CASE – Centrum Analiz Społeczno-Ekonomicznych
CASE – Center for Social and Economic Research

Expert-Grup
Independent Think-Tank

CASE Reports No. 510 (2025)

Country Report: Moldova

Assessing the Economic Resilience of the Republic of Moldova in the Context of Recent Security Threats

28 JANUARY, 2025

Adrian Lupusor, Corina Gaibu, Ecaterina Rusu
Marina Soloviova, Stas Madan

Supported by the grant from Foundation Open Society Institute in the Cooperation with the Open Society Foundation:

Keywords: Moldova, economic growth, economic security, energy dependence, foreign trade, financial sector, current account

JEL codes: JEL: O11, O16, O20.

ISBN 978-83-67407-25-0

Publisher:

CASE – Center for Social and Economic Research

ul. Zamenhofa 5/1b, 00-165 Warsaw, Poland

tel.: +48 798 023 759

e-mail: case@case-research.eu

“CASE Reports” is a continuation of “CASE Network Studies & Analyses” series.

About Expert-Grup

Expert-Grup is a think-tank specialized in economic and public policy research. We are positioning ourselves as a politically and ideologically neutral think-tank, and we do not represent any economic, corporate and political interests.

Our mission is to empower citizens, firms, media and policy makers to become active agents of inclusive and sustainable development in their country, through independent analyses and consulting, evidence-based policies and community mobilization. To accomplish our mission, Expert-Grup pursues 3 strategic priorities:

1. We provide independent research, consultancy and analytical insights about major economic and social issues that would help the society to become more resilient and inclusive.
2. We empower communities, media and firms to hold the central and local governments accountable and deliver proper public and private services and goods for the population.
3. We aim to become a resource of expertise for local CSOs.

About the authors of the report

Adrian Lupusor - Over 15 years in policy research and analysis, including data analysis, econometric modeling, formulating policy proposals, conducting policy impact analyses, monitoring the implementation of reforms in economic and financial areas, as well as promoting advocacy activities for reforms. Over 10 years of experience in project management and leading project implementation teams in such areas as developing investment and economic growth strategies for the Government, providing technical assistance projects to various Governmental bodies on economic and financial issues, developing economic policy analyses, formulating forecasts etc.

Corina Gaibu – Over 15 years of experience in finance and engineering, including implementation of policy development and advocacy projects addressing energy efficiency in buildings; policy research and analysis, including data analysis; coordination of pilot projects, including energy efficiency measures and supervision of the work of teams of engineers and architects; analysis, development and piloting of financial mechanisms for energy efficiency projects, promotion of development policies and governance tools in the residential sector, 5 years of experience in the management boards of public institutions, particularly in the energy sector.

Ecaterina Rusu - An economist with over 10 years of experience in the private and public sectors, having held roles in financial institutions and at Expert-Grup. This professional background has provided expertise in data analysis, macroprudential policy, and financial sector regulation. Have been involved in conducting comprehensive analyses on economic development, corporate governance, and public finance, offering actionable insights to inform evidence-based decision-making and policy development.

Marina Soloviova – 18+ years of professional experience, of which 15 years in macroeconomic statistics and research in a central bank, and 3 years in research and advocacy activities with a civil society organization. Was involved in the production and analysis of external sector statistics and methodology-related research, contributed to flagship publications and databases of the National Bank of Moldova. Participated in projects related to macroeconomic analysis and forecasting, evaluation of economic reforms and policies, drafting public policy documents, financial education.

Stas Madan - Over 14 years of professional activity (10 years in the private sector - and 4 years in the associative sector), covering areas like Business environment and SMEs, International trade, monitoring macroeconomic and investment developments, sectoral and competitive studies. 10 years of activity in the field of business consulting with direct contact with entrepreneurs of all categories, both local SMEs and foreign investors. Proven expertise in business development, corporate governance, data analysis, strategic planning and macroeconomics. Contribution to the drafting of various public policy documents concerning entrepreneurial activity.

Abbreviations

ATP	Autonomous Trade Preferences
CEE	Central and Eastern Europe
CEFTA	Central European Free Trade Agreement
CIS	Commonwealth of Independent States
DCFTA	Deep and Comprehensive Free Trade Area
EBRD	European Bank for Reconstruction and Development
EFTA	European Free Trade Association
EU	European Union
GDP	Gross Domestic Product
GFC	Global financial crisis
GFS	Government Finance Statistics
GUAM	Organization for Democracy and Economic Development
IMF	International Monetary Fund
IT	Information technology
LRC	Liquidity coverage ratio
MDL	Moldovan leu
MEDD	Ministry of Economic Development and Digitalization
MFN	Most Favored Nation
MSE	Moldova Stock Exchange
NBM	National Bank of Moldova
NBS	National Bureau of Statistics
NBCOs	Non-bank credit organizations
NCFM	National Commission on Financial Markets
NPB	National Public Budget
NPL	Non-performing loans
ODA	Official development assistance
PAS	Action and Solidarity Party
PPP	Purchasing power parity
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
USD	US Dollar
WB	World Bank
WTO	World Trade Organization
y-o-y	Year on year

Table of contents

List of figures

List of tables

1. Introduction

The Republic of Moldova, having a small and opened economy in transition, has always been exposed to numerous shocks and volatilities. Most often, they were induced by the exposure to the agrifood sector and, respectively, extreme climate events (primarily droughts), low competitiveness and investment attractiveness leading to high current account deficit, as well as weak institutions causing policy instability, corruption and even crises (e.g., the banking crisis following the „1 billion USD fraud" in 2014).

The vulnerability of the Moldovan economy significantly increased since 2020, primarily because of a series of external shocks that aggravated the internal vulnerabilities mentioned above. Namely, the COVID pandemic in 2020, which was paralleled by a major drought, led to economic recession and a high budgetary deficit; the energy crisis that started in the autumn of 2021 caused a 34% inflation in 2022 and a rising poverty rate; the Russian invasion in Ukraine in 2022 made Moldova the most exposed country, after Ukraine, because of geographic proximity and energy dependence on Russia, undermining further the economic dynamics, investment attractiveness and exports.

The report analyses how the Moldovan economy absorbed these unprecedented shocks, how efficiently the Government responded, what changes these crises caused in macroeconomic policy, and the financial and energy systems of the country. The report contains not only a descriptive analysis of recent developments but also provides analytical insights into the main sources of vulnerabilities and formulates policy recommendations on addressing them.

The analysis was carried out based on the statistical data collected from the open sources of the National Bureau of Statistics (NBS), National Bank of Moldova (NBM), World Bank, International Monetary Fund (IMF) and other reliable sources of data and information referred in the report. Because of lack of reliable statistical data, the report does not cover the Eastern Rayons of the Republic of Moldova (Transnistrian region), which is the territory of the country that is not controlled by the constitutional authorities.

The document contains 7 chapters. After the introduction, it describes the domestic and external political developments and their macroeconomic impact (chapter 2), followed by the analysis of key sectors and policies (macroeconomic stability – chapter 3; financial sector stability – chapter 4; external economic relations – chapter 5; energy sector – chapter 6), a summary of main sources of vulnerability (chapter 7) and policy recommendations (chapter 8).

The report was drafted by the Independent Think-Tank "Expert-Grup", based in Moldova.

2. Domestic and external political developments and their economic impact

Since gaining independence, Moldova's political landscape has been marked by a struggle between pro-Russian and pro-European factions, however the latest direction of the foreign policy points to the European vector. In the first decade of the independence (1991-2000), the country's foreign policy was focused on establishing itself as an independent state and building diplomatic relations with the international community, while remaining economically dependent on Russia. The next decade (under the rule of the Communist Party (2001-2009)), was marked by balancing the historical ties to Russia to pro-European aspirations. In the early 2000s, Moldova's foreign policy pursued a pro-Russian stance, leaning more towards strengthening relations with Russia and the Commonwealth of Independent States (CIS), representing the main trading partner. However, starting in 2003, after the rejection of the initiative to federalize the Republic of Moldova proposed by the Russian Federation, relations with Russia became more strained, and the country started to explore deeper relations with the European Union (EU). In 2005, with widespread political consensus, the EU–Moldova Action Plan was adopted, officially establishing European integration as a national strategic goal. Moldova's push towards European integration was resisted by the Russian Federation, who appealed to various embargoes and trade restrictions to destabilise the domestic situation. In response, to mitigate the negative effects of deteriorating relations with Russia, in 2008, the EU granted Autonomous Trade Preferences (ATP) to Moldova.

The 2009 political changes, brought to power a pro-European coalition called itself the Alliance for European Integration (AIE), claiming to follow the EU integration as a source of political legitimacy. In this context, in 2010 the negotiations for the Association Agreement started and in 2014 Moldova signed the Association Agreement with the EU, which included a Deep and Comprehensive Free Trade Area (DCFTA), marking a significant step towards closer ties with Europe. The DCFTA boosted the total exports of the Republic of Moldova to the EU, compensating the losses from the decrease in exports to the CIS. Additionally, as a result of tight bilateral dialogue with the EU, the Republic of Moldova was the first country in the Eastern Partnership (EaP) to secure a visa-free regime for its citizens in 2014. On this background, Moldova was given as an example of the success story of the EaP. Nevertheless, this success did not last too long, as Moldovan European future was undermined by challenges, such as the 2014 bank fraud, political turmoil, unstable coalitions that weakened genuine pro-European path, systemic corruption etc., that led to an oligarchic "captured" state (2015-2019).

The direct election of President Maia Sandu in 2020 (defeating in the second round Igor Dodon - de facto head of the Russia-leaning Party of Socialists) and the snap parliamentary elections (2021), resulted in a landslide win of the new pro-EU political actors (Action and Solidarity Party (PAS)), brought an end the years of rule by unstable coalitions. The PAS government pledged to strengthen the rule of law, root out systemic corruption and advance reforms related to Moldova's EU membership. The most important is the judiciary reform. However, so far, the reforming process is slow and faces a lot of resistance. On the other hand, Moldova saw a continuous improvement in the Corruption Perceptions Index, jumping from 120th in 2019 to 76th place in 2023.

The new pro-European Moldovan government was not "welcomed" by Russia, which adopted a harsher policy line. The main manipulation tool was the natural gas supply contract between Gazprom and Moldovagaz which was due at the end of 2021. The negotiations on a new contract were tough and the reached deal envisages the prices pegged to international gas prices, which amid the global energy crisis, implied an increase of more than 5 times compared to previous import prices. Against the rocket spike in gas prices, Moldova was able to continue paying for gas as well as compensate bills for the population and enterprises. In overcoming the unfolding energy problem and effects of COVID-19, Moldova has relied on financial support offered by international partners. Since taking office in August 2021, the new pro-European government concluded a new Memorandum of Economic and Financial Policies with the IMF, providing a financial envelope of USD 560 million (later augmented to USD 815 million) for the following 3 years. Also, in 2021, a EUR 600 million EU-funded Economic Recovery and Resilience plan was announced by the European Commission to Moldova, financial disbursement being subject to progress made.

Russia's war against Ukraine has created significant challenges for Moldova, but also urged the European integration agenda. Condemning the Russian invasion of Ukraine, and joining EU sanctions against Russia, Moldova has found itself at the forefront of security and economic crises. Along with the trade disruption, the energy insecurity re-emerged, namely the electricity crisis. As the country's electricity supply relied on the power plant based in the Transnistrian region that runs on Russian gas, this caused severe energy shortages. However, the emergency context led to an accelerated synchronisation of Moldova's power systems with the Continental European Power System, laying the foundations for alternative electricity suppliers.

The unresolved status of Eastern Rayons of the Republic of Moldova (Transnistria) has been an additional source of tension and instability in the country, remaining out of the control of the constitutional authorities of the country. The illegal presence of Russian troops and weapons depots in Transnistria serve as continual threats. Even if Moldovan leadership has asked Russia to remove its troops from Transnistria, Russia continues to assert that they will remain there. While Transinistria's authorities broadly support Russian policies, they have avoided making explicit, provocative statements about the war in Ukraine. Despite the pro-Russian tilt, Transnistria has strong economic links to the EU, the destination for more than two-thirds of its exports.

In such a difficult environment, Moldova has opted for more than ever an active foreign policy to mobilize international support. In June 2023, Moldova hosted the second meeting of the European Political Community that brought together leaders from across the continent. It represented a powerful symbol of joint support in addressing issues related to security, stability and prosperity. At the same time, Moldova also withdrew from several CIS agreements linked to security and defense.

Against the background of severe disruptions to the region's trade chains, the EU stepped up its support by offering additional trade liberalisation measures, by suspending all outstanding duties and tariff rate quotas that were still applicable to a number of agricultural products. In the same response, the UK lifted tariffs for the same agricultural products in the framework of the Strategic Partnership, Trade and Cooperation Agreement. Also, in support of expanding trade opportunities, two years after the launching of negotiations, at the beginning of 2023, EFTA and Moldova reached a deal on a comprehensive free trade agreement. Over time, Moldova has successfully decoupled from dependence on Russia as a main export market. Currently, about two-thirds of goods exports from Moldova go to the EU market (65% in 2023). Furthermore, the EU is the main economic partner of the Republic of Moldova in all fields: foreign trade in goods and services, direct investments, loans and grants.

A historical milestone for Moldova came in June 2022 when it, alongside Ukraine, was granted the EU candidate status, three months after submitting its formal membership application. In December 2023, EU member states approved opening accession negotiations, while in June 2024, the accession negotiations opened per se, demonstrating Moldova's resoluteness to fulfilling the EU reform agenda. Now, the European vector has become backed more than ever before. Nevertheless, the process of joining the EU can take many years and the outcome depends on a consistent track record of reforms Moldova can deliver.

Nevertheless, the situation remains fragile. The presidential election, in which Maia Sandu ran again and won, together with the EU referendum vote in late October 2024 triggered the opposition and pro-Russian forces to create disinformation and chaos, and reorient geopolitical directions. While the successful referendum in favor of deeper EU integration will further solidify the pro-European stance of the country, it is obvious that Russia will not give up its hostile actions against Moldova. Hence, strengthening the national security system should be a priority for Moldova for the upcoming years.

3. Macroeconomic stability

3.1 Macroeconomic policy setup (key actors, policy goals, target indicators)

3.1.1. Central bank independence, monetary policy/ exchange rate regime, target indicators and their values

The National Bank of Moldova (NBM) is the institution in charge of conducting monetary and foreign exchange policy. According to Article 4 of Law No. 548/1995[1] on the National Bank of Moldova, the primary objective of the NBM is to ensure and maintain price stability. Additionally, without prejudice to the primary objective, the NBM aims at ensuring the stability and viability of the banking system and supporting the general economic policy of the Government. It is worth noting that this provision has been in force since 2006. Previously, the main objective of the NBM was to achieve and maintain the stability of the national currency. The NBM quantitatively measures price stability in terms of the consumer price index (CPI) published monthly by the NBS. Following a medium-term monetary policy strategy, the NBM targets an annual inflation rate of 5% with a symmetric band of ±1.5 percentage points. In line with the declared inflation targeting, the NBM's exchange rate regime is a managed float. Avoiding a fixed or crawling peg allows the economy to respond adequately to price signals associated with external and internal shocks.

Forex market interventions are limited to those necessary to support the implementation of open market operations, insofar as they are necessary to reach the inflation target and do not interfere with FX market fundamentals. However, the NBM retains the right to intervene to mitigate excessive fluctuations in the exchange rate, stop speculative operations, and replenish the reserve assets, without prejudice to reaching the inflation target. For example, in February and March 2022 after the Russian invasion of Ukraine, when the Moldovan population rushed to the exchange offices to exchange their national currency into US dollars (USD) and euros, the NBM sold USD 370 million from its reserves to stabilize the market. This prevented a sharp depreciation of the Moldovan leu (MDL) and the galloping inflation that was bound to follow if the NBM did not intervene.

According to the Strategic Plan the „NBM 2025"[2], NBM has a matrix of 7 strategic objectives: i) To strengthen the monetary policy framework and streamline the implementation of monetary policy, ii) To strengthen the financial stability function and macroprudential supervision, iii) To strengthen the supervision function in respect to banking and non-banking financial sector, iv) To continuously develop the financial market infrastructures and to promote cashless payments, v) To increase the quality of national currency and strengthen the function of insurance with national currency in cash, vi) To strengthen institutional resilience and agility and vii) To develop and enhance human capital.

[1] https://www.legis.md/cautare/getResults?doc_id=143069&lang=ro#
[2] https://www.bnm.md/en/content/strategic-plan-national-bank-moldova-bnm-2025

According to Law no. 548-XIII of 21.07.1995, the NBM is governed by a Supervisory Board composed of 7 members and an Executive Board made up of 5 members. The NBM and the members of its decision-making bodies shall be independent in exercising the tasks conferred upon them by law and shall neither seek nor take instructions from public authorities or any other authority.

In recent years, especially after the 2014 "Billion Dollar Robbery", the banking sector has undergone a profound legislative reform, which has also aimed at strengthening the independence of the NBM. Despite numerous accomplishments[3], the Parliament's sudden action in December 2023 to dismiss the Governor of the NBM, Octavian Armaşu, put the NBM's independence under question. As stated by IMF[4], the hearings and decisions took place very quickly, raising concerns about due process: proper and thorough professional and legal investigation and assessment.

3.1.2 Fiscal policy targets, channels of coordination between fiscal and monetary policies

The main objectives of the fiscal policy are set in Law No. 181/2014 on public finance and fiscal responsibility[5]. The above-mentioned law also sets several fiscal rules:

- Fiscal policy should be designed in correlation with other economic policies and should ensure that the annual deficit of the national public budget (NPB) (excluding grants) does not exceed 2.5% of gross domestic product (GDP). Exceeding the deficit limit is allowed only if there is committed financing from external sources for capital investment projects and the capacity to implement them.
- In setting policy priorities, authorities should ensure consistency and continuity of the objectives outlined in the Medium-Term Budgetary Framework. The only admitted exceptions are for periods of up to three years in cases of natural disasters and other exceptional situations that endanger national security, a decline in economic activity and/or if the level of inflation exceeds the forecasted/planned level by 10 percentage points. The exceptions are also allowed in case of systemic financial crisis, for the capitalization of banks and for guaranteeing emergency loans granted to the banks by the NBM.
- According to the budget balance rules, the upper limit of the budget balance should be set by annual budget laws, which indicate the sources of budget deficit financing or how the budget surplus is directed.
- Finally, according to the financial impact rules and according to Law No. 100/2017 on legal acts[6], draft legal acts which have a financial impact on the budget are subject to mandatory financial expertise. At the same time, during the budget year, decisions leading to a decrease in revenues and/or an increase in expenditure cannot be approved if their financial impact is not foreseen in the budget. Also, committing specific amounts or shares of the budget or GDP to certain areas, sectors or programmes by legal acts other than the annual budget law is not allowed.

[3] https://www.ipn.md/en/imf-representative-even-if-it-is-an-independent-institution-nbm-can-be-held-acco-7966_1089882.html
[4] https://imf.md/press/pressl/pressl-231222.html
[5] https://www.legis.md/cautare/getResults?doc_id=142656&lang=ro#
[6] https://www.legis.md/cautare/getResults?doc_id=142658&lang=ro#

Despite the mandate separation and the mutual institutional independence, the NBM and the Government of the Republic of Moldova cooperate for coordination of the general economic policy of the state. The NBM Governor can advise and speak at government meetings and can present written follow-up statements regarding the policy problems discussed. Under Art. 37 of the Law No. 548/1995 on the NBM, the NBM shall have the duty to consult the Government on all significant monetary and financial matters that are within its field of competence, and the Government shall have the duty to consult the NBM on matters that are within its field of competence. When preparing the state budget, the Government shall seek the advice of the NBM on financial and economic matters, and the NBM shall submit to the Government a report on these matters.

The NBM's Governor chairs the Financial Stability Board. The Board[7] is an important policy platform which also includes the Ministry of Economic Development and Digitization, the Ministry of Finance, the chairperson of the National Commission for Financial Market and the general executive director of the Bank Deposits Guarantee Fund. The Board provides the venue for coordination of the macroprudential policy, prevention, reduction, and eradication of systemic risks affecting financial stability as well as for the management of systemic financial crises.

In October 2017, the NBM and the Ministry of Finance concluded a Memorandum of Understanding to collaborate on a variety of monetary and financial matters, including banking system liquidity forecasting, Treasury account projections, the Government's securities issuance calendars, and the Government's term deposit placement at the NBM. Members of the working groups from the Ministry of Finance and the NBM discuss and exchange information before and during periodic meetings.

3.1.3 External conditionalities imposed on the domestic macroeconomic policy setup

Traditionally, Moldova's memorandums with the IMF[8] have been the main external economic reference. These agreements are important since Moldova has no presence in the external capital market, having issued no Eurobonds. At the same time, the memorandums with the IMF were also an element in strengthening the country's economic and financial security. In the 2010s and 2020s, the main conditionalities agreed by Moldova with the IMF in the memorandums of Economic and Financial Policies (MEFP) have focused on a range of fiscal, monetary and structural reforms. Besides fiscal policy and budgetary reforms (fiscal consolidation, public financial management) and monetary policy (inflation targeting, exchange rate flexibility), conditionalities related to financial sector reforms are also important. After "the Moldovan bank robbery" crisis[9], banking sector supervision, ensuring the independence of the NBM and Anti-Money Laundering (AML) have been priority topics in agreements with the IMF. Besides the above-mentioned types of conditionalities, the December 2023 MEFP between Moldova and the IMF[10] includes new chapters, namely the Rule of Law and Anti-Corruption, and Building Climate Resilience.

---

[7] https://www.legis.md/cautare/getResults?doc_id=132669&lang=ro
[8] https://www.imf.md/pub-memo.html
[9] https://www.bbc.com/news/magazine-33166383
[10] https://www.imf.md/press/LOI-MEFP-TMU_eng_Dec23.pdf

Macro-financial assistance (MFA - a form of financial aid extended by the EU to partner countries experiencing a balance of payments crisis), is another instrument with external conditionalities imposed on domestic macroeconomic policy setup. Since the start of the EU's use of this instrument, Moldova has benefited four times from the MFA[11]: i) 2010-2012, ii) 2017-2020, iii) MFA in the context of the COVID-19 pandemic (2020-2021) and iv) since 2022. In terms of conditionalities, MFA is only available to countries having active IMF programmes; this requirement is being applied also to Moldova. The 2017-2020 MFA was tied to the political pre-conditions regarding the respect for democratic mechanisms, the rule of law and human rights. Also, the Memorandum of Understanding included measures in areas such as public governance, financial sector governance, energy sector reforms and tackling corruption. The MFA launched in 2022, which is still in force at the time of writing this report (July 2024), contains several conditionalities related to structural reforms in key areas such as the Energy Sector, Business Environment, Rule of Law, Fight against Corruption and Public Sector Governance[12].

3.2 Macroeconomic stability: historical perspective and current situation

3.2.1 Economic growth, its sectoral decomposition and aggregate demand decomposition

In 2023, the GDP of Moldova reached USD 16.5 billion in current prices, which represents 6,732 USD per capita. Since 2014, there has been a slowdown in the country's economic growth. While in the period 2004-2013, economic growth amounted to 4.6% per year, in the period 2014-2023 average annual growth amounted to only 2.2%. The slowdown was determined by domestic and external factors, such as the growing comparison base, shrinking population, extreme weather events (mainly droughts), but also external shocks since 2020 - the COVID-19 pandemic, rampant global inflation, and the brutal and unjustified Russian military aggression in Ukraine.

Since 2020, the overlapping crises have caused significant fluctuations in the Moldovan economy. As a result of the COVID-19 pandemic and severe drought in 2020, the Moldovan economy contracted by -8.3% y-o-y. The year 2021 saw a strong rebound with a growth of 13.9% y-o-y, due to record agricultural production, an increase of the postponed consumption from the pandemic period and the low comparison base. In 2022, however, the Russian aggression against Ukraine, the energy crisis and persistent inflation caused the contraction by -5.0% y-o-y. In 2023, Moldova's economy underperformed with a modest economic growth of only 0.7% y-o-y. Although receding inflation has allowed monetary policy easing and cheaper financing, most firms still consider the business environment unpredictable and are resorting to optimizations and re-engineering of existing production facilities, remaining reluctant about investing in new production facilities. Given the continuing Russian aggression in Ukraine, the security risk perceived by the business

[11] https://economy-finance.ec.europa.eu/international-economic-relations/candidate-and-neighbouring-countries/neighbouring-countries-eu/neighbourhood-countries/moldova_en#macro-financial-assistance
[12] https://economy-finance.ec.europa.eu/document/download/9b90688d-9c2c-4012-9d65-3c990da79887_en?filename=Addendum_MoU_EU-MD%20.pdf

environment and potential investors is higher. As a result, 2023 was the first year in the last two decades when the Moldovan economy has not fully recovered from the previous year's recession.

The data reveals that in Q1 2024[13], about 61% of firms faced limitations in economic activity. The main limitation was insufficient market demand (reported by 30.4% of respondents). Business activity was also negatively influenced by the lack of skilled labour (22.4%), financial problems (20.6%) and consequences of the war in Ukraine (14.3%).

In terms of the economic restructuring, the period of 2013-2023 was characterized by decreasing share of GDP of some sectors - agriculture, real estate transactions, and industry, while increasing share of trade, transport, storage, and information technology (IT) services. The main sectoral developments in 2013-2023 were as follows:

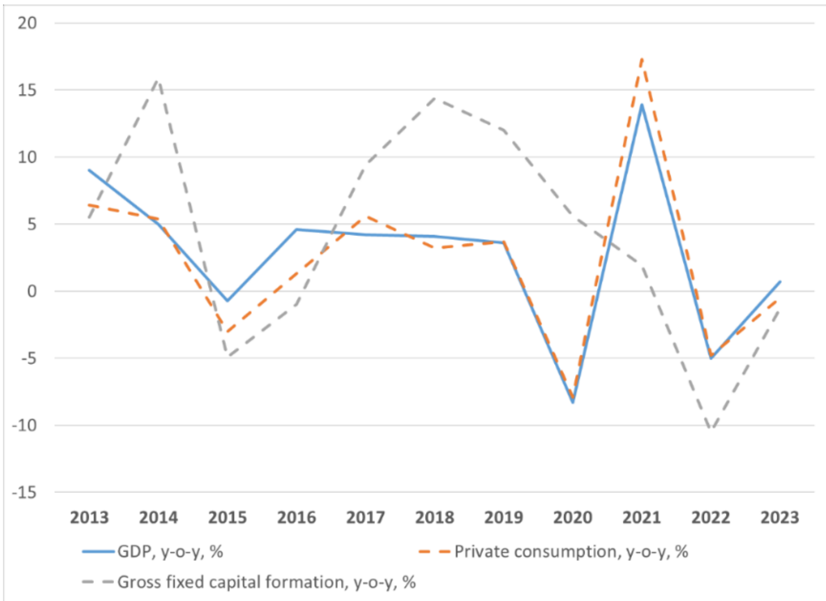
- The share of the trade sector in GDP increased from 13.7% to 16.5% due to an increase in the share of organized trade and the gradual legalization of unregistered trade, but also due to a decrease in sales through markets and an increase in sales through retail networks and company stores.
- The share of industry in GDP has declined from 14.9% in 2013 to 11.2% in 2023 at a time when a good part of Moldovan industrial products was characterized by low productivity and competitiveness. In 2013-2023, the export capacity of the industry grew much faster than its value-added generating capacity, which revealed a specialization in low value-added components of the global value chains.
- Agriculture was increasingly exposed to the effects of climate change, which significantly influenced growth outcomes. Thus, after years of drought (2012, 2015, 2020, 2022), agricultural activities brought strong compensatory increases, decisively influencing the growth outcome one way or the other. Compared to 2013, the share of agriculture in GDP fell by 4 percentage points to 7.6%.
- IT was the best-performing sector. With the electronic communications sector in decline, the ICT sector's share increased from 4.8% in 2013 to 6.7% in 2023. The existence of a preferential business tax regime[14] for the IT sector has led to its significant growth.

On the expenditure side, over the period 2013-2023, gross fixed capital formation had a higher average annual growth rate (4.3%) compared to the dynamics of private consumption (2.4%). This trend also reveals a lower dependence on remittances and slightly better exploitation of domestic growth resources. At the same time, being a small open economy, external shocks and crises spread rapidly through the economy. This trend has become even more pronounced in the early 2020s as Moldova has become even more integrated into the international markets through agricultural products and some branches of industry (e.g. automotive, textiles).

Moldova remains an economy with a trade deficit with the rest of the world, although between 2013 and 2023 the gap between exports and imports slightly narrowed. Thus, if in 2013, the negative net export constituted -31.5% contribution to GDP, in 2023, the given value has been reduced to -24.1% contribution to GDP.

[13] https://statistica.gov.md/en/trends-in-economic-development-in-the-second-quarter-of-2024-9557_61179.html
[14] https://mitp.md/p/web/webHome

FIGURE 1. GDP, PRIVATE CONSUMPTION AND GROSS FIXED CAPITAL FORMATION, Y-O-Y, %



Source: NBS data

The crises and related uncertainty in 2020-2023 have also had an impact on the distribution of value added to the economy. On the consumption component, there has been a slight reduction in the share of private consumption, but also an increase in public consumption, reflecting the state intervention to mitigate the ongoing crises. Thus, while in the period 2016-2019, the contribution of government consumption to GDP was 14.7%, in the period 2020-2023 this share increased to 17.4%. On the other hand, the investment component suffered from the effects of the Russian invasion in Ukraine and high inflation. Thus, while in 2020 and 2021 the rate of investment in the economy (calculated as the ratio of gross fixed capital formation to GVA) amounted to 28.8% and 28.1% respectively, in 2022 and 2023 this indicator fell successively to 25.7% and 22.8% respectively.

In 2022 both exports and imports of goods and services made the highest shares in GDP (41.2% and, respectively, 70.9%). This is due to the intensification of trade flows with Ukraine, which, after restricting access to ports, has redirected trade and supplier routes, through companies from other countries, including from the Republic of Moldova. On the other hand, the 5.1% increase in exports in 2023 paralleled by a 5.1% decline in imports has led to a contribution of net exports to GDP of up to -24.1%, compared to -29.7% in 2022.

TABLE 1. GDP-RELATED INDICATORS, Y-O-Y

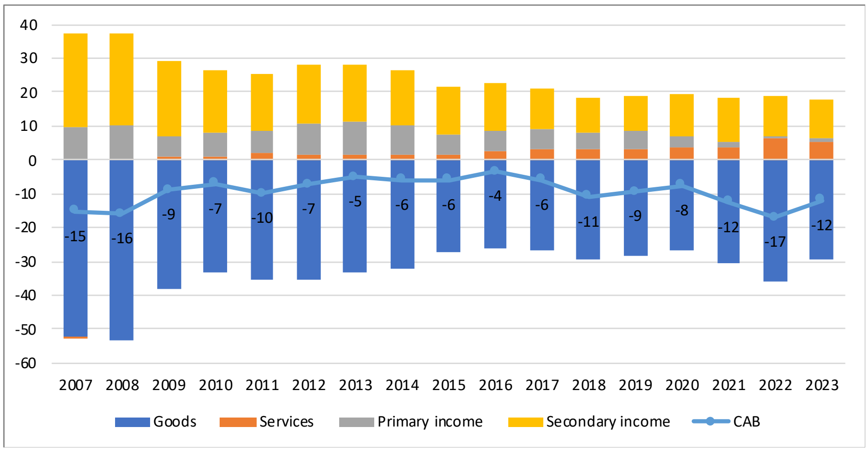
Gross domestic product	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real growth rate	3	7.8	-6	7.1	5.8	-0.6	9	5	-0.7	4.6	4.2	4.1	3.6	-8.3	13.9	-5	0.7
Consumption	3.9	5.7	-6.9	7.3	7.7	0.9	5.3	4.4	-2.4	1.5	5	2.8	3.7	-5.8	14.8	-2.4	0.5
Private	3.6	5.8	-8.1	9.2	9.3	0.9	6.4	5.4	-3	1.3	5.6	3.2	3.7	-7.9	17.3	-4.8	-0.5
Public	5.3	5	-2	-1.1	0.3	0.7	-0.7	-2.1	-1.4	0.7	1.1	-0.3	0.5	4.4	3	10.7	6
Gross fixed capital formation	25.5	2.2	-30.9	17.2	12.7	1.9	5.5	15.9	-4.9	-1	9.4	14.4	12	5.6	1.9	-10.5	-1.3
Net Exports of goods and services																	
Exports of goods and services	10.5	3.4	-12.1	13.7	29.8	-0.1	12.7	0.9	2.6	9.3	11.1	4.1	8.2	-14.9	17.5	29.7	5.1
Imports of goods and services	14.6	2.9	-23.6	14.3	22.4	2.7	5.6	3.1	-3.4	2.6	10.6	8.4	6.2	-9.5	21.2	18.2	2.2
Nominal GDP (billions of Moldovan lei)	53.4	62.9	60.4	86.3	98.8	105.5	119.5	132.0	146.7	159.0	176.0	189.1	206.3	199.7	242.1	274.5	300.5
Nominal GDP (billions of U.S. dollars), current prices	4.4	6.1	5.4	7.0	8.4	8.7	9.5	9.4	7.8	8.0	9.5	11.3	11.7	11.5	13.7	14.5	16.5

Source: NBS data, authors calculation

3.2.2 Balance of payments: current account; financial account

Moldova is a small open economy, with the ratio of external trade in goods and services to GDP oscillating around 90% in the last decade (95% in 2023), which makes it particularly vulnerable to economic and political shocks and fluctuations. Since its independence, Moldova has always recorded current account deficits (-12% to GDP in 2023), entirely caused by the goods balance, while services, primary and secondary income recorded surpluses (Figure 2). Shocks such as the GFC, the local banking crisis (2015), and the Covid-19 pandemic caused the current account deficit to shrink, but for bad reasons (contraction of final consumption and investment, bottlenecks in value chains and sudden trade barriers). The start of war in Ukraine in 2022 triggered a worsening of Moldova's current account, driven primarily by terms of trade shocks.

FIGURE 2. CURRENT ACCOUNT BALANCE AND MAIN COMPONENTS (% RATIO TO GDP)

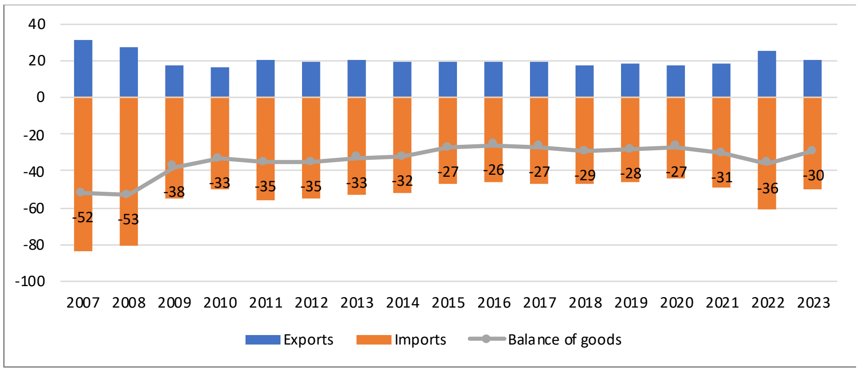


Source: IMF

Note: Data before 2009 are not fully comparable to later data. 2007-2008 BOP data according to BPM5 (1993), 2009-2023 BOP data according to BPM6 (2009). 2007-2009 GDP according to SNA 1993, 2010-2023 GDP according to SNA 2008

The trade in goods deficit has been around 30% as a ratio to GDP during the last 10 years (29.5% in 2023) with no significant improvements. Exports of goods averaged at approximately 20% as a share of GDP (20.7% in 2023), and imports of goods – around 50% (50.3% in 2023) (Figure 3). The growth in both exports and imports in 2022 was primarily driven by re-exports (mostly mineral fuels re-exported to Ukraine). The growth in imports of goods was also caused by a substantial hike in prices, particularly for fuels and fertilizers (overall, import prices went up by 18% on average, while export prices grew by 12% as against 2021).

FIGURE 3. GOODS EXPORTS, IMPORTS AND BALANCE (% RATIO TO GDP)

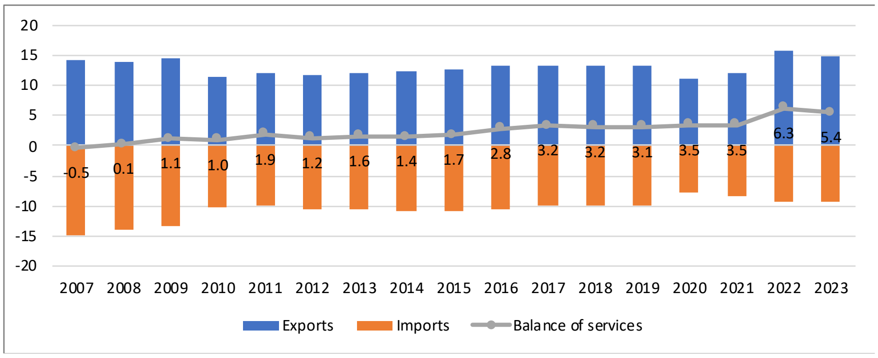


Source: IMF

Note: FOB prices for both exports and imports. Data for 2007-2008 include goods for/after processing, data starting from 2009 do not include goods for/after processing.

On the other hand, it appears from the BOP data that the role of services in Moldova's external trade is growing, with services accounting for 41.6% of total exports of goods and services, and 15.7% of total imports (2023). Moldova is a net exporter of services and the services surplus has increased from 1.1% of GDP in 2009 to 5.4% in 2023 (Figure 4). The increase in services exports recorded in 2022 was mainly connected with travel services, the exports of which grew because of a large inflow of Ukrainian refugees. However, the main driver of services exports growth over the last years was the IT sector.

FIGURE 4. SERVICES EXPORTS, IMPORTS, AND BALANCE (% RATIO TO GDP)

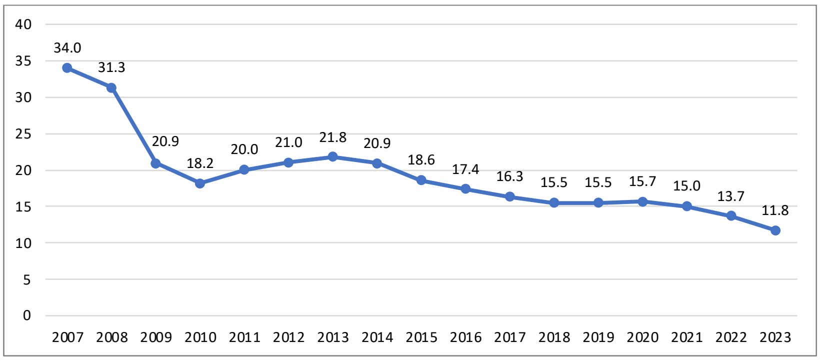


Source: IMF

Note: Data for 2007-2008 do not include manufacturing services on physical inputs owned by others, data starting from 2009 include manufacturing services.

At the same time, Moldova's reliance on remittances is fading: if personal remittances received from abroad by Moldovan residents reached 34% of GDP in 2007, then in 2023 they only amounted to 12% (Figure 5). Before 2022, this dynamic was caused by a more rapid pace of GDP growth, as remittances increased in USD nominal terms between 2017 and 2021. In 2022 and 2023, remittances decreased both in relative and absolute terms.

FIGURE 5. PERSONAL REMITTANCES (% RATIO TO GDP)

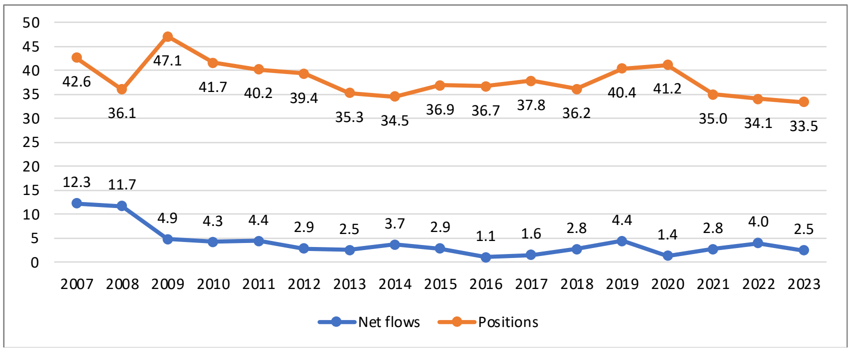


Source: IMF

Note: Data before 2009 are not fully comparable to later data.

The dynamics of FDI inflows fluctuated over time and reflected the impact of all major crises mentioned above (Figure 6). The growth in FDI inflows recorded in 2022 resulted from a large reinvestment of earnings by commercial banks with foreign capital, who reported unusually high profits on the back of high interest rates and earnings from currency exchange operations (which resulted from both Ukrainian refugees exchanging money and Moldovan population buying foreign currency in a panic over the war in Ukraine)[15]. Similar developments continued in 2023, but at a smaller scale as interest rates went down. Despite new inflows, the accumulated stock of FDI as a ratio to GDP is slowly going down (from 47.1% in 2009 to 33.5% in 2023), because of a more rapid pace of GDP growth (while the FDI stock in USD at the end of 2023 was 2.2 times larger than at the end of 2009, the nominal GDP expressed in USD grew 3.0 times from 2009 through 2023).

FIGURE 6. DIRECT INVESTMENT LIABILITIES, NET FLOWS AND STOCKS AT YEAR-END (% RATIO TO GDP)



Source: IMF

Note: Data before 2009 are not fully comparable to later data.

[15] https://www.expert-grup.org/media/k2/attachments/MEGA_24_EN_c.pdf

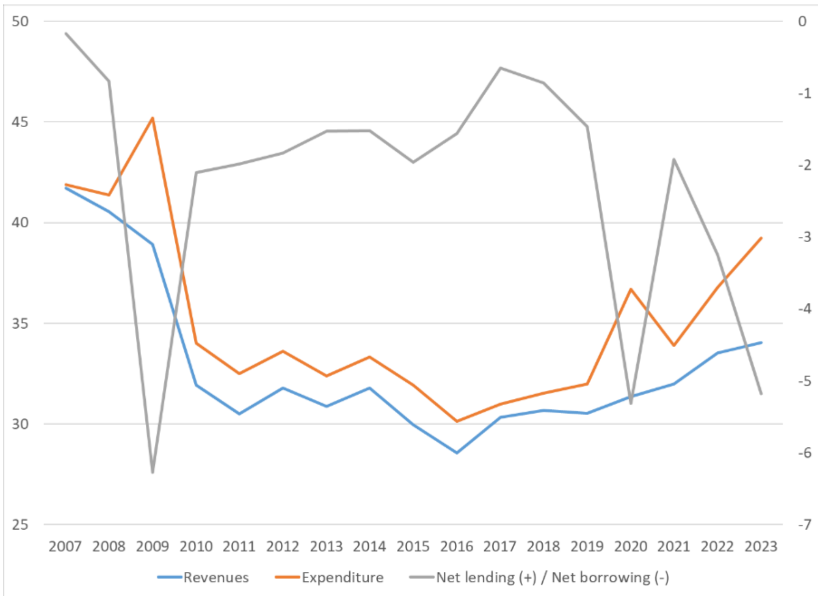
3.2.3 Fiscal situation: structure of the general government, fiscal deficit, public debt

According to Article 26 of Law no. 181 of 25 July 2014 on public finance and fiscal responsibility, the NPB of Moldova (NPB is similar to the definition of general government) includes the state budget, the state social insurance budget, the compulsory health insurance funds, and the local budgets. The state budget represents the totality of revenues, expenditures and sources of financing intended for the performance of the functions of the central public authorities, except for the functions of the public social insurance system and the compulsory health insurance system, as well as for establishing relations with other budgets. The state budget is administered by the Ministry of Finance. In 2023, revenues amounting MDL 102.3 billion were accrued to the NPB. Compared to 2022, nominal revenues increased by 11.8%. On the expenditure side, the NPB was executed of MDL 117.9 billion. Compared to the previous year, nominal expenditure increased by 17.4%. The execution of the NPB in 2023 ended with a deficit of MDL 15.6 billion or at the level of 5.2% of GDP.

The dynamics of Moldova's public finances over the last two decades can be conventionally divided into 3 stages:

1. Until the crisis of 2008-2009 - during the 2000s the government took advantage of the favourable macroeconomic environment and carried out a continuous expansion of public spending relative to economic potential. Thus, in 2009 the maximum share of public spending in GDP was reached (45.2%). Also, in 2009, due to the global financial crisis (GFC), Moldova had the highest budget deficit to GDP - 6.3%.
2. The period 2010-2019 - after the 2009 crisis, a process of optimization of public spending, a slight reduction in the overall fiscal pressure and prudent management of public finances followed. Thus, in the period 2010-2019, the share of public expenditure in GDP amounted to 32.3%, while the reported budget deficit of GDP did not exceed 2% in any of the years.
3. The 2020-2023 period - the series of crises – such as the Covid-19 pandemic, the Russian aggression in Ukraine, the galloping inflation in 2022, especially the increase in energy tariffs, exacerbated by the Russian Federation's blackmail on Moldova - have required intervention by the government to mitigate shrinking population's purchasing power, but also to ensure a minimum of social cohesion. As a result, the share of public spending in GDP increased from 32% in 2019 to 39.2% in 2023. The expansion in public spending during this period was financed by an increase in public debt rather than higher taxes. Respectively, in 2020 and 2023, the budget deficit relative to GDP exceeded 5%.

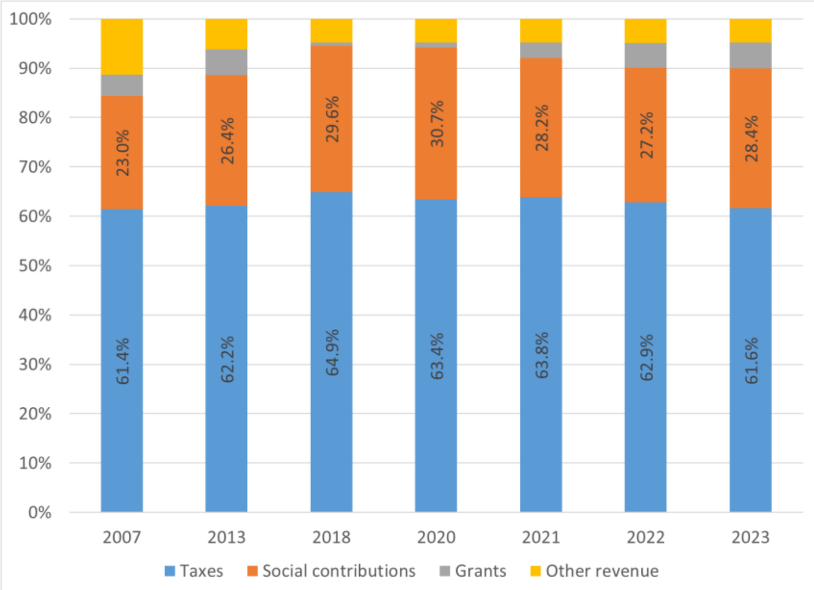
FIGURE 7. REVENUE, EXPENDITURES (THE LEFT AXIS), NET LENDING/BORROWING AND FINANCING OF THE GENERAL GOVERNMENT (THE RIGHT AXIS), % OF GDP



Source: IMF's Government Finance Statistics (GFS) databases

The revenue structure of the national public budget is dominated by taxes and duties, which in 2023 made up 63.6% of total public revenues. This share has fluctuated insignificantly over time. The specificity of the Moldovan system of taxes and duties is that it is largely based on indirect taxes. Broadly speaking, Moldova raises most of its revenue from taxes on consumption and labour, and to a lesser extent from taxes on capital and property. In 2023, the share of indirect taxes in the structure of tax revenues amounted to 67.8%. Income tax from both individuals and legal entities generates 26.4% of tax revenues. At the same time, property taxes account for only 1.3% of tax receipts. This set-up in tax collection makes the country more vulnerable to external shocks, with indirect taxes having higher volatility. As a rule, falls in imports, consumption, or the MDL appreciation affect budget revenues. At the same time, for 2007-2023, the average gross nominal wage in the economy increased every year regardless of economic growth. Accordingly, the constant nominal increase in the average wage brings higher receipts to the budget from income tax and contributions (social and health insurance). The share of social contributions in the NPB's revenue in 2023 was 28.4%. These revenues come from the taxation of labour remuneration through social insurance contributions and health insurance premiums. These resources are also the main sources of revenue for the State Social Insurance Budget and the Mandatory Health Care Insurance Fund. In 2021-2023, the share of foreign grants in public revenues increased significantly from 1% in 2020 to over 5% in 2022 and 2023. This situation is primarily explained by the efforts of the country's development partners, particularly the EU, to help Moldova cope with the shocks generated by an increase in energy tariffs.

FIGURE 8. REVENUE STRUCTURE OF THE NATIONAL PUBLIC BUDGET (GENERAL GOVERNMENT)



Source: IMF's Government Finance Statistics (GFS) databases

The structure of public expenditure is dominated by social protection with a share of 38.2% in 2023 and an increasing trend over the years with the population ageing and the effects of emigration. The Pension Fund is currently not fully covered by social security contributions. Respectively, the difference is financed by other general taxes. Spending on education and health accounts for 15.9% and 13.5% of total public expenditure respectively. The smallest shares are allocated to environmental protection (0.4%) and national defense (1.3%), although after the Russian aggression in Ukraine, the defense budget has increased, in 2023 being twice as high in nominal values as in 2021.

Table 2. Public expenditures structure of the Republic of Moldova, functional classification, % of total

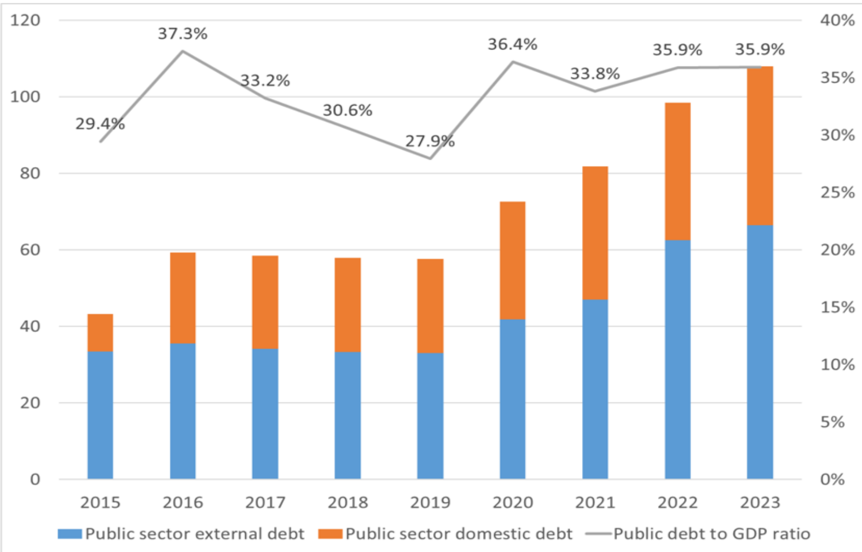
Name	2007	2013	2018	2020	2021	2022	2023
General public services	12.4	9.7	9.3	9.0	8.3	8.2	9.8
Defense	1.2	0.9	1.1	0.9	1.0	0.9	1.3
Public order & safety	5.7	6.3	7.3	6.5	6.2	6.3	5.7
Economic affairs	13.4	11.9	11.1	12.1	10.4	10.8	9.6
Environment protection	0.6	1.0	0.2	0.3	0.4	0.4	0.4
Housing & community amenities	3.4	3.0	2.6	2.4	2.7	2.9	3.2
Health	11.7	13.5	13.1	13.6	16.5	13.6	13.5
Recreation, culture, & religion	2.5	2.6	2.5	2.4	2.4	2.3	2.5
Expenditure on education	19.1	18.2	17.6	17.2	16.3	15.8	15.9
Social protection	30.0	32.8	35.2	35.5	35.9	38.8	38.2

Source: IMF's Government Finance Statistics (GFS) databases, Ministry of Finance

Over the last years, there has been increasing pressure on current expenditure and a more limited space for capital expenditure. Thus, in the period 2020-2023, the average share of capital expenditure in total public expenditure amounted to 9.9%, and the share of current expenditure - to 90.1%. In the analyzed period, the highest share of capital expenditure was recorded in 2014 - 21%.

Moldova's public debt has always been within sustainable range[16], even in times of various internal and external shocks. In 2023, the public debt-to-GDP ratio amounted to 35.9%. The highest ratio of public debt to GDP was recorded in 2016 after the Government converted into public debt the guarantee issued to the NBM for the emergency loan that covered the "Billion Theft"[17]. Later, the public debt-to-GDP ratio fell to 27.9% between 2016-2019. After 2019, however, with the need to manage subsequent crises and finance higher budget deficits, this trend was reversed. In terms of public debt servicing, the highest pressure on the budget was felt in 2023, because of high inflation and tightening of monetary policy; the debt servicing costs to state budget revenues reached 8.9%, while in previous years this indicator was at the level of 4-5%.

FIGURE 9. PUBLIC DEBT (MDL BILLION) AND PUBLIC DEBT TO GDP RATIO



Source: Ministry of Finance, author calculations

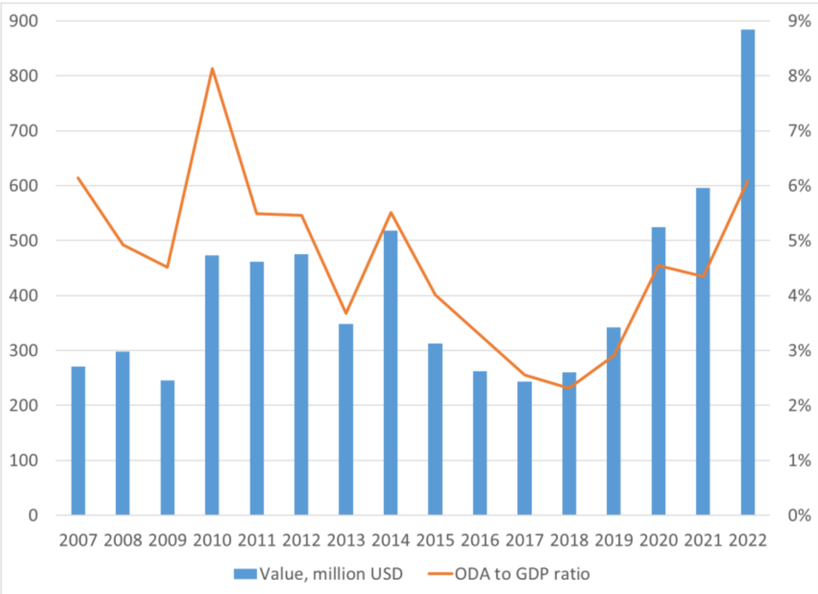
3.2.4 External financial aid flows and their impact on the balance of payments and budget

Net official development assistance (ODA) and official aid received[18] has been an important factor in social and macroeconomic stabilization for the Republic of Moldova, as the country has remained vulnerable to external shocks. Statistical data available up to 2022 show that in absolute terms Moldova benefited from the highest volume of external assistance in 2022 of 884.5 million

[16] As stated in the Medium-Term Government Debt Management Programs
[17] https://www.bnm.md/en/content/nbm-published-detailed-summary-second-investigation-report-kroll-and-steptoe-johnson
[18] ODA consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25% (calculated at a rate of discount of 10%). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in the Part II of the DAC list of recipients: more advanced countries of Central and Eastern Europe (CEE), the countries of the former Soviet Union, and certain advanced developing countries and territories.

USD. This situation is explained by several factors: i) the Republic of Moldova was helped by development partners in the context of persistent inflation and Russian energy blackmail, in particular by compensating part of the utility bills for the population, ii) after the Russian aggression in Ukraine, Moldova had one of the largest inflows of Ukrainian refugees to the size of the population, and several international organizations came with the support, iii) the government has firmly declared itself as pro-European, managing to advance in the process of European integration. As a share of GDP, Moldova received the highest volume of foreign assistance in 2010 - 8.1% of GDP. On the other hand, the smallest inflows of foreign assistance were recorded in 2016-2019, when the government was controlled by the Democratic Party and the oligarch Vladimir Plahotniuc. This was a way for development partners to react to deviations from democracy and the rule of law.

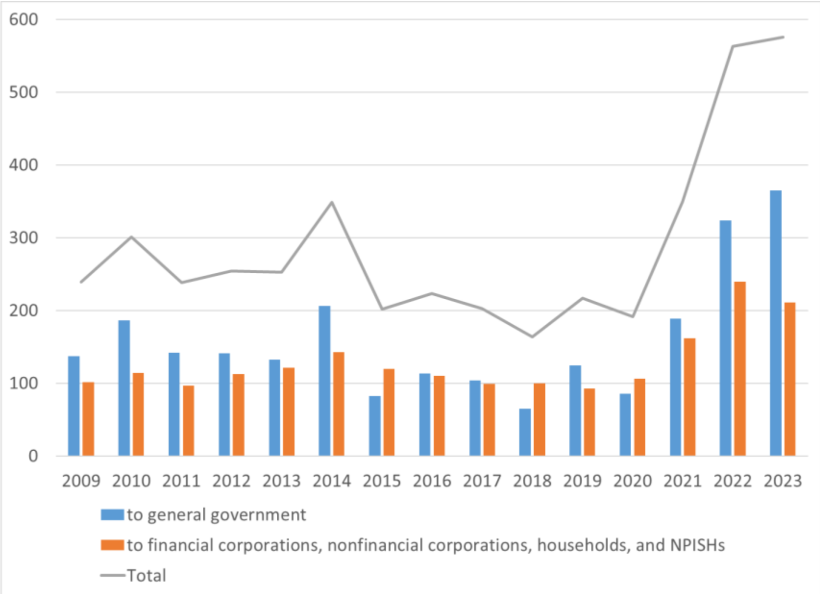
FIGURE 10. NET ODA AND OFFICIAL AID RECEIVED (CURRENT US$)



Source: World Bank, World Development Indicators

The impact of foreign assistance is notable both on the public budget and on the balance of payments. For example, in 2022 Moldova benefited from grants amounting to MDL 4.5 billion (USD 240 million or 1.7% of GDP) and net inflows of external borrowing amounting to MDL 13.1 billion (USD 693 million or 4.8% of GDP), of which a good part was on concessional terms. This allowed the government to expand some expenditures to support the population, but also to keep debt servicing at a reasonable level, given the substantial increase in market interest rates with the tightening of monetary policies in all countries. ODA financing is also important since Moldova does not yet have access to the external capital market, and no Eurobonds have been issued. The impact is also sizeable on the balance of payments, helping to narrow the current account deficit. The Balance of Payments data on international cooperation show that Moldova received the most aid to both the government and non-government sectors in 2022 and 2023.

FIGURE 11. CURRENT INTERNATIONAL COOPERATION FOR MOLDOVA (GRANTS, HUMANITARIAN AID, INCLUDING IN THE FORM OF GOODS - FOOD, CLOTHING, MEDICINES, ETC.), USD MILLION



Source: National Bank of Moldova. Note: NPISHs - Non-Profit Institutions Serving Households

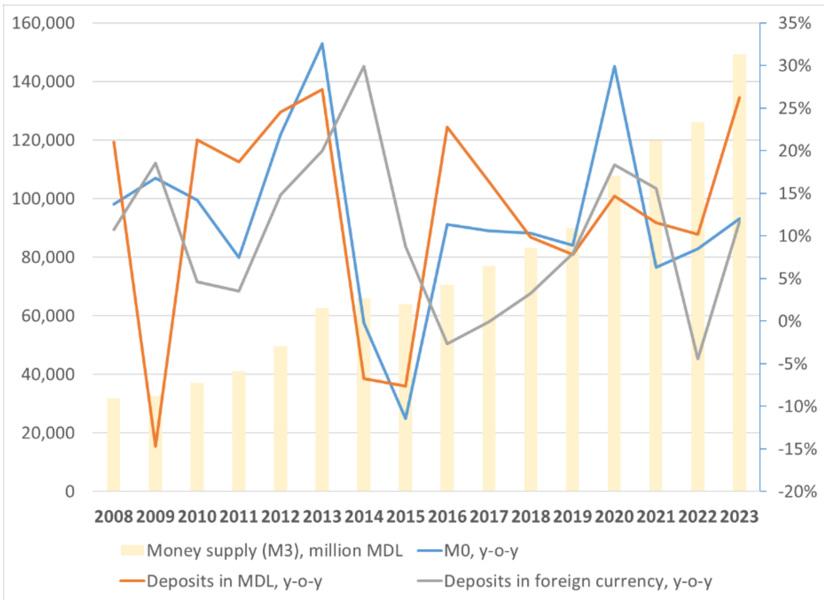
3.2.5 Monetary policy and inflation

In the Republic of Moldova, the evolution of monetary indicators is marked by the particularities of the transmission mechanism of monetary policy decisions on the economy and the financial sector, but also by the performance of the economy. In 2023, the money supply (M3) amounted to MDL 149.2 billion or 49.6% of GDP. Even though there were some fluctuations in individual years, for the period 2008-2023 the average annual growth rate of M3 (10.9%) was almost identical to the nominal growth rate of GDP (11.0%). The highest annual increases in money supply (M3) occurred in the years of monetary policy easing when the base interest rate applied by the NBM reached the lowest levels (2013, 2020, 2023). In contrast, in 2015 money supply (M3) declined by 3.0% and in 2022 it increased by only 5.3%, both periods witnessing monetary policy tightening.

The dynamics of M3 components look in the following way:

- Currency in circulation (M0) is increasing in conditions of low interest rates when the population and firms are more inclined to consume and invest.
- Deposits in domestic currency are increasing when monetary policy tightens and deposit rates in MDL become attractive. For example, in 2023 the stock of deposits in domestic currency increased by 26.2% and in 2016 by 22.7%.
- Exchange rate volatility reflects the degree of uncertainty in the economy. For example, in 2022 the stock of foreign currency deposits fell by 4.5%. This was partly due to the withdrawal of deposits following the panic in the first months of the Russian aggression in Ukraine, but also due to other depositors' decisions to convert deposits from foreign currency into MDL due to better returns.

FIGURE 12. MONEY SUPPLY (M3) AND ITS MAIN COMPONENTS



Source: National Bank of Moldova, author calculations

In the absence of internal and external shocks, the NBM was successful in the implementation of the monetary policy strategy adopted in 2012 with the inflation target is 5% and deviations of +/- 1.5 percentage points). The exceptions were 2015 (effects of the "Billion Theft" crisis), 2022 and 2023 (several external shocks). In 2022 the annual inflation rate reached a record-high level for the analysed period - 28.7%, and in 2023 the average price increase amounted to 13.4%.

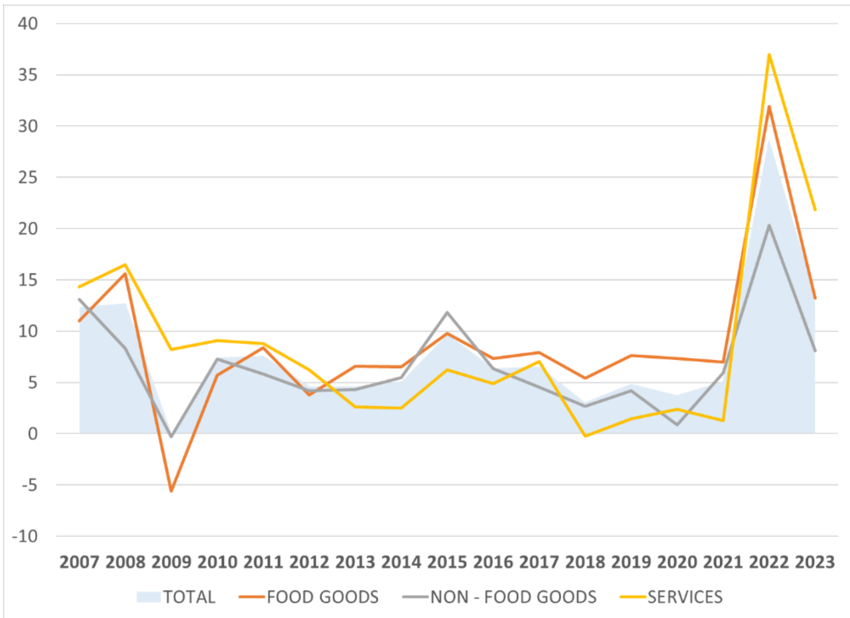
High inflation in 2022-2023 is explained by a combination of factors:

- High dependence of the economy on imports, which have become more expensive. The consumption structure is dominated by imported products (the VAT collected from imports is more than 2 times higher than the VAT collected domestically). As 2022 was marked by a significant increase in food and energy resource prices, the Moldovan economy had to absorb these shocks. In particular, the population was affected by the increase in utility tariffs of 77.4% in 2022 and 42.6% in 2023.
- Specific consumption structure dominated by foodstuffs. As a result of low per capita income and consumption habits, food products have a high share of the consumer basket. For example, in 2020 the share of expenditure on food and non-alcoholic beverages in the structure of a personal consumption expenditure was 43.9%, which is 3 times more than the average in the EU (14.8%). In such conditions, when international food prices increased and domestic food supply shrank (due to bad weather conditions), inflation in Moldova increased much more compared to other countries.
- The war in Ukraine has accelerated price increases. This occurred for several reasons: i) in 2021 the share of Moldova's imports from Russia, Ukraine and Belarus cumulatively amounted to 26%, the highest exposure to these markets in the region, ii) in addition to the imports from Ukraine, Russia and Belarus, a significant part of Moldova's imports from other countries went through the port of Odesa. Because of the lack of access to this logistical hub, many importers were forced to change import routes, which led to a substantial increase in logistical and transportation costs, which eventually translated into

higher prices for consumers, iii) the increase in aggregate demand due to the presence of Ukrainian refugees, but also iv) inflationary expectations, especially at the beginning of the war, when the population, fearing the creation of product shortages, started to buy massively different products to create reserves, and this behaviour led to higher prices.

- Small market size. The small size of the market, as well as limited access to finance, requires most importers to work with minimum stock levels. Respectively, the rapid depletion of stocks means that new prices on international markets are felt faster in Moldova than in other countries. This is one of the reasons why Moldova has absorbed inflationary shocks earlier than other countries, as is also the case for other small countries such as Estonia or Lithuania.

FIGURE 13. ANNUAL INFLATION RATE AND ITS DISAGGREGATION BY COMPONENTS



Source: National Bureau of Statistics

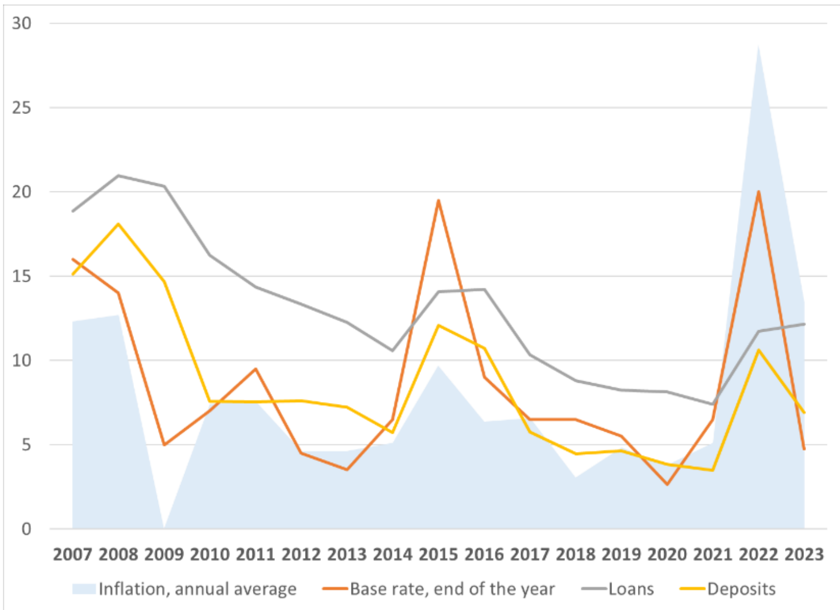
Reflecting inflationary trends, the NBM's monetary policy has generally been adequate. However, a challenge that remains is that monetary policy decisions are often taken with some lag to inflation forecasts. Empirical estimates[19] confirm that the NBM tends to make decisions, which react to current inflation developments (backward-looking policy) rather than anticipate the expected future developments (forward-looking policy). Thus, although monetary policy reacts appropriately to current inflationary trends, there are some shortcomings in promoting a forward-looking monetary policy to react in advance to inflationary risks. The slow transmission of monetary policy decisions (three to four quarters), due to capital market dysfunctions and the low level of financial intermediation creates another challenge for the central bank.

The strongest monetary policy interventions by the NBM took place in 2015 and 2022, when for some time the base interest rate exceeded average lending and deposit rates. Except for periods of shocks, interest rates in the economy follow a downward trend. For example, the average lending interest rate in the banking sector in MDL shrank from 21% in 2008 to an annual low of 7.4% in 2021.

[19] https://www.expert-grup.org/ro/biblioteca/item/2356-trei-elemente-pentru-solu%C8%9Bia-problemei-infla%C8%9Biei&category=7

Even if this trend reversed in 2022 and 2023, the situation returned to normal in 2024 with interest rates close to the 2021 level. Another specific feature of the Moldovan economy is that the spread between loan and deposit rates shrinks to minimal in periods of monetary policy tightening, while in periods of monetary policy easing the spreads become wider.

FIGURE 14. INTEREST RATE DEVELOPMENTS, %



Source: National Bank of Moldova; Notes: Loans refers to weighted average nominal interest rates on newly granted loans, Deposits – refers to weighted average interest rates on newly attracted deposits

3.3 Primary sources of macroeconomic fragility and key macroeconomic risks

3.3.1 Macroeconomic outlook

Various national and international institutions (Ministry of Economic Development and Digitalization - MDED, IMF, WB, EBRD, EU) estimate that in 2024 Moldova will record an economic growth of around 2.5%, but the figures from Q3-24 suggest that is could be even lower. For 2025, the economic outlook is a bit more optimistic, with real GDP growth of around 3.5%. As the European Commission report shows[20], the economic recovery is expected to gain pace in 2025, though the outlook for real GDP has been less than expected in the Autumn 2023 Economic Forecast, reflecting the lingering effect of the inflation shock on household incomes in 2022 and 2023. Continued employment growth and higher incomes through rising real wages and pensions are set to continue boosting private consumption in 2024 and 2025. Investment growth is expected to be supported by looser monetary policy. Nevertheless, subdued business sentiment and lower planned public investment are likely to moderate investment growth in 2024. Investment is expected to grow more strongly in 2025, with a sharp increase in the planned public investment. The current account deficit will remain at high levels, though with a modest decline (10-11% of GDP

[20] EU Commission - European Economic Forecast. Spring 2024 - https://ec.europa.eu/economy_finance/forecasts/2024/spring/spring_forecast-2024_md_en.pdf

in 2024 and 9-10% in 2025), on the grounds of positive prospects in export. At the same time, the general government deficit as a share of GDP is projected to decline from around -5% in 2024 to -3% in 2025. As for inflationary expectations, forecasts point to an average increase in consumer prices within the range targeted by the NBM.

TABLE 3. ECONOMIC OUTLOOK INDICATORS FOR MOLDOVA

	2024	2025	2026
Real GDP Growth			
Ministry of Economic Development and Digitalization (MEDD)[21]	2.5	3.0	3.3
IMF[22]	2.6	3.7	4.4
World Bank[23]	2.2	3.9	4.5
EBRD[24]	3.5	3.7	
EU Commission[25]	2.9	3.7	
Consumer Price Index			
Ministry of Economic Development and Digitalization (MEDD)	4.7	4.5	5
IMF	5	5	5
EU Commission	4.7	4.7	
Current account balance (as a % of GDP)			
IMF	-11.2	-10.7	
EU Commission	-10.1	-9.1	
General government balance (as a % of GDP)			
EU Commission	-4.9	-2.6	

Source: MEDD, IMF, WB, EU, EBRD

3.3.2 Domestic weaknesses

The Moldovan economy has a series of domestic vulnerabilities, which limit economic growth. The main vulnerabilities are:

- Fiscal space remains limited - increasing public investment requires strengthening the collection of budget revenues.
- Public investment in sustainable infrastructure is much lower than in the EU countries, which represents a constraint on economic growth. The NPB assigns very high shares to current expenditures, while investment-oriented expenditures remain fragmented and characterized by chronic under-execution.
- An overly complex framework of strategic documents, characterized by poor coordination between processes and institutions and without a clear financial envelope, has compromised the achievement of many development objectives.

[21] MEDD - Macroeconomic forecast - June 2024, https://mded.gov.md/en/economic-indicators/macroeconomic-forecast/
[22] IMF - Fifth Reviews Under the ECF and EFF - June 2024, https://www.imf.org/en/News/Articles/2024/06/28/pr24255-moldova-imf-concludes-the-5th-reviews-under-ecf-eff-and-1st-review-under-rsf
[23] World Bank - Global Economic Prospects - June 2024, https://openknowledge.worldbank.org/server/api/core/bitstreams/6feb9566-e973-4706-a4e1-b3b82a1a758d/content
[24] EBRD - Regional Economic Prospects - May 2024, https://www.ebrd.com/what-we-do/economic-research-and-data/rep.html
[25] EU Commission - European Economic Forecast. Spring 2024 - https://ec.europa.eu/economy_finance/forecasts/2024/spring/spring_forecast-2024_md_en.pdf

- Underdeveloped financial intermediation inhibits the structural changes in the economy towards higher added value sectors/ industries.
- The national economy suffers from a chronic lack of investment resources, aggravated by limited access to bank credit or other forms of financing, which translates into technological underdevelopment.
- A shrinking labour force increases the risks to the sustainable development of the economy. Two decades of population decline in the Republic of Moldova have left a negative imprint on the country's socioeconomic development prospects. Currently, Moldova still enjoys a demographic dividend[26]. However, in the coming decades, the ration between pensioners and working age population will increase significantly, putting more pressures on public finances and the economy in general. At the same time, there is a skill mismatch between the demand and supply of the labour force.
- Limited capacities to attract foreign direct investment (FDI): as a share in GDP the FDIs in Moldova are lower compared to other countries in the region.[27]
- The slow pace of justice reform and related structural reforms compared to societal expectations.

3.3.3 External challenges related to the war in Ukraine

Continued regional geopolitical instability and related crises, mainly the Russian military invasion of Ukraine, have a strong impact on the Republic of Moldova, namely:

- Security threats and decline in investor confidence. Apart from Russia and Belarus (parties to the conflict), Moldova is Ukraine's only non-NATO neighbor. This makes Moldova vulnerable given the decline in investor confidence and investment activity. The situation is also exacerbated by the hybrid threats to which Moldova is constantly exposed from the Russian Federation.
- Increasing dependence on external assistance. The large inflow of Ukrainian refugees (relative to the population) has required a substantial effort from Moldova, with increasing pressure on the budget and social services. The international community has stepped in with a significant increase in external assistance, but this may have long-term implications and may become a challenge if not properly managed.
- Trade Disruptions. With the lack of access to Odessa port, many importers were forced to change import routes, which led to a substantial increase in logistical and transportation costs, which eventually translated into higher prices for consumers. The outlook for exports cannot be neglected too. In 2021 Moldova's cumulative exports to Russia, Ukraine and Belarus amounted to 13.9%. Even though trade relations with Ukraine have intensified since the outbreak of the war, Moldova has lost part of its exports to Russia and Belarus (increased logistics costs, and difficulties in financial operations through the financial system of Russia and Belarus).
- Pressure on Moldova's infrastructure and logistics. Following the Russian invasion of Ukraine, Moldova's infrastructure is under enormous pressure. The situation has led to an infrastructure deficit, and transportation and logistics costs for producers have increased

[26] A demographic dividend occurs when the working-age population accounts for 55% or more of the total population. For Moldova the indicator is 59.6% in 2022.
[27] https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx

substantially, even by two to three times. This has occurred due to the loss of access to the Black Sea for Ukrainian companies, which have largely redirected trade flows over land, including through the Republic of Moldova.

- Energy dependence. By 2021 Moldova was almost 100% dependent on the Russian Federation for energy. On the gas market, with the increase in prices after the beginning of the war, and insufficient Russian supply from the fall of 2022, Moldova had to purchase gas on the international markets. At the same time, after the Russian attacks on Ukraine's energy infrastructure, Moldova found itself unable to import electricity from Ukraine. It had to purchase electricity from the EU which had major implications for domestic tariffs. Moreover, only the synchronization in record time in March 2022 of the Ukrainian and Moldovan energy systems with the European energy system (ENTSO-E) allowed to avoid electricity blackouts.

4. Financial sector stability in Moldova

4.1 Introduction

The development of the financial sector of Moldova has mirrored the overall reform trajectory of the country, subject to fits and starts and with halting progress made until recently. Throughout the early 2000s, in the run-up to the GFC, the sector (and the country) suffered from a patchwork regulatory framework, the prevalence of corruption (including oligarchs supported by Moscow), a public sector which took up far too much of the economy, and a permissive macroeconomic environment which contributed to prudential issues in the banking sector.[28] As with other countries (Armenia and Georgia), Moldova's financial sector is dominated by banks, which comprise approximately 90% of the financial sector's total assets as of 2023, but were an even larger portion of the sector in the 2000s. Delayed bank privatization and difficulties in the country's political institutions, alongside the country's exposure to Russia via exports and reliance on energetical resources, continued to depress banking sector reform, while an underdeveloped regulatory framework, lack of confidence in the country's macroeconomic and political outlook, and the prevalence of the informal economy have kept lending volumes low.[29]

The 2007-09 GFC resulted in a spike in non-performing loans (NPLs) and a decline in remittances, upon which the economy relies heavily; however, unlike in other countries, there was no nationalization of banks and only one (Investprivatbank) had its license withdrawn following its state of insolvency.[30] However, continued geopolitical tensions, a lingering reliance on Russia , and a home-grown banking scandal (see section 4.2) continued to harm the financial sector in the pre-Covid era, even as Moldova began to make strides in protecting its financial institutions. As a result, the sector has improved its standing substantially since the pre-GFC era and in particular following the 2014-15 banking crisis, with an emphasis placed on resilience, financial stability, legitimate shareholders and transparency, and diversification. This emphasis has manifested in better prudential regulation and a far more attentive regulator – aided by the signing of the Association Agreement with the EU in 2014, which committed Moldova to align with Basel III principles - although the fallout from the bank scandal of 2014-15 continues.

Financial system resilience has further been tested by the recent macroeconomic and geopolitical environment generated by the Russian invasion of Ukraine. Nevertheless, the banking sector remained resilient in terms of financial and prudential indicators. The capital adequacy ratio stands well above minimum requirements (30% at the end of 2023) which provides substantial reserves to withstand potential adverse conditions. Liquidity has improved as compared to the pre-war level

---

[28] See, for example, World Bank (2022). *Moldova - Public Finance Review: Fiscal Policy for Resilience and Growth*. Washington DC: World Bank, available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099061223084028856/p1752140cd75d502509d1c007891a4f9cfc.

[29] IMF (2001). Republic of Moldova: Recent Economic Developments. Washington, DC: International Monetary Fund, available at: https://www.elibrary.imf.org/view/journals/002/2001/022/article-A002-en.xml.

[30] Clichini, D., & Gribincea, C. (2015). Implications of the financial crisis on the soundness of the banking system in the Republic of Moldova: Implicaciones de la crisis financiera en la solidez del sistema bancario dela República de Moldavia. Aestimatio: The IEB International Journal of Finance, (10), 88-109.

(the liquidity coverage ratio (LCR) was 282.3% in 2023) providing an adequate buffer to deal with potential significant deposit withdrawals. In prompt response to the negative macroeconomic outlook, and as a measure of caution, the NBM has relied on its macroprudential instruments, adding a systemic risk buffer of 2 percentage points for banks' exposures to household lending, which was revoked in late 2023. .

In general, the banking sector in Moldova remains vulnerable to external shocks, especially to Russian aggression and the invasion of Ukraine – and especially if there are military incursions by Russia originating in the unrecognized statelet of Transnistria. While Moldova attempts to continue on the path to Europe, following the EU's directives and harmonizing legislation, external shocks such as the spread of the invasion of Ukraine into Moldova could have severe repercussions for the entire financial sector. Additionally, as a country highly dependent on remittances, external shocks that reduce the flow of money into Moldova – and thus into Moldovan financial institutions – also have the ability to harm the financial sector.

4.2 The Banking Sector – Key Data

As elsewhere in Europe, as well as in the former Soviet space, banking makes up the largest share of Moldova's financial sector. From a high of 96.32% of all financial sector assets in 2013, banking sector assets have declined to 87.80% of financial sector assets in 2023, still a dominant position but one which is trending downward as a share of the sector other financial instruments become available (see below). In absolute terms, bank assets have increased considerably since the end of GFC in 2010, standing at 364% of their 2010 level in 2023 but spread over fewer commercial banks (11 banks in 2023 versus 15 in 2010). Nevertheless, financial intermediation measured in terms of bank assets-to-GDP remains low (Figure 11). For the structure of assets, the largest share is held by credit and advances (around 40% at the end of 2023), but this has decreased compared to its pre-war level. Indeed, the share of required reserves held in accounts with the NBM has grown from 19% to 26% due to higher reserve requirements.

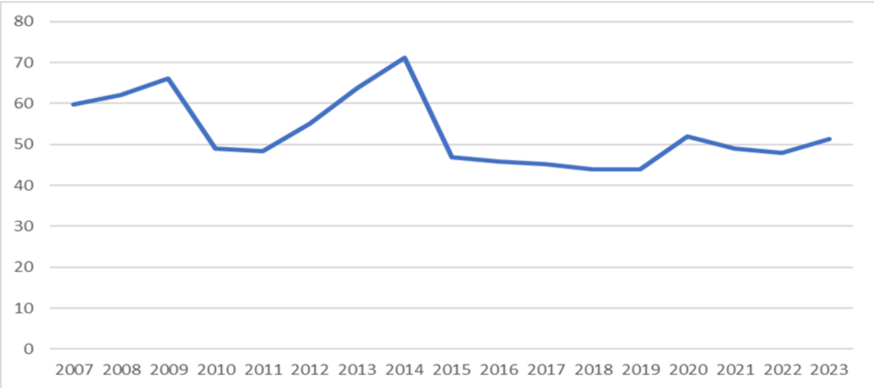
Deposits have also increased, albeit they are at a lower trajectory since 2014; as Figure 12 shows, there was a clear structural break as a result of the banking scandal in Moldova (see more on this below), but deposits resumed an upward trend in 2016 and now stand at historical highs. Deposits in the national currency comprise about two-thirds of total deposits, and this share has consolidated in recent years.

These deposits are spread across 11 commercial banks, with four in particular denoted as systemically important by the NBM: Moldova-Agroindbank (MAIB), Moldindconbank, Victoriabank, and OTP Bank. The entire sector has become more concentrated since the GFC, with the assets in the top 5 banks as a percentage of all assets rising from 63.76% in 2007 to 86.3% in 2023 (although the share of the top 3 has decreased somewhat, from a high of 70.64% of all assets in 2021 to 68.25% in 2023).[31] Private bank MAIB stands heads and shoulders above the rest in terms of its position in the country, with 34% of assets in the banking sector (over MDL 52 billion) in 2023, as well as 38% of all outstanding loans in the country. It is followed by Moldindconbank, with approximately 20% of all assets in 2023, and then Victoriabank and OTP Bank, each with about 14% of all assets in the

[31] This concentration in the banking sector appears set to continue, as in 2023 Victoriabank announced the acquisition of BCR Chișinău

banking sector. Each of these banks has seen slow but steady growth in their assets since the GFC, with a marked jump from 2022 to 2023; this has corresponded with growing profitability, as return on assets (ROA) in the entire sector climbed to 2.8% in 2023 (lower than its highs pre-GFC but a welcome change from the scandal year of 2014, when ROA was a mere 0.85%). This performance has turned somewhat in the early months of 2024, with the entire banking system showing a decline in profit of 34.9% in January and February 2024.[32] This comes on the heels of the end of the monetary policy easing cycle started by the Central Bank in February 2023 (when the base rate stood at 17%, while at the end of February 2024, it was down to 4.25%). The decrease in the base rate has led to a drop in the yields banks receive from central bank certificates and government securities and in the remuneration of the required reserves that banks hold at the NBM.

FIGURE 15. TOTAL ASSETS IN THE BANKING SYSTEM TO GDP, %



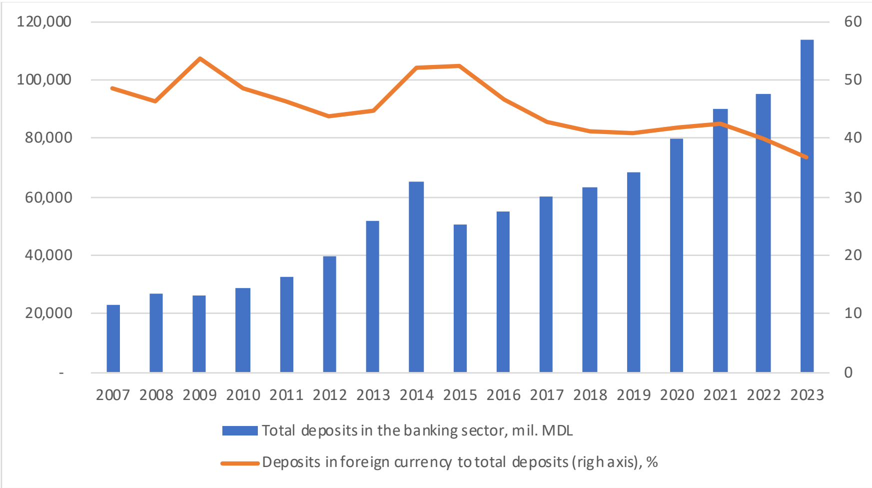
Source: National Bank of Moldova

Despite substantial progress achieved so far in terms of the banking governance in Moldova, a continuing risk stems from the erosion of these fundamentals via corruption. From its earliest financial sector assessments, the IMF noted that the corporate governance in the banking sector was opaque, with little sense of ownership; in their 2008 assessment, the IMF pointed out that even systemically important banks had unclear ownership, creating a vulnerability for the sector.[33] This vulnerability was exploited catastrophically in 2014-15, as a scandal involving three of the largest banks – state-owned Banca de Economii, Unibank, and Banca Socială - resulted in US$1 billion being stolen from the banking sector, the equivalent of approximately 12% of Moldova's GDP (in nominal terms) at the time. Worse from the point of view of the economy and for regulators, the money was quickly removed into various companies, including those in jurisdictions that do not implement strict financial transparency standards and there has been little recovered. The scandal led to severe economic repercussions, political instability, and public outrage, with many high-ranking officials implicated and ongoing investigations.

[32] "MAIB is the only bank that built up profit in first two months of year," *Infotag News Agency Moldova,* 22 March 2024, available at: https://www.infotag.md/finances-en/314737/.

[33] IMF (2008). *Republic of Moldova: Financial System Stability Assessment—Update*, IMF Country Report No. 08/274, August, available at: https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Republic-of-Moldova-Financial-System-Stability-Assessment-Update-22252.

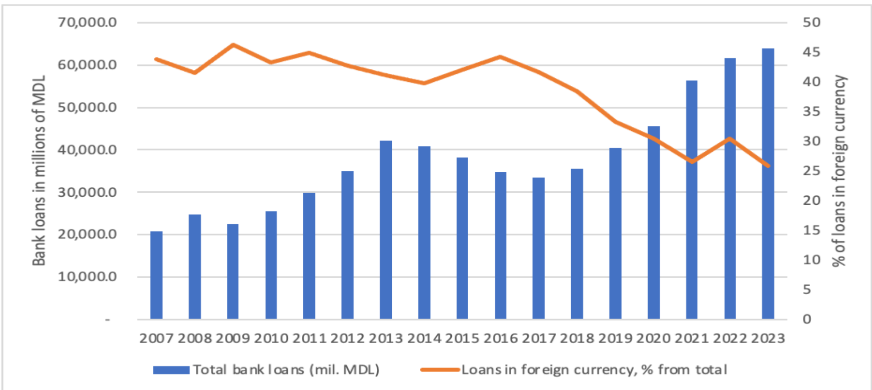
FIGURE 16. DEPOSITS IN THE MOLDOVAN BANKING SECTOR, VALUE AND % IN FOREIGN CURRENCY



Source: National Bank of Moldova

The effect of the 2014 bank fraud was, first and foremost, a substantial decline in bank lending. However, since bottoming out in 2017, loan volumes have nearly doubled, with a corresponding drop in the demand for loans in foreign currency (perhaps due to a sense of risk easing in the Moldovan economy but also due to the decrease in the rate differential between the MDL-denominated and foreign currency-denominated loans). The largest amount of this lending was given to businesses engaged in trade, standing consistently in the range of 22% of all loans over the past 6 years, but there has been an increase in mortgage lending as well: from a mere 7.87% of all loans in 2017, mortgage lending now (2023) makes up 20.78% of bank lending. When coupled with consumer credits – making up 17.53% of all lending in 2023 – it is easy to see that consumer lending in Moldova outpaces lending to any industrial sector (and is growing). Indeed, mortgages appear to remain a safe bet for Moldovan banks, with an NPL ratio of just 2.3% in real estate lending in 2023, as compared to 15.4% in agriculture and 12.2% in manufacturing.[34]

FIGURE 17. LOANS IN MOLDOVA, VALUE AND % IN FOREIGN CURRENCY



Source: National Bank of Moldova

[34] Based on NBM data , available at: https://www.bnm.md/bdi/pages/reports/drsb/DRSB12.xhtml.

In the last decade, the increase in the stock of credit was surpassed by the increase in stock of deposits, thus the ratio between loans and deposits decreased from 0.81 in 2013 to 0.56 in 2023, pointing on the one hand to low credit penetration, and, on the other hand, to high liquidity. Despite this consistent buffer of liquidity, a structural challenge for the intermediation process is the maturity mismatch of resources. Banks overwhelmingly attract short term-resources (about 76% of total new deposits attracted in 2023 were with a maturity of up to one year), limiting bank capacity to grant long-term loans (in 2023 only 7% of the volume of credits granted to businesses had a maturity of 5 years or over).

The ownership structure of banks in Moldova has also been affected by the 2014-15 banking crisis – but for the better - as the market share of foreign-owned banks jumped to 67% in 2019 on the backs of two major sales: Victoriabank has been majority owned by Romania's Banca Transilvania since 2018, while MAIB has been 41% owned since 2019 by a consortium consisting of the European Bank for Reconstruction and Development (EBRD), Invalda (a Baltic asset management company), and Horizon Capital, a private equity group based in Switzerland.[35] Moldindconbank also had 78.21% of its shares purchased in 2019 by Bulgarian company "Doverie-Invest" EAD, making all of the four top banks in Moldova substantially or partly foreign-owned (OTP Bank is a Hungarian bank based in Budapest). This shift towards foreign ownership has solved the issue of opaque governance but has introduced a small bit of risk as well: given that much of the investment in Moldovan banks comes from CEE banking institutions (rather than Western European banks), their performance may thus be contingent on home country idiosyncrasies. Given the ongoing invasion of Ukraine, these banks may be an amplification mechanism rather than a dampening one, given that all of CEE is facing the shock of Russian aggression together. However, on the whole, and given Moldova's experience in the past, this may be a small price to pay to overcome the more substantial corporate governance issues which plagued the sector in the past – as well as a way to have transparency as a bulwark against Russian interference in a vital sector.

Finally, another risk to consider in the Moldovan banking sector is the fact that the country is highly dependent on remittances from Moldovans abroad (mainly in Romania and Italy but also with sizeable portions on both sides of the conflict, that is in Russia and Ukraine). While remittances can be volatile, their volatility has increased due to the Russian invasion: in 2022 and 2023 remittances (including remittances sent via informal channels) slightly drop down. As these remittances are mainly paid through the banking sector (although at a high cost, as the IMF noted in its 2022 financial sector assessment),[36] any external shock which decreases their flow or makes them unstable is likely to result in less revenue for the banks involved. At the same time, remittances often keep Moldovan households (especially rural ones) afloat in terms of consumption, acting as finance for consumer loans; a drop-off in remittances due to unfavourable external or internal conditions could then increase the risk to banks of an increase in NPLs, as consumers find they are unable to pay back their credit. Such an occurrence would likely act as a drag on the entire system, not only in terms of profitability but also in terms of being able to extend new lending.

The financial sector may also face other, longer-term challenges, such as the emphasis on climate/sustainable financing elsewhere in Europe. The NBM and Moldovan banks are at a very

[35] The EBRD also has a stake in Victoriabank.
[36] IMF (2022a). *Republic of Moldova Technical Assistance Report—Financial Sector Stability Review*. Washington DC: International Monetary Fund, available at: https://www.imf.org/en/Publications/CR/Issues/2022/02/07/Republic-of-Moldova-Technical-Assistance-Report-Financial-Sector-Stability-Review-512884.

early stage of preparedness to monitor, assess and address this type of risk. While the NBM is in the process of developing a sustainable finance taxonomy, other relevant regulations for financial sector participants are not yet in place to ensure an approach to climate risk consistent with other European regulators.

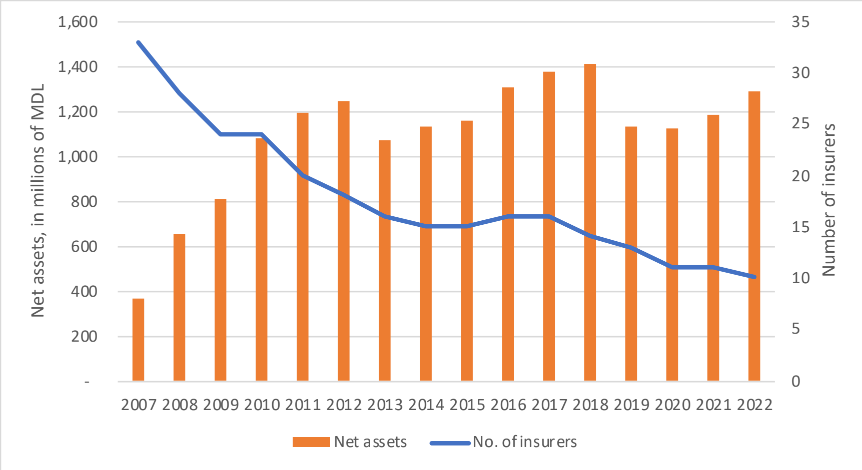
4.3 Non-banking Financial Institutions – Key Data

While the banking sector continues to hold the largest share of financial sector assets by far, the non-bank sector has begun to make inroads in recent years. As an example, among these institutions, the insurance industry has been fairly steady since the bank fraud scandal (Figure 14), with the number of insurers declining since 2007 and the net assets in the industry having increased substantially after 2016 reaching 1.6 billion MDL at the end of 2023 (or 4.9 million MDL in total assets that make about 3% of the assets in the entire financial sector). Most of the insurance industry is domestically owned, although the two largest providers are from Austria, and, according to the IMF, "product range and penetration rates are low by European standards."[37] Overall, the insurance sector in Moldova is marked by a high level of concentration: in 2023, the five largest insurers owned 80% of total assets and collected 75% of the total volume of gross written premiums. The sector became more concentrated, as the license of one insurer was withdrawn in 2022 and another one was withdrawn in 2023, leaving only 9 active insurance companies.

In terms of products, the insurance sector remains underdeveloped with limited offerings, and much of the insurance market is dominated by compulsory motor insurance, while only one offeror has life insurance available. International organizations such as the IMF and the World Bank have advised that the regulation for insurance firms, including an increase in solvency requirements, needs to be implemented, a tightening which may result in either further consolidation of the industry or more foreign penetration. In the recent period, some progress has been achieved, with the adoption of secondary legislation on licensing, qualified shareholders, and fit-and-proper and prudential requirements for insurance companies. Nevertheless, there is still work to be done to complete the remaining regulations for the Solvency II directive of the EU. And yet, despite these supervisory issues, the position of remaining insurers has improved: profits increased steadily over the past six years, and 2023 saw an increase in profit of 3.1 times over 2022, while there was a steady increase in the amount of gross written premiums (which doubled over 2015 and 2023 and increased by 19% just in 2023 alone).

[37] *Ibid.*, p. 11.

FIGURE 18. THE INSURANCE INDUSTRY IN MOLDOVA



Source: National Commission for Financial Markets of Moldova, annual reports

While the insurance market is slowly growing in terms of its coverage, it is faring better than capital markets in the small country: the Moldova Stock Exchange (MSE) took a battering in the GFC and has had a long climb back. Market capitalization in the MSE only reached its pre-crisis levels sometime in 2019, and it now (2023) stands at 155% of its 2007 level, approximately 4.1% of Moldovan GDP (far lower than the average capitalization/GDP ratio of 76.38% at the global level).[38] However, this period also saw a large number of firms drop off the exchange, with only 81 issuers trading securities on the exchange in 2023, a far cry from the 392 who were present in 2008. This decrease is explained by the tightening in admission requirements to trading on the regulated market once the Law on the Capital Market was amended in 2015. Similarly, the secondary market for securities has been on a steady decline but took a nosedive in 2022, with the value of transactions standing at just 29% of its level in 2021 (and just 11% of its high in 2019). Nevertheless, in recent years there can be observed a diversification of financial instruments traded on the capital market. For example, in 2021, bonds issued by local public authorities were traded for the first time, while in 2023 corporate bonds were available for the first time in 20 years.

Given the small size of the MSE, it poses little risk to financial stability apart from the reality that it should be utilized more as a source of funding for business – that is, the concentration in the banking sector gives it oversize weighting in financial risks, and a more diversified financial sector would also better spread risks more evenly.

Perhaps the brightest spot in the non-bank realm for achieving this diversification is coming from non-bank credit organizations (NBCOs), which have somewhat helped to fill the hole in lending in the immediate aftermath of the bank scandal of 2014. Much of this lending has been to households, growing from around 2% of consumer lending in 2010 to approximately 30% ten years later.[39] As in other, more developed markets, these NBCOs have taken advantage of a lighter regulatory touch to pursue more aggressive strategies, with many NBCOs having far less capital or assets than banks which do comparable lending. The relative profitability of these organizations also has attracted

[38] Based on 74 countries (not including Moldova) in the year 2022, statistic taken from theGlobalEconomy.com and based on World Bank data: https://www.theglobaleconomy.com/rankings/stock_market_capitalization/.

[39] IMF (2022b). *Republic of Moldova: Selected Issues*. Washington, DC: International Monetary Fund, available at: https://www.elibrary.imf.org/view/journals/002/2022/061/article-A003-en.xml.

more resources into the industry, which then led to more credit being extended. While such an approach in another market might cast doubts on the overall stability of the financial sector – regulatory arbitrage is often a worrisome issue for central banks and/or financial regulators – the relatively small size of NBCOs in the entire financial sector (not to mention the Moldovan economy) means that there is less of a worry about destabilization. At the same time, the fact that many loans through NBCOs are of short duration (typically between one and two years) means that these exposures are not held on the books of the organizations for very long.

Indeed, the difficulties in securing loans from the formal banking sector (noted by the IMF) call for more and varied types of financial intermediation, which NBCOs have been providing, and which have been targeted precisely at the segments of the population which would have problems in working through banks.[40] Loans granted by NBCOs represent a tool meant to increase financial inclusion, targeting customers with a higher level of risk than those who access traditional banking products. Nevertheless, these intermediation services do not come without consequences. NBCOs provide financing at much higher costs than banks do (the estimated interest rate of double that of banks), exacerbating problems of consumer indebtedness. To address this issue, a regulation on "responsible lending" was adopted in 2022, which introduced tighter creditworthiness assessment regulations and limits for debt service-to-income level both for banks and NBCOs. This regulation also set ceilings for interest rates and fees, and penalties for consumer loans; not surprisingly, as a result of these measures, the growth of credit offered by NBCOs to households has slowed.

4.4 Financial regulation

The regulatory structure of Moldova – and its potential shortcomings – have already been hinted at, but they have played a central role in the development of the financial sector over the past two decades. Moldova pursues a two-tier regulatory approach. The NBM is the key regulator for the financial sector, overseeing the banking sector and since recently (mid-2023) nonbanking financial institutions, taking over this attribution from the National Commission on Financial Markets (NCFM), which remains in charge of regulating and monitoring the capital market only. The previous dual supervisory system split between the NBM and NCFM meant a different approach to the regulation of NBCOs versus banks, allowing for regulatory arbitrage and also preventing a clean view of all systemic risks in the economy. Thus, the new regulatory structure came in response to the need for an integrated macroprudential supervisory framework due to a strong interconnection of the non-banking financial market sectors with the banking sector. The unification of the regulation and supervision of these sectors aims to support the NBM in its mandate of ensuring financial stability, enabling a transparent, calibrated and risk-based supervisory process.

The banking crisis of 2014-2015 changed the desultory approach to financial stability and resulted in enhanced regulatory structures for banks in particular. From the NBM side, apart from possible involvement in the banking scandal itself, prudential supervision of Moldovan banks has improved substantially since the 2014-15 crisis, with the years immediately following spent implementing and improving the stress testing system, matching medium-term plans with banking sector needs, and

[40] Ibid.

raising the overall professionalism and engagement of NBM with the sector.[41] Since that time, the NBM has instituted a prudential oversight system which is nearly in line with EU standards and instituted mandatory capital buffers in line with Basel III standards.

Also, in reaction to the banking scandal of 2014-2015, a milestone was the adoption of the Law on Bank Recovery and Resolution in 2016. It creates an effective management framework to preserve financial stability, including via the Banking Resolution Fund. The fund is meant to ensure the application of resolution instruments to better protect depositors and minimise the reliance on government budget funds for such purposes (as was the case with bank fraud in 2014).

On the other hand, as the IMF notes, the political travails of Moldova continue to interfere with the enactment of some of the directives of the NBM, as its decisions are challenged in court fairly regularly.[42] This has been a consistent issue since the introduction of the new regulatory approach in 2016, proving that even independent central banks are never really "independent" of the political processes that spawn them.[43]

With the increase of financial products and services available in the country, consumers are also exposed to a range of risks. Starting with mid-2023, the NCFM has been assigned a broader mandate to safeguard consumers of financial services, solely in charge of supervision and settling customer claims related to financial services provided by banks, non-bank credit organizations, insurers and insurance intermediaries, payment service providers, and currency exchange units. This legislative amendment came to establish a clear line of enforcement, as the responsibilities in this area were fragmented in the past, being split between the NCFM, NBM, and also Consumer Protection and Market Supervision Agency.

[41] IMF (2016). Republic of Moldova: Financial System Stability Assessment. Washington DC: International Monetary Fund, available at: https://www.elibrary.imf.org/view/journals/002/2016/070/article-A001-en.xml.
[42] IMF (2022a), p. 16.
[43] Hartwell, C. A. (2019). On the impossibility of central bank independence: four decades of time- (and intellectual) inconsistency. *Cambridge Journal of Economics*, *43*(1), 61-84.

5. External economic relations

5.1 Overview of the country's trade and investment agreements

5.1.1 Commitments related to WTO membership

The Republic of Moldova has been a member of the WTO since 2001 and grants at least the MFN treatment to all of its trading partners. It is a party to the Information Technology Agreement and the Agreement on Trade Facilitation (ratified in 2016). Since 2016, Moldova is also a party to the Agreement on Government Procurement and accepted the Protocol Amending the TRIPS Agreement in 2015. Moldova has also endorsed the Buenos Aires Declaration on Trade and Women's Economic Empowerment.

5.1.2 Preferential trade agreements

The Republic of Moldova has free trade agreements (FTAs) with almost all its main trading partners. Moldova has bilateral free trade agreements with Armenia (effective since 1995), Kyrgyzstan (1996), Turkey (2016), the United Kingdom (2021), and Ukraine (2008)[44]. There are also multilateral FTAs: CEFTA (2007), CIS (2012), the Deep and Comprehensive Free Trade Area (DCFTA) as part of the Association Agreement between the Republic of Moldova and the EU (effective since 2014), EFTA (2024), GUAM (2003). Moldova also receives the Generalized System of Preferences treatment from Canada, Japan, Norway, Switzerland, and the United States[45].

5.1.3 Bilateral and multilateral investment agreements

In 2011, Moldova ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID Convention). The country also ratified the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Moldova is also a party to the Geneva European Convention on International Commercial Arbitration and the Paris Agreement relating to the application of the European Convention on International Commercial Arbitration. Since 1992, the Republic of Moldova has been a member of the Multilateral Investment Guarantee Agency, a part of the World Bank Group. Moldova has investment protection agreements in force with Austria (2002), Albania (2004), Azerbaijan (1999), BLEU (Belgium-Luxembourg Economic Union) (2002), Belarus (1999), Bosnia and Herzegovina (2008), Bulgaria (1997), Canada (2019), Czechia (2000), China (1995), Croatia (2007), Cyprus (2008), Estonia (2011), France (1999), Finland (1997), Georgia (1999), Germany (2006), Greece (2000), Hungary (1996), Israel (1999), Kyrgyzstan (2004), Kuwait (2004), Latvia (2000), Lithuania (2003), Montenegro (2015), Netherlands (1997), Poland (1995), Qatar (2013), Romania (1997), Russia (2001), Slovenia (2004), Slovakia (2009), Spain (2007), Switzerland (1996), Tajikistan (2003), Turkey (1997), Ukraine (1996), United Arab Emirates (2019), United Kingdom (1998), United States (1994), and Uzbekistan (1997)[46].

[44] http://rtais.wto.org/UI/PublicSearchByCrResult.aspx
[45] http://ptadb.wto.org/Country.aspx?code=498
[46] https://investmentpolicy.unctad.org/international-investment-agreements/countries/172/moldova-republic-of

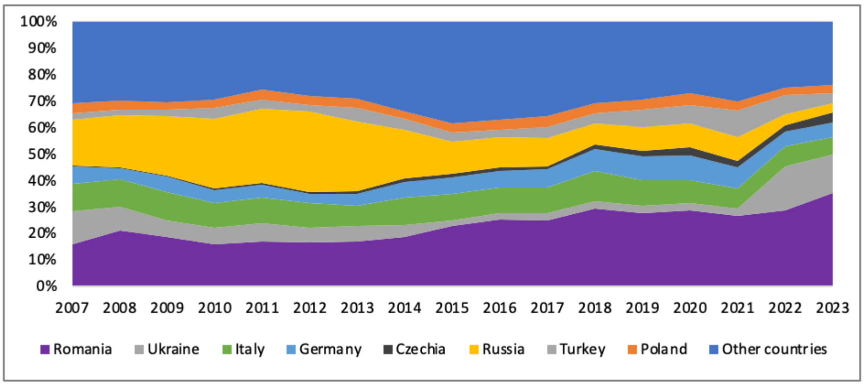
5.3 Fragility in trade in goods

5.3.1 Geographic structure of exports and imports

Currently, about two-thirds of Moldova's exports of goods go to the EU (65% in 2023), while the dependence on Eastern markets decreased. However, one of the main vulnerabilities of Moldova's foreign trade – excessive reliance on a small number of markets – persists even today. If in the past Moldova's exports were excessively concentrated on Russia with shares exceeding 30%, then today the role of the main export market belongs to Romania, to which 35% of goods exports were directed in 2023 (Figure 19). Within Moldova's exports to the EU, Romania absorbs more than half, and over 80% of goods exports to the EU are directed to only five countries (Romania, Italy, Germany, Czechia, and Poland). In fact, goods exports have become less geographically diversified in recent years, with Romania's share continuing to grow.

Although the share of Russia in Moldova's exports was not very large even before the war (9% in 2021), the reduction in exports to Russia (-31% in 2022 and -24% in 2023, y-o-y) caused disproportionate damage to businesses in some sectors[47]. One example is the export of fresh apples: before 2022, more than 95% of such exports went to Russia (USD 85 million in 2021). In 2022, the export of fresh apples to Russia went down by 23%, and then by 49% in 2023. Exporters partly switched to other countries; however, the total export of fresh apples was only 71% in 2023 compared to 2021. Another example is the export of pumps for liquids: in 2021, Russia absorbed half of such exports; in 2023, almost no pumps for liquids were exported to Russia (not as much for general reasons such as issues with logistics and payments, but mainly because pumps are considered to be double-use goods). The total amount of exports of pumps for liquids was not very large (USD 4 million in 2021). Nevertheless, pumps were among a few high-value-added export items of Moldova.

FIGURE 19. EVOLUTION OF THE STRUCTURE OF GROSS EXPORTS OF GOODS, BY MAIN COUNTRIES, %



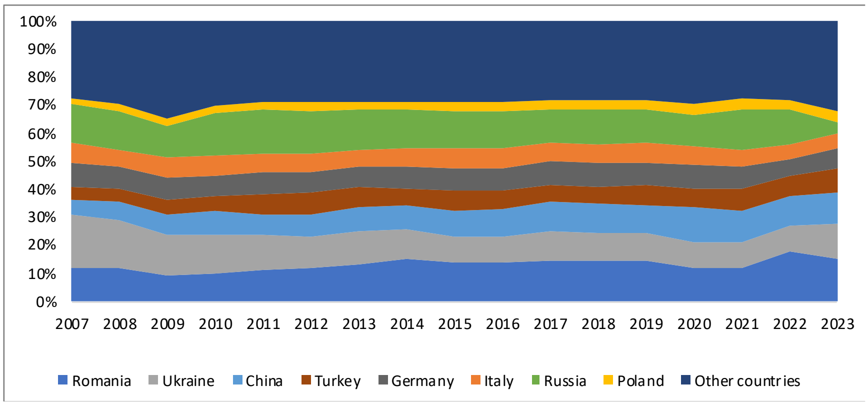
Source: UN Comtrade

Imports are more diversified geographically, with top-5 countries accounting for 55% of gross imports of goods (Romania 15%, Ukraine 12%, China 12%, Turkey 9%, and Germany 7%) in 2023

[47] https://www.expert-grup.org/ro/biblioteca/item/2312-propagarea-efectelor-economice-ale-crizei-regionale-de-securitate-asupra-republicii-moldova-%E2%80%93-o-evaluare-preliminar%C4%83

(Figure 20). The share of Russia in imports of goods remained high till 2022, averaging at around 12% in recent years, but it fell to 4% in 2023 as Moldova switched to other suppliers of natural gas.

FIGURE 20. EVOLUTION OF THE STRUCTURE OF GROSS IMPORTS OF GOODS, BY MAIN COUNTRIES, %



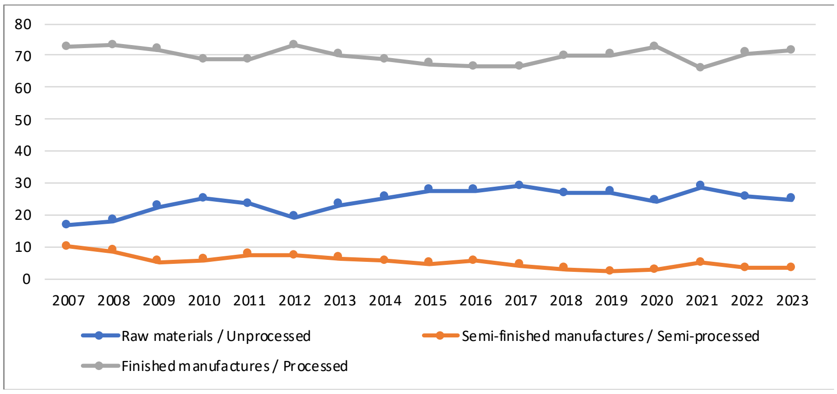
Source: UN Comtrade

The decrease in trade with Russia disrupted the supply of inputs for some sectors, such as agriculture. In addition to rising fuel prices, farmers were also affected by reduced access to fertilizers: in 2021, more than 80% of imports of mineral or nitrogenous fertilizers to Moldova came from Russia. Although the total value of nitrogenous fertilizers imports increased in 2022, that was entirely due to the price effect. In physical terms (tons), imports of nitrogenous fertilizers from Russia halved in 2022, causing the total import of them to decrease by 8%.

5.3.2 Structure of exports and imports by the level of processing (MTN categories)

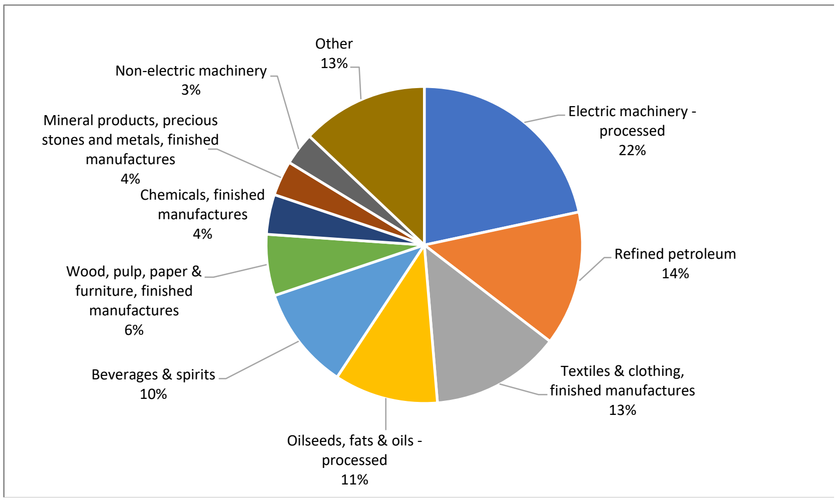
In Moldova's gross exports' structure, finished/processed goods prevail with a share of 72% (2023), followed by raw materials / unprocessed goods (25%), and semi-finished / semi-processed goods (3%) (Figure 21). Despite a relatively large share of finished/processed goods in total exports, they represent a low level of technological sophistication: electric machinery (mainly cables and wire) – 22% of total exports of finished goods, refined petroleum – 14% (re-exports), textiles & clothing – 13%, processed oilseeds, fats & oils – 11%, beverages & spirits – 10% etc. (Figure 22). Imports are also dominated by finished/processed goods (74% in 2023), followed by raw materials / unprocessed goods (13%), and semi-finished / semi-processed goods (13%), with no significant changes in patterns over time. Among imported finished/processed goods, the largest share belongs to refined petroleum – 20%, electric machinery – 13%, chemicals – 12%, transport equipment – 11%, non-electric machinery – 11% etc. (Figure 23).

FIGURE 21. STRUCTURE OF GROSS EXPORTS BY THE STAGES OF PROCESSING (MTN CATEGORIES), % OF TOTAL



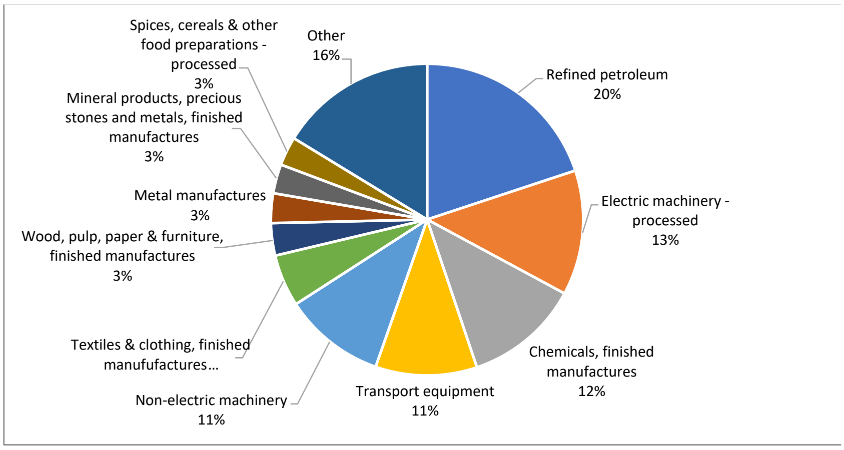
Source: UN Comtrade

FIGURE 22. STRUCTURE OF FINISHED/PROCESSED GOODS EXPORTS (MTN CATEGORIES), 2023, %



Source: UN Comtrade

FIGURE 23. STRUCTURE OF FINISHED/PROCESSED GOODS IMPORTS (MTN CATEGORIES), 2023, %

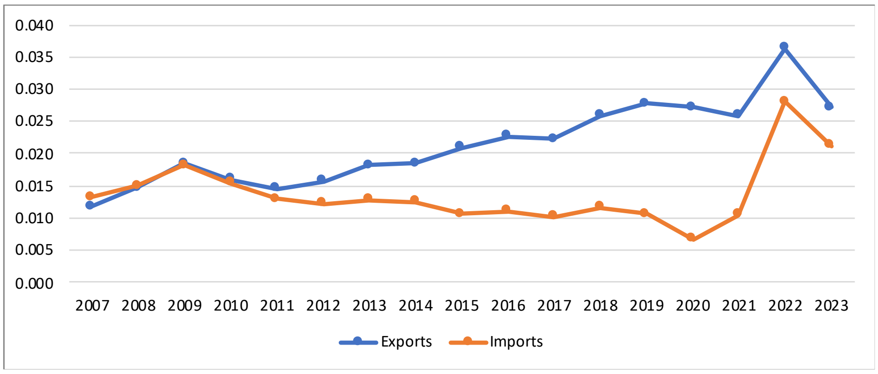


Source: UN Comtrade

5.3.3 Concentration of exports and imports at the product level

From the point of view of concentration at product level, the diversification of exports is also limited. The start of the war in Ukraine in 2022 has made Moldova's trade even less diverse, although there was some improvement in 2023 (Figure 24). Moldova's largest export category is agricultural products and foodstuffs – 43% in 2023, followed by machinery and equipment (mostly cables and wirings after processing) – 18%, mineral products (mostly re-exports of fuels) – 12%, textiles (mostly clothing after processing) – 9%, and furniture – 4%. Top import categories include mineral products (mostly fuels and energy) – 23% in 2023, machinery and equipment – 17%, agricultural products and foodstuffs – 15%, chemical products (mostly medicaments and fertilizers) – 10%, vehicles and transport equipment (mostly motor cars) – 8%.

FIGURE 24. HERFINDAHL-HIRSCHMAN PRODUCT CONCENTRATION INDEX FOR EXPORTS AND IMPORTS



Source: Calculated based on UN Comtrade data (all 6-digit HS codes)

5.3.4 Indexes of trade similarity/complementarity with potential trading partners

Moldova's exports display a high similarity with Ukraine both in terms of products exported and partner countries, with export similarity indices (ESI) reaching 43.4 and 52.2 in 2022, respectively. Apart from Ukraine, Moldova's main competitors in world markets include:

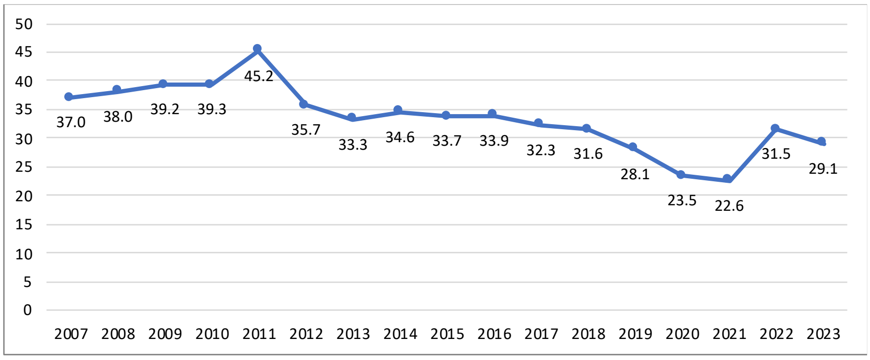
- Bulgaria, where significant similarity is observable in terms of trading partners (ESI = 51.7) and a sizeable overlap in products exported (ESI = 21.6);
- Serbia, with country ESI = 46.2 and product ESI = 22.3;
- Romania, with country ESI = 43.6 and product ESI = 20.5.

In terms of Moldova's exports complementarity with the imports of other countries, data suggest a considerable degree of match with the structure of imports of such EU countries as Denmark (TCI = 52.3 of 100 in 2022), Netherlands (51.7), Portugal (51.6), Latvia (51.5), Germany (51.3), although actual exports are significant only to Germany (accounts for 5.5% of Moldova's exports). Among non-EU members located in relative geographic proximity, the export profile of Moldova highly matches the import profile of the following countries: Tunisia (53.9), Andorra (51.9), Armenia (51.8), Israel (51.6), Montenegro (50.5), none of which ranks high among actual importers of Moldovan goods, which may indicate that Moldova and these countries could potentially gain from increased trade. As for imports, Moldova's imports structure highly matches the exports structure of countries like Netherlands (TCI = 77.2 in 2022), Croatia (75.5), Canada (74.0), Lithuania (73.4), Greece (70.0), United States (69.8), Estonia (69.2), India (68.8), Belgium (68.0), and Bulgaria (67.6), although just India is among top-10 sources of Moldova's actual imports.

5.3.5 Treatment of re-exports

There was a surge in re-exports in 2022, which almost doubled (+92% as against 2021). Re-exports decreased somewhat in 2023 (-14% as against 2022), but remained large as compared to pre-war years, with a share of 29.1% in Moldova's gross exports of goods (Figure 25). This growth in re-exports was primarily driven by the re-exports of mineral fuels to Ukraine, while other categories of goods had a significantly lower impact. However, some re-exports may be suggestive of trade aimed at the circumvention of sanctions. Apart from traditional re-exports of medicaments that existed long before the war, there were significant increases in some goods that were not largely re-exported in previous years: Kazakhstan – industrial machinery and parts of vehicles; Kyrgyzstan – parts of vehicles, machinery, engines; United Arab Emirates – motor vehicles; Armenia – motor vehicles and industrial machinery. This being said, although percentage growths in re-exports to these countries are considerable, the absolute amounts are minor, which means that Moldovan exporters are not engaged in the circumvention of sanctions at a large scale.

FIGURE 25. RE-EXPORTS OF GOODS, % OF GROSS EXPORTS

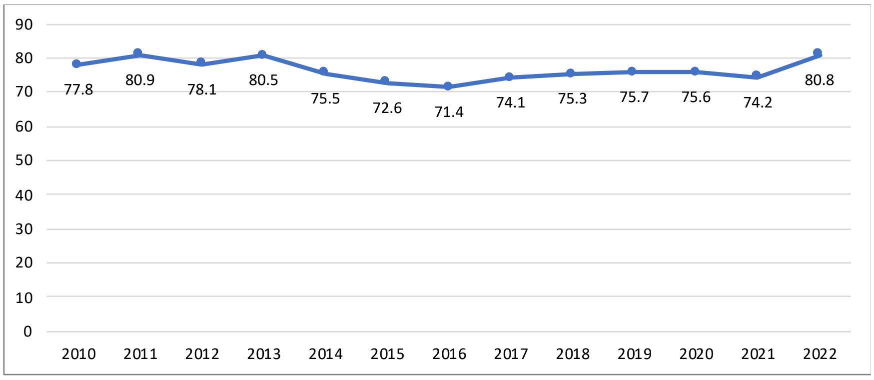


Source: Calculated based on UN Comtrade data

5.3.6 Exposure to imports of energy supply

Moldova is highly dependent on imports of energy, with 81% of its energy consumption being covered by imports (2022) (Figure 26). Before 2015, Moldova mostly relied on electrical power imports from Ukraine, after that the supply of power mostly came from the Cuciurgan thermal power plant (located in the Transnistrian region and therefore power was not counted as imported). In 2022, Moldova had to import large volumes of electricity again, while total energy consumption decreased because of the price shock, so the share of imported energy in total consumption went up.

FIGURE 26. NET ENERGY IMPORTS, % OF FINAL ENERGY CONSUMPTION IN TONNES OF OIL EQUIVALENT

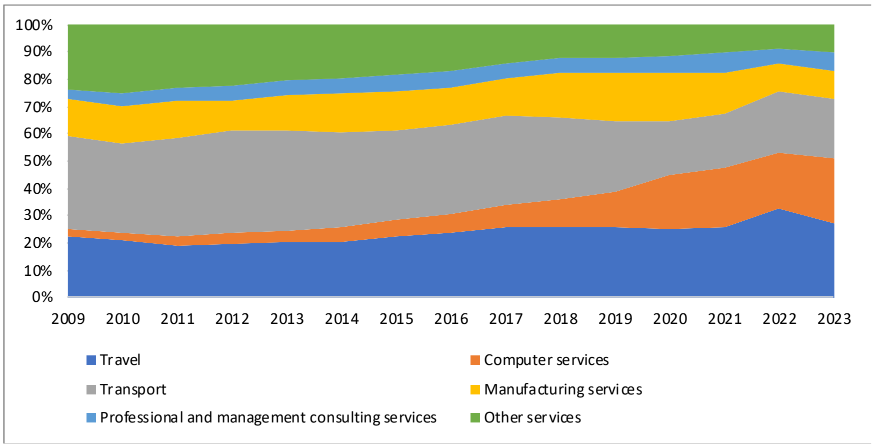


Source: Calculated based on data from the National Bureau of Statistics of Moldova

5.4 Trade in services

Travel and IT are the main types of service exported by Moldova. The share of travel services is about 27% (2023) (Figure 27). Travel services exports increased in 2022 as Moldova received Ukrainian refugees and then diminished in 2023 as the number of staying refugees decreased. IT services grew at a rapid pace (approximately 30% yearly in the last 5 years) and accounted for 24% of Moldovan services exports in 2023. Geographically, the largest share of IT services exports goes to the EU (39% in 2022), followed by the United States (29%) and the United Kingdom (18%). In services imports, the largest category is transport (37% in 2023), followed by travel (33%), IT services (5%), professional and management consulting services (5%), and technical, trade-related, and other business services (5%).

FIGURE 27. STRUCTURE OF SERVICES EXPORTS BY TYPE, % OF TOTAL SERVICES EXPORTS



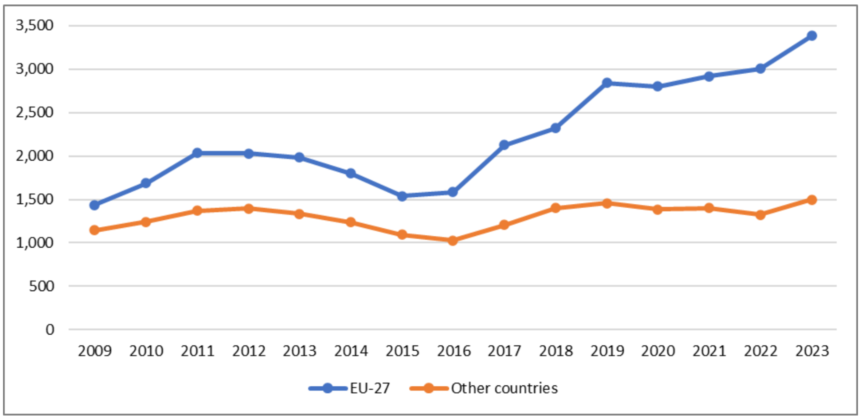
Source: IMF

5.5 FDI and portfolio investments

5.5.1 Trends in inward and outward FDI

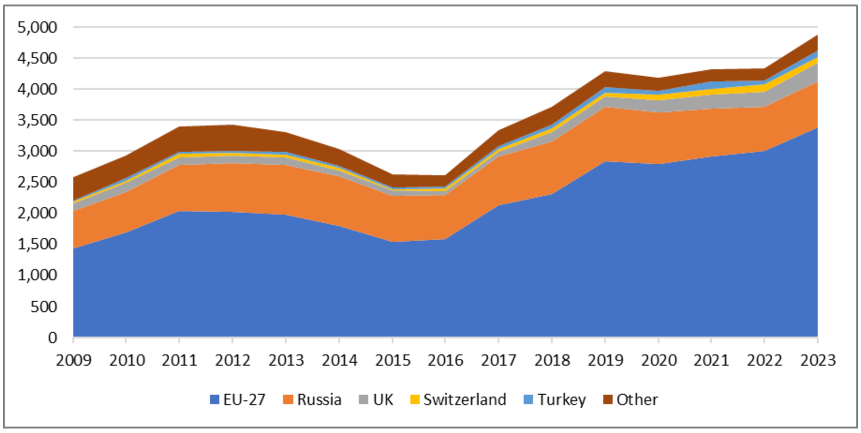
After the signing of the Association Agreement with the EU in 2014, direct investment from EU countries to Moldova gained momentum. At the end of 2023, the accumulated stock of FDI from the EU was 71% larger than in 2013 and exceeded USD 3 billion (69% of total FDI stock, including equity and debt). At the same time, FDI stock from other countries showed flat dynamics, remaining almost at the level of 2013 (Figure 28). Russia is the second largest direct investor in Moldova after the EU, with a share of 15% of total stock at the end of 2023 (Figure 29). It should be noted, however, that Russia's FDI stock mainly comprises just one large company (Moldovagaz, where Gazprom owns 50% of shares[48]) and primarily consists of debt rather than equity[49] (historical debt for natural gas imports that is now disputed[50]).

FIGURE 28. FOREIGN DIRECT INVESTMENT IN MOLDOVA: INWARD STOCK AT YEAR-END (EQUITY AND DEBT), USD MILLION



Source: IMF (CDIS)

FIGURE 29. FOREIGN DIRECT INVESTMENT IN MOLDOVA: INWARD STOCK AT YEAR-END (EQUITY AND DEBT), BY COUNTRY, USD MILLION



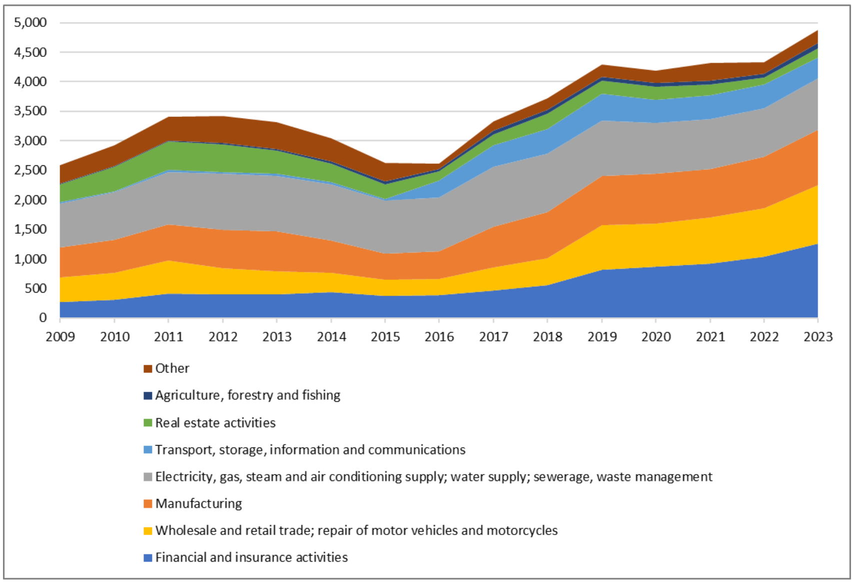
Source: IMF (CDIS)

---

48 https://ro.wikipedia.org/wiki/Moldovagaz
49 https://www.bnm.md/bdi/pages/reports/dbp/DBP2.xhtml
50 https://www.reuters.com/business/energy/moldova-puts-its-debt-gazprom-86-mln-russian-firm-disagrees-2023-09-06/

The composition of FDI stock by sectors at the end of 2023 shows that financial and insurance activities received the largest part of total investment so far (26%), followed by wholesale and retail trade (20%), manufacturing (19%), electricity, gas, water supply, waste management (18%) (Figure 30). With such a structure by industries, FDI does not appear to contribute much to exports or to fostering technological transfer. Even in manufacturing, FDI is frequently concentrated on low-value-added activities, such as processing and assembling.

FIGURE 30. FOREIGN DIRECT INVESTMENT IN MOLDOVA: INWARD STOCK AT YEAR-END (EQUITY AND DEBT), BY ECONOMIC ACTIVITY, USD MILLION



Source: IMF (CDIS)

Outward direct investment of Moldova is relatively small, with the stock of direct investment assets reaching USD 450 million as of the end of 2023 (2.7% as a ratio to GDP) and an annual net flow of less than USD 1 million in 2023. Small as it is, Moldova's outward direct investment is highly exposed to risks arising from the war in Ukraine, as its largest part was invested in Russia (USD 196 million at the end of 2021, as reported by Russia, which later stopped reporting data to the IMF). A significant share of Moldova's direct investment stock abroad also went to Ukraine (USD 23 million at the end of 2022). Other important investment destinations include Turkey (USD 68 million at the end of 2022), Romania (USD 60 million), and Italy (USD 50 million).

5.5.2 Portfolio investment

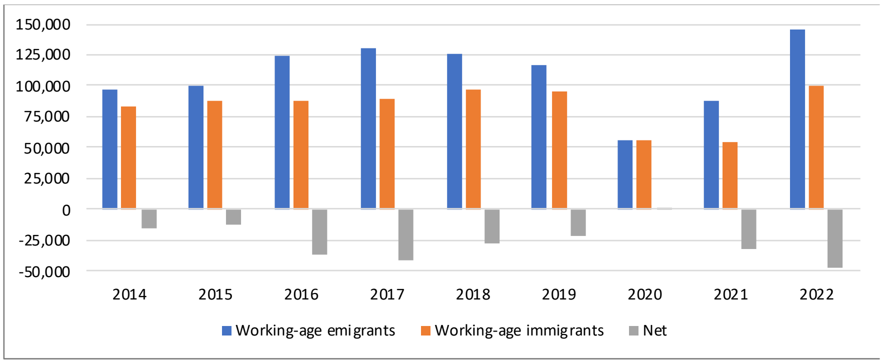
Moldova's portfolio investment (PI) is minor for both assets and liabilities, and no clear trends can be identified. In 2023, it recorded a net capital inflow of USD 0.3 million, with Moldova's PI assets abroad decreasing by USD 1.7 million, and PI liabilities to non-residents decreasing by USD 1.5 million. The total stock of accumulated PI assets amounted to USD 12 million at the end of 2023 (of which equity securities – USD 3 million and debt securities – USD 9 million). The total stock of PI liabilities reached USD 23 million (of which equity securities – USD 22 million and debt securities – USD 1 million).

5.6 Fragility related to personal mobility

5.6.1 Outgoing and incoming labour migrants, the impact of migration on labour supply

Before the COVID-19 pandemic, Moldova recorded approximately 115,000 working-age persons emigrating from the country each year (which is approximately 4% of its total population). At the same time, the average yearly number of working-age immigrants was around 90,000. Thus, on the net, Moldova used to lose approximately 25,000 working-age persons each year (1% of the total population). In 2020-2021, migration slowed down because of sanitary restrictions, to resume with renewed vigour in 2022. After the start of the war in Ukraine, the number of working-age emigrants from Moldova grew to 146 thousand during 2022, while the number of working-age immigrants reached 99 thousand (minus 47 thousand on the net) (Figure 31).

FIGURE 31. WORKING-AGE (15-64) MIGRANTS, PERSONS



Source: National Bureau of Statistics

Initially, emigrants were mostly recruited among the unemployed from rural areas so that emigration did not put much pressure on the domestic labour market. More recently (according to the Generations and Gender Survey conducted in 2020[51]), intentions to emigrate have become strong also among the employed. Thus, emigration started causing tightness in the labour market. In a survey conducted in 2023 by the National Agency for Employment, 18% of employers reported being unable to hire the staff they needed (16% reported so one year earlier)[52].

Moldova received approximately 100,000 refugees from Ukraine (including children and the elderly), of which around 90,000 are remaining to date[53]. Although Ukrainian citizens were allowed to stay and work without restrictions, the inflow of refugees did not have a significant impact on the local labour market, since only 1,419 of them were employed by Moldovan employers as of 05/31/2024[54]. The main reasons for such a weak inclusion are language barriers, parental responsibilities, and remote working for Ukrainian employers.

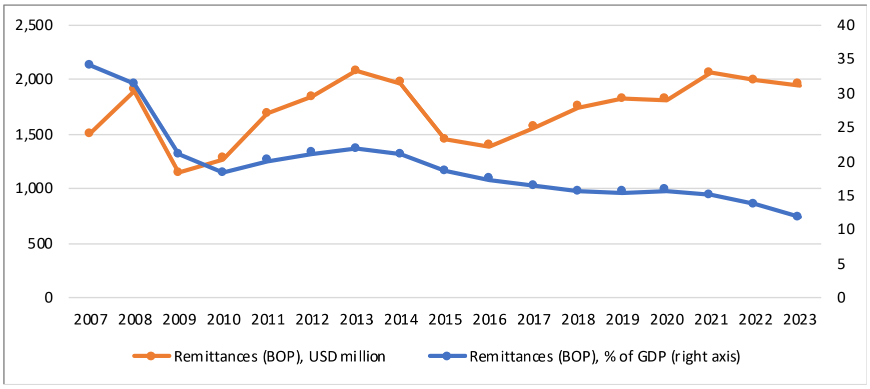
---

[51] https://moldova.unfpa.org/ro/publications/raportul-studiului-genera%C8%9Bii-%C8%99i-gen-%C3%AEn-republica-moldova
[52] https://www.anofm.md/view_document?nid=20224
[53] https://tvrmoldova.md/article/375fd95c40a2c805/republica-moldova-gazduieste-peste-90-000-de-refugiati-din-ucraina.html
[54] https://anofm.md/ro/node/20103

5.6.2 Total size of remittances, the role of remittances in macroeconomic stability

Personal remittances received by Moldovan residents from non-residents (including remittances sent via informal channels) are tapering down both in absolute terms and as a ratio to GDP (Figure 34). In 2023, they totaled USD 1,946 million (down 2% as against 2022) and accounted for 12% of GDP. Historically, developments in remittances have been sensitive to external shocks: they fell in 2009 following the GFC, in 2015 as a result of a sharp depreciation of the Russian ruble, during the Covid-19 pandemic in 2020, and in 2022 again. The decrease in remittances in 2022 and 2023 was not large enough to affect the country's financial stability, as the central bank's reserve assets were sufficient to mitigate the risks of a currency crisis[55]. However, smaller remittances contributed to the reduction in final consumption of households recorded in 2022 and 2023 (-4.0% in 2022 and -0.5% in 2023, in real terms[56]), although higher inflation was the main cause[57].

FIGURE 32. PERSONAL REMITTANCES, INFLOWS (BALANCE OF PAYMENTS)



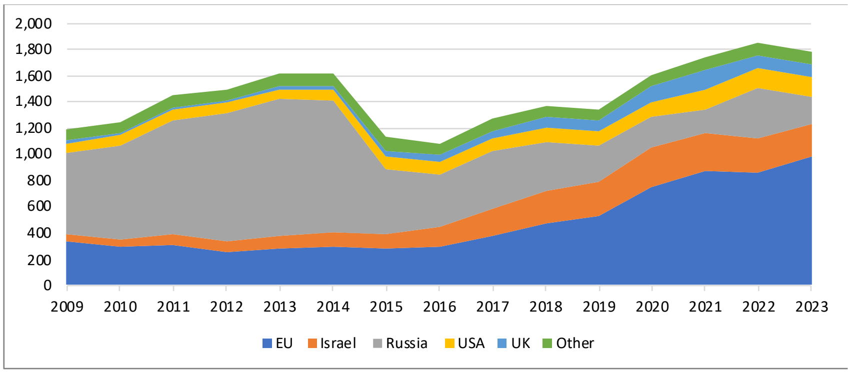
Source: IMF

5.6.3 Geography of remittances

Before 2015, Russia used to be the main source of remittances to Moldova (Figure 35). After a sharp depreciation of the Russian ruble, remittances from Russia halved and never rebounded, although Russia still accounts for 12% of remittances received (2023). At the same time, the granting of the visa-free regime by the EU to Moldovan nationals in 2014 facilitated labour migration to the EU. These factors combined induced a shift in the geographic patterns of remittances. Today, the EU accounts for more than half (58% in 2023) of remittances received by Moldova.

[55] https://www.bnm.md/en/content/international-accounts-republic-moldova-quarter-iv-2023-preliminary-data
[56] https://statistica.gov.md/ro/produsul-intern-brut-in-trimestrul-iv-2023-si-anul-2023-9497_61050.html
[57] https://www.expert-grup.org/media/k2/attachments/State_of_the_Country_Report_2023_en.pdf

FIGURE 33. MONEY TRANSFERS FROM ABROAD IN FAVOUR OF INDIVIDUALS VIA FORMAL CHANNELS (BANKS OR MONEY TRANSFER OPERATORS), USD MILLION



Source: National Bank of Moldova

Note: Data include money sent via formal channels only, which is the main reason for differences with remittance data from the BOP. The growth in 2020 reflects a shift in preferences for formal channels rather than an actual increase in remittances.

Chapter 6. Energy sector of Moldova: overview, dependency and outlook

6.1. The country's energy background

Moldova is almost fully dependent on imported fossil fuel and electricity, with natural gas serving most of its energy needs. Moldova is part of the EU4Energy Program,[58] which focuses on improving evidence-based policymaking for the energy sector.

Since the beginning of the Russian-Ukrainian war, Moldova reduced significantly its dependence on the infrastructure and power-generating facilities in Transnistria. It is currently able to fulfil its needs without the facilities from the separatist region. Before the war, Moldova did not have organized processes and capabilities to procure gas from other sources than Gazprom. Energocom obtained the license to procure gas on the Romanian market from the Romanian regulator in 2022. At the same time, since 2022, Moldova has developed policies and operationalized capabilities to procure natural gas from other sources and, for the first time, has created reserves of natural gas for winter season and emergency purposes located in Romania and Ukraine.

After the start of the war, Ukraine disconnected the electricity grid from the Russian Federation grid and synchronized it with the EU grid. Thus, Moldova automatically became synchronized with the EU electrical grid. This has allowed, since March 2022, procurement of electricity from EU countries, notably from Romania. Before synchronization, technically, there was no possibility to transport electricity from Romania or any EU country to Moldova. With the support of the World Bank, Moldova is building a new aerial high-voltage line with Romania (Chisinau – Isaccea)[59] and is planning to build an additional high-voltage line in the north of the country (Balti – Suceava) that will ensure a full interconnection with Romania and the EU electricity grid.

Moldova has limited own energy resources. While it has potential for renewable energy sources like wind, solar, and biomass, these resources are not sufficient to meet the country's energy demand. The Government of Moldova is developing programs to stimulate the production of renewable energy and improve energy efficiency to reduce energy consumption in industries, buildings, and transportation and dependence on imports.

[58] EU NEIGHBOURS EAST, "EU4Energy Announces 2024 Work Programme to Advance Energy Governance in Georgia, Moldova, and Ukraine", 17.01.2024, https://euneighbourseast.eu/news/latest-news/eu4energy-announces-2024-work-programme-to-advance-energy-governance-in-georgia-moldova-and-ukraine/#:~:text=In%202024%2C%20EU4Energy%20will%20provide,fostering%20environmentally%20responsible%20energy%20practices. (accessed 04.08.2024).
[59] Construction of new OHL Vulcanesti (MD) Chisinau (MD) https://www.energy-community.org/regionalinitiatives/infrastructure/PLIMA/EL06.html, (accessed 04.08.2024)

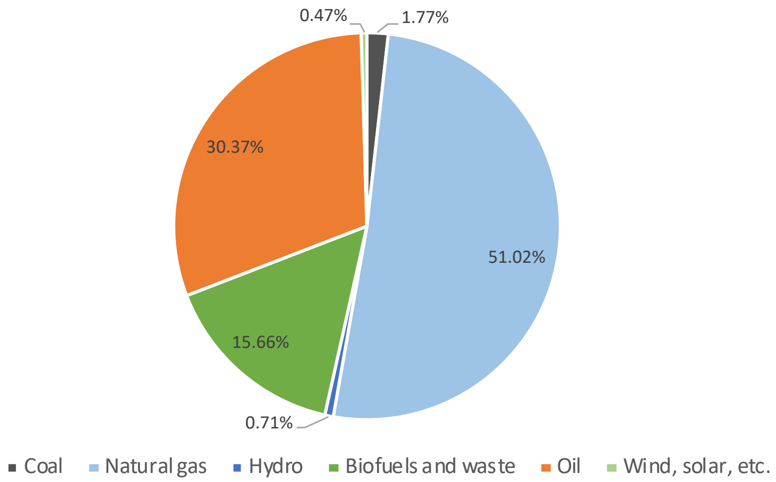
Moldova faces several challenges in its energy sector. It is one of the most vulnerable countries with the highest dependence on external supply in the region. Other challenges include ageing infrastructure, inefficiencies, vulnerability to energy price fluctuations, and geopolitical tensions affecting energy supply. These challenges underscore the importance of continued efforts towards diversification, sustainability, and energy security.

Overall, Moldova's energy sector is in a transitional phase, with ongoing efforts to reduce dependence on imports, increase renewable energy capacity, and improve efficiency and sustainability. Collaboration with international partners and adherence to energy sector reforms are crucial for achieving these goals.

6.1.1. Structure of energy supply

Moldova's energy supply is more than 80% dependent on fossil fuels (oil, coal, and natural gas) (Figure 34). The major part of the energy supply constitutes natural gas that is used for heating during the cold season and for electricity generation in Cuciurgan (since the beginning of 2025, the Cuciurgan Power Station stopped its supplies of electricity on the right bank of Nistru after Gazprom stopped its supply of natural gas). Biofuel (woodfire and vegetation residuals) is used in rural areas mainly.

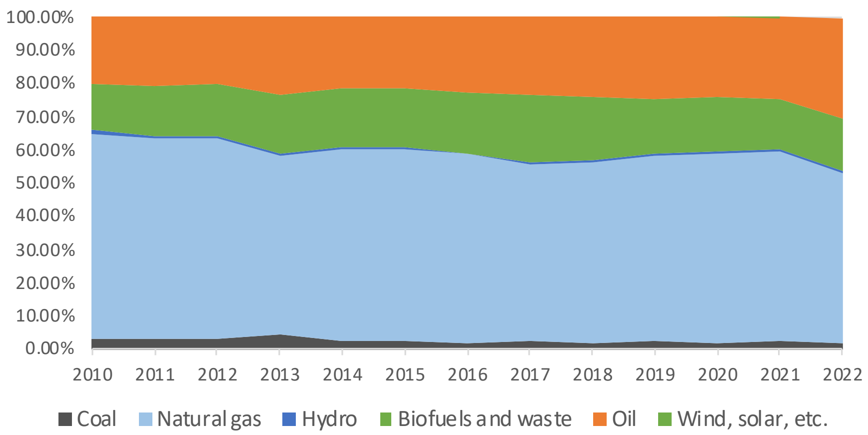
FIGURE 34. SHARE OF EACH SOURCE IN THE TOTAL ENERGY SUPPLY, 2022



Source: International Energy Agency, https://www.iea.org/data-and-statistics

The energy supply mix in Moldova has not recorded significant changes since 2010 (Figure 37). The share of oil products has increased slightly as the number of transportation units is constantly increasing. Also, the share of natural gas is continuously decreasing, especially since the beginning of the Russian aggression in Ukraine in 2022.

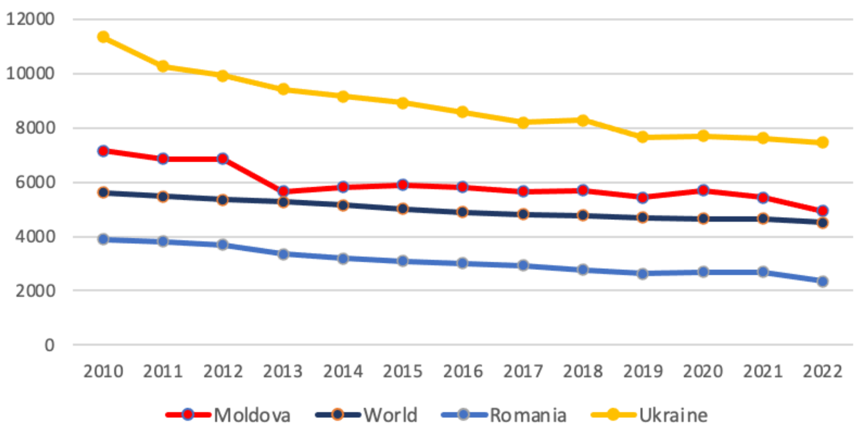
FIGURE 35. EVOLUTION OF THE ENERGY SUPPLY MIX, %



Source: International Energy Agency, https://www.iea.org/data-and-statistics

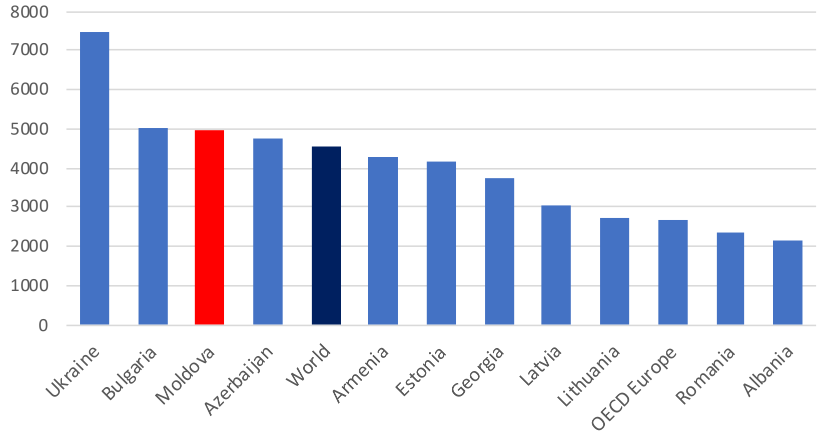
More than 43% of the total energy consumption comes from the residential sector. The small size of the economy, as well as the low level of energy efficiency of both the residential sector and economic activity, causes a high energy intensity. However, Moldova registered better progress compared to the average of the world during the period 2010-2022, with a reduction of energy intensity by approximatively 25%.

FIGURE 36. EVOLUTION OF ENERGY INTENSITY IN MOLDOVA, WORLD, ROMANIA AND UKRAINE. ENERGY SUPPLY BY GDP (PPP), MJ/THOUSAND USD (PPP 2015)



Source: International Energy Agency, https://www.iea.org/data-and-statistics

FIGURE 37. ENERGY INTENSITY COMPARISON, 2022. ENERGY SUPPLY BY GDP (PPP), MJ/THOUSAND USD (PPP 2015)



Source: International Energy Agency, https://www.iea.org/data-and-statistics

6.1.2. Development of energy distribution infrastructure

Natural Gas Transmission System

The core of Moldova's natural gas transport system is the pipeline network[60] managed by Moldovatransgaz,[61] a subsidiary of Moldovagaz. This network includes several major pipelines that transport gas from international borders to domestic consumers. The main entry point for natural gas imports is the Ananiev-Tiraspol-Ismail pipeline, which connects Moldova with the Ukrainian gas transmission system. However, in 2022, for the first time, the Trans-Balkan pipeline was used by Moldova in reverse mode, and the first 4.3 mln m^3 of natural gas was delivered to Moldova from the south, entering the country in the Causeni interconnection point. In 2024, Moldova had multiple interconnection points to neighboring natural gas pipeline systems, which allowed transporting natural gas from EU countries and Ukraine.

Electricity Grid

Moldova's electricity grid is operated by Moldelectrica, which is responsible for the transmission of electricity across the country.[62] The grid is interconnected with the Ukrainian and Romanian electricity networks, which allows for cross-border electricity trade and enhances energy security.[63] The country is divided into two main regions for electricity distribution: the right bank of the Nistru river and the left bank of the Nistru river uncontrolled by the government of Moldova. The distribution networks in these regions are managed by different operators, with Energy Premier and

[60] The map of the natural gas pipeline system of Moldova can be seen from the webpage of Modovatransgaz, https://mtg.md/ro/technical-data/map (accessed 04.08.2024).
[61] Moldovatransgaz, Prezentarea companiei, Company presentation, https://www.moldovatransgaz.md/ro/about/presentation (accessed 01.08.2024).
[62] Moldelectrica, Sarcinile Operatorului de Sistem, Tasks of the System Operator https://moldelectrica.md/ro/about/mission_and_strategy (accessed 04.08.2024).
[63] The map of electric grid and interconnections of Moldova can be seen from the webpage of International Energy Agency https://www.iea.org/reports/system-integration-of-renewables-in-moldova-a-roadmap/context-of-renewables-in-moldova-s-electricity-sector (accessed 04.08.2024)

RED Nord responsible for the right bank and the local administration in Transnistria managing the left bank. The most important power plant is situated in Cuciurgan in Transnistria, producing electricity from natural gas provided by Gazprom. An important part of the produced energy was delivered to the right bank of Nistru until the end of 2024.

After the start of the war in February 2022, Ukraine decided to disconnect its electricity system from that of the CIS and join the European Network of Transmission System Operators for Electricity (ENTSO-E).[64] This allows Moldova to import electricity not only from Ukraine but also from EU countries through northern connectivity with Ukraine, avoiding the Transnistria region. The construction of the south 400kV high voltage line Chisinau-Vulcanesti-Isaccea is ongoing.[65] This line will further increase the sustainability of the electric grid and independence from the separatist electric power plant. Another high voltage line connection with Romania (Balti – Suceava) is planned to be constructed to ensure adequate resilience of the grid and electricity supply.[66]

6.2. Energy consumption, domestic energy production, and energy import

6.2.1. Energy consumption

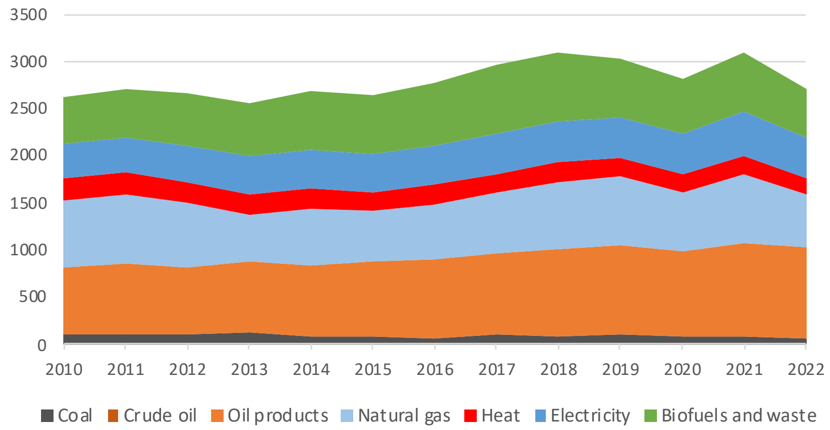
Total energy consumption in Moldova in 2022 was 2702 ktoe. Even though natural gas has a share of 70% of the total net imports, it was not the major source used in final consumption. Natural gas occupied the second position in final consumption in 2022 with 548 ktoe, being used mainly for heating in the residential, public, and commercial sectors and in some industrial sectors for processing. Oil products, which counted for 969 ktoe or 32% of the total final energy consumption, used mainly for transportation and agriculture works, were the most important source. Electricity consumption was 434 ktoe. Most of the electricity was generated from natural gas in the Cuciurgan power plant, indicating a strong dependence on this fuel for power generation. Biofuels and waste were also an important source of energy for final consumption and accounted for 513 ktoe or almost 19% of the total. It was represented mainly by agriculture products wastes, pellets, and firewood, used mainly in rural areas. The imported coal (61 ktoe in 2022) was also used mainly for household heating in rural areas.

[64] ENTSO-E is the association for the cooperation of the European transmission system operators, see https://www.entsoe.eu/about/inside-entsoe/objectives/ (accessed 04.08.2024).

[65] EU4Energy announces 2024 work programme to advance energy governance in Georgia, Moldova, and Ukraine https://euneighbourseast.eu/news/latest-news/eu4energy-announces-2024-work-programme-to-advance-energy-governance-in-georgia-moldova-and-ukraine/#:~:text=In%202024%2C%20EU4Energy%20will%20provide,fostering%20environmentally%20responsible%20energy%20practices. . (accessed 04.08.2024).

[66] MOLDOVA- ROMANIA POWER INTERCONNECTION PROJECT, Back-to-Back (BtB) Bălți station and 400kV OHL Bălți – Suceava https://www.eib.org/attachments/registers/212183446.pdf . (accessed 04.08.2024).

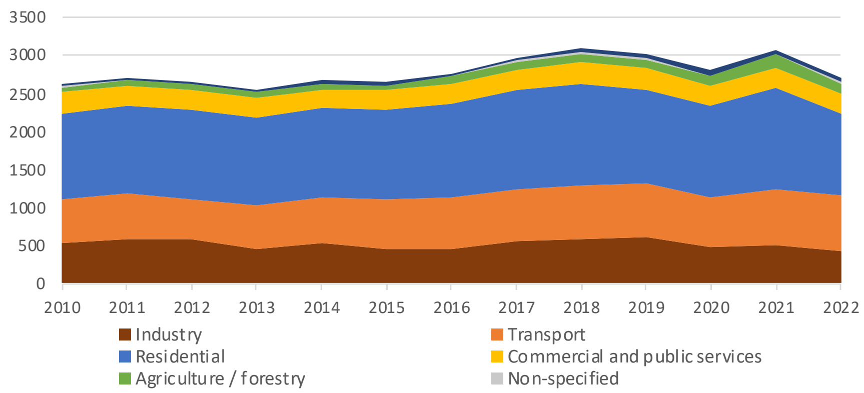
FIGURE 38. TOTAL FINAL ENERGY CONSUMPTION BY SOURCE, KTOE



Source: International Energy Agency, https://www.iea.org/data-and-statistics

The residential sector had the largest share of energy consumption – 1078 ktoe in 2022 or 40% of the total energy consumption, mainly used for heating. Transportation was the second largest energy consumer with 734 ktoe or 27% of the total, followed by the industry with 421 ktoe consumption or 15.5% of the total consumption. Major sectors of the industry were represented by construction materials producers and food processing companies. Commercial and public services accounted for 9.6% and agriculture for 5% of the total final consumption.

FIGURE 39. TOTAL FINAL ENERGY CONSUMPTION BY SECTOR, KTOE

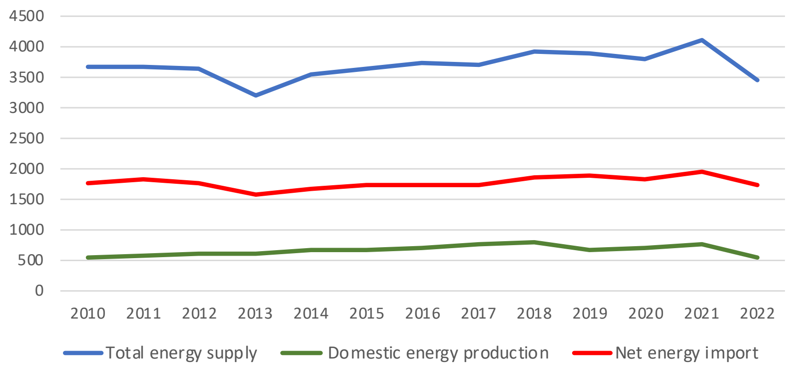


Source: International Energy Agency, https://www.iea.org/data-and-statistics

6.2.2. Domestic energy production

Domestic energy production in Moldova is quite limited due to the country's lack of substantial fossil fuel reserves. It amounted to 537 ktoe or 15.5% of the total energy supply in 2022 of 3453 ktoe (Figure 40). The energy produced domestically comes primarily from a few key sources, including renewable energy and some small-scale fossil fuel production.

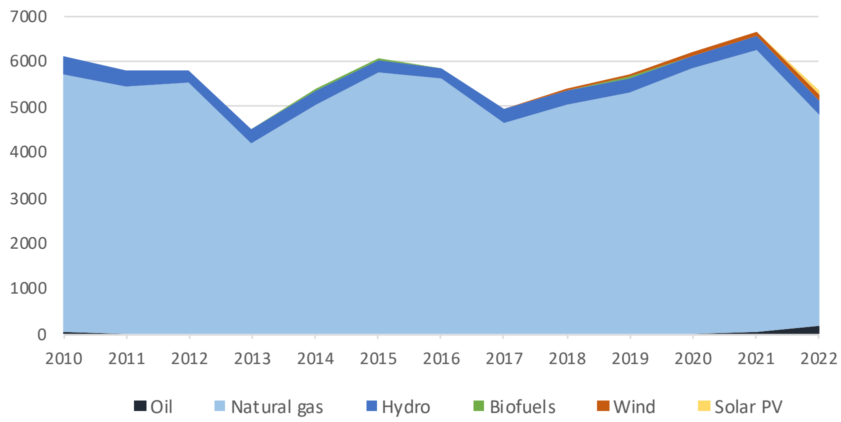
FIGURE 40. TOTAL ENERGY SUPPLY, DOMESTIC ENERGY PRODUCTION, AND NET ENERGY IMPORT, KTOE



Source: International Energy Agency, https://www.iea.org/data-and-statistics

Most of Moldova's electricity is produced from natural gas, primarily at the Cuciurgan power plant in Transnistria. This plant is a significant source of electricity, although it is located in a region with a complex political status. In addition, Chisinau and Balti have a heat power plant with cogeneration of electricity based on natural gas fuel.

FIGURE 41. DOMESTIC ELECTRICITY GENERATION BY ENERGY SOURCE, GWH



Source: International Energy Agency, https://www.iea.org/data-and-statistics

Biomass is one of the most significant sources of renewable energy in Moldova. It includes the use of agricultural and forestry residues for heating and electricity generation. Biomass energy is particularly important in rural areas where agricultural residues are readily available. Moldova has a few small hydropower plants. The most notable one is the Dubăsari Hydropower Plant on the Nistru River, which has a capacity of 48 MW.[67] However, hydropower contributes a relatively small fraction to the overall energy mix, that is, less than 5% of total electricity generated.

Solar energy is gradually gaining traction in Moldova. Several small-scale solar power installations have been set up, and the government is encouraging further development through various

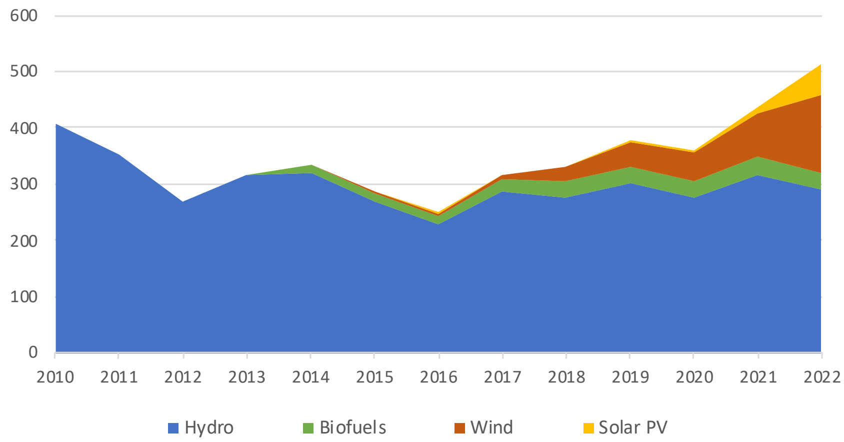
[67] Moldelectrica, Surse de energie, Energy sources, https://moldelectrica.md/ro/electricity/energy_sources (accessed 04.08.2024).

incentives.[68] However, the overall contribution of solar power to the national energy grid is still relatively minor and it counts for 0.15% of total electricity generated.

Wind energy is in its nascent stages in Moldova. There are a few small wind farms, and potential for expansion exists, especially in the northern and southern regions where wind conditions are favorable. Wind power plants have generated more power than solar PV plants, however, they account for only 1.15% of total electricity generation.

Moldova has very limited natural gas and oil production. The country relies almost entirely on imports to meet its natural gas and oil needs. There are some minor oil and gas fields, but their contribution to the overall energy supply is negligible.

FIGURE 42. DOMESTIC ELECTRICITY GENERATION BY RENEWABLE ENERGY SOURCE, GWH



Source: International Energy Agency, https://www.iea.org/data-and-statistics

The Moldovan government has been working on strategies to increase energy security and reduce dependence on imports. This includes promoting renewable energy sources, improving energy efficiency, and modernizing the energy infrastructure.[69] Moldova receives support from international organizations such as the EU and the World Bank to develop its energy sector.[70] Projects include upgrading the electricity grid, enhancing cross-border interconnections, and supporting renewable energy projects.

6.2.3. Energy imports

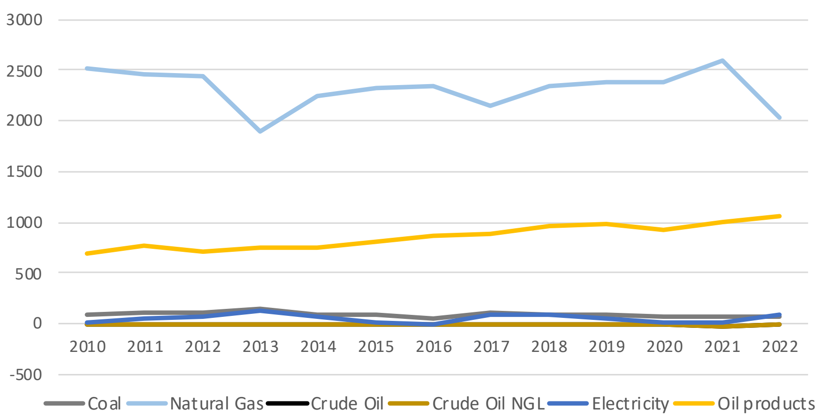
Traditionally, Moldova has relied heavily on Russian natural gas, supplied via Ukraine. The ongoing conflict between Russia and Ukraine has disrupted supply routes and created uncertainty regarding the reliability of Russian gas supplies. The share of imports did not change significantly due to a lack

[68] UNDP, The Low Emissions Development Programme was approved https://www.undp.org/moldova/press-releases/low-emissions-development-programme-was-approved-bringing-moldova-one-step-closer-towards-carbon-free-economy (accessed 04.08.2024)
Ministry of Energy, Renewable Energy, https://energie.gov.md/ro/content/energie-regenerabila; anre.md (accessed 04.08.2024).
[69] Ministry of Energy, Renewable Energy https://energie.gov.md/ro/content/energie-regenerabila (accessed 04.08.2024).
[70] A Roadmap for energy market reforms agreed and support to Moldova reaffirmed by the European Commission at the 5th EU-Moldova High-Level Energy Dialogue https://www.eeas.europa.eu/delegations/moldova/roadmap-energy-market-reforms-agreed-and-support-moldova-reaffirmed-european-commission-5th-eu_en?s=223 . (accessed 04.08.2024).

of domestic resources. However, in the face of an energy crisis and supply disruption, Moldova had to make significant changes to diversify sources and implement safeguarding mechanisms.

In October 2021, Moldova faced a significant gas supply crisis[71] **when the country's contract with Gazprom expired, and negotiations for a new contract stalled**. Moldova experienced reduced gas supplies, leading to a state of emergency declaration and urgent measures to secure alternative supplies, including natural gas from Romania and other European sources. The crisis was eventually resolved with a new contract agreement with Gazprom at the end of October 2021. However, starting from October 1st, 2022, Gazprom reduced the volumes toward Moldova by 30%.[72] Starting from December 2022, Gazprom was delivering natural gas only to Transnistria. In turn, Transnistria was delivering electricity that was produced by the Cuciurgan power plant on the right bank of the Nistru river. Moldova had to adapt quickly and implement mechanisms to buy natural gas from new sources. Thus, starting in 2022, a Moldovan state operator, Energocom, developed competencies and received financial support to trade energy products for the Moldovan energy sector, primarily natural gas, as well as to create natural gas reserves for each winter period stored in Romania and Ukraine.[73] In 2023, the right bank of Moldova was importing natural gas from the open European market. Natural gas represents approx. 70% of the total net imports. The second position of imports is represented by oil products with more than 27% of the total imports and by coal with 2% of the total imports. Electricity and other products have a minor share in the total imports. The share of imports in the total energy supply is 94%. Own supply is mainly ensured by biofuels and agricultural waste.

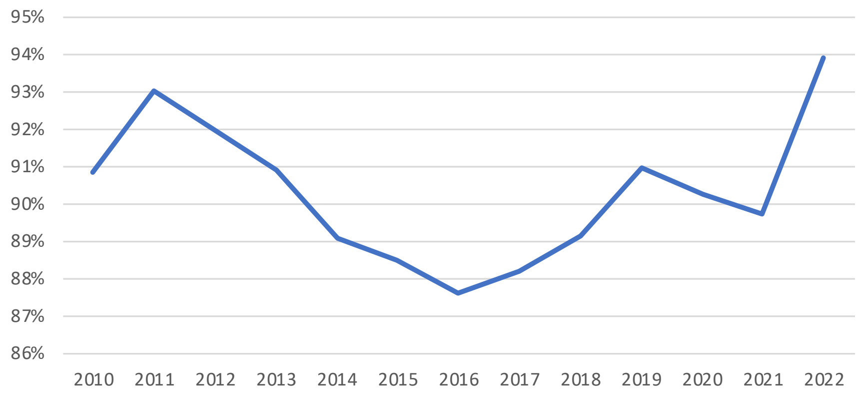
FIGURE 43. NET ENERGY IMPORTS BY ENERGY SOURCE, KTOE



Source: International Energy Agency, https://www.iea.org/data-and-statistics

[71] European Parliament, Energy Crisis in Republic of Moldova, https://www.europarl.europa.eu/doceo/document/E-9-2021-004826_RO.html . (accessed 04.08.2024).
[72] Free Europe, Gazprom reduces deliveries to Moldova by 30%, starting October 1 https://moldova.europalibera.org/a/gazprom-reduce-livr%C4%83rile-%C3%AEn-moldova-cu-30-de-la-1-octombrie-chi%C8%99in%C4%83ul-va-acoperi-diferen%C8%9Ba-din-rezerve-sau-achizi%C8%9Bii-noi/32060579.html . (accessed 04.08.2024).
[73] IPN, Press Agency, Energocom obtained the license from ANRE Romania and can buy natural gas on the Romanian market https://www.ipn.md/ro/energocom-a-obtinut-licenta-la-anre-romania-si-poate-7966_1092551.html . (accessed 04.08.2024).

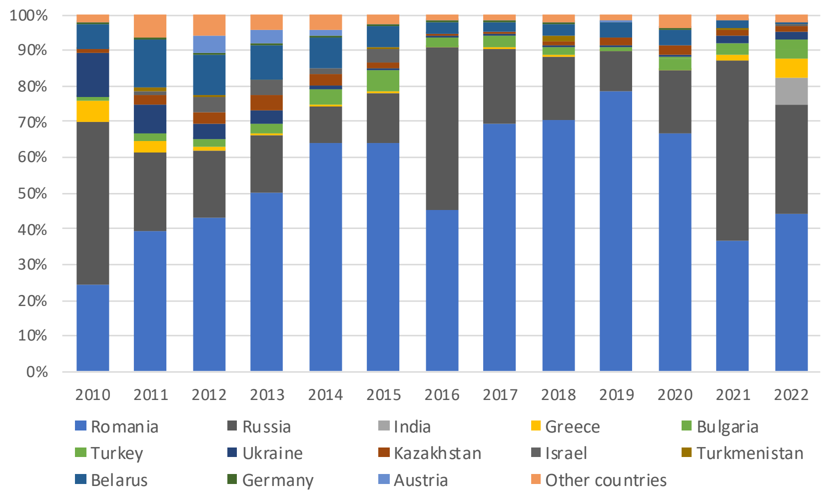
FIGURE 44. SHARE OF IMPORT IN THE TOTAL ENERGY SUPPLY



Source: International Energy Agency, https://www.iea.org/data-and-statistics

The major imports of fuels come from Romania and Russia. Since 2016, these two countries have supplied Moldova with more than 80% of its total fuel imports. Some imports are realized from Turkmenistan, Kazakhstan, Belarus and Ukraine, but the volume decreased from 25% of total Moldovan imports in 2011 to 6-7% in 2020-2023. Other notable partnering countries are Germany, Austria, Bulgaria, Greece and Israel, but since 2016, they have counted for less than 5% of total fuel imports in Moldova. (Figure 45)

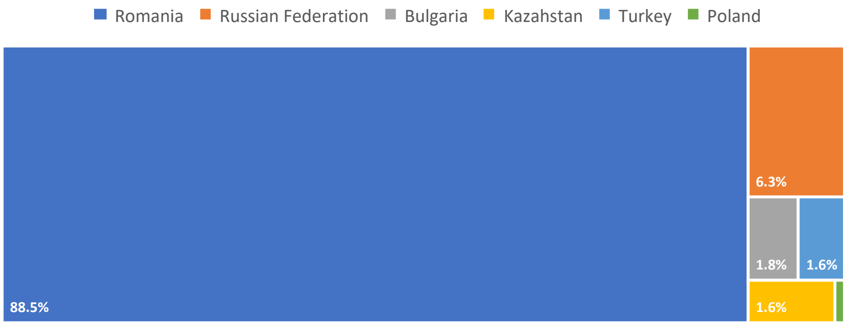
FIGURE 45. EVOLUTION OF FUEL PRODUCTS IMPORTS BY COUNTRY IN 2010-2022, %



Source: World Bank, https://wits.worldbank.org/CountryProfile/en/Country/MDA/StartYear/2010/EndYear/2021/TradeFlow/Import/Indicator/MPRT-TRD-VL/Partner/BY-COUNTRY/Product/27-27_Fuels#)

Oil products (petrol fuel, diesel fuel, LNG) which are 100% imported by Moldova have diverse sources of import (Figure 46), with Romania being in the first place (88.5% of the total volume of oil products imports in 2022). Petrol fuel (gasoline) is 100% imported from Romania. Diesel fuel is 84.4% imported from Romania and 8% from Russia. LNG is 64.4% imported from Romania and 19.9% from Kazakhstan. Other countries have minor contributions to imports of oil products.

FIGURE 46. OIL PRODUCTS IMPORT BY COUNTRY IN 2022, %

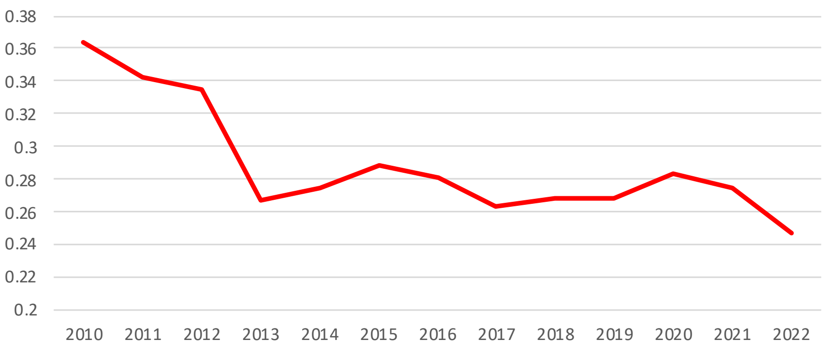


Source: National Agency for Energy Regulation of the Republic of Moldova anre.md, National Bureau of Statistics bns.md, calculation realized by the authors.

6.3. Renewable energy: development and potential

The CO2 per unit of GDP has decreased since 2010 (Figure 47), but this has been rather due to the increase of GDP in sectors with low energy consumption. The structure of renewable energy generation has not changed significantly in the analysed period. The main source of renewables remains to be biomass (agriculture waste and firewood), used primarily for heating.

FIGURE 47. CO_2 EMISSIONS PER UNIT OF GDP (PPP 2015), KG CO2 / USD OF GDP

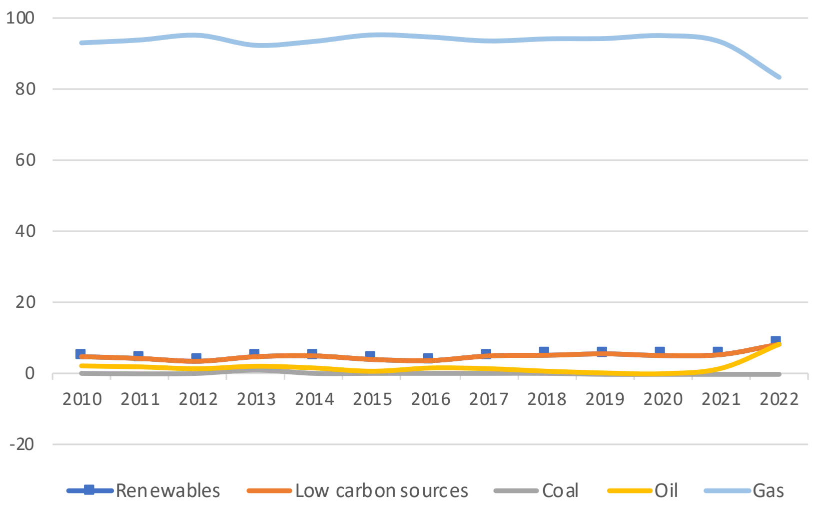


Source: International Energy Agency, https://www.iea.org/data-and-statistics

In 2022, only 5.4% of the electricity generation came from hydropower. New governmental programs stimulate investments in PV, wind, and biogas energy production,[74] and all these sources has increased to 4.1% of domestic electricity generation (Figure 48). In 2022 all renewables accounted for 9.6 % of total domestic electricity production.

[74] UNDP, The Low Emissions Development Programme was approved https://www.undp.org/moldova/press-releases/low-emissions-development-programme-was-approved-bringing-moldova-one-step-closer-towards-carbon-free-economy (accessed 04.08.2024)
Ministry of Energy, Renewable Energy https://energie.gov.md/en/content/renewable-energy . (accessed 04.08.2024).

FIGURE 48. SHARE OF RENEWABLES, LOW-CARBON SOURCES, AND FOSSIL FUELS IN POWER GENERATION, %



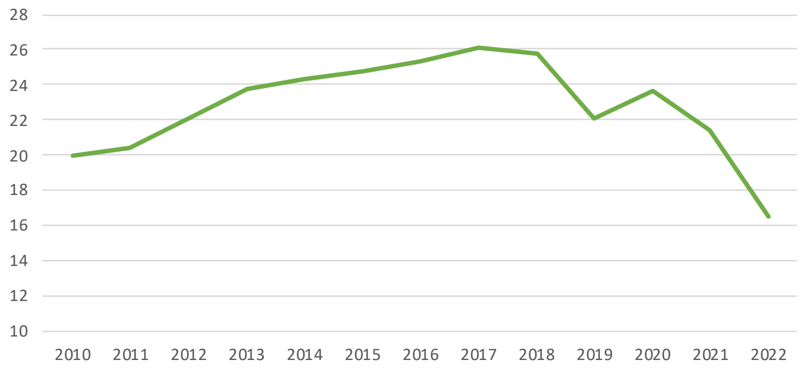
Source: International Energy Agency, https://www.iea.org/data-and-statistics

The modern renewables share in final energy consumption increased from 20% in 2010 to almost 24% in 2020 (Figure 49). However, biomass fuels account for more than 95% of the total renewables. The electricity market renewables represented 27% of Moldova's installed capacity in 2022 (101 MW of wind, 16 MW of hydropower, 19 MW of solar, and 12 MW of biomass). Natural gas dominated with over 400 MW of capacity in 2022. The Ministry of Energy of Moldova planned to launch tenders for 165 MW of large-scale renewable energy projects in April 2024.[75] The majority of the offered capacity will be reserved for wind projects (105 MW), while the remaining capacity (60 MW) will be reserved for solar PV projects. According to the Ministry's schedule, the offers were to be accepted until July 2024. Selected bidders will sign fixed-price 15-year contracts. Moldova currently supports renewable projects through net invoicing (for small producers with installations for self-consumption, as of 1 January 2024) and 15-year fixed feed-in tariffs for solar PV and wind projects, with large ones (solar PV parks above 1 MW and wind parks above 4 MW) awarded through auctions.[76]

[75] Ministry of Energy, The Ministry of Energy organized a new round of public consultations with potential investors on the tender documentation for the construction of 165 MW of renewable energy https://energie.gov.md/en/content/ministry-energy-organized-new-round-public-consultations-potential-investors-tender . (accessed 04.08.2024).

[76] United Nations Moldova, How much renewable energy is there in Moldova and how much could it be? https://moldova.un.org/en/256312-how-much-renewable-energy-there-moldova-and-how-much-could-it-be (accessed 04.08.2024).

FIGURE 49. RENEWABLE SHARE (MODERN RENEWABLES) IN FINAL ENERGY CONSUMPTION, %



Source: International Energy Agency, https://www.iea.org/data-and-statistics

6.4. Energy policies and outlook

Moldova's energy policy priorities have been shaped by several key factors: lack of fossil fuel resources and its reliance on energy imports, efforts to diversify energy sources, and the push towards sustainable and renewable energy. Here are the main priorities of Moldova's current energy policy:[77]

Energy security and diversification:

- Reducing dependence on energy imports, particularly from Russia, by diversifying energy supply sources and routes.
- Enhancing energy interconnections with neighbouring countries, such as Romania and Ukraine, to improve supply reliability and integrate into the European energy market.
- Enhance energy infrastructure to ensure secured delivery of energy resources from different partner countries, in particular constructions of electricity interconnection high-voltage lines with Romania.
- Enhance energy resources safety storage mechanisms and level of reserves.

Renewable energy development:

- Promoting the use of renewable energy sources such as wind, solar, biogas and biomass to reduce greenhouse gas emissions and dependence on fossil fuels, ensuring attractive mechanisms for distributed renewable sources.
- Implementing policies and incentives to attract investment in renewable energy projects.

Energy efficiency:

- Improving energy efficiency across various sectors, including residential, industrial, and public services, to reduce overall energy consumption and operationalization of the Energy Efficiency Fund.

[77] Ministry of Energy, Programs, Plans and Strategies https://energie.gov.md/ro/content/programe-planuri-si-strategii(accessed 04.08.2024).

- Upgrading infrastructure and implementing energy-saving technologies to enhance efficiency in energy production, transmission, and distribution, in particular central heating systems.

Regulatory and institutional reforms:
- Aligning the national energy regulatory framework with EU standards and directives as part of Moldova's commitment under the Energy Community Treaty.
- Strengthening the capacity and independence of regulatory bodies to ensure fair and transparent energy markets through adequate policies and mechanisms.

Market liberalization:
- Continuing the liberalization of the electricity and gas markets to promote competition and improve service quality for consumers.
- Encouraging private sector participation and investment in the energy sector.

Digitalization and automation
- Implementation of smart-metering and hour-based tariffs.
- Automated data transmission and improved interoperability between energy sector operators
- Create innovation sandboxes for energy sector development.

Climate change mitigation:
- Developing and implementing strategies to reduce carbon emissions in line with international climate agreements, such as the Paris Agreement.
- Promoting the adoption of clean energy technologies and practices to support sustainable development goals.

Regional cooperation:
- Participating in regional energy initiatives and projects to enhance cooperation and integration with neighbouring countries and the EU.
- Leveraging regional partnerships to improve energy security and achieve shared energy and environmental goals.

These priorities reflect Moldova's efforts to build a more resilient, sustainable, and integrated energy system. Being under the pressure of the energy crisis and the effects of the war, Moldova has made significant steps to promote policies but also to achieve results in terms of sustainability, efficiency and security of the energy sector. After 2022, for the first time, Russia and the Russia-backed Transnistria separatist region lost the energy leverage used to oppress citizens and authorities of Moldova.

Major projects focused on the implementation of strategic objectives in the energy sector:

- Moldova has received financing from the World Bank for the construction of a 400kV Vulcanesti-Chisinau overhead transmission line. 70 mln USD were approved in May 2019 and nowadays the construction works are in full progress.[78]
- The World Bank has extensive Development Policy Operations (DPOs) in Moldova and provides direct budget support for policy and institutional reforms. The current budget support operations are focused on Moldova Emergency Response, Resilience, and Competitiveness DPO with USD 159.24million approved on 2 June 2022 and USD 43.76 million of grant funds approved on 2 December 2022 which aims to help in mitigating the economic impact of Russia's invasion of Ukraine while maintaining momentum on the long-term agenda. The program, among others, includes measures to enhance energy efficiency in Moldova.[79]
- In June 2020, it was approved USD 100 million to finance investment in one of the major heat and electricity production facilities in Moldova to optimize heat and energy generation by installing new cogeneration units and increase of the total electric generation power to 55 MW.[80]
- The Ministry of Energy has established the Energy Efficiency Fund and reformed the former Energy Efficiency Agency into the National Center for Sustainable Energy, increasing the competencies and capacities to develop and implement programs to increase resilience in the energy sector and the efficiency of the energy consumers. The allocated budget is estimated to reach MDL 723 million for three years.[81]
- In February 2024 the Government of Moldova designated the „Operatorul Pieţei de Energie M" SRL (OPEM), a branch of OPCOM, Romania as the operator of the energy market. It will facilitate the creation of an energy sector market and trading of energy in Moldova – an important foundation for a competition-based energy sector market.[82]
- With the support of UNDP a pilot project for the implementation of smart-metering in Moldova was launched in June 2023 that will help foster the digitalization process in the energy sector of Moldova.[83]

Infrastructure

After the start of the war in Ukraine, Ukraine and Moldova were accepted to enter ENTSO-E on 16 March 2022. As a consequence, Moldova immediately received access to electricity power on the European market, primarily from Romania, through the interconnection to the South via Isaccea and by the Northern part to Dnestrovskaia through Ukraine. It is still needed to increase the resilience of the electricity grid and to finalize the construction of the Chisinau-Vulcanesti-Isaccea 400kV electric line that will avoid the Cuciurgan interconnection node in Transnistria. An additional high-voltage line is planned to be constructed between Balţi and Suceva in Romania. The natural

[78] World Bank https://thedocs.worldbank.org/en/doc/4beaf80e51c27e4b5395639c1019af8d-0080012023/original/WB-Moldova-Portfolio-Brochure-May-05-2023.pdf page 13 (accessed 04.08.2024)
[79] World Bank https://thedocs.worldbank.org/en/doc/4beaf80e51c27e4b5395639c1019af8d-0080012023/original/WB-Moldova-Portfolio-Brochure-May-05-2023.pdf page 5 (accessed 04.08.2024)
[80] World Bank https://thedocs.worldbank.org/en/doc/4beaf80e51c27e4b5395639c1019af8d-0080012023/original/WB-Moldova-Portfolio-Brochure-May-05-2023.pdf page 14 (accessed 04.08.2024)
[81] Ministry of Energy https://energie.gov.md/ro/content/fondul-de-eficienta-energetica-sectorul-rezidential-va-avea-un-buget-de-cel-putin-723 (accessed 04.08.2024)
[82] Government of the Republic of Moldova https://gov.md/en/node/47907 (accessed 04.08.2024)
[83] Ministry of Energy https://energie.gov.md/en/content/energy-ministry-has-launched-pilot-program-install-smart-meters-electricity-0 (accessed 04.08.2024)

gas high-pressure pipeline system is sufficient at this stage. Moldova has 4 interconnections, 3 of which are outside the control of the separatist regime of Transnistria.

Energy supply

As Gazprom has reduced dramatically the supply of natural gas to Moldova, nowadays the supply is offered only to Transnistria. Moldova has developed institutional capacities and mechanisms to trade both natural gas and electricity on the European market. Also, for the first time, the state-owned company, Energocom, with the support of the EU and EBRD, has created reserves of natural gas stored in Romania and Ukraine for the winter season 2022-2023. Except for domestic sources of electricity production, the main supplier remains the Cuciurgan power plant based in the separatist region. However, Moldova has full capacity to trade and deliver energy from Ukraine and Romania, if needed.

Energy Efficiency and Renewables

Moldova has a strong international commitment to improving energy efficiency, reducing greenhouse gas emissions, and decarbonizing the economy. Energy intensity in Moldova is 3.4 times higher than the average energy intensity in EU countries, which indicates that there is significant room for improving energy efficiency.

Moldova has assumed the goal of achieving carbon neutrality by 2050, by adopting the National Strategy for Sustainable Development until 2030 and the Integrated National Plan on Energy and Climate Change for the period 2021-2030. Also, the Republic of Moldova is a party to the Paris Agreement and submitted the Nationally Determined Contribution, in which it undertakes to reduce greenhouse gas emissions by at least 70% by 2030, compared to the level of 1990. To achieve this goal, the Ministry of Energy has set several priorities, including developing policies and programs to support energy efficiency and decarbonization in the country. The Ministry of Energy developed the Energy Efficiency Fund,[84] which is in the process of operationalizing the mechanisms to provide financial support for projects promoting energy efficiency in buildings, transport, and industry. The fund aims to reduce energy consumption and greenhouse gas emissions by supporting energy efficiency projects. The development and organization of auctions for the distribution of capacities for renewables is another important strategic direction for the decarbonization of the economy, as well as sustainability and diversification in the energy sector. In 2024, the Ministry of Energy has planned 160 MW of renewable plant capacity auctioning. The Republic of Moldova aims to increase the share of renewable energy in the energy mix to 40% by 2030.[85]

[84] Ministry of Energy, The Energy Efficiency Law provides the Ministry of Energy with new tools to deliver and encourage investment in energy efficiency https://energie.gov.md/en/content/energy-efficiency-law-provides-ministry-energy-new-tools-deliver-and-encourage-investment(accessed 04.08.2024).

[85] Ministry of Energy, The Ministry of Energy organized a new round of public consultations with potential investors on the tender documentation for the construction of 165 MW of renewable energy. https://energie.gov.md/en/content/ministry-energy-organized-new-round-public-consultations-potential-investors-tender(accessed 04.08.2024).

7. Sources of vulnerability and risk factors in Moldova

7.1 Macroeconomic situation

Over the last years, the economic growth of Moldova has been slowing down because of domestic challenges, declining competitiveness and external shocks. While in the period 2004-2013, economic growth amounted to 4.6% per year, in the period 2014-2023 average annual growth amounted to only 2.2%. The slowdown was determined by domestic and external factors, such as the growing comparison base, shrinking population, extreme weather events (mainly droughts), but also external shocks since 2020 - the COVID-19 pandemic, rampant global inflation, and the brutal and unjustified Russian military aggression in Ukraine. As a result of the perpetuation of domestic constraints along with increased uncertainty and security risks in the region, 2023 was the first year in the last two decades when the Moldovan economy has not fully recovered from the previous year's recession (in 2023, Moldova's economy underperformed with a modest economic growth of only 0.7% y-o-y, after a contraction by -5.0% y-o-y in 2022).

Geopolitical tensions, particularly the ongoing war in Ukraine, have caused significant disruptions to trade routes and increased logistical costs for Moldova. This geopolitical instability introduces considerable economic uncertainty and negatively impacts trade activities. Additionally, Moldova's heavy reliance on imported energy poses substantial risks. This dependence makes the country vulnerable to price volatility and supply disruptions, which can severely impact its economy. Furthermore, Moldova's economic performance is closely tied to the health of its major trading partners, primarily the EU. Economic downturns or instability in these regions can lead to significant declines in Moldova's export revenues and overall economic stability.

Moldova's limited fiscal space is a critical domestic weakness. The country struggles to enhance public investment while maintaining fiscal discipline, which affects the government's ability to respond to economic challenges and invest in long-term growth. Additionally, the underdeveloped financial sector lacks the depth and efficiency needed to support robust economic expansion. This limited financial intermediation hampers the allocation of credit to productive sectors. Chronic lack of investment in infrastructure, technology, and other critical areas further stifles economic diversification and growth, restricting innovation and competitiveness. Moreover, Moldova faces significant demographic challenges, including a declining and ageing population, which reduces the labour force and poses long-term threats to sustainable economic growth.

Infrastructural bottlenecks and underfinancing are a major structural weakness for Moldova. Inadequate infrastructure increases operational costs for businesses and reduces the economy's overall competitiveness. Poor infrastructure affects key sectors such as transportation, communication, and utilities, hindering economic activities. Additionally, institutional fragility is a significant concern. Weak coordination among various strategic documents and institutions leads to ineffective policy implementation, undermining efforts to achieve economic stability and growth.

Monetary policy challenges also pose risks to Moldova's macroeconomic stability. The effectiveness of monetary policy is often hindered by delays in transmission due to structural issues within the capital market. These lags affect the central bank's ability to manage inflation and stimulate economic activity.

7.2 Financial sector

Although the financial sector of the Republic of Moldova has strengthened considerably since the 2014 bank fraud and remained resilient against the myriad of crises of recent years, it remains exposed to some vulnerabilities.

The growing share of foreign ownership in the banking sector improved overall governance, however, some risks persist. After the bank scandal, the market share of foreign-owned banks jumped to 68% in 2019 (from 21% in 2013). While this helped in solving the opaque governance, a small bit of risk of erosion of fit-and-proper fundamentals persists, especially in the context of litigations raised from previous shareholders and corruption risks. Also, given that much of the investment in Moldovan banks comes from CEE banking institutions, this makes the banks exposed to potential adverse developments in the home country.

Despite an expansion of the non-bank financial institutions, commercial banks remain dominant, comprising approximately 90% of the financial sector's assets. The banking sector is very concentrated, with the assets in the top 5 banks reaching 86%. A high degree of concentration is specific to the insurance sector too: the 5 largest insurers hold 80% of total assets and 75% of the total volume of gross written premiums. In terms of products, the insurance sector remains highly dependent on compulsory insurance products.

While the banking sector is well-capitalized with strong liquidity buffers, credit penetration is low, even though bank lending has nearly doubled since 2016 and the lending of non-banking credit organisations – tripled. This is explained by a high-risk aversion of lending institutions, coupled with the inability of the financial system to provide long-term financing due to the maturity mismatch of resources. These, in tandem with an underdeveloped capital market with only sporadic initiatives aimed at providing investment opportunities, further discourage financial intermediation, which continues to be a structural challenge to economic development.

Trade remains one of the main beneficiaries of banking lending, standing consistently in the range of 22% of all loans over the past 6 years, but there has been an increase in mortgage lending as well. From a mere 8% of all loans in 2017, mortgage lending made up 21% of bank lending in 2023. Indeed, mortgages appear to remain a safe bet for Moldovan banks, with an NPL ratio of around 2% in real estate lending in 2023, as compared to 15% in agriculture and 12% in manufacturing. Nevertheless, it requires close monitoring to ensure that a bubble does not develop and that the indebtedness of the population remains sustainable, as long-term credits are more exposed to interest rate fluctuation, and any rate increase can create payment difficulties.

In general, the financial sector in Moldova remains vulnerable to external shocks, especially concerning Russian aggression and the invasion of Ukraine. These vulnerabilities can be translated in different ways that could harm the financial sector, such as a low appetite for investments and respective low demand for credit, or capital flow.

7.3 External Economic Relations

Moldova is a small and open economy, which makes it particularly vulnerable to external economic and political shocks and fluctuations. Since its independence, Moldova has always recorded current account deficits, entirely caused by the goods balance, while services and primary and secondary income recorded surpluses. The start of war in Ukraine in 2022 triggered a worsening of Moldova's current account, driven primarily by terms of trade shocks.

Currently, about two-thirds of Moldova's exports of goods go to the EU, while the dependence on Eastern markets has decreased. However, one of the main vulnerabilities of Moldova's foreign trade – excessive reliance on a small number of markets – persists even today. If in the past Moldova's exports were excessively concentrated in Russia, then today the role of the main export market belongs to Romania, to which 35% of goods exports were directed in 2023. Goods exports have become even less geographically diversified in recent years, with Romania's share continuing to grow. The diversification of exports in terms of products is also limited, and the technological sophistication of exports is low. Moldova's largest export category is agricultural products and foodstuffs – 43% in 2023, followed by machinery and equipment (mostly cables and wirings after processing) – 18%, mineral products (mostly re-exports of fuels) – 12%, and textiles (mostly clothing after processing) – 9%.

On the other hand, the role of services in Moldova's external trade is growing. Moldova is a net exporter of services and the service surplus has increased from 1.1% of GDP in 2009 to 5.4% in 2023. The increase in services exports was mainly driven by the IT sector and tourism.

After the signing of the Association Agreement with the EU in 2014, direct investment from EU countries to Moldova increased significantly. At the end of 2023, the accumulated stock of FDI from the EU was 71% larger than in 2013 and exceeded USD 3 billion (69% of total FDI stock, including equity and debt). At the same time, FDI stock from other countries remained almost at the level of 2013. The composition of FDI stock by sectors at the end of 2023 shows that financial and insurance activities received the largest part of total investment so far (26%), followed by wholesale and retail trade (20%), manufacturing (19%), electricity, gas, water supply, waste management (18%). With such a structure by industries, FDI does not contribute much to exports or to fostering technological transfer. Even in manufacturing, FDI is frequently concentrated on low-value-added activities, such as processing.

Another vulnerability is emigration which has started causing tightness in the labour market. Over the last decade, on the net (considering both emigrants and immigrants), Moldova has been losing approximately 25,000 working-age persons each year (1% of the total population). In a survey conducted in 2023, 18% of employers reported being unable to hire the staff they needed (16% reported so one year earlier).

7.4 Energy

Since Moldova has limited energy resources, it can meet only a fraction (less than 16%) of the total demand from domestic sources and is highly dependent on imported energy such as oil and gas. Obsolete infrastructure and low energy efficiency of the residential, governmental and commercial sectors harm energy intensity, a high rate of energy poverty and a negative impact on economic performance. The energy sector of Moldova faces several vulnerabilities that impact its stability and development. The main issues are:

- *Dependence on Imported Energy*: Moldova relies heavily on imported energy, particularly from neighbouring countries.
- *Ageing Infrastructure*: Much of Moldova's energy infrastructure, including power plants, transmission lines, and distribution networks, is outdated and in need of modernization. This can lead to inefficiencies, higher maintenance costs, and increased risk of breakdowns.
- *Energy Efficiency*: There are challenges related to energy efficiency and conservation. The lack of modern, energy-efficient technologies and practices can lead to higher energy consumption and costs.
- *Financial Constraints*: Moldova faces financial constraints that limit its ability to invest in new energy projects or upgrade existing infrastructure. This financial strain can affect the development of sustainable and resilient energy solutions.
- *Lack of Diversification*: The energy mix in Moldova is not highly diversified, which can be risky if the country faces disruptions in its primary energy sources. Greater diversification could help mitigate risks associated with reliance on a single energy source.
- *Environmental Impact*: The environmental impact of energy production and consumption is a concern, especially if the country relies on outdated or polluting technologies. Transitioning to cleaner energy sources is crucial for long-term sustainability.
- *Cybersecurity Threats*: Like many other countries, Moldova's energy sector is vulnerable to cyberattacks that can disrupt operations or compromise sensitive information. Strengthening cybersecurity measures is essential to protect the sector from potential threats.

8. Policy Recommendations

The identified vulnerabilities in Chapter 7 should be tackled by the following policy recommendations:

8.1 Macroeconomic stability

To enhance macroeconomic stability, and resilience and ensure more sustainable economic growth, the following recommendations are proposed:

1. Anchor in the European integration - Moldova must stay fully committed to the European integration process, ensuring rapid progress in negotiations on the 35 chapters. This commitment will help stabilize the macroeconomic environment and enhance investor confidence.

2. Integrated approach to labour market imbalances - define and implement an integrated strategy to manage demographic and economic imbalances in the labour market. This includes addressing the shrinking labour force and skills mismatch to ensure sustainable economic growth.

3. Enhance financial intermediation - this involves addressing both cyclical and structural obstacles to finance access, thereby promoting structural changes towards higher value-added sectors.

4. Coherent economic policies - develop well-coordinated and coherent economic policies to create a stable and predictable economic environment. This stability is crucial for attracting investments and fostering economic growth.

5. Improve business climate - enhance the business environment to stimulate domestic entrepreneurship and attract foreign investment. This includes simplifying regulatory frameworks, improving legal systems and ensuring transparent governance.

6. Attract investments - actively seek investments as a source of capital, technology, and market access. Creating incentives and reducing barriers for investors will help boost economic development.

7. Strengthen capacity to absorb foreign assistance - improve the ability to effectively utilize foreign aid by aligning it with national development priorities. This will ensure that external assistance contributes significantly to sustainable growth.

8. Prepare for European funds absorption - develop the necessary institutional capacity and implementation mechanisms to absorb European funds efficiently. This preparation will facilitate the effective use of these funds for development projects.

9. Invest in sustainable infrastructure - increase public investment in sustainable infrastructure to support long-term economic growth. This includes improving transportation, energy, and digital infrastructure to enhance productivity and competitiveness. Focus on reducing current public expenditures and increasing investment-oriented spending, but also address chronic under-execution issues.

10. Reform the justice system - accelerate justice reforms and related structural changes to meet societal expectations and improve the overall investment climate. A transparent and efficient legal system is critical for economic stability and growth.

8.2 Financial sector

After the bank fraud, a broad range of reforms has been undertaken with an emphasis placed on financial stability, legitimate shareholders and transparency. This positive context needs to be maintained, with a strong commitment from the central bank to maintain the current prudential requirements on share ownership in the banking sector as a fundament for macro-financial stability.

The low level of financial intermediation stresses the need for more targeted efforts geared toward the closing of financial sector development gaps. It is necessary to adopt a holistic view (such as a financial sector strategy) by encompassing all state institutions and initiatives, identifying and taking into account all market barriers and leveraging commercial finance. Developing the capital market should be seen as a tool to underpin financial intermediation as an alternative to credits, to solve the problem of maturity mismatch of the resources and to offer more investment opportunities.

The expansion coming from non-bank credit organizations (NBCOs) that have more aggressive business strategies, should be properly accompanied by effective financial consumer protection. While the regulatory framework on responsible lending is in place, it is important to ensure the effective enforcement of the legislative framework, while keeping in the loop the financial education of the population as a crosscutting priority.

Although regulations and prudential requirements for insurance companies have been revised, there is still work to be done to complete the remaining regulations for the Solvency II directive of the EU to ensure its adequacy and effectiveness. Also, given the low penetration of insurance services, efforts to develop other segments of the insurance market, such as homeowners' property, health, and life insurance remain important.

8.3 External Economic Relations

To decrease the current account deficit, Moldova needs to boost competitiveness both in terms of costs and quality. Doing so requires investing more in local production of renewable energy and increasing energy efficiency, as energy is one of the main drivers of costs. Particular emphasis should be put on attracting FDI capable of fostering technological transfer to increase productivity and sophistication of goods manufactured. Apart from boosting productivity to increase wages, public services need to be enhanced and safety needs to be ensured to decrease emigration.

8.4 Energy sector

Moldova's energy policy requires a comprehensive approach, including investment in modern infrastructure and renewable energy, securing supply of energy, diversification of energy sources, regulatory improvements, digitalization of the sector, implementation of smart-grid technologies, and efforts to enhance energy efficiency and security.

Energy Diversification and Independence are necessary to reduce dependency on energy imports:

- Diversify Energy Sources: Increase the share of renewable energy in the energy mix by investing in solar, wind, hydroelectric, and biomass. Implementation of an atomic energy project should also be considered for energy source diversification.
- Develop Regional Energy Connectivity: Strengthen Moldova's energy ties with the EU by completing interconnections with neighbouring EU member states (Romania). This includes the completion of the power grid interconnection with Romania.
- *Grid Modernization and Smart Grids:* Upgrade Moldova's outdated electricity grid with advanced technologies like smart meters, sensors, and grid automation to improve energy efficiency, reduce transmission losses, and optimize energy distribution.

Energy Efficiency and Demand-Side Management improvement is needed to r*educe* energy consumption and promote more sustainable energy practices among consumers and industries.

- *Energy Efficiency Standards and Incentives:* Establish strict energy efficiency standards for buildings, appliances, and industrial processes. Introduce financial incentives for households and businesses to invest in energy-efficient technologies, such as insulation, LED lighting, and energy-efficient heating systems.
- *Public Awareness Campaigns:* Launch nationwide campaigns to raise awareness about energy efficiency practices, the benefits of renewable energy, and government incentives for energy-saving technologies.
- *Encourage Industrial Energy Efficiency:* Provide incentives for industries to adopt energy-efficient technologies, such as high-efficiency boilers, renewable energy integration, and waste-to-energy systems.

Promote Green Financing and Innovation to obtain l*everage* financing mechanisms to support the transition to a more sustainable energy system.

- *Seek EU and International Funding:* Moldova should continue to engage with the EU-funded Energy programs and other international organizations, such as the World Bank and the European Investment Bank, to secure financing for energy infrastructure projects, especially in renewable energy, energy efficiency, and grid modernization.
- *Encourage Private Sector Involvement:* Create incentives for private sector participation in the energy transition, particularly in renewable energy generation, by introducing feed-in tariffs, tax breaks, or guaranteed power purchase agreements.