Country diagnostics are a European Bank for Reconstruction and Development (EBRD) tool for identifying the main obstacles to entrepreneurship and private-sector development and shaping the Bank’s strategic priorities and project selection in new country strategies. Each diagnostic informs the EBRD’s policy engagement with the authorities in the country.

Each diagnostic assesses the progress and challenges of developing a sustainable market economy in the country in question. Private-sector development and entrepreneurship are at the heart of the Bank’s mandate in the regions where the Bank operates, but the private sector in all EBRD economies faces a range of problems and obstacles. The diagnostic highlights the key challenges facing private companies and shows where each country stands vis-à-vis its peers in terms of six qualities of transition – competitive, well governed, resilient, integrated, green and inclusive – pointing out the main deficiencies and gaps in each.

The diagnostics draw on a range of methodologies and best practices for assessing the size of different obstacles. Extensive use is made of in-house expertise across the EBRD, along with surveys such as the Business Environment and Enterprise Performance Survey (BEEPS) and the Life in Transition Survey (LiTS), as well as other cross-country surveys and reports from institutions such as the World Bank, World Economic Forum and Organisation for Economic Co-operation and Development (OECD). For some larger countries, the diagnostics also draw on specially commissioned studies of selected issues that are critical to private-sector development in that country.

The diagnostics are led by the EBRD’s Country Economics, Strategy and Policy team, drawing substantially on the expertise of sector, governance and political experts in the Policy, Strategy and Delivery department (PSD) and consulting widely with relevant experts across the EBRD when preparing the final product. The diagnostics are shared with the EBRD Board during the Country Strategy process and published during the public consultation period.

The views expressed in the diagnostic papers are those of the authors only and not of the EBRD.

For more information, go to: https://www.ebrd.com/publications/country-diagnostics
This report was prepared by Radu Cracan and Lia Alscher, Economic Analysts in the Policy, Strategy and Delivery (PSD) department, under the supervision of Dimitar Bogov, Regional Lead Economist. The authors are grateful for the contributions and comments provided by Oleksandr Pavlyuk, Rada Tomova, John Gordon, Federica Foiadelli, Margherita Calderone, Daniel Manrique de Lara, Andrei Mazur, Hester Coutanche, Yuliya Zemlytska, Mark Lane, Peter Sanfey, Nino Shanshiashvili, Justin Robbins, Cem Gundogan, Mirjana Grkowska and Kyun Sung-Ah. Editor: Polin Breathnach. The views expressed in this paper are those of the authors only and not necessarily those of the EBRD. The report is based on information and data available as of August 2022, except the Macroeconomic overview section and the Box 1 which were updated in February 2023.
Executive summary

Moldova is a small economy and its real income per capita lags that of other countries in the region. The economy’s catch-up potential is constrained by serious structural weaknesses. Weak governance, poor public services and an unstable business environment have had a negative effect on investment and have contributed to large-scale emigration, mostly of young people.

The current government has embarked on an ambitious reform programme, but this has been disrupted by the challenges posed by the war on Ukraine. A major influx of Ukrainian refugees has put additional stress on the fragile economy and the country’s weak institutional capacity. The authorities are addressing the immediate needs of the refugee population, although the magnitude of the crisis has put huge strain on the country’s resources and infrastructure. Existing gaps in the provision of public services are compounding the challenge of hosting and integrating the refugees. In addition to these direct implications of the war, Moldova’s macroeconomic figures worsened significantly in 2022. Inflation averaged close to 30 per cent, public deficits increased and gross domestic product (GDP) growth stalled.

Moldova’s economic competitiveness is held back by its small market size and the strong presence of state-owned enterprises (SOEs), many of which receive significant state subsidies. Insufficient openness to trade and investment has led to weak export intensity and limited corporate capacity to innovate and generate value added. From a competitive standpoint, institutions and regulations are mostly aligned with European Union (EU) standards, but institutional capacity and enforcement lag.

Critical governance and institutional reforms are long overdue. The current rule-of-law and anti-corruption frameworks are ineffective and there are serious concerns about transparency and corruption in SOEs and the wider economy. Improving the quality of the judicial system is vital to enacting wider governance reforms.

Moldova’s (pre-war) access to affordable imported gas has slowed climate change awareness and reduced incentives to introduce renewables to the energy mix and implement energy efficiency measures in industry and in public and residential buildings. The energy intensity of the economy is significantly higher than the EU average. A new regulatory framework for green investments has been delayed and investors are still waiting for the first auction to be held. Air pollution, waste and waste-water management services remain serious challenges. Meeting the enhanced targets of the country’s updated nationally determined contribution (NDC) and strengthening climate resilience will require significant international financial support.

Moldova faces a number of serious inclusion issues, which constrain equality of opportunity. Gender bias is formally low but, in practice, women still are subject to discrimination and negative stereotyping in public life. Access to broadband and computers varies widely by region and gender. Labour-market participation is well below regional standards and those with disabilities face particular hurdles in finding employment.

Both financial stability and energy security are vulnerable to adverse shocks. The country’s financial resilience has been adversely affected by legal proceedings against banks over legacy issues, as well as the vulnerabilities of the fast-growing non-bank financial sector, which requires closer supervision. With a low credit penetration rate and underdeveloped financial market, there is a lack of financing opportunities, especially for micro, small and medium-sized enterprises (MSMEs). Energy security is at risk because of the high concentration of the energy mix in a single energy source and single supplier, as well as the weak degree of energy-sector connectivity, which limits the possibilities for diversification and security of supply.

Moldova’s international integration is impeded by its poor physical infrastructure and an unusually low ratio of trade to GDP. Good digital connectivity, however, offers an opportunity for better integration into the global digital economy and a move to higher-value-added sectors. Free trade zones have had some success in attracting export-oriented foreign direct investment (FDI), but with limited spill-over effects on other sectors of the economy.
Contents

Executive summary ........................................................................................................................................ 4

Contents ...................................................................................................................................................... 5

1. Political and Economic overview ........................................................................................................ 6
   1. Political economy ............................................................................................................................... 6
   2. Macroeconomic overview .................................................................................................................. 6

Box 1. Moldova and the war in Ukraine .................................................................................................. 12

2. Assessment of the market economy .................................................................................................... 14
   1. Competitive – limited capacity to add value amid weak foreign integration, low innovation and
      uncompetitive markets.......................................................................................................................... 14
   2. Well-governed – uneven execution of rule of law and weak institutional capacity cause slow progress
      on broader reforms............................................................................................................................... 18
   3. Green – poor energy efficiency, climate change and fragile municipal infrastructure increase
      vulnerabilities........................................................................................................................................ 23
   4. Inclusive – skill gaps, gender bias and poor access to services inhibit potential human capital
      development........................................................................................................................................ 27
   5. Resilient – recovering banking sector, nascent capital markets and deficient energy security constrain
      resilience................................................................................................................................................ 32
   6. Integrated – poor external integration is exacerbated by insufficient domestic infrastructure........ 39

3. References ............................................................................................................................................... 43
1. Political and economic overview

1. Political economy

Moldova’s reform agenda has been driven by the country’s commitment to European integration, underpinned by an Association Agreement with the EU, including a Deep and Comprehensive Free Trade Area (DCFTA), which was signed in 2014 and fully entered into force in July 2016. In a further and potentially transformative step, in March 2022, Moldova submitted a formal application for EU membership. In June 2022, the EU formally recognised the country’s European perspective and granted candidate status to Moldova (and Ukraine). This historic decision is a powerful reform incentive, and tangible progress on EU approximation could help strengthen Moldova’s political stability.

The Moldovan presidential elections in November 2020 and early parliamentary elections in July 2021 resulted in sweeping political change, bringing to power a pro-European president, parliament and government. This clearly aligned Moldova with a pathway to reform for the first time in its recent history. Moldova is a parliamentary republic. With the next parliamentary elections not due until 2025, the country has a chance to implement meaningful reform and break the cycle of frequent political instability, dysfunctional governance and economic stagnation.

Building on its broad popular mandate, the new government has committed to ambitious reforms: fighting corruption and cleaning up the justice system; improving the quality of governance and the business and investment climate; and increasing people’s prosperity. Important steps have been taken, particularly with regard to combatting corruption and strengthening the rule of law. The pro-reform government benefits from political goodwill and financial support from its international partners.

But the government faces many long-standing vulnerabilities: weak institutions and governance; the unreformed judicial system, which lacks public trust; the consequences of a massive fraud in the banking sector in 2013-14; poor quality of life and high emigration, especially among the youth; and persisting divisions in society along ethnic identity and geopolitical lines. The administrative capacity of the public sector is weak and the labour market is characterised by skills shortages, with both factors hindering reform efforts.

What is more, Moldova is facing serious new challenges. In its first months in office, the government had to deal with a gas supply crisis. Although the immediate problem of acute gas shortages was resolved, the energy crisis remains a major challenge amid unresolved issues and Moldova’s dependence on Russia as its single source of gas. Unprecedented energy prices and rising socioeconomic pressures are eroding the government’s popularity, emboldening the opposition and threatening to disrupt economic reforms.

Russia’s full-scale invasion of neighbouring Ukraine in February 2022 has dramatically changed Moldova’s geopolitical environment and increased risks to the country’s stability and security. The war, the resulting large influx of Ukrainian refugees and rocketing energy prices have added to Moldova’s growing economic and social pressures. The worsened geopolitical landscape has once again put the spotlight on the risks to Moldova’s stability associated with the Transnistrian conflict, which has remained unresolved since 1992.

2. Macroeconomic overview

Moldova is a small economy and real incomes lag those of other countries in the region. Faster economic convergence is constrained by serious structural weaknesses. Weak governance, poor public services and an unstable business environment deter investment and have caused sizeable emigration. Growth is predominantly driven by remittances, which fuel private consumption, while low-value-added products pervade exports. Problems in the labour market, including low participation rates and high emigration, exacerbate macroeconomic weaknesses.
Growth performance

Moldova is one of the poorest countries in Europe. The economy collapsed in the early years of transition, but stabilised around the turn of the century, and annual growth averaged 4.4 per cent between 2001 and 2021 (see Chart 1). The government’s Moldova 2020 strategy has set an ambitious growth rate of 5.9 per cent annually, to accelerate convergence with average European income levels.¹

Chart 1. Cumulative real GDP growth, 1992=100

Growth performance

[Graph showing cumulative real GDP growth from 1992 to 2021 for different countries.]

Source: IMF (2022c), authors’ calculations.

Real income per capita lags that of other countries in the region. GDP per capita in Moldova is low compared with neighbouring Romania, other Eastern European and Caucasus (EEC) economies and those in the Western Balkans (see Chart 2). In 2021, 24.5 per cent of the population lived in absolute poverty and 9.5 per cent in extreme poverty.² The poverty rate in rural areas is approximately three times that of urban areas.

Chart 2. GDP per capita, US$ 000s, constant prices, PPP-adjusted, weighted average

GDP growth has been volatile (see Chart 3). Moldova has been buffeted over the years by internal and external crises. In 2020, the Covid-19 pandemic led to a fall in global demand, decreased remittances and subdued domestic consumption, which, combined with a severe drought, pushed the economy into a deep contraction of 8.3 per cent. However, the economy recovered strongly in 2021, by 13.9 per cent, driven by double-digit growth in household consumption, fuelled in turn by robust salary growth, enhanced social assistance and remittances, and a revival of export demand from European automotive value chains. Rising petrol prices and the war on Ukraine caused GDP to contract in 2022. The growth of government consumption could not compensate for the decline in net exports, private consumption and investment. The war on Ukraine has affected Moldova mainly in the form of a major inflow of refugees, a sharp rise in inflation and disruptions to energy supply (see Box 1 for more information).

¹ See Government of Moldova (2020a).
² Data published by the National Bureau of Statistics of the Republic of Moldova. An explanation of the setting of poverty lines can be found here:
In recent years, growth has been driven by private consumption and, to a lesser extent, investment. Moldovan growth depends mainly on domestic consumption (see Chart 4). Remittances from the large diaspora are one of the main sources of household disposable income. Though money transfers from abroad have increased in absolute terms over the last seven years, their share of GDP has declined, falling from 17.8 per cent in 2010 to 11.8 per cent in 2021. The contribution of investment to growth is more modest, unsurprising given the low level of FDI and persistent weaknesses in the investment climate.

Chart 4. Contributions to GDP growth

Source: National Bureau of Statistics of Moldova, authors’ calculations.

The EU is Moldova’s main trading partner, accounting for around two-thirds of exports (up from one-third in 2000). The signing of the Association Agreement in 2014 and the Deep and Comprehensive Free Trade Area (DCFTA) in 2016 contributed significantly to this expansion. In particular, trade with neighbouring Romania has been gaining in importance and Romania is now Moldova’s biggest national trading partner and an important access point to the EU market. The share of exports going to Russia and other CIS countries decreased from 58.6 per cent in 2000 to 14.8 per cent in 2021 (see Chart 6). Imports have followed similar patterns and mainly originate from Russia (14.7 per cent), China (11.7 per cent), Romania (11.6 per cent), Ukraine (9.3 per cent) and other EU countries (32.3 per cent).

Export performance and FDI

Export growth has been disappointing. Since 2000, nominal GDP has increased ninefold, while exports of goods have only risen close to sixfold and exports of services almost eightfold. As a result, the share of exports of goods and services in GDP has decreased over the last two decades, from 42.6 per cent of GDP in 2000 to 30.7 per cent in 2021, in contrast to developments in comparator countries (see Chart 5).

Chart 5. Exports of goods and services as a share of GDP, current prices

Source: IMF (2022a), authors’ calculations.
Low-value-added products dominate exports. Vegetable products, machinery and mechanical appliances, and food, beverages (including wine) and tobacco were the three main export categories in 2021, followed by textiles. Moldova's key imports are mineral products, machinery, chemical products, and textiles, mostly imported for processing and re-exported as final products. Most of the machinery-related trade comes from the free trade zones.

Moldova has difficulty attracting investment. Historically, investment has been low and concentrated in the free trade zones. As a result, Moldova has the lowest FDI stock per capita in the region (see Chart 7). Positive spill-over effects from investments in the free trade zones to the rest of the economy have been scarce. The main constraints on FDI are the volatile economic and political environment and the lack of a qualified labour force.

FDI has been volatile. In the past decade, inflows of FDI have averaged around 2.8 per cent of GDP with major variations over time (see Chart 8). Currently, the bulk of FDI investments comes from the EU and are mainly in finance, automotive, light industry, agriculture, food processing, IT, wine and real estate. However, the Association Agreement and DCFTA are creating further opportunities for investment in Moldova, as the country could serve as a bridge between European and CIS markets.
The capital expenditure of greenfield FDI projects in Moldova is lower and projects are typically smaller than in other EBRD countries. The average expenditure of greenfield FDI projects in Moldova was about 5 per cent of GDP between 2003 and 2019, lower than the EBRD average of 6 per cent. EBRD research shows that the median project created only 58 jobs, mostly in manufacturing, compared with an average of 80 in the EBRD regions. Over time, greenfield FDI inflows have shifted from lower-skilled manufacturing and services (such as food and beverages, textiles and construction) to higher-skilled manufacturing (such as automotive value-chain and electronic equipment) and sectors with high digital intensity.4

Private-sector development

Moldova’s economy has seen significant structural change. Agriculture has historically accounted for a large share of Moldova’s economy, but gradually declined from 19.5 per cent in 2005 to 12.3 per cent in 2021. Nevertheless, agriculture as a share of gross value added (GVA) remains higher than in most regional peers, while its share of employment, at over 20 per cent, is comparable to that of peer countries in the Caucasus. The declining role of industry during transition has been offset by growing services, trade and construction. Since 2015, both agriculture and industry have increased nominal value added more modestly than financial services, construction or trade. However, moving more towards high-productivity sectors could help boost growth.

Small and medium-sized enterprises (SMEs) account for a relatively low share of the economy. They generate 40 per cent of the turnover in the economy and employ about 60 per cent of all workers (see Chart 10). State-owned SMEs account for about 12.0 per cent of SME employment, but only about 3.5 per cent of turnover is realised by this segment.5

The low survival rate of firms reflects a difficult business environment and a lack of business continuity. In 2021, the company formation rate was 14.0 per cent, similar to previous years, while the failure rate decreased to 14.3 per cent from 28.7 per cent in 2020. The survival rate of firms founded in 2019 was only 44.5 per cent.7 For

---

4 See EBRD (2021b).
6 The National Statistics Bureau defines SMEs as firms with up to 249 employees, annual turnover of MDL 50 million or assets worth up to MDL 50 million.
comparison, the company formation rate in the EU-27 in 2018 was almost 10 per cent, while the three-year survival rate was almost 60 per cent.

Despite some progress, the business environment faces multiple constraints. According to the OECD SME Policy Index, Moldova performs better than other Eastern Partnership countries on most indices, with the exception of those relating to the insolvency framework, internationalisation and business development services. Progress has been recorded on almost all dimensions since 2016. Nevertheless, the Business Environment and Enterprise Performance Survey (BEEPS) survey suggests that Moldovan firms continue to face difficulties with finding the right skills, the unpredictable policy environment and the high level of informality (see Chart 10).

Informality remains a significant part of the Moldovan economy and has become a more pressing issue for fair competition. According to some estimates, the informal economy accounts for almost a quarter of the Moldovan economy and up to 7 per cent of GDP in terms of tax losses. This often entails cases of undeclared work, where informal businesses or individuals wilfully avoid taxation and labour regulation. Workers and employers also often declare lower-than-actual income to maximise current disposable income or profit and avoid taxes. Every fifth employed person in Moldova has an undeclared job, and undeclared wages are estimated at 6 per cent of GDP. Agriculture remains the sector with the highest share of informal activity, at around 70 per cent, though the phenomenon is also prevalent in construction and trade.

Informality is sustained by several factors. Key determinants perpetuating informality include: the low quality of public goods and services; the low level of transparency with regard to budgetary spending; low tax morale; the poor quality of public institutions and regulations; and higher profits from partially or fully hidden revenues. Moldovans revert to informality also as a solution to economic constraints.

---

8 See OECD, EU, European Training Foundation and EBRD (2020).
9 See UNDP (2021a).
10 See ILD (2021).
11 See ILO (2022).
12 See UNDP (2021a).
13 Ibid.
Box 1. Moldova and the war on Ukraine

**Macroeconomic impact**

The war on Ukraine is heavily affecting Moldova through five main channels: i) the refugee crisis, ii) prices, iii) trade, iv) fiscal costs and v) financial markets. The country’s GDP contracted by 5.9 per cent year on year in 2022. On top of the macroeconomic shock, the influx of hundreds of thousands of Ukrainian refugees is straining the capacity of public institutions and weakening their reform focus, while overstretched public services in utilities, health and education.

Inflation has accelerated strongly, driven mainly by rising energy and food prices. Higher food prices since the beginning of 2021 and a fivefold increase of gas prices since October 2021 boosted inflation from almost zero at the beginning of 2021 to a peak of 34.6 per cent year on year in October 2022, averaging 28.7 per cent in 2022. The increase was broad based, with food prices rising 31.9 per cent on average in 2022 and services (including utilities) by 37.0 per cent. This prompted the NBM to increase the policy rate to 21.5 per cent in August 2022 and to raise the reserve requirement ratio, potentially hampering access to credit and economic growth. The slowing of inflation in the last quarter allowed the NBM to decrease the policy rate to 20 per cent in December 2022 and again to 17 per cent in February 2023.

Trade with Ukraine, Russia and Belarus has been disrupted, but exports to the EU are accelerating. Moldova’s exposure to Russia’s economy through exports and remittances is around 5 per cent of its GDP, with agricultural products likely to be affected most. The three countries account for about 24 per cent of Moldova’s total imports and 15 per cent of total exports.\(^\text{14}\) A mitigating factor is that Moldova serves as a transit country for Ukrainian exports to the EU and Western Balkans. Border crossings have been strained since the war, as road freight attempts to compensate for Ukrainian port blockages. Moldovan goods exports increased 37.9 per cent in 2022, with key EU markets and Ukraine increasing their share markedly, while Russia’s share decreased to a historical low of 4.4 per cent. Trade volumes are likely to increase further, as Moldova and Ukraine signed an agreement with the EU in June 2022 on the liberalisation of trade through road freight. However, more expensive energy imports led to a widening trade deficit.

Measures to compensate the impact of inflation and the energy crisis will raise the fiscal deficit. Government subsidies for gas tariffs are estimated at 1.9 per cent of GDP in 2022. On top of that, added expenses for dealing with refugees resulted in an estimated budget deficit of 4.2 per cent of GDP. Public debt, which already increased from 25.1 per cent of GDP in 2019 to 34 per cent of GDP in 2020 as a result of the pandemic, is estimated to increase further in 2022, to 36.0 per cent of GDP. Interest rates on domestic market sovereign bonds reached 22 per cent as of September 2022, compared with an average of 5.5 per cent in 2021. Debt financing of the external gap in 2022 stemmed mostly from the depletion of foreign reserves up to April and official funding from international creditors thereafter.

Financial conditions have also worsened, while the Moldovan leu (MDL) has come under significant pressure. Rising uncertainty and risks saw the interbank rate triple from January 2022, while the Moldovan currency came under pressure from increased demand, almost double normal levels. That prompted the NBM to increase its interventions to levels last seen during the 2014 crisis, while foreign reserves declined from a high of US$ 4.1 billion in October 2021 to US$ 3.4 billion in April 2022. Later, foreign reserves reversed that trend, supported by official foreign inflows and seasonal factors, reaching US$ 4.5 billion as of the end of 2022. Similarly, the banking sector saw an outflow of deposits in the two months after the start of the war, but later recovered those losses.

**Inclusion aspects**

Since Russia’s invasion of Ukraine, more than 760,000 refugees have entered Moldova, most of them women, children and the elderly.\(^\text{15}\) The inflows of refugees into Moldova represent more than 20 per cent of the country’s population at the start of the war. Evidence from an

\(^{14}\) See IMF (2022b).

\(^{15}\) See UNHCR (n.d.).
International Organization for Migration/UN Women survey suggests that women and girls accounted for 81 per cent of all refugees surveyed during a two-week period from the onset of the war and that 83 per cent of refugee women were travelling with at least one child.\textsuperscript{16} Around 109,000 people had stayed in Moldova as of February 2023.

**Moldova is actively working to address the immediate needs of the refugee population, although the magnitude of the crisis is straining the country’s resources and infrastructure.** According to UN Moldova, as of 11 March 2022, 93 centres authorised by the government to host refugees were functional, with a total capacity of 8,636, which was not commensurate with the magnitude of the inflow of refugees. However, the occupancy rate of the centres was just 56 per cent. Many other refugees were staying in hotels or rented accommodation, for which prices reportedly increased, or were being temporarily housed for free by Moldovans.\textsuperscript{17} The lack of affordable accommodation poses a challenge, considering that every fourth refugee cites Moldova as their main intended destination.\textsuperscript{18} Other urgent needs include access to food, transportation, cash assistance, relief items such as winter kits and sanitary materials, as well as protection services, especially for unaccompanied children, women and older people. The need for financial support emerges as one of the top needs of the refugee population entering Moldova (around 47 per cent of survey participants reported this as one of their main needs, while the proportion drops to about 29 per cent for those refugees surveyed while in transit).\textsuperscript{19} As the refugee response plan evolves, the government, together with the Inter-Agency Coordination Group, is increasing emergency aid stockpiles to assist refugees.

**Existing gaps in the provision of public services are exacerbating the challenge of hosting and integrating refugees.** Moldova fares poorly when it comes to quality of infrastructure, access to water, the healthcare system and educational facilities. On top of this, there are strong gender and urban-rural divides in accessing basic services. These deficiencies will limit the integration of refugees, particularly when it comes to accessing basic needs and employment. On the upside, digitalisation levels are relatively high in Moldova, but refugees still need assistance in using the available resources. The insufficiency of childcare services is a major barrier that limits women’s entrepreneurship and labour-market participation, and this could also affect Ukrainian women refugees.\textsuperscript{20}

\textsuperscript{16} See IOM and UN Women (2022).
\textsuperscript{17} United Nations Country Team Moldova (2022).
\textsuperscript{18} See IOM and UN Women (2022).
\textsuperscript{19} Ibid.
\textsuperscript{20} Ibid.
This section presents the EBRD’s assessment of transition qualities (ATQ) for Moldova. The ATQ is based on a methodology developed by the EBRD in 2016, whereby economies are measured on six desirable qualities of a sustainable market economy, namely: competitive, well-governed, green, inclusive, resilient and integrated. Each quality is a composite index calibrated on a scale of 1 (lowest) to 10 (highest), based on a large number of indicators and assessments.  

1. Competitive – limited capacity to add value amid weak foreign integration, low innovation and uncompetitive markets

Moldova ranks 24th out of the EBRD’s 36 investee economies and is above only Azerbaijan in the EEC region. The Moldovan economy continues to have limited capacity to innovate and generate added value, as partly reflected in its weak export intensity. From a competitive standpoint, institutions and regulations are mostly aligned with EU standards, but institutional capacity and enforcement lag. Shallow investment is constraining the development of the competitive environment and innovation. Accordingly, the lack of a sizeable, value-adding private sector is seriously inhibiting Moldova’s economic development and preventing faster economic convergence.

Market structures and institutions for competition

Moldova’s economy is open to international markets, but there is room for improvement in leveraging access to the EU. As a member of the DCFTA since 2014, Moldova benefits from lower tariffs and performs well in

---

21 See EBRD (2017).
22 See EBRD (2021).
23 The advanced comparator countries for which the EBRD also calculates ATQ scores are Canada, France, Germany, Japan, Sweden, the United Kingdom and the United States of America.
terms of openness to international markets. It exceeds the average of the EEC region, where not all countries benefit from access to the EU market. Trade flows have, indeed, shifted significantly towards the EU, but the Moldovan economy still has limited export intensity. Multiple economic and political crises since 2015 have held back growth and trade diversification. The DCFTA introduced preferential rules of origin, which can incentivise value-chain creation, but so far, Moldovan firms have not availed of the mechanism, despite the opportunity it brings. Nonetheless, Moldova’s services exports contain a much higher share of business services than its EEC peers thanks to its booming information and communications technology (ICT) sector. Its stagnating score in the Economic Complexity Index corroborates the limited progress made so far, with the country having dropped to 68th place in 2019 from 53rd in 2013.

**DCFTA and Association Agreement implementation has catalysed some important reforms, though with uneven progress.** As of the end of 2019, Moldova had adopted all 26,838 European (CEN/CENELEC) standards, but more effective application and monitoring of compliance is needed. A significant challenge is compliance with EU sanitary standards for food products, which lags due to a lack of capacity in key institutions and the high cost burden for firms. This has led to only three animal-origin products being cleared for export to the EU. Progress on implementation has been uneven (see Table 1). In terms of EU acquis implementation, out of 681 laws covered by the Association Agreement, Moldova had adopted 499 in full and 152 in part as of 2021.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market access</td>
<td>2.5</td>
</tr>
<tr>
<td>Customs services</td>
<td>2</td>
</tr>
<tr>
<td>Technical product standard</td>
<td>2.5</td>
</tr>
<tr>
<td>Food safety</td>
<td>1.5</td>
</tr>
<tr>
<td>Services</td>
<td>2</td>
</tr>
<tr>
<td>Public procurement</td>
<td>2</td>
</tr>
<tr>
<td>Intellectual property rights</td>
<td>1.5</td>
</tr>
<tr>
<td>Competition policy</td>
<td>1.5</td>
</tr>
<tr>
<td>Statistics</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1. DCFTA chapter implementation rating

Source: CEPS (2022).
Note: A rating of 3 implies full implementation, a rating of 1 only some implementation.

**Moldova performs better than its EEC peers when it comes to competition policy, but key markets remain dominated by a few firms.** A much higher score of 6.67 on the Competition Policy Index (compared with 3.02 for the EEC region) implies a better environment for enabling market competition. Nevertheless, anticompetitive behaviour remains an issue for Moldovan firms, ranging from informal competition to questionable business integrity. The Competition Council has issued ever fewer sanctions since 2017, when eight cases were recorded, to just two cases in 2019 and one case in 2021. The cases mostly pertain to cartels and price setting in key markets. Merger cases have been practically absent in recent years, although more transactions were analysed in 2022. The Competition Council’s institutional capacity and ability to

---

24 See CEPS (2021a).
25 CEN is the European Committee for Standardization, while CENELEC is the European Committee for Electrotechnical Standardization.
26 See CEPS (2021a).
27 See CEPS (2021b).
28 See OECD, EU, European Training Foundation and EBRD (2020).
effectively investigate state aid schemes are limited, despite current law, which gives it extended powers.

**Markets are distorted by the large presence of SOEs and significant state subsidies.** In general, competition in key sectors is relatively low, while the SOE sector adds another layer of constraint. The World Bank estimates that in around half of all sectors, SOEs control more than half of the market and are active in markets with no apparent market failures.\(^{29}\) SOEs face multiple issues with financial and managerial performance, which inhibits their potential (see more in the well-governed section below). State aid is also significant in Moldova, estimated at around 4.3 per cent of GDP on average in 2014-17, with a significant share having a sectoral rather than a horizontal focus.\(^{30}\) Moreover, while price controls are largely present in socially critical products, final prices are significantly above those of peer countries.\(^{31}\)

**The policy framework for SMEs is robust.** According to the OECD SME Policy Index, Moldova fares well compared with its EEC peers.\(^{32}\) Only the operational environment, insolvency procedures and SME internationalisation are rated lower than the EEC average. Moldova has improved significantly since the 2016 assessment on (women’s) entrepreneurship, public procurement and the green economy. In practice, low entry and survival rates and difficulties in increasing in size reflect significant obstacles to growth, including access to inputs, business environment issues and infrastructure gaps.\(^{33}\) SMEs are less export intensive and face significant barriers to growth, including the inspections system, certification, business entry and exit, and a lack of digitalisation. Moreover, export and FDI promotion could be boosted by a stronger, more efficient investment agency. On the financing and business support side, the Organisation for Small and Medium Enterprises Sector Development (ODIMM) recently expanded its activities in the SME sector. Moreover, the government announced in May 2022 the formation of the Organisation for Development of Entrepreneurship, which will take up some of ODIMM’s responsibilities. The 2022 plan for reducing the

administrative burden for SMEs includes some of the above issues.\(^{34}\) A central issue for SMEs is access to finance, which remains limited (see more in the “resilient” section).

**Capacity to generate value added and to innovate**

Analyses suggest that total factor productivity has been decelerating in recent years. The World Bank argues that between-sectors productivity has been relatively good, as resources continue to shift from agriculture to higher value-added sectors.\(^{35}\) However, within-sector productivity growth has been an issue, suggesting problems with competition and innovation.

**Moldova’s small market size is generally not conducive to organic company growth and innovation.** Apart from supply-side and horizontal issues, Moldova’s private sector is very small, limiting the capacity of firms to benefit from economies of scale and scope in competitive markets. Coupled with limited export activity and weak capacity to absorb innovation, this constrains the ability of firms to add more value and grow in size.\(^{36}\) At firm level, multiple stakeholders cite a lack of business acumen and management practices as limiting the prospects of firms to grow and innovate. As suggested by the ATQ assessment, a lack of skills and human capital more generally is also a key reason for the modest capacity of firms to add value.

**Moldova’s knowledge economy, complexity and innovation potential remain limited.** In the EBRD’s Knowledge Economy Index 2019, Moldova fared marginally worse than the EEC and EBRD averages, with a score of 4.3 (OECD average of 7.4). The main areas where Moldova approaches the level of its regional peers are adequate skills and the innovation system, but it lags on linkages and innovation inputs. Access to specialised skills also is an area where improvement is needed (see Chart 15). Nevertheless, innovation output performs better than suggested by the level of inputs and innovation investments.\(^{37}\) In the Global Innovation Index, Moldova’s

---

\(^{29}\) See World Bank (2021).

\(^{30}\) Ibid.

\(^{31}\) Ibid.

\(^{32}\) See OECD, ELL European Training Foundation and EBRD (2020).

\(^{33}\) See World Bank (2021).

\(^{34}\) See Consultative Council for SMEs (2022).

\(^{35}\) See E. Gamberoni and R. Newfarmer (2019).

\(^{36}\) See UNECE (2021).

\(^{37}\) See WIPO (2021).
business sophistication is the lowest-ranked aspect. More generally, innovation activity remains very low, with private-sector research and development (R&D) expenditure estimated at around 0.01 per cent of GDP, while ISO certificate and trademark applications between 2015 and 2019 were modest compared with regional peers.38

**Chart 14. Knowledge Economy Index, 2019**

| ICT sophistication | ICT availability | Linkages | Innovation output | Innovation input | Specialised skills | General skills | Governance | Business | Openness | OECD diff | EBRD diff | EEC diff |
|--------------------|------------------|----------|-------------------|-------------------|------------------|----------------|------------|----------|---------|----------|-----------|-----------|----------|
| -0.5               | -0.1             | 0        | -0.3              | -0.2              | 0                | -0.2          | 0          | -0.1     | 0       | -1       | -5        | -4        | -2       |

Source: EBRD (2019).

**Free trade zones have supported linkages with the global economy, but knock-on effects on the local economy have been limited.** Moldova has seven free trade zones and nine industrial parks with preferential tax systems. The zones have benefited from significant FDI in the past (about US$ 500 million, or €480 million) and created about 20,000 jobs. Foreign firms are about 60 per cent more productive than domestically owned and operated firms, and 80 per cent more productive than SOEs.39 However, linkages to the domestic economy are very weak, as most of the firms source their inputs abroad, translating into limited domestic added value. Local firms also have low capacity to offer adequate services and goods, according to foreign companies. The absence of data on global value chains limits a potential assessment of the supply-chain linkages of the Moldovan economy and of the impact of free trade zones.

**Private-sector digital transformation**

The information technology (IT) sector has become one of the country’s key growth drivers and a source of good employment opportunities in recent years. Similar to other countries in the region, and in spite of its relatively low innovation potential, an emerging IT ecosystem, generating 7 per cent of GDP, has formed in Moldova, boosted by public-sector and international support. The IT sector comprises about 2,400 companies, which employ about 30,500 professionals, mostly focused on the outsourcing and export of IT services, which accounted for about US$ 300 million (€260 million) in 2020.40 IT parks, home to 1,089 active companies as of the end of 2021, benefit from a single preferential tax rate of 7 per cent on revenue, simplified business administration and an IT visa programme to attract skilled workers, which has supported the sector’s growth in recent years.41

The government has accelerated legislative reforms to promote the economy’s digitalisation. The current government has prioritised the faster digitalisation of both the public and private sectors. The Deputy Prime-Minister for Digitalisation, in collaboration with the Economic Council and partners, led the adoption of the first legislative package on digitalising the economy in November 2021. The extensive package covers digital services for business, e-commerce and e-payment improvements, and customs services for e-commerce.42 A few other legislative initiatives under development will further align e-government services and e-commerce with international standards. All these activities are being developed under the country’s roadmap for the digitalisation of the economy and e-commerce and updated annually by the Economic Council and the Ministry of Economy. Priority areas include the improvement of and access to digital infrastructure, the promotion of a cashless economy and online payments, the digitalisation and optimisation of customs clearance procedures, cloud computing, digital data exchange, electronic identity, currier services and access to digital marketplaces.

38 See UNECE (2021).
39 Ibid.
40 See Invest Moldova (2020).
41 See Moldova Information Technology Parks (n.d.).
42 See Economic Council to the Prime Minister of the Republic of Moldova (2021).
Further legislative changes are needed to support the development and adoption of digital technologies. Moldova lacks specific regulations or promotional activities on new digital technologies, including artificial intelligence (AI), big data analytics and distributed ledger technologies. These technologies will help shape the digital landscape of the future, and regulators need to prepare for their use. The provision of an appropriate legal and policy framework would create opportunities for local companies developing related services. Aligning national legislation with EU standards in the fintech and digital payments sector is an essential part of integration with the EU. When it comes to e-commerce, legislative changes are needed to the private courier industry to facilitate the growth of the sector. Greater use of digital technologies could also support the shift towards a low-carbon economy.

Digitalisation levels across Moldova’s private sector vary significantly. While the banking, insurance and ICT sectors are highly digitalised in terms of operating procedures and client interfaces, other economic sectors lag. In the United Nations Conference on Trade and Development (UNCTAD) Business-to-Consumer (B2C) E-Commerce Index,\(^43\) which measures an economy’s preparedness to support online shopping, Moldova ranked 53rd (index value of 70.8) out of 152 countries in 2020 in terms of e-commerce development – better than Armenia and Azerbaijan, but behind Belarus, Georgia and Ukraine.\(^44\) According to a 2019 World Bank Report,\(^45\) of 107 SMEs surveyed, only 23 per cent conducted e-commerce activities. Of these, half made less than 10 per cent of their sales online, while only seven firms carried out online transactions with external markets. Throughout 2020, following the restrictions imposed by the Covid-19 pandemic (limited physical access to commercial spaces and an increased need to purchase products from online shops), the number of e-commerce platforms in Moldova increased. By the end of 2020, 533 platforms were registered, compared with 406 in 2019.\(^46\) The amount and value of payments with cards issued by Moldovan money-service providers through e-commerce platforms has tripled over the last five years.\(^47\) This trend is supported by government incentives to promote economic digitalisation and e-commerce development. However, many SMEs established online shops without considering the ongoing maintenance costs that this would incur, particularly for promotion and text content for retail items, revealing a low level of digital literacy among entrepreneurs.

2. Well governed – uneven execution of rule of law and weak institutional capacity cause slow progress on broader reforms

Moldova ranked 25th out of the 36 economies in which the EBRD operates in the Bank’s 2021 assessment of the well-governed transition quality. Moldova has been at a standstill for the past few years on the governance front and lags other countries in the region. Problems with governance are significantly constraining progress on all other transition qualities.\(^48\) Critical governance and institutional reforms have been long overdue, with rule-of-law and anti-corruption frameworks proving ineffective due to incomplete implementation, despite the legal and institutional legislative foundations being in place. As a result, the regulating role of various public agencies and authorities is constrained and exacerbated by limited institutional capacity. In terms of corporate governance, the institutional framework for SOEs is fragmented and prone to sudden change, leading to a blurring of institutional responsibilities.

---

\(^{43}\) This indicator is calculated as the average of four indicators: account ownership at a financial institution or with a mobile money-service provider (percentage of the population aged 15+); individuals using the internet (percentage of population); postal reliability index; secured internet servers (per 1 million people).

\(^{44}\) See UNCTAD (2020).

\(^{45}\) See World Bank (2013a).

\(^{46}\) See National Bank of Moldova (n.d.).

\(^{47}\) According to National Bank of Moldova (NBM) data, 15.0 million payments worth MDL 6.6 billion (€315 million) were made online in 2021 through e-commerce platforms with payment cards from Moldova, both in the country and abroad, compared with 4.7 million payments worth MDL 2.6 billion (€125 million) in 2017.

\(^{48}\) See EBRD (2021), Moldovan country assessment.
National-level governance

Moldova’s governance performance is disappointing.\(^49\) Moldova scores lower than its EEC peers on all six World Bank Worldwide Governance Indicators, except for voice and accountability and political stability (see Chart 17).\(^50\) Political instability over the past 10 years has limited the ability of Moldovan governments to focus on long-term reforms, which is why difficult strategies and plans adopted during this time were only partly implemented. Internationally supported projects have mostly achieved surface-level changes.\(^51\) Nevertheless, in 2020, the country performed better in the area of regulatory quality and voice and accountability. It scored worst when it came to control of corruption. The Worldwide Governance Indicators reveal a slight decrease in the political stability dimension over the last five years, despite improvements in government effectiveness, regulatory quality and control of corruption (see Chart 18).\(^52\) Moldova’s rule of law dimension has barely changed over the past decade, reflecting limited progress in this area. Against the backdrop of the Russian invasion of Ukraine, weak governance and institutional capacity are exacerbating the challenges posed by rising gas prices, the inflow of Ukrainian refugees and the aggravated situation in Transnistria.

\(^{49}\) Ibid.
\(^{50}\) These are: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law and control of corruption. For more, see: http://info.worldbank.org/governance/wgi/Home/Reports.
\(^{51}\) See S. Roch (2017).
\(^{52}\) See World Bank (n.d.a).
A history of political opacity and ongoing legal uncertainty are hindering forward-looking improvements in Moldova’s governance. Experience and perceptions of the rule of law in Moldova remain low. The 2021 World Justice Project Rule of Law index ranked Moldova 73rd out of 139 countries based on an overall index score. This low ranking reflects challenges posed by the limited independence of the judiciary and the lack of prosecution of government officials for official misconduct (see Chart 19). The lack of judicial independence reduces people’s trust in public institutions and results in ineffective checks on the government, while eroding investor confidence.

Improving the quality of the judicial system is central to wider governance reforms. The main problems in the judiciary relate to the poor impartiality of judges, who are subject to influence and corruption, few institutional safeguards to limit such behaviour, and incomplete implementation and application of legislation. The lack of both merit-based promotion and technical capacity also lead to unpredictable rulings and, hence, an inefficient and irregular system, as reflected in the high number of cases against Moldova at the European Court of Human Rights. Key short-term government priorities include enhancing the integrity and selection process of judges, as well as clarifying the powers of the judicial inspectorate.

A pre-vetting system for selecting Superior Council of Magistracy (SCM) magistrates has been developed together with international partners and is seen as a first step towards judicial reform.

Improving the judicial process would strengthen contract enforcement and, hence, investor confidence. The public has little trust in the judiciary. Court rulings have been inconsistent, while the government has intervened in situations that questioned private property rights and eroded foreign investor confidence. Other dispute resolution mechanisms that act as an alternative to formal judicial processes are ineffective and underused.

Despite slight improvements, corruption remains a systemic challenge in Moldova and a key barrier to sustainable development. The 2021 Transparency International Corruption Perception Index ranks Moldova 105th out of 180 countries based on perceived level of public-sector corruption (see Chart 20). The problem lies predominantly in the executive, legislative and judicial branches, and undermines the rule of law, but is present in multiple sectors – customs, education, health, agriculture and road construction, among others. At the end of 2021, a Group of States against Corruption (GRECO) report on measures to prevent corruption in the judicial sector and parliament concluded that only six out of 18 recommendations issued in 2016 had been implemented in a satisfactory manner. Conversely,
legislative progress has been made on the anti-money laundering front, Moldova being largely compliant with standards, according to Moneyval’s 2022 assessment.\textsuperscript{63} The new government led its electoral campaign on an anti-corruption platform, but needs to accelerate its efforts to de-politicise the country’s anti-corruption bodies and reform the justice system to bring about real, significant change. Key priorities include reform of the anti-corruption institutional setup, legislative changes to increase sanctions for corruption offences and to criminalise the abuse of power, and strengthened enforcement.

**Chart 19. Corruption Perceptions Index, scores 1-100 (ranking out of 180 countries in 2021, out of 176 in 2012)**

![Chart showing Corruption Perceptions Index scores and rankings for selected countries]

*Source: Transparency International.*

**Governance issues are exacerbated by the weak capacity of the public administration and public agencies, which affects, among other things, public service delivery and reform implementation.** A reform programme at central level was implemented from 2016 to 2020, but more progress is needed at institutional level to improve policymaking capacity and implementation, professionalisation and use of resources. Public procurement has been improved from both a legislative and technical perspective, but the online tendering platform has yet to be made fully operational, especially for low-value procurement. Investment management, especially through the “funds” that lie outside the state budget, could be improved by implementing more controls over budgets and increasing transparency.

**Local administrative reform has stalled.** In contrast to the central administration, local administrative reform has not advanced, not least due to a lack of political will. A reorganisation of Moldova’s local authorities is needed, given their role in public service delivery. Local governments have very limited financial and fiscal autonomy; they are typically underfunded, with income per capita about 7 to 14 times less than the EU average.\textsuperscript{64} This mismatch between service delivery and (financial) capacity prevents the effective delivery of most public services.

**E-governance – digitalisation of public services for citizens and businesses**

Digitalisation of public-sector services and the economy could play a role in improving government effectiveness and regulatory quality. The authorities have strengthened their efforts and commitment to digitalising the economy by appointing a Deputy Prime Minister for Digitalisation and streamlining the implementation of their ambitious digitalisation agenda. The United Nations Department of Economic and Social Affairs (UNDESA) E-Government Development Index (EGDI) ranked Moldova 79th out of 193 United Nations member states in 2020. The country performs relatively strongly on the E-Participation Index (EPI), while the Online Service Index (OCI) places Moldova in line with regional peers.\textsuperscript{65} The government has managed to develop sound, reliable IT systems and infrastructure products that help citizens and businesses in their interactions with government institutions and support the provision of better services. In total, 10 platforms\textsuperscript{66} have been created to date to enable a more efficient, transparent and accountable government, as well as citizen- and business-centric e-services.

**While progress has been made, more enabling technologies need to be implemented for digital public services.** Unresolved legal, safety and data protection issues need to be addressed first, as well as the

\textsuperscript{63} See Council of Europe (2022).

\textsuperscript{64} See KDDZ (2021).

\textsuperscript{65} See UN DESA (2020).

\textsuperscript{66} Including, for example, the public services portal, open government data portal, MCloud, MPay, MSign, MPass and MConnect.
interoperability challenges between public institutions. Moreover, a key factor in digital transformation is the implementation and adoption of electronic identity – an essential component of the infrastructure on which the future of e-government and private e-service systems will be built. Electronic identification (ID) with full capacity to make legally binding actions online, anywhere and anytime, offers huge advantages to citizens, companies and governments alike. In Moldova, remote electronic registration tools (facial identification, reuse of biometry from digital IDs or passports, and/or video conferencing solutions) will be implemented as a priority by the country’s e-governance agency for the registration of trusted service users, especially users of the Mobile Government Identity and Signature Service (MobiSign). However, further support is required for electronic know-your-client (eKYC) procedures (to identify and verify a customer’s identity) in various sectors, as well as associated technological platforms.

The International Telecommunication Union’s (ITU) Global Cybersecurity Index ranks Moldova 33rd in Europe and 63rd in the world. The country’s 2009 accession to the Convention on Cybercrime of the Council of Europe and its adoption of the National Cyber Security Programme for 2016-20 established the legislative parameters for a safer digital environment. The next step towards cyber resilience was the adoption of the Information Security Strategy of the Republic of Moldova for 2019-24, which transposed the first EU Directive on Cyber Security (called the NIS Directive) into national legislation and created an action framework against cyber-risks.

**SOE reform and potential efficiency gains**

Moldova needs to reduce the state’s presence in the economy and define objectives for maintaining state ownership. According to various estimates, Moldova appears to have an SOE sector that is 2-3 times larger than other countries in the region. The assets of state-owned companies account for more than one-quarter of GDP (26.5 per cent) and about 50 per cent of all fixed assets. State-owned companies employ 6.2 per cent of the total workforce, and the top 10 enterprises generate 75 per cent of all sales of state-owned companies. SOEs enjoy a legal or de facto monopoly in key infrastructure services, such as rail, post, electricity transmission and telecom infrastructure. The state retains a significant market share of electricity imports, generation and retail, mobile and internet. Beyond this, SOEs are found and enjoy competitive advantages in market segments typically served by the private sector, ranging from hotels and movie theatres to wineries and pharmaceuticals. As the next essential step in SOE reform, the government has prioritised the adoption of a clear state ownership strategy — for all SOEs operating at central government level — to identify public enterprises to undergo reorganisation, privatisation or liquidation. This important reform measure, also mandated in the country’s 2022 International Monetary Fund (IMF) programme, is expected to facilitate further divestiture of the state from competitive sectors and the liquidation of non-operational or loss-making SOEs.

**Legal and institutional framework for SOE governance will need significant improvement.** The Moldovan government has taken steps towards SOE reform, but numerous implementation gaps remain. In the competition law issued in 2012, for instance, there are no antitrust exemptions for SOEs, while state-aid control applies equally to private and public companies. A 2017 government decision transferred the management of majority SOEs previously overseen by line ministries to the Public Property Agency, tackling some of the problems associated with the potential overlap between the ownership, management and regulation of SOEs. However, governance arrangements for SOEs are not standardised or consistent. Moldova maintains a parallel legal regime with separate laws on municipal and central government-owned companies – Întreprindere Municipală (IM) and Întreprindere de Stat (IS) – and joint stock companies (JSCs). The lack of regulatory neutrality affects several aspects of business management and performance, from financial accounting obligations to bankruptcy and liquidation. In addition, numerous exemptions give a competitive advantage to SOEs over their private-sector counterparts.

---

67 See Electronic IDentification (2022).
68 See ITU (2023).
SOE boards are subject to heavy representation by line ministries and enjoy limited operational autonomy. Government approval for some operational decisions, such as executive appointments, is still required. Selection and remuneration of SOE boards lacks transparency. Poor oversight, non-commercial mandates, capacity constraints within the Public Property Agency (PPA) and a lack of supervisory board independence contribute to overall inefficiency in the state sector. The state ownership strategy is also expected to set out plans and principles to strengthen (including through regulatory amendments) governance structures for SOEs that are due to remain in state ownership.

Concerns about transparency and corruption are high in the SOE sector. While SOEs are registered on the Public Property Register, many lack websites or do not update them. The PPA and the Ministry of Finance do not have comprehensive data on the financial and operational performance of all SOEs, which impedes effective monitoring, including for anti-corruption purposes. SOEs’ internal control frameworks are underdeveloped. Moreover, while the country's SOE Law requires state-owned firms to publish information on their board and employees, this is rarely done in practice, as financial and non-financial disclosures remain minimal. Moldova lacks sufficient mechanisms to separate the commercial from the non-commercial activities of SOEs and to determine and monitor the true cost of public service obligations. In the absence of clear quantification of the costs of SOEs’ non-commercial objectives, it is hard to assess whether their failure to perform efficiently is due to mismanagement or to the heavy burden imposed by the state. Developing and publishing individual SOEs’ performance results and publicly evaluating enterprises would improve the accountability of SOE boards and management. At the same time, the privatisations that have occurred over the years have led to legal disputes based on corruption allegations. Addressing regulatory and institutional gaps in the privatisation framework will be essential to the success of the future divestiture programme.

The state ownership function will need significant capacity enhancement to deliver on SOE reforms and effectively manage state assets. The PPA currently oversees around 200 SOEs, manages privatisations and public-private partnerships (PPPs), and generally oversees the administration of public land and buildings. As a relatively new institution, the Agency faces significant capacity constraints, further aggravated by the need for rapid response during the Covid-19 pandemic and the ensuing war on Ukraine. On the one hand, the corporate structure of the PPA will need revision to professionalise it and to facilitate a gradual transition to a portfolio management approach. On the other, the PPA needs to be empowered and sufficiently resourced to attract and retain talent capable of managing the often-conflicting demands of immediate crisis response and progressing the longer-term SOE reform programme.

3. Green – poor energy efficiency, climate change and fragile municipal infrastructure increase vulnerabilities

Ranked 34th out of the 36 EBRD investee economies, Moldova is the poorest performing EEC country on the green transition quality. Energy and carbon intensity are significantly higher than the EU average, while there is a low level of renewables in the energy mix. Delays to the finalisation of a new regulatory framework have hindered green economy investments, and investors are still waiting for the first auction to be held. The prevalence of Soviet-era structures is holding back energy efficiency and resource-efficient technologies are mostly lacking. Water tariffs usually fall short of operating and maintenance costs, while waste management infrastructure is still inadequate.
Moldova has adopted or been developing a number of important national documents in the energy and climate policy domains. The country’s current climate policy framework is based on long-, medium- and short-term strategies on renewable energy, energy efficiency, mitigation and adaptation, as well as sector-specific regulations. In 2017, Moldova approved its Low Emissions Development Strategy to the year 2030, aimed at helping to achieve the targets outlined in the country’s NDC. This was recently updated to match its second NDC (NDC2). Moldova has a new, unconditional target to reduce its greenhouse gas (GHG) emissions by 70 per cent from 1990 levels by 2030, compared with a commitment of 64-67 per cent in the first NDC. Should it receive sufficient international support, this could be increased to 88 per cent. The Energy Strategy of the Republic of Moldova, adopted in 2013, outlines the vision for the development and climate change mitigation of the national energy sector to 2030. Moldova is also advancing the second cycle of its National Adaptation Planning (NAP2) process, and the results of the implementation of its Climate Change Adaptation Strategy to 2020 have been evaluated. With extensive support from the EU and as a contracting party to the Energy Community Treaty, Moldova is making gradual progress on the approximation of EU environmental and energy legislation. This supports the country’s efforts to ensure its energy security and diversify its sources of supply, including through renewable energy. Furthermore, Moldova plans to adopt the National Energy and Climate Plan in 2023.

**GHG intensity remains high.** Moldova contributes as little as 0.04 per cent to total global GHG emissions and has one of the lowest per capita footprints, at 3.8 t CO₂e in 2020. The key emitting sectors in 2019 were transport (42.9 per cent), residential (21.2 per cent), electricity and heat generation (15.6 per cent), agriculture (7.6 per cent) and industry (7.6 per cent). GHG emissions in the Moldovan energy sector increased 52.9 per cent to 1.180 t CO₂e between 2000 and 2020, while GDP growth was relatively decoupled from GHG emissions, growing more than twofold. However, the GHG intensity of GDP in Moldova is still among the highest of the transition economies in central and eastern Europe, and significantly higher than the EU average, though it decreased 29.3 per cent from 2010 to 1.180 kg CO₂/’000 2015 US$ in 2020. In contrast, as Moldova’s population shrinks and GHG emissions increase steadily, the country’s per capita emissions have increased incrementally. The emission intensity of the residential and transport sectors is one of the highest in the EBRD regions. Taking into account the gaps and barriers to engaging the private sector in climate investments in the energy sector, such as a lack of finance, low energy tariffs and high interest rates, the involvement of international financial institutions and the provision of technical assistance are important elements in achieving sectoral climate targets.
High energy intensity poses challenges for reducing emissions. Moldova’s energy intensity decreased 40.7 per cent to 4.8 MJ/’000 2017 US$ between 2000 and 2019. Nevertheless, Moldova is still one of the most energy-intensive economies as a ratio of GDP in the EBRD region (11th) and three times higher than the EU average (see Chart 23). Natural gas accounts for 55.6 per cent of the total energy supply in Moldova, with oil accounting for 24.6 per cent and biofuels and waste accounting for 16.5 per cent (see Chart 23). After a continuous drop between 1990 and 2000, Moldova’s total primary energy supply remained stable until 2009 and has been increasing ever since. The high dependence of the electricity sector on natural gas consumption and the insufficient diversification of the country’s fuel mix remain the key challenges for the Moldovan energy sector.

Moldova’s final energy consumption mix has been dominated by fossil fuels. In 2019, oil products (31.3 per cent) accounted for the largest chunk of final energy consumption, followed by natural gas (24.3 per cent) and biofuels and waste (20.4 per cent). The residential sector accounted for the largest share of final energy consumption (41.3 per cent), followed by transport (23.5 per cent), industry (20 per cent), and commercial and public services (8.9 per cent). Natural gas constituted nearly two-thirds of fuel consumption in the transport sector in 2019, while biofuels and waste accounted for more than half of consumption in the residential sector. Road transport has been one of the major drivers of oil demand in Moldova. Agriculture relied mainly on electricity. In 2019, the residential sector was responsible for 40 per cent of the country’s final electricity consumption. The legal and regulatory framework on energy efficiency is mostly in line with the EU energy acquis, though some secondary legislation is still missing and regulations need to be strictly enforced.

81 See IEA (2020).
82 See IEA (n.d.).
83 See IEA (2020b).
84 See IEA (2022a).
85 Ibid.
Development of renewable sources has been constrained by an unattractive regulatory framework. Initially, secondary legislation to the country’s Law on Renewable Energy of 2007 reduced interest from private investors, as the regulator could adjust the feed-in tariff rather arbitrarily. The situation was improved in 2018, when the Law on Promotion of the Use of Energy from Renewable Sources entered into force, introducing quotas of 400 MW of capacity by 2025. Nevertheless, no auction has been arranged since then, as secondary legislation has again proved deficient. The authorities, with the support of the EBRD, are working to address these issues and facilitate the first auction.

Energy efficiency investments have been focused on public buildings. The newly created Energy Efficiency Agency has absorbed the Energy Efficiency Fund, which had been implementing public-sector projects associated with the rehabilitation of public buildings and lighting since 2012. Moreover, municipalities across the country have been initiating and managing energy-efficiency projects. At the moment, the primary energy-efficiency project is a €75 million public buildings project financed by international partners. Once the institutionalisation of the Energy Efficiency Agency has been completed, more projects and initiatives are expected.

Moldova’s structural conditions make the country highly vulnerable to climate risk. With almost 60 percent of the population concentrated in rural areas, agriculture is critical to rural communities and central to the country’s food security. This makes Moldova extremely vulnerable to climate variability, such as droughts, late spring frosts, hail, floods and severe storms. The associated socioeconomic costs are significant. Increasingly erratic weather patterns have resulted in loss of life and income, for example, through rising food and energy prices. The most vulnerable sectors include agriculture, human health, water resources, forestry, transport and energy.

Commodity exports are potentially vulnerable to the EU’s carbon border adjustment mechanism (CBAM). Around 61 per cent of Moldovan exports are destined for...
the EU market, with a total value of US$ 1.9 billion (€1.83 billion) in 2021, an increase of about 58 per cent from 2015. Most of Moldova’s commodity exports to the EU are agricultural products, with a value of US$ 636 million (€614 million) in 2021 (95 per cent of the total).\(^1\) Future expansion of the EU CBAM to agricultural products could pose risks to Moldovan exports.

### Air pollution poses serious health risks

From 2009 to 2019, air pollution remained a top 10 risk factor in Moldova, with lower respiratory infections the fifth-highest cause of deaths and disability combined.\(^2\) Moldova is the sixth most affected EBRD investee economy by ambient air pollution in terms of disability-adjusted life years of the population, meaning ambient air pollution is a serious public health issue on a per capita basis.\(^3\) Since 2010, Moldova has seen a rise in air-pollutant emissions due to a rapid increase in emissions from road transport, a trend that amplifies environmental and human health risks.\(^4\)

### People’s access to waste management systems and water services is increasing, but remains insufficient

The share of the population benefitting from municipal waste services increased from 37.7 per cent in 2016 to 53.1 per cent in 2020.\(^5\) Waste from enterprises decreased, particularly from 2015, but overall waste collected from the population increased 21 per cent from 2014 to 2020.\(^6\) About 2.4 million m\(^3\) of household waste were generated in 2020. There is no clear trend in waste utilisation. The quantity of utilised waste varied between 300,000 and 700,000 tonnes between 2011 and 2019.\(^7\) At the same time, the public water supply network has expanded rapidly. As a result, people’s access to safely managed drinking water has increased. However, the expansion of public water supply networks far exceeds the increase in the length of sewerage networks. This creates additional pressures on water resources, as water consumption reduces the amount of quality water returned to the natural water cycle.\(^8\) Moldova is highly dependent on water sources outside its borders, with a water dependency ratio of 86.6 per cent.\(^9\)

### 4. Inclusive – skills gaps, gender bias and poor access to services inhibit potential human capital development

Moldova has recently improved its inclusive ATQ score and now ranks 19th out of 36 EBRD investee economies, though it still lags some of its EEC regional peers. This is mainly down to its low score on the human development dimension, which reflects the weak state of the labour market and poor access to services, particularly financial inclusion. Gender bias is formally low but, in practice, women still tend to face discrimination. Skill gaps and shortages, including in the ICT sector, risk limiting potential growth.

### Chart 25. Inclusive ATQ indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Moldova</th>
<th>EEC</th>
<th>EBRD</th>
<th>Comparators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowing from a financial institution (gender gap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in access to a computer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in access to internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in access to water</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in educational attainment of household head</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in establishments with bank accounts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in labour market status of household head</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gap in quality of health and education systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonised test scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiring and firing flexibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inequality of opportunity attributable to gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labour-force participation rate (gender gap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individuals with a bank account</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of individuals with a bank account adjusted for GDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of quality of education system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of transport and trade related infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings at a financial institution (gender gap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Institutions and Gender Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate (age gap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment rate (gender gap)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women Business and the Law Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women employers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women in managerial roles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: EBRD

\(^{1}\) See Bureau of Statistics of Moldova (n.d.).

\(^{2}\) See IHEM (n.d.).

\(^{3}\) See WHO (n.d.).

\(^{4}\) See Expert-Grup (n.d.).

\(^{5}\) National Bureau of Statistics (n.d.). Municipal waste collected during the year: population benefitting from municipal waste service.

\(^{6}\) See eu4Environment (2021).

\(^{7}\) Ibid.

\(^{8}\) Ibid.

\(^{9}\) Per the Food and Agriculture Organization of the United Nations (FAO) Aquastat key indicators database, the water dependency ratio expresses the percentage of total renewable water resources originating outside the country.
Human capital development

Many people have emigrated in the past three decades. Since gaining independence, Moldova’s population has fallen by 26 per cent, due mainly to emigration. Over the past five years, an average of 17 per cent of respondents to a regular survey said they intended to leave the country in the next six months. The population is also decreasing due to low fertility rates. The old-age dependency ratio is forecast to increase from 17.4 in 2020 to 53 in 2060 amid changes in the population structure (see Chart 11).

Chart 26. Population pyramid

Source: UN DESA Population Division (2022), authors’ calculations.

The labour market features multiple dysfunctions. In 2021, out of 2.12 million people over the age of 15, only 41.1 per cent were active in the labour market (see Chart 28). At the same time, the unemployment rate was rather low, at 3.2 per cent in 2021, reflecting the low share of people willing to work in the local economy. This is confirmed by the fact that more than 90 per cent of the non-active population (or 1.16 million persons) say they are not looking for a job and do not want to work. Aside from pensioners and students, around 167,000 people were engaged in household duties and another 208,000 had some work arrangement abroad.

Moldova struggles to promote equality of opportunity through human capital development. As mentioned, labour-force participation is very low, more than 10 percentage points behind Armenia, the second-worst performer in the region, and more than 20 percentage points behind Georgia, the regional leader. In 2021, the labour-force participation rate for young people aged 15-24 stood at 18.1 per cent, while the participation rate for young women in that age range was 13.6 per cent. These figures are about half to one-third the average rates in the EU (38 per cent in total, 35 per cent for women). When it comes to youth not in employment, education or training (NEETs), Moldova stands out with a share of 28.1 per cent in 2020 versus 13.8 per cent in the EU. This suggests that the potential of the already shrinking number of young people is being wasted, exacerbating the poor state of the labour market.

Chart 27. Labour productivity

Source: Conference Board Total Economy Database, August 2021, authors’ calculations.

Gender inequalities are still very much present in the workplace. Women are under-represented in public office, but the share of women in key public institutions has been increasing (see Chart 29). Following the parliamentary elections of July 2021, the share of women in parliament increased to 39.6 per cent from 24.8 per cent in 2020, while the share of women in the cabinet increased to almost 30 per cent. These numbers were boosted by a law adopted in 2016 requiring at least 40 per cent of either

---

100 See L. Grâu (2021).
101 See OECD (2016).
102 See World Bank (2021).
104 See World Bank (n.d.b).
105 See ILOstat (n.d.).
gender from a political party to participate in elections. Among the police and the judiciary, women’s share of employment has also improved in the past 10 years. However, despite progress, women are typically segregated into lower-paying occupations and sectors and hold fewer managerial or decision-making positions than men.\textsuperscript{107} Women earned on average 13.7 per cent less than men in 2020.\textsuperscript{108} This is exacerbated by their lower labour participation rate, especially at a younger age, although from a regional perspective, the gap is not very large (see Chart 28).

\textbf{Chart 28. Labour-force participation rate by gender, area and age group, 2021}

<table>
<thead>
<tr>
<th>Gender</th>
<th>Area</th>
<th>Age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>Urban</td>
<td>15-24</td>
</tr>
<tr>
<td>Men</td>
<td>Rural</td>
<td>25-34</td>
</tr>
</tbody>
</table>


\textbf{Chart 29. Share of women employed in the public sector, per cent}

<table>
<thead>
<tr>
<th>Year</th>
<th>Ministers</th>
<th>Police</th>
<th>Parliament members</th>
<th>Judges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>2011</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>2012</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>2013</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>2014</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>2015</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>2016</td>
<td>70</td>
<td>80</td>
<td>90</td>
<td>100</td>
</tr>
<tr>
<td>2017</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>110</td>
</tr>
<tr>
<td>2018</td>
<td>90</td>
<td>100</td>
<td>110</td>
<td>120</td>
</tr>
<tr>
<td>2019</td>
<td>100</td>
<td>110</td>
<td>120</td>
<td>130</td>
</tr>
<tr>
<td>2020</td>
<td>110</td>
<td>120</td>
<td>130</td>
<td>140</td>
</tr>
</tbody>
</table>


\textbf{Strengthening the female labour participation rate includes addressing discouraging social norms.} Despite favourable legislation, women tend to do twice as much unpaid work as men. An overwhelming majority (about 80 per cent) of respondents in a recent survey stated that it was a woman’s job to perform household chores.\textsuperscript{109} On top of social norms, a lack of affordable childcare constrains women from engaging in the labour market. More flexible work schemes would support higher engagement.

\textbf{Employment of people with disabilities is low.} Although the law stipulates that 5 per cent of the workforce in companies with 20 or more employees should be people with disabilities, the benefits to which they are entitled (two months of paid annual leave and a six-hour workday) discourage employment. Moreover, although the National Employment Strategy 2017-21 includes public policy measures to promote the employment of people with disabilities, in 2018, their employment rate was just half that of the overall population.\textsuperscript{110}

\textbf{The Employment Promotion Law seeks to make the labour market more effective and inclusive.} The law to promote active labour market policies, such as creating job opportunities through wage subsidies or stimulating start-ups, was approved in June 2018 and entered into force in February 2019. Target groups mentioned in the law include women over 50, unskilled youth, people with disabilities and the Roma minority.\textsuperscript{111} Even so, labour regulations are too restrictive; the authorities have announced that a reform of the labour code will start soon.

\textbf{Moldova has made progress on supporting its most marginalised members.} Recent reforms have improved social assistance and pension systems, but overall spending remains low, limiting coverage. Moreover, ad hoc decisions on pension increases and other social assistance programmes have decreased the role of means-tested support. Proposed solutions include the redesign of the Ajutor Social programme to better cover

\textsuperscript{107} See WAGE (2021) and Bertelsmann Stiftung Transformation Index (2022).

\textsuperscript{108} See National Bureau of Statistics of Moldova (2022a).

\textsuperscript{109} See WAGE (2021).

\textsuperscript{110} See Council of Europe (2020).

\textsuperscript{111} See European Training Foundation (2021).
multi-child and single-parent families and to create stronger links to labour-market activation.\textsuperscript{112, 113}

**Educational outcomes should be improved to tackle labour shortages and skills gaps.** The OECD’s Programme for International Student Assessment (PISA) reflects the challenges of Moldova’s educational system. In 2018, 50 per cent of 15-year-olds did not have basic proficiency in mathematics and 46 per cent did not have basic reading skills.\textsuperscript{114} A gap equivalent to three years of schooling was found between high- and low-income students. Moreover, the Covid-19 crisis affected the projected increase in proficiency and deepened the gaps for children from disadvantaged backgrounds. At tertiary level, the decrease in enrolment has been stark – in the 2021-22 academic year, 59,647 students were enrolled in universities compared with a peak of 127,997 in 2006-07. In the previous two years, the number of students had increased slightly, perhaps driven by the pandemic. Skills gaps are reported among university and vocational education and training (VET) graduates, with 43 per cent of graduates citing a mismatch between education and work.\textsuperscript{115}

**Access to basic and financial services**

**Moldova lags its counterparts on financial and physical infrastructure.** Poor access to basic infrastructure and services seriously hinders inclusion, resilience and competitiveness. On top of this, financial inclusion plays an important role in building entrepreneurial and human capital, and addressing this issue could have a positive impact on private-sector development.

**The quality of the country’s water infrastructure is subpar and underperforms compared with other eastern European countries.** Moldova’s water supply is the least reliable in the region, ranking 88th globally, while 22.3 per cent of the population is exposed to unsafe drinking water. This is particularly evident in the urban-rural disparity of its infrastructure services: 95 per cent of Chisinau’s population enjoys access to improved water sources, compared with only 54 per cent of rural residents – only 39 per cent of whom have upgraded water pipes directly to their homes. Rural water supply often relies on shallow groundwater wells that do not benefit from regular monitoring and fail to meet drinking-water quality standards.\textsuperscript{116} Only 10 per cent of rural residents have private flush toilets. Access to water supply and sanitation facilities is very low for Roma and low-income households.

**Indicators of basic access to finance show gaps to regional peers.** Moldova lags other EEC countries on the most basic financial service provision. Just 43.8 per cent of the population of Moldova has a bank account, compared with 62.9 and 61.2 per cent in Ukraine and Georgia, respectively.\textsuperscript{117} In 2021, 54.2 per cent of the population said they had borrowed money, ahead of Georgia, at 44.9 per cent. However, only 9.0 per cent of the population reported having borrowed from a financial institution, in contrast to Georgia, where that figure stood at 23.7 per cent.\textsuperscript{118} This highlights the importance of informal channels of finance. In Moldova, 38.2 per cent of the population said they borrowed from family or friends, compared with just 20.7 per cent in Georgia.\textsuperscript{119} When it comes to the inclusion of marginalised segments, such as women, rural dwellers and the poorest segments of the population (those in the lowest 40 per cent in terms of income distribution), Moldova consistently performs among the worst in the region.

**Pervasive and persistent financing barriers mean businesses and individuals face major difficulties in accessing the funds they need from the banking sector.** Only 43 per cent of MSMEs’ formal financing demands are estimated to be met by the financial sector, creating a finance gap of around US$ 894 million.\textsuperscript{120} This is driven by failures in the financial system on both the supply and demand side. On the supply side, the banking sector tends to view MSMEs as a risky segment of the market, so application processes are cumbersome and interest rates are high. On the demand side, weak financial literacy and

\textsuperscript{112} See World Bank (2021), “Achieving a sustainable social protection system”.
\textsuperscript{113} See World Bank (2019b).
\textsuperscript{114} See World Bank (2021), “Strengthening education outcomes and skills”.
\textsuperscript{115} Ibid.
\textsuperscript{116} See OECD (2021).
\textsuperscript{117} World Bank Findex data for 2017.
\textsuperscript{118} Ibid.
\textsuperscript{119} Ibid.
\textsuperscript{120} See SME Finance Forum (n.d.).
business know-how, as well as high levels of informality among MSMEs, leave loan applicants ill equipped to understand their financing options and apply for loans.\textsuperscript{121} As a result, there is a gap in the ability of the banking sector to cater to the financial and non-financial needs of MSMEs.\textsuperscript{122}

**Difficulty accessing bank finance in the large informal economy and agricultural sector has segmented the market into traditional banking and a growing number of non-bank credit institutions.** The liberal regulation of the non-bank credit sector has often made such institutions the lender of choice for MSMEs. They lend quickly, require little paperwork, offer greater flexibility on loan repayments and pose no income restrictions, making access easy for early-stage entrepreneurs. However, this reliance on non-bank credit organisations (NBCOs) as the primary finance provider is not without problems. Interest rates tend to be higher than those found in the traditional banking sector, with little consumer protection for borrowers and little integration with national credit-scoring systems.\textsuperscript{123}

Since 2014, NBCOs have acquired a sizeable market share of retail lending and micro-credit, but this has slowed recently due to tighter regulations.\textsuperscript{124} NBCOs accounted for 9 per cent of total banking-sector assets and 19 per cent of financial-sector loans in 2018. The non-bank financial institution sector is concentrated, with the top 10 companies accounting for around 70 per cent of the market (which comprises around 140 entities overall). The National Commission for Financial Markets (NCFM) has progressed on implementing an essentially new regulatory regime for NBCOs since 2018. However, many NBCOs are not compliant with existing financial regulation, with only 55 out of 140 NBCOs satisfying the capital requirements set by the NCFM.

**Women entrepreneurs face additional restrictions to those encountered by businesses in general.** An estimated 38.5 per cent of registered MSMEs are led or owned by women.\textsuperscript{124} Despite parity in the law, harmful norms hinder women entrepreneurs’ ability to access and make effective use of finance. Available data suggest financial institutions reject well-established female businesses at a higher rate than those led by men, and anecdotal evidence from female entrepreneurs indicates that women face increased scrutiny in the application process, pointing to unconscious gender bias in lending practices.\textsuperscript{125}

There are some identified areas where reforms may enhance the financial inclusion of businesses and individuals.\textsuperscript{126} While the introduction of macro-prudential regulation and the transfer of supervision of non-bank credit institutions to the National Bank of Moldova (NBM) would provide additional protection to consumers, it should be carefully calibrated. For example, the introduction of debt-to-income ratios and full reliance on official income without allowing a transition period with alternative income calculation methods could make a large number of their clients unbankable, especially the self-employed, and expose them to the unofficial predatory lending market. Integration with national credit-scoring facilities, however, would allow small lenders to build a financial profile and gradually align with the procedures of the traditional banking sector. In banking, a more diverse offering tailored to the needs of MSMEs would vastly benefit the sector. Lastly, supporting entrepreneurs in the development of a business plan and providing them with better information on financial products would help spur an increase in demand for financial goods and services.

**Digital gap**

**ICT adoption remains one of Moldova’s strengths, but its ambitions may be constrained by its lack of skilled human capital.** Low levels of digital skill are now the key constraint on people’s use of digital technologies. Computer literacy rates are good, though slightly below the EU average, at 92 per cent in 2021\textsuperscript{127, 128}. The EBRD’s Transition Report 2021-22 scored Moldova’s digital skills

\begin{itemize}
  \item See OECD (2014).
  \item See SME Finance Forum (n.d.).
  \item See V. Popa (2013).
  \item Prime Capital (2019) Internal Women in Business report for the EBRD.
  \item See WAGE (2021).
  \item See OECD (2014).
  \item See Eurostat (n.d.b).
  \item See UNDP (2021b) and Moldovan Association of ICT Companies (2021), p. 22.
\end{itemize}
lower than any other digital enablers in 2020, indicating the need for the government to work closely with the private sector and academic institutions to address this challenge. Further progress is required, particularly in terms of improving digital skills and resolving issues that lead to a lack of trust in digital technologies, especially with regard to data security and privacy.

Access to broadband and computers varies by gender and region. Women-led households are 11.7 per cent less likely to have a computer and internet access, probably because of the low incomes of those households. This gap is increasing, with the share of men-led households with access to computers and internet growing faster than that of women-led households. At the same time, households in villages are 24.1 per cent less likely to have a computer than those in urban areas, while only 35.7 per cent of poorer households have a computer (compared with 71.5 per cent of well-off households).

In 2020, women and girls occupied only 31 per cent of jobs in Moldova’s ICT sector and only 19 per cent of digital professions overall. This disparity begins from a young age; only 4.6 per cent of girls in higher education study STEM subjects. Consequently, women get jobs that pay less: the gender salary gap in the ICT sector is 33 per cent. Over the past three years, the gender gap has declined, as the number of ICT businesses led by women has grown faster (by 28 per cent) than the number led by men (24 per cent).

Firms report a worsening skills shortage in the sector, but initiatives to address this are emerging. Around 6,500 students graduate from ICT-related higher education studies annually, higher than some EU countries such as Bulgaria and Hungary, but lower than the OECD and EU averages. However, because of the country’s significant brain drain, IT industry representatives say it is difficult for employers in the ICT industry to find young graduates with digital skills. Digital firms contacted in the course of this research estimate that half of the technical staff that have left their jobs over the past few years have left the country. A few private-sector companies have taken steps to resolve the skills mismatch by collaborating with local technical universities and providing in-house training to volunteers. The large majority of job creation in the ICT sector is concentrated in the capital, Chisinau, indicating unequal regional opportunities. At the same time, however, this presents an opportunity to increase Moldova’s pool of talent by targeting other regions with appropriate training programmes.

The inevitable continuation of digitalisation and automation in the labour market will see over 14 per cent of jobs becoming redundant and a further 60 per cent of jobs changing significantly in terms of tasks performed. These changes will affect the least-skilled workers and workers in rural areas, potentially widening regional wealth gaps. As in other countries, rapid upskilling and reskilling will be required to ensure Moldova’s labour force is prepared for the future of work and the structural transformation of the economy. ICT inclusion would enable underserved communities to access education, health and social services, and would strengthen their economic independence and integration into the national and international economy.

5. Resilient – a recovering banking sector, nascent capital markets and deficient energy security are constraining resilience

Moldova ranks 23rd out of 36 EBRD economies on the resilient quality. Both financial stability and energy security are vulnerable to adverse shocks. The relatively low degree of financial resilience is due to a small and concentrated banking sector that is still recovering from the 2014 bank fraud, underdeveloped financial markets, low credit penetration and a lack of financing opportunities for MSMEs. The country’s energy resilience ranking suffers from the high concentration of the energy mix on a single source and single supplier, as well as

---

129 See EBRD (2021).
131 See EU4Digital (2020).
132 Ibid.
133 Ibid.
135 Ibid.
136 Ibid.
137 In 2014, US$1 billion disappeared from three Moldovan banks – Banca de Economii, Unibank and Banca Socială – into offshore accounts. The total loss from the scheme was equivalent to 12 per cent of Moldova’s GDP.
limited possibilities for diversification due to constraints on energy-sector connectivity.

Chart 30. Resilient ATQ indicators

Source: EBRD

Financial resilience

Moldova’s financial system is dominated by the banking sector, which remains the main source of financing for businesses. The banking sector consists of 11 banks, including seven foreign-owned banks, which held more than 91 per cent of total sector assets as of the end of 2021. The sector is small, accounting for 51 per cent of GDP, but at the same time concentrated, with four systemically important banks accounting for 80 per cent of the market by total assets. Credit penetration remains low (23 per cent of GDP as of end 2021). The banking system is largely "plain vanilla", with loans constituting the largest part of banks' assets and deposits the dominant source of funding. External wholesale funding is limited to international financial institutions. Apart from banks, the financial system comprises non-bank credit institutions and a growing insurance industry. In the absence of mandatory funded pension funds and with a small life-insurance segment, institutional investors’ assets as of end 2021 stood at 1 per cent of GDP (see Chart 31).

In its first real-life, post-restructuring test, the banking sector weathered the Covid-19 crisis well, but it is now facing the challenges brought about by the war on Ukraine. The banking sector maintained high liquidity buffers, sound capitalisation (a capital adequacy ratio of 25.6 per cent) and a low non-performing loan (NPL) ratio (of 6.6 per cent) (see Chart 32) throughout the pandemic. It remained profitable in 2021, with a return on average equity of 12.4 per cent and a return on average assets of 2.0 per cent. Growth in loans and deposits was reported at 21.6 per cent and 13.1 per cent, respectively, in 2021. The NBM continued to tighten monetary policy, with the base rate reaching 21.5 per cent in August 2022, to combat rising inflation, which reached 34.3 per cent in August 2022. The expected negative impact of the war in Ukraine on the country's overall economic performance (see Box 1) may put pressure on banking sector liquidity and threatens to put loan quality at risk in the medium term.

Chart 31. Banking sector and institutional investor assets in early transition economies, percentage of GDP

Following the 2014 bank fraud, the NBM took active measures to clean up the banking system and enforce ownership transparency. A legislative overhaul resulted in NBM independence and a new bank resolution regime. The quality of banking regulation is generally adequate and continuously improving: (i) Basel III regulation on capital adequacy came into force in 2018; (ii) liquidity coverage requirements were approved in 2020; and (iii) pillar 3 disclosure requirements became compulsory for all banks in September 2021.

Financial markets infrastructure

Financial markets in Moldova are in the early stages of development, despite relatively robust market infrastructure and stable macroeconomic conditions. In the EBRD Financial Markets Development Index (FMDI), Moldova ranks 28th out of 38 economies, reflecting the low levels of depth, liquidity and diversification of the debt and equity markets and the absence of local derivatives markets (see Chart 33). Gaps remain in the legal and regulatory framework (for example, in property rights, the rule of law and local derivative and repo legal frameworks) and the local institutional investor base, but macroeconomic conditions and policy frameworks are stable and conducive to future market development initiatives.

Chart 32. NPLs as a percentage of total gross loans


Chart 33. Financial market development in Moldova and selected comparator economies

Source: EBRD (2022).

Money markets are at an early stage of development in Moldova. The local money market comprises government T-bills, NBM certificates of deposit and the direct unsecured interbank market. The outstanding stock of T-bills and NBM certificates amounts to just 7.9 per cent of GDP, with virtually no secondary market trading. This is because state securities are in regular supply (issued every fortnight) and local banks repo those with the NBM, earning a positive carry of up to 341 basis points as of May 2022. Incentives to sell/trade on the secondary market are limited due to the resulting loss of leveraged income. Use of the unsecured segment of the money market is limited by excess liquidity, with banks holding liquid assets well in excess of regulatory requirements and the bulk of liquidity in unremunerated NBM reserve accounts. The NBM provides sufficient liquidity through repo auctions and absorbs liquidity through certificates of deposit on a weekly basis. There is no limit, which reduces reflecting the extent of such development across debt, equity, money and derivatives markets. See EBRD (2021) for more details on the FMDI.

138 The FMDI measures local financial market development based on publicly available quantitative and qualitative criteria. The FMDI score is derived from 54 individual indicators, split across two equally weighted sub-indices covering (i) the necessary conditions for sustainable market development, including macro-financial conditions, the legal and regulatory framework, market infrastructure and the institutional investor base; and (ii) asset class-specific indicators reflecting the extent of such development across debt, equity, money and derivatives markets.

139 In April 2022, the EBRD’s Board of Governors decided to suspend access to the Bank’s resources by Russia and Belarus in response to the invasion of Ukraine, reducing the number of economies in which the Bank operates to 36. The Bank has closed its offices in Moscow and Minsk. Russia and Belarus remain EBRD shareholders.
the need for an interbank market. Overnight access to liquidity is also available from the NBM, which, though expensive, is broadly in line with pricing available over the counter (OTC). The NBM publishes an intereae rate benchmark, the Chisinau Interbank Offered Rate, calculated based on quotations of contributor banks for the placement of funds with other banks in Moldovan leu (MDL). However, this is not a reliable rate and the sovereign’s floating rate notes are not indexed to it, but rather to the weighted average of the 182-day T-bill yield. The lack of an active money market and the absence of a reliable local benchmark rate in turn limit the development of derivatives and capital markets.

Local bond markets remain underdeveloped and are heavily dominated by government issuance. Total outstanding sovereign bond volumes as of end-February 2022 were equivalent to US$ 1.73 billion (€1.65 billion) (around 14 per cent of GDP), of which over half (about 7.3 per cent of GDP) were T-bills with less than a one-year maturity, in marked contrast to other EEC economies (see Chart 34). The Moldovan sovereign securities market would benefit from an average duration extension, concentrated issuance in a small number of benchmark bonds and the further development of its yield curve. Amid relatively low market liquidity, international investment in Moldova’s sovereign bond market is currently negligible, with only 0.3 per cent of outstanding securities held by non-residents. The NCFM is working on reforms to allow government securities to be traded on the regulated market (currently only interbank), which would support a marginal increase in secondary market liquidity, noting that this market is predominantly traded OTC.

Chart 34. Outstanding sovereign bond nominal value in EEC economies by maturity, percentage of GDP

Non-sovereign local bond markets comprise only municipal securities, while corporate issuance has taken place on international markets. Municipal bonds, issued for the first time in 2021, total a combined notional amount of US$ 0.4 billion equivalent (€0.38 billion) and are traded on the Multilateral Trading Facility administered by the Moldova Stock Exchange (MSE). The capital, Chisinau, approved additional municipal issuance in October 2021, which will support the development of this nascent market. There is no domestic corporate bond market, but Eurobonds issued by the leading Moldovan agro-industrial company, TransOil, have been listed on the Irish Stock Exchange. These securities have been upsized several times, with the subordinated (5NC3) bonds issued in April 2021, reaching benchmark size in September 2021. The total corporate bond market, made up solely of TransOil issuance, measures almost US$ 1 billion (€0.95 billion, or 8 per cent of GDP). Given the company’s large financing needs and the absence of a domestic institutional investor base, TransOil needed to tap international markets, with investor interest supported by a rating one notch above the Moldovan sovereign.

Moldova’s equity market remains illiquid, with a limited number of listed companies. There were no initial public offerings (IPOs) in 2019-21. There are only 15 listed companies on the regulated market of the MSE and 21 on its Multilateral Trading Facility, amounting to a total market capitalisation of US$ 0.6 billion equivalent (€0.5 billion) as of end 2021. The market is very concentrated, with 66 per cent (10 out of 15 firms) coming from the financial sector. Trading volumes on the MSE have been decreasing sharply in recent years, a trend accelerated by the Covid-19 crisis. From 2020 to 2021, annual trading volumes fell from US$ 5.6 million (€4.9 million) to US$ 1.9 million (€1.6 million) (see Chart 35). Instead, much of the trading is taking place OTC. According to MSE estimates, off-exchange equity trading volumes are 5 to 10 times larger. Against this backdrop, unsurprisingly, the Moldovan equity market is not classified by either of the two benchmark index providers (MSCI and FTSE). With its limited trading activity and investor base, companies have few incentives to take on the additional disclosure and transparency requirements associated with a public listing – many preferring to become limited liability companies (LLCs). As a result, there is currently no IPO pipeline on the

Source: Cbonds.com
MSE, with Moldova’s largest companies choosing to list on international exchanges. Consequently, efforts to classify the MSE as a frontier market by FTSE/MSCI to increase foreign investor recognition and stimulate passive investor inflows could be pursued.

Chart 35. MSE trading activity

![MSE Trading Activity Chart](chart)

Source: Moldova Stock Exchange.

**Financial market infrastructure in Moldova is generally sound.** The MSE has been operating for more than 20 years and the NBM, acting as the fiscal agent of the Ministry of Finance, is in charge of the managing the primary and interbank secondary markets for state securities issued in book-entry form on the domestic market. In May 2019, the single Central Securities Depository (DCU) was launched for all corporate securities, state securities and NBM instruments, which ensures the safekeeping of financial instruments and a higher level of protection for operations. The DCU delivers a full range of services, offering omnibus accounts and providing a delivery-versus-payment settlement system, but has inherited largely outdated information from the fragmented registers it replaced (estimated at around 90 per cent). The DCU is currently owned by the NBM, which not only creates potential for conflicts of interest, but also limits the scope of possible investment in Moldova by international exchange groups. Establishing a vertically integrated capital market infrastructure covering the full value chain from trading to post-trade services would require the partial divestment by NBM of a stake in DCU. This could attract investment interest from a major international exchange group, which would, in turn, help to enhance the quality of services, introduce the necessary infrastructure upgrades, provide knowledge transfer and facilitate the access of Moldovan corporates to EU/international capital markets. An alternative path to strengthening the regional integration of Moldova’s capital market infrastructure and facilitating the IPOs and secondary public offerings (SPOs) of Moldovan companies on neighbouring capital markets would involve the creation of links between the Moldovan and international central securities depositories (CSDs).

The authorities have demonstrated strong commitment to financial market reforms focused on adopting international standards in banking and financial market regulation and supervision. Following several takeover scandals in recent years, the government has passed amendments to strengthen the integrity of shareholder rights in line with international standards (such as the Principles for Financial Market Infrastructures and the Central Securities Depositories Regulation). In 2020, a new law on facultative pension funds was adopted, though none has been created to date and normative rules to support the establishment of such funds have yet to be developed. Regulatory responsibility for the CSD still has to be properly defined: its role in capital markets would make it fall under the NCFM’s mandate, though it is by law comes under NBM supervision. These challenges as regards NBM-NCFM cooperation come at a time when insurance and non-banking financial institution supervision is being transferred to the NBM (by mid-2023) in order to mitigate the risks they pose to the financial system and the existence of regulatory arbitrage between deposit-taking banks and non-bank financial institutions. The NCFM will be given sole responsibility for regulating capital markets and the new facultative pension industry. This will have a significant impact on the NCFM: in 2020, capital markets accounted for 15 of its 59 staff and only 20 per cent of its revenue, threatening its industry-funded model. Strengthening the legal and regulatory framework for corporate governance and disclosure, as well as the bankruptcy framework, should also be prioritised, along with reviewing and expanding current incentives for local company bond issuance and listings.
Energy resilience and security

Moldova’s energy self-sufficiency is very weak. Moldova has one of the lowest self-sufficiency rates in the world, as only about 20 per cent of energy demand is covered by domestic production. Almost all domestic capacity is based on solid biomass. Only 6 per cent of electricity generation comes from renewable sources.

Moldova’s energy security situation is acute, requiring an accelerated reform path. Despite pro-market reforms in the domestic sector since independence, the country’s energy supply is still characterised by extremely high market concentration in electricity and gas and dependence on Russian imports, which are becoming unreliable. These import dependencies have led to an energy market with significant structural issues. Key priorities are to diversify electricity and gas sources, increase local renewable production capacity and invest in energy efficiency measures. Major reforms ahead include the unbundling of Moldelectrica and Moldovagaz, full integration with EU energy markets, the integration of renewable energy, addressing the issues of long-term debt and developing wholesale markets.

The war on Ukraine has worsened energy security and led to a series of short-term breakthroughs. Recent developments suggest that reforms have accelerated in the face of the crisis that began in late 2021, which saw a threefold increase in gas prices as well as the war on Ukraine. The risk of supply disruption led to efforts to diversify supply. The government, through state-owned Energocom, procured gas from European markets. With support from the EBRD and the United States Agency for International Development, Energocom is strengthening its capacity to procure gas from more diversified sources. In May 2022, it signed a contract with the Ukrainian HPP, Ukhydrenerno, for the supply of around 30 per cent of Moldova’s electricity needs, thus shifting away from its dependence on the Transnistrian Moldavskaya GRES (MGRES) power station. One key development that was fast-tracked as a result of the war on Ukraine was Moldova’s emergency synchronisation with the European association for the cooperation of transmission system operators (ENTSO-E) system in March 2022.

Electricity generation would be improved by energy efficiency measures and additional investment. Moldova imports around 80 per cent of the electricity it consumes, mainly from the Russian-owned MGRES. The power plants on the right bank of the Dniester supply only 20 per cent or so of consumption (412 MW) and rely on gas for about 80 per cent of capacity. Termoelectrica is looking to construct a new combined cycle gas turbine and combined heat and power (CCGT CHP) plant in Chisinau (388 MW) by 2035, at an estimated investment cost of US$ 400 million (€380 million), while CET Nord is also looking to build a new 150 MW CCGT CHP plant in Bălți for US$ 160 million (€150 million). A new 400 MW gas-fired plant is also needed to balance the power system in either Ungheni or Comrat. Small modular reactors (60 MW) are also being considered for 2030-35 at a projected cost of €270 million. If implemented, these projects would increase Moldova’s energy independence. Despite the significant investment, however, they would probably not be very positive from a green transition perspective. The focus should be on the deployment of domestic renewable energy. Parallel efforts should be made to increase the efficiency of the Soviet-era operating plants.140

Moldova’s energy security would benefit greatly from an expanded network of interconnectors with Romania and Ukraine. The main project in this area, which has been rather slow in terms of implementation, is the 400 kV interconnector with Romania at Vulcănești, expected to be finalised in 2024. Several more interconnectors with Romania and with Ukraine in the north and centre of the country are currently planned. This would allow Moldova to decrease its dependence on MGRES and enable a more cost-competitive electricity supply. The emergency synchronisation of the Moldovan power system with the ENTSO-E should provide the impetus for increased interconnection.

140 The safe operating period for the second and third energy units of CHP-2 Chisinau expire in 2021 and 2022, respectively. The modernisation works have been marred by a procurement scandal, which was won by a consortium comprising a Russian and a Moldovan company, and which was cancelled by the government in spring 2022. The modernisation of the first unit was finalised by the same contractor at the end of 2020. Financing has been assured by a loan from the World Bank.
Reforms in the electricity sector have progressed unevenly. Moldova has already transposed much of the Third Energy Package, but not all of the relevant requirements have been fully implemented. Secondary legislation linked to the 2016 law is still lacking; (i) regulations on auctioning new generation capacity; (ii) regulations for the authorisation of new generation capacity over 20 MW; (iii) minimum fuel-stock requirements for power plants; and (iv) the designation of the market operator (pending market conditions). The unbundling of the country’s distribution system operators is in train, but Moldova still does not meet requirements for unbundling the transmission system operator, Moldelectrica. The Energy Community Secretariat opened infringement proceedings against Moldova in May 2021 due to the lack of progress. In December 2022, the National Agency for Energy Regulation (ANRE) provisionally certified Moldelectrica as an independent system operator, an important step with a view to implementing the Third Energy Package.

There has been little progress on developing the electricity wholesale market. In 2020, the opening up of the country’s electricity retail market (meaning outside regulated prices) totalled just 10 per cent. Moldova’s electricity market rules entered into force on 1 June 2022. The priority is to introduce new wholesale trading arrangements, with a simplified balancing market that provides a centrally administered balancing mechanism. A market operator will be introduced at a later point when market coupling with the EU is possible. Cross-border exchanges with Ukraine should become easier under the new rules, but a competitive and transparent market will be possible only with new interconnectors and legal efforts to integrate with the EU markets. ENTSO-E synchronisation ensures uninterrupted electricity supply to Moldova during the war on Ukraine, with commercial electricity exchanges increasing gradually. The synchronisation of the Moldovan power system with the ENTSO-E may have an impact on the rationale for the ongoing work on a back-to-back connection with Romania.

The diversification of gas sources could prove more difficult. In contrast to most of its neighbours, where gas demand comes from industry, up to 70 per cent of Moldova’s gas is consumed by the residential sector and district heating utilities. Moldova (excluding Transnistria) consumes around 1 bcm of gas annually. A new 112 km gas interconnector, Ungheni-Chisinau, has been operational since October 2021 and currently allows Moldova to import 1.5 bcm/year of gas from Romania. However, the new interconnector is not able to cover peak winter demand for the whole country and some regions are still dependent on the traditional route via Ukraine. The Energy Community Secretariat submitted a letter to Moldova in May 2022 on its failure to adopt the legal framework necessary to enable the transmission system operator to offer backhaul capacity, noting that while Moldova had transposed the network code provision, it did not have the provisions in place for the customs clearance of backhaul capacity. This would enable a reverse flow from the Trans Balkan Pipeline in case of emergency. Gas storage aspects are also important, and the EU’s decision to include Moldova in its common platform to acquire energy is a step forward in enhancing energy security. Moreover, the Law on Natural Gas obliges Moldovagaz to ensure it can cover two months of consumption during the heating season.

<table>
<thead>
<tr>
<th>Table 2. Moldova gas consumption breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Million m³</td>
</tr>
<tr>
<td>Gas imports</td>
</tr>
<tr>
<td>Gas consumption of which:</td>
</tr>
<tr>
<td>Households</td>
</tr>
<tr>
<td>Legal entities:</td>
</tr>
<tr>
<td>State organisations</td>
</tr>
<tr>
<td>Power plants</td>
</tr>
<tr>
<td>Other consumers</td>
</tr>
</tbody>
</table>

Note: Excluding Transnistria.
Source: ANRE.

Moldova’s long-term contract with Gazprom can be seen as an additional source of risk. A new five-year contract was signed in October 2021, with a formula based on global oil prices and EU gas prices. Although the average price agreed for Moldova is lower than the EU market price, the contract in itself, creates uncertainties over energy security, particularly due to Moldovagaz’s €720 million in outstanding debt to Gazprom, which should have been audited and settled as of May 2022. A wider issue is the debt accumulated by Transnistria, at around US$ 7 billion (€6.7 billion). Gazprom retains the power to terminate the contract in the event of non-payment, while
Gas transit through Ukraine remains uncertain because of the war.

Gas-sector reform implementation is lagging. While the relevant legislation and network codes were transposed in late 2020 and further amended in April 2022, implementation of the requirements remains limited due to government inaction and the unwillingness of Moldovagaz to cooperate on reforms. It is understood that the reforms were slowed by Gazprom’s demands during contract extension discussions in October 2021, amid concern that the reforms would undermine the gas debt accumulated by Moldovagaz to date. The unbundling of Moldovatransgaz is trailing behind and still not compliant with the EU’s Third Energy Package. Third-party access to the transmission system is not in place either, as Moldovatransgaz holds a transmission service contract only with its owner, Moldovagaz. Consequently, Moldova’s gas market is still a monopoly and without a virtual trading point. The REMIT Regulation has yet to be transposed, while the retail market is still heavily regulated, with a public service obligation. The balancing network code between Vestmoldtransgaz and Moldovatransgaz has not been implemented as yet, despite an agreement between the two entities. Moldova’s wholesale gas market remains illiquid and foreclosed.

Renewables offer a key solution to improving energy security, contingent on an adequate regulatory framework. Moldova received 25 per cent of its energy supply from renewables in 2020, exceeding its 2020 target of 17 per cent, largely by using biomass in the heating sector. The 2018 Renewables Law set the legal basis for renewable energy support schemes and made provision for priority dispatch and balance responsibility. Feed-in tariffs for small producers have already been implemented, but have yet to result in a successful auction. The government has agreed a 400 MW support scheme, with 165 MW of tenders (105 MW wind, 60 MW solar PV) and a 235 MW feed-in tariff (15 MW wind, 70 MW solar PV, 150 MW biomass/biogas). As part of the EBRD’s €300 million facility to support emergency gas purchases, the project will support the implementation of an enabling framework for renewable energy auctions and facilitate Moldova’s first renewable auction by adopting amendments to the Renewable Energy Sources Law and secondary legislation. This will be followed by the renewable auction and selection of winning bidders.

6. Integrated – poor external integration is exacerbated by insufficient domestic infrastructure

Moldova ranks 23rd on the integrated quality in the overall EBRD regions and fourth among countries in the EEC region. The country performs better in terms of internal than external integration. Notably, the Chinn-Ito indicator of financial openness is well below the EEC and EBRD regional averages.

Chart 36. Integrated ATQ indicators

External integration

External trade accounts for a much smaller share of total output than in similar small economies in the EBRD regions. Exports and imports of goods and services as a share of GDP in Moldova, at 77 per cent, are lower than those of regional peers and the EBRD average. Despite a reorientation of trade towards the EU, exports still account
for a low share of GDP. Moldova has signed nine regional trade agreements, which is considerably lower than the EBRD regional and advanced comparator country averages (on average 17 and 29 RTAs, respectively.) Closer integration with the EU and DCFTA implementation may compensate for this over time. In terms of transport modalities, road transport has increased significantly over the last 10 years on the back of a structural decline in rail shipping (see Chart 37).

**Chart 37. Volume of transported freight, ‘000 tonnes**

[Insert chart showing volumetric data over time and by mode]

**Source:** National Bureau of Statistics of Moldova.

**Cross-border integration is limited.** Data on road freight transport indicate that transport services are mostly focused on international trade (see Chart 38). There is, therefore, a pressing need to create the conditions necessary for efficient cross-border trade. According to the Logistics Performance Index, Moldova significantly lags the EEC and EBRD averages (1.22 vs 2.82 and 3.68, respectively), implying unsatisfactory logistics services, mainly caused by the poor state of transport infrastructure. As far as the cost of trading across borders is concerned (measured as the time and cost associated with the logistical process of exporting and importing goods), Moldova scores higher than the EEC and EBRD averages on the World Bank’s Doing Business rankings. At the same time, measures of logistics competence (for example, transport operators and customs brokers), the ability to track and trace consignments and the timeliness of shipments all achieve low scores and are below regional averages. Per the 2020 evaluation report on Association Agreement implementation, Moldova’s transport chapter has one of the lowest progress rates, with delays on naval and rail sector reforms.141

**Chart 38. Internal and external regional distribution of freight transport by road, 2021**

[Insert chart showing regional distribution of road freight transport]

**Source:** National Bureau of Statistics of Moldova.

**A streamlining of customs operations is needed.** A 2018 assessment concluded that Moldova’s customs services were complicated by a lack of clarity over regulations and legislation, coupled with capacity and expertise shortfalls in key institutions and cumbersome customs clearance, especially between the Dniester banks.142 Increasing road freight transport and higher EU trade have created bottlenecks at two key border crossings with Romania (accounting for 35 per cent of merchandise trade) and added significant costs to logistics. Customs and border checks have reportedly been prone to bribery and corruption.143 While the customs code has recently been aligned with EU directives, a more effective valuation process has yet to be implemented, strictly aligned with World Trade Organization rules. Infrastructure, including digitalisation, needs to be modernised. Procedures related to transit traffic should also be simplified, as they can exacerbate the bottlenecks at border crossings.

**The financial openness of the Moldovan economy is very limited.** The Chinn-Ito Index, which measures capital account openness, is very low for Moldova.144 This is down to its negligible capital flows as a share of GDP. Moreover,

---

141 See Ministry of Foreign Affairs and European Integration (2020).
142 See UNECE (2017).
143 See USAID (2018).
144 See M. Chinn and H. Ito (2022).
the capital account has been slightly negative since 2016, indicating net outflows ever since.

**The investment environment is not attractive to foreign investors.** FDI flows (3.6 per cent of GDP on average over the last five years) is considerably below the regional (5.2 per cent) and EBRD averages (5.2 per cent). The country’s FDI inflow ratio to GDP is among the lowest of all EBRD countries.\(^\text{145}\) The five-year average of portfolio inflows as a share of GDP is 4.4 per cent, below the EEC and EBRD averages (both 5.1 per cent).

**Internal Integration**

**The lack of appropriate infrastructure seriously inhibits competitiveness.** In recent years, volumes of freight by road have increased significantly (see Chart 37). However, road quality has been rated as one of the worst in Europe in some assessments.\(^\text{146}\) Moreover, road quality in recent years has declined, as public investment has been insufficient and poorly managed (see Chart 39). Evaluations suggest that the economy lost MDL 4.4 billion (€210 million) in 2021 (up from MDL 2.1 billion, or €100 million, in 2015) as a result of the poor state of roads. In 2021, households are estimated to have spent almost three times their outlays in 2015 on car maintenance.\(^\text{147}\) Road safety is an indicator of the quality of infrastructure, as fatality rates are 54 per cent higher than in the EU. This affects Moldova’s potential as a logistical route to EU markets, as well as internal connectivity.

**Increasing volumes of freight and the rising number of personal cars are putting significant stress on the current road infrastructure.** In recent years, the number of personal cars has increased significantly, especially in Chisinau (35 per cent growth since 2015). The density of cars per kilometre has tripled over the past 25 years.\(^\text{148}\) This is putting significant strain on existing infrastructure, requiring investment in maintenance and, in some cases, network expansion. In larger cities, especially Chisinau, investment in public transport systems is urgently needed. Nevertheless, the existing road infrastructure, despite its poor state, enables decent internal connectivity. According to the EBRD’s Road Transport Connectivity Index, the quality of road transport in Moldova is in the top 18 EBRD economies. Intercity travel times are typically 57 per cent longer than the best performers, compared with an EEC average of 60 per cent and an EBRD average of 66 per cent. Additional investment is needed at local level as a policy tool for improving regional inclusion, but there is no clear understanding of the state of local roads.

**Public investment in infrastructure has been anaemic and poorly managed.** Despite external assistance on road rehabilitation, Moldova’s Road Fund financing has been significantly below National Transport and Logistics Strategy targets.\(^\text{149}\) Moreover, major projects have been delayed and/or poorly implemented.\(^\text{150}\) For instance, the

---

\(^\text{145}\) See Trading Economics (n.d.).

\(^\text{146}\) See WEF (2019).

\(^\text{147}\) See Veaceslav Ioniță (2022a).

\(^\text{148}\) See Veaceslav Ioniță (2022b).

\(^\text{149}\) See World Bank (2021), “Enhancing the business environment and market competition”.

\(^\text{150}\) See IMF (2021).
Chisinau bypass, announced in 2012, is far from being completed. Inadequate funding and a lack of State Road Administration capacity to manage large infrastructure projects is seriously inhibiting Moldova’s efforts to improve its trade links. Exploring public-private partnerships could be a solution here.

**Rail infrastructure is underutilised and key reforms have yet to be implemented.** Rail accounted for only 14 per cent of freight in 2019. This low share is driven by years of underinvestment in infrastructure. While road maintenance received funding of more than €1 billion between 2007 and 2016, the railways received only €150 million. There are essentially no electrified or double rail lines in the country, seriously limiting its connectivity with Romania and Ukraine. Consequently, Moldova’s railway lines are in a precarious state. The restructuring of the Moldovan railways company has yet to be completed.

**Port capacity and connectivity should be expanded to make use of existing opportunities.** The international port of Giurgiulesti is Moldova’s main port, on the River Danube. Its added value could be increased by improving its road and rail connectivity (projects are underway) and increasing the capacity of the port, now mostly taken up by the grain trade.

**Poor municipal infrastructure limits the efficient provision of services.** Starting with energy supply, the quality of electricity in Moldova is below the EEC and EBRD averages, as transmission and distribution losses are high. Moreover, municipal infrastructure is old and, in some cases, lacking, such as solid waste management facilities. Backbone services delivery is more problematic outside larger cities. Water supply, sanitation and waste management are absent in a large proportion of rural areas.

---

**Digital infrastructure**

The country’s telecommunications infrastructure is well developed, putting Moldova in the top 50 countries globally in terms of broadband coverage and affordability. The majority of populated areas are covered by mobile broadband (98 per cent 4G) or fixed broadband (98 per cent ADSL availability, of which 90 per cent is supported by optic fibre). According to the national telecom regulator, 74 per cent of private households are connected to broadband. Mobile broadband penetration (calculated as the number of active mobile broadband subscriptions per 100 inhabitants) was almost 90 per cent as of the end of 2020. Moldova is ranked 58th globally in terms of mobile broadband speed by the Speedtest Global Index, higher than the global average. The affordability of mobile broadband has also improved, with a drastic drop in the cost of data-only mobile broadband. This puts Moldova significantly below the 2 per cent of monthly gross national income per capita affordability target of the Broadband Commission for Sustainable Development. The number of fixed broadband subscribers continues to grow steadily, with 27 per cent of households having a fixed connection in 2020. State-owned operator Moldtelecom holds over 61 per cent of the fixed broadband market. However, improvements are still required, including in promoting the innovation ecosystem.

---

151 See World Bank (2021), “Multimodal transport and logistics”.
152 Ibid.
3. References


CEPS (2021b) Ex-post evaluation of the implementation of the Deep and Comprehensive Free Trade Areas between the EU and its Member States and Georgia and Moldova, Brussels. Available at: https://trade.ec.europa.eu/doclib/docs/2021/may/tradoc_159581.pdf.


National Bank of Moldova (n.d.) “Information regarding the activity of payment service providers with payment cards from the Republic of Moldova (per provider)”, Chisinau. Available at: https://www.bnm.md/bdi/pages/reports/dsp/DSP2.html.


Veaceslav Ionăță (2022a) #048 Analele Economie: Infrastructura rutieră, Chisinau. Available at: https://ionita.md/2022/04/10/048-analyze-economice-infrastructura-rutiera/.


WAGE (2021) Preliminary Gender and Inclusion Analysis for Moldova, Washington, DC. Available at: https://www.americanbar.org/content/dam/aba/directories/roll/wage/gender-inclusionmoldova.pdf.

WHO (n.d.) “Ambient air pollution attributable DALYs (per 100 000 population)”, Geneva, Switzerland. Available at: https://www.who.int/data/gho/data/indicators/indicator-details/GHO/ambient-air-pollution-attributable-dalys-per-100-000-population.


