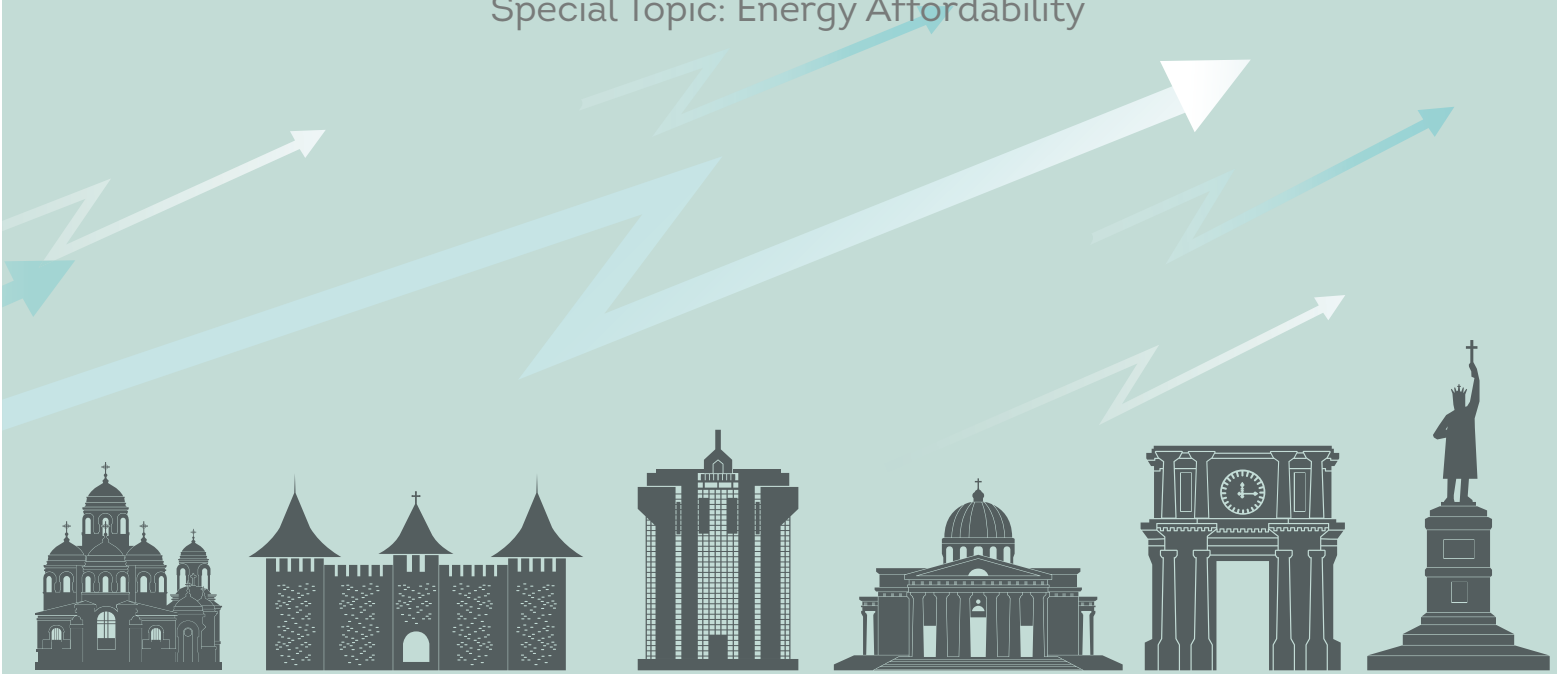


MACROECONOMICS, TRADE AND INVESTMENT
GLOBAL PRACTICE

MOLDOVA ECONOMIC UPDATE

Special Topic: Energy Affordability



THE WORLD BANK
IBRD • IDA



April 2024

EXECUTIVE SUMMARY

Moldova's economic prospects have dimmed following Russia's invasion of Ukraine, with only a gradual recovery expected. Although the economy resumed growth in 2023, it was at a slower rate and came with an increase in poverty due to rising prices. Ongoing challenges such as the war in Ukraine, structural issues, and impending elections continue to pose constraints significantly impacting consumer and investor confidence. Ensuring the availability and affordability of energy resources remains a top priority in short term, given their potential impact on Moldovan families, especially the vulnerable, as well as the country's competitiveness and fiscal position. Despite inherent structural constraints, monetary and fiscal policies appear aligned in stimulating economic activity. Fiscal policy faces the dual challenge of supporting households' real disposable income while laying the groundwork for future growth. However, a cautious approach to building buffers and managing fiscal risks is warranted. To achieve long-term sustainable development and align with EU per capita income levels, Moldova needs robust reform momentum and investments in growth-enhancing, climate-resilient infrastructure. Structural challenges like low productivity growth, skills mismatch, governance deficiencies, and limited competition persist, necessitating reforms to boost market competitiveness, remove barriers to advanced technology adoption, and address market inefficiencies. Proposed reforms aim to accelerate public investment in infrastructure, implement a multimodal transport strategy, and diversify the energy sector to reduce reliance on limited sources. Strengthening PPP frameworks, enhancing procurement strategies, and attracting private investment are essential for sectoral development. Accompanying policy changes with institutional reforms, including subjecting State-Owned Enterprises (SOEs) to private company regulations, and promoting competition, is crucial to stimulate productivity growth and investment. Leveraging EU integration can drive private sector productivity, enhance competitiveness, and generate more job opportunities, positioning Moldova for long-term economic prosperity. Prioritizing preparations for potential access to EU funds, particularly for infrastructure needs, should be a key focus moving forward.

EXTERNAL ENVIRONMENT

Growth in the Europe and Central Asia (ECA) region is expected to moderate to 2.4 percent in 2024, with a slight improvement to 2.7 percent by 2025.

The main drivers of growth are expected to be private consumption, supported by easing inflation, and exports, which are likely to benefit from the euro area’s gradual recovery. However, regional growth remains below pre-COVID-19 pandemic levels, largely due to persistent pandemic effects and the repercussions of Russia’s invasion of Ukraine. Elevated inflation rates impede rapid monetary policy adjustments and are affecting private consumption, while anticipated fiscal consolidation is likely to dampen growth prospects. Risks to the outlook include tensions in the Middle East, with the potential to increase energy

prices and tightening financial conditions, as well as further escalation of the war in Ukraine. Prolonged inflation or a sluggish euro area recovery could also negatively impact regional activity. Russia’s growth is expected to slow to 1.3 percent in 2024 and 0.9 percent in 2025, nearing its potential rate. Romania’s economy is forecasted to grow by 3.3 percent in 2024, fueled by increased disposable incomes and investments financed by the EU, despite external challenges, particularly those stemming from Russia’s invasion of Ukraine. Ukraine’s economic forecast is highly uncertain due to ongoing war in Ukraine, with growth projected at 3.2 percent this year and 6.5 percent in 2025. The euro area will expand by 0.7 percent in 2024, with growth expected to strengthen to 1.5 percent in 2025 and 1.3 percent in 2026.

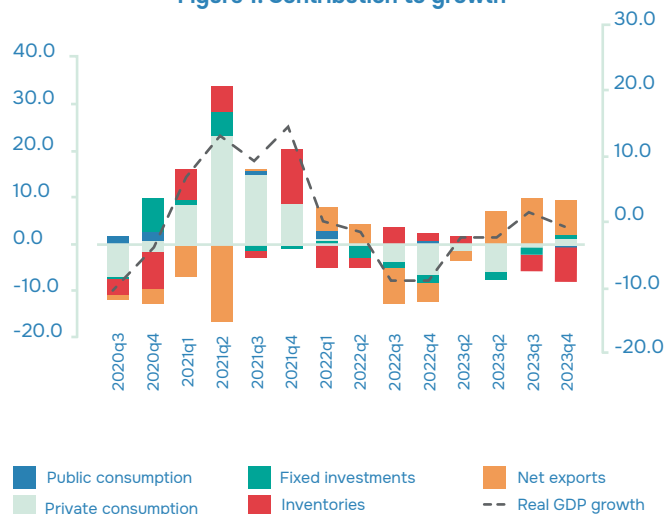
RECENT ECONOMIC DEVELOPMENTS

The economy continues to grapple with the lingering repercussions of the war, exerting a dampening effect on economic growth throughout 2023.

The economy has faced a series of compounded challenges that began with an energy crisis in late 2021, followed by Russia’s invasion of Ukraine or war in Ukraine, and was further exacerbated by a severe drought in 2022, resulting in a substantial contraction of 4.6 percent in 2022. Moldova’s economy continued to grapple with the aftermath of these shocks in 2023, amidst heightened uncertainties. In the first quarter, GDP contracted by 2.4 percent (year-on-year, y-o-y), with private consumption declining by 2 percentage points due to high prices and weakened purchasing power. Net exports also dragged down growth by 1.3 percentage points as imports outpaced exports, although some support came from restocking activities and a marginal increase in investments. The second quarter saw a further contraction in GDP, resulting in a 2.3 percent decrease in the first half of the year, primarily driven by a significant dip in private consumption (-4.7 percentage points) and

subdued investments. Net exports contributed positively to growth as imports remained muted amidst weak domestic demand. A modest rebound occurred in the third quarter, with GDP expanding by 2.6 percent, signaling nascent signs of recovery through improvements in net exports and private consumption, although investments continued to decline due to elevated uncertainties and interest rates.

Figure 1. Contribution to growth



In 2023, the economy exhibited modest growth of 0.7 percent, driven by a strong recovery in the agriculture sector, which expanded by 31.9 percent following the 2022 drought.

Meanwhile, livestock production, particularly in household settings, experienced a decline for the fourth consecutive year. Conversely, the industrial sector contracted by 10 percent for a second consecutive year due to a downturn in manufacturing, quarrying, and mining, and construction activities, exacerbated by high input costs, reduced demand from trade partners, and increased risk. The most significant contractions were observed in manufacture of chemicals and chemical products (-26.4 percent) and wearing apparel (-16.8 percent). The manufacture of electrical equipment, a sector integrated into the Global Value Chain (GVC), grew by almost 60 percent, while the production of machinery and equipment more than doubled in 2023, following a tripling in 2022. The construction sector (-14.8%) was affected by high interest rates and low investment confidence, with a sharp decrease in new constructions works. The services sector experienced subdued growth overall, despite notable expansions observed in the IT, healthcare, and hospitality sectors, the latter boosted by Ukrainian refugees largely using Moldova as a transit hub. Conversely, domestic trade and transport services activities contracted due to the resumption of activity at the Odessa port in Ukraine.

On the demand side, net exports made the largest contribution to growth in 2023, driven by a reduction in imports (-5.1 percent) amid subdued domestic demand.

Exports also increased, supported by robust services exports (9 percent), strong agricultural yields, and substantial re-export activities to Ukraine, promoting Ukraine to the position of Moldova's second-largest trading partner. However, logistical challenges in exporting to Russia resulted in a 14 percent decrease in goods exports to Commonwealth of Independent States (CIS) countries compared to 2022. The positive contribution from net exports was partially offset by a reduction in inventories, indicative of the broader economic deceleration and diminished demand environment. Moreover, private consumption and investments contracted due to sluggish growth in disposable incomes (1.9 percent), elevated interest rates, and heightened uncertainties associated with the ongoing war in Ukraine.

High frequency indicators suggest divergent trends.

In January 2024, sales volumes decreased in wholesale trade sector by 2.7 percent, while in retail trade increased by 5.5 percent. In the first two months of 2024, industrial production saw an increase of 3.8 percent. Following the construction sector's downward trend, mining and quarrying decreased by 5.2 percent, while the manufacturing industry increased by 4.7 percent. Simultaneously, there was a 12.5 percent decrease in the export of goods, notably with exports to CIS countries plummeting by 31.5 percent. Imports also saw a decline of 7.5 percent, with a particularly sharp drop of 43.4 percent observed in the import of oil and oil products. In the first three months of 2024, on the back of a recovery in animal production, total agricultural production increased by 11.6 percent.

Figure 2. Selected short-term indicators.

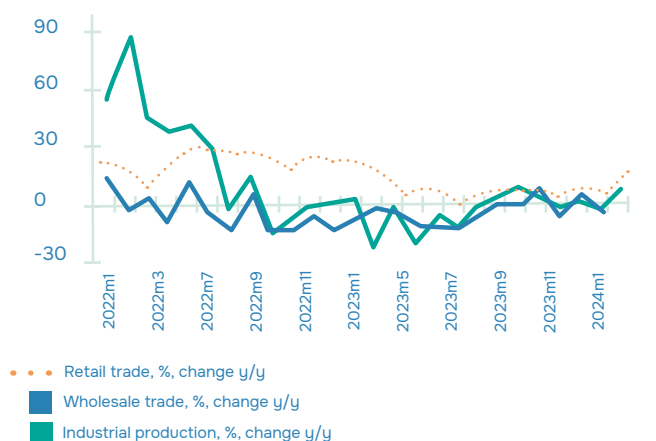
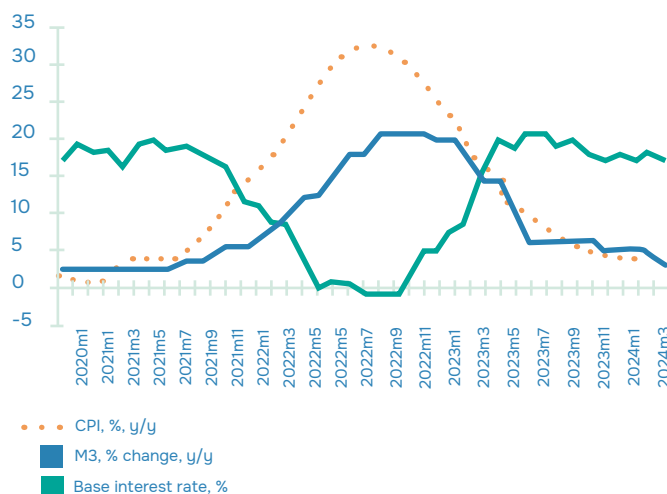


Figure 3. Selected monetary indicators and CPI.

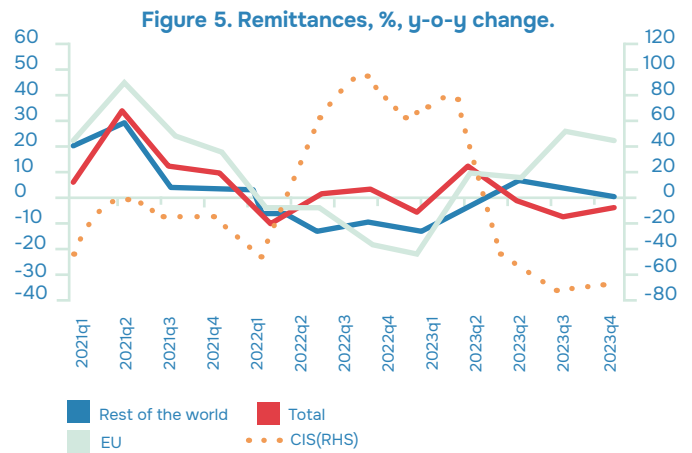
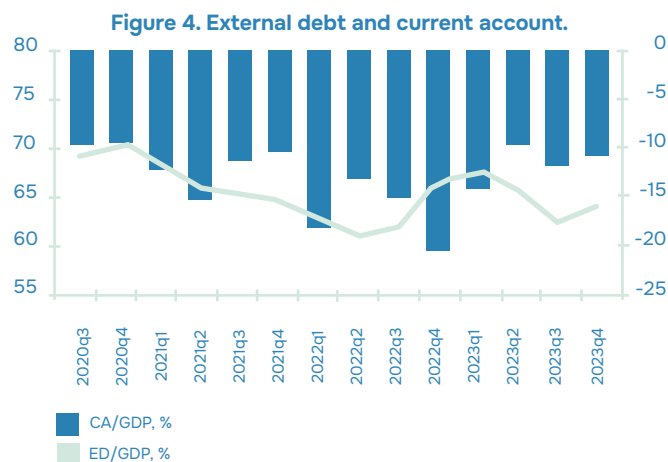


Average inflation decelerated from 28.7 percent in 2022 to 13.4 percent in 2023, driven by lower commodity prices and monetary policy tightening.

After its spike in October 2022 at 34.6 percent (y-o-y), inflation decelerated rapidly in 2023. This was driven by subdued domestic demand and a decline in energy and food prices, also due to good harvest, timely tightening of monetary policy, and appreciation of the Leu. The latter reduced the cost of imports, which had spiked following the initial impact of Russia's invasion of Ukraine. Furthermore, the compensations through the Energy Vulnerability Reduction Fund (EVRF) fund and the reduction in utility tariffs aided in lessening inflationary pressures (see special topic). As a result, the inflation rate reentered in the central bank's target range of 3.5 to 6.5 percent by October 2023. Inflation continued its downward trajectory in 2024, with the rate reaching 3.9 percent (y-o-y) by March 2024.

Persistently high food and fuel prices reduced purchasing power, with government energy subsidies providing some relief (more details in the special topic).

During 2022, average household income saw a real-term decline of 6 percent. This decline disproportionately affected poorer households, with consumption among those in the first quintile plummeting by 10 percent in real terms. Consequently, poverty rates, as measured by the international US\$6.85 2017 PPP per day poverty line, are expected to have stayed broadly constant, marginally dropping from 15.4 percent in 2022 to 15.0 percent in 2023.



With the easing of inflation, the National Bank of Moldova (NBM) reduced the policy rate gradually in line with the objective of the inflation targeting framework.

The NBM reduced the policy rate from 21.5 at the beginning of the year to 3.75 percent by March 2024, in line with inflation movements. Furthermore, the NBM gradually relaxed reserve ratio requirements throughout 2023. This adjustment was primarily prompted by substantial excess liquidity within the banking system that are not used for financial intermediation. According to the NBM, in the fourth quarter of 2023, excess liquidity surged by 77 percent compared to same period last year, amounting to 25 percent of the MO (monetary base). This trend persists into early 2024, with an increasing trend.

The current account deficit (CAD) improved from 17.1 percent of GDP in 2022 to 11.9 percent in 2023, driven primarily by improvements in the trade balance.

Moldova's CAD is structural in nature due to its reliance on agricultural exports and low value-added manufacturing sector, coupled with high energy imports. The improvement in the CAD was driven by a more pronounced decrease in imports (-6.6 percent), reflecting lower domestic demand and import prices, particularly energy. At the same time, goods exports in dollar terms remained subdued due to less favorable export prices. Imports of services increased by more than 13 percent, with the import of travel services increasing by around 20 percent. Services exports also increased by 7 percent with the transport and IT services leading. Positive developments were also registered in the primary income account, with the main driver being the income from reserves assets. The surplus of the secondary account increased by 4.4 percent, due to a decrease of 19 percent in outflows of personal transfers. Remittances from CIS countries have decreased by half as migrants are moving to other nations, while those from the EU have increased by 15.4 percent, leading to a 2 per-

cent overall decrease in remittance inflows. The CAD was financed primarily by cash and deposits along with public sector debt instruments, and to a lesser extent by foreign direct investment (FDI) in the form of reinvested profits. External debt decreased by 2.8 percentage points compared to end-2022, reaching 63.3 percent of GDP. The NBM used a prudent exchange rate policy, resulting in comfortable foreign reserves that by end-March 2024 increased by 20.4 percent as compared to end-2022 and currently stand at around US\$5.4 billion and cover more than four months of imports.

While the banking sector remains strong, there are risks in the non-banking financial sector and credit recovers slowly.

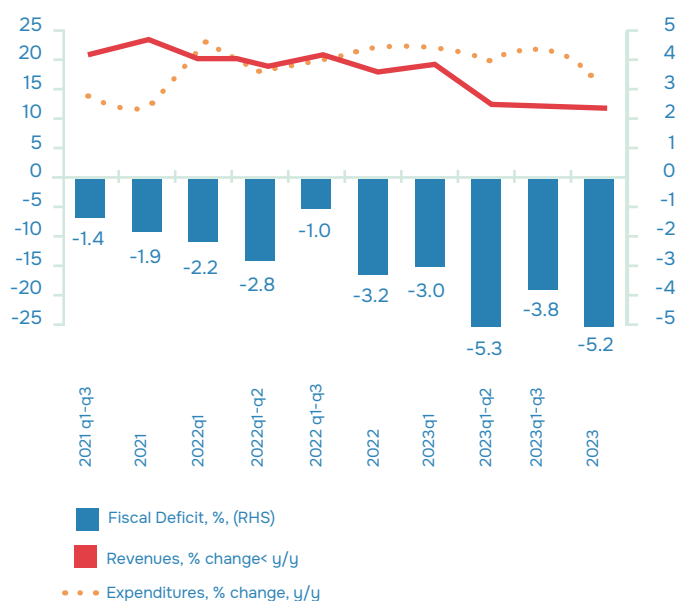
The banking sector continues to report strong levels of capital adequacy, liquidity, and profitability, on the back of high-yielding investments in government bonds, high interest rates, and a conservative prudential regulatory and supervisory framework. Despite muted loan growth and significant geopolitical and economic uncertainty in 2023, banks' return on assets and equity (RoA and RoE) decreased only slightly to 2.8 percent and 16.2 percent, respectively. Despite initial challenges, including elevated interest rates and a sluggish economy, new credit issuance accelerated in the second half of 2023, averaging 20 percent (y-o-y) in the first two months of 2024. The NPL ratio has been steadily declining since the 2014 banking crisis, and further declined from 6.4 percent in 2022 to 5.6 percent in 2023. Euroization of deposits remains elevated, at 37 percent, and risks in the non-banking financial sector warrant close monitoring and enhanced oversight.

The fiscal deficit widened to 5.2 percent of GDP in 2023 but remained below the planned 5.9 percent of GDP due to budget under-execution and subdued domestic revenues.

In 2023, total revenues increased by 11.8 percent, driven by higher income taxes, social contributions, excise duties on imported goods, and significant external grants provide by development partners to alleviate fiscal pressures arising from the impact of the war in Ukraine and the repercussions of energy crises. However, collections from value-added-tax (VAT) on imports, representing the largest component of domestic revenue, decreased by 3 percent. Total expenditure increased by 17.4 percent, driven by strong spending growth to support households and protect jobs. Expenditures escalated on various fronts, primarily spending on social programs increased by 15.5 percent reaching 37 percent of all spending. Driven by inflation dynamics and high interest rates, wages in-

creased by 14 percent, while interest payments almost doubled. Spending on non-financial assets increased by 13.6 percent, while capital investments witnessed a rebound of 20.9 percent following a weak execution in 2022. Consequently, the fiscal deficit widened from 3.2 percent of GDP in 2022 to 5.2 percent in 2023, well below the planned 5.9 percent of GDP. The underutilization of capital expenditure remains a challenge, necessitating better budget projections, particularly at local levels, and improvements in the public investment management (PIM) framework. The fiscal deficit was financed mainly by external borrowing from multilateral and bilateral partners on concessional terms and domestic borrowing. Authorities managed to increase their cash buffers reaching 6.5 percent of GDP, with slightly less than half attributed to the state budget cash balance. Public and publicly guaranteed debt increased by 9.6 percent, registering 35.9 percent of GDP in 2023, reflecting new loan disbursements. In the initial two months of 2024, with import VAT collections showing stagnant growth, public revenues decelerated to 9.6 percent, while expenditures rose by 10.2 percent. This led to a resulting deficit approximately 14 percent higher than the previous year, reaching around 5 percent of the projected GDP.

Figure 6. Selected fiscal indicators.



OUTLOOK AND MEDIUM-TERM PROSPECTS

The economy is projected to grow by 2.2 percent in 2024, supported by rising real disposable incomes fueled by lower inflation and a positive fiscal stimulus.

The gradual recovery is expected to be supported by private consumption and investments, reflecting a rebound in the main sources of disposable income (salaries, remittances, and social transfers), lower inflation, an accommodative monetary stance leading to favorable credit conditions. Nevertheless, private consumption and investment are likely to remain below past levels due to high energy and food prices and low confidence among consumers and investors. Net exports are expected to be a drag on growth, with demand-driven imports increasing and re-exports from Ukraine declining, compounded by logistical challenges in exporting to CIS markets. On the supply side, service sector growth, especially IT, transport and travel, and public services, is expected to support growth in 2024, benefiting from IT outsourcing opportunities and public sector modernization. Growth in the industry sector is expected to remain subdued, with production still below pre-war levels due to weak external demand. The construction sector faces headwinds from high material costs and uncertainties, while the transport sector will continue to benefit from rerouted trade from Ukraine through Moldova, albeit at reduced volumes. The agricultural sector's contribution to overall growth is expected to be limited, mainly due to persistently high input costs, ongoing logistical difficulties, and productivity constraints.

Medium-term growth will be sustained by reforms aimed at economic diversification and competitiveness enhancement, aligned with the EU accession agenda, positive fiscal impulse, and favorable interest rates.

GDP growth is forecasted to progressively approach its potential in 2025, as the EU accession reforms accelerate. The service sector is expected to drive growth, with substantial contributions from the IT and public sectors. The industrial sector is anticipated to recover gradually, with output reaching pre-war levels in 2025, supported by improvements in external demand and regional investment sentiment. The food industry is forecasted to experience a gradual rebound in tandem with domestic demand improvements, although it will encounter heightened challenges from increased input costs and competition from neighboring countries. Moderate performance is expected

in the energy sector, characterized by significantly elevated energy prices compared to pre-COVID-19 pandemic levels, with authorities planning extensive energy efficiency measures, especially focusing on building infrastructure. Industries predominantly focused on exports, such as textiles, pharmaceuticals, and electrical equipment, are expected to remain particularly robust. The agricultural sector's contribution to growth is expected to remain modest in the medium term, constrained by productivity challenges.

Average inflation is projected to decline further in 2024, and to remain within the target corridor in the medium term.

This is due to weak domestic demand and the stabilization of food and energy prices, which are expected to sustain disinflationary pressures throughout 2024, with the inflation rate fluctuating in the lower band of the target corridor (3.5 to 6.5 percent). In the medium term, the inflation rate is expected to stabilize around the 5 percent target. However, inflation remains highly susceptible to external shocks. In contrast to the past two years, the effect of regulated prices on inflation is anticipated to be relatively insignificant. The NBM is expected to maintain a flexible exchange rate regime, and to be moderately active on the foreign exchange market to smoothen the fluctuations of the national currency. As inflationary pressures ease, the poverty rate, as measured by the US\$6.85 2017 PPP poverty line, is expected to decrease to 13.3 percent in 2024. With the anticipated economic recovery and normalization of inflation, poverty is projected to decline further to 11.2 percent in 2025. Energy subsidies are an important supportive element in reducing the poverty in Moldova, the Special Topic discusses in detail the impact of the EVRF on the households.

The CAD is expected to narrow to 10.7 percent of GDP in 2024, underpinned by favorable developments in the income accounts and strong services exports.

This improvement in the income accounts reflects a gradual recovery in remittance volumes. Exports increase, supported by robust services exports and robust food exports, particularly in the first half of the year on the back good harvest in 2023. Imports are projected to increase even more than exports, in line with an increase in domestic demand and lower re-exports from Ukraine, resulting in a slight deterioration in the trade deficit. The current account is expected to further improve in the medium term as import prices stabilize, moderate depreciation resumes, trade logistics normalize, and external demand, especially for services, increases. With increased economic activity, the CAD is expected to remain above historical averages, as the commitment to EU accession will take time to yield significant impacts on FDIs and exports. Remittances are anticipated to stabilize following a sharp decline from the Commonwealth of Independent States (CIS) countries as a result of the war in Ukraine, as migrants seek out alternative destinations. International reserves are projected to remain strong, covering more than four months' worth of future imports by 2026. Nonetheless, Moldova will continue to rely on international financial assistance to meet its external financing needs.

The fiscal deficit is expected to remain high at 4.1 percent of GDP in 2024 due to spending pressures, including support for households, jobs, refugees, and infrastructure.

In 2024, revenues are expected to decline due to a normalization of external grant contributions to their historical mean after the temporary increase caused by recent emergencies. With lower inflation, expenditures will decline even more as support to households to mitigate the impact of high energy prices is made more efficient. In the medium term, the deficit is projected to decrease, reaching 3 percent of GDP in 2026 as fiscal support is phased out. While spending and revenues as share of GDP will converge to historical averages, fiscal consolidation is underpinned by measures to improve domestic revenue mobilization. While external grants are expected to continue declining, tax revenues are projected to remain robust, supported by ongoing revenue mobilization efforts. These efforts include streamlining tax incentives, expanding the VAT base, and reducing exemptions. However, the introduction of VAT on cars, recent tax expenditures aimed at supporting SME investment, and the implementation of the new customs code could potentially undermine these efforts. Additionally, modernization initiatives within tax administration

are set to play a pivotal role in bolstering fiscal resilience and efficiency. Expenditures are anticipated to see an even steeper decline, facilitated by the refinement and better targeting of support to households through the EVRF, aimed at mitigating the impact of high energy prices. Concurrently, subsidies are expected to diminish, with support being rationed upon the resumption of economic activity. Additionally, with the realization of improvements in public investment management, expenditures on capital investments are anticipated to rise. This additional expenditure is expected to be partially offset by measures aimed at preserving the real value of the wage bill and goods and services, particularly as the pace of price increases slows.

Fiscal resources should be allocated more effectively to yield greater results with the same financing.

Ensuring a well-targeted framework is essential to achieve this efficiency. Strengthening domestic revenues, enhancing spending efficiency, and implementing climate resilience measures are paramount. Additionally, there's an urgent need to improve governance, streamline public spending, and fortify the management of fiscal risks, including those associated with SOEs. In the medium term, maintaining macroeconomic stability and fiscal reserves necessitates curbing spending on indiscriminate and costly subsidies and tax expenditures. This strategy could allow the government to adapt to changing economic conditions and expedite the introduction of structural reforms across various sectors such as energy, education, social welfare, and healthcare, fostering inclusive and sustainable economic growth. Moreover, expanding and fortifying the tax base and improving tax administration are critical steps.

Public debt is expected to remain sustainable.

The 2023 joint IMF-World Bank Debt Sustainability Analysis (DSA) assesses Moldova at low risk of external debt distress and at moderate risk of overall public debt distress, unchanged from the 2022 joint IMF-World Bank DSA. Moldova's public debt is considered sustainable with current debt carrying capacity assessed as strong. This is despite the increased financing needed to mitigate the economic and humanitarian fallout of the war in Ukraine and projected medium-term developmental spending needs. Under the baseline scenario, the present value of total PPG debt-to-GDP ratio is projected to decline below 30 percent of GDP from 2033 onward, remaining below the 70 percent benchmark in the medium to long term. Overall, the public debt trajectory remains vulnerable to risks, particularly from shocks to real GDP growth, calling for broadening growth drivers, sustaining reform momentum, and remaining committed to prudent fiscal policy, while reducing longer-term risks stem-

ming from climate change. In addition, improving governance, enhancing effectiveness of public spending, and strengthening management of fiscal risks, including from SOEs, are priorities to contain public debt vulnerabilities, as well as reducing vulnerabilities to extreme weather events and energy shocks.

Downside risks remain high due to Moldova's proximity to the war in Ukraine, vulnerability to external and climate shocks, and headwinds from upcoming elections.

The potential escalation of the war in Ukraine could adversely affect economic activity, financial stability, and investor confidence, potentially hindering domestic debt financing. Energy price volatility could add further pressures, possibly requiring reallocation of spending to prevent social unrest, particularly amid upcoming elections and the risk of gas transit disruptions through Ukraine by the end of 2025. This transit route is vital for both the left bank regions of the Nistru River and Moldova, facilitating the procurement of electricity at a more favorable cost than that available on EU markets. Unresolved disputes over historical commercial gas debt between Moldovagaz and Gazprom further exacerbate economic uncertainties. Vulnerabilities to extreme weather events, especially in agriculture, further heighten risks. However, social protection measures, energy diversification efforts, and strong reform commitments mitigate some of these risks. Political tensions, exacerbated by the war in Ukraine, and upcoming elections, along with tensions in Transnistria and Gagauzia, pose governance risks that could destabilize the government and the reform agenda.

Short-term priorities include supporting households to address the immediate needs resulting from the repercussions of the war and energy crisis.

After effectively navigating the past cold season, the immediate objective, besides gearing up for the next, should emphasize the following: on the social side, it is crucial for authorities to ensure energy availability for the forthcoming cold season while enhancing the efficiency and targeting of social protection programs, especially those designed for the most vulnerable groups (please refer to the special section for more details). Encouraging the adoption of energy-efficient practices and renewable energy sources is anticipated to enhance both the security and affordability of energy.

With EU opening of negotiations with Moldova in November 2023, strong reform momentum and growth-enhancing, climate-resilient investments are needed to foster long-term, sustainable development and convergence toward EU income levels.

Despite strong economic growth over two decades, poverty remains stubbornly high, especially in rural areas, and limited access to services and viable economic opportunities persist. Traditional drivers of poverty reduction, including remittances and social assistance, are showing signs of slowing, while low labor force participation and employment rates hinder a shift to employment-driven poverty reduction, emphasizing the need for urgent structural changes. Moldova faces structural challenges including low productivity growth, governance deficiencies, a large state footprint in the economy, limited competition, an imbalanced business environment, and tax distortions. In November 2023, the EU Commission recommended that the European Council initiates accession negotiations with Moldova. However, EU accession requires stronger reforms in areas such as justice, anti-corruption efforts, and reducing the influence of oligarchs. Seizing the opportunity of integration with the EU would help, leading to more rapid gains in private sector productivity growth, a more competitive economy, and greater job creation.

The recent Country Economic Memorandum (CEM) has highlighted three key priorities to advance long-term agenda of fostering a more competitive, resilient, and private-sector-led economy.

Reforms targeting increased productivity, enhanced infrastructure, and workforce skill development are proposed to drive economic growth above 5% in the medium term, leading Moldova towards convergence with average EU income levels within three decades. These reforms emphasize making markets more competitive and accessible, removing barriers to advanced technology adoption, and addressing market inefficiencies that allow unproductive firms to maintain significant market power. Policies must focus on reducing entry barriers, promoting fair competition, and facilitating access to markets to boost productivity and job creation effectively. Proposed reforms focus on accelerating public investment to address infrastructure deficiencies, implementing a multimodal transport strategy emphasizing railways, roads, and urban systems, and diversifying the energy sector to reduce dependence on single sources. Additionally, reviewing and strengthening PPP frameworks, enhancing procurement strategies, and attracting private investment are crucial to foster sectoral devel-

opment and remove barriers to entry. Accompanying policy changes with reforms of public institutions is key to enable productivity growth and investment. Key measures include subjecting commercial SOEs to private company regulations, eliminating regulations favoring SOEs in public procurement and market entry, and reviewing price controls and state support to the economic sectors. Additionally, addressing conflicts of interest within SOEs, implementing transparent cooperation mechanisms between sector regulators and competition authorities, and promoting competition are essential for leveling the playing field and fostering economic development.

Table 1: Key Macroeconomic Indicators

	2018	2019	2020	2021	2022	2023	2024f	2025f	2026f
Nominal GDP, MDL billion	189.1	206.3	199.7	242.1	274.5	300.4	321.3	349.7	383.0
GDP, % real change	4.1	3.6	-8.3	13.9	-4.6	0.7	2.2	3.9	4.5
Consumption, % real change	2.8	3.7	-5.8	14.8	-2.4	-0.8	3.4	3.5	3.5
Gross fixed Investment, % real change	14.4	12.0	5.6	1.9	-10.5	-1.3	1.4	1.5	1.5
Exports, % real change	4.1	8.2	-4.9	17.5	29.7	5.1	4.5	5.1	5.1
Imports, % real change	8.4	6.2	-9.5	21.2	18.2	-5.1	4.0	4.1	4.1
GDP deflator, % change	3.2	5.5	5.6	6.4	18.9	8.7	4.7	4.8	4.8
CPI, % change, average	3.1	4.8	3.8	5.1	28.7	13.4	4.9	5.2	5.0
Current account balance, % GDP	-10.8	-9.4	-7.7	-12.4	-17.1	-11.9	-10.7	-9.9	-9.1
Remittances, % change, USD	12.1	4.2	-0.4	5.4	4.1	3.8			
Terms of Trade, % change	-4.1	-0.5	0.2	0.1	-0.1	3.4	-0.1	1.2	0.5
External Debt, % GDP	63.9	62.0	70.5	64.5	66.1	63.3	67.8	67.2	65.8
Budget revenues, % GDP	30.1	29.9	31.4	32.0	33.4	34.1	33.0	32.6	32.4
Budget expenditures, % GDP	31.0	31.4	36.7	33.9	36.6	39.2	37.1	36.0	35.4
Fiscal balance, % GDP	-0.8	-1.4	-5.3	-1.9	-3.2	-5.2	-4.1	-3.4	-3.1
Public and Guaranteed Debt, % GDP	30.1	27.4	36.4	33.8	35.9	35.9	39.5	39.3	38.9

Source: Moldovan authorities, World Bank projections

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SPECIAL TOPIC:

ENERGY AFFORDABILITY IN MOLDOVA¹

Energy affordability has been a long-standing challenge in Moldova with 3 in 10 people reporting an inability to keep their home adequately warm, one of the highest rates in Europe. Successive price shocks over the past three heating seasons exacerbated these pre-existing challenges and would have led to sizable welfare impacts in the absence of mitigation measures. The government's flagship program to soften the impact of the energy price hikes, the Energy Vulnerability Reduction Fund (EVRF), helped households mitigate the welfare impacts of high energy prices and meet energy needs over the recent heating seasons. Without mitigation measures, national poverty rates are estimated to have been 8.3 percentage points higher. A comprehensive strategy is required to address the fundamental issues of energy affordability, including energy efficiency improvements to reduce consumption, promoting the development of renewable energy sources to diversify the energy mix, and revising energy subsidies to target those most in need. Additionally, upgrading energy infrastructure, promoting market competition, and providing financial assistance for energy-saving measures are essential. Raising awareness among consumers about energy-saving practices can empower them to make informed choices. By implementing these measures, Moldova can work towards making energy more affordable for its citizens while promoting sustainability and reducing dependency on external energy sources.

¹ Based on forthcoming World Bank Poverty Assessment (2024).

HIGH ENERGY EXPENDITURE SHARES RENDER MOLDOVANS VULNERABLE TO ENERGY PRICE SHOCKS

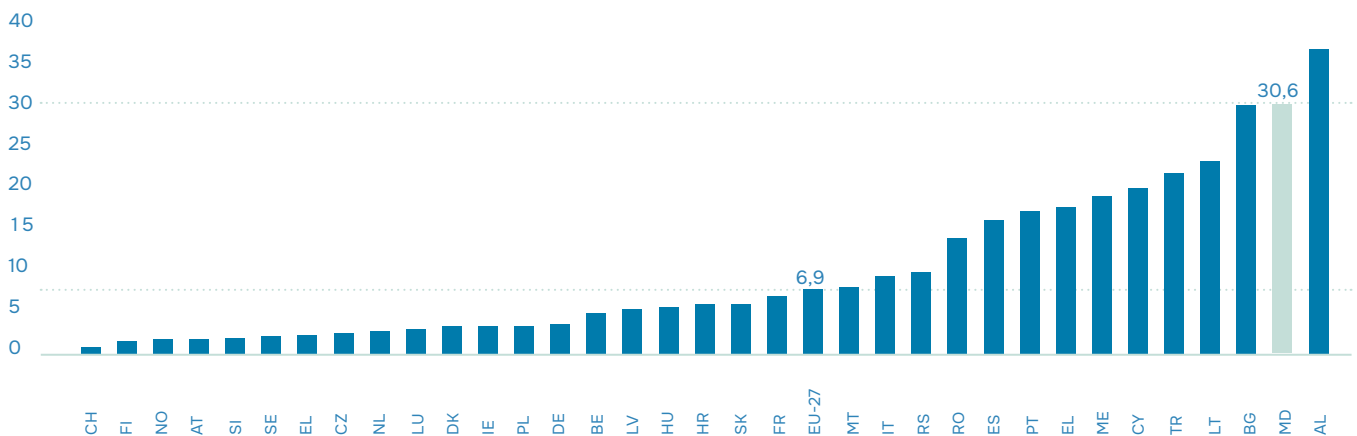
Energy affordability has been a long-standing challenge in Moldova, particularly affecting poorer and rural households.

In 2021, around 30 percent of Moldovans could not afford to keep their homes adequately warm, more than quadruple the EU-27 average (Figure 1). The burden of energy costs is unevenly distributed, with nearly half of the population in the poorest quintile and 40 per-

cent of rural residents struggling to maintain adequate warmth in their homes. In contrast, only about 10 percent of the wealthiest quintile and 16 percent of urban dwellers face similar challenges. Even before the energy price shocks of the winter of 2021, Moldova grappled with energy affordability. In 2019, before the steep rise in energy prices and the onset of the COVID-19 pandemic, the percentage of Moldovans unable to adequately heat their homes was five times the EU-27 average.

Figure 2. Moldova has one of the highest shares of people unable to keep their homes adequately warm.

(Proportion of people reporting an inability to keep their homes adequately warm, by select European countries, 2021)



Notes: Values for Iceland and the United Kingdom are from 2018. All other values are from 2021.
Source : Eurostat [ilc_mdcs01], Moldova HBS 2021.

Moldova’s energy costs are among the highest in the region, making it particularly vulnerable to energy price shocks, a situation exacerbated by its status as one of Europe’s poorest countries.

Moldova ranked fourth highest in energy expenditure shares compared to 10 select comparator countries in the region, with only Poland, Serbia, and Armenia spending more.² In 2021, the average Moldovan household spent around 16 percent on its budget on energy needs (Table 1), with the poorest 40 percent spending up to 20 percent, and 60 percent spending more than 10 percent.³ Even middle-class households, with consumption between 150 and 200 percent above the poverty line, faced high energy costs, while

the wealthiest spent about 10 percent of their budget on energy needs. These findings indicate widespread vulnerability to the impact of energy price shocks. Despite high vulnerability across the board, households in different locales are vulnerable to different types of energy price shocks in 2021. Urban and southern households, who are more likely to be connected to the gas network, are more exposed to natural gas price fluctuations, while those in Chisinau are disproportionately affected by district heating price shocks. Rural households, typically using less modern fuel sources, are more susceptible to solid fuel price increases. With almost universal access to electricity and high costs, the majority of households are vulnerable to electricity price hikes.

² The comparator countries were Poland, Serbia, Armenia, Croatia, Georgia, Albania, Turkey, The Kyrgyz Republic, and Azerbaijan.

³ Energy expenditure shares more than 10 percent is one commonly used indicator for energy poverty. The so-called 10 percent rule was introduced by Boardman in 1991 but is subject to several criticisms. See Romero and Lopez 2018 for a more complete discussion of the advantages and drawbacks of various proposed measures of energy poverty.

Table 1 .Vulnerability to different types of energy price shocks varies by geography.
(Share of expenditure by energy source, area, region, and socioeconomic status, 2021)

	Electricity	Network gas	Bottle gas	Central heating	Hot water	Solid fuel	Other fuel	Total
National	5.0	2.8	0.9	1.1	0.2	5.9	0.1	16.0
Urban	4.5	4.1	0.2	2.7	0.4	1.9	0.0	13.8
Rural	5.3	2.0	1.4	0.0	0.0	8.5	0.2	17.4
North	5.7	2.5	1.4	0.4	0.0	7.2	0.3	17.5
Center	4.9	2.4	1.2	0.0	0.0	8.0	0.0	16.5
South	5.2	4.5	0.9	0.0	0.0	6.8	0.0	17.4
Chisinau	4.1	2.4	0.1	4.3	0.7	0.8	0.0	12.4
Quintile 1	6.0	2.2	1.8	0.8	0.1	8.4	0.2	19.5
Quintile 2	5.6	3.0	1.2	0.8	0.1	7.8	0.1	18.6
Quintile 3	5.1	3.0	0.9	1.1	0.2	6.4	0.1	16.8
Quintile 4	4.8	3.2	0.5	1.3	0.2	4.8	0.1	14.9
Quintile 5	3.5	2.8	0.3	1.5	0.2	2.1	0.0	10.4

Source: Author's computations based on HBS 2021.

The recent energy price hikes exacerbated Moldova's pre-existing energy affordability challenges.

As the 2023/2024 heating season approached, gas prices had nearly quadrupled from the 2020/2021 season, while heating and electricity prices increased by 170 percent and 40 percent, respectively. Solid fuel prices also rose by 30 percent. In the absence of mitigation measures or compensating behaviors such as reductions in energy consumption, simulations using Household Budget Survey (HBS) data suggest that energy expenditures for the heating season would have been double the amount of a hypothetical scenario with pre-crisis energy prices. Urban households, which already allocate a large portion of their budget to natural gas, would have seen their expenses rise to 2.7 times the counterfactual level. Similarly, households in Chisinau, facing significant central heating costs, would have experienced a 2.6-fold increase in energy expenditures compared to pre-crisis levels.

In the absence of mitigation measures, the recent surge in energy prices could have had significant welfare impacts, especially for households in urban areas and Chisinau.

Using the HBS and pre-crisis energy prices to compute the poverty rate that would have prevailed if energy prices remained at pre-crisis levels, poverty rates would have been 15.4 percentage points or 1.5 times higher during the heating season without mitigation measures (Table 2). In absolute terms, urban households (relative to rural households), and households in the already poorer South (relative to households in other regions) would have seen the most substantial increases in poverty rates over the heating season, with rates estimated to be 21 percentage points higher than their respective baseline poverty rates.

Table 2 . Urban households are simulated to be disproportionately impacted by gas and heating shocks.

(Simulated energy expenditure shares and poverty rates under counterfactual and no mitigation scenarios by localities)

	Average energy share at pre-crisis energy prices (1)	Average energy share with energy price shocks and no mitigation (2)	Poverty rate at pre-crisis energy prices (3)	Poverty rate with energy price shocks and no mitigation (4)	Absolute increase in poverty rate (5)=(4)-(3)
National	15.1	30.6	28.2	43.6	15.4
Urban	14.3	37.9	15.1	36.2	21.1
Rural	15.6	25.7	36.7	48.5	11.8
North	15.8	29.5	29.2	44.5	15.3
Center	14.9	26.4	31.8	42.4	10.6
South	16.2	33.3	45.6	66.6	21.0
Chisinau	13.5	35.4	8.3	25.7	17.4

Source: Author's computations based on HBS 2021.

The poverty rate at pre-crisis energy prices differs from the national reported rate, which serves as a counterfactual measure. This represents the poverty rate during the 2023/2024 heating season under pre-crisis energy prices.

Source: Authors' computation based on nowcasted data from HBS 2020.

THE GOVERNMENT'S POLICY RESPONSE HELPED SOFTEN THE DIRECT IMPACTS OF THE ENERGY PRICE SPIKES.

The government's flagship program to combat energy price shocks, the EVRF, ties energy subsidies to households' estimated level of energy vulnerability.

In response to the first round of energy price shocks during the 2021/2022 heating season, the government implemented untargeted gas, heating, and electricity subsidies and increased both the threshold for qualification and the benefit amount for the means-tested cold season benefit Ajutorul pentru Perioada Rece a Anului (APRA).⁴ To counteract energy price shocks over the 2022/2023 heating season following Russia's invasion of Ukraine, the government instituted the EVRF, a mechanism to better link financial compensation to households' estimated level of energy vulnerability according to 5 vulnerability categories – Very High, High, Medium, Low and Not (Box 1). In advance of the 2023/2024 heating season, the government revised the EVRF program, with the crea-

tion of two new energy vulnerability categories to capture low-income households. These households were classed as having Very High or Extreme energy vulnerability based solely on whether their income could meet minimum expenditure needs regardless of degree of energy vulnerability. These households received a flat benefit of MDL 800 (about US\$45) per month of the heating season and could also qualify for utility bill reductions, though these were capped at a lower level compared with those who exclusively received utility bill reductions.⁵ Qualification thresholds for existing energy vulnerability categories and utility bill subsidies were also revised in accordance with the fall in energy prices. While the EVRF lowered the energy prices faced by most households to below market prices, they remained elevated compared with pre-crisis levels.

⁴ APRA was an add-on program to Ajutor Social, the last-resort social protection system, and the main instrument to support the vulnerable during the heating season.

⁵ For natural gas the maximum volume for compensation per month was capped at 90m³ (versus 180m³ for those who exclusively received on bill compensations), the maximum central heat consumption for compensation per month was capped at 0.9 Gcal (versus 1.3 Gcal for those who exclusively received on bill compensations), and the maximum electricity consumption for compensation per month was capped at 750 kWh (versus 1500 kWh for those who exclusively received on bill compensations).

The EVRF is based on a Minimum Income Standard (MIS) concept to determine energy vulnerability.

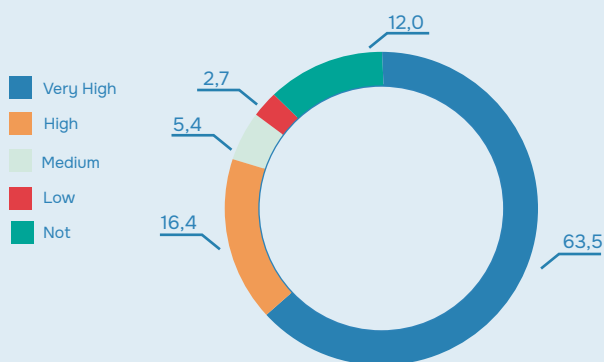
Households are considered energy vulnerable to varying degrees if after deducting a minimum household expenditure level from their income they lack sufficient resources to meet their energy expenditures based on historical energy consumption amounts and the current heating season’s prices (anticipated current energy expenditure).

Households are classified into vulnerability categories based on their relative ability to meet energy needs.

The selection is based on a ratio which assesses anticipated energy expenditure in the current heating season (within some upper bounds on consumption), against income available for energy expenditure needs (income after basic cost-of-living needs are accounted for). In the 2022/2023 heating season, 5 energy vulnerability categories were used—Very

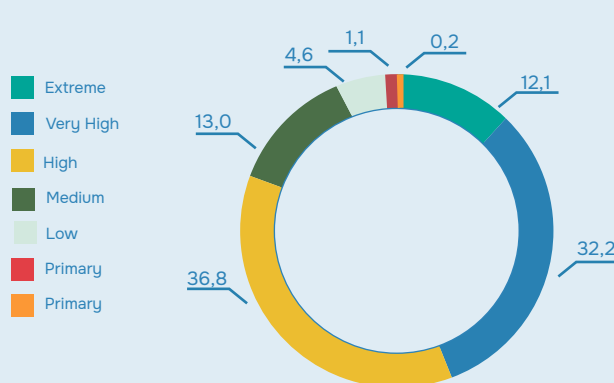
High, High, Medium, Low, and Not Vulnerable. The simulated distribution based on computations using HBS was 63.5 percent Very High, 16.4 percent High, 5.4 percent Medium, 2.7 percent Low, and 12.0 percent Not Vulnerable (Figure 2). For the 2023/2024 heating season, the EVRF underwent refinement, introducing two additional categories—Primary and Extreme—while reclassifying existing ones. This adjustment aimed to better account for variations in energy vulnerability among households. Notably, some households were categorized as Very High and Extreme solely based on income thresholds, irrespective of their energy vulnerability level. This approach was specifically applied to include the poorest households, including those who were receiving APRA in the previous framework. The latter were classed into the Very High and Extreme energy vulnerability categories. The simulated distribution based on computations using the HBS under the revised EVRF was 0.2 percent Not Vulnerable, 1.1 percent Primary, 4.6 percent Low, 13.0 percent Medium, 36.8 percent High, 32.2 percent Very High and 12.1 percent Extreme (Figure 3).

Figure 2. Original EVRF Distribution 2022/2023 heating season



Source: Authors’ computation based on nowcasted data from HBS 2020

Figure 3. Revised EVRF Distribution 2023/2024 heating season



Source: Authors’ computation based on nowcasted data from HBS 2020

Compensation was awarded on a staggered basis depending on the energy vulnerability category.

Initially, the EVRF was paid out through utility companies, which meant that only households with utility connections could benefit. Households in the highest vulnerability categories received the largest unit subsidies for gas and heating. Only households in the highest two vulnerability categories for electricity and households that used electricity as their main source of heating were eligible to receive compensation for electricity. Households classed as having no energy vulnerability received no energy subsidies,

whereas those with low energy vulnerability received modest energy subsidies. The revised EVRF for the 2023/2024 heating season continued to offer utility bill discounts with nominal transfers for those in the Primary and Low categories, and also introduced a fixed payment of MDL800 (around US\$45) for households that heat with solid fuel, subject to some additional requirements, and those who were part of the means-tested cold season benefit APRA. This fixed benefit was reserved for those in the High, Very High, and Extreme vulnerability categories.

Households in the three highest energy vulnerability categories enjoyed a relatively high share of the benefits and had high coverage rates.

Households in the Very high and Extreme energy vulnerability categories are simulated to receive a higher share of benefits relative to their share in total households. The favorable benefit distribution stems from some households in these categories being able to receive both a fixed benefit and reductions in their utility bills, with the latter being particularly significant for these categories (Table 3). Households in the Very high category received a proportional share of benefits relative to their share of households. Like households in the Very High and Extreme energy vulnerability categories, some households in the High energy vulnerability category were able to claim both the fixed benefit and utility bill reductions, however the share of these types of households is lower, and utility bill reductions were lower for households with High energy vulnerability. Meanwhile, households in

the Medium, Low, and Primary energy vulnerability categories are simulated to receive a proportionally lower shares of the benefits relative to their share in total households. Households in High, Very high, and Extreme energy vulnerability categories are simulated to have high coverage rates of 62 percent, 72 percent, and 76 percent, respectively. In contrast, only 30 percent of households in the Primary energy vulnerability category are simulated to receive EVRF benefits. Simulated coverage rates are mostly in line with estimated take-up rates, except for the Primary category.⁶ Although nearly all households in the Primary category are simulated to take up the program, they were not eligible for utility bill gas subsidies under the EVRF rules. They could, however, still qualify for discounts on heating bills, and in specific cases, electricity subsidies. As a result, those in the Primary category without district heating connections or who do not primarily use electricity for heating were not entitled to any benefits, leading to low coverage rates for this group.

Table 3 . Households in the higher energy vulnerability categories are simulated to enjoy a relatively higher share of the benefits and have high coverage.

(Simulated distribution of households, distribution of benefits, and coverage rates by EVRF categories)

EVRF category	Distribution of households	Distribution of benefits	Coverage
Not	0.2	0.0	0.0
Primary	1.1	0.0	31.1
Low	4.7	2.0	78.2
Medium	13.0	11.0	56.9
High	36.8	36.4	61.5
Very High	32.2	36.4	71.9
Extreme	12.0	14.2	76.2

Authors' computation based on nowcasted data from HBS 2020.

Simulations suggest that the EVRF has significantly cushioned the impact of energy price shocks on poverty and prevented many middle-class households from slipping into poverty.

Preliminary estimates indicate that the EVRF reduced the potential poverty impact of energy price shocks during the 2023/2024 heating season by about 8.3 percentage points or by about 20 percent overall (Table 4). This reduction translates to a decrease in the projected increase in the poverty rate of 15.4

percentage points (to 43.6 percent), in the absence of any mitigation scenario, to 7.1 percentage points (to 35.3 percent) with the EVRF's intervention. Rural households are simulated to have experienced a marginally greater reduction in poverty impacts compared to urban households. Meanwhile, households in the South are simulated to have experienced a more substantial reduction in poverty impacts compared to households in other regions. The EVRF program has played a vital role in mitigating the impact of energy price shocks and preventing middle-class households from falling into poverty. Looking ahead, it is imperative to enhance the targeting of social assistance spending, especially within the EVRF framework.

⁶ Comparing simulated data from the HBS on the number of households eligible for the benefit across energy vulnerability categories with the number of households currently receiving the program based on preliminary administrative data can give an estimated level of take-up of the program across energy vulnerability categories.

Table 4 . The EVRF is simulated to have help offset the adverse welfare impacts of the energy price shocks.

(Simulated poverty rates under counterfactual, no mitigation, and post-shock with EVRF scenarios by localities)

	Poverty rate at pre-crisis energy prices (1)	Poverty rate with energy price shocks and no mitigation (2)	Poverty rate post-shock with EVRF (3)	Absolute reduction in poverty impact of shocks due to EVRF (4)=(2)-(3)
National	28.2	43.6	35.3	8.3
Urban	15.1	36.2	27.9	8.3
Rural	36.7	48.5	40.1	8.4
North	29.2	44.5	34.9	9.6
Center	31.8	42.4	35.8	6.6
South	45.6	66.6	56.7	9.9
Chisinau	8.3	25.7	17.8	7.9

Note: Preliminary estimates. (p.p.) refers to percentage points.
Source: Authors' computation based on nowcasted data from HBS 2020

DESPITE HIGH LEVELS OF ENERGY EXPENDITURE AND CHALLENGES WITH AFFORDABILITY, TOO FEW POOR MOLDOVANS ARE ESTIMATED TO HAVE UNDERTAKEN ENERGY-EFFICIENT UPGRADES.

Despite the financial burden of high energy costs, a significant number of impoverished Moldovans have not made energy efficiency improvements to their homes.

Insulation upgrades, which can mitigate the effects of rising energy prices, have not been implemented in approximately 56 percent of poor Moldovan households. Estimates suggest that medium-level renovations, such as insulating walls, roofs, basements, windows, and doors, could lead to energy savings of about 45 percent.⁷ In 2022, 70 percent of Moldovan households had completed at least one insulation upgrade, an increase from 51 percent in 2016. Insulation rates vary significantly, with urban areas, especially Chisinau, showing higher rates of 83 percent, compared to 62 percent in rural areas and the lowest in the North at 62 percent. Although the poverty status is not directly measured in the Household Energy

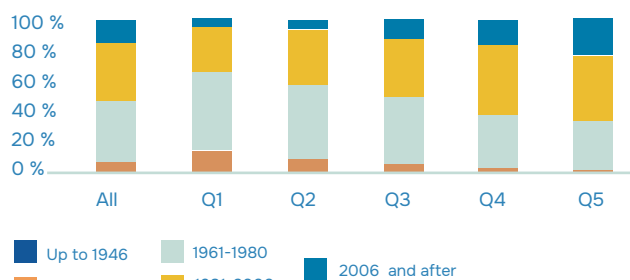
Consumption Survey, it can be estimated using survey-to-survey imputation techniques based on variables correlated with poverty. Using this method, the insulation rate among poor households is estimated at 44 percent, compared to 80 percent for non-poor households.

⁷ <https://energie.gov.md/ro/content/fondul-de-eficienta-energetica-sectorul-rezidential-va-avea-un-buget-de-cel-putin-723>

Poorer and rural Moldovans, who are less likely to use modern energy sources, face greater difficulties in keeping their homes adequately warm, indicating a higher potential benefit from energy-efficient upgrades.

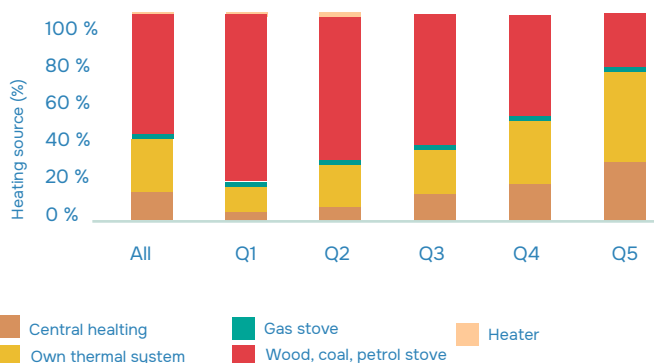
These households typically live in older buildings that are less likely to be energy-efficient, leading to higher energy costs and affordability challenges (Figure 4). Households in the lowest consumption quintile and in rural areas are more reliant on solid fuels for heating, with few connected to central heating systems (Figure 5). Transitioning to more modern, cleaner, and energy-efficient energy sources could not only reduce costs and increase resilience to energy price volatility but also offer a range of co-benefits, including improved air quality, public health, and environmental benefits. For example, reducing reliance on wood for heating could help conserve Moldova’s limited forest cover, which only spans 13.2 percent of its territory, well below the European average of around 30 percent.

Figure 4. Poorer Moldovans tend to live in older households which tend to be less energy efficient.
(Distribution of the period of construction of the dwelling by quintile, 2021)



Source: Authors’ computations based on HBS 2021.

Figure 5. Poorer households tend to use less modern sources of energy.
(Source of heating by quintile, 2021)



Note: Quintile refers to per adult equivalent consumption quintile.

Source: Authors’ computations based on HBS 2021.

RECOMMENDATIONS

In the short term, the EVRF could be further refined by separating energy consumption from subsidies, ensuring that assistance reaches those most in need.

The EVRF consumes the most significant portion of the social assistance budget, alongside social care services. Subsequent reforms could involve refining the EVRF by separating the provision of subsidies from actual energy usage to incentivize efficient consumption, for instance by introducing consumption norms linked to heated area, and by converting utility bill reductions into monetized benefits. This adjustment can alleviate energy costs for vulnerable households and prevent program overspending, thereby easing fiscal pressure on the budget. In the medium term, integrating the EVRF with existing social programs and developing a comprehensive “last resort program” that addresses a range of adverse events—such as energy shocks, natural disasters, loss of the primary breadwinner, and chronic poverty situations—is imperative.

Considering the persistent energy affordability issues and the current environment of high energy prices, it is crucial for the government to focus on providing accessible financing options for energy efficiency to assist households in managing energy expenses more effectively.

Investing in energy efficiency measures will reduce overall energy consumption, thus lowering energy bills for households and businesses. This could include initiatives such as improving insulation, upgrading heating and cooling systems, and promoting energy-efficient appliances, which authorities are starting to implement. Low-income homeowners do not have the financial means to renovate their properties, which prevents them from realizing the economic and other benefits from energy efficient upgrades. Even with available energy subsidies, the

limited financial resources of poor households make it difficult for them to contribute the necessary co-financing or to secure affordable financing options. Banks are frequently hesitant to offer loans due to these and other barriers, such as the lack of collateral. Successful implementation of financial assistance programs, such as subsidies or low-interest loans, for energy-efficient upgrades or renewable energy installations can help households and businesses invest in cost-saving measures. Additionally, increasing awareness about energy-saving practices and technologies among consumers can empower them to make informed choices to reduce energy consumption and costs.

Upgrading and modernizing the energy infrastructure, including transmission and distribution networks, will enhance efficiency and reduce energy losses, which could lead to lower costs for consumers.

Furthermore, encouraging competition in the energy market by deregulating and allowing private sector involvement can result in more competitive prices and improved services for consumers. Increasing the share of renewable energy sources in the energy mix will help diversify the energy supply and reduce dependency on imported energy, potentially leading to lower energy prices over time. Moldova should consider seeking funding from the European Union and other donors, as well as private sector financing for such projects.

