capacities for large-scale coal imports. These might be required in the near future, if Russia ceases gas supplies to Moldova and the MGRES power plant were to be run on coal instead.

## 4.3 Deficit of growth drivers

### Business climate

A good business climate is a key factor for investments into a country and thus improvements in this regard should be a reform priority. Reforms should focus on decreasing unnecessary bureaucracy, for example in the field of various permit requirements. Increased digitalisation of public services should be one of the tools to achieve this and has already been initiated by the current government.

Another important measure will be improvements in the rule of law and a continuation of the efforts to fight corruption. Successfully implemented, these measures could facilitate investments.

Lastly, reforms should be accompanied by targeted investment attraction measures focusing on the most promising sectors for FDI, such as electronics, IT and other high potential business services, but also agriculture.

### Labour

Labour is a crucial factor for economic development in Moldova, if not the most important one. Considering the large emigration and demographic decline in the country, the focus should be on increasing the labour force participation rate. Possible measures in this regard could include improvements in the quality and access to childcare. The labour force participation rate is currently even lower for women than the country average and the main reason for this are childcare responsibilities. Especially the options for early childcare

(under 3 years of age) in Moldova are currently insufficient. Furthermore, improving public transportation linking villages to district centres/towns would be essential to enable the rural population to access employment opportunities in urban areas.

Another option would be to further reform university education to encourage shorter study periods. The Moldovan university system offers undergraduate degrees lasting both 3 years, as is typically the case in the EU, and 4 years. A significant number of students is enrolled in 4-year degrees, which means that they may enter the labour market one year later. Increasing the number of students, who enrol in shorter degrees could be one way of creating additional labour supply. In addition, more options for vocational training opportunities and improved quality of such options would contribute to market-oriented skills development.

#### **Limited usage of growth potential in agriculture**

The agricultural sector is an important growth driver of the Moldovan economy. However, large potential for industrialisation and up-scaling in the sector still remains untapped. To better use this potential, investment, including FDI, into the sector should be facilitated. Potential measures would include reforming the regulatory environment to ensure better access to land for foreign investors. In addition, comprehensive reforms will be required to prepare the sector for EU accession.

To optimise the use of industrialisation and up-scaling potential, a strategically oriented analysis of the sector should be conducted to identify the most promising sub-sectors and products.

Lastly, the diversification of export markets and reorientation of agricultural exports from Russia to other markets should be continued to make the sector more resilient and reduce dependencies on one market.