MOLDOVA POLICY NOTES 2019

SUSTAINING STABILITY AND REVIVING GROWTH

WORLD BANK GROUP

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Acknowledgements

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Executive Summary

Over the last two decades, Moldova has achieved major development results: with average annual growth of 4.6 percent since 2000, poverty has decreased dramatically, and the growth has also benefitted more citizens: Inequality, as measured by the Gini Index, has declined from 36.4 in 2000 to 26.3 in 2016. Macroeconomic stability has been maintained despite the 2014 banking crisis, and monetary and the exchange rate policies have led to a declining inflation protecting the living standard of Moldova's citizens.

The country has benefitted from its unique assets, such as a strategic European location and growing global integration. The authorities' focus on investment policy put the country on investors' map: commitment demonstrated in investment promotion and the level of service and attention that was given to investors led to attracting manufacturing FDI. They on the other hand helped reorient exports towards more technology-intensive products and allowed for a stronger contribution of exports to growth and employment generation. Moldova has also significantly reformed its business environment, ranking today 47th of the 190 countries measured on ease of doing business.

There was also effort to improve the quality of human capital. The education system reform led to improvement of student learning outcomes in Moldova, as measured by the Program for International Students Assessment (PISA), although there are still major gaps in learning outcomes that need to be addressed. The preprimary enrollment rates increased substantially, and labor force participation rate increased to historical highs, albeit at 43 percent still comparatively low.

Yet, the growth model, propelled mainly by consumption and remittances, has been volatile, and unsustainable, and is losing strength. The volatility results not only from reliance of the economy on worker remittances from abroad, weather-dependent agricultural products, and foreign capital inflows, but also from its exposure to both external and internal shocks. Because remittances are declining, while capital inflows are expected to stagnate, the country needs alternative growth engines fueled by exports and investment.[1] Growth rates have already fallen short of the national aspirations (in the new National Development Strategy at 5.5 percent) and are slowly declining. Moldova's convergence to European income levels has been disappointing. GDP per capita in 2017 at PPP US$6,803 was almost five times below the average for Europe and Central Asia (ECA). Structural challenges, especially population aging, emigration, and stagnant productivity, are holding the economy back.[2]

Moldova's volatile sources of growth have built external vulnerabilities. Despite the recent decline, gross external debt at 65 percent of GDP in 2018 remains particularly high for a lower middle-income country, and this is especially true for the private sector debt. Non-debt creating FDIs have financed two-thirds of the current account deficit over the last few years, but despite exports growth and high remittances current account deficit widened in 2018 to above 10 percent of GDP, while FDI dropped dramatically, from 12 percent of GDP in 2008 to less than 2 percent in 2018. The 2014 banking crisis, that costed the country almost 12 percent of 2014 GDP, caused a rise in public debt and a loss in investor confidence. This, along with the large state-owned companies, has depleted the fiscal space needed to upgrade much needed infrastructure, further strengthen the education outcomes, and support companies to innovate and integrate into global supply chains.

Despite a positive macroeconomic outlook, there are considerable downside risks for sustainable growth in Moldova. These risks relate to:

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[1] World Bank. 2019. Moldova: Country Economic Memorandum (CEM)—Rekindling Economy Dynamics. World Bank: Washington, DC.
[2] World Bank. 2016. Moldova: A Systematic Country Diagnostic.

(i) *Fragile fiscal situation*. The 2018 tax reform and capital amnesty package ("fiscal package") and the expected increases on the expenditure side (wage bill, social benefits and recalculation of pensions) threaten to reverse the fiscal consolidation gains of 2016-17 and put pressure on fiscal sustainability over the short term. Inefficient public spending, contingent liabilities and demographic vulnerabilities put pressure on fiscal policy in the long term. Further, debt sustainability requires reducing dependence on foreign financing, together with lengthening the average maturity of domestic debt and deepening the secondary market, which would help reduce domestic debt roll-over and interest rate risks.

(ii) *Still unresolved weaknesses in the financial sector*. Despite strengthening of the regulatory framework after the 2014 bank fraud, the financial sector is still fragile and underdeveloped to provide important impetus to private sector growth. Further efforts are needed to strengthen financial institutions and their management and reduce interest rates through improved financial sector efficiency. Finally, despite its relatively small size, the fast growth of the non-banking financial sector calls for attention by the regulators and supervisors.

(iii) *Weak competitiveness*. While growth prospects remain positive, with a continued, albeit slow, normalization of financial conditions, growth is projected to further moderate to 3.6 percent by 2020, lower from more than 4 percent in the past three years. Moldova trails the ECA region by about 35 percentage points in the governance indicators ranking, while both the World Economic Forum Global Competitiveness Report and the World Bank-EBRD Business Environment and Enterprise Performance Survey report issues with antimonopoly policy, contract favouritism and corruption. Exports, despite recent diversification and a larger pool of greenfield FDIs, remains small and still tilted to lower-value-added production, while productivity is low and decelerating.

Moldova's productivity is decelerating, and labor productivity is one of the lowest in Europe, which further reduced its growth potential. So far growth has been fueled by worker remittances from abroad, while capital deepening and labor contribution to growth have been declining or stagnating. Total factor productivity has been even negative. There are several reasons for this:

(i) *Large state footprint in the economy.* The government regulates a wide range of prices and retail margins, resulting in inefficient allocation of resources and high costs. Since price ceilings may reduce quality or innovation, prevent more efficient firms from competing, and encourage abuse of market power or rent-seeking, less distortive alternatives should be considered. SOEs in Moldova are active in at least 19 out of 30 sectors where private participation is economically viable and their assets represent close to a third of GDP. Yet, they have lower production per employee, lower and declining productivity, and they are a fiscal drain.

(ii) *Limited pool of available labor to work and skills needed by the market.* Firms complain about difficulty in finding workers with suitable skills, while the current education system still produces only 60 percent of students with basic cognitive skills despite the recent improvements. Half of the 15-year-old students do not possess basic proficiency in mathematics, and bit less in reading and science. Over half of the working age population does not even engage in the labor market: the inactivity rate in 2017 stood at 53 percent (as a percentage of total population aged 15–64). With declining demographics and emigration, increasing participation rates and labor productivity is urgent. More than 17 percent of population in the latest 2014 census was over the age of 60, and that share is rising. This adverse demographic puts pressure on pension and health spending,

while reducing domestic savings rates. Emigration of young people is amplifying the problem: at about 30 percent of the labor force, Moldova's emigrant population is among the largest in the world. With current trends, by 2050 Moldova will lose a fifth of its population.

(iii) *Despite investment promotion, low exports and a limited value added of the export basket.* As a small open economy, Moldova needs to compensate for its size limits and extend its market through exports. The composition of Moldova's goods export basket has shifted in the past decade, with machinery, vegetables, and other food increasing in importance at the expense of textiles and furniture. Yet exports remain low at 18 percent of GDP, and the trade with the EU is constrained by inability to meet EU standards. The FDI could contribute more to national development if there are more domestic spillovers and if of higher value added. Further, the Logistics Performance Index ranks Moldova behind neighbors due to infrastructure, tracking and tracing, and logistics competence: the median time an export transaction takes in Moldova is almost 12 times higher than in the EU and neighboring Romania and Ukraine.

(iv) *Unlevel-playing field due to governance, business environment and competition constraints*. The removal of these distortions in resource allocation promise to bring high growth dividends. Easing entry into business, improving transparency, conflict of interest, procurement and competition rules, and strengthening the rule of law are necessary to attract more FDI, in particular greenfield investments, as well as encourage domestic investments that are currently low. They are particularly low for new technologies and innovation which would help economy to make a leap in competitiveness and convergence.

Increasing prosperity as expected by all Moldovan citizens will require new sources of growth. The growth in remittances that fueled private consumption so far will continue to slow, so growth and jobs need to come from private sector investments and exports that would boost productivity. Government has an important role to play to enable the new growth model:

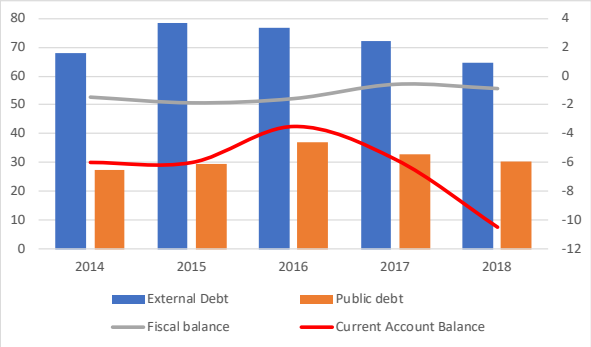
(i) *It needs to unlock the assets held by vast number of loss-making, low-productive state-owned companies, and strengthen the competition policy at home to allow private sector firms to compete and grow.* Business environment and the rule of law need to be further strengthened, and access to foreign markets through connectivity and trade policy ensured to boost exports. No small economy has reached the higher income status without exporting more and compensating for its market size. Agriculture, still a large employer in the country and a fiscal drain, needs to increase its efficiency and exports.

(ii) *It needs to safeguard macroeconomic and fiscal stability and continue strengthening the fragile financial sector*. Increasing efficiency of public spending while mobilizing and broadening the tax base would help with keeping debt low. Efficiency improvements in sectors like transport, water and energy are urgent to increase the quality of service, modernize the sectors and their management, and ensure efficient use of limited budgetary resources and water endowments. This is particularly critical in the country of high vulnerability to climate change, where the present cost of inaction on climate adaptation is estimated at 6.5 percent of GDP.

(iii) *Further investments and efficiency improvements are needed to ensure social service and education are delivered in high quality to all citizens*. Despite progress more efforts are required to further optimize the school network, increase access to preschools and improve the quality of primary and secondary education. Bringing women, idle youth and adults into jobs, encouraging more internal

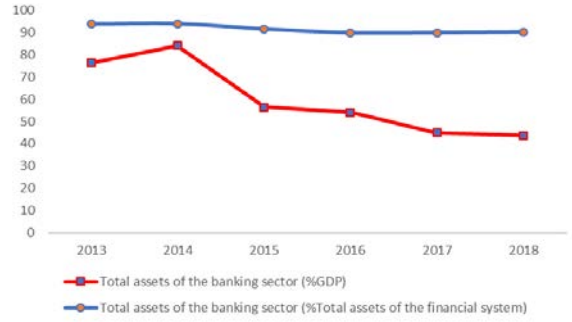
migration and professional mobility of workers, would help increase labor contribution to growth. Policy and delivery system improvements should continue to reduce fragmentation and strengthen targeting of the social assistance benefits, while inefficiencies observed in the hospital and specialized out-patient care need to be addressed given increased demand for care to chronic and aging patients.

Widening external and fiscal imbalances are risks to sustainability



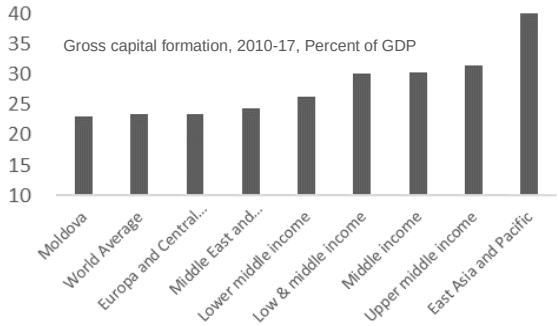
Source: World Bank Governance Indicators

Financial sector is stabilized, but still fragile and underdeveloped.



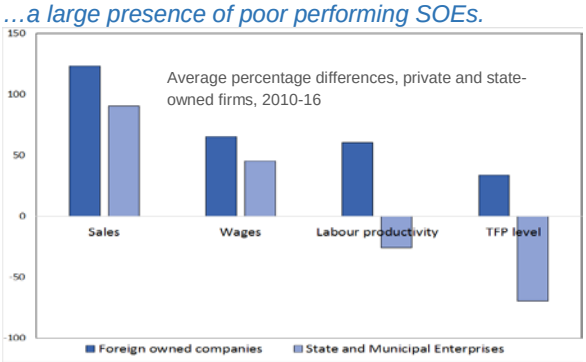
Source: World Bank Governance Indicators

Low gross capital formation is partly due to…



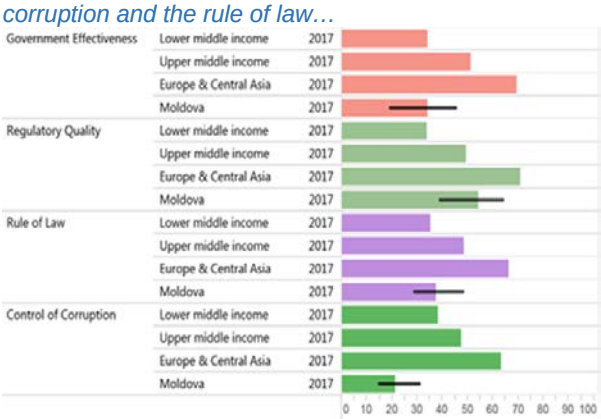
Source: UNCTAD

…a large presence of poor performing SOEs.



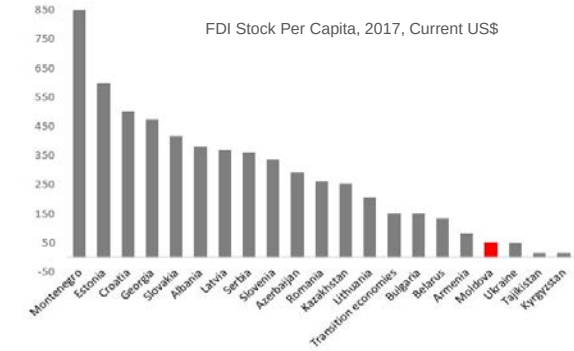
Source: World Bank staff calculation

Moldova trails its peers on governance, control of corruption and the rule of law…



Source: World Bank Governance Indicators

…while easing entry, improving competition rules, and strengthening the rule of law are necessary to attract more FDI.

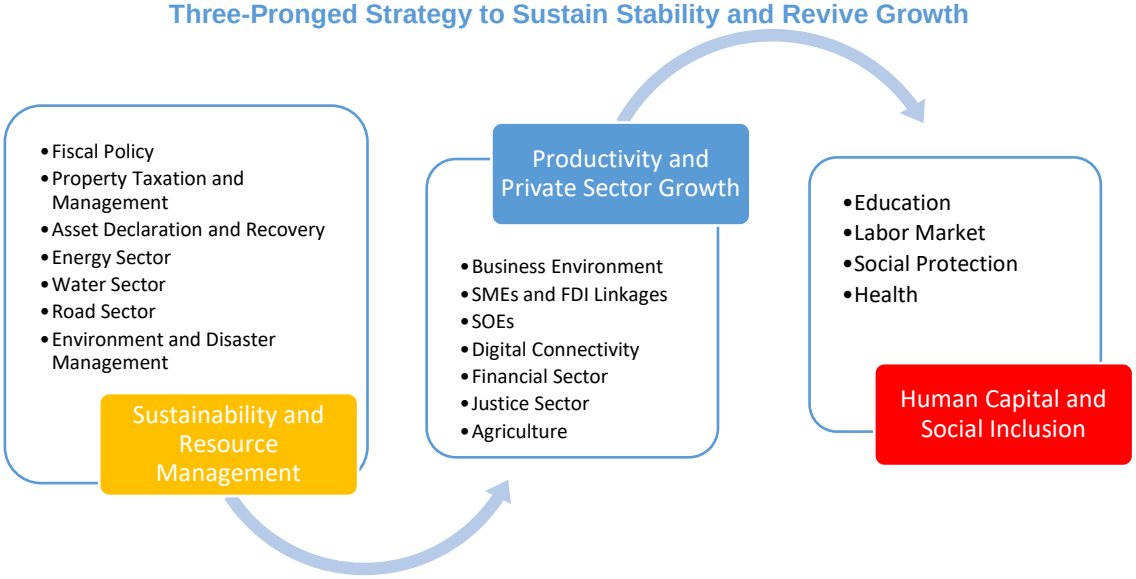


Source: UNCTAD

Moldova's citizens aspire to rising income levels and convergence of incomes with the middle- and high-income countries. *To achieve this, future governments are thus confronted with two pressing overarching challenges: sustaining stability and reviving growth. This requires a three-pronged strategy: (i) boosting productivity and private sector growth; (ii) increasing sustainability and improving resource management; (iii) strengthening*

human capital and social inclusion. The rationale is clear: there is still close to 15 percent of population living under the middle-income country poverty line (US$5.5 at PPP), which motivates many young Moldovans to seek their future abroad. While the country recovered from the 2014 bank fraud, the cost of this policy failure crowded out public resources that could have been used to improve the living standard of its citizens, people endowments as well upgrade the country's infrastructure. Institutions and judiciary need to regain the trust of citizens and businesses through enshrining the rule of law, a zero tolerance to corruption, and focus on strengthening sustainability and reviving growth. The summary of policy priorities below could serve as a guidance on sequencing and policies needed across the three-pronged strategy.

Three-Pronged Strategy to Sustain Stability and Revive Growth



Summary of Key Policy Priorities	
SHORT TERM (1 year)	**MEDIUM TERM (1-3 years)**
Productivity and Private Sector Growth	
Business Environment	
• Revisit price control policies based on in-depth market assessments to identify the root causes of unusually high prices in Moldova. • Advance the implementation of digital tools for businesses, including online business registration, online depository of business financial statements, and online issuance of permits and licenses. • Upgrade the state aid registry and make it public.	• Cut top tariffs and eliminate price controls. • Obtain EU market opening for Moldovan products of animal origin, by passing laws that allow incineration of animal waste, by accreditation of national laboratories and by streamlining customs logistics and valuation. • Intensify efforts to reduce corruption in government services and procurement, by digitizing services and underlying registries, and by adopting transparent procurement mechanisms.
SMEs and FDI Linkages	
• Promote upgrading of firm productivity by stimulating innovation, and exports rather than supporting traditional business models. • Support the entry of firms into global markets with programs on export readiness and improving export standards. • Actively involve Investment Agency in FDI promotion and develop investor aftercare services to promote FDI.	• Improve access to electricity, water, telecommunications, and transport networks and re-balance labor market legislation to allow for supportive input systems. • Encourage technology and knowledge spillovers from FDI by promoting FDI in upstream sectors, stimulating investment in research & development, encouraging the interaction of foreign and domestic firms, and implementing supplier development programs.

Summary of Key Policy Priorities	
SHORT TERM (1 year)	**MEDIUM TERM (1-3 years)**
State-Owned Enterprises	
• Define for each enterprise and state dominated sub-sector an explicit ownership rationale and objective and adopt the timebound plan for reform of SOEs. • For each SOE publish audited financial statements, performance results, and evaluations to promote the accountability of SOE boards and management. • Strengthen SOEs corporate governance.	• Accelerate the divestiture, restructuring or liquidation of SOEs. • Build institutional capacity of ownership agency to enable fulfilling new functions of central SOE ownership. • Professionalize the SOEs' boards, and track SOEs performance.
Digital Development	
• Implement the infrastructure sharing law, through definition and enforcement of associated regulations. • Increase competitive pressures on the market through regulatory actions. • Consider restructuring of Moldtelecom, including its privatization.	• Implement specific programs to train un- or underemployed people and boost digital skills. • Promote rural broadband connectivity in 'white zones'. • Support digitization of SMEs through targeted programs in partnership with Moldova's IT industry.
Financial Sector Stability and Governance	
• Ensure MICB exit special supervision and new shareholders in Fincombank and Energbank are fit and proper. • Address weaknesses in the insurance sector by enforcing existing regulations and enhancing regulatory, supervisory and legal framework. • Step up asset recovery efforts, in particular in foreign jurisdictions and prioritize the monitoring and supervision of the implementation of AML/CFT measures related to the voluntary declaration process.	• Increase coverage of the deposit guarantee fund and strengthen the capacity of DGF. • Strengthen the financial infrastructure through reforms in corporate insolvency, developing a personal insolvency law, upgrading the collateral registry, and strengthening the credit information sharing system and financial services consumer protection. • Consolidate the Savings and Credit Associations (SCA) sector and establish deposit protection for SCA members.
Justice Sector	
• Adopt a medium-term plan to improve enforcement of judicial decisions, and a prosecution service reform. • Review the current plan to reorganize the judicial map to identify further streamlining, cost savings and improved integrity. • Develop a realistic, costed and sequenced Justice Sector ICT Strategy and Implementation Action Plan. • Quantify the volume of arrears built up by justice system and announce a time-bound action plan (agreed with MOF) to reduce/eliminate and prevent build-up of such arrears.	• Define the requirements for an integrated enterprise-level resource management system, i.e. HRMIS and FMIS. • Address the uneven distribution of judicial services and judges' workload by deploying courts' financial and human resources according to population and projected case inflows. • Develop and publish criteria and procedures for hiring, promotions, awards and bonuses for judges, prosecutors and their staff, to increase internal and external trust in the justice system.
Agriculture	
• Revise the spending on subsidies, shifting the spending towards smart subsidies and smaller producers, particularly in higher value-added agriculture. • Implement food quality and safety programs that aim to reach international standards.	• Set-up a proper mechanism (i.e. information system) of evaluation and assessment of the subsidy fund spending. • Build capacities for sustainable and productive agricultural practices, including climate adaptation measures. • Promote professional education and agricultural extension services to improve access to knowledge.
Sustainability and Resource Management	
Fiscal Policy	
• Rationalize tax expenditures and state aid. • Report publicly contingent liabilities from SOEs and take actions to reduce those risks. • Apply fiscal rules more effectively and prudently.	• Streamline direct taxes and boost indirect taxes. • Improve efficiency of social spending and improve public investment management. • Develop domestic capital market and deepen the secondary market.
Property Taxation and Public Property Management	
• Improve collection and enforcement of property tax revenues.	• Improve state land management by registering and creating an inventory of publicly-owned properties,

Summary of Key Policy Priorities	
SHORT TERM (1 year)	**MEDIUM TERM (1-3 years)**
• Update property valuations and link revised valuations to property taxation. • Enable mobile/mCloud payments to lower the costs of property tax collection.	resolving disputes, and building capacity to manage public land. • Improve coverage and review property tax rates and tax relief to broaden the tax base. • Introduce valuation of publicly-owned land and property and use the valuations to determine the optimal use of such assets.
Asset Declaration and Recovery System	
• Verify asset and interest declarations in a timely and credible manner. • Issue guidelines for declarants on the beneficial ownership of assets which should be reflected in the asset and interest declarations. • Increase openness of the e-Integrity system by making available for the public use the machine-readable data from asset and interest declarations.	• Fully implement the new legal framework on asset declaration to prevent and fight against corruption. • Devote efforts to tracing the proceeds of crime linked to the banking fraud in foreign jurisdictions, leveraging all available international cooperation avenues.
Energy Sector	
• Align energy regulation to best European practices, including adequate methodologies to recover large investments. • Mobilize funding in modernizing heat and power generation of District Heating, which is at the end of its operational life and needs urgent modernization. • Complete the ongoing Energy Efficiency Options Study to identify the financing instruments to improve energy efficiency.	• Diversify electricity supply through renewable energy and interconnection with the European electricity grid also to establish a transparent and competitive electricity market in Moldova. • Increase the share of renewable generation through a robust competitive bidding process in a manner consistent with grid stability and tariff affordability. • Diversify gas supply by finalizing Ungheni and Chisinau pipeline and creating a level playing field for different sources of gas.
Water Sector	
• Analyze Moldova's water security risks under different scenarios to prioritize interventions, policies and investments and better understand trade-offs. • Develop a national water and sanitation investment plan and financing framework with increased efficiency and cost recovery. • Identify priority areas for irrigation & drainage investment to expand high-value irrigated agriculture with export focus; modernize irrigation institutions and improve financial position of the sector to reduce fiscal burden.	• Strengthen water management agency, including information management, enforcement of regulations, and planning functions, and enhance inter-agency coordination to optimize benefits from different water uses. • Secure a multiyear investment budget for water and sanitation that targets lagging rural areas, prioritizes high-impact wastewater polluters, and improves coherence and accountability for existing funds. • Implement priority measures in river-basin flood and drought management plans, restore watersheds and environmental flows, improve dam safety and introduce risk management tools.
Road Sector	
• Prepare necessary amendments to the legal framework to ensure any new investment in the sector is accompanied by adequate maintenance funds. • Undertake rigorous prioritization of investments in the sector considering the significant existing IFI-financed contracts.	• Modernize maintenance practices by introducing the mid-term and performance-based maintenance contracts while the current maintenance activities are limited to one-year contracts. • Enable the Road Fund allocation based on long-term maintenance planning.
Environment and Disaster Management	
• Harmonize environmental legislation and regulatory framework in line with the Association Agreement and the Chapter Technical Barriers to Trade of the DCFTA. • Develop an action plan for expanding protected areas which would also include institutional capacity building for their management. • Operationalize the EPR scheme for hazardous, plastic and medical waste.	• Make the Environmental Agency fully functional and create the agency responsible for the management of chemical substances. • Implement the Forest Institutional Reform Strategy and a long-term program on forest regeneration and rehabilitation. • Strengthen natural disasters preparedness and response.

Summary of Key Policy Priorities	
SHORT TERM (1 year)	**MEDIUM TERM (1-3 years)**
Human Capital and Social Inclusion	
Education	
• Optimize the school network to improve funding efficiency. • Improve the internal and external quality assurance mechanisms, including professional accreditation of vocational and higher education programs. • Include performance indicators in vocational schools and university financing mechanisms. • Develop a national lifelong learning strategy and promote continuous learning.	• Increase access to preschool education in rural areas and for disadvantaged children. • Improve the learning outcomes of students in primary and secondary education and improve teacher training and adapt teaching methods to provide students with relevant life- and job-skills. • Increase the labor market relevance of higher and vocational education and training by improving curriculum and involving employers in the occupational profiles and qualification standards review process.
Labor Market	
• Reform the Labor Code to reduce firing and hiring rigidity and facilitate non-standard flexible working arrangements while ensuring social protection during unemployment. • Revisit the rules of maternity and parental leave and improve the availability of childcare services for children under 3 years. • Facilitate worker internal mobility by detaching benefits from location. • Abolish the list of banned jobs and professions for women, adjust the curricula of educational institutions and support women entrepreneurship.	• Reduce the costs and increase the benefits of formalization through online registration of workers and better access to credit for formal firms. • Strengthen policies and mechanisms to motivate and facilitate the training providers to improve their service delivery for skills formation/upgrade and foster private sector's contribution to skills formation and labor market intermediation. • The National Employment Agency to implement new set of Active Labor Market Programs, including via the operational and technology changes required for more efficient service delivery.
Social Protection	
• Adjust eligibility parameters of the targeted social assistance programs in coordination with other income support policies to prevent decline in coverage and to maintain benefits adequacy. • Revisit the list of documents required to apply for targeted benefits and expand set of active labor market programs to social assistance beneficiaries to help reduce their reliance on cash transfers. • Speed up the retirement age increase and/or revisit the benefit package with a basic pension component complementing a smaller insurance-based pension. • Enhance pension revenue base by revisiting preferential contributions treatment of various groups of contributors.	• Continue rationalizing category-based benefits on behalf of targeted cash transfers. • Invigorate introduction of a new business model and service delivery standards in the local social assistance departments, including through a functional National Social Assistance Agency, and enhance the institutional capacity and authority of the Social Inspectorate. • Sign bilateral social protection agreements with recipient countries for Moldova`s labor migrants and ensure enforcement of the agreements already signed. • Continue transforming military pensions into a more predictable, transparent and fiscally sound program.
Health Sector	
• Selectively contract health care providers to optimize resource use as well as increase technical efficiency of public health spending. • Prioritize primary health care services, and continue investments in Youth Friendly Health Services, including through fully implementing the performance-based financing of these services, and strengthen the outreach to most vulnerable groups. • Strengthen and harmonize the national health information and the eHealth system.	• Rationalize the hospital sector to increase efficiency and to receive higher value for money on public health spending. • Strengthen emergency preparedness and response capacities. • Promote the integration of a universal progressive Home Visiting programme as part of the primary health care system, and establish robust services to address needs of children with disabilities and mechanism for early detection of development delays.

Policy Notes

Sustaining Stability and Reviving Growth
• Sustaining Macroeconomic Stability • Fostering Growth and Competitiveness
Productivity and Private Sector Growth
• Enhancing the Business Environment and Market Competition • Fostering Small and Medium Enterprises and Strengthening Foreign Direct Investment Linkages • Reforming the State-Owned Enterprises • Promoting Digital Development • Enhancing Financial Sector Stability and Governance • Reforming Moldova's Justice Sector • Increasing the Productivity and Competitiveness of Agriculture
Sustainability and Resource Management
• Safeguarding Fiscal Sustainability • General Property Taxation and Public Property Management • Strengthening the Asset Declaration and Asset Recovery • Addressing Energy Security and Promoting Efficiency • Enhancing Water Security and Service Delivery • Improving Efficiency of the Road Sector Financing • Strengthening Environment Protection and Disaster Management
Human Capital and Social Inclusion
• Strengthening Education Outcomes and Skills • Enhancing Labor Markets and Closing the Gender Gap • Achieving a Sustainable Social Protection System • Improving the Efficiency of Health Service Delivery

Sustaining Macroeconomic Stability

1. **Over the last two decades, Moldova has achieved major development results:** with average growth of 4.6 percent since 2000; poverty has decreased dramatically, and the poverty rate at the lower middle-income country (LMC) threshold of $3.2 a day (2011 PPP) declined from 69 percent in 2000 to just over 1 percent in 2016. Growth has also been inclusive, with income growth for the bottom 40 percent of the population outpacing the average.[3] Inequality, as measured by the Gini Index, has similarly declined from 36.4 in 2000 to 26.3 in 2016.

2. **The country has benefitted from unique assets, such as a strategic location and growing integration into the international market**. Yet Moldova's convergence to European income levels has been disappointing. GDP per capita in 2017 (at PPP) was US$6,803, far below the average for Europe and Central Asia (ECA) of US$33,522. Structural challenges, especially population aging, emigration, and stagnant productivity, are holding the economy back.

3. **The growth model, propelled mainly by consumption and remittances, has been unsustainable and is losing strength.** The economy has not yet recovered from the 2014 banking crisis, which cost the country almost 12 percent of 2014 GDP and caused a rise in debt and a loss in investor confidence. This, along with the large state-owned companies, has eaten up the fiscal space needed to upgrade much needed infrastructure, strengthen the human development outcomes, and support companies to innovate and integrate into global supply chains. *Future governments are thus confronted with two pressing overarching challenges: sustaining stability and reviving growth. This requires a three-pronged strategy: (i) boosting productivity and private sector growth; (ii) increasing sustainability and improving resource management; (iii) strengthening human capital and social inclusion.*

Highly Volatile and Decelerating Economic Growth

4. **Since 2000 growth in Moldova was higher than the Europe and Central Asia (ECA) average of 4.4 percent but lower that the 5.9 percent average for Lower-Middle Income (LMC) countries** (Figure 1). Although Moldova has so far generally performed well, its growth has been exceptionally volatile. As discussed in the Moldova Country Economic Memorandum (CEM),[4] volatility may undermine average growth by reducing returns on investment and heightening uncertainty, which discourages investors. The volatility results not only from reliance of the economy on weather-dependent agricultural products, but also from its exposure to both external and internal shocks. Nevertheless, growth rates fell short of the aspirations expressed in the Moldova National Development Strategy (NDS).[5] While real GDP increased by 4 percent in 2018, projections for the next few years are for even lower growth, making the path to convergence with average European incomes even more difficult (Figure 2).

Figure 1. Real GDP Growth, Percent

Figure 2. Growth Volatile and Decelerating, 2000-19, Percent

Source: Moldova Statistical Office, World Bank staff calculations.

5. **Consumption has been the primary driver of growth, although the contribution from gross fixed capital formation increased in the last few years** (Figure 3). Despite FDIs attracted in the past, net

[3] For the latest period (2011-16) the shared prosperity premium (or the difference between the growth of the bottom 40 and average growth) equaled 2.4 percentage points.

[4] World Bank.2019. Moldova – CEM: Rekindling Economy Dynamics. World Bank: Washington, DC.

[5] Growth aspirations were 6 percent in the Moldova 2020 National Development Strategy (NDS) and 5.5 percent in the Moldova 2030 NDS (2018).

exports contribution to growth remain low or even negative. Imports growth fueled by domestic demand outpaced still nascent export recovery. While EU integration helped increase exports, the country still lags its competitors. Consumption instead has been fueled by real wage growth and remittances, averaging 25 percent of GDP during 2000-17 (Figure 4)[6].

Figure 3. Contributions to Growth, Percentage Points

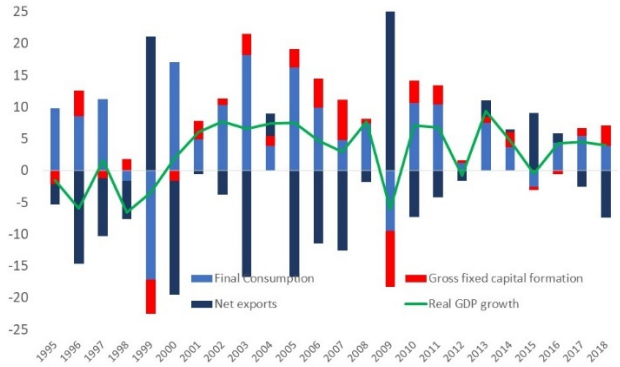
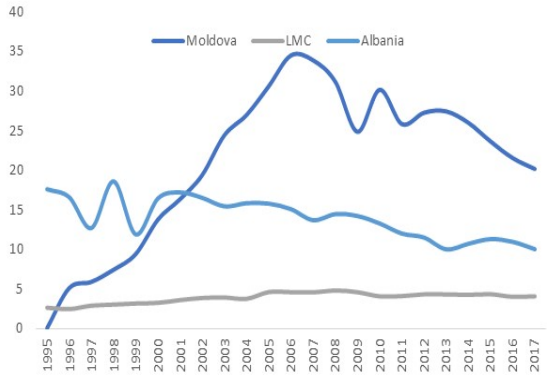


Figure 4. Remittances, Percent of GDP



Note: With the GDP revision, remittances declined to 16 percent of GDP in 2017.
Source: NBM, Moldova Statistical Office, World Development Indicators.

6. **From the supply side, growth is mainly driven by manufacturing, trade and construction.** The share of agriculture has on the other hand slightly decreased, a pattern of an early transition economy (Figure 5). The transition away from agriculture has not come without cost as job market became less inclusive: rural residents, women, the poor and youth were the most affected.[7] One of the driving forces of this transition were FDIs. Since 2000 Moldova has gradually become more open to FDI; though inflows slowed after the global crisis. Moreover, the country still lags its competitors in its ability to attract foreign investments: net FDI, as a percentage of GDP, is in fact lower than in peer countries, although higher than the LMC average (Figure 6).

Figure 5. Structure of Growth by Sector, 2010-18

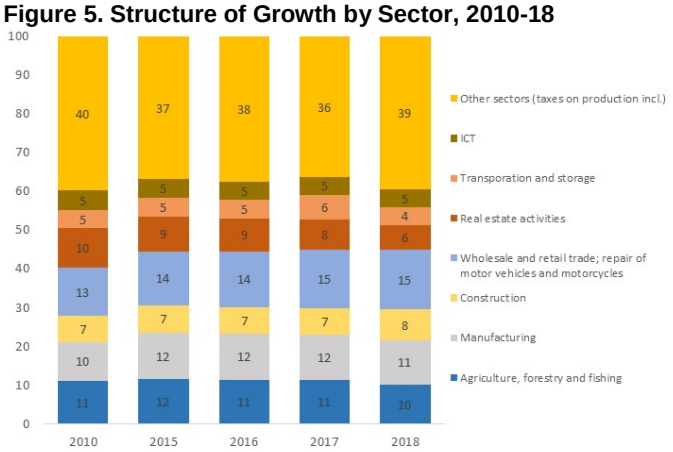
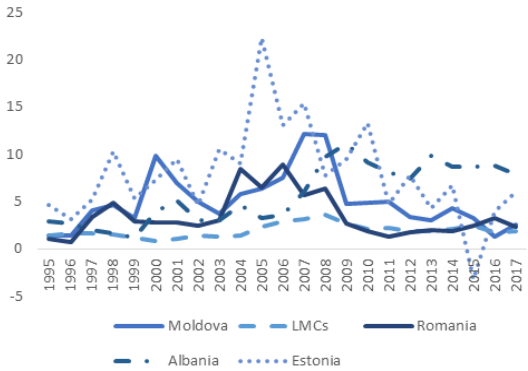


Figure 6. Total FDI inflows, 1995-2017, Percent of GDP



Source: NBM, Moldova Statistical Office, World Development Indicators.

External Imbalances Increased

7. **Not only is growth losing strength, but its sources built external vulnerabilities.** Despite the recent decline, mainly attributable to the strong appreciation of the nominal exchange rate amid renewed capital inflows, gross external debt at 65 percent of GDP in 2018, especially of the private sector, remains high for the lower middle-income country. Non-debt creating FDIs have financed two-thirds of the current account deficit over the last few years, but despite exports growth and high remittances current account deficit widened dramatically to above 10 percent of GDP in 2018 while FDIs remained low.

8. **Important consolidation on the fiscal side took place since 2015, which reduced the risk of twin deficits** (Figure 7). Consequently, public debt declined to 30 percent of GDP in 2018. Yet, relative to its

[6] The GDP revision from 2010 has assessed to reduce this number by about 4 percentage points.
[7] World Bank. 2016a. Moldova - Poverty Assessment 2016: A Jobs Diagnostic for Moldova. World Bank: Washington, DC.

level of per capita income, human development and government efficiency, Moldova's ratio of government consumption to GDP is high. The recent policy decisions to cut tax rates, introduce fiscal amnesty, increase public sector wages and pensions have also increased fiscal imbalance by at least 1.5 percentage points of GDP a year and temporarily discontinued the access to foreign concessional budget support (*see Policy Note on Safeguarding Fiscal Sustainability*). The increased vigilance is needed to address recent fiscal expansion costs, improve spending efficiency and strengthen revenue collection.

9. **Over the medium term, debt remains sustainable; however, the authorities need to safeguard access to capital and reduce rollover risks.** Given the lack of access to the capital market, the public external debt is still mostly long term and held by multilateral and bilateral donors on concessional terms. Over the medium term, external debt is expected to decline as exports underpinned by FDIs reduce current account deficit. While maturity of external debt has declined over time, getting close to the average maturity for comparators as the country decreasingly relies on the concessional debt (Figure 8), half of private external debt is short-term, which also poses rollover risks.

Figure 7. Twin Deficits and Debts, 2013-18, Percent of GDP

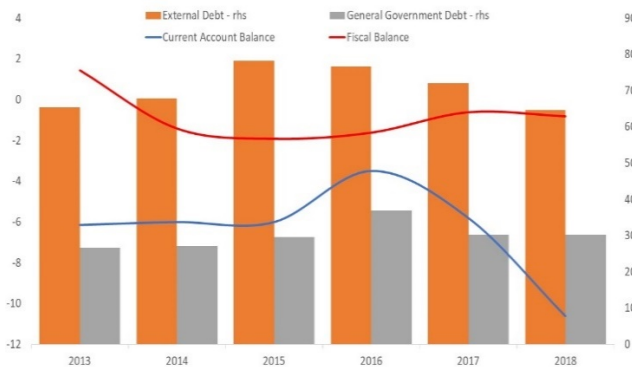
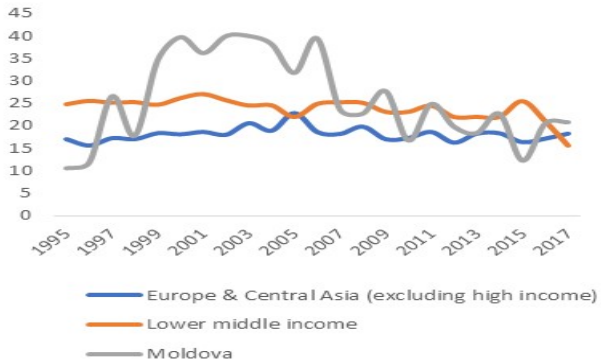


Figure 8. Average Maturity on New External Debt Commitments, 1995-2017, Years



Source: NBM, Moldova Statistical Office, World Bank staff estimates.

Table 1. Moldova: Key Macroeconomic Indicators, 2014-20

	2014	2015	2016	2017	2018	2019[f]	2020[f]
Real GDP growth (percent)	5.0	-0.3	4.4	4.7	4.0	3.4	3.6
Composition (percentage points):							
Private Consumption	4.9	-2.3	2.5	4.5	3.2	2.8	3.1
Public Consumption	-0.2	-0.1	0.1	0.3	0.0	0.2	0.0
Investment	2.0	-2.3	0.3	2.6	4.2	1.6	1.4
Exports	0.3	0.8	3.1	3.5	1.6	1.4	1.9
Imports (-)	2.0	-3.6	1.6	6.1	5.0	2.6	2.8
Consumer price inflation (percent, p.a.)	5.1	9.7	6.4	6.6	3.0	4.7	4.8
Public revenues (percent of GDP)	31.8	30.0	29.0	30.2	30.5	29.6	29.5
Public expenditures (percent of GDP)	33.3	31.8	30.5	30.8	31.4	32.3	31.6
Of which:							
Wage bill (percent of GDP)	6.9	7.2	6.8	7.0	6.8	6.6	6.5
Social benefits (percent of GDP)	10.1	10.4	11.9	12.0	12.7	12.8	12.7
Capital expenditures (percent of GDP)	7.1	5.4	3.4	3.4	3.3	3.2	3.2
Fiscal balance (percent of GDP)	-1.5	-1.9	-1.6	-0.6	-0.9	-2.7	-2.1
Primary fiscal balance (percent of GDP)	-1.1	-1.1	-0.4	0.5	-0.1	-1.7	-1.1
Public and publicly guaranteed debt (percent of GDP)	27.2	29.6	36.9	32.7	30.5	31.0	29.9
Of which: Domestic (percent of GDP)	7.0	6.7	14.8	13.6	13.2	12.0	13.5
External (PPG, percent of GDP)	20.2	22.9	22.1	19.1	17.3	19.0	16.4
Goods exports (percent of GDP)	19.1	19.5	19.2	19.2	17.8	..	..
Goods imports (percent of GDP)	51.1	46.9	45.0	45.7	42.1	..	..
Net services exports (percent of GDP)	1.3	1.7	2.8	3.3	0.9	..	..

Trade balance (percent of GDP)	-32.0	-27.4	-25.8	-26.6	-24.3	-25.0	-25.2
Remittance inflows (percent of GDP)	20.7	18.7	17.1	16.1	14.8	14.2	13.7
Current account balance (percent of GDP)	-6.0	-6.0	-3.5	-5.8	-10.5	-5.4	-5.7
Net foreign direct investment inflows (percent of GDP)	3.2	2.7	1.0	1.5	1.8	1.7	1.6
External debt (percent of GDP)	67.9	78.3	76.7	72.0	64.6	64.9	65.2
Gross official reserves (months of imports)	4.2	4.3	5.9	6.2	5.6	..	..
Nominal exchange rate (MDL/US$)	14.0	18.8	19.9	18.5	16.9	..	..
Real effective exchange rate (% change)	-1.2	-0.8	5.3	4.5	9.9	..	..
Real private credit growth (percent, period average)	-3.6	-1.0	-4.7	-3.6	6.9	..	..
Broad money (annual percentage change)	5.1	-2.3	9.1	9.1	7.8	..	..
Nonperforming loans (percent of gross loans, end of period)	11.7	14.4	16.4	18.4	12.5	..	..
Unemployment rate (percent, period average)	3.9	4.9	4.2	4.1	3.0	..	..
Youth unemployment rate (15-24 years, percent, period average)	9.8	12.8	11.2	11.8	7.4	..	..
Labor force participation rate (percent, period average)	41.2	42.4	42.6	42.2	43.3	..	..
GDP per capita, PPP (current international $)	5,984	6,027	6,379	6,803	7,168	7,426	7,686
Poverty rate at US$5.5/day, PPP (percent of population)	18.3	16.1	16.4	16.3	14.7	13.2	12.3

Sources: Country authorities, World Bank estimates and projections.
Note: Poverty rates are based on Moldova household budget survey (HBS).

Limited Growth Impact on Job Creation

10. **Both employment and labor force participation rates are below ECA and LMC averages.** The 2017 labor force participation rate (as a percentage of total population aged 15–64) was 47 percent; the average for LMCs was 60 percent and for ECA 68 percent. The official unemployment rate is quite low, however (Figure 9). Due to the low participation rate and the low retirement age, the number of inactive adults has in fact been going up, and together with the aging process puts further pressure on the already high dependency ratio, burdening pension and health systems. Emigration and remittances also feed reluctance to participate in the labor force, as does increasing enrollment in higher education and engagement in home production. Among the bottom 10 percent in rural areas, on average remittances contribute a higher share of total income than agricultural income and pensions.[8] While net job creation remained negative for a long time since the 2008 global crisis,[9] the situation is changing over the last few years. Rising real wages (Figure 10) have exacerbated the problem, by raising unit labor cost and depressing labor demand. Still, average wage in PPP terms of the Moldovan manufacturing worker is less than a half of those in Slovenia, Poland, or the Czech Republic giving it a comparative advantage along the global supply chains.[10]

Figure 9. Labor Market Performance, 2009-17, Percent

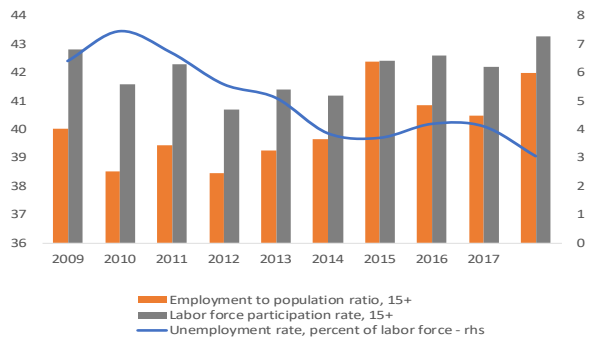
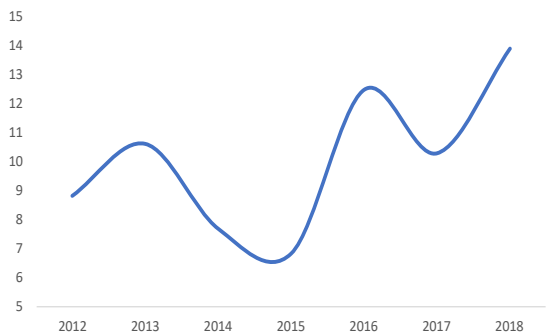


Figure 10. Real Wage Growth, 2012-18, Percent



Source: Moldova Statistical Office, World Bank staff calculations.

[8] Cojocaru, A., and M. Matytsin. 2018. "Moldova Poverty and Shared Prosperity Update 201." Other Operational Studies 30468. Washington, DC: World Bank.
[9] World Bank. 2016a. Moldova - Poverty Assessment 2016: A Jobs Diagnostic for Moldova. World Bank: Washington, DC.
[10] World Bank.2019. Moldova – CEM.

11. **Over the last few years, most of the jobs created are middle-skilled in retail and service sectors.** Over 42 percent of new hires in 2016 was in the group of middle-skilled workers, followed by 23 percent in the skilled and semi-skilled blue-collar workers; some 18 percent were highly-skilled workers.[11] The structure of employment has changed dramatically over the past decades (Figure 11) with agricultural sector losing one-third of the jobs. A large share moved to the service sector, although low-productivity agriculture, family-owned farms, absorbed the rest. Jobs have moved towards sectors with higher productivity (Figure 12). Moreover, both industry and service sectors have experienced higher wages and a stronger wage growth than agricultural sector which bodes well for living standard of the active labor force.

Figure 11. Employment by Sector, Percent of Total

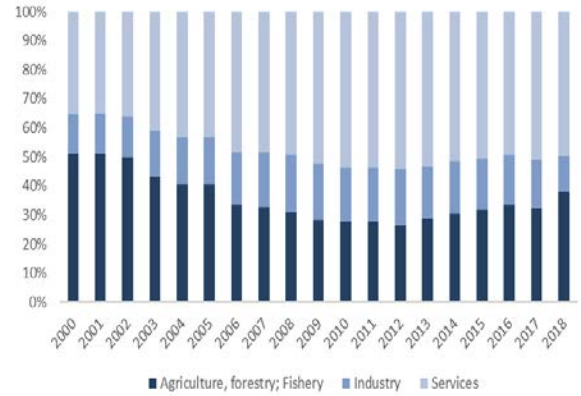
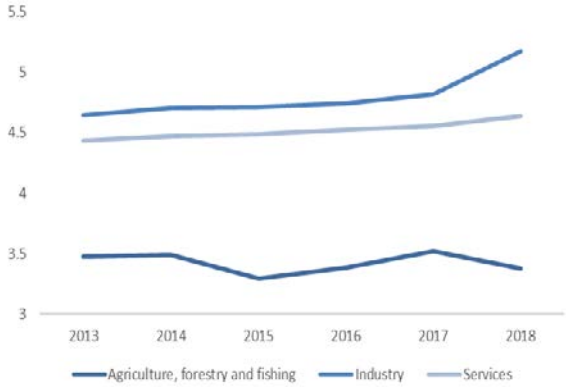


Figure 12. Real Output per Worker, 2010-18 (ln)



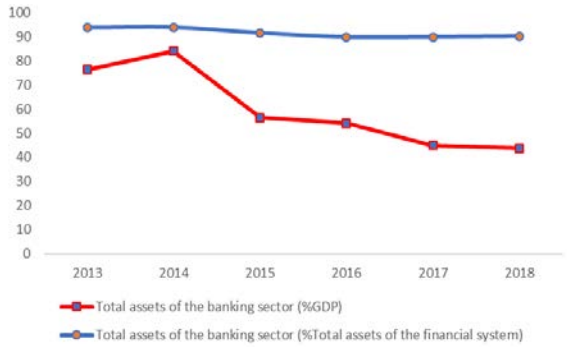
Source: Moldova Statistical Office, World Bank staff calculations.

Though Financial Stability Improved, Financial Sector is Vulnerable and Underdeveloped

12. **Since 2010, the National Bank of Moldova (NBM) has been allowing more exchange rate flexibility and has pursued a policy shift towards inflation targeting.** This has been helping to restore the external balance and price stability and to mitigate the effects of both internal and external shocks. Its policy has also helped rebuild the buffers eroded by the banking fraud in 2013–14.[12]

13. **While the legal, regulatory and supervisory framework for the financial sector improved after the 2014 bank fraud, the sector is still exposed to risks in terms of integrity, governance, and financial safety net.** The National Bank of Moldova (NBM) undertook significant reforms in terms of bank governance, the NBM powers, and a resolution of problem banks. Three largest banks underwent special diagnostic audits and were placed under special supervision due to suspected risks from unsound practices. Based on the audit findings, the NBM suspended large blocks of shares of these banks. Two of the banks have been acquired by strategic investors, and the NBM has authorized an investor to purchase the remaining third bank, which remains under a special supervision. In addition, large blocks of shareholders in two other banks have been ordered by NBM to sell their shares. It is important to ensure new bank shareholders are fit and proper. Meanwhile, progress on recovering assets from the fraud has been disappointing and integrity of the sector was set back by the launch on voluntary declaration. Furthermore, the Deposit Guarantee Fund for the banking sector has significant shortcomings including low deposit coverage and limited capacity.

Figure 13. Total Assets of the Banking Sector, 2013-18



Note: The financial development index database provides data on the degree of development of financial market and institutions in terms of depth, access and efficiency.
Source: IMF, NBM, World Bank staff calculations.

14. **Today banks are well-capitalized, profitable, and liquid; however, high share of non-performing loans remain a concern.** Financial intermediation is low, and the banking sector is shallow relative to the size of the

[11] Rutkowski, Jan, Victoria Levin, and Ali Bargu. 2017. Missing Skills: Results of the Skills Module of the Moldovan Labor Market Forecast Survey. Washington, DC: World Bank.
[12] Moldova went through a disruptive bank fraud, which cost the government about MDL12 billion (almost USD1 billion), or 12 percent of the 2014 GDP. Since it coincided with a downturn in Russia, the result was a severe macroeconomic shock and a loss in confidence in the domestic currency.

economy. In 2018 total bank assets amounted to around 90 percent of total financial system assets. Since the bank fraud, total system assets as a percentage of GDP have plunged (Figure 13) although domestic deposits have rebounded to a pre-fraud level. Banks have become more profitable, and the average total capital adequacy ratio is well above the 10 percent minimum, reaching 26.5 percent in January 2019. Nonperforming loans have increased due not only to the stricter classification but also because the loan portfolio has been shrinking (Figure 14). Despite the recent decline, nonperforming loans are above the average for regional comparators and LMC countries, respectively, 10 and 6 percent in 2017. The aggregate liquidity position causes concerns over potential monetary risks, and the current liquidity ratio at 55 percent remains high and increasing. To cope with abundant liquidity, in 2018 the reserve requirement was increased to a record 42.5 percent.

15. **While the non-banking financial sector is small and fragmented, it poses several risks to both stability and governance.** The non-bank credit organization sector is very small but has been growing rapidly, especially given the curtailed credit supply in the banking sector in the aftermath of the crisis. There are concerns over the regulatory and supervisory framework for this sector in addition to protection of consumers of Saving & Credit Associations. The insurance sector, while small, suffers from a large number of insurers at a high risk of insolvency which show signs of weak payment capacity and should be addressed through enforcing existing regulation as well as tighter regulation and supervision.

16. **Financial intermediation is further hampered by inadequacies in the financial infrastructure including the insolvency framework, credit information sharing system and secured transactions.** Sound insolvency and creditor/debtor regimes, credit reporting, and consumer protection, are vital for facilitating greater and more efficient access to finance as well as safeguarding financial stability. The financial infrastructure suffers from weaknesses in the insolvency legal framework (including absence of a personal insolvency framework), in the reach of the credit information system as well as implementation gaps for asset-based lending, which is predominantly used by SMEs.

Figure 14. Bank Nonperforming Loans, 2010-18, Percent of Total Gross Loans

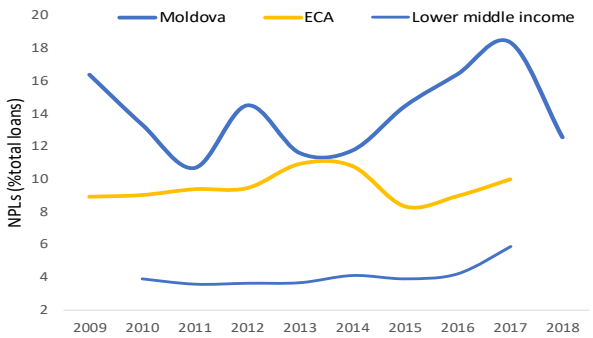
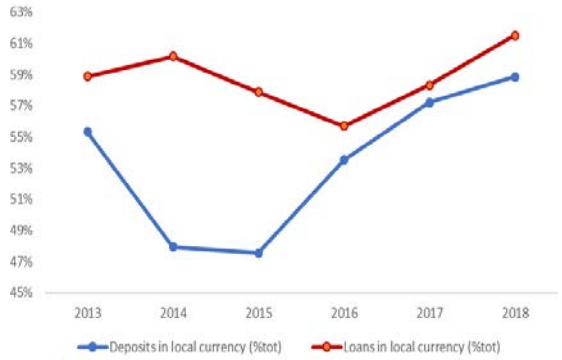


Figure 15. Recovery in Confidence, 2013-18



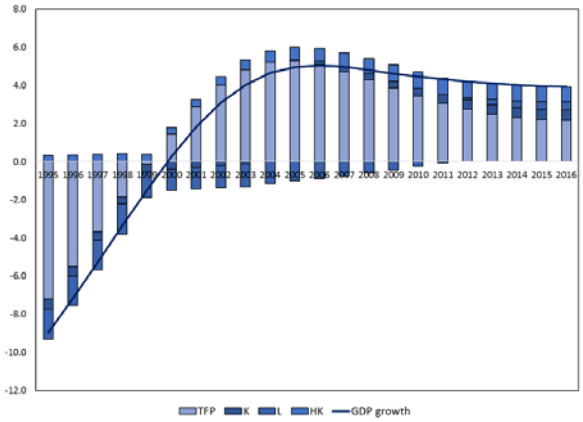
Source: NBM, World Bank staff calculations.

17. **Though the capital market is small, since 2013 the authorities have taken major steps to build it up.** To promote investor confidence, the government and the financial sector regulators should continue working to communicate the importance of capital markets and to increase transparency. Continuing problems are access to finance for both enterprises and individuals, and the ability of the financial sector to mobilize and effectively channel savings to productive investment. For example, in 2017 the number of ATMs per 100,000 adults (36.71) was far below the ECA average (70.7). However, despite Moldova's many weaknesses, confidence in the domestic currency and in the economy, has rebounded to a pre-fraud level (Figure 15). (*See Note on Enhancing Financial Sector Stability and Governance*).

Fostering Growth and Competitiveness

18. **Moldova's growth challenge is in its declining productivity growth and stagnant contribution of labor.** Increases in total factor productivity that powered growth rates between 5-6 percent in the first five years of the 2000s have fallen to about a third of their earlier levels (Figure 16). Total factor productivity has experienced a decline more pronounced decline following the 2008 and the 2014 bank fraud crisis, although its rate of growth has been decelerating since 2005. This is due to the inability of the economy to shift resources from low-productivity sectors to high productivity sectors, to shift resources within sector to higher productivity uses, and for firms to use innovation to seize new market opportunities. Although movements of workers from less to more productive firms have sustained growth, firm-level productivity has stagnated.[13]

Figure 16. Growth Accounting, 1995-2016, Percent



Source: NBM, Moldova Statistical Office, World Bank staff estimates.

19. **Moldova's productivity is decelerating, and labor productivity is one of the lowest in Europe** (Figure 17). So far growth has been fueled by worker remittances from abroad: at about 30 percent of the labor force, Moldova's emigrant population is among the largest in the world. Remittances are high, but their contribution is expected to stagnate: not only growth of remittances has slowed down in the last decade, but also will likely diminish further as the attachment of next-generation migrants will likely loosen.[14] Both capital deepening and labor contribution to growth have been declining or stagnating. Capital deepening is discouraged by the large footprint in the economy of state-owned enterprises (SOEs) and the relatively high cost of finance,[15] while lack of skills needed by the market as well as limited pool of available labor to work hamper growth potentials. As a small open economy, Moldova also needs to compensate for its size limits and extend its market through exports. There were major advancements in this area, but further efforts are needed to diversify exports and increase its value added. And finally, governance, business environment and competition policy need to ensure level-playing field for all market players which promise to bring a high growth dividend. Competition has failed to drive growth as more than half of the manufacturing markets are either monopolies, duopolies or oligopolies.[16]

Figure 17. Value Added per Worker in 2016, Constant 2010 US$

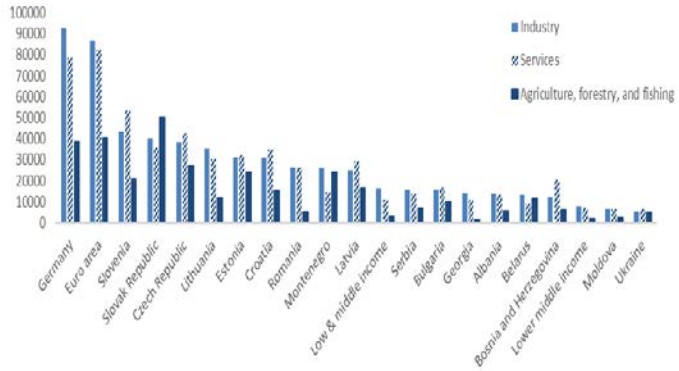
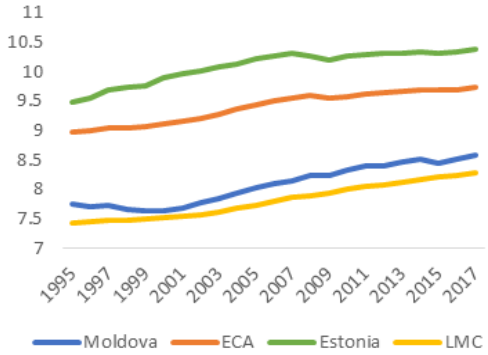


Figure 18. Labor Productivity 1995-2017, (Output per Worker, ln)



Source: Moldova Statistical Office, WDI

Increasing Activity and Addressing Skills

20. **The contribution of labor has been stagnant due to low labor participation and employment**. Labor productivity is below ECA and peer country averages (Figure 18), although it has risen relative to its

[13] World Bank. 2019. Moldova – CEM.
[14] World Bank. 2016. Moldova – SCD: Path to Sustained Prosperity. World Bank: Washington, DC.
[15] World Bank. 2009. Moldova – CEM.
[16] World Bank. 2019. Moldova – CEM.

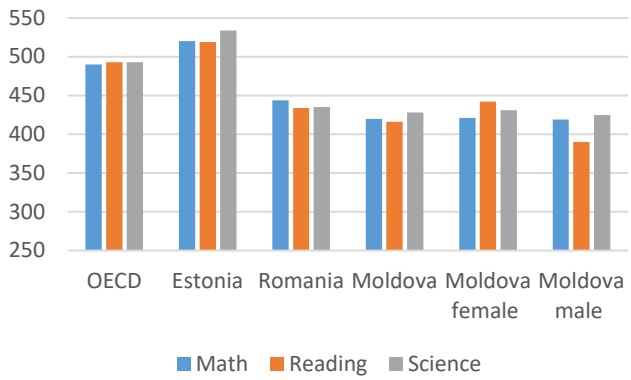
2000 level. For a small landlocked economy, higher productivity can be achieved mostly by making its labor more productive, exporting more, attracting FDI, and levelling the playing field for domestic firms.

21. **With declining demographics, increasing participation rates and boosting labor productivity will be necessary to boost convergence to higher living standards and to support a new model of growth.** Demographic trends are probably the most alarming for Moldova. The fertility rate has hit a historic low, as has the dependency ratio for young people. Both are below the ECA and LMC averages. The population is aging; the average dependency ratio for old people is a record-high 14.8 percent, still below the ECA average but much higher than the LMC average. Notably, the old-age dependency ratio is higher for the bottom 10 percent of the welfare distribution than for the top 60 percent and the gap has been widening, which will make it harder in the future to sustain shared prosperity. Emigration of young people is also troubling: emigration from Moldova is higher than from LMCs generally. According to World Bank population projections, if current trends continue, by 2050 Moldova will lose a fifth of its population.

22. **Moldova's employment and labor force participation rates are below ECA and LMC averages.** The inactivity rate in 2017 (as a percentage of total population aged 15–64) stood at 53 percent; the average for LMCs was 40 percent and for ECA 32 percent. This directly reflects the lost labor contribution to accelerate growth in the country. Those detached from the labor market for a longer period of time reduce their employability given declining relevance of skills for the private sector.

23. **Mismatches in the labor market are already present, while skills the education system develops are not encouraging.** On the one hand, as the World Bank reported in 2017,[17] firms complain about difficulty in finding workers with suitable skills. On the other, workers report a lack of correspondence between education and jobs. Although results of the OECD Program for International Students Assessment (PISA), demonstrate an improvement in the learning outcomes for Moldovan students since 2009, recent data show that 40 percent of Moldovan students lack basic cognitive skills. Some, 50 percent of the 15-year-old students do not possess the basic proficiency in mathematics, along with 46 percent in reading and 42 percent in science. Across the distribution, the poorest group continues to have lower educational endowments: the share of people with university degrees in the top 60 percent is almost triple that of the poorest 40 percent—and in recent years there has been no obvious convergence in education between the two groups.

Figure 19. PISA Scores, 2015, Age 15



Source: OECD

24. **The labor market is fragmented and highly gender-biased**. Although the country performs relatively well in terms of gender equality, ranking well ahead of its comparators at 26th in the Global Gender Gap Index (2016), gender inequalities persist. The wage gap is still significant, with women earning 13 percent less than men. Yet, a 15-year-old female performs consistently better across math, reading and science than its male colleague (Figure 19). Moreover, the labor market is segregated, so that women are concentrated in poorly remunerated public-sector jobs, with only a minority involved in productive work.

25. **Moldova has barriers to importing labor while close to one-third of the labor force works outside the country.** According to the CBR Labour Regulation Index Dataset,[18] Moldovan labor regulation is primarily concerned with regulating dismissals and is more pro-labor than any of the four major OECD countries (France, Germany, the UK. and the USA). This contributes heavily to labor market rigidities and the shadow economy, undermining competitiveness. Nevertheless, only 13 percent of firms in the BEEPS survey regard the regulations as constraints, which suggests that the laws are not enforced and there are gaps in implementation.

Increasing the Global Market Share

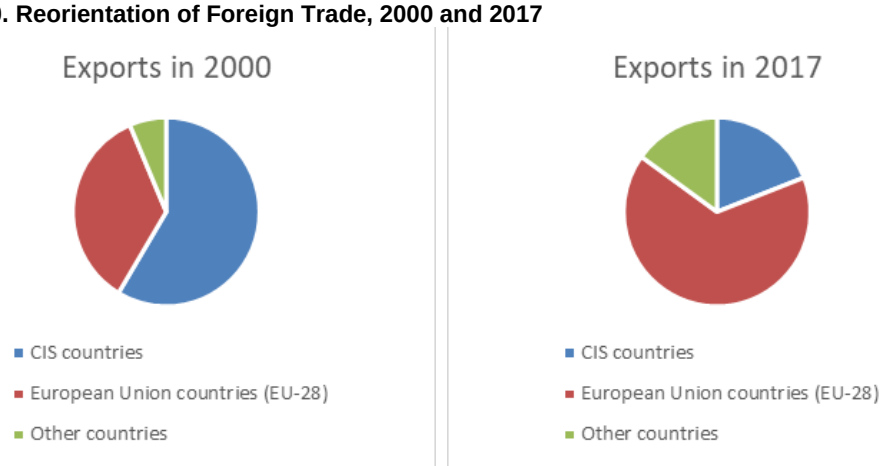
[17] World Bank. 2017. Moldova – Assessment of firm-level skills demand and engagement in skills development. World Bank: Washington, DC.
[18] CBR Labour Regulation Index, https://www.repository.cam.ac.uk/bitstream/handle/1810/256566/cbr-lri-117-countries-codebook-and-methodology.pdf?sequence=1&isAllowed=y

26. **Moldova is a small economy that is moderately open when compared to comparable countries.** Yet it has been unable to fully realize the benefits of trade by boosting productivity and economic growth. Due to high import penetration, Moldova's trade openness, at 113 percent of GDP in 2017, is moderately high. Yet, the quality of its export basket is limited.[19]

27. **The trade policy seems to be pro-trade, with tariff regime being liberal.** The simple average most-favored-nation applied tariff is among the world's lowest. Given its relatively low tariffs, on the "trading across borders" Doing Business indicator, in 2018, Moldova ranked 35th among 190 economies, and it has a wide range of regional trade agreements.[20] It has also signed a number of preferential trade agreements with advanced industrial economies, including the United States, Canada, and Japan.

28. **Exports towards EU countries have gained importance as Moldova becomes more integrated with Europe** (Figure 20). Meanwhile, exports to the Commonwealth of Independent States (CIS) have halved. Over the last ten years, Moldova has diversified its markets considerably; in 2017 the number of export destinations rose from 48 to 67. Moldova relies far less now on markets in the CIS, shifting toward other European countries. Exports to CIS fell from 39.5 percent in 2003 to 20 percent in 2017. In recent years, almost 30 percent of all goods exported by Moldova went to Romania, now its largest trade partner. New markets, such as China, Egypt, Saudi Arabia, and Turkey, have also emerged. However, there is ample scope for further diversification and trade ties with more distant markets.

Figure 20. Reorientation of Foreign Trade, 2000 and 2017



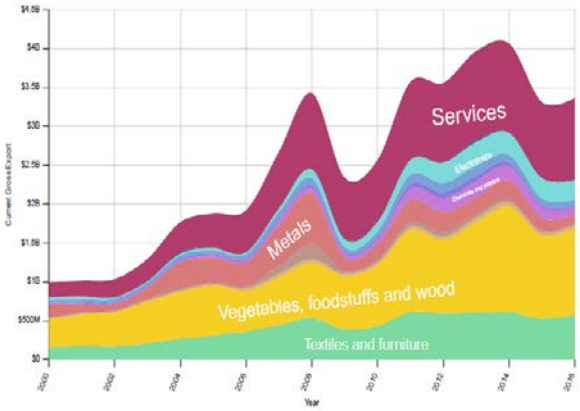
Source: NBM, World Bank staff calculations.

29. **While Moldova's average tariff is below that of the EU, its trade with the EU is constrained by its inability to meet EU standards.** The lack of standards is a particular problem for agribusiness exporters. For example, black caviar is certified as acceptable to the EU, but eggs for processing are only now getting certification, and as yet eggs for consumption and meats do not comply. The apple varieties accepted in the EU are not those traditionally produced in Moldova. The country must also meet EU standards for post-harvest sorting, calibration, packaging, and storage; producers need to keep working to improve these processes.

30. **Between 2006 and 2016 Moldova's export basket experienced a quality upgrade but is still tilted toward lower-value-added production**. Exports have been dominated by services (IT, transport, and tourism); agri-food products; textiles and furniture (Figure 21). Moldova has relied on food and other resource-based products to drive market penetration, which is still low. Comparing the change between 2006 and 2016 with other countries reveals Moldova's relatively small increase in market share and its reliance on primary products and low-technology manufactures (Figure 22).[21] However, the composition of Moldova's exports has shifted in the past decade with machinery, vegetables, and other food products increasing in importance at the expense of furniture and textile. In recent years, coaxial cables and other electric conductors were the main export product due to a handful of foreign firms investing in the country after it signed the DCFTA.

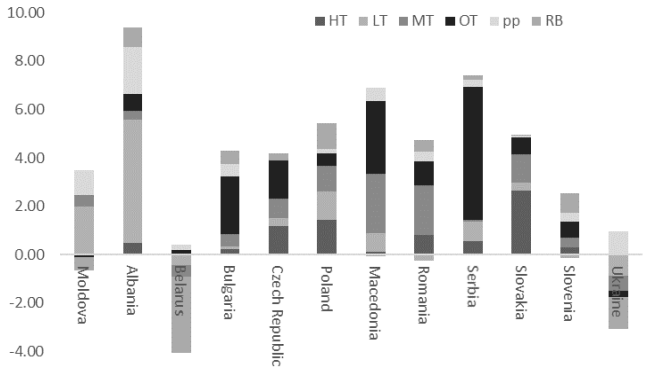
[19] World Bank. 2016. Moldova Trade Study – Note 1. Analysis of Trade Competitiveness. World Bank: Washington, DC.
[20] Moldova has 14 active Regional Trade Agreements (RTAs), including the Deep and Comprehensive Free Trade Area (DCFTA) with the EU, Georgia, Ukraine, and Turkey. A trade treaty with China has been announced.
[21] World Bank. 2019. CEM.

Figure 21. Export Structure, 2000-16



Source: UNCTAD

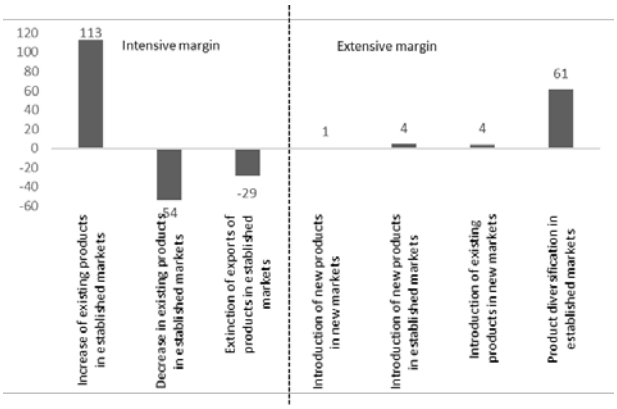
Figure 22. Adjusted Market Shares Decomposed by Technology, 2006Q2-2016Q2



Source: Measuring Export Competitiveness database.
Note: Changes in adjusted market share net out the effects of the mix of products exported and new the distribution of trading partners.

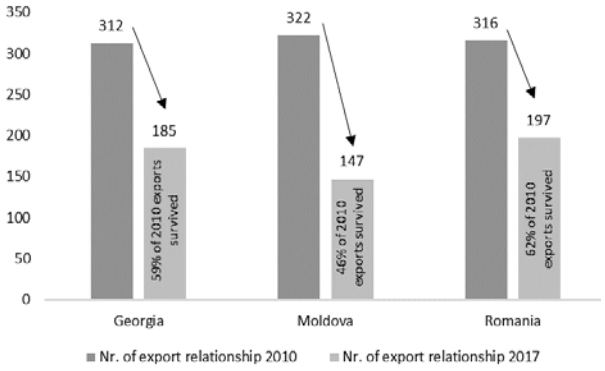
31. **While most of Moldova's export growth consists of more sales of the same products to the same markets, product diversification has been growing.** The increase in market destinations explains the export growth observed in recent years (Figure 23). In fact, new products accounted for 61 percent of export growth in recent years. However, Moldovan exporters do not last long (Figure 24). According to the latest Trade Study, the probability of an exporter surviving beyond the first year is less than 50 percent. Those that do survive and are integrated in the global markets tend to be the more productive firms.

Figure 23. Export Growth Decomposition, 2006-17



Source: WITS.

Figure 24. Export Duration and Decomposition, 2010-17

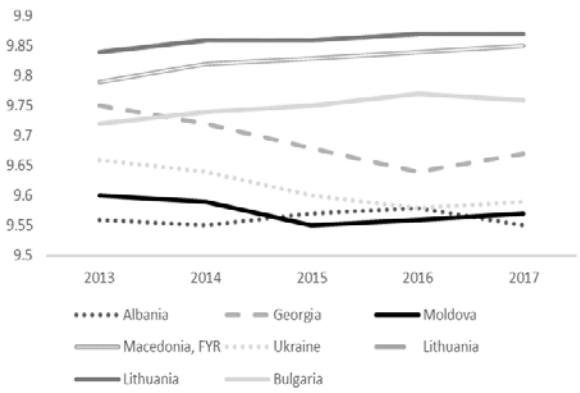


Source: WITS.

32. **The sophistication of Moldova's exports has not changed much since 2013 and is low when compared with the region.** The sophistication of its exports has stagnated at a low point since 2013 (Figure 25). However, the quality of its top product exports has improved, especially bottled wine, apple juice, car seat parts, coaxial cables, walnuts, and spirits.

33. **Dominating services exports have been transport, ICT, and travel.** Between 2000 and 2010 services exports grew faster than goods exports, though the situation has since reversed. Between 2010 and 2017 services increased on average by almost 7 percent, while merchandise exports increased by 9.2 percent. Services have considerable potential to drive export growth, especially ICT, transport, and tourism.

Figure 25. Product Sophistication, log, 2010-17



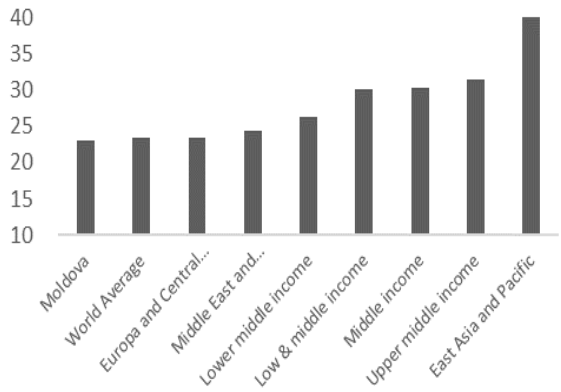
Source: WITS.

34. **To generate jobs and heighten competitiveness, services are central.**[22] For instance, Moldova's ICT sector now employs about 22,000 workers, and net exports of computer and information services have more than doubled since 2011; in 2017 reaching 11 percent of all services exports. Still, in terms of the number of ICT goods exported, international databases count only 5, far below regional peers. In many countries, spillover effects from such sectors as financial and business services, health care, and tourism are likely to be an important driver of productivity. Although Moldova compares well with peer countries, however, to make the ICT a growth driver, the country must first address issues like skills shortages; upgrade ICT-related education; and simplify labor law.[23]

35. **Exports of transport services are undeveloped because of trade barriers and procedures and infrastructure inadequacies**. Transport accounts for 37 percent of total services exports. Moldova's roads and railways have been poorly maintained, with a few exceptions to accommodate changing patterns of commerce and trade. Road transportation is particularly time-consuming and deserves concerted efforts to build infrastructure and expand capacity, particularly at the border with Romania (*see Road Financing Note*). Railways need significant track maintenance and rehabilitation to speed access from the EU to the closest ports. With huge cargo capacity needs and two poorly-operational airports (Chisinau and Marculesti), airfreight exports are almost nonexistent compared to regional peers. Compounded by the 48 hours required for documentation, compared to less than 2 hours in EU, the median time an export transaction takes in Moldova is almost 12 times higher than in the EU and neigboring Romania and Ukraine.

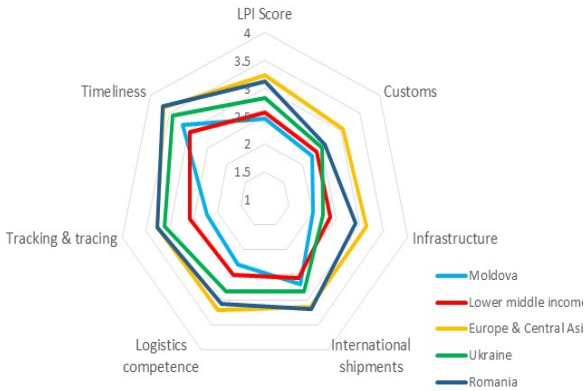
36. **Moldova needs to upgrade its existing obsolete infrastructure.** The share of investments in Moldova's GDP is marginally worse than in the region as a whole and trails the country's income-group peers (Figure 26). At the same time, the Logistics Performance Index ranks Moldova behind neighbors, and its worst scores are in infrastructure, tracking and tracing, and logistics competence (Figure 27). Ukraine and Romania are far ahead of Moldova on all analyzed indicators, which makes it harder for Moldovan companies to compete.

Figure 26. Gross Capital Formation, 2010-17 Average, Percent of GDP



Source: UNCTAD

Figure 27. Logistics Performance Index, 2018



Source: https://lpi.worldbank.org/international/scorecard/radar/254/C/MDA/2018/C/ROM/2018

Boosting Foreign Direct Investments and Enhancing the Innovation System

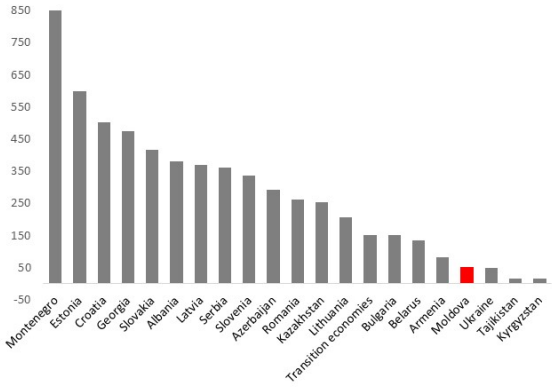
37. **Moldova needs to improve its investment climate and reduce the costs of doing business**. Like exports, FDI usually brings with it new technologies and management innovations. Moldova must now focus on easing entry into business, fairer competition, and the rule of law if it is to attract more FDI. Currently it is far behind in attracting FDI, which can be a significant source of productivity growth by helping domestic industries to get closer to the international technology frontier. The basic premise related to FDI spillovers is that foreign firms are technologically superior and can transfer knowledge and innovations through interactions with domestic firms. Foreign ownership is generally associated with better performance in terms of productivity.[24] In Moldova, the latest Enterprise Survey revealed that about 64.6 percent of foreign firms[25]

[22] McKinsey Global Institute.
[23] World Bank. 2019. CEM.
[24] World Bank. 2019. CEM
[25] Foreign firms are defined as firms with 10 percent or more foreign ownership. Using a stricter measure of foreign ownership (with 50 percent or more foreign ownership) reveals that 81 percent of foreign owned firms invested in R&D compared to 6 percent of domestic owned firms.

compared to 4.2 percent of domestic firms spent on research and development. A skilled workforce also helps companies to develop and adapt modern technologies to their production process. On average about 50 percent of the workforce employed in foreign companies has a university degree compared to about 28 percent among domestic companies.

38. **In the last decade, FDI per capita in Moldova was among the lowest in the region** (Figure 28). In recent years gross FDI dropped dramatically, from 12 percent of GDP in 2008 to less than 3 percent. The banking fraud further suppressed FDI. Some investments reported as FDI may be Moldovan resources channeled back through other countries. A high share of FDI from the Netherlands and Cyprus has gone to lowering intra-company loans and equity and increasing reinvested earings. After the banking fraud, the latter is the main source of FDI in Moldova. Thanks to recent dynamic investment in Free Economic Zones (Box 1), FDI is now increasingly going to manufacturing (21.4 percent of the 2017 total, as opposed to 28.9 percent that went to financial and insurance industries and trade), but the stock is still modest compared to peer countries.[26]

Figure 28. FDI Stock Per Capita, 2017, Current US$



Source: UNCTAD.

39. **Greenfield investments are rare.** Over the last decade, Moldova received only 85 greenfield projects—less than half the number received by the next lowest recipient, North Macedonia, and only a small fraction of the 2,264 projects in Romania, the highest comparator recipient.[27] Only lately are the majority of greenfield investments related to FEZs and associated with export diversification. According to the National Strategy for Attracting investments 2016–20,[28] investments in electrical machinery, chemicals, clothing and footwear, and technical, optical and medical equipment generate more exports than traditional sectors.

Box 1. Free Economic Zones in Moldova

Moldova currently has seven free economic zones that offer investors numerous benefits, such as tax incentives. The FEZs do not adhere to the existing state aid framework and according to the Association Agreement with the EU, Moldova must align all state aid schemes on Free Economic Zones until 2024. Fiscal incentives for firms resident in FEZs are to be considered as operating aid, which is in principle prohibited by the state aid framework and may distort allocation of economic resources. In addition to the FEZs, Moldova also has nine industrial parks, one international airport, and one free water port terminal that offer similar benefits.

In recent years, FDI has generally been linked to FEZs. With exports from the FEZs amounting to 25 percent of all merchandise exports in 2015–17 and a five-fold increase in employment, FEZs are viewed as important gateways for technology transfer, skill upgrades, and spillovers to the economy.

However, international experience has raised questions about the spillovers, productivity and competitiveness gains from FEZs. For instance, the skills needed to perform most tasks relate to less value-added stages of production and tend to be repetitive manual operations. For instance, the top 10 exports with the lowest added value in China include electronic components, telecommunication equipment, office equipment, and electronic elements and devices. (Koopman, Wang, and Wei 2008). The highest domestic value-added exports are agricultural, hemp textiles, metalworking machinery, and steel processing exports. This validates the 2016 World Bank Trade Study of Moldova that found few dynamic gains from FEZs.

Nonetheless, the recent dynamism of the FEZs shows that when policies are supportive and infrastructure obstacles overcome, businesses are more productive. This is particularly important for logistics and customs procedures. Lengthy customs and import licensing procedures erode a firm's productivity. Extending to the rest of the country effective FEZ institutions and policies, especially those related to customs and business facilitation, might foster growth

Source: World Bank CEM, 2019.

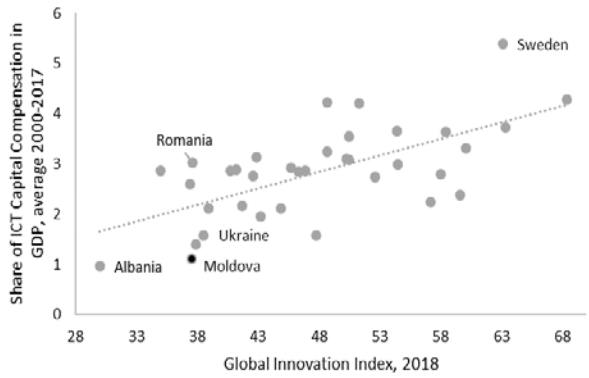
40. **The FDI could contribute more to Moldova's development if there are more domestic spillovers and if of higher value added.** There are low spillovers from the current pool of FDIs. Encouraging

[26] World Bank Trade Study. 2016. and CEM. 2019.
[27] World Bank. 2019. CEM
[28] https://mei.gov.md/sites/default/files/snaipe_2016-2020_eng.pdf

the development of domestic suppliers, and training of workers could help linking domestic companies with investors in the zones through supply chains or sub-contracting. Encouraging business networks and clusters between the zones and the rest of the territory by developing a full range of technical and support services; developing technical and support services to encourage clustering and networking among residents of the zone and the rest of the economy could help with increasing the value added for the economy. Yet, attracting the FDIs for the downstream exports (high value-added stage of production) requires strengthening skills and the rule of law in the country. Upstreamness, that is average distance from final use, is negatively correlated to the relative financial development, skill endowment, and rule of law of the country, which is a proxy for the strength of contracting institutions.[29]

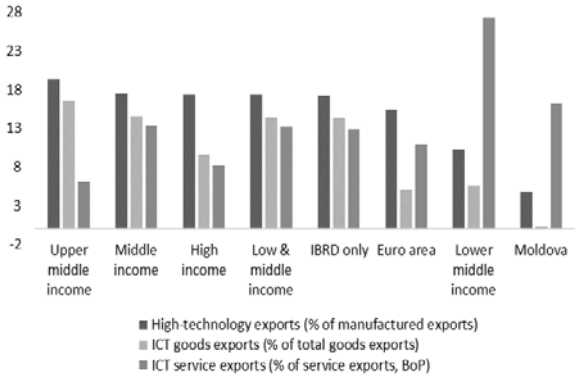
41. **While innovation per se is less critical for factor-driven economies, technology absorption and transfer processes may explain lagging export and FDI performance and the lack of positive externalities.** The quality of human capital is a serious problem for absorbing innovation and technology (*see the Education Policy Note*). As a consequence, relative to the EU there is little innovation in Moldova and it produces few intangible assets. Moldova thus has one the lowest rankings in the Global Innovation Index (GII) and its share of ICT capital and its returns is the lowest except for Albania (Figure 29). As a result, Moldova exports few high-technology products and ICT goods (Figure 30).

Figure 29. ICT and the Global Innovation Index



Source: Global Innovation Index.

Figure 30. Exports of High-Technology Products and of ICT Goods and Services, 2017



Source: WDI.

42. **Long-term policy and funding neglect have rendered much of Moldova's research infrastructure obsolete and prevented modern industry–science linkages**. After peaking at 0.55 percent of GDP in 2005, by 2017 spending on R&D had dropped to 0.3 percent (Table 2). Given emigration and brain drain from Moldova, the number of researchers per million inhabitants is far below those of peer countries. The share of the population with tertiary education is relatively high but new doctorates per 1,000 population aged 25–34 years are less than 20 percent of the EU average. Moldova has difficulty in attracting and retaining foreign students and researchers; the education offered by local universities does not meet market expectations and conditions are generally unattractive. Low R&D investment keeps research infrastructure undeveloped, although some ICT networks and databases are available to researchers.

43. **Production of intangible assets and exports of high-tech products is highly correlated with business investment in human resources, R&D, and ICT infrastructure.** Many Moldovan businesses do not use ICT in everyday business operations. Employed persons using internet and computers on a daily basis is very low in Moldova, while the web presence of Moldovan companies is only 25 percent that of German use and 50 percent of Romanian and Ukrainian (Figure 31). Researcher density in the business sector is also the lowest in the region. Moldova has 73 researchers employed by business enterprises per million inhabitants.[30] On average, businesses are responsible for only 20 percent of all R&D spending, while in most EU countries (except Romania and Bulgaria) they average more than 40 percent. The number of Moldovan researchers is also decreasing.

44. **Moldova still has a long way to go to catch up with dynamic middle-income countries in terms of translating its modest R&D effort into economic gains.** In Slovenia, 32 times more technicians work in R&D than in Moldova, which helps explain the latter's inability to develop new products and production processes. In the past ten years, Moldova has applied for only 26 patents at EPO and USPTO--the lowest number in the region. Its spending to develop entertainment and artistic originals that can be copyrighted or

[29] Antras et al. (2012)
[30] UNESCO Science Report – Towards 2030, file:///C:/Users/WB333070/Downloads/235406eng.pdf.

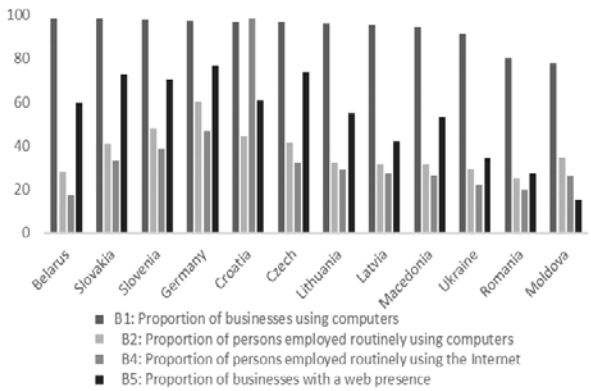
licensed, to design new financial services products, new architectural and engineering designs, or R&D in the social sciences and humanities is almost nonexistent.

Table 2. Selected ICT Indicators

	R&D expenditure (% of GDP)	Patent applications	Industrial design applications	Trademark applications	Scientific and technical journal articles
High income	2.5	1388927	332200	1636136	1411361.95
IBRD only	n/a	1564421	791415	1525233	917780.4
Low & middle income	1.4	1556008	794610	3437693	891992.786
Middle income	0.6	1555702	793822	1481102	886566.598
Upper middle income	1.8	1480038	749872	2909919	713399.095
Euro area	2.1	106987	124290	344787	410882.8
Lower middle income	1.4	75664	43950	639016	172760.366
Moldova	**0.3**	**155**	**902**	**4291**	**295.4**

Source: UNCTAD.

Figure 31. Use of ICT by Firms (2015)



Source: UNCTAD.

45. **If it is to transition to an innovation-driven economy, Moldova has no choice but to engage in fundamental reforms and to steeply increase business R&D.** Moreover, businesses need stronger incentives to invest in R&D, rooted in a business-friendly environment that is conducive to a thriving market economy. That in turn will require the country to battle corruption with determination and eliminate oligarchic ownership and control structures.

Strengthening Governance and Competition Policy

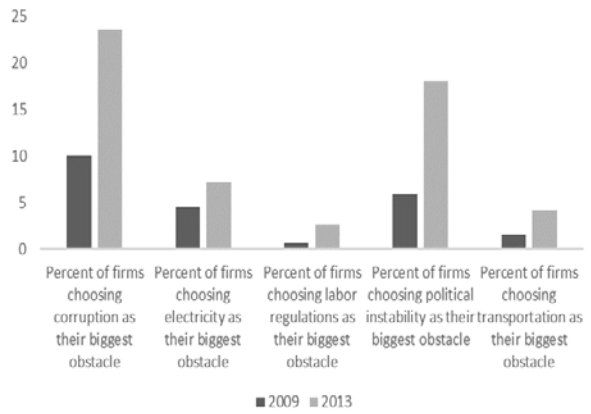
46. **In order to advance to efficiency-driven economy, Moldova should concentrate on reducing distortions and encouraging fair competition.** A well-functioning market economy with competitive markets is crucial to compete in global trade. Effective complementary policies for competition, market regulation, and investment in human capital are necessary to open up trade successfully. For that Moldova needs to address its institutions, the large presence of the state in the economy, and vested interests.

47. **Moldova is not rated highly on the effectiveness of its administration** (Figure 32). The World Bank governance indicators specify particular shortfalls in control of corruption, the rule of law, regulatory quality, and government effectiveness generally. Moldova trails the ECA region by about 35 percentage points in the governance indicators ranking. In both the World Economic Forum Global Competitiveness Report and the World Bank-EBRD Business Environment and Enterprise Performance Survey, 40 percent of businesses now identify corruption as their top concern (Figure 33). The Cost of Doing Business Study demonstrated that government interference in business activity has soared. Only 6 percent of companies believe that the laws treat businesses equitably—and 44 percent mention that the laws are applied selectively.

Figure 32. World Governance Indicators, 2018

Source: World Development Indicators, World Bank.

Figure 33. Most Binding Constraints, 2009 and 2013

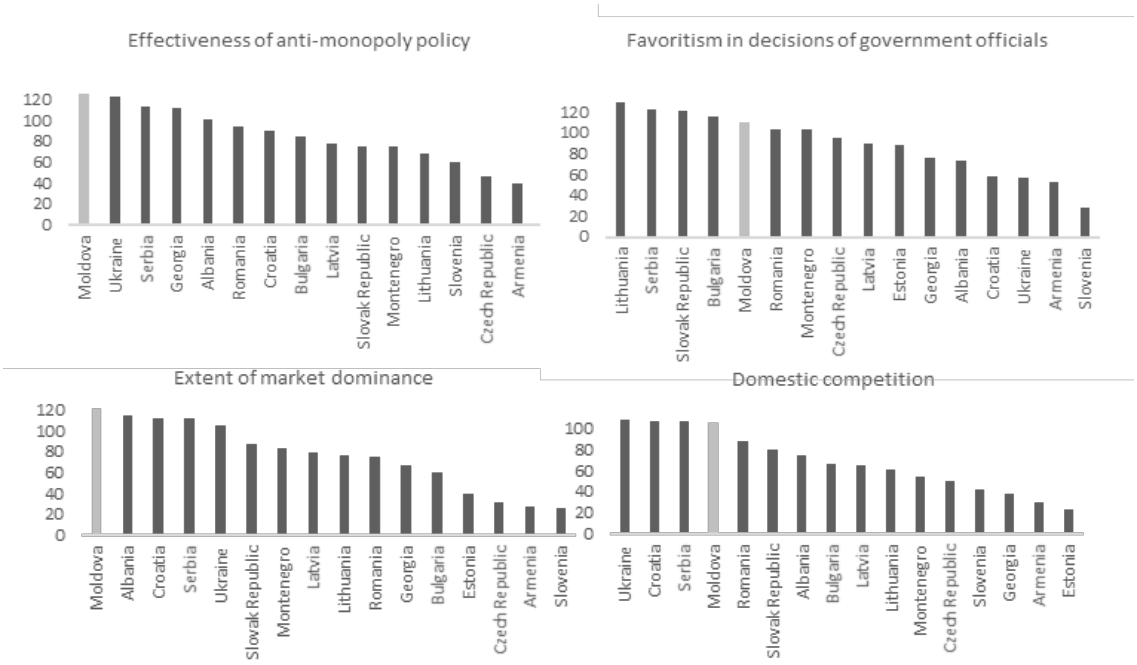


Source: World Bank and EBRD, BEEPS database.

48. **Underdeveloped and politicized institutions encourage unfair competition and undermine competitiveness**. The regulatory power of the state is seen as being used for unfair competition. According

to the Global Competitiveness Index 2017–018 (GCI), Moldova scores poor on effectiveness of antimonopoly policy; a few companies dominate the internal market. It also ranks low on favoritism by government officials and lack of domestic competition (Figure 34). Among countries in the region, Moldova's rankings on most of the GCI indicators are very low. There is clear evidence that the large presence of the state in the economy is harmful for competitiveness and productivity growth. Competitiveness suffers from (i) a large SOE sector; (ii) lack of effective state aid policy; (iii) price controls and anticompetitive restrictions; and (iv) poor enforcement of antitrust mechanisms.[31] Countries with less regulation of product markets tend to be more productive and competitive.

Figure 34. Selected Global Competitiveness Indicators, 2017-18



Source: World Economic Forum.

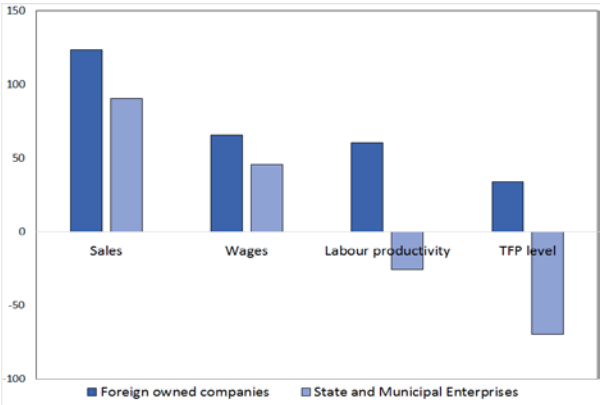
49. **The number, and impact, of SOEs in Moldova is double to triple those of neighboring countries**.[32] Its SOEs are active in at least 19 sectors where private participation is economically viable; the OECD average is 14. SOEs employ 7 to 24 percent of the labor force and their assets represent 14 to 32 percent of GDP. Yet they have lower production per employee (Figure 35 and Figure 36), and slower productivity growth. Finally, between 2010 and 2016 the growth of total factor productivity (TFP) of foreign-owned firms has outpaced by 3 pp both state and municipal enterprises and domestic private firms.

50. **Although markets tend to be more concentrated in small economies, Moldova is a clear outlier, and there are sectors that can be efficiently covered by private sector.** According to BEEPS (2013), 47 percent of manufacturers exhibit oligopolistic behavior and another 12 percent are monopolies and duopolies. In at least half of the economic sectors in which they operate, SOEs have more than 50 percent of the market share. Most of those sectors would benefit from more private participation. For example, in addition to network industries, SOEs are engaged in wine production, motion pictures, telecommunications, tobacco, gambling, pharmaceuticals, urban passenger transportation, and food and beverage manufacturing. The majority of SOEs are loss-making and require substantial government aid. Some of the largest SOEs receive financing through loan guarantees or benefit from tax expenditures and subsidies not available to private companies, and repayment rules are lenient. SOEs can also benefit from write-offs of tax arrears and other liabilities, which allows them to keep prices artificially low, to the detriment of private firms.

51. **State aid is four times larger than the EU recommends.** In 2016–17, it consumed more than 4 percent of GDP, compared to averaging less than 1 percent in the EU. State aid benefits companies or sectors through exemptions, rebates, deferrals, rescheduling, or forgiveness of taxes. Horizontal and regional development aid, as a rule, does less harm to the competitive environment and is therefore more acceptable than sectoral aid.

[31] World Bank. 2019. CEM.
[32] World Bank. 2019. CEM.

Figure 35. Average Percentage Differences, Private Firms and SOEs, 2010-16



Source: World Bank.

Figure 36. Performance of Economic Entities by Ownership, 2015

Source: Moldova Statistical Office.

52. **State aid and investment incentives are not adequately monitored; nor are they evaluated ex-post.** The ex-ante[33] and ex-post evaluation of aid is necessary to determine whether the scheme has achieved its goals and also to limit market distortions of trade and competition. For Moldova, clarifying the policy objectives of state aid and collecting detailed firm-level data would make it possible to assess whether state aid is effective and how it affects markets. Indeed, with state aid of about 1 percent of GDP going to SOEs that provide backbone services, it is imperative to ensure transparency and accountability. However, with launch of the state aid portal, reporting and monitoring are improving. It is essential to generate enough transparency to guarantee that state aid in Moldova does not distort competition.

53. **There are also questions about whether price controls in trade distort free market frictions and restrictions.** Given regulatory distortions and lack of competition, consumer prices of food products appear to be higher in Moldova than in OECD countries. The government regulates a wide range of prices and retail margins, resulting in inefficient allocation of resources and high government costs for sustaining the policy. About 13 products and a wide range of retail margins[34] are regulated. The government also controls margins on both prescription and nonprescription medicines. Since price ceilings may reduce quality or innovation, prevent more efficient firms from competing, and encourage abuse of market power or rent-seeking, less distortive alternatives (e.g., removal of import restrictions, anti-monopoly measures) should be considered.

54. **Competitive neutrality is central to a country's transition to the market economy and crucial for effective allocation of resources by sector and firm**. Competitive neutrality implies that (i) in a given market all enterprises, whether public or private, domestic or foreign, are subject to the same rules, and that (ii) no market players receives any competitive advantages not available to all actual or potential competitors—such as government aid to SOEs because of the ownership links. Given the significant SOE footprint in the economy, giving them a competitive advantage can seriously distort the market. When numerous SOEs are active in the market, it is necessary to guarantee that they will be guided by the same incentive framework as private players. Otherwise, their competitive advantage can limit the capacity of private players to enter or expand; reduce incentives for productivity growth and job creation; and give SOEs direct or indirect benefits not available to private firms[35].

55. **If Moldova wants to accelerate its convergence with the middle- and high-income countries, the three-pronged strategy is needed: to safeguard stability, revive productivity and private sector growth, and strengthen inclusive growth.** The Policy Notes that follow provide a summary of policy challenges and recommendations across 18 policy areas fitting into the objectives of the three-pronged strategy of safeguarding stability, reviving productivity and private sector growth and strengthening inclusiveness of growth.

[33] In addition to a significant amount of aid missing from the total officially reported for 2016, the Competition Council reviewed and authorized only 2 percent of the total reported value.
[34] The sectors affected are health care and medicine, transportation and storage, agricultural and food processing, electricity, water and sanitation, gas supply, and retail sale of petroleum and tobacco.
[35] OECD. 2011. *Competitive Neutrality and State-Owned Enterprises*.

Enhancing the Business Environment and Market Competition

Key Messages

Moldova is making significant strives to reform its business environment, and the Doing Business ranking acknowledges these achievements. Insolvency procedures; dilatory procedures for construction permits and electricity connections–both of which are linked with new investments, need further improvements. The Cost of Doing Business survey also identifies private sector concerns: government inspections, unfair competition, skills shortages, labor regulation, and access to finance. Despite numerous free trade agreements, trade logistics are holding back the trade development, and indicative prices used for customs valuation reduce the competitiveness of domestic goods. Food safety infrastructure for products of animal origin also does not allow for export accreditation. The government procurement is being viewed as non-transparent and unattractive for financial management reasons. The government continues to interfere heavily in markets through high SOE presence, state aid, and regulation of prices and profit margins for a number of products. Moreover, these activities are apparently ineffective—prices of these products are higher in Moldova than in comparator countries.

Key Actions

- Revisit price control policies based on in-depth market assessments and design reforms to boost competition. Upgrade the state aid registry and make it public.
- Reduce state presence in markets where there is no evidence of market failures that would require government interference. Alternatives to SOEs, such as public-private partnerships, should be explored in markets where government presence may be justified.
- Develop on-line business registration. All government entities without exception should perform electronic issuance of business permits and licenses, to leverage the new electronic one-stop-shop. Government business services and registries should all be digitized, tax service in particular. Strong central monitoring of inspection reforms is necessary to ensure that incentives and institutional behavior of inspectorates are changed.
- Create an online repository of businesses financial statements.
- Streamline customs logistics and obtain accreditation of national laboratories for EU exports.
- Cut top tariffs and eliminate restrictions on trade in services to improve the trade regime.
- Intensify efforts to reduce corruption in government procurement to allow all firms open access to government contracts and promote the use of digital procurement and open contracting to increase transparency of awarding and commercially attractive conditions of public tenders.

Where Moldova Stands Now

Entry, Exit, and Operations

Moldova's progress on upgrading the quality of its business environment has been uneven. According to the Doing Business 2019 report, Moldova currently ranks 47th of the 190 countries measured on ease of doing business. Its worst rankings are in getting construction permits (172nd), getting electricity (81th), enforcing contracts (69th) and resolving insolvency (68th). Over the past several years, Moldova has enacted several reforms to reduce barriers to business entry and now ranks 14th among all countries in starting a business, even if online registration is not available yet. Firm exit however has been a chronic problem—the process is cumbersome and prohibitive for firms. In 2017, several laws were amended to streamline the process by cutting eight steps in company liquidation. However, as yet there is no evidence of reform's impact in practice. Its effects need to be studied to identify ways to further optimize the process.

The Global Competitiveness Index 2017/2018 underscores Moldova's poor performance in competition policy, the extent of market dominance, and the burden of government regulation. Of the 14 ECA economies, Moldova had the lowest score in many GCI dimensions. According to the Cost of Doing Business Survey, between 2010 and 2017 the cost of entry and operation in Moldova improved but all other elements worsened. Particularly, worrying areas

were problems with uncertainty, unethical practices, access to finance, and labor market issues. Firms reported spending more time dealing with authorities, which had gone down to 7.9 percent in 2016 and 2017 but rose to 10 percent in 2018. The annual Cost of Doing Business survey continues to report that businesses see inspections as designed to create unfair advantages for competitors. The government has begun to reform inspection bodies, reducing their number from 58 to 18 and adopting risk-based rules for planning and conducting inspections, but how well the reform is working in practice must be monitored to make sure institutional behavior and incentives change. The reform will require strong central government supervision and management.

The reform of permits and licenses has significantly reduced the number of permits required, and an electronic one-stop-shop for issuing permits was launched in July 2018. Building on this significant simplification and technology breakthrough, the government now needs to make sure that its institutions use the system effectively by switching to electronic procedures and to deter duplication of processes by manual by-passes.

The transparency of businesses continues to be an issue. There is no database, public or private, that investors and business counterparts can consult to evaluate the quality of possible Moldovan business partners. Although a new law on accounting and auditing mandates creation of a public repository of financial statements, that has not yet begun. Such a repository would significantly advance business transparency, facilitate commercial links, and open new avenues for local businesses in search of foreign markets and partners.

Trade and Access to Markets

Moldova's trade openness (proxied by the sum of exports and imports as a share of GDP) surpassed that of regional peers, but the last decade has seen trade integration decelerate. In general, the trade regime is open: Moldova has signed free trade agreements (FTAs) with more than 40 countries, including one (DCFTA) with the EU28 member states. Despite some progress in tidying up trade operations, however, there are still problems with excessive border inspections, unclear and unpredictable requirements, and a high degree of staff discretion. Inefficient logistic services that raise costs and create delays and unpredictability in international trade are also a concern. Importers particularly complain about clearance and release of goods in consignments by several importers consolidated into one shipment. They also raise concerns about Customs valuation of goods and the application of indicative pricing. Despite WTO requirements, the application of valuation method 6 is common and not properly explained to companies by Customs, making the costs of trading less predictable.

Moldova's trade in recent years has been marked by growing trade flows with the EU, which is now the destination for over 65 percent of Moldova's exports. However, not all the country's products enjoy the same export regime. Products of animal origin cannot access EU markets unless the country has EU accreditation, which depends on adopting measures and systems to ensure compliance with EU food safety standards. One such measure is passage of laws that allow, e.g., incineration and co-incineration of animal waste, development and accreditation of laboratory testing methods, disease monitoring. So far, food safety infrastructure and the capacity of Moldovan authorities to apply processes that meet EU requirements are not adequate, greatly reducing the prospects of Moldovan food businesses to export to the EU.

Domestically, Moldovan companies perceive access to government procurement as being non-transparent, with government contracts going to companies that are politically affiliated. Moreover, lack of advances and late payments by the Government for such contracts make them unattractive from financial management perspective and cause firms to go into additional debt and bankruptcies or increase prices to offset these effects. This may create a situation where the government ends up paying higher prices than the market can provide. The government procurement system requires additional assessment to identify the ways for making it an effective tool in private sector development and in increasing the effectiveness of government spending.

Competition and State Aid

Market competition continues to be a challenge for the development of the private sector. In at least half of all sectors, SOEs control more than half of the estimated market share. Their extensive presence underscores the need to assess how their activity is affecting market outcomes. SOEs have (i) a legal monopoly of railroad services and infrastructure, postal services (basic and parcel), and gambling; (ii) a de facto monopoly on electricity transmission; telecoms backbone infrastructure and land lines; water collection, treatment, and supply; passenger port terminals, and road infrastructure, and (iii) significant participation in markets for electricity import, generation,

distribution, and retail; Internet services; air transport and urban passenger services; waste management; and several manufacturing sectors, such as pharmaceuticals, certain foods (bread and wheat flour), beverages (wine), and glass (bottles).

SOEs are spread through sectors already served by the private sector. The Moldovan government competes directly with the private sector even though there are no significant signs of market failures that would justify public investment. State competition with the private sector requires special attention because of its potential negative effects on attracting investments needed to ensure sustainable growth.

Moldova provides state aid on a large scale. On average, for 2014–16 total Moldovan state aid constituted 4.3 percent of GDP**;** the European Council recommends that state aid from EU members be less than 1 percent of GDP. State aid helps to lower the operational costs of firms, diminishing incentives for them to innovate, and to some extent favors individual companies and specific sectors over economy-wide horizontal schemes. There is also the risk that sector-oriented aid may disrupt the efficient allocation of resources across sectors. In 2014–16, almost 22 percent of all reported Moldovan state aid had a sectoral focus (versus EU 3.2 percent). Tax incentives tend to be poorly targeted, without clear objectives, and their performance unmonitored and poorly managed, thus distorting competition.[36]

Price controls are another area where the market impact effects should be carefully assessed. The Moldovan government regulates retail margins and prices in several sectors, such as essential foods, fuel, and pharmaceuticals; however, how the government monitors compliance or verifies wholesale costs is not clear. Moreover, despite the control of margins of socially important food products, Moldovans still pay about 53 percent more for them than comparator countries—controlling margins where there is information asymmetry between regulator and market players leads to inflated costs to overcome the margin restrictions, and ultimately to higher final prices.

How Moldova Can Enhance its Business Environment

Entry, Exit, and Operations

Moldova should build on what recent business climate reforms have achieved to make conditions more encouraging for the private sector. In business entry, the missing step is making business registration available on-line. In particular, this can facilitate registration of businesses by members of the diaspora and foreign investors. The government should continue to use its electronic one-stop-shop for permits and licenses—and make sure all its entities are issuing documents online with no manual by-passes. Allowing on-line mechanisms to function routinely in all entities will bring huge benefits in optimizing government bureaucracy, eliminating opportunities for corruption, and smoothing interaction between public and private sectors.

Building on reform of the government inspection system, authorities must ensure that it is properly implemented, and in particular that incentives and institutional behavior change. Remuneration and incentives for inspectors need to be reviewed and performance indicators identified to make sure that inspectorates direct their efforts to achieving the intended impacts. Central supervision of inspection system operations needs to be reinforced in terms of both IT systems and personnel, granting the latter sufficient powers to ensure that the reforms are not lost or reversed.

Moldova should revisit the relationship between local and central public authorities, for business permitting, to make sure that efforts of the central government to streamline its interactions with businesses are not lost, or annihilated, at the local level. Local procedures for issuing construction permits need special attention to keep them aligned with new legal requirements. Local authorities must build on central government IT achievements and have the political will to implement changes uniformly throughout the country.

Creation of a public repository of company financial statements is a priority for attracting investment and facilitating links of domestic companies with each other and with foreign partners. Besides commercial and investment benefits, transparent and publicly available financial information will greatly benefit governance in the private sector, lowering corruption.

Moldova should now follow up on the business liquidation reforms it has already passed. Their impact needs to be assessed to verify how they contributed to business dynamics and what still needs to be done. The possibility of clear and simple exit will help attract the investment capital that Moldova so much needs.

[36] World Bank. 2019. Moldova – CEM.

Trade and Access to Markets

Moldova should further streamline trade logistics to make sure its companies can easily trade across borders and respond to foreign demand for its products. The country should re-assess its trade and transport corridors and logistics and consider how customs can facilitate trade. Streamlined customs procedures are essential, especially for risk-based border inspection, processing of mixed consignments, and post-clearance audits. Enabling electronic trade by simplifying customs procedures for small parcels, particularly for export, should be a priority in supporting small businesses and start-ups. Authorities should further revisit their customs valuation practices and apply valuation methods as per WTO rules, making the currently applied valuation method 6 more of an exception rather than the default method.

Access to foreign markets must be ensured for all Moldovan products, with export of products of animal origin a priority, given the importance of agribusiness for the economy. Food safety infrastructure needs to be raised to European levels. It will be especially important to pass laws permitting incineration and co-incineration of animal waste resulting from animal breeding and processing; develop and accredit laboratory testing methods to meet European requirements; and implement national animal disease monitoring and prevention plans. Exports would further be promoted by such initiatives as cutting remaining tariff peaks and liberalizing key utilities.

A sound system of government procurement can be a significant stimulus for private sector development and at the same time a source of better efficiency of government spending. The elimination of corruption from the system of attributing government contracts, including through use of open contracting and digital procurement platforms, enforcement of fair competition and proper financial management mechanisms in government procurement are priorities.

Competition and State Aid

An investment climate becomes dynamic when state involvement in business operations—as both a market player and regulator—is neutral to competition and is not a barrier to private sector participation where that is feasible. The government needs to think strategically about how to leverage the private sector to boost service in regulated industries where there is already private investment. Making sure that its engagement with the private sector is transparent and driven by objective competition principles, the government could take advantage of the laws governing public-private partnerships approved in 2008 to promote greater inclusion of the private sector.

Comprehensive market assessments of the effectiveness and efficiency of price controls are needed to identify possible reasons for high prices in Moldova. A reduction by 10 percent of price-cost margins may lead to a 5 percentage points increase in labor productivity growth[37] (*See Note on enhancing Business Environment and Market Competition*). Current limitations on margins and profitability must be reviewed simultaneously with assessment of mechanisms for monitoring wholesale acquisition prices and of the costs of their administration. Similarly, it would be advisable to review restrictions on firm market entry and ability to compete, such as burdensome requirements to import.

The Competition Council should continue to advocate for public authorities to move away from sectoral to horizontal forms of state aid, which are more likely to spur sustainable investment (e.g., support to SMEs, R&D, job creation, regional development, and environmental protection). The government should review tax incentives and budget expenditures to ensure that the tax system is efficient and effective. This would also prevent discrimination against eligible firms based on state aid rules. Establishing a state aid registry with detailed information from government bodies that provide aid is also essential to generate the transparency necessary to guarantee that state aid does not distort competition. A follow-up step would be to upgrade the database with more powerful functions and make it available to the public, boosting accountability. (*See Note on Strengthening Governance of SOEs; on Safeguarding Fiscal Sustainability*).

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[37] World Bank. 2019. Moldova – CEM.

Fostering SMEs and Strengthening FDI Linkages

Key Messages

Small and medium-sized enterprises (SMEs) in Moldova are neither productive or diversified, and the products they export are not sophisticated. Its export survival rates are low. Despite being open to international trade, Moldova has not been able to fully realize its benefits and has yet to translate increasing exports into productivity growth. Deficient backbone and input services—not to mention corruption—are significant barriers to firm productivity and competitiveness. Access to finance is problematic: there are no real alternatives to bank financing, capital market instruments are almost nonexistent, and most firm investments are financed by internal funds. This further erodes productivity and perhaps decisions to export.

Export-oriented innovative FDI that successfully links to local firms can promote growth and job creation. Yet despite preferential tax treatment and other state support measures for firms resident in special zones, there have been no spillovers from these zones to the rest of the economy. Furthermore, the share of FDI in Moldova's GDP has been steadily declining.

Key Actions

- Promote upgrading of firm productivity. Priority should be given to stimulating innovation, growth, and exports rather than supporting traditional business models.
- Improve access to electricity, water, telecommunications, and transport networks and re-balance labor market legislation to allow for supportive input systems. Continuous efforts are required to cut corruption at all levels.
- Support the entry of firms into global markets. Because firm productivity and foreign trade are mutually re-enhancing, give priority to helping SMEs with programs on export readiness and improving export standards.
- Build up and deepen the financial market to support firm investment and growth (*see Financial Sector Note*).
- Actively promote FDI and ensure that its gains materialize by an open and effective dialog with investors to identify reforms for removing obstacles to attracting and retaining investments.
- Encourage technology and knowledge spillovers from FDI to the rest of the economy by promoting FDI in upstream sectors, stimulating investment in research & development, encouraging the interaction of foreign and domestic firms, and implementing supplier development programs.

Where Moldova Stands Now

Micro, Small and Medium Enterprises (MSMEs) represent 97 percent of all registered companies in Moldova. The number of active SMEs in Moldova has been estimated at almost 35,000; they are mainly in services, especially retail and wholesale trade—by far the largest Moldovan industry. SMEs account for 67 percent of total employment with the service sector again contributing most. In terms of value added, SMEs accounted for only 61 percent of the total value added, with significant differences by sectors. The fact that the share of employment by SMEs is higher than their value-added means that in SMEs labor productivity is lower than in large companies.[38] Moreover, the contribution of SMEs to total exports has been estimated at just over half, and the diversification and sophistication of their exports is minimal. The fact that few exporters last long may be because their products are not of high enough quality.[39]

Moldova is looking for additional drivers of growth, and growing exports could boost growth in productivity. Even after almost two decades of trade flow averaging more than 120 percent of GDP, Moldova has failed to translate its increasing exports into productivity growth. The economy has been unable to shift resources (i) from low- to high-productivity sectors; (ii) within

[38] SME Segmentation Study, World Bank 2015.

[39] Moldova Trade Study, World Bank 2015.

sectors to higher-productivity uses; and (iii) for firms that are innovative, to seize new market opportunities.

Entrepreneurs perceive the high cost of credit as their main business obstacle. Access to finance has become ever more important, in terms not only of cost but also of ability to meet bank standards for borrowers. There are almost no alternatives to bank financing: leasing is rare and capital market instruments almost nonexistent. As a result, almost 70 percent of all investments in fixed assets are financed internally. High reliance on internal funds, like high collateral requirements, is associated with lower total factor productivity. Lack of access to finance for funding working capital may be reducing participation in export markets, given their greater risks and longer repayment terms.

Poor factor conditions, especially deficient backbone and input services do major harm to firm productivity and competitiveness. Expensive and poor-quality utilities, especially inadequate power, water, telecommunication, and transport services push up the costs of production and discourage exports. Other widespread problems are access to foreign markets and inadequate marketing, followed by difficulties, especially for micro firms, in establishing collaboration and links to larger firms, and the dearth of technical expertise in both companies and the marketplace (something SMEs perceive as comparatively a more severe operating constraint).

Corruption also suppresses firm performance and productivity. Moldovan firms that allegedly make informal payments to authorities are less productive than their counterparts.

Not all firms in Moldovan territory enjoy the same conditions. Currently, most FDI-supported firms are in one of the country's 7 free economic zones (FEZs). Moldova also has 9 industrial parks, 1 free international airport, and 1 free water port terminal with similar benefits. Firms resident in these areas benefit from state support incentives that are not available to firms elsewhere in Moldova. Further, there have been no spillovers from these zones to the rest of the economy, either directly or via the SME support ecosystem. Most raw materials used in FEZ are imported and the products exported. The main domestic input is local labor.

In Moldova, export-oriented, foreign-owned. and innovative firms are far more productive than other enterprises (controlling for size, age, and sector). Export-oriented FDIs that have successful links to the local ecosystem can have a positive impact on growth and job creation. But Moldova is experiencing a continuous decline in the share of FDI in GDP—a trend that may reinforce the perception that firms face barriers to entry and investment.

Most SME Development Agency programs are provided to start-ups via incentive programs and incubators. However, start-ups tend to remain small rather than grow to medium-size or large. Despite several donor support projects, the SME Development Agency has continued to focus its support on start-ups than on growing or export-oriented enterprises. Yet evaluation of matching- grant programs that fund export-oriented firm upgrades found that firms receiving export-related support achieve better outcomes.[40]

The Investment Agency is mandated to attract investment and promote exports. However, though recently reorganized, it inherited the budget and funding problems of its predecessor, and its outreach and effectiveness are limited.

How Moldova Can Build Up SMEs and Ensure FDI Spillovers

Moldova needs to work on upgrading firm productivity. One priority is to promote private sector product and process innovation. This can be done directly by, e.g., incentives like matching grants for eligible firms based on support programs with proven impact. Since innovators have regularly proved to be more productive, the authorities should identify support programs that truly stimulate innovation rather than stimulating re-creation of basic business models. Thus, Development Agency support programs should be redirected to promoting innovation, growth, and exports. It should also give firms incentives to offer management training and invest in skills in critical areas like corporate financial literacy, export-readiness, how to meet quality standards, and access to foreign markets.

Moldova should support its firms' internationalization. As productivity and foreign trade enhance each other, helping Moldovan SMEs to access foreign markets should be a policy priority.[41] Policies that help SMEs to overcome the main barriers to exporter survival are crucial to growth and diversification. Government support programs should target upgrading export product quality and improving the standards that exports meet. Promoting

[40] World Bank, Impact Evaluation of Matching Grant Facility, Second Competitiveness Enhancement Project, World Bank, March 2019.

[41] See *Enhancing Business Environment Note* recommendations on products of animal origin.

country brands and key export sectors systematically should continue but draw in a wider number of companies. Targeted assistance to SMEs in export readiness and match-making programs for them should become a priority.

Productivity depends on well-functioning input markets and ready access to electricity, water, telecommunications, and transport networks. Labor market conditions need to be re-balanced by modernizing legislation to give firms the flexibility to adjust quickly to structural and cyclical fluctuations in the economy and their markets. Modern labor laws will bring productivity gains that translate into better jobs. Meanwhile, efforts must continue to cut corruption in public entities at all levels to ensure that resources are directed to growth and development.

Financial markets must be deep and well-functioning to support firm investment and growth. In addition to the recommendations of *Financial Sector Policy Note*, both supply and demand-side barriers to accessing finance need to be reviewed. Alternatives to bank financing should be developed, especially for capital market instruments such as corporate bonds, export financing, insurance, and other instruments that can spur innovation and enable businesses to invest efficiently.

Moldova should actively promote FDI and ensure that the expected gains materialize. This means maintaining an open and effective dialog with investors to identify policy reforms and remove obstacles to attracting and retaining investment, as by building up the current dialogue through the Economic Council. The continuous decline in FDI as a share of GDP also needs to be analyzed carefully for factors that deter FDI. It may be, e.g., that competition and market regulation policies are ineffective, or that the judicial system does not give investors enough protection to generate investor trust. Here, too, anti-corruption initiatives would reduce the cost of doing business and make investing in Moldova more attractive.

The country needs to encourage technology and knowledge spillovers from FDI and FEZs to the rest of the economy. This can be done by promoting FDI in upstream sectors and by encouraging the interaction of foreign and domestic firms, perhaps by promoting client and supplier relationships. There is also a need to increase the capacity of domestic firms to absorb spillovers, perhaps by supporting education and training to improve labor force skills, investment in research & development, or through supplier development programs.

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Reforming the State-Owned Enterprises

Key Messages

State owned enterprises play a major role in the Moldovan economy, as significant owners, operators, and employers in vital sectors. They account for about a third of GDP and employ up to 24 percent of the labor force. SOEs in Moldova are active in at least 19 sectors where private participation is economically viable, compared to the OECD average of 14. The SOE sector is characterized by severe inefficiency, considerable losses, rising long-term debt, poor service delivery, low productivity, and inadequate governance. Although the government has begun to address these issues by introducing basic governance arrangements for state and municipal enterprises through new laws and through concentration of their ownership in a specialized central agency that oversees state enterprises, more must be done to improve the governance and efficiency of SOE operations.

Key Actions

- Define for each enterprise and state-dominated subsector an explicit rationale and objectives.
- Adopt the timebound plan and accelerate restructuring, privatization or closure of SOEs.
- Professionalize SOE boards by reforming nomination and operational practices, and tracking SOE performance.
- Set standard principles of good corporate governance for: relationship between owner and enterprise, owner's functions and rights, board and executive effectiveness, corporate values and code of conduct, conflicts of interest, social accountability, transactions with related parties, disclosure and transparency of information, internal control systems, external audits, and risk management.
- Adopt clear guidelines on how information is to be passed from owner to SOE board members; clarify and define responsibilities of owners, boards, and management to avoid political interference.
- For each SOE publish audited financial statements, performance results, and evaluations to promote the accountability of SOE boards and management.
- Reduce the state aid to SOEs to ensure transparent and equitable environment with other companies competing at the same market.

Where Moldova Stands Now

SOEs account for about 10 percent of corporate sector assets. However, unreliable and often unpublished financial data has made it difficult to accurately assess their performance, validating their weak governance and the fiscal risks they present. Moldovan SOEs can be found in such essential services and industries as utilities, health care, transport, and energy; they also perform government administrative services. SOEs employ 24 percent of the labor force and their assets account for one-third of GDP.

SOEs display much lower productivity levels and growth than their non-state counterparts. In particular, foreign-owned firms are 80 percent more productive than SOEs, despite accounting for a smaller share of firms.[42]

In addition to 4 percent of GDP in overall direct state aid, there is considerable indirect state support to SOEs through exemptions, rebates, deferrals, and rescheduling of tax payments which together amount to another 3 percent of GDP. Although the net financial position of SOEs as a group is positive, long-term debt and negative profitability trends suggest their financial performance is deteriorating. Concerned about SOE inefficiency and underperformance, the MOF sought a

[42] World Bank. 2019. Moldova – CEM.

comprehensive analysis[43] of how the SOE sector performs against the OECD Guidelines on Corporate Governance of SOEs and other international benchmarks. The results identified fundamental SOE issues and informed the drafting and prioritizing of potential reforms.

Responding to the robust assessment recommendations, the Moldovan government has initiated a series of ambitious reforms to improve SOE governance. In 2017, the Public Property Agency took over management of numerous SOEs previously overseen by line ministries and has begun to tackle problems associated with possible overlap between SOE ownership, management, and regulatory functions. The government has also begun to restructure the legal form for SOEs and have them corporatized or transformed into public entities. Ultimately, both SOEs and private entities would be subject to the same laws and governance arrangements. However, as outlined below, some areas need additional reforms to ensure that SOEs operate efficiently and transparently and are held accountable if they do not do so.

A clear strategy for state ownership policy and defined objectives, principles, and modalities for governing and reforming SOEs would improve accountability to both the legislature and electorate. Moldova has no policy document or law that explains why the state continues to own some enterprises, what the functions are of specific SOEs, and their governance principles and requirements. This deters a systematic approach to SOE governance and decisions on whether to continue or cease ownership of SOEs or create new ones. SOEs, the market, and the general public need predictability based on a clear understanding of the objectives of the state as owner.

Nomination and operations practices of SOE boards are problematic, and there is little monitoring of their performance. Currently most SOE board members are public servants, often active in policy making in the same sectors where the SOE operates. This creates a perception that they have divided loyalties. It also raises questions about the time and the range of skills they offer the SOE. There is no way to assess the performance of SOE board members or administrators or to hold them liable for poor performance. There is also no direct link between the long-term interest of the SOE and the remuneration of administrators and board members.

There are serious questions about SOE compliance with legal requirements and market expectations on transparency and disclosure. Little if any public information is available about their finances and performance. The quality of financial information prepared by SOEs is not reliable enough to support economically sound decisions. Most SOEs are not audited, so unaudited information, of limited value, is often used in SOE monitoring and decision making.

Weaknesses in SOEs' governance are also reflected in weak competition policies, which heighten business risks for firms operating in Moldova. The dominance of large SOEs and state-owned monopolies in the economy suggests that these companies are likely to receive preferential or favorable treatment making it difficult for potential competitors to operate in some sectors.

What Can Be Done to Reform SOEs?

Define the rationale for state ownership. The government could consider adopting an explicit SOE ownership rationale and ownership policy, stating clearly how state ownership benefits Moldovan society. For instance, SOEs might deliver public goods and services more efficiently or reliably; operate natural monopolies where markets are not efficient; or meet strategic goals such as keeping certain industries under national control. As part of this exercise, the government should decide which of them need restructuring to enhance performance, which should be closed due to inactivity, and which should be privatized.

Divestiture and restructuring of SOEs. Once the stock-taking exercise is done, the government should adopt a timebound plan for divestiture and restructuring of SOEs. This would involve liquidation of inactive companies, privatization of companies operating in commercially viable markets, and restructuring of companies which address market failures but are operationally inefficient. The state aid allocated to these companies should be exclusively tied to restructuring aid or a provision of Services of General Economic Interest, as per the state aid rules.

Strengthen monitoring of SOE performance. The authorities might design an SOE compliance dashboard and put in place an SOE monitoring system based on performance agreements with each SOE that specify both financial and

[43] The World Bank with support of the partnership with the UK Good Governance Fund (GGF) (http://siteresources.worldbank.org/EXTCENFINREPREF/Resources/Moldova_SOE_Diagnostics_EN.pdf)

nonfinancial performance indicators. Performance of each SOE should be judged against targets set in accordance with objectives stated in the ownership policy and measured against indicators drawn from audited financial statements and management reports. It is also critical that quality and reliability of financial information prepared by SOEs is improved.

Reinforce and consolidate the ownership function and board practices. The OECD guidelines for SOE governance set aspirational targets for the state as an owner and recommend putting in place arrangements conducive to responsible ownership practices. Among these are standardizing the legal forms of SOEs and their operational autonomy and board independence; and centralizing the functions of ownership, making owners accountable to other relevant public bodies, and acting as informed and active owners. Establishing an open and competitive process for identifying and appointing board members based on merit and professional capability would help them fulfill their functions effectively in the best interests of the SOE.

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Promoting Digital Development

Key Message

For the past decade Moldova's communications sector, especially the Internet market, has been growing. By late 2018, about half of Moldovan households were connected to fixed broadband services, and over half of the population subscribes to mobile services. While the market for connectivity has few entry barriers, it is concentrated, and the presence of the SOE Moldtelecom distorts it. There is also a rural-urban broadband divide, and fewer Moldovans are connected at higher speeds than citizens of EU member states.

Moldova's information technology (IT) and IT-enabled services (ITeS) are growing briskly and exports have reached a considerable volume. One major constraint on growth of the sectors is the limited talent pool, partly because university and technical education is of uneven quality and partly because so many professionals and young people have emigrated. Also, the general digitization of businesses across sectors is still nascent.

Key Actions

- Implement the infrastructure sharing law, through definition and enforcement of associated regulations.
- Increase competitive pressure on the market through more vigorous regulation and restructuring of Moldtelecom, and possibly privatizing it.
- Promote rural broadband connectivity in 'white zones'.
- Put in place programs to boost the digital skills of un- and underemployed Moldovans.
- Partner with Moldova's IT industry to support digitization of SMEs via targeted programs.

Where Moldova Stands Now

Moldova's digital industries—including its electronic communication sector, and the information technology (IT) and IT-enabled services (ITeS) sectors—have been performing well for the past decade. Public and private stakeholders foresee further growth, but also a range of challenges.

Communications

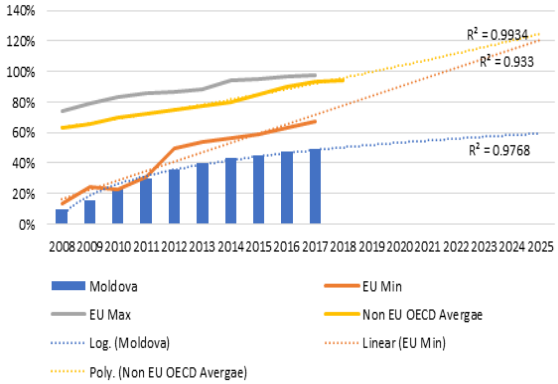
The communications sector, especially the Internet market, has been growing steadily. As of late 2018, about 50 percent of Moldovan households were connected to fixed broadband, and about as many subscribe to mobile services. Moreover, international rankings of retail Internet access speeds, typically feature Moldova in the top 20 countries in the world. This positions Moldova reasonably well globally and sets the stage for adoption of such digital services as e-government and e-commerce.

However, there is a risk that Moldova could slip behind, especially below the EU, as few people are connected to higher speeds. The EU target for 2025 is for all households to be connected to broadband at speeds higher than 100 Mbps. In Moldova, only 7 percent of all Internet connections reach such speeds, and about 50 percent operate at 30–100 Mbps.

Mobile broadband (MBB) networks—which are cheaper and faster to deploy—appear to be the access networks of choice in rural areas. Three MBB 3G networks cover 99 percent of the Moldovan population; three 4G networks cover 33 percent. However, because MBB services do not always offer the same speed and reliability as FBB, a mix of both available nationwide is useful; businesses and households would connect to FBB services; individuals and temporary applications (e.g. for logistics tracking or field-based staff) would use MBB. FBB is especially important for enabling the next generation of digital applications, such as artificial intelligence (AI), advanced manufacturing, and financial services.

The next phase of FBB development is to extend networks beyond the economically more lucrative urban centers. The current situation suggests that the market in its current form has stabilized—growth rates are low. When compared to EU member states with low FBB penetration, the growth rate of penetration of services in Moldova appears to lag (Figure 1).

Figure 1. Fixed Broadband Household Penetration Trend and Projections, Percent



Source: TeleGeography GlobalComms data.

Targeting rural areas not yet connected could bring a second round of growth. About 70 percent of the population uses the Internet, but 61 percent of all fixed broadband (FBB) is in the capital and other urban areas. Almost 22 percent of rural localities have no fixed broadband Internet access, and in many others where networks are present, speeds are less than 30 Mbps; the *Moldova Digital 2020* strategy, like many other countries, sees 30 Mbps as the baseline for user needs today. There are two possible reasons for the limited penetration and adoption of FBB networks in rural areas: (i) Service providers see the business case for those areas as unviable because of the higher costs of deploying networks and perhaps lower revenue because users do not see broadband as attractive or affordable; (ii) There may be hold-ups to competitive service provision.

The affordability of broadband remains an issue in Moldova, even though such plans are comparable to international averages. New users, especially those who are less well-off, may be finding the unavailability of reasonably-priced entry-level broadband plans a barrier. Almost 60 percent of Moldovans not connected to the Internet report that they cannot afford the access device. Entry-level broadband plans cost over 5 percent of GNI per capita, the highest relative price among Eastern Partnership (EaP) countries. Although an improvement from previous years, it is still much higher than the UN Broadband Commission's proposed target of 2 percent of GNI per capita. Moldova's low GNI per capita may also explain why entry-level broadband plans are relatively unaffordable and why the market has yet to develop much beyond urbanized areas.

The connectivity market has low formal barriers to entry, but it is concentrated. There are over 100 Internet service providers (ISPs). But just two of the three mobile operators share almost 85 percent of that market, and the largest fixed broadband provider has over 50 percent market share, with the top three accounting for almost 90 percent of the market.

A major distortive factor in the market is the presence of state-owned Moldtelecom (MTC). Because multiple efforts to privatize it have failed, the company still has a sizable market share. MTC also owns much of the passive infrastructure (e.g., ducts), especially in rural areas, and does not allow access to competitive operators on technical grounds, even though the regulations promote sharing. Often, too, MTC is given preferential treatment, such as being awarded a mobile telecoms license without contest and at a low entry fee. Its tariffs cannot be regulated by the industry regulator, but rather require government approval.

MTC also has significant social obligations which, despite their importance, are not sustainably designed. Reorganizing the company to separate social business lines while renewing the effort to privatize could promote competition and allow private investment in rural and urban connectivity. Explicitly defined and funded programs to attain social objectives can boost their sustainability. Efforts should therefore focus on reducing the costs of network deployment to open new markets, adopting measures to increase competition, and offering incentives that improve market outcomes.

IT and ITeS sectors

The growth of Moldova's IT and ITeS sectors has been steady, and a considerable volume of its exports are ICT services. However, the links between IT firms and the cross-sector digitization of businesses are still tenuous. World Trade Organization data show that in 2016 the country's net exports in telecoms, computer, and information services reached US$78m. Per capita, these exports have more than doubled over the past decade, while about 22,000 people were employed in ICT. The IT industry alone employs about 7,000 workers, and half of those work in the software industry. Many such well-paid jobs are available for highly skilled workers.

There are clear opportunities for growth; the EU-Moldova Association Agreement could help to grow trade links, and global industry analysts are beginning to take an interest in the country. Many stakeholders agree that IT jobs could more than triple over the next decade, if the business climate, infrastructure such as IT parks, and skills training programs keep up. Growth has been stimulated by a vibrant and well-organized private sector, support from the public sector, and the increased visibility of Moldova in the global IT industry. The Association of Information and Communications

Technology Companies (ATIC) has been a significant contributor. The number of digital startups has been increasing rapidly in recent years. Interviews with stakeholders suggest that supporting IT professionals and graduates to set up businesses in Moldova could encourage them to remain in the country.

However, the current scarcity of talent could hold the Moldovan IT industry back, especially compared to regional peers. IT industry representatives predict that skills problem will get worse as technological change accelerates, shifting client demand and the skills needed. Concerns are growing that many qualified (especially young) professionals are leaving the country; some estimate that half of their technical employees who resigned in the past few years have emigrated.

Although they realize the need to address the skills constraint, few local companies invest in training current staff, either from limited means or little interest. Though private sector efforts coordinated by ATIC and supported by the government are seeking to remedy this, more effort is needed.

To promote growth of the IT industry, a "startup visa law" has simplified access to Moldova's labor market for qualified IT specialists. Private sector stakeholders are not sure how well this will attract international workers but recognize it as a step forward. The Ministry of Economy and Infrastructure is defining an ICT industry competitiveness roadmap through 2023. In addition to improving infrastructure, it will focus on skills development, the business and startup ecosystem, and investment promotion. Meanwhile the Ministry of Education aims to upgrade school ICT curricula and infrastructure. The number of graduates in ICT-related fields—about 6,500 annually—is higher as a share of graduates than in Bulgaria, Hungary, or Romania, though smaller than the EU or OECD average.

Employers and industry representatives are critical of the quality and relevance of skills of graduates in meeting their demand. Some policy restrictions also limit the potential for closer industry-academia collaboration: IT industry professionals are not allowed to formally teach at universities even part time unless they have advanced degrees and pedagogical certification. A focus on improvements in higher education alone cannot make up for weaknesses in primary or secondary schooling. Although efforts are increasing to expose younger students to digital technologies, these are ad hoc and not fully integrated into the curriculum or teaching system.

Not much information is available on the 'horizontal' use of digital tools and technologies in such other sectors as banking, tourism, and agriculture. Data suggest that Moldova's businesses have been slow to adopt digital technologies. In the most recent Enterprise Survey of Moldovan firms with five or more employees, for example, only about 60 percent had websites or use e-mail to transact business.[44] It is perhaps significant that in terms of ICT goods as a share of all goods imports since 2010, Moldova's share of about one-third is lowest among comparator countries and is significantly less than Central European and Baltic averages.

How Moldova Can Promote Digital Development

In support of digital development, the government has adopted the Broadband Development Program for 2018–20, the Strategy for Increasing the Competitiveness of the IT Industry for 2015–21, and the Digital Moldova 2020 strategy. Building on these programs and recognizing the importance of the private sector in the communications and IT and ITeS sectors, the following actions to promote digital development are recommended.

Communications

The primary policy objective should be to increase access to high-speed broadband (100 Mbps+) while ensuring affordability (entry-level broadband priced at less than 2 percent of GNI per capita). This builds on the current targets for 2020 of broadband penetration rate of at least 60 percent of households and connecting every settlement with a municipal office to fiber Internet. The recommended way to attain this is to reduce the costs of network deployment and encourage competition in the market. In the short term, this would be supported by the following:

- *Apply the infrastructure-sharing law comprehensively by defining regulations and enforcing them.* The law to encourage sharing of infrastructure and reduce the costs of broadband network deployment was passed in 2016. It can be implemented fully through coordination of public agencies or SOEs that own property or telecom-ready infrastructure, such as municipalities and utilities; creation of a digital infrastructure map; simplifying the permitting processes;

[44] In the Czech Republic the finding was 90 percent and in Poland over 80 percent.

and reinforcing the capacity of ANRCETI, the electronic communications regulator, to enforce the law.

- *Use regulation to increase competitive pressure.* It will be important to strengthen the process of market analysis and ex ante competition regulation by ANRCETI, and to reinforce its mandate.
- *To further increase competition, restructure MTC and consider privatizing it*. Create a strategic plan for the company's corporate restructuring and market repositioning so that it can meet the challenges of competition and technological convergence. If there is a case for privatization, in addition to adopting a short-term, low-cost, high-impact strategic plan to generate rapid improvement in its performance, it will also be necessary to define the parameters for a successful privatization in terms of, e.g., target ownership structure, pace of the transaction, and investment requirements.
- *Promote rural broadband connectivity in 'white zones'.* Identify geographic areas where it will not be possible to provide commercial service within a reasonable time (e.g., three years), and work closely—through a process that is open, competitively neutral, and transparent—to define a program to reduce the risk for private investors to expand access in those areas.

IT and ITeS

Moldova has an opportunity to position its IT and ITeS sectors for robust growth and creation of more inclusive digital jobs across the economy. This calls for continued support to digital industries to make them more inclusive and promote innovation and entrepreneurship; advancing digital literacy and skills beyond the IT industry, for both the current and future workforce; and accelerating the digitization of businesses so that they can increase their productivity, access to markets, and innovation. In the short to medium term, therefore:

- *Promote entrepreneurship, innovation and applied ICT skills* by including these subjects in the curricular and extra-curricular education at the medium and higher education level. Support development of children's innovation and ICT skills, building on existing initiatives, including increasing of the awareness of younger students and their families about digital skills and jobs
- *Increase the relevance of education curricula* by engaging the private sector and industry in the development and delivery of ICT courses. Promote partnerships with IT sector businesses/professionals to provide higher education students with opportunities such as innovative labs or IT mentorship, to increase relevance of skills upon graduation.
- *Continue and scale-up current collaborations of the public and private sectors*, supporting the IT industry to improve quality and shift to higher value-added products and services.
- *Undertake short-term programs to quickly train un- and underemployed people to find work in digital industries*, e.g., through virtual IT parks, in IT and ITeS firms, and in IT applications in other sectors.
- *Support digitization of SMEs*. Identify pilot sectors to test training approaches for businesses and individuals to develop and improve their digital competencies and skills; set up a program—possibly implemented by ODIMM, the SME development agency and ATIC—to link local IT expertise with businesses to identify and implement digital upgrades, potentially with a focus on SMEs.

This Policy Note was produced by the World Bank to inform policy debate in Moldova. This note was prepared by Siddhartha Raja, Elena Lungu and Stela Leuca with contributions from Dumitru Vasilescu (UNDP).

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Enhancing Financial Sector Stability and Governance

Key Messages

Since the financial sector crisis in 2014, the banking sector relative to the size of the economy remains smaller than it was, and banking activity has not been normalized. Progress on recovering assets has been disappointing. The fragile integrity of the financial sector was also set back by the launch of voluntary declaration and fiscal stimulation. One large bank (MICB) still remains in special supervision. The authorities have taken major steps to restore the stability and confidence of the banking sector and have tightened bank supervision and regulation to align with EU directives. Although the sector is well-capitalized, liquid, and profitable, non-performing loans (NPLs) remain high. The financial safety net for the banking sector is also weak. In the insurance sector, a significant number of insurers are at high risk of insolvency and there are concerns over the regulatory and supervisory framework for non-bank credit organizations (NBCOs). Inadequate protections for consumers and incomplete financial infrastructure, especially related to insolvency, secured transactions, and credit information-sharing, are additional hurdles to financial intermediation.

Key Actions

- Safeguard banking sector stability and integrity by: (i) ensuring MICB successfully exit special supervision and shareholders for the other two banks are fit and proper, (ii) operationalizing the new banking regulatory and supervisory framework; (iii) assessing the NPL resolution framework; (iv) strengthening the bank deposit guarantee fund, (v) accelerating efforts to recover assets, especially those in foreign jurisdictions; and (vi) monitoring and supervising the implementation of AML/CFT measures in the voluntary declaration process;
- Strengthen non-banking sector stability and governance by: (i) assessing the institutional set up and capacity of NCFM; (ii) enforcing and tightening regulation and supervision in insurance sector; (iii) strengthening protection of financial services consumers and supervision of NBCOs with special attention to AML; (iv) consolidating the savings and credit associations (SCAs); and (v) establishing deposit guarantee for SCAs members.
- Strengthen financial infrastructure by addressing weaknesses in insolvency management (reforming corporate insolvency, drafting a personal insolvency law); upgrading the collateral registry; and enhancing the credit information sharing system.

Where Moldova Stands Now

Banking Sector Stability and Integrity

The bank fraud in 2014, the ensuing liquidation of three large banks, and the weakening macroeconomic conditions in recent years, have taken toll on the financial sector. The fraud revealed inadequacies in bank governance and transparency. It not only created significant fiscal liabilities but also undermined the confidence of investors, external lenders, and depositors. In response to the pressures that ensued, banks restricted lending and had to meet higher loan loss provisions. Four years later, the sector has not fully recovered. Despite 4.6 percent growth in banking assets in 2018, total assets amounted to just 43.4 percent of GDP in 2018, far below the level in 2013 (76.3 percent).

While the banking sector has been stabilizing, NPLs remain high. As of end 2018, banks were well-capitalized (26.5 percent average risk-weighted capital adequacy ratio); liquid (more than half of assets are liquid); and profitable (11.6 percent return on equity). However, nonperforming loans (NPLs) have risen, in part because after 2015 the National Bank of Moldova (NBM) tightened loan classification. In end 2018, NPLs constituted 12.5 percent of total loans. While this is down from the 18.4 percent in 2017, it is much higher than the 2015 level (10 percent) and represents a source of risk to banking system stability.

Resolution of the ailing banks is proceeding apace. In 2015–16, special diagnostic audits were conducted in the three largest banks, Victoriabank (VB), Moldova-Agroindbank (MAIB), and Moldindconbank (MICB), which together account for 65 percent of total banking sector assets. The audit results led NBM to suspend shareholding rights in all three and place them under special supervision. In January

2018, Bank Transylvania purchased a 39.2 percent stake in VB, and the bank exited special supervision in August 2018. In October, a 41.09 percent stake in MAIB was purchased by an international consortium, led by EBRD, and the bank exited intensive supervision in April 2019. In January 2019, NBM authorized Doverie United Holding to purchase a majority stake in MICB. In April 2019, NBM extended the mandate of temporary administration of MICB until October 2019 until a supervisory board is appointed. Furthermore, in January 2019, NBM suspended some of the rights of a large block of shareholders in Fincombank and Energbank and ordered them to sell their shares.

The authorities have improved the legal and regulatory framework for the banking sector, including with regards to bank governance, bank resolution, and NBM powers. In 2017 NBM introduced the Law on Bank Activities, and in 2018 the Regulation on Internal Governance and Risk Management. Thus, the new legal regime governing bank regulation and supervision has been aligned more closely with EU requirements and the transition to Basel III.

The Deposit Guarantee Fund for the Banking System (DGS) has low coverage and limited capacity. DGS coverage will be increased from MDL 20,000 to MDL 50,000 in 2020, equivalent to 1.2 times GDP per capita, well below level in regional peers (5 - 18 times). While DGS has been accumulating reserves adequately (albeit insufficient for an expanded coverage), its structure is limited and staff is untrained. DGS is unprepared to engage in bank resolution actions other than as a mere paybox to depositors of failed banks, and even so, depending on the size of the bank, its capacity may be insufficient. These concerns are exacerbated given that Moldova in process of setting up a resolution fund in 2020 under the administration of DGS.

Investigation of events leading to the fraud, which is estimated to have costed US$1 billion, was also launched. The final report was submitted in March 2018; so far, however, efforts to recover the stolen assets have been modest. The asset declaration regime, which is seen as a deterrent for those wishing to enrich themselves by working in the public sector, has undergone a series of large-scale reforms. Electronic filing and verification of declarations has been launched and the institution responsible for system management reorganized. However, the recently adopted legislation on voluntary declaration represents an obstacle to effective asset declaration—which would require that assets held by officials and family members are justified by their incomes—and makes it harder to recover stolen assets.

Non-Banking Financial Sector

Although the non-bank credit organization sector is still small, it has been growing rapidly, with households and SMEs increasingly served by 187 mostly small commercial micro-credit institutions. However, there are concerns about the regulatory and supervisory framework, as well as consumer protection. Although large numbers of complaints are being filed about the abusive terms, the Consumer Protection Agency lacks sufficient capacity in financial services. There is a risk of over-indebtedness on the retail consumers serviced by both banks and non-banks—a risk aggravated by deficiencies in the credit reporting system. Thirdly, there are also concerns regarding public savings. NBCOs are not allowed to take public deposits and must be financed with equity or shareholder loans. Anecdotal evidence indicates that at least some of these institutions may be taking advantage of a loophole in the legislation and that they are mis-selling shares to the population and collecting their savings (promising substantial returns) to fund their lending activities**.**

Savings and Credit Associations (SCAs) provide affordable financial services to rural areas. However, the sector is highly fragmented, with 272 small entities with no access to modern technologies or effective financial protection tools. SCAs have no deposit protection scheme and the services provided by apex organizations are under-developed. Meanwhile, the National Commission for Financial Markets (NCFM), the regulator, has no effective mechanisms to intervene when entities are in distress—the stabilization fund has not yet been established.

The insurance sector is underdeveloped with many insurers at high risk of insolvency. In 2016 insurance penetration was only 1.0 percent of GDP. The market is dominated by non-life insurance, especially by compulsory Motor Third Party Liability (MTPL) insurance, which accounts for 50 percent of gross non-life insurance premiums written. For the last five years, the non-life insurance market has been stagnant due to sluggish economic growth, low incomes, lack of public trust, and fierce price competition to build market share by the 16 insurers. A significant number of insurers are at high risk of insolvency and show signs of weak payment capacity. True financial condition is likely to be worse: minimal regulatory requirements for insurer solvency, provisioning, and valuation of assets means that solvency is likely overestimated. In July 2019, as required by the Association Agreement with the EU, the MTPL market will be fully liberalized. Without stabilization measures, liberalization is likely to trigger unsustainable price competition

and further jeopardize the already precarious financial position of the sector.

Capital markets are shallow. Domestic government debt was about 5 percent of GDP until 2016, when it shot up to about 17 percent of GDP due to recognition of government guarantees issued to NBM for the emergency loans provided to banks during the crisis and subsequent conversion of the loans into long-term government bonds. (Maximum maturity of regular government securities is just two years.)[45] The secondary market is thin with banks as primary dealers and investors. The Moldova Stock Exchange (MSE) is illiquid and turnover has been less than 1 percent of GDP for the past years. It lists only shares because no corporate bonds have ever been issued. Market capitalization is 3 percent of GDP with only 32 companies listed. The MSE is not equipped to contribute to capital market development while the Chisinau Stock Exchange, created in 2012, is not yet a viable alternative trading platform.

Financial Intermediation

Financial intermediation is low. Deposit penetration is low with bank deposits amounting to 39.5 percent of GDP (2016), similar to peers, but the ratio of private credit to GDP is 26.7 percent of GDP vs. ECA average of 41.3 percent. In addition to the impact of the fraud, financial intermediation is undercut by poverty, rurality, and informality. Corporate credit demand is limited by the relatively low share of large firms, a high share of foreign-owned firms, and use of non-bank financing.

The 2014 fraud slashed credit supply, especially for SMEs. High NPLs, minimal access to long-term funding, and a preference for government securities further undermined banks' ability to finance the real economy.

Financial Infrastructure

Inadequacies in the financial infrastructure, such as insolvency management is also a barrier to financial intermediation. The main tool for debt resolution is the 2012 Insolvency Law, which is widely used despite structural deficiencies. In particular, it does not offer adequate incentives for reorganization, such as granting priority to new funding; consequently, there is little use of restructuring techniques in support of long-term business rehabilitation. There is also consensus that the liquidation system is often used as a substitute for private enforcement and there are no adequate mechanisms to monitor and counter fraudulent conduct. Furthermore, approved reorganizations fail to implement operational changes for firm rehabilitation. As a result, returns to creditors are low, which adversely affects access to finance.

Moldova has two credit bureaus, but they do not exchange information, partly because of technical aspects. Parties seem unwilling to communicate although they are legally required to do so. Reporting to a credit bureau is still not mandatory for all market participants, especially non-bank lenders and SCAs, which reduces risk appraisal capacity and drives up both NPLs and consumer protection concerns.

There is a big implementation gap regarding asset-based lending. Although lending secured by movable collateral exists, (mostly for equipment, machinery, and other tangible assets), other categories e.g. accounts receivable and inventory are rarely used. Despite numerous recent legislative reforms, there is a implementation gap preventing efficient use of legal provisions that enable the use of movable assets as collateral. Even though the Civil Code recognizes various forms of security and allows financial institutions to register security directly with the collateral registry, these options are not being used optimally which increases transaction costs and deters financial institutions from using asset-based lending for SMEs.

How Moldova Can Build Up its Financial Sector

Banking Sector Stability and Integrity

The coverage of DGS should be increased while its capacity should be strengthened with the trained staff and adequate procedures, manuals and methodologies. DGS must be able to have a "single customer view" to effectively payout depositors in case of a bank failure, rather than merely relying on the instructions of the bank liquidator. Institutional strengthening should be accompanied by public awareness to improve confidence in the banking system. In addition, due to the resolution fund to be set up in 2020, DGS will need a substantially more robust and sophisticated structure to ensure that sound fund management and availability during resolution.

Authorities should safeguard financial sector stability by **ensuring that MICB successfully exit special supervision and ensure fit and proper shareholders for the other two banks**. Furthermore, while NBM has undertaken much-needed reforms in banking regulation and supervision, **operationalizing new regulations and supervising banks to ensure compliance**

[45] In March 2018, the Ministry of Finance issued the inaugural 5-year government bond.

are necessary. Similarly, after adopting BRRD-compliant bank resolution laws, it is essential to adopt the necessary supportive regulations. As NPLs rise, a holistic assessment of resolution mechanisms is needed to address gaps and facilitate credit growth of credit. There is a need to enhance the quality of property appraisals to improve assessments of collateral.

More aggressive efforts are needed to recover assets stolen in the 2014 bank fraud. Building on the results of the Kroll audit, priority should be given to recovery of fraud proceeds from foreign jurisdictions. To preserve the integrity of the financial sector, which was crippled by the "laundromat" and bank fraud cases, it is necessary to deploy monitoring and supervisory measures, and if necessary sanctions, to respond to any AML/CFT lapses in voluntary declarations.

NBM has several options for partly mitigating the threat to financial sector integrity posed by the voluntary declaration process. NBM could (i) analyze information received by financial institutions on voluntary declaration transactions and based on the results carry out on-site and off-site supervision; (ii) ensure that applying AML/CFT measures to the voluntary declaration process is a priority area of review under the supervision process for all financial institutions; and (iii) ensure that bank managers and boards commit fully to good governance practices.

Non-Banking Financial Sector

TThere are effective actions NCFM can undertake in the sectors it supervises. NCFM should finalize the registration of all nonbank lenders, identify the beneficial owners of the firms, and set supervisory objectives for this industry. AML and consumer protection (including retail savers) should be the main priorities. In addition, the authorities should amend the NBCO law to disallow any form of savings mobilization from non-qualified investors and to foster the consolidation of the sector. The authorities should also reinforce regulation and supervision of SCAs, establish an effective safety net (including effective liquidity and stabilization funds and deposit protection scheme), and identify effective mechanisms for intervening in entities in distress. Consolidation and integration of the sector should be fostered to enhance governance, internal controls, and external supervision and promote efficient operations. An assessment of NCFM's institutional setup and capacity should be conducted, aimed at strengthening the regulatory framework and supervisory capacity of NCFM.

To address challenges in the insurance sector, NCFM should tighten regulatory requirements and enhance supervision of capital adequacy and solvency, reserving, asset valuation, and allocation of expenses. NCFM should also enforce existing solvency regulations and take appropriate actions with regards to insolvent companies. It is also necessary to address gaps in auditing, governance, and transparency by amending the Insurance and MTPL laws, and to ensure consistency with the Civil Code, as recently amended, which has several insurance provisions that deviate from international best practices. Finally, in the medium term the NCFM should shift from compliance-based to risk-based supervision.

Authorities should accelerate efforts to develop capital markets, e.g., by developing investment and pension funds and government and corporate bond markets; listing government and corporate bonds on the stock exchange and adopting rules regarding market integrity. Privatizing SOEs could enhance market liquidity and attract foreign portfolio investment. Improving corporate governance and encouraging listed companies to transition to IFRS will promote transparency and attract more investors, both foreign and local.

Financial infrastructure

Reforming the 2012 Insolvency Law and improving the implementation of the law by judges and administrators, are critical to address NPL resolution and improve credit risk. In parallel, the authorities should draft a Personal Insolvency Law so that consumers could restructure their debt based on principles similar to those in the Insolvency Law.

It is critical to **introduce tools allowing SMEs to leverage their movable assets**. To support this, it is essential to modernize the collateral registry to enable financial institutions to fully take advantage of the new provisions recently introduced in the new Civil Code.

Finally, the credit information sharing system should be strengthened. The use of credit bureaus must be mandatory for all lenders for loans above a small minimum size, in addition to enforcing the current law and ensuring that the two credit bureaus exchange and integrate information.

This Policy Note was produced by the World Bank to inform policy debate in Moldova. This note was prepared by Natalie Nicolaou with contributions from the UK Embassy and Iuliana Stratan (EUD).

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Reforming Moldova's Justice Sector

Key Messages

A well-functioning justice sector is critical for ensuring good governance, reducing corruption, and delivering public services efficiently. In Moldova, however, pervasive state capture undermines trust in justice institutions. Despite numerous new laws and strategies, the lack of results on the ground from justice and anti-corruption reforms has fueled public disappointment. Entrenched interests resist efforts to make the system more transparent, accountable, and predictable. Moldova now needs to consolidate its justice system to reduce corruption, ensure that justice services are efficiently provided, and remove access constraints for vulnerable groups and rural populations.

Key Actions

- Surveys of court users in 2017–18 identified clear user priorities: tailored information, better enforcement, and procedures fair to all regardless of income.
- Improve justice access, efficiency, and integrity by leveraging IT and judges' specialization for smarter court consolidation, easier access for the vulnerable, reduced corruption, faster case processing, and cost savings.
- Designate a single court with jurisdiction across Moldova for small-value high-volume civil enforcement cases with online filing capability.
- Adopt a medium-term plan to improve enforcement of judicial decisions, and a prosecution service reform.

Where Moldova Stands Now

Despite a decade of reforms of the justice system the lack of public trust and a troubling internal picture call for credible actions: in a detailed 2017-18 survey of court users,[46] 56 percent of respondents reported either no change or a deterioration in the work of courts. Only about 20 percent of citizens considered the courts fair and impartial, and almost 50 percent of lawyer-respondents shared their clients' concerns. Among businesses, 68 percent did not expect court proceedings to be fair, 75 percent thought that in recent years corruption has either remained the same or worsened, and 25 percent of businesses knew someone who had paid bribes. Moreover, 72 percent of judges felt unsafe and, like prosecutors, judges see risks to efficiency and integrity arising from current court organization, management, procedures, outdated information systems, and poor premises. Citizens ranked justice reforms fourth in order of importance nationally, behind only health care, pensions, and education.

Moldova's ambitious 2011–16 Justice Sector Reform Strategy (JSRS), extended to 2017, did not yield the expected results. This is partly due to frequent changes in government but also to the emphasis on process rather than on actions and results on the ground. The JSRS was also dependent on donor funding for implementation and required justice entities to prepare development and funding plans aligned with JSRS priorities. Assessments of JSRS progress in 2015 and 2016 showed mixed results. In 2017, the Ministry of Justice (MOJ), with contributions from justice sector stakeholders, began to update the JSRS design for 2018–21 but the announcement of elections in early 2019 put the work on hold. While drafting is likely to resume after the 2019 elections, Moldova's current justice challenge is simply to act on reforms already approved, track progress, and report to the public on the results.

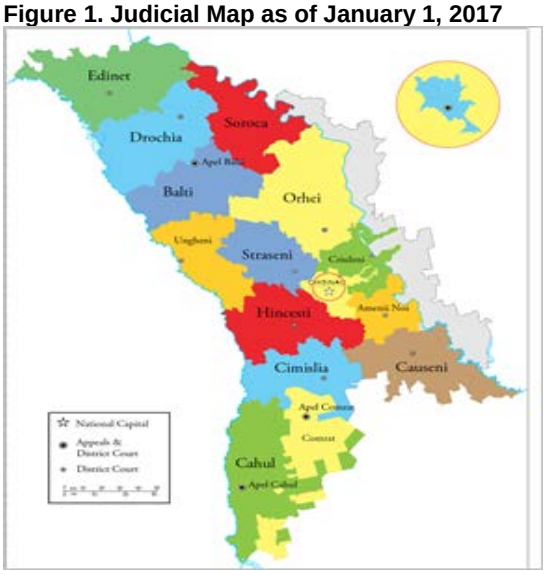
Despite official commitment to a well-functioning justice system and recognition that it will be critical to reducing corruption and delivering public services efficiently, pervasive state capture still infects the system. Oligarchic interests and elite reluctance to reform a political system continue to define Moldova's political economy.

A 2016 law kicked off an ambitious judicial reorganization on January 1, 2017. Previously, there were 48 first-instance courts and several courts of special jurisdiction. The 2017 law merged most courts. The specialized first-instance Military and Economic Courts were closed and the five Chisinau municipal courts

[46] 2017–18 Surveys of Court Users, conducted by the World Bank in collaboration with the MOJ and SCM.

were merged into one. Each court in Moldova now has at least nine judges. The cost of the consolidation of the judicial network is an estimated MLD1.18 billion (US$60 million). The government expects the investment to pay off in 17 years (court optimization is expected to generate annual savings of MLD45.3 million). The reorganization can generate more savings if coupled with other efficiency improvements.

Figure 1. Judicial Map as of January 1, 2017



Source: MOJ.

Constraints on Performance

Despite numerous new laws, justice and anti-corruption reform implementation has stalled; key reforms are compromised from within the system. Entrenched interests resist efforts to make the system more transparent, accountable, and predictable and oppose a more rational, performance- and demand-based distribution of its resources. Appointment and promotion of judges do not strictly follow the prescribed criteria and rules. Prisons are a sensitive issue: investigative reports have documented how organized crime and property capture appear to be led from inside prisons. If reforms are to succeed, state capture and corruption—the main barriers to improving the quality of justice—need to be addressed first.

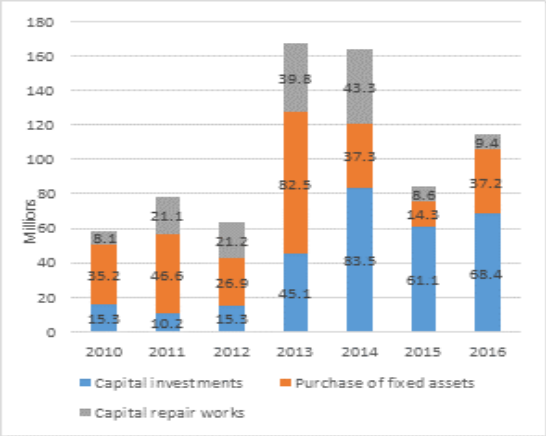
Little on-the-ground progress is seen by citizens and businesses. A coherent coordination mechanism among law enforcement and justice institutions is missing both at the national and local levels. Men and women, particularly from marginalized or minority groups, are not able to claim their rights and access to justice effectively. The right to a fair trial is perceived by the general public as being the most violated human right.[47]

Access to justice for vulnerable groups—especially women and girls—is a major concern. Access constraints for vulnerable groups and less mobile rural populations, combined with longer distances to courts and few if any transport options, have heightened concerns about the ongoing court consolidation's adverse effect on access. Rural and remote areas account for 57 percent of Moldova's citizens and 84 percent of its poor. The justice system for children remains reactive with very low application of diversion measures. The lack of specialized justice personnel (prosecutors, judges, lawyers), including in child and family-related cases, and cases related to sexual violence, is a serious concern for professional adjudication in the best interest of the child. Developing preventive and reintegrative services for children is not prioritized at the local level.

Court Budgeting and Expenditures

In 2010–16, in both nominal and real terms Moldova's spending on justice went up. Yet its real spending is the lowest in Europe. Salaries account for about two-thirds, consistent with international patterns. Between 2010 and 2015, the justice wage bill rose by 170 percent.

Figure 2. Justice Sector Capital Spending 2010-16, MDL



Source: MOF.

Capital spending is erratic; in 2015 it dropped steeply after increases in investments and repairs in previous years. The fact that the wage bill went up steadily suggests that courts and the Superior Council of Magistracy (SCM) have particular difficulty in long-term planning for capital spending. Spending on operations, including capital repairs, has gone down since 2013 as the budget squeeze continues.

[47] 2018 Human Rights Perception Study (English), http://www.md.undp.org/content/moldova/en/home/library/effective_governance/percep_ii-asupra-drepturilor-omului-in-republica-moldova.html

Strengthening Human Capital

Judges' performance evaluation and management need to be more transparent, accountable and rule-based. Performance management is addressed in a 2012 Law on the Selection and Performance Evaluation of Judges, which gives the SCM primary responsibility for evaluation and requires it to set detailed criteria for performance. Judges are subject to regular performance evaluation every three years. At the request of the SCM, in 2014 the Organization for Security and Cooperation in Europe and its office for Democratic Institutions and Human Rights assessed the effect of the law. The report expressed "concerns with the fairness and transparency of the system, including lack of consistency in grading, insufficient reasoning for Board decisions, and a perceived subjectivity of grading".

Appropriate incentives for justice personnel, if well-designed, could mitigate some corruption and human resource management (HRM) challenges. According to the JSRS, despite the new HRM system, low civil service salaries remain an issue. Past wage increases sought to promote judicial independence and reduce judicial corruption. Over 2013-14, judges received 100 percent salary increases and in 2015 and 2016, 10 percent increases. The MOJ reports that since 2010 it has replaced one-third of judges to reduce corruption. However, citizens and firms are skeptical that corruption has been reduced much, and unless credible punitive measures against corruption are taken in parallel, salary increases alone will not help.

Quality and professionalism of justice sector personnel requires sustained attention. 45 percent of court users believe that justice professionals are not sufficiently qualified,[48] while the quality of judicial decisions is assessed to be the weakest element of the judiciary.[49] The new approach to professional training of judges and prosecutors, championed by the National Institute of Justice since 2017, could potentially improve the quality of justice services. Nevertheless, additional efforts are required to improve the quality of legal reasoning and develop non-technical skills required by effective justice professionals, based on a comprehensive training needs assessment and modern training evaluation tools.

Justice Sector IT Systems

Moldova plans to modernize its justice information systems, but that will not be easy or quick. Advances in technology and good practices from neighboring countries suggest Moldova could use smarter ICT-based solutions cost-effectively to address the capture, corruption, and performance issues identified. A priority for Moldova's justice reforms is to strengthen sector ICT capability and applications to increase efficiency, transparency, access, and accountability.

A central ICT challenge for the court system is an advanced cloud infrastructure that lacks requisite support. Its numerous stakeholders, objectives, and activities are not aligned under a single ICT strategy umbrella. The result is that justice sector ICT is fragmented, and the organizational structure is complex. Funding for ICT is not aligned with outcomes or user priorities, and annual allocations complicate medium- to long-term planning. There is no allocation for maintenance, support, or upgrading of current systems. The justice system as a whole lacks enterprise-level information and communications technology architecture to support high-quality, efficient resource management, data transmission and storage and information security. In addition, limited current resources and capacities are scattered across organizations, further reducing effectiveness.

Physical Facilities

The 2016 law on judicial reorganization has led to little change on the ground: courthouses remain crowded and short of hearing rooms, and lack clear signage, elevators, rooms for (defense) lawyers, canteens, and toilets. Access shortcomings leave users poorly informed, and not treated well. The child-friendly hearing rooms in courts and prosecution offices are not compliant with international standards.

MOJ estimates that it needs about US$60 million (MDL1.5 billion) to reorganize the judicial map as originally envisaged. The estimate covers new construction, renovations, extensions, furniture, and equipment; however, it underestimates the true cost of consolidating the court network (e.g., Moldova has no energy efficiency standards yet for courthouses and related physical infrastructure, and none of its courts comply with national or international fire protection standards). The estimated cost does not include the costs of upgrading ICT, any land acquisition that may be needed, or demolition of

[48] 2018 Survey on Public Opinion about the Justice System in Moldova (Romanian language version), https://www.justitietransparenta.md/rezultatele-sondajului-privind-opinia-publica-despre-sistemul-judecatoresc-din-moldova/

[49] Soros-Moldova. Assessing the First Year of Moldova's Implementation of the Association Agenda – Progress and Opportunities in the Political Sphere. Working paper. Chisinau: Soros-Moldova, 2016.

obsolete buildings. However, funding is yet to be identified, and no donors have yet committed to financing court infrastructure.

How Moldova Can Strengthen its Justice Sector Performance

The findings from the 2017–18 court user surveys can significantly contribute to policy and reform design and implementation. For instance, the most important reforms for citizens were specialization of judges, simpler and faster procedures for small cases, and reform of courts and prosecution. Survey feedback from citizens, firms, and justice employees, combined with data analysis, discussions with policy-makers, and reports from development partners such as the EU, DfID, USAID, and others, should inform the **minimum agenda for justice reform:**[50]

1. **Strengthen citizen and business trust in the justice system by making the work of courts, prosecution, advocates and notaries more responsive and transparent.**
- Publish the findings of the 2017–18 Surveys of Court Users on SCM and MOJ websites; announce actions to address the findings; and repeat the surveys every two years to track progress.
- Announce and implement a medium-term action plan to improve enforcement of civil judicial decisions, so that locked-up private capital is freed up, the government can recover moneys owed to it, and businesses do not have to use unregulated private debt collectors.[51]
- Annually publish basic justice sector statistical data, including the 2017 Justice-at-a-Glance indicators developed with World Bank support.
- Announce a time-bound program for reforming the prosecution service, without amendments to laws or draft laws contrary to the opinion of the Venice Commission or limiting the powers of prosecutors to combat high-level corruption.

2. **Improve justice access, efficiency, and integrity by leveraging IT and judges' specialization for smarter court consolidation, easier access for the vulnerable, reduced corruption, faster case processing, and cost savings**.
- Revise the current plan to reorganize the judicial map, to identify opportunities for process streamlining, cost savings, and improving integrity, including designating a single court with jurisdiction across Moldova for small-value high-volume civil enforcement cases with online filing capability, and announce a revised action plan[52] with costing, implementation schedule, and milestones.
- Initiate or expand targeted programs to improve access to justice for vulnerable groups, such as women, girl children, juveniles, and minorities, in collaboration with civil society and development partners, and publish the results every quarter.
- Address performance and corruption feedback captured in the 2017–18 Surveys of Court Users through targeted actions (such as prosecution of officials for corruption) and publicize progress annually.

3. **Improve justice sector ICT and physical facilities to facilitate user access, make more information available to them, and reduce manipulation and corruption.**
- Announce milestones and indicators to track progress on improving justice ICT systems for the next three years, based on a review of the previous findings on ICT issues that identify 5–10 priorities for improvement.

4. **Strengthen human and financial resources to modernize the justice system.**
- Address the uneven distribution of judicial services and judges' workloads by deploying courts' financial and human resources on the basis of projected case inflows.
- Quantify the volume of arrears built up by the courts, prosecution, and MOJ and announce a schedule for action (agreed with the MOF) to eliminate and then prevent build-up of arrears.
- Locate financial resources and establish a strong management team for a 5–7-year justice system modernization program (covering courts, prosecution and the MOJ).

This Policy Note was produced by the World Bank to inform policy debate in Moldova. This note was prepared by Eva Melis and Amitabha Mukherjee with contributions from Alla Skvortsova and Alexandru Cocirta (UNDP), Sergiu Rusanovschi (UNICEF), Schaeffer Fabien (EUD), and Kate Whyte (UK Embassy).

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[50] For details, see the World Bank 2018 Justice Sector Public Expenditure and Institutional Review of Moldova, and the Justice-at-a-Glance (English, Romanian): http://documents.worldbank.org/curated/en/docsearch?query=p158938.

[51] In the 2017–18 survey 72 percent of businesses using private debt collectors reported poor performance.

[52] This will include learning from regional peers (e.g. Croatia, Azerbaijan) about combining technological advances and specialization to yield cost savings without affecting access.

Increasing the Productivity and Competitiveness of Agriculture

Key Messages

Agriculture is vital to Moldova's economy, contributing 11 percent of GDP, 32 percent of employment, and 45 percent of exports. But its low productivity limits incomes and inhibits on-farm investments. Key public services in agriculture, such as education, research, and extension services are weak, outdated, and underfunded. The vulnerability of agriculture is amplified by the acute volatility of output caused by weather-related shocks and perpetuated by the lack of effective weather mitigation tools and services.

Trade integration with the EU generates both opportunities and challenges for Moldova's agricultural producers. Enhancing compliance with EU requirements for food safety and quality will improve market access and help Moldova to compete domestically with increasing agricultural imports.

Key Actions

- Build farmers' capacity for sustainable and productive agricultural practices, especially climate adaptation measures.
- Support penetration into markets, both domestic and external, for higher-value products, particularly animal production.
- Revise the existing subsidies by promoting smart subsidies and set-up a mechanism for evaluation of the impact of the subsidies.
- Promote agricultural education and extension services to improve access to knowledge.
- Launch food quality and safety programs to reach international standards.
- Emphasize innovation to attract more young people into the sector.

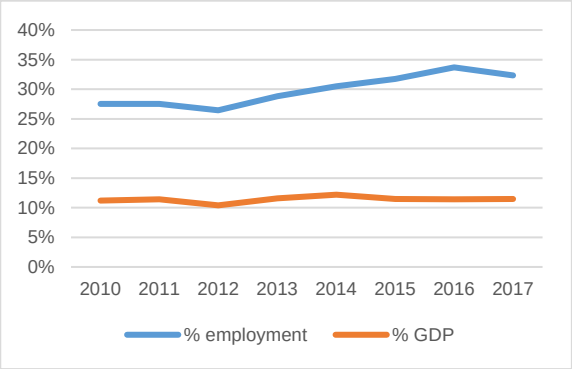
Where Moldova Stands Now

Agriculture is vital to Moldova's economy. In 2017 it accounted for 11 percent of GDP and employed up to 32 percent of the labor force. Together with agro-processing, it generates about 18 percent of GDP. The sector is a net exporter and a major earner of foreign exchange; agro-food products comprise over 45 percent of Moldova's total exports. Clearly, agriculture continues to be both a driver of economic growth and an avenue for reducing rural poverty.

However, low productivity limits farm incomes and heightens sector vulnerability. The current share of agriculture in employment is nearly triple its share in GDP (Figure 1), which implies that labor generates much less value-added in agriculture than in other sectors. Agricultural labor productivity is only 40 percent of average national productivity. As a result, agricultural incomes remain modest; in 2015 poverty was much higher in rural areas (14.5 percent) than in urban (3.1 percent). Moldova's exposure to shocks is amplified by the climate-related shocks that affect agriculture.

High output volatility is a serious threat to agricultural development. Crop production is particularly vulnerable to weather. Droughts, floods, and soil erosion are among major climate-driven problems affecting Moldova. Severe weather every two to three years since 2007 has had a devastating effect on most crops (Figure 2). The volatility is also partly caused by underdeveloped measures for mitigating weather-related risks, limited access to irrigation, low adoption of such modern agricultural technologies as drought-resistant crop varieties and anti-hail protection, and a lack of innovative insurance schemes.

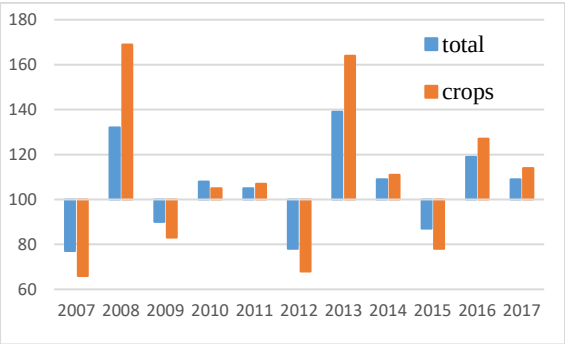
Figure 1. Share of Agriculture in GDP and Employment, Percent



Source: NBS.

Climate change is expected to exacerbate the impacts of extreme weather. A 2014 World Bank study found that changes will lead to variations in temperature and rainfall patterns, and that over the next 40 years the effects of climate change on Moldova will become more severe. Without decisive adaptation strategies, most yields will plunge.

Figure 2. Agricultural Output Volatility, 2007–17, Percent



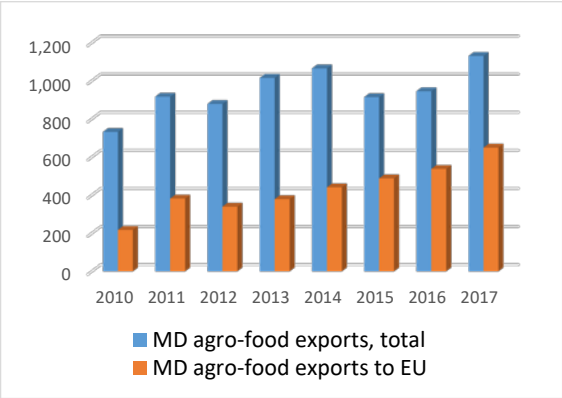
Source: NBS.

Education, research, extension, and other public services that are critical to supporting sector development are lacking quality and are not effective. Due to systemic deficiencies and outdated methods, agricultural education and research institutions offer little value to the sector. Underfunded, with dilapidated inventories, inadequate resources, and aging staff, existing research institutes are in survival mode. The risk of irrelevance is particularly critical because they still operate in isolation from the private sector and the international R&D system. Education and training in agriculture are confronted with similar problems, and there is a severe mismatch between the qualifications students acquire and those the labor market needs. Inadequate services for farmers, poor infrastructure and underdeveloped utilities make it acutely difficult to retain young people in agriculture and in rural areas.

By 2018 provision of extension services had significantly regressed. Until 2018, these services were provided through a network of regional and village-based consultants of the National Rural Development Agency, for which public resources had been allocated since 2002. This system of service providers was established with the World Bank, SIDA, and DFID support and, despite some limitations, has built a solid track record of engagement with thousands of farmers of all types and sizes. In 2018, the Ministry failed to select an extension service provider for the next 5-year period, so the service is not available. The Ministry has no clear position on this, and informal communications suggest that in future extension services will be provided by existing education and research institutions. That would be a less than optimal scenario for the delivery of essential knowledge to farmers, as these entities do not have a wide-spread physical presence in the rural space and lack the resources and skills to provide effective extension services.

Trade integration with the EU generates opportunities as well as challenges for Moldova's farmers. In 2014, Moldova signed the Association Agreement with the EU and the related Deep and Comprehensive Free Trade Agreement (DCFTA). This gives its agro-food sector a great opportunity to both compete in the largest market in the world and reduce its reliance on the traditional but unstable Russian market. Indeed, since 2014 Moldova's exports in general and agro-food exports in particular have been increasingly directed to the EU (Figure 3). The share of agro-food exports to the EU shot up from an average of 35 percent before DCFTA (2010–13) to over 55 percent after (2015–17). But Moldova's agro-food sector needs to move faster if it is to compete even domestically with EU imports.

Figure 3. Moldova's Agro-Food Exports, 2010–17, US$ million



Source: NBS.

The agro-foods Moldova exports to the EU have little value added. Among them recently have been dried fruits and nuts, cereals and sunflower seeds, wines, juice concentrates, and vegetal oils—standardized commodities sold in bulk. The next challenge for Moldovan producers in becoming competitive on EU markets is to add more value to exports.

Compliance with EU food safety and quality requirements is at the core of the EU-Moldova DCFTA and looms large on Moldova's agenda. Since creation of the National Food Safety Agency in 2013, the Government of Moldova has been pursuing an ambitious agenda for modernizing its food safety and quality management systems in order to align them with rigorous international public health standards,

maintain domestic market share, and promote growth of exports to both traditional and new markets. Progress to date has been good in many areas but among issues still to be resolved are development of the domestic livestock sector. There are still gaps in laboratory diagnostic capacity for monitoring and surveillance of animal diseases, despite recent improvements. There is also a complete absence of programs to monitor the quality of raw milk, which disadvantages domestic dairy producers vis-a-vis competitors. Another major gap is in infrastructure for the management and disposal of byproducts of animal origin. These gaps are not only major problems for exports but also significant domestic public health concerns.

The "Moldova 2030" National Development Strategy calls for more investment in agriculture, expanded export opportunities, building up human capital, and identifying action to respond to climate change. The strategy emphasizes enhancing the quality of people's lives through country modernization and integration with Europe. It acknowledges the low productivity and competitiveness of Moldova's agriculture. The problem of inadequate human capital and the exodus of young people from rural areas is recognized as a major developmental challenge. Among other threats are global climate change, which calls for adopting such adaptation measures as access to more resilient plant varieties, raising farmers' awareness and training, and using water more efficiently.

How Moldova Can Enhance Agricultural Productivity and Become Internationally Competitive

Transforming agriculture into a modern, vibrant, and market-oriented sector is central to fighting poverty, promoting social inclusion, and reducing the urban/rural development divide. A review of the experience post-accession of new EU member states found that agriculture had benefited more in countries that gave priority to enhancing competitiveness, modernizing the agri-food industry, and adapting it to EU standards. Clearly, Moldova should continue to apply a variety of strategies to boost agricultural productivity and competitiveness. Thus, it might:

- Generate incentives and build capacities for sustainable and productive agricultural practices, such as climate adaptation measures.
- Support penetration into markets for higher-value products, both domestic and external.
- Promote education and agricultural extension services to broaden access to knowledge.
- Adopt food quality and safety programs for reaching international standards.
- Focus on innovation and attraction of young people into the sector.

As agriculture proves to be more and more affected by adverse events, the need for effective risk management tools becomes critical. Moldovan agriculture would benefit from a comprehensive risk assessment that would also identify the policy instruments best tailored to the Moldovan context. Farm-level reforms should be identified, such as farm water efficiency, adoption of more climate-resilient seed varieties, crop diversification, and also national adaptation and mitigation measures, such as investment in rehabilitating secondary irrigation capacity. It will be important to establish the appropriate mix of tools for Moldova's agricultural conditions, the most effective division of roles and risk-sharing between the public and private sectors, and the appropriate targeting of risk management instruments.

Building the competitive advantage for Moldova's agriculture will require skilled and innovative management. Consolidated efforts are needed to improve the business, marketing, and management skills of domestic producers, especially young farmers. In the short term, good technical managers can be recruited internationally, but that can be costly, and longer-term Moldovan-trained management will be needed. The government could work together with education institutions, extension services, and the private sector on a clear action plan to improve business management in agriculture so as to drive the sector forward

In this context priority should be given to revamping agricultural education and adapting the curriculum to meet contemporary business needs. Reviewing both university and pre-university curricula could help place more emphasis on modern business practices and closer cooperation with the private sector. Agricultural colleges and vocational education and training could add courses on business administration that are customized for training middle management and supervisors for the agricultural industry. They could also provide on-farm training for the certification demanded by EU retailers, such as GlobalGAP and other private standards—which would also be a good way to link more closely with the private sector. The curriculum of the Agricultural University also needs to be adapted to the requirements of the market economy, and ties strengthened with companies to organize student placements that offer practical company experience.

An urgent priority is to get the extension service back up and act as an effective channel for delivering knowledge to Moldovan farmers. If there are concerns about the quality and efficiency of the extension services delivered, the tenure of the award to the prospective service provider could be reduced from five to three years, with the government meanwhile working on a new model for rural advisory extension services. Development partners could advise on international best practices and provide technical assistance.

Still required will be both significant investment and institutional change to ensure that the agricultural and food industry complies with EU requirements. The government must make it a priority to fund and provide practical support for addressing deficiencies in the country's food safety laboratory capabilities; eliminating quality assurance problems in the milk and dairy sector; and urgently tackling the agenda for animal by-product management and disposal. Addressing these priority themes will create the necessary dynamism for investments that enhance the productivity and competitiveness of the country's deteriorating livestock sector at both production and processing levels.

Moldova must innovate if it is to make its agriculture world-class and competitive and promote better and higher-paid jobs for the rural workforce. The start-up and development costs of truly innovative enterprises in Moldova are expensive because the goal is difficult. An Innovation Fund could be established to provide matching grants and supplementary technical assistance to encourage companies to innovate. The fund could finance the development of new products or markets, the uptake of new technologies or processes, or the building of strategic relations among new value chain actors.

This Policy Note was produced by the World Bank to inform policy debate in Moldova. This note was prepared by Anatol Gobjila, Felicia Pricop, and Marcel Chistruga.

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Safeguarding Fiscal Sustainability

Key Message

Moldova has managed to keep fiscal deficits under control in recent years, largely on the account of lower capital spending and improved tax collection. Yet, efficiency of public finances remains challenging. Relative to its level of per capita income, human development and government efficiency, Moldova's ratio of government consumption to GDP is high. Going forward, while fiscal discipline needs to be maintained, reliance on foreign assistance in addressing Moldova's infrastructure needs, contingent liabilities, and social pressures will require more efficient use of public resources. To achieve fiscal sustainability, build resilience to internal and external shocks, and ease dependence on external financial aid, the authorities will have to keep the budget deficit within the fiscal rule and lower. The recent policy decisions to cut tax rates, introduce fiscal amnesty, increase public sector wages and pensions are steps to a wrong direction.

Key Actions

- Raise the productivity of major taxes; streamline taxes on income, and wealth; strengthen the VAT and excise tax regimes; and rationalize tax expenditure.
- Increase local government own tax revenues through property taxation to reduce dependence on intergovernmental fiscal transfers.
- Improve efficiency of social spending, state aid, and improve public investment management.
- Strengthen monitoring of contingent liabilities from SOEs.
- Apply fiscal rules more effectively and prudently.
- Launch domestic debt issuance to reduce dependence from foreign assistance, together with lengthening the average maturity of domestic debt and deepening the secondary market to reduce domestic debt roll-over and interest rate risks.

Where Moldova Stands Now

Moldova has managed to keep fiscal deficits under control in recent years. Except for 2007 when the deficit reached 5.9 percent of GDP (Figure 1), deficit was on average 1.2 percent of GDP by 2018. Government spending has declined from 37 percent in 2007 to 31 percent in 2018, mostly on the account of declining public investments (as a percentage of GDP). The latter, which relies mainly on external sources, was severely affected by the spending cuts following the 2014 bank fraud. It has not fully recovered yet.

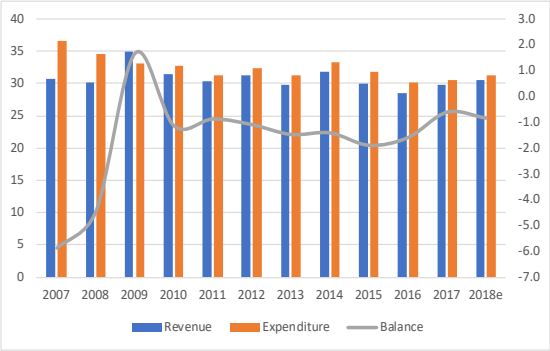
Reforms of tax administration have prevented steeper fall of revenues despite declining economic activity. Moldova collects more tax revenues (19 percent of GDP) than peer countries (13 percent ECA average in 2016), but there are still inefficiencies in collections. The proliferation of tax expenditures, especially related to VAT, is a serious problem for revenues as it erodes the tax base. As discussed in Moldova CEM (2019), the system was skewed toward taxes on goods and services; but direct taxes gained importance recently. This bias against employment and capital accumulation reduces the incentives to create jobs, while low taxes on consumption discourage savings. The VAT fraud, tax exemptions, and inefficient collection mechanisms deserve more attention, as poorly designed, and not systematically monitored, tax incentives undermine productivity growth.[53]

Efficiency of public finances remains challenging. Not only does Moldova collects more revenues than its peers, it also spends more. Relative to its level of per capita income, human development and government efficiency, Moldova's ratio of government consumption to GDP is particularly high (Figure 2). Spending on social protection, education and health account

[53] World Bank. 2019. Moldova – CEM.

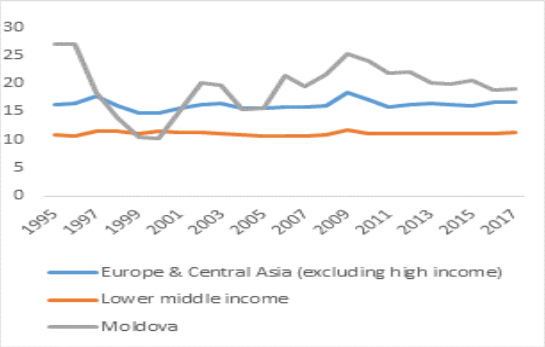
for almost two-thirds of the overall spending. The aging pressures on social sector spending will intensify. With increasing dependency ratios, despite the beneficial impact of the 2016 reforms, there are still concerns about pension system sustainability since the 2018 cut in the contribution rate.

Figure 1. Government Revenues, Expenditures and Balance, 2007-18, Percent of GDP



Source: MoF, World Bank, World Bank staff calculation.

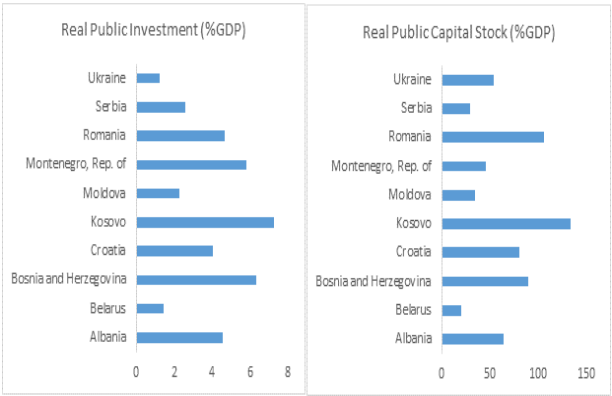
Figure 2. General Government Final Consumption Expenditure, 1995-17, Percent of GDP



Source: MoF, World Bank, World Bank staff calculation.

Public investment and public capital stock are lower in Moldova than in peer countries (Figure 3). Public capital spending is concentrated in few areas, and roads absorb the most. And although its efficiency score for physical infrastructure is relatively high, except for electricity and telephony infrastructure Moldova does not perform particularly well compared to peer and neighboring countries.[54] The Capital Expenditure Review suggested several areas for improvement[55] and also found that inconsistencies in national budget classifications undermine transparency. For example, after 2008, spending on road maintenance executed through the Road Fund was classified as "capital transfer within country." If the classification were corrected, capital as a share of GDP would be revised downward. How well capital spending aligns with NDS priorities also raises concerns: Although budgeted spending is generally consistent with strategic objectives, actual outlays are less so. This gap implies project implementation problems.

Figure 3. Public Investment and Capital Stock, 2015, Percent of GDP



Source: IMF, World Bank staff calculations.

Going forward, while fiscal discipline needs to be maintained, reliance on foreign assistance in addressing Moldova's infrastructure needs, contingent liabilities, and social pressures will require more efficient use of public resources.[56] The law on public finance and budget responsibility mandates that as of 2018 the budget deficit should not exceed 2.5 percent of GDP, excluding grants and capital investment projects. Yet, this rule will be hard to comply going forward given the recent fiscal package enacted in 2018. The 2019–21 MTBF[57] seeks to promote a prudent fiscal policy and a cautious debt profile while allocating the necessary resources to social spending and stimulating economic growth. The main short- and medium-term objective is to carry out structural reforms, consolidate public finances and maintain financial stability. However, the recent policy decisions to cut social contributions and PIT rates for the private sector, introduce fiscal amnesty, reduce VAT for the HORECA sector, increase public sector wages, and change the pension indexation lead to a rise

[54] IMF. 2017. Moldova: Public Investment, Efficiency and Growth: The Case of Moldova. IMF Country Report No. 17/399: Washington, DC.

[55] World Bank. 2014. Moldova–Capital Expenditures: Making Public Investment Work for Competitiveness and Inclusive Growth in Moldova. Public Expenditure Review. World Bank: Washington DC.

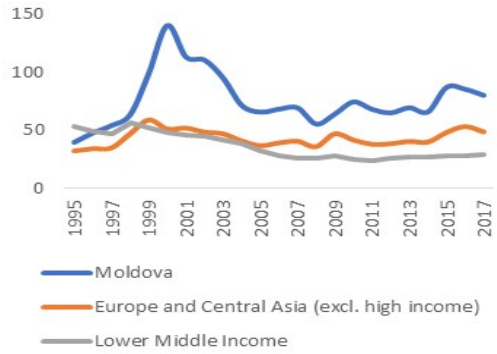
[56] World Bank. 2017. Moldova – Support to SOEs Preliminary Diagnostic and Reform Assessment. World Bank: Washington DC.

[57] The Medium-Term Budgetary Framework (2019–21) is designed to comply with target indicators agreed during the Third Assessment (March 15–27, 2018) of the Economic Reform Program supported by a three-year IMF arrangement.

in deficit of 1.5 percent of GDP a year. The social contribution cut should be either reversed or adjustments should be sought on the expenditure side (*See Note on Achieving a Sustainable Social Protection System*).

To maintain fiscal sustainability, build resilience to internal and external shocks, and ease dependence on external financial aid, the authorities will have to keep the budget deficit within the fiscal rule and lower. Another challenge for the medium term is to make public spending more efficient. In 2018, higher and vocational-technical education was chosen for a pilot expenditure rationalization exercise to heighten the efficient use of funds in education by identifying possible nonpriority savings and spending. The results will inform policies for education to be incorporated into the 2020–22 MTBF and the 2020 budget.

Figure 4. External Debt, 1995-2017, Percent of GNI



Source: MOF, Central Bank, World Bank staff calculations.

Debt sustainability needs to be safeguarded. Although both public and external debt have declined in the last two years, external debt is still relatively high (Figure 4). Although private external debt has declined since 2015 (mainly because overseas borrowing by banks declined), at almost 47 percent of GDP in 2018, it is still unusually high for a lower middle-income country. Given the country's significant vulnerability to exogenous developments and the persistent problems in the banking sector, fiscal discipline is critical to ensure debt sustainability. External sources finance a large part of government debt—more as a percent of gross national income (GNI) than ECA and LMC averages.

The 2017 Joint IMF–World Bank Debt Sustainability Analysis found that in all scenarios Moldova's risk of debt distress is still low and public debt dynamics are sustainable (Table 1). Once guarantees are included, Moldova's public and publicly guaranteed (PPG) debt declined from 45.4 percent of GDP in 2016 to 37 percent in 2018. In all scenarios, Moldova's public debt is projected to remain sustainable, although sensitive to exchange rate depreciation, economic growth, and a sudden call of contingent liabilities. Permanently lower GDP growth could push public debt above the sustainability threshold by 2037, with the present value of debt reaching 84 percent of GDP. In alternative scenarios, the present value of the debt-to-GDP ratio stays below the indicative thresholds, even in a scenario that foresees an increase in contingencies in the banking system affecting accumulated energy sector debts.

Table 1. Debt Indicators, 2014-18, Percent of GDP

	2015	2016	2017	2018
Total external debt	78.3	76.7	72.0	64.6
Public debt (including domestic arrears)	29.6	36.9	32.7	30.5
External debt (PPG)	22.9	22.1	19.1	18.2
Domestic debt	6.7	14.8	13.6	12.1
External debt service payments (% of exports)	2.1	2.6	2.2	..
Government interest payments (% of revenue)	0.8	1.1	1.1	1.0
Government loan guarantees	..	8.5	7.4	6.8

Source: MOF, NBM, World Bank.

Yet, despite positive macroeconomic outlook, there are considerable downside risks. While growth prospects remain robust thanks to consumer and business confidence, and a continued, albeit slow, normalization of financial conditions, growth is projected to further moderate to 3.6 percent by 2020, away from more than 4 percent in the past three years. The 2018 tax reform and capital amnesty package ("fiscal package") and the expected increases on the expenditure side (wage bill, social benefits and recalculation of pensions) put further pressure on fiscal sustainability over the short term, while inefficient public spending, contingent liabilities and demographic vulnerabilities expose fiscal policy to long-term pressures.

How Moldova Can Safeguard Fiscal Sustainability

To ensure stability and resilience Moldova requires prudent fiscal policies and public finance efficiency improvements. Among tax policy actions necessary to promote stability are: raising the productivity of major taxes; streamlining taxes on income, wealth, and social security; strengthening the VAT and excise tax regimes; and rationalizing tax expenditure. Moreover, as highlighted in the Public Finance

Review,[58] fiscal authorities should also act to make government spending more efficient. This is particularly the case in social sectors, state aid, and capital spending areas. (*see Note on Enhancing the Business Environment and Market Competition; on Strengthening Governance of State-Owned Enterprises; on Increasing the Productivity and Competitiveness of Agriculture*).

To reduce dependence on intergovernmental fiscal transfers, local governments should strengthen its own tax revenues through property taxation (*see Note on General Property Taxation and Public Property Management*). This would require enhancing land registry and property valuations, as well as strengthening the tax collection at local levels.

The authorities should strengthen monitoring of contingent liabilities from SOEs and applying fiscal rules more effectively. Launching an authentic domestic debt market is a top priority recommended in the latest joint IMF-WB Debt Sustainability Assessment to reduce dependence from foreign assistance, together with lengthening the average maturity of domestic debt and deepening the secondary market, which would help reduce PPG domestic debt roll-over and interest rate risks. Sound medium-term macroeconomic management is essential to ensure debt sustainability and growth.

This Policy Note was produced by the World Bank to inform policy debate in Moldova. This note was prepared by Natasha Rovo and Sanja Madzarevic Sujster.

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[58] World Bank. 2016. Moldova Public Finance Review. World Bank: Washington, DC.

General Property Taxation and Public Property Management

Key Message

With respect to property taxation, the contribution of recurrent property tax revenue to GDP in Moldova is only one-third of the EU average, which indicates significant potential for improvement. Among problems depressing property tax revenue are incomplete coverage of properties, lack of up-to-date market-based property valuations, absence of links between property valuation and taxation, and the high cost of collection and enforcement.

With respect to public property management, publicly-owned immovable assets (land and property) is an extremely valuable resource because it enables the delivery of public goods and services as well as generating public revenues. A major impediment to effective management of Moldovan public property is incomplete registration and the lack of an inventory. Lack of registration has also caused disputes in Moldova between central and local government claims. Finally, Moldova has an incomplete cadaster and property assessments are not conducted with up-to-date market-values. This directly affects property taxation revenue performance.

Key Actions

- Update property valuations and link revised valuations to property taxation.
- Enable mobile/mCloud payments to lower the costs of property tax collection.
- Improve state land management by registering and creating an inventory of publicly-owned properties, resolving disputes, and building capacity to manage public land.
- Improve coverage and review property tax rates and tax relief to broaden the tax base.
- Introduce valuation of publicly-owned land and property and use the valuations to determine the optimal use of such assets.

Where Moldova Stands Now

Capturing all the properties in the cadaster and linking the registry to the taxation system improves coverage and expands the property tax base. Value-based recurrent property taxes are important because they broaden the tax base to embrace wealth as well as incomes and consumption. Imposing value-based taxes helps to produce a fairer, more equitable, and more efficient property tax system.

Recurrent property taxes are typically local taxes. However, central and local government budgets are inextricably linked through inter-governmental fiscal transfers, which means that failure to maximize the revenue potential of local taxes has consequences for national budgets and fiscal sustainability. Moldova raises only 0.3 percent of GDP from recurrent (annual) property taxes; the EU average is 0.8 percent.[59]

To maximize property tax revenues, it is a priority to link property tax policy to updated property valuations. Moldova has impressively high rates of collection of reported property taxes: it brings in 99 percent of the land tax payable by individuals, 96 percent payable by legal entities, 95 percent of property tax on individuals, and 90 percent payable by legal entities. However, the property valuations used are old, and currently there are no plans to update valuations for taxation purposes. Updating valuations without also reviewing property tax policy at the central level could cause average losses in property taxes of US$2.3 million to US$5.4 million a year. This amounts to 7.2–16.9 percent of annual property tax collections and 1–2.2 percent of annual own-source revenues.

The costs of collection also seem very high, depressing net tax yields. The World Bank Land Governance Assessment Framework estimated that Moldova's administrative costs amount to 43 percent of the tax collected. Collection costs ought to be less than 3 percent.

About 45 percent of the land in Moldova is publicly owned. Of this, about 25 percent is

[59] The World Bank-financed Land Registration and Property Valuation Project aims to complete first registrations to increase coverage and update the property valuation system so that accurate market values can support such purposes as property taxation and real estate market analysis.

believed to be owned by the state and 75 percent by local public authorities (LPAs). One of the biggest impediments to effective management of state land is lack of an inventory, which is exacerbated by incomplete registration: An estimated 93 percent of publicly-owned land in Moldova is unregistered—about 25,000 parcels are believed to have been registered but another 330,000 parcels are not. Often, there is no clear delineation between public and private land, especially in rural areas.

Lack of registration can create disputes. Moldova has seen disputes between different levels of government about who has the rights to particular properties. There have also been questions related to how property was acquired, whether expropriated or privatized. In rural areas privatization was not based on accurate surveys; some households were allocated larger areas than they were entitled to but have had peaceful enjoyment of these properties for long enough that they could reasonably claim ownership by virtue of adverse possession.

In Moldova the World Bank Land Governance Assessment Framework (LGAF) identified a number of issues with management of state land, including because assets were privatized on disadvantageous terms, land belonging to state companies was illegally alienated, bankrupt companies used state land to pay creditors, and civil servants representing the state on company boards had severe conflicts of interest because of their association with multiple companies. Clearly, there are management deficiencies that need to be addressed.

The cadaster is incomplete preventing proper mass valuation. A decade ago Moldova was a leader in Europe in development of mass valuation to generate up-to-date market-value property assessments, with plans to expand the process to different types of properties. However, this project was abandoned for many reasons, notably lack of systematic first registration, which left many properties out of the cadaster.

How Moldova Can Bolster Land Management and Property Taxation

To improve property tax revenue performance, Moldova can use a three-pronged strategy. A country's property tax revenue performance is a function of coverage ratio, valuation ratio, tax liability ratio (tax rates and relief), and tax collection and compliance (including collection and enforcement). Moldova should therefore:

- Improve the coverage and increase the number of properties in the tax base and update their values by current valuation standards. Properties not yet captured in the system need to be evaluated. By supporting coverage and valuation, the country's property tax revenue performance should improve. Updated valuations would also result in a more fair and equitable tax burden in line with market values.
- Assess the effectiveness of current tax rates and relief regime. This would be particularly prudent when the valuations are updated. The Government of Moldova may wish to revise tax rates and relief policies in line with the updated values. Participation of LPAs in such an initiative would be important to the design of a system that takes into account the local revenue and equity effects. The expected impact of such an initiative would be higher property tax yields. LPA participation would also give the process more legitimacy. In addition, higher local tax revenues could reduce the burden of inter-governmental fiscal transfers.
- Subsequently give priority to property tax collection and enforcement. The results of the first two strategies would be undermined by poor collection and enforcement. While Moldova has high rates of property tax collection, the administrative cost of collection is high. To heighten collection efficiency, the Government could assess the bottlenecks that confront LPAs. Enabling mobile payments over the mCloud platform could reduce the administrative burden.

Publicly-owned land and property is an extremely valuable resource for any country. It is needed to enable the delivery of several public goods and services, and it can also generate significant revenues for state and local governments. In order to optimize the utilization of public land, Moldova can reinforce state land management in several ways:

- **Both national and local governments must have an accurate record of the properties they own, and the rights associated with them.** Delineation and registration both provide essential protection from encroachment and an accurate record of what is owned. This is the first step to an effective program for managing public assets. The World Bank-financed Land Registration and Property Valuation Project will fund the delineation and first registration of public land and its valuation, which is an essential first step to developing a national policy for efficient management of state land.
- **It is necessary to resolve outstanding disputes about who owns public land.**

Because some such disputes are likely to emerge during the delineation and registration process, the Public Property Agency may need to create a fast-track mechanism to resolve disputes, particularly between central and local governments.

- **Publicly-owned properties need to be valued so that their rental and lease values can be set with confidence**. It is necessary to determine whether properties are being used to best effect or whether they could serve a better purpose and functions.
- **State land management policy will require building both central and local government capacity**, to better equip officials to make decisions and optimize the utilization of state land and property.

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Strengthening the Asset Declaration and Asset Recovery

Key Message

In the past three years, Moldova has significantly strengthened its requirements for asset and interest declarations by public officials. With the support of the World Bank and other development partners it also overhauled the corruption prevention agency in charge of enforcing the asset disclosure system and other anticorruption restrictions. However, enforcement of the new rules and effective verification of the asset declarations of high-level officials remain an issue. The National Integrity Authority (NIA) needs to demonstrate that it can effectively verify declarations, impose sanctions, and cooperate with other law enforcement bodies that use asset declarations in fighting corruption. The Government and other stakeholders need to address the poor enforcement of the asset declaration regime to ensure that the reform succeeds.
Moldovan authorities have made substantial steps to hold accountable those responsible for the banking fraud. Some proceeds of the fraud in Moldova have been confiscated, but the results in terms of tracing proceeds of the crime through other jurisdictions and securing their return have been very limited.

Key Actions

- Ensure that the new legal framework on asset declaration is fully implemented and that the role of the asset declaration system in fighting against and preventing corruption is credible. Verification of the declarations needs immediate attention and violations must be sanctioned promptly and credibly.
- Issue guidelines for declarants on beneficial ownership of assets, which should be reflected in the declarations.
- Increase the openness of the e-Integrity system by making available to the public use the machine-readable data from asset and interest declarations.
- Devote efforts to tracing in foreign jurisdictions all the proceeds of crime linked to the banking fraud, taking all avenues for international cooperation.

Where Moldova Stands Now

Corruption is still one of the main challenges to the economic and social development of Moldova. In the past three years Moldova has implemented several measures to strengthen its anti-corruption framework. In mid-2016 Parliament adopted important reforms that (i) transformed the National Integrity Commission into the National Integrity Authority (NIA) with a new governance model that increased independence safeguards; (ii) strengthened the asset and interest disclosure system by extending the scope of information to be reported by public officials, transitioning to fully electronic system of submission, strengthening the verification of their wealth, introducing civil confiscation of unexplained assets; and (iii) significantly increased sanctions for conflict of interest and other corruption-related violations.

Translation of the reforms into action is taking a long time. Leadership of the new NIA was selected in a competitive process by the National Integrity Council with a one-year delay (in December 2017). Of 45 integrity inspectors authorized, only 9 have been selected. The NIA has yet to demonstrate its capacity to enforce asset and interest declaration requirements and anti-corruption restrictions. It has verified only a few declarations submitted under the new law.

In 2018, the NIA did successfully launch the electronic e-Integrity system for submission of asset and interest declarations.[60] The system covers about 65,000 declarants, who use government-issued electronic signatures to log in and file their wealth reports. Except for certain confidential data that the law excluded from public access, declarations are then published online for public scrutiny.

In May 2018, Parliament passed a new set of amendments to further strengthen the sanctioning of corruption-related offences, improve procedures for control of assets and

[60] With the support of the World Bank Support to Asset Declaration Project.

interests by public officials, introduce disclosure of the beneficial ownership of companies and other assets as part of the declaration, and extend the disclosure requirement to staff of the National Bank and Financial Markets Regulator, etc. In January 2019, NIA introduced the extended form of the asset and interest disclosure with the request for information on beneficial owners added.

One recent significant challenge to the NIA's work has been the requirement to issue "integrity certificates" to electoral candidates. Tight deadlines, inefficient procedure, and minimal requirements for certificate contents (certificies only that a candidate who has been a public official was not sanctioned for certain corruption-related offences) have undermined NIA's reputation. This requirement jeopardizes NIA operations because the certificates must be provided for local as well as national elections.

The Moldovan Parliament adopted Law no. 180 on voluntary declaration and fiscal stimulation in July 2018. It was criticized by the several other international partners as undermining the fight against corruption and the integrity of the financial sector. Amendments in November 2018 addressed some of the initial concerns by, e.g., excluding from the law's scope current and former public officials subject to the Asset and Interest Declaration Law and their family members. However, comprehensive assessment of the impact of the voluntary declaration law on the asset declaration system and the fight against corruption and money laundering will only be possible if Moldovan authorities share up-to-date statistics (excluding personal information) on the number of declarations submitted, date of submissions, the value of assets declared, and whether any declaration was submitted by a person exempted under the amendments to Article 3 of Law no.180.

How the Asset Declaration System Can Effectively Promote Integrity and Fight Against Corruption

Effectively verify asset declarations and impose sanctions. With recent amendments, the laws on asset and interest declarations are generally in line with international standards and best practice. The priority now must be effective verification of declarations and imposition of any sanctions necessary. The NIA should promptly complete recruitment of all integrity inspectors through an open and merit-based process. It is important to thoroughly train the new inspectors on analysis and verification of assets and interests and confiscation of unjustified wealth.

The NIA is well-positioned to benefit from not only electronic filing but also electronic verification, which can cross-check some of the information declared against information in government registries. In parallel with launching systematic verification of declarations, based on its experience the NIA should also review and reinforce electronic verification.

The Government should ensure that NIA staff remuneration is commensurate with their tasks and scope of authority and that the NIA has a sufficient budget to perform its mandate, including funds for commissioning expert appraisal of assets and maintaining and upgrading the electronic filing and verification system.

The NIA needs to demonstrate that it can effectively comply with the legal requirement that at least 40 percent of the asset and interest declarations it verifies are those of high-level officials.

To ensure that the NIA gives priority to immediate enforcement of the anti-corruption requirements, it is recommended that the agency review the procedure for issuing integrity certificates to electoral candidates. If preserved, the procedure should be automated as much as possible; and information on persons held liable for corruption-related offences should be made public online, which would eliminate the need to issue any special certificates.

Issue guidelines on beneficial ownership and other declaration categories. The provisions requiring disclosure of control over assets through beneficial ownership are commendable. To have full effect, the NIA now needs to clarify their application and provide guidelines to declarants explaining how different property relationships should be reflected in the updated electronic declaration form. Such guidelines could also clarify other requirements that declarants find problematic; that would ensure full compliance and minimize mistakes in filling out declaration forms.

Increase the openness of the e-Integrity system. Information from submitted asset and interest declarations is available on the NIA web-site but is not provided in machine-readable format, which significantly limits its possible use for analytical purposes. Making machine-readable data available will foster its use by civil society, in particular for data analysis and data integration. That will heighten the transparency and accountability of the asset and interest disclosure system in general. The NIA could also improve the search capabilities on its website for asset and interest declarations.

Tracing and recovering assets found abroad needs to be made a priority. The Moldovan authorities have undertaken substantial steps toward holding accountable those responsible for the 2014 banking fraud. In some cases, there have been final convictions for fraud-linked crimes and some of the proceeds from the underlying crimes have been confiscated. The vast majority of the assets recovered, however, were located in Moldova.

More efforts and resources need to be devoted to tracing the proceeds in foreign jurisdictions of crimes linked to the fraud. The Moldovan authorities Asset Recovery Office (ARBI), the national anti-corruption center (CNA), the office for the prevention and fight against money laundering (SPCSB), and the anti-corruption prosecutor's office need to give priority to exploring all international cooperation avenues to trace the proceeds of crime abroad and ensure their ultimate return to Moldova. Among these avenues are Europol, bilateral police-to-police cooperation, and mutual legal assistance requests. Moldovan authorities can build on the previous ARBI and CAN investigations, SPCSB analyses of suspicious transactions reports, and the results of the Kroll audit.

It is urgent that efforts to trace assets in foreign jurisdictions be stepped up—the longer the time since the fraud took place, the lower the chances of recovery. The Moldovan government should ensure that all stakeholders in the recovery process have the resources they need to quickly move the recovery process forward in foreign jurisdictions.

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Addressing Energy Security and Promoting Efficiency

Key Message

Over the last 20 years, Moldova has significantly reformed the energy sector through cost-reflective pricing, independent regulation, and promotion of efficient operations and investments; but because there has been no remedy for the oligopolistic pricing of the main supplier, the results have been suboptimal. Moldova's dependence on energy imports, especially natural gas, exposes it to energy supply security risks. About 95 percent of Moldova's total primary energy needs are met by imports, mainly natural gas. To improve the security of its electricity supply, Moldova should diversify supply sources and interconnect with EU networks. That would also allow it to access competitively priced electricity and set up a competitive and transparent internal electricity market.

Key Actions

- Further improve regulation and energy sector governance to incentivize efficiency and investment. This requires aligning energy regulation to best European practices, including methodologies to recover large investments.
- Diversify electricity supply through renewable energy and by connecting with the European electricity grid to establish a transparent and competitive electricity market in Moldova.
- Increase the share of renewable generation through a robust competitive bidding process that can deliver increased capacity at lower costs while ensuring control over the volume and location of renewable generation in a manner consistent with system stability and tariff affordability.
- Diversify gas supply by finalizing Ungheni and Chisinau pipeline and creating in the regulatory environment a level playing field for different sources of gas.
- Build on the success of District Heating (DH) sector recovery to make the service affordable and competitive. The major DH challenge now is to mobilize funding in modernizing heat and power generation, which urgently needs modernization.
- Complete the Energy Efficiency Options Study to identify financing instruments to improve energy efficiency in the public sector.

Where Moldova Stands Now

Moldova's dependence on energy imports, especially natural gas, exposes it to energy supply security risks. About 95 percent of Moldova's total primary energy needs are met by imports, with natural gas constituting 64 percent of total primary energy supply (TPES). Natural gas is supplied almost entirely from Russia. Moldova has no gas storage capacity and the gas sector is dominated by a single company, Moldovagaz, owned by Gazprom (50 percent plus one share), the state of Moldova (35.3 percent), and administration of Transdniestria (13.4 percent; Transdniestria's share transferred under the control of Gazprom). The transmission network operator is Moldovatransgaz, which is a daughter company of Moldovagaz. The risk of relying on a single source of gas was realized in 2009, when the gas supply was suspended over payment arrears, mainly those of District Heating (about US$150 million in principal debt). Although Moldovagaz still has significant debt owed to Gazprom, for several years it has been able to stay current on payment for gas supplies; but future gas supply to Moldova is still uncertain because of the risks of Ukraine halting gas transit (about 25m^3 billion annually) from Russia. The transit agreement between Russia and Ukraine ends on December 31, 2019. Russia is developing several alternative transit routes bypassing Ukraine (Nordstream 2, Turkstream 1 & 2) to mitigate the threat.

Any significant reduction in transit volume through Ukraine could affect transit through Moldova. This will not only impact residential

and commercial consumers of natural gas but also District Heating (DH) and power generation by both CHPs on the right bank of the Nistru River and by MGRES on the left bank (see below). The outstanding debt also exposes Moldova to the risk of further supply disruption.

The fact that Moldova has few sources of electricity imports also exposes it to risks of security of supply and insufficient competition. About 20 percent of Moldova's electricity demand is currently met by domestic generation, primarily from Combined Heat and Power (CHP) plants operated to meet seasonal DH heat demand. The remaining 80 percent is purchased, some from Ukraine but mostly from the MGRES power plant in Transnistria. Because both domestic CHP generation and the MGRES plant are gas-fired, they depend on imports from Russia.

Over the last 20 years, Moldova has significantly reformed the energy sector to allow for cost-reflective pricing, independent regulation, promotion of efficient operations, and investments. It has also sought to align its law with EU energy legislation and in 2010 joined the Energy Community. However, its power system is physically still part of the Russian Integrated Power System/Unified Power System. Since March 2017, the Government has had in place a formal process for annual procurement of electricity, based on guidelines agreed with the Energy Community Secretariat. This process, monitored by independent observers, injected some transparency into the country's contractual arrangements for electricity procurement, yet without remedying the underlying issue of oligopolistic pricing by Ukraine and MGRES due to the absence of interconnection with EU networks. To improve the security of its electricity supply, Moldova needs to diversify supply sources–including through the promotion of further investments in renewable energy sources–and connect with the EU networks. This would allow it to acquire competitively priced electricity and set up a competitive and transparent electricity market in Moldova.

Progress on promoting energy efficiency and DH modernization has been encouraging but insufficient. Since 1990, Moldova's energy intensity has almost halved, a significant factor being adoption of cost-reflective energy pricing. Still, Moldova uses more than twice as much energy per dollar of GDP than Romania and OECD countries. It has potential for significant energy efficiency, especially in public buildings and residential apartment buildings. On the supply side, DH has long been the least efficient energy subsector in the country, because of its obsolete and badly maintained infrastructure, inefficient management, and inadequate regulation. With World Bank support, since 2009 the DH in Chisinau has launched a comprehensive institutional, corporate and financial restructuring supported by an investment in modernizing its operations and improving its finances.[61] While producing notable results, these efforts need to be pursued to put DH on a solid path of operational sustainability and financial viability.

Significant progress has been made on promoting the diversification of electricity supply through scaling-up investments in renewable energy. Moldovan authorities are preparing, with support from EBRD, necessary improvements to the overall policy framework as well as the documentation required for the competitive procurement of 113MW of renewable energy capacity in 2019 and 2020 through competitive bidding processes. Scaling-up investments in renewable energy will be an important means for Moldova to: meet its climate change mitigation commitments; increase private sector participation in its electricity sector; expand electricity generation capacity and increase the resilience of its electricity sector by reducing dependency on electricity imports and on generation from the Kuchurgan power plant - with solar and wind being the two priority renewable sources to be developed in the short and medium term.

How Moldova Can Ensure Security and Efficiency of its Energy Supply

There is a need to further improve regulation and sector governance to promote efficiency and attract investments. Compared to other ex-Soviet republics, Moldova moved rapidly in 1997 to reform the energy sector by establishing an independent regulator, ANRE. In the 2000s, the country privatized most electricity distribution, which significantly improved technical and financial performance. Regulated energy prices were for the most part adjusted to reflect costs, and the Government has never had to provide massive budget support to the energy sector, unlike the authorities in Ukraine, Belarus, and Central Asian countries. In 2015 the resilience of tariff regulation was particularly tested when the unprecedented banking sector fraud caused a sudden, large depreciation of the MDL; tariff

[61] District Heating Efficiency Improvement Project.

increases for natural gas, electricity. and DH then soared to reflect the much higher costs of imported energy. Delays of nearly a year in tariff adjustments resulted in operators accumulating tariff deficits that still have not been fully recovered. Energy regulation in Moldova must now be aligned to best European practices, with methodologies for effective recovery of large investments.

Diversifying electricity supply by connecting to the European electricity grid is the main precondition for a transparent, competitive Moldovan electricity market. In 2015 Moldova made the strategic decision to connect its power transmission system asynchronously with that of Romania and hence with the ENTSO-E. The first phase consists of constructing a Back-to-Back station at Vulcanesti in the South (financed jointly by EBRD, the EIB, and the EU) and an overhead transmission line connecting Vulcanesti to Chisinau, the main consumption center, and also expanding the high-voltage substations at Vulcanesti and Chisinau. The two projects directly address the Moldova Energy Strategy's main 2020 objectives by: (i) consolidating Moldova's role as an energy transit country; ensuring interconnection to ENTSO-E; and building the institutional framework to support a modern and competitive power market. To enable effective operation of the new infrastructure, the World Bank, with some support from other donors, will also contribute to sector reform initiatives for building modern and competitive institutions through affiliated technical assistance (TA). By creating conditions for future interconnection with the ENTSO-E at an acceptable cost, the Government of Moldova will be creating a solid foundation for achieving the Strategy goals so that the country can diversify its sources of external electric power supply, reduce its almost exclusive dependence on the two current sources of supply, foster competition, and limit increases in electric power prices.

In the short to medium term, the Power Sector Action Plan (PowerSAP) developed jointly by the EBRD, EU, EIB, and World Bank would help achieve those goals; it is therefore imperative that all PowerSAP actions are implemented promptly. It is also important that sector regulation improves to best EU practices and develops instruments for recovering large investments.

Over the longer term, to allow well-informed strategic decisions for longer-term development, Moldova must complete the joint feasibility study (not yet begun) for Moldova and Ukraine synchronization with ENTSO-E. Depending on the study outcomes, a prompt decision must be made to either strengthen the domestic transmission system, supported by creation of a transparent and competitive electricity market to comply with synchronization rigors; or identify and attract new investments in asynchronous interconnection with ENTSO-E to consolidate diversification of supply and establish the electricity market. Whichever decision is made, Moldova must comply with the EU Third Energy Package.

There is a need to build on the success of the District Heating recovery to make the service affordable and competitive. The remarkable success of the DH restructuring since 2014, supported by the Bank-financed DHEIP project, made it possible to reverse a downward spiral for DH services in Chisinau (lack of funds for maintenance and investments resulted in poor service caused DH to lose clients, and thus suffer higher financial losses). The successful recovery included complete corporate restructuring and optimization (by creating Termoelectrica as the single operator); major staff downsizing; reduction of thermal losses and electricity consumption through investments by DHEIP; improvement in service and client-orientation, which attracted reconnections and raised sales volume; and a return to operating profitability, thanks to overhaul of the tariff methodology (the need to increase tariffs was moderated by the higher volume). The major challenge for DH now is whether it can mobilize funding to modernize heat and power generation, the equipment for which is at the end of its operational life and needs urgent modernization to extend it over the medium term and replace it over the long term.

Over the short to medium term, it would be important to complete the Chisinau DH optimization study to identify least-cost short-, medium-, and long-term investment needs. Based on the study recommendations, it will be necessary to identify investment support for modernizing gas-fired CHP plants and converting combined heat-and-power generation to heat-only boilers (HOBs) Vest and/or South to extend the useful life of Source 1 over an 8- to 10-year horizon.

Over the long term, the dialogue and work on DH debt restructuring needs to be resumed to ensure the bankability of replacing larger CHP units with a new modern CHP, and to identify the investments necessary to construct the new CHP.

In addition, investments in increased demand-side energy efficiency also needs to be prioritized. In this respect, the most promising approach to maximize funding for EE investments scale-up would be for Developments Partners to work with local financial intermediaries.[62]

When it comes to gas supply security, Moldova constructed in 2014 the Iasi-Ungheni gas interconnector as a first phase in diversifying its gas supply options and reducing or eliminating its dependence on Gazprom. The Iaşi-Ungheni Interconnector between Romania and Moldova became operational in the first quarter of 2015. The pipeline can only supply a small region around Ungheni which consumes 3-5 percent of Moldova's annual gas consumption. Ungheni and Chisinau, supplemented with a new gas compression station in Romania, could provide much larger diversification benefits.[63] After exploring options for extending the interconnector to the main consumption center in Chisinau, in 2018 the Government issued a concession for construction of the Ungheni-Chisinau gas pipeline to a private investor, the Romanian Transgaz, which committed to finalizing the new gas pipeline by 2021. During the DH Optimization Study, the World Bank launched an analysis of current supply options and regional development trends in order to identify options for diversifying supply, reinforce interconnection with European gas networks, and thus reduce its dependence on a single source of supply.

Over the medium term, it will be important to get the Ungheni-Chisinau gas pipeline operating, explore new options to diversify gas supply, and if feasible strengthen interconnection with European gas networks. From the regulatory point of view, it would be important to implement the unbundling guidelines published by ANRE in 2018 with support from EBRD, in order to establish a level playing field in the gas sector across potential sources of gas.

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[62] The Bank is currently carrying out an Energy Efficiency Options Study which will issue recommendations on sustainable financing and implementation mechanisms for energy efficiency programs.

[63] At the end of 2016, the EBRD and EIB signed a loan agreement to provide financing for the infrastructure which included also the Energy Sector Action Plan. Similarly to the Powersap, the ENERSAP included the key milestones for reform of the gas sector, among which a proposal for a harmonized gas transmission tariff methodology.

Enhancing Water Security and Service Delivery

Key Message

Moldova's water endowment is mostly derived from its surface water, with high reliance on the Prut and Nistru rivers. It is highly vulnerable to climate change: drought and flood risk is rising, impacting growth and productivity. Investments in storage, irrigation systems, and flood protection measures are needed. Ongoing analysis of Moldova's water balance show that water security risks are linked to a lack of infrastructure and management rather than absolute water shortages (except for parts of the south). Understanding the potential impacts of upstream water use will be important to manage such risks. Rural areas are poorly served by drinking water and sanitation services because of low investment, inadequate service delivery, and lack of assistance to rural municipalities. The performance of water utilities needs to improve, and their operations must become more viable financially while ensuring that assistance is targeted to the poorest. Public spending in the sector has declined over the past years and stood at just 0.4 percent of GDP in 2017. Finally, although Moldova has made substantial progress in reforming its water and environment institutions, capacities for integrated water resource management in the river basins need considerable work.

Key Actions

- Consolidate institutional reform, strengthen water management agency and enhance inter-agency coordination to optimize benefits from different water uses.
- Analyze Moldova's water security risks under different development scenarios to assess unmet water demand and prioritize policies and investments.
- Develop a national water and sanitation investment plan and financing framework and secure a multiyear investment budget for water and sanitation that targets lagging rural areas, prioritizes high-impact wastewater polluters, and improves coherence and accountability of existing funds.
- Increase efficiency and cost recovery in urban areas to mobilize and increase the efficiency of funding.
- Implement priority measures of river basin flood and drought management plans, restore watersheds and environmental flows, improve dam safety and introduce risk management tools.
- Identify priority areas for irrigation & drainage investment to accelerate high-value irrigated agriculture with export focus; reform irrigation institutions and improve financial position to reduce fiscal burden.
- Strengthen transboundary governance for the Nistru and ensure that negotiations are backed by evidence on potential impacts of upstream hydropower development in Ukraine.
- Expand information on water resources, including accessibility and sharing of data among institutions; and assess groundwater potential for development.

Where Moldova Stands Now

Water security is vital to Moldova's economic development, environmental sustainability, and social inclusion. Moldova's natural water endowment and vulnerability to climate change, emigration of many of its citizens, urbanization, regional relations, and the state of its institutions, information, and water-related infrastructure—all determine the intensity of water security challenges. While Moldova has made progress in reforming its water and environment-related institutions and harmonized laws and instruments with the EU Water Framework Directive, the country's socioeconomic development is still challenged by suboptimal management of water resources and underperforming water service delivery to its citizens.

Moldova has a relatively limited water endowment compared to regional

benchmark. It's water security risks are linked to high reliance on external flows from the Prut and Nistru, limited infrastructure, and nascent basin level water management, exacerbated by degrading water quality. It is one of the most water-scarce countries in the region with total renewable water availability of just over 3000 m^3/capita/year, only 400 m^3/capita/year of which is from internal resources.[64] Over 90 percent of its surface water stems from the inflow of the transboundary rivers of Nistru and Prut. Compounding the problem is that it only has 738 m^3/cap of storage capacity to help manage extremes in water flow. Groundwater reservoirs are reportedly limited and often not usable due to high mineralization or pollution, posing a public health risks for a large share of the rural population relying on this source.[65] A comprehensive assessment of groundwater resources is missing. In addition to a few large reservoirs, used for both hydropower and thermal cooling of heat and power plants, there are over 5,000 small dams used for irrigation and local drinking water supply.[66] These suffer from siltation and degraded water quality. Often, they are not properly operated and maintained, nor is their water use and safety regulated. Canalization of internal rivers and degradation of watersheds are increasing flood risk. River basin management plans for both the Prut and the Nistru underscore the need to improve the ecological status of water bodies and restore upstream watersheds.

Upstream developments on the Nistru in Ukraine need to be monitored to mitigate potential water security risk. Expansion of hydropower capacity at Novodnestrovsk in Ukraine may negatively affect the flow regime and change ecological habitats. Irrigation expansion upstream in the Nistru and may impact water availability for downstream users, especially municipal and industrial use and irrigation use in the south of the country.[67]

Agriculture is a potential driver of poverty reduction; better irrigation services will thus be essential to accelerate its transition to high-value export crops *(see Note on Agriculture).* Irrigation modernization, along with other measures to reduce volatility due to weather shocks, especially droughts, is critical to facilitate the transition to higher-value agriculture. Conservation agriculture could also be effective to increase water infiltration, reduce losses from soil evaporation and minimize erosion. Previous assessments identified investments in the agriculture and water sectors as high impact to adapt to climate change.[68] Ongoing water balance analysis indicates that lack of infrastructure and uptake of modern irrigation practices hinders this transition, rather than water availability.

Poorly organized irrigation services in part explain the lack of their uptake and general underinvestment in modernization. While 135,000 ha falls under centralized schemes, only 35,000 ha can be irrigated due to dysfunctional status of systems, mostly beyond repair.[69] Of 88 schemes, 11 have been transferred to Water User Associations (WUAs) established under the Water Law. Others remain under management of state-owned enterprises that are reliant on subsidies to cover costs[70] and not all WUAs are performing as expected. Although recent investments in new schemes have had positive impacts,[71] there is still a lack of uptake of irrigation services, little willingness to pay, and lack of investments in on-farm modernization. Along with irrigation investments and management improvements, it will be necessary to address incentives, risk mitigation measures, and access to extension services and to financing. Informal and uncontrolled irrigation from local reservoirs and groundwater remains a challenge for Apele Moldovei, although currently it is improving its water cadaster.

Another unresolved issue concerning the productive potential of water is the use of groundwater as supplemental irrigation. Because large volumes of groundwater are highly mineralized, using it for irrigation may irreversibly destroy certain types of soil. Regulations are being drawn up to control such

[64] FAO Aquastat 2014.
[65] World Bank (2018) Beyond Utility Reach? Rural Water and Sanitation Service Delivery in Seven Countries of the Danube Region.
[66] EIB (2014) Flood Assessment Technical Assistance.
[67] With support from the Swedish embassy, the possible environmental and social impact is being assessed. The results will be critical in informing negotiations to formulate a new treaty. Unlike the current agreement, among other provisions, the new treaty should incorporate elements of good governance for transboundary waters, such as protocols for sharing data, management of the river basin, multi-stakeholder involvement, and transparency.
[68] World Bank (2016) Moldova Climate Adaptation Investment Planning. The ongoing World Bank-supported Water Security Diagnostic and Future Outlook will assess trade-offs and possible synergies in future investments and interventions.
[69] SDA (2018) National Assessment of Irrigation Schemes.
[70] Assets being transferred to the Public Property Agency.
[71] Such as under the MCC Compact.

usage, but state-of-the art exploration and field measurements would be necessary to quantify the potential of treating groundwater for drinking or supplemental irrigation use without negative effects on the environment.

Both drought and floods are major risks in Moldova, impacting economic development and productivity. The estimated annual loss in crop production due to drought is US$20 million, assuming drought occurs every 7 years. Since 1995, Moldova has suffered 11 droughts, and with climate change it is assumed that intervals between them will narrow. In 2010, floods on both the Prut and the Nistru recorded damages to property and income equivalent to 0.15 percent of GDP. The drought and flood management plans now being drafted will incorporate both risk maps and mitigation measures. Also, Moldova has more than 1,200 km of flood defenses, and there are concerns about their safety. Flood protection and mitigation measures have been identified for priority investment, but funds have not yet been allocated.

Moldova faces a challenge of achieving sustainable water and sanitation services for all Moldovans, especially in rural areas where the population is declining. Despite recent progress, Moldova has the widest urban-rural gap and the lowest access across the Danube region,[72] with 90, 79, and 70 percent of the population accessing publicly provided piped water, flush toilets and public sewer connections in urban areas, compared to 31 percent, 13 percent and 1 percent in rural areas, respectively.[73] In rural areas, those connected to services are mostly served by local municipal operators. Despite best intentions of local public administration and local water operators, their access to finance and technical assistance is limited. Decentralization without adequate transfer of resources has left the rural population reliant on limited services or self-supply solutions using shallow wells. This poses an unacceptable health risk to rural households: as of 2015, 82 percent of wells did not comply with chemical or microbiological parameters, such as those for nitrates and e-coli[2]. New regulations for water safety planning have been adopted for smaller systems and the Association of Local Governments is now offering technical support to local self-governments on compliance with laws and regulations. A more flexible approach in allowing various sources to be used for drinking water can help to achieve cost-efficiencies, while maintaining safety standards.

Poor water, sanitation and hygiene situation in social institutions is negatively impacting Moldova's human capital outcomes. A UNICEF survey of the water and sanitation conditions in preschools[74] revealed that around 41 percent of preschools have latrines located in the school yard, not connected to water supply and without washbasins.[75] One third of primary and/or secondary schools lacks basic water and sanitation services and almost one in two has no hygienic handwashing facilities.[76]

While service coverage in towns and rayon centers is better organized through regulated water utilities, there is scope to both improve operations and to expand wastewater services to curb pollution. In urban areas corporate utilities, owned by local governments, are the main vehicle for service delivery. Government has pursued a policy of regionalizing service providers, though results so far have been mixed. Although service access, reliability, and quality are satisfactory, operational cost recovery and non-revenue water still do not meet acceptable benchmarks and there is space for efficiency improvements for a large share of Moldova's utilities.[77] Realizing efficiency gains in urban areas will be necessary to create fiscal space to mobilize public funds and concessional loans to expand services in lagging rural areas and to invest in wastewater, starting with priority polluters of surface water such as Soroca city.

The water sector spending amounted to 0.4 percent of GDP in 2017. Since 2014, there is a decline in spending, and expenditures are inadequate to meet sector needs. Around 80 percent are capital investments, the majority executed at the local level through the National Environmental Fund. In 2017, around two thirds of public spending went to the water and sanitation sector, with remaining funds for

[72] World Bank (2015) Water and Wastewater Services in the Danube Region: A State of the Sector.

[73] From Household Budget Survey (2015), elaborated in World Bank (2018) Beyond Utility Reach? Rural Water and Sanitation Service Delivery in Seven Countries of the Danube Region.

[74] UNICEF (2016) Assessment of Water Quality, Sanitation and Hygiene Practices in Preschool Institutions of the Republic of Moldova.

[75] One in eight children in preschools is exposed to risk of water-related infections due to consumption of water which does not correspond to the standards on nitrates and fluorides content. One in four children is exposed to increased concentration of boron. One in six children is exposed to the risk of contracting acute diarrheal diseases due to the consumption of microbial contaminated water.

[76] WHO/UNICEF (2018) www.washdata.org.

[77] www.danubis.org

irrigation and drainage, water management, and other communal investments. A large share of official development assistance is not recorded in the central government budget. If accounted for, this would augment water sector investments by about 40 percent in 2017.[78] The lack of a comprehensive overview and coherence in the sector investment program is a major bottleneck.

The "Moldova 2030" National Development Strategy calls for more investment in water security. The new country strategy emphasizes Moldova's development challenges in the water sector and proposes measures linked to the Sustainable Development Goals that promote water security. Among them are universal delivery of services such as water and sanitation by 2030; ensuring the right to a healthy and safe environment, protected from flood and droughts; curbing pollution; and offering opportunities for productivity growth through a resilient and adaptive agriculture sector.

How Moldova Can Enhance Water Security

Moldova needs to embark on a more holistic and multisectoral programmatic approach for managing the country's water resources, risks, and services, both rural and urban. Actions going forward need to emphasize:

i) Strengthening of national planning and prioritization for infrastructure and addressing financial viability;

ii) Consolidation and further reform of sector institutions and governance arrangements;

iii) Coordinated implementation of measures at the basin level.

Priority actions to enhance water security need to evolve with the following priorities:

Institutional strengthening and strategic planning

- Strengthen coordination mechanisms and consolidate institutional reform and capacity development of the water management agency including for information management and basin planning.
- Continue Water Security Diagnostic to understand opportunities, risks and unmet water demands of different development scenarios and identify priority interventions.[79]
- Modernize irrigation institutions and improve sector financial position by reforming state-owned enterprises and implementation of the water law and WUA development; increase investments in hydraulic and on-farm measures.
- Increase efficiency of utility sector and expand assistance to service providers in rural areas and local governments.
- Introduce risk management tools for floods and droughts.
- Strengthen transboundary governance arrangements; ensure that negotiations for the Nistru are backed by evidence on potential impacts of hydropower development in Ukraine.
- Expand information on water resources, including accessibility and sharing of data among institutions; carry out assessments on the potential of groundwater for development.

Investment and budget management

- Develop a national water and sanitation investment plan and financing framework.
- Review public funding and secure a multiyear investment budget that is inclusive of rural areas, improves coherence of existing funds and supports accountability.
- Invest in wastewater treatment in priority locations to stop pollution of surface water.
- Identify priority areas for investment to expand irrigation of high-value agriculture.
- Informed by river-basin flood and drought management plans, increase funding of priority measures; restore watersheds and environmental flows; and improve dam safety.

Incentivize private sector investments and climate-conscious behavior

- Ensure complementary measures in agriculture to encourage farmers to invest in modernization and adoption of climate resilient agricultural practices;
- Explore eco-based tourism along Prut and Nistru linked with river restoration;
- Promote citizen engagement in the water sector through various mechanism, including campaigns and educational and media actions.

This Policy Note was produced by the World Bank to inform policy debate in Moldova. This note was prepared by Susanna Smets, Elvira Broeks, Felicia Pricop, and Irina Capita with contributions from Larisa Virtosu (UNICEF), Ulrich Kleppmann (German Embassy), and Carolina Tissot Baranzini (Swiss Cooperation Office).

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[78] Analysis based on BOOST data, and OECD database.

[79] This diagnostic is supported by World Bank and expected to be finalized by September 2019

Improving Efficiency of Road Sector Financing

Key Messages

Ensuring adequate transport connectivity and mobility is vital for economic growth and development. The National Transport and Logistics Strategy 2013–22 improved decision making and strategic planning in Moldova's transport sector. By 2017, the network condition had improved significantly. However, the quality of the roads is still inadequate.

The roads subsector consumes the largest part of the transport budget. Every year Moldova spends about 1 percent of GDP to maintain its road network. Yet maintenance of primary roads has been substantially underfunded and the cumulative impact is worrisome. The efficiency of the financing for roads can be strengthened by improving administration of the Road Fund.

Key Actions

- Prepare necessary amendments to the legal framework to ensure any new investment in the sector is accompanied by adequate maintenance funds.
- Modernize maintenance practices by introducing the mid-term and performance-based maintenance contracts while limiting the current contracts to one year.
- Enable the Road Fund allocation based on long-term maintenance planning.
- Rigorously prioritize road investments considering the significant existing IFI-financed contracts, which are progressing slowly given the limited capacity of State Road Administration and limited local resources (labor and materials).
- Increase the capacity of local contractors to execute complex rehabilitation projects, and prepare them for performance-based maintenance contracts.

Where Moldova Stands Now

Moldova currently has a reasonable amount of transport infrastructure: one international airport, one primary international river port, 5,850 km of national roads, 3,494 km of local roads, and 1,157 km of railway tracks.

However, the condition of the roads and efficient management of the infrastructure is far from acceptable. Moldova's roads carry 96 percent of passenger traffic and 74 percent of freight; rail carries just 1.5 percent of passenger traffic and 25 percent of freight. Currently, about 1.5 million passengers use Chisinau Airport and about 119,000 tons of cargo are transshipped through the Giurgiulesti Port.

In recent years national roads have received a large amount of investment, mainly financed by international finance institutions (IFIs), which have committed €429 million for national road rehabilitation. The World Bank has contributed another US$80 million to rehabilitate 150 km of local roads.

Allocating sufficient funds to local and rural roads is an anti-poverty priority. Almost two-thirds of Moldovans live in rural areas. However, such investments should be done in an efficient manner. Since most jobs in Moldova are in urban areas, adequate transport connectivity and mobility is crucial for economic growth and development. For instance, it has been proved globally that limited access to transport decreases the probability that women will participate in the labor market by 16.5 percent, which can have significant impact on the economy.[80] Policymakers must also take into account different mobility needs and travel patterns.

Roads consume the largest part of the transport budget. Moldova spends about 1 percent of its GDP annually to maintain the road network. Because the Road Fund represents a large share of public investments, efficient and transparent use of its resources is critical.

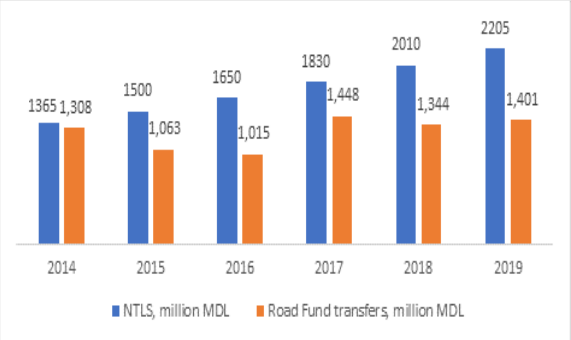
Over the last four years, the condition of the road network has seen major improvement. In

[80] International Labor Organization.

2013, only 26 percent of the network was assessed as in good or fair condition, but by 2017 this had increased to almost 66 percent.[81] However, in 2018 the Global Competitiveness Index[82] compiled by the World Economic Forum, ranked Moldova at 130 out of 140 countries for road quality—down 23.6 points from 2017.

The improvement and proper maintenance of the Priority Road Network of Moldova is a major objective of the National Transport and Logistics Strategy (NTLS). The Strategy provides comprehensive estimates of the spending required to maintain the national network for 2013–22. However, the funds transferred to the Road Fund have been considerably less than the Strategy targets (Figure 1).

Figure 1. Road Fund Financing, NTSL and Road Fund Transfers



Source: State Roads Administration,

Decentralization has affected administration of road infrastructure. In 2017, management of 3,494 km of local roads was transferred from the State Road Administration (SRA) to local public authorities (LPAs). The transfer of the assets has been complemented with about 42 percent share of the Road Fund resources to be transferred and used directly by LPAs to maintain and repair local roads.

Maintenance of the primary road network has been substantially underfunded and the cumulative impact is troubling. The economic cost of poor maintenance is borne primarily by users and service providers in the form of higher operating costs. For example, when a road is allowed to deteriorate from good to poor condition, every dollar saved on maintenance increases vehicle operating costs by $2 to $3.[83] Maintenance is also important to investment strategy because the loss in capital value of infrastructure caused by lack of maintenance can significantly exceed the cost of the maintenance required to maintain that value.

Table 1. Road Fund Execution, 2015-19

Million MDL	2015	2016	2017	2018	2019 projection
Road Fund Revenue Collection	1,063	1,015	1,447	1,330	1,400
Road Fund Budgetary Allocations	1,038	1,000	1,079	1,072	1,077
Road Fund transfers	641	1,000	1,779	1,682	1,790
Transfers to SRA	641	1,000	1,079	972	1,024
Transfers to LPAs	----	----	700	710	766
Arrears		**229.6**			**100**

Source: State Roads Administration.

The Government has in 2018 launched a massive program for maintenance and current repair of selected local roads—the Good Roads for Moldova Program (Table 2). About 1,200 km of local and community roads and streets are in the program. Although LPAs oversee management of local and community roads, the State Roads Administration was coordinating the program, which diluted its capacity to manage the primary network; meanwhile, Road Fund financing for the core network has been reduced. It is advisable for investment in roads to be rigorously prioritized, considering that the significant IFI-financed contracts are progressing slowly and the SRA has limited capacity.

Table 2. Good Roads for Moldova Program

Mill MDL	2018, approved budget	2018, executed budget	2019, projections
Road Fund funding allocated for Good Roads for Moldova Program[84]	492	492	500
Additional State Budget allocations for Good Roads for Moldova Program	1,200	1,200	1,000

Source: State Roads Administration.

The Road Maintenance Reform Action Plan has brought some improvements. The 2012 Government Decision Nr. 244 on "Reform of the

[81] In 2017, 3,494 km of local roads were transferred from the State Road Administration to local public authorities to manage; this has influenced the figures related to condition of the roads

[82] http://reports.weforum.org/global-competitiveness-report-2018

[83] Notes on the Economic Evaluation of Transport Projects, World Bank, January 2005

[84] Annex 2 of the Government Decision nr.225 from 12.03.2018

Road Maintenance System" was the legal basis for the reorganization and provided an action plan for 2012–17. Consolidation of the 38 district road maintenance enterprises into 12 new companies, which began in 2011, is now completed and the 12 new companies are fully operational. This should help reduce operating costs.

How Moldova Can Enhance Road Sector Financing Efficiency

To advance the road maintenance reform action plan, the following actions are recommended:

- **Prepare necessary amendments to the legal framework to require that any new capital investment in the sector be accompanied by adequate maintenance funds.** Predictable Road Fund transfers would permit the Ministry of Economy and Infrastructure and SRA to manage road assets strategically. Historically, most of the funds were allocated starting in October—too late in a year to allow the SRA to plan efficiently. Late allocation also creates a disproportionate workload near the end of the year and underutilizes funds because it misses the construction season. As soon as they are collected, the funds must be transferred for utilization. A mechanism should also be introduced to transfer unutilized resources of the Road Fund into the next budget year. Amending the law to create a dedicated Treasury account exclusively for Road Fund transfers is recommended.

- **Modernize maintenance practices by using medium-term and performance-based contracts.** Two actions are necessary to assure continued progress in road maintenance: (i) introduction of mid-term maintenance contracts, which will allow for the efficient planning and execution of maintenance activities (current contracts are limited to one year); and (ii) introduction of the performance-based maintenance contracts, which are usually for 3 or more years.

- **Allocate Road Fund resources based on a long-term maintenance plan.** Sound maintenance management and methods will sustain the utility and economic effectiveness of road assets. That involves life-cycle planning of maintenance resources and efficient delivery of the work. Maintenance investments should be prioritized within an integrated Road Asset Management System (RAMS).

- **Build up the capacity of the local construction industry.** For efficient road maintenance and construction in a competitive market, there is a need for contracting firms of all sizes to undertake projects ranging from minor maintenance to large-scale major road construction. To achieve the full benefits of using the private sector, the workload contracted must be of adequate size, and realistic competition between local contracting firms offering competitive prices needs to be established. Experience with work on current IFI-financed contracts in Moldova demonstrates that the country's local contracting capacity is inadequate.

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Strengthening Environment Protection and Disaster Management

Key Message

Moldova's sustainable development is adversely impacted by natural hazards that with climate change will become more frequent and more severe. Additional issues are inadequate financing of the environmental sector, inefficient governance, land and forestry degradation, and poor management of waste and chemical substances. While the legislative approximation with the EU directives and regulations is underway, enforcement is poor because the institutions necessary are inadequate or even nonexistent. Moldova requires action on climate resilient development.
Moldova has rich soils, but continuous land degradation is eroding the productivity of its agriculture. Low forest cover magnifies soil erosion, floods, and landslides, and results in large areas of degraded land. The country's forests are not well-managed, and there is considerable illegal harvesting of timber and firewood. Few areas are protected; their expansion would help conserve natural ecosystems. Moldova needs to be better prepared to respond to climate disasters; that will entail building up subnational command structures and facilities and purchasing modern equipment, promoting up-to-date policies, improving warning systems, and increasing awareness of environmental threats.

Key Actions

- Continue harmonizing environmental legislation and regulation with the Association Agreement and the Chapter on Technical Barriers to Trade of the DCFTA.
- Continue reforming the Environmental Agency to make it fully functional and create an agency to manage chemical substances.
- Implement the Forest Institutional Reform Strategy, prepare a National Program for participating in the EU4Environment program and ensure efficient management of community forests. Prepare a long-term institutional and human capacity forestry program and start reorganizing forest-related institutions. Design and launch a long-term program on forest regeneration and rehabilitation to ensure forest sustainability. Plan an agenda for forestry research to provide direction and address the possible impacts of climate change.
- Prepare and implement a national wood energy program.
- Adopt an action plan for expanding protection to at least 8 percent of territory, which would include building institutional capacity to manage protected areas.
- Strengthen natural disaster preparedness and response.
- Consider resilient rural and green urban development.
- Operationalize the EPR scheme for hazardous, plastic and medical waste.

Where Moldova Stands Now

Moldova is one of the countries in Europe and Central Asia that is most vulnerable to climate change, based on many social and economic indicators, and it is confronted by numerous adaptation challenges.[85] Climate models predict future rises in mean temperature of more than 2 degrees by mid-century, and a significant decline or a slight increase in precipitation, depending on the region. Climate change is expected to heighten the frequency and intensity of most extreme events and such natural disasters as droughts and floods, hailstorms, torrential rains, late frosts, and heavy winds. It will also present new climate-related pest and disease challenges.[86]

Climate change is already having widespread

[85] According to the widely used Notre Dame Global Adaptation Index (ND-GAIN, http://index.gain.org/), which summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience, Moldova ranks as the fourth most climate vulnerable country in Europe and Central Asia (behind Turkmenistan, Uzbekistan and Tajikistan) (January 2017).

[86] World Bank. 2016. Republic of Moldova – Moldova Climate Adaptation Investment Planning Technical Assistance. Report No: ACS18562.

impacts. The future projected climate warming will only create multi-dimensional risks, which will affect country's economy and society. Effective response can combine adaptation and mitigation, and the Sustainable Development Agenda 2030 is a window of opportunity to identify operational approaches to tackle climate change. The country needs to start investing in transforming its industries, energy, transport, agriculture and forestry systems.

Environmental laws are not being enforced. In recent years Moldova's Parliament has adopted several laws that are very important for the environment (e.g., on waste, use of chemicals, EIA, and SEA). They have yet to be enforced, and so far, they have had little impact on Moldovan quality of life. In June 2018, the Government approved creation of the Environmental Agency, which is responsible for implementing the environmental laws; and for issuing permits and authorizations, environmental assessment and monitoring, and management of the shared environmental information system. The agency is not yet fully functional.

Agricultural sector is acutely sensitive to weather and periodically it is seriously affected by droughts and other weather phenomenon. The severe drought in 1994 caused a decline of 30 percent of GDP and 26 percent in agricultural output.[87] The 2007 drought, with estimated agricultural losses of about US$1 billion, accounted for 23 percent of Moldova's GDP.[88,89] Climate change is expected to exacerbate existing challenges in the sector: for instance, land degradation and soil erosion are projected to worsen—in 2015 about 37 percent of all agricultural land was already degraded to some degree; the productivity of most crops could well decline by 10–30 percent. The 2015 summer drought, which was unprecedented in its severity and the amount of territory affected, devastated both agriculture and cattle herding and is thought to have contributed to a rise in rural poverty, especially among small to medium-size farmers.[90] By 2050, the projected annual cost to agriculture of climate change is about US$700 million.[91]

Continuous land degradation is causing a decline in agricultural productivity. Moldova has agricultural land resources that are critical to the livelihoods of many, including highly productive black soils (about 70 percent) and a high agricultural utilization rate (more than 75 percent). However, low forest coverage, poor land management, extensive use of pesticides and other chemicals, and use of saline ground water for irrigation all exacerbate soil erosion, floods, and landslides. As a result, large areas of agricultural lands are totally degraded, and agricultural productivity has seen significant decline. Land privatization and parceling, lack of crop rotation and other anti-erosion measures, and failure to use best practices for soil conservation have complicated the prospects for efficient management of land resources (see *Agricultural Policy Note*).

The present total cost of inaction on climate adaptation is an estimated US$600 million, equivalent to 6.5 percent of GDP. By 2050, the direct costs of climate change (the decrease in production plus the increase in damage and the costs of prevention) are expected to be at about US$1 billion—70 percent of which will be incurred by agriculture, which faces the biggest challenges. The estimated cost of implementing the CCA Strategy and its Action Plan is US$200 million, while the annual cost of inaction would be US$61 million. As yet, climate change adaptation measures are not part of the Moldovan budget. Climate change will become a significant problem for Moldovan forests as well. During the 2010–39 period, forest health will worsen considerably: in the north, for instance, areas susceptible to die-back will expand by about 15–25 percent.[92] The annual opportunity costs of inaction are an estimated US$40 million and will gradually increase over the next few decades.

Weak forest management aggravates the problems of Moldova's forest resources. Although forests cover just 12 percent of Moldova's land area (such a small amount

[87] World Bank 1995. Moldova Agriculture Sector Review. Report No. 12581-MD. World Bank, Washington DC.

[88] UNECE. The Republic of Moldova: Third Environmental Performance Review. 2014 http://www.unece.org/index.php?id=35481

[89] UN. 2012. Moldova Situation Report – 2012. (http://www.un.md/drought/2012 /Moldova Drought SitRep2012_1.pdf)

[90] FAO drought assessment.

[91] Calculated from the difference in future production under the climate change and no-climate change scenarios (roughly US$430 million—US$235 million from crops and US$195 million from livestock) and the portion of the increase in damages and losses that can be attributed to the increased frequency and extent of extreme events (roughly US$270 million).

[92] By 2040–69, the deterioration will be spreading southward. The impact is expected to be greatest in the south, which already has the least forest cover, at 8 percent of land area, followed by the center, which has the most forests, 209,000 ha, or 15 percent of total land area.

contributes to soil erosion, floods, and landslides and results in large areas of degradation), the rate of illegal timber and firewood harvesting is very high—official estimates put the annual harvest at about 400,000 m^3, but total annual consumption of fuelwood is estimated at 1.1 million m^3. The result can only be continuous, serious forest degradation.

The small area covered by protected areas in Moldova requires prompt action to better conserve natural ecosystems. It is urgently necessary to act on biodiversity conservation strategies by expanding and consolidating the protected areas in the north and center. This will make it possible to achieve the 2020 target of 8 percent of total Moldovan territory specified in the Second National Biodiversity Strategy and Action Plan. For the long term, adaptation measures for sustainable development should be based on an integrated landscape approach to protecting biodiversity.[93]

Climate and disaster risk management and emergency response need reinforcement. This requires bolstering sub-national command structures, facilities, and equipment, and ensuring that local first responders, authorities, public services, and businesses are well prepared. It will therefore be necessary to modernize policies and institutions as well as raise awareness, all supported by better warning systems, cross-sector and cross-border collaboration, and local action. While the State Department for Emergency Situations has been improving, its technology is still outdated and connections and coverage in some parts of the country are minimal.

Moldova follows a global trend of growing urbanization[94] with cities increasingly contributing to environmental degradation. In Moldova 43 percent of the population lives in urban areas, and by 2030, it is expected that only Chisinau will host over 50 percent of all urban population putting even more pressure on city's infrastructure and services, while also creating considerable social and environmental challenges. The municipalities have the greatest impact on environment. During 2000-13, the biggest increase in Moldova's greenhouse gas emissions, both in absolute and relative terms, were observed in the transport sector, followed by the residential sector and the commercial and public sectors. There is an obvious need to improve current urban practices, focusing inter alia on sustainable transport and mobility, utilizing innovative, climate-smart technologies, engaging public and private sector in planning and implementation of green urban solutions.

Moldova has made significant progress in setting the regulatory framework necessary for implementing a modern integrated waste management system based on prevention and a circular economy inclusive of chemical waste as well as addressing persistent organic pollutant (POPs) stockpiles and waste legacies. However, the country faces significant implementation barriers. Data available indicates that in 2016, waste generation in the country was 1.4 million tons consisting of 1.1 million of mixed municipal solid waste and the rest of hazardous waste based on EU/Basel Convention classification.

How Moldova Can Better Protect the Environment and Manage Disasters

Short-term actions:

- Recognize Moldova's increasing climatic risks in national policy documents, and adequately fund them; perhaps undertake a follow-up to the cancelled Climate Adaptation Project, with activities that reflect up-to-date priorities.
- Implement the Forest Institutional Reform Strategy and separate the management, control, and regulatory functions, and enhance the regulatory and monitoring capacity of the forest authority.
- Submit a request for a new GEF 7 project that will scale up sustainable land management activities so as to prevent land degradation, increase carbon stocks above and below ground, intensify soil productivity, and reduce pollution of the soil by agricultural chemicals.
- Adopt the Air Protection Strategy.
- Clarify the functions of the subordinated institutions within the purview of the Ministry of Agriculture, Regional Development and Environment, in the context of further development of the Environmental Agency.
- Reform the National Environmental Fund to enhance its transparency and effectiveness and clarify its focus on pollution prevention.
- Instruct both central and local public administration on the responsibilities as they result from the Law on Environmental Impact Assessment, Law on Strategic Environmental Assessment, including the assessment of health impacts and cooperation with the health administration.

[93] Moldova's potential for landscape restoration has been estimated at about 300,000 ha, of which 125,000 ha are severely degraded agricultural land; 10,000 ha agricultural shelter belts; and 70,000 ha buffer zones for rivers, lakes, and other types of land.

[94] It is expected that global urbanization will rise from 47 percent in 2010 to 60 percent in 2030 (UN Habitat).

- Consider partner institutions support for supporting climate actions in line with resilient development objectives assumed under the Paris Agreement through promotion of climate-smart agriculture and forestry practices in communities, targeted climate education in schools and further climate change mainstreaming into sectoral policies.
- Scale up biodiversity mainstreaming into territorial and urbanization plans (started under the GEF 6). The successful practice of developing passports, more detailed information and respective monitoring of species in nature sites (Ramsar sites currently being formed and those protected areas planned in the future) should be continued and replicated.

Medium- and long-term reforms:

- Increase funding for environment; and create effective mechanisms for a comprehensive reform of pollution charges.
- Further improve the inter-sectoral cooperation and awareness of environment as a cross-cutting issue; mainstream environmental protection requirements into other sectors and fields.
- Build up the capacity of the Ministry of Agriculture, Regional Development and Environment, and other relevant institutions to adopt and enforce harmonized laws; and introduce modern management practices.
- Support the Environmental Agency to make it fully functional and ensure that it is adequately funded in the budget.
- Create an agency for the management of the chemical substances and ensure an effective implementation of the Law on Chemical Substances.
- Transpose the Industrial Emissions Directive in line with provisions of the Association Agreement and engagements under Energy Community.
- Prepare a national program for participating in the EU4Environment: Eastern Partnership – Forest Program with a strong focus on strengthening country's capacity to control illegal logging and ensuring efficient management of community forests.
- Prepare and launch a long-term institutional and human capacity program for forestry. Use a GIS-based forest management information system to support monitoring.
- Enhance Moldova's technical capacities by investing in special agricultural equipment for soil preparation, planting, and combating soil diseases and forest pests.
- Prepare and launch a long-term afforestation/reforestation program, establishing fast growing wood energy plantations, and rehabilitate or create agricultural shelter-belts.
- Draw up a plan for expanding protected areas to cover 8 percent of the country and for building institutional capacity to manage them.
- Strengthen natural disasters preparedness and response by improving sub-national command structures and facilities and purchasing modern equipment; updating policies and institutions; increasing public awareness, and attention to programs.
- Enhance the national dialogue process related to climate change adaptation and mitigation, including involvement of LPAs and private sector.
- Implement the Government Action Plan for DCFTA Chapters 16 and 17 of the Association Agreement and Technical Barriers to Trade Chapter.
- Prepare and carry out a national wood energy program for a target afforestation area using short rotation, high-yielding forest energy crops that are suited to the projected climate change impacts. This could dramatically increase the supply of legally-sourced fuelwood and alleviate the pressure on forest resources from illegal harvesting.
- Develop a strategic forestry research agenda to address possible impacts of climate change. Inventory and mapping of biodiversity especially at PAs level is also an important area for research while applied GIS research would facilitate a cross-sectoral landscape approach to forest research.[95]
- Operationalize EPR scheme for WEEE, plastic and medical waste.
- Continue elimination of POPs stockpile legacies.

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[95] Moldova Climate Adaptation Investment Planning TA 2016; Forestry Policy Notes 2015; Moldova Soil Conservation and Biocarbon Fund Community Forestry Development; and National Strategy on Biodiversity 2015-2020.

Strengthening Education Outcomes and Skills

Key Messages

Over the past decade, Moldova has made progress in improving the efficiency of its primary and secondary school network. However, challenges related to equity, access, inclusion, quality and relevance of education remain. Comparing to other countries in the region, access to preschools and the quality of primary and secondary education remain low. These challenges are especially daunting for children with a disadvantaged background. Skills mismatches represent a major obstacle for both employers and graduates, especially for youth making the transition from school to work. Nevertheless, recent qualitative research identified that youth face not only skills challenge, but also lack of opportunities and resources.

Key Actions

- Continue with the school and university network optimization.
- Increase access to preschool education in rural areas and for disadvantaged children.
- Improve the learning outcomes of primary and secondary students.
- Ensure that higher education and vocational education and training (VET) are relevant to the labor market by improving curricula and involving employers in reviewing occupational profiles and qualification standards.
- Give more attention to internal and external quality assurance mechanisms, such as professional accreditation of higher education programs.
- Incorporate performance indicators in vocational schools and university financing mechanisms.
- Make VET more demand-driven and practice-oriented, thereby enabling students and job seekers acquire skills needed on the labor market, and strengthen the role of the private sector in delivery of VET.
- Improve teacher training and adapt teaching methods to provide students with relevant life- and job-skills.
- Formulate a national lifelong learning strategy and promote continuous learning for all Moldovans.

Moldova's Education System: Status and Major Challenges

Although there has been some progress in the preschool enrollment rate in recent years, access to preschool in rural areas needs special attention. In 2017 net enrollment for children aged 3 to 6 in rural areas was 71.7 percent. Young Roma children and children with disabilities are least likely to be enrolled. The decentralization process, which shifted the responsibility for financing preschools from central to local public authorities, resulted in severe underfunding of preschool education and no facilities in 250 localities.

In the past decade, Moldova has improved the efficiency of its primary and secondary network, but challenges remain with regard the quality and relevance of education. The country has been working since 2014 to optimize its school network and make the system more efficient. As a result, the average student-teacher ratio for grades 1–12 has risen from 10.8:1 in 2012 to 11.9:1 Nevertheless, there is room for more progress in this area: While the school-age population (ages 6–18) has fallen by 47 percent since 2000, the number of primary and secondary schools has gone down by only 21 percent (330 closed and reorganized).

With internal efficiency of the educational system improving, the priorities now should be its quality and equity. On quality: 40 percent of Moldovan students lack basic cognitive skills. Though student learning outcomes in Moldova, as measured by the Program for International Students Assessment (PISA), have improved since 2009, 50 percent of 15-year-old students still do not have basic proficiency in mathematics; nor are 46 percent proficient in reading or 42 percent in science. Where equity is concerned, the PISA results in science reveal a gap equivalent to almost 3 years of schooling

between high- and low-income students of 15 years of age. The gap between students living in rural and in urban areas is equivalent to 1.5 years of schooling. Moreover, despite robust progress on inclusion, resulting in a four-fold increase in the number of children with disabilities or special education needs in regular schools since 2012, still some 709 children with disabilities are in special schools. For those in mainstream schools, at the moment, major challenges for successful inclusion and quality learning outcomes are teachers' limited capacities to provide efficient individualized support and schools largely lack relevant technologies for such a support.

In general, the education infrastructure in Moldova is suboptimal. This is especially true for accessibility for children with disabilities, the physical condition of learning spaces, and access to water and sanitation. Few kindergartens are prepared for children with disabilities, rural schools often lack indoor toilets, and vocational schools struggle with outdated learning environments. More than 60 percent of Moldovan children are at risk of illness because of the poor quality of the water in their schools.

A disproportionate number of young Moldovans (ages 15– 29) are not in education, formal employment, or training (NEET): In 2017 this proportion reached 29 percent, which was more than double the EU average of 12 percent. An estimated 9 percent of Moldovan adolescents (ages 15–19) and 30 percent of youth (20–24) were NEET with pronounced rural-urban and gender discrepancies: 35 percent of youth in rural areas and 34 percent of girls were NEET.[96] The longer they are idle, the less employable they become. Currently there are no programs to tackle the needs of NEETs and to support their integration on the labor market.

In vocational education and training (VET), recent progress in optimizing the network of institutions has not yet improved youth employability. Between 40 and 50 percent of VET graduates choose not to look for work or have been discouraged from participating in the national labor market. To address this issue, the government introduced in 2014 a pilot dual VET (dVET) programs with employers' direct involvement in the development and delivery of programs. By 2018, 14 percent of VET students chose the dVET path, while employability of dVET graduates has been higher.

Enrollment in higher education in Moldova has been declining for 13 years. At present, only 65,543 students are enrolled in universities, 84 percent of them in public institutions. In just two years, the university student population has fallen by almost 20 percent. The country currently has 29 higher education institutions, of which 19 (65 percent) are public. Almost all have less than 2,000 students, and only two have more than 10,000 students enrolled. It is projected that by 2020 universities will lose another 8 percent of their students.

Moldova's higher and VET education systems do not meet labor market demands. Though university graduates have better employment and earnings prospects than those with less education, they lack many job-specific skills: for instance, about 43 percent of those university graduates who are employed report a mismatch between their education and their jobs. Firms believe that curricula are outdated and irrelevant to occupational profiles.

Skills mismatches are a major challenge for Moldovan employers. Limited availability of skilled workforce reportedly ranks third among constraints to expanding their businesses and tend to force firms to reconsider their development plans. For about 40 percent of Moldovan firms skills deficits are a major or severe constraint on growth—one of the highest percentages in the Europe and Central Asia region. Private sector companies are already contributing to skills building programs and their financing, but there is need for a robust mechanism to scale up these efforts.

Labor market information for students and job-seekers is weak. If unaddressed skills-related decisions will remain deficient and will exacerbate the extent of future skills mismatches.

The Government is working on a lifelong learning strategy. With the population shrinking and an expected reduction in the share of the working-age population, it is vital that Moldova's workforce be equipped with adequate skills. A well-developed lifelong learning system could make a significant difference.

Developing Moldova's Human Capital for Growth

To address access challenges to preschool education, a new funding formula should be introduced and implemented. It needs to be supported by legislative changes that would require local authorities to adequately finance preschool education and ensure universal access; including for children with disabilities, Roma children, and children from rural areas.

[96] National Bureau of Statistics 2018.

In primary and secondary education, the emphasis should be on quality and equity while continuing to address school and university network optimization. In addition to continuing efficiency reforms, current policies should be directed to strengthening the application of the competency framework of curricula and improving the quality of teaching, teaching conditions and the students', teachers' and school assessment systems to ensure equal access and quality education services for all children. Pre-service and in-service teacher training should be adjusted to align with international best practices, including by developing soft skills and competencies to support children and young people transition into adulthood. To further strengthen quality of education and in line with the provisions of the National Strategy on Strengthening Parental Skills 2016-22, stronger considerations must be placed on engaging parents as partners of teachers contributing to strengthened learning outcomes for children, adolescents and youth.

The VET system needs to be modernized with an emphasis on building digital skills. The curricula should be increasingly demand-driven and practice-oriented. In this regard, the cooperation between the VET schools and the private sector should be further strengthened, including through options like dVET, whereby more than half of the training is carried out in companies. The ICT programs offered in vocational schools should be modernized and incentivized. Second chance education and e-learning programs should be developed and offered to early school leavers, children and adolescents with disabilities, and those from disadvantaged families to increase their chances of inclusion and employability.

Policies for higher education should give priority to enhancing program quality and labor market relevance. Occupational profiles and qualification standards should be drawn up with the participation of employers. Internal and external quality assurance mechanisms, such as professional accreditation of programs, should be developed and involvement of employers and employees in the education process strengthened. Internationalization should be recognized as a potential force to raise the quality of education programs. University financing mechanism should be based on performance indicators. These recommendations are relevant for the VET education as well.

Lifelong learning should be incentivized to address the challenges confronting both the employed and the unemployed. Universities, and VET institutions, which currently have no significant role in the lifelong learning market, should be given incentives to provide short-term adult training programs, especially considering the declining student population.

Labor market information for students and job-seekers need to be enhanced. Career guidance and professional orientation services should be strengthened, and the policy-making would benefit from accurate measurement of skills demand and supply. There is need to support the modernization of the NEA and strengthening career advisory services for students to connect supply and demand.

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Enhancing Labor Markets and Closing the Gender Gap

Key Message

An aging population and a shrinking labor force may be dampening Moldova`s prospects for sustainable growth. Low rates of both labor force participation and employment accentuate the demographic risks. Though the gender difference in labor force participation is relatively small, the share of women who are inactive has been on the rise. If it is to respond effectively to the demographic challenge, Moldova needs a steady increase in both labor force participation and labor productivity. To increase participation, aside from adopting policies to promote competitiveness and job creation, the country must also review and perhaps revise labor regulation, taxation, and productive use of remittances. Investing in education and skills-formation is at the core of improving job quality and preparing Moldovans for productive jobs.

Key Actions

- Reform the Labor Code to reduce the rigidity of firing and hiring and facilitate non-standard flexible work arrangements while ensuring social protection during unemployment.
- Implement a specific regulatory and tax treatment of internships and apprenticeships for youth.
- Revisit the rules for maternity and parental leave and make available more child care services for children under 3.
- Facilitate worker internal mobility by detaching benefits from location.
- Reduce the costs and increase the benefits of formalization, e.g., through online registration of workers and better access to credit for formal firms.
- Abolish the list of banned jobs and professions for women, adjust the curricula and support women entrepreneurship.
- Strengthen policies and regulation to motivate training providers to improve their programs for skills formation and upgrading, and nurture private sector contributions to skills formation. Implement the system for recognition and validation of non-formal and informal learning, particularly for returned migrants.
- The National Employment Agency needs to undertake new active labor market programs, e.g., via operational and technology changes required for more efficient service delivery.
- Strengthen the role of the private sector in labor market intermediation.
- Empower the Labor Market Observatory to produce gender-desegregated labor market and training information to enhance career guidance and better align education with labor market needs.

Where Moldova Stands Now

An aging population and a shrinking labor force are serious threats to the country's development. Moldova, one of the fastest-aging countries in Europe, has been suffering losses of population and labor force because of low and decreasing fertility and losses in high net emigration. By 2060 the population is expected to shrink by 29 percent, or 1.2 million people, and the share of people 65 and over will triple to 30 percent. Moreover, the low labor force participation (LFP) rate has made Moldova's dependency ratio the highest in the region as measured by the ratio of inactive to active adults.[97]

Moldova`s LFP and employment rates are far

[97] World Bank. 2017. A Human Rights-Based Approach to the Economic Security of Older People in Moldova.

below the ECA regional averages: In 2017, only 42.4 percent of the population over 15 years were in the labor force, and only 40.6 percent were employed (women: 38.1 percent; men: 43.1 percent).[98] The low employment rate is both a cause and a consequence of high emigration. In 2013, conservative official statistics stated that about 14 percent of men and 8 percent of women of working age were employed or looking for jobs abroad. Between 2000 and 2014 the share of economically active Moldovan adults (aged 15 and up) who had or were looking for a job abroad rose from 8.4 to 27.7 percent. With adjustments for international migrants,[99] the Moldovan LFP and employment rates exceed 50 percent, though they are still lower than in most transition and more developed European economies

Low unemployment masks a depressed labor market. The unemployment rate was 4.1 percent in 2017 (women: 3.3 percent; men: 4.8 percent). Because job opportunities were scarce, many workers, especially men, withdrew from the local labor market to work abroad. Unemployment among young adults aged 15–24 is a more pressing problem, having reached 11.8 percent (women: 13 percent; men: 10.9 percent).

The LFP gender difference is relatively small but the share of inactive women has been on the rise, and the gender pay gap has not narrowed. Moldova`s LFP gender gap of 6.3 percentage points is well below Europe and Central Asia average (20.7 percentage points). However, since 2000 the LFP and employment rates for women have deteriorated faster than those for men. Inactivity has gone up, especially among youth. Close to 30 percent (28.9) of youth in Moldova are NEETS—neither employed nor in education or training. Among the younger and well-educated, NEET shares are higher among women (34.8 percent) than men (23.2 percent).[100] Often family obligations, such as taking care of children and other family members, explain the inactivity of women aged 25–44. Mothers of children under 5, especially infants (up to 2), face a significant LFP penalty. If employed, mothers of infants are more likely to work informally, mainly as unpaid family workers in rural areas, and with shorter hours. Having two or more children of pre-school age also lowers female LFP and employment, most likely due to a lack of childcare facilities and part-time "child-friendly" jobs.[101] Among women employed, the share with those with children is lower by 23.3 percent than for those without. Moreover, in 2017 the gender pay gap was 13.5 percent and was wider in better-paid sectors like IT (35.4 percent) or finance (39.2 percent).[102]

Among the reasons why productivity in Moldova is among the lowest in the region are an economy dominated by agriculture, high informal employment, and education and skills shortfalls. Half of all Moldovans still live in rural areas (57.1 percent), and about one-third of the labor force works in agriculture--a sector where productivity is lower than the national average and those of peer economies.[103] More efficient firms are raising productivity by shedding rather than creating jobs. While productivity is increasing somewhat, a growing share of jobs is in less-productive firms. In general, firms find it very difficult to create decent jobs and improve productivity.[104]

The gender gaps in business ownership and entrepreneurial activity are large. Women are losing ownership and control over businesses to men who are expanding their firms, probably because of indebtedness, poor access to equity capital, and lack of knowledge about how to expand their businesses.[105]

Moreover, informal employment is an important segment of the Moldovan labor market; in 2017 more than one in three workers were employed informally. Notably, over 80 percent of the workers informally employed lived in rural areas.[106] There are clear differences between

[98] National Bureau of Statistics.
[99] The NBS classifies all international migrants as inactive individuals when calculating key labor market indicators based on the Labor Force Survey (LFS).
[100] ILO. 2016. Labour market transitions of young women and men in the Republic of Moldova.
[101] World Bank. 2018. Moldova Labor Market Gender Inequality.
[102] ILO. 2017. Wage regulations and practices in the Republic of Moldova.
[103] World Bank. 2018. Promoting Market Competition for Productivity Growth, background paper for the upcoming Moldova Country Economic Memorandum.
[104] World Bank. 2016. Moldova Poverty Assessment. A Jobs Diagnostics for Moldova.
[105] World Bank. 2018. Supporting Women's Entrepreneurship in Moldova.
[106] Informal employment comprises all persons who during the survey reference week had any of the following types of job: (1) Own account workers or employers in informal sector enterprises; (2) members of cooperatives of informal producers (3) contributing family workers, whether employed in formal or informal enterprises; (4) employees in formal and informal sector or as paid domestic workers in households, who were in one or more of the following situations: their employer did not pay social contributions for them; or they did not benefit from paid annual leave or paid sick leave; and (5) persons producing agricultural goods exclusively for consumption by their own household, if they worked on this for 20 or more hours during the survey reference week (NBS, 2017).

men and women who have non-standard jobs. Women enter into non-standard employment contracts more often than men and choose such less-protected options in order to reconcile work with family responsibilities.[107]

How Moldova Can Enhance its Labor Market Outcomes

To compensate for the narrowing labor force and achieve sustainable growth will require a steady increase in labor force participation and productivity. Among other things, this will require bringing idle youth and adults into jobs, encouraging more internal migration (including support for employment reintegration of returnees and better regulation of legal circular migration) and the professional mobility of workers, and better utilizing their knowledge and skills.

To increase LFP will require not only policies to promote competitiveness and creation of decent jobs but also rethinking labor regulation, taxation, and ways to use remittances more productively. Also important for increasing firm entry and job creation will be improving competitiveness and transparency and strengthening the rule of law and the accountability of public institutions.[108] On the supply side, reducing the cost of hiring and firing and simplifying rules for internships and part-time work could help increase labor engagement, especially for youth and women. Considering that low LFP may partly stem from higher reservation wages in the households of emigrants, measures to support the productive investment of remittances and enhance entrepreneurship among returned emigrants or members of emigrant households could help keep them in the labor market. These measures should include business training and advisory and support services. Given that such programs already exist, it would be important to evaluate them and scale up those demonstrating good performance and outcomes.

To increase LFP and employment for women, it is important that they have access to quality child care and after-school activities. It will also be necessary to revise the system of maternity and parental leave in terms of duration, replacement rate, and the share of leave for fathers. Dropping the list of jobs and professions banned for women can also help activate them and reduce occupational segregation and the gender pay gap. In Moldova, parental leave is the lowest paid in Europe, and 98 percent of its beneficiaries are women.

To reduce informal work, there is a need to clarify and publicize the benefits of formalization. Two-thirds of informally employed wage earners do not want to change their current jobs. Thus, while there is a role for inspections, some reforms could reduce the cost of formalization by simplifying administrative procedures and expanding and publicizing its benefits, such as access to credit. Enforcement and inspection capacities (including occupational health and safety) need to strengthen as well. In particular, authorities would need to ensure an effective functioning of the current labor inspection system in line with relevant ILO conventions, including by strengthening its capacity.

Investing in education and skills-formation for all Moldovans, women and men, is necessary if they are to achieve full, productive employment and decent work. The skills gap is attributed to the fact that education is not relevant to labor market needs and seems unable to equip future workers for new job opportunities. For it to become relevant will require changes in the formal education system (see *Policy Note on Strengthening Education Outcomes and Skills*) and more active involvement of the private sector in skills formation. Private sector engagement in shaping of the education programs and policies, as well as in their delivery, should be sought to improve the relevance and alignment of education outcomes to labor market needs.

The current workforce would benefit from investment in both skills formation and retraining. Training providers that serve the adult population can (i) provide remediation for those who did not acquire sufficient skills in formal education, and (ii) offer skills upgrading for those seeking promotion, validation of informal skills recognition, or a change of career. The Government can promote and support a system of lifelong learning, strengthen policies and regulation to motivate and facilitate training providers to improve their services, and better align training with market needs.

The National Employment Agency (NEA) can do a great deal to facilitate jobseeker access to decent jobs. It should upgrade its capcaities and IT tools to collect and track information on jobseekers and vacancies to provide more

[107] ILO. 2016. Informal Economy in Moldova: A Comprehensive Review.
[108] World Bank. 2016. Moldova Poverty Assessment. A Jobs Diagnostics for Moldova.

effective skills- and job-matching services. NEA interventions are also critical for helping vulnerable women and men to enter or return to the labor market. The Government has already launched an ambitious employment policy reform,[109] an essential component of which is to revamp current and launch new active labor market programs (ALMPs) to make NEA services more efficient and relevant. However, the current public administration plans to reorganize the NEA and cut its staff by 25 percent. This significantly increases the risks that the policy reform objectives will not be reached.[110] In parallel, the role of the private sector in labor market intermediation should be strengthened.

The NEA needs to implement the reform strategy, but it needs to be supported both operationally and technologically to ensure more efficient service delivery. After the organizational change, the agency should revisit its operational model for supporting delivery of existing and new gender-responsive services. The revised model would seek for more integrated, beneficiary-oriented business processes and information management in administering the services. Moreover, greater focus is required to monitor ALMPs implementation results. The goal would be continuous adjustment to increase the efficiency and cost-effectiveness of ALMPs and improve the balance between various programs and measures. A recent modernization pilot showed that slight improvement in NEAs service delivery, and transfer of responsibility to unemployed through individual job plans accelerated access to jobs by 5-7 percent on average.

Alignment of education with the labor market should be grounded on solid evidence. Poor labor outcomes stemming from skills and spatial mismatches may be addressed in part through better labor market information. With comprehensive, timely, relevant, and gender-disaggregated information, it will be possible to more quickly identify employment barriers and adjust related policies, incentivize formal work; and support the education and employment choices of individuals. Having gender-specific information on the returns to education and occupational wage differentials has the potential to change the occupational aspirations of girls and reduce gender labor market disparities. It is therefore crucial to support the new Labor Market Observatory and make it fully operational.

Finally, to ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life, the Government should strengthen policies and regulatory mechanisms[111] to achieve the targets of SDGs 5 and 8, including the target 5.5 which is already aligned to national policy agenda through the Strategy to Ensure the Equality between Women and Men for 2017-21. Interinstitutional cooperation and active civil society participation would enable the implementation of the strategy.

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[109] The key principles of the reform are stipulated in the recently approved Law on Promotion of Employment and Unemployment Insurance.

[110] ILO. 2017. Assessment of the delivery of employment services for youth by the National Employment Agency of the Republic of Moldova

[111] According to the Moldova 2030, there is a range of policy documents approaching different aspects of gender equality and one specific policy document covering almost fully fifth SDG area (Strategy to ensure equality between women and men 2017-2021).

Achieving a Sustainable Social Protection System

Key Messages

Moldova`s social protection system has been helping the country to reduce poverty and advance shared prosperity. It will continue to be central to mitigating the adverse impacts of growth-promoting reforms on the poor and on vulnerable households. The 2009–17 social assistance reforms attained important results but remained incomplete. Improvement of policy and service delivery must continue to reduce fragmentation and better target social assistance benefits. Further, the 2016 parametric reform put Moldova`s public pension system on the path to fiscal and social sustainability, but its benefits have been undermined by subsequent policy measures as the reduction in the social contribution rate. The fiscal impact of the contribution rate cut is non-trivial and is permanent; it should either be reversed, or adjustments should be sought on the expenditure side.

Key Actions

Social Assistance

- Continue rationalizing category-based benefits to reallocate resources to targeted cash transfers.
- Adjust eligibility parameters for targeted social assistance programs in coordination with other income support policies to prevent decline in the number of eligible households and to maintain benefits adequacy.
- Revisit the list of documents required to apply for targeted benefits and facilitate enrollment by stronger cadre of social workers and technology.
- Invigorate introduction of a new business model and service delivery standards in local social assistance departments, e.g., through a functional National Social Assistance Agency.
- Enhance the institutional capacity and authority of the Social Inspectorate.
- Target more active labor market programs to social assistance beneficiaries to help reduce their reliance on cash transfers (see *Policy Note on the Labor Market*).

Pensions

- Avoid ad hoc pension increases.
- Reverse the reduction in the social contribution rate. Otherwise, speed up the rise in the retirement age, revisit the benefit package with a basic pension component to complement a smaller insurance-based pension.
- Continue making the military pensions program more predictable, transparent, and fiscally sound.
- Enhance the pension revenue base by revisiting preferential contributions treatment for various groups of contributors.
- Pursue policies to increase participation in employment and reduce informality (see *Policy Note on the Labor Market*).
- Sign social protection agreements with countries receiving Moldova`s labor migrants and ensure enforcement of the agreements already signed.

Where Moldova Stands Now

Social transfers such as pensions and social assistance benefits are an important source of income for the bottom 40 percent of Moldovans and have contributed to their income growth more than to that of the top 60 percent. In 2017, multiple social protection programs amounting to 10 percent of GDP covered 60 percent of the population. Coverage of the bottom quintile reached almost 100 percent because pensions and other social insurance benefits covered 55 percent of the population and 98 percent of the poorest quintile. Social assistance transfers covered 24 percent of the population and 57 percent of the poorest quintile. Well-functioning social protection programs should continue to be central to mitigate any adverse impacts of growth-promoting reforms on the poor and on vulnerable households.

However, social assistance in Moldova must do more to prevent and eliminate vulnerabilities. There is a growing disparity between rural and urban poverty.[112] Children in Moldova are still disproportionately poor, and the rural-urban inequalities are pronounced. In 2015 the poverty rate for households with three or more children was 23 percent, the national average was 10 percent, and for families with one child the poverty rate was just 8 percent (Ministry of Economy and Infrastructure 2017). About 18 percent of children in rural areas but only 2 percent in urban areas lived below the poverty line (NBS 2017). Between 2014 and 2017 the share of families with children receiving the country's main poverty-focused social assistance program, *Ajutor Social*, went down from 52 to 41 percent (MHLSP 2018). Coverage of the most vulnerable, especially those in the poorest income quintile, is limited.[113]

To be socially and fiscally sustainable, the social protection system needs to continue reforms to better target social assistance spending and improve the adequacy of pensions while holding their fiscal cost steady.

Social Assistance

After major reforms, noncontributory social assistance attained important results. The reforms launched in 2009–10 helped build up the financial sustainability and equity of the social assistance system by introducing means-tested cash transfers such as *Ajutor Social* and the Heating Allowance and eliminating inefficient entitlement-based (categorical) benefits. A gradual expansion of targeted cash transfers helped double the share of social assistance benefits going to the poorest 20 percent of the population from 40 to 80 percent by 2017. Elimination in 2012 of the costly, poorly targeted Nominative Compensations and in 2017 of categorical benefits from the Fund for Social Support of Population improved the spending efficiency and sustainability of the social safety net.

Yet fragmented programs and targeting errors persist. Existing categorical transfers mean that about 20 percent of the total social assistance spending, of 1.5 percent of GDP, leaks to people in the top three quintiles. The relatively small main anti-poverty program, *Ajutor Social,* covers just 7 percent of the total population. Moreover, 2018, a pre-election year, saw a rise in the number and cost of categorical benefits and ad hoc pension increases that divert budget resources from expanding and sustaining the adequacy of the means-tested benefits. Such measures are likely to affect recipients of *Ajutor Social* cash transfers whose incomes are close to the eligibility threshold. In the past, erosion of the beneficiary base by ad hoc changes in income-related policies pushed many poor households out of the social safety net and it took considerable time and concerted efforts for program coverage to recuperate.

Pensions

The 2016 parametric policy measures put Moldova`s public pension system on the path to sustainability. With those reforms, it was projected that by 2020 the system's deficit should be almost negligible and stay so for the next two decades. The changes helped ensure system stability over the longer term. Critically, the system was positioned to provide basic social security to its recipients—instead of sliding below 15 percent, the average pension replacement rate would stay in the range of 25–30 percent.

Unfortunately, the benefits of those reforms have been undermined. Recent measures, such as valorization of existing pensions and recalculation of the pensions of working pensioners, have diluted the gains promised by the 2016 reform. The financing gap in the short to medium term increased by 0.4–1.0 percent of GDP annually. The most significant threat to fiscal sustainability is the 2018 reduction in the social contribution rate. Its cost is far from trivial, in that the contribution revenues' permanent loss is estimated at 1 percent of GDP. This is expected to spike the pension deficit in 2019 from 1.4 to 2.5 percent of GDP, elevating the future deficit by 1.5 percent of GDP. World Bank simulations suggest that increases in the wage bill, wage employment, or both are not likely to compensate for the revenue lost. By increasing future pension system liabilities, they will

[112] The National Human Development report highlighted the significant gap between absolute urban and rural poverty in Moldova with 19 percent of the rural population living below the national poverty line versus 5 percent in urban areas. The most vulnerable groups are also exposed to social inequalities in education, health, access to quality services, and participation. The urban-rural income gap doubled from 24 percent in 2010 to 42 percent in 2015 (UNDP, 2017).

[113] Cash-based social protection for children in the Republic of Moldova, UNICEF, 2018; "Strengthening the effectiveness of the social safety net project: Consultancy for Ajutorul Social evaluation and design", Oxford Policy Management, 2017; SWOT analysis of Child Protection System, Government of Moldova, 2014 concluding that "*the existing social benefits do not adequately support families with children*".

exacerbate rather than resolve the fiscal problem.

How Moldova Can Make its Social Protections more Sustainable

Social Assistance

It is important to revive social assistance reforms. On the policy side, the Government should return to consolidating categorical benefits in order to budget more for targeted cash transfer programs. Also necessary is adjustment of *Ajutor Social* and Heating Allowance program parameters to prevent reduction in coverage and benefit adequacy. When setting the programs` income eligibility threshold apart from CPI growth currently considered, the Government should also account for the impact of other income support measures, such as pension increases and changes in taxation. For adequacy of the Heating Allowance benefits tariff changes should also be considered. It would also be important to increase the income disregarded when determining eligibility for *Ajutor Social* to strengthen incentives for formal paid employment. The disregard should be set as a percentage of income rather than in absolute terms. The authorities also need to intensify their efforts to address child poverty by, e.g., expanding coverage and raising benefits, in particular for such vulnerable groups as households with a disabled child, single-parent households, families in rural areas, those with more than three children, and Roma families.[114]

As for benefits delivery, the Government should continue to enhance access of the poor to social assistance. With the World Bank support, the Government has built a modern information system that has helped reduce benefits processing time and enabled cross-checks with public registries to verify beneficiary information. But applicants are still required to submit numerous documents, which discourages some poor households from applying. The Government should revisit the list of documents required to confirm applicants and use data from public registries. The system should also advance to telephone and on-line applications. The Bank-financed project also drafted service delivery standards for local welfare offices and a new operational model to enhance client focus and efficiency. To help build local capacities, a National Agency for Social Assistance has been created. However, the innovations have yet to be fully implemented. The Government needs to make the Agency fully operational and allocate enough resources to support enhancements in delivery of benefits and services by local social assistants.

Successful practices of combatting benefit fraud and error should be further exploited and expanded to prevent leakage of social assistance to better-off households. The Social Inspectorate, established in 2011 to identify fraud and error in targeted benefits, has proved to be highly efficient. Due to strong risk-based inspection methodology, benefit irregularities were detected in 79 percent of the cases inspected in 2017. The Government should support institutional development of the Social Inspectorate to strengthen its authority to enforce its decisions and recover over-payments identified and expand its mandate to cover more social benefits.

Pensions

Solutions are needed to ensure that the pension system is fiscally sustainable. The contribution rate, the pension benefit and the retirement age are interconnected parameters for keeping pension system finances in balance. If changes affect one parameter, a policy response in the others should follow. For instance, if the social contribution rate reduction cannot be reversed, the retirement age or the benefit package needs to be adjusted in response. Moldova is currently transitioning to a higher retirement age, to reach 63 years for both men and women by 2028. If the contribution rate had not been cut, the next age increase could have been postponed until 2040. Now, to compensate for lower contribution revenues, the pace of the retirement age increase must accelerate, and the new schedule to reach 65 years would have to start immediately after the current transition.[115] Another structural response would be to revisit the benefit package by introducing a basic pension component to complement the falling replacement rates of insurance pensions due to the lower contribution rate, and to recognize explicitly that the pension program is deficit-financed.

Clearing the pension system of a variety of privileges could help generate additional revenues and improve transparency. Pensions of military and para-military personnel

[114] Committee of the Rights of the Child, Concluding observations on the combined fourth and fifth periodic report of the Republic of Moldova, 2017.

[115] Another possible scenario is to continue raising the male retirement age immediately after 2019 when the transition to age 63 is completed. However, currently the life expectancy of men at 63 is low. In 10 years, life expectancy may improve, opening up space for further retirement age increases.

add about 1 percent of GDP to the cost of the national pension system. The pension reform of 2016 provided a basis for greater transparency and better governance of the military pension program.[116] However, the Government should continue to streamline military pensions by (i) aligning their benefit formula with the general one, with an accrual factor that would yield a target replacement rate; (ii) gradually increasing the age to qualify for the military pension; and (iii) having clearly defined, transparent, and predictable liabilities for funding the military pensions. In addition, the Government could enhance the pension system revenue base by revisiting preferential contribution treatment, e.g., abolishing flat contributions or reduced contribution rates; defining adequate contribution bases; and introducing flexible arrangements for self-employed and agricultural businesses to pay contributions.

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[116] The reform introduced social insurance contributions for the military and transmitted the administration of their pensions from line ministries to the National Social Insurance House.

Improving the Efficiency of Health Service Delivery

Key Messages

Although Moldova's spending on public health compares fairly with that of other countries of similar incomes, its health outcomes are not as good as would be expected for the amount it spends. With population aging, the rise of noncommunicable diseases, the advent of new technologies, and Moldova's dilapidated hospital infrastructure, the cost of health care is likely to grow if preventive and low-cost technologies are not expanded.

Key Actions

- Selectively contract health care providers to optimize resource use and increase the technical efficiency of public health spending.
- Prioritize primary health care services and increase their share of public spending.
- Strengthen and harmonize the national health information and the eHealth systems.
- Rationalize the hospital sector to increase efficiency and to ensure higher value for money in public health spending.
- Strengthen emergency preparedness and response capacities in Moldova: a common, efficient, coordinated multisectoral approach comprising all-hazards and hazard specific measures to ensure preparedness for all types of emergencies.
- Promote evidence-informed health policy-making and establish a research advisor infrastructure.
- Promote the integration of a universal progressive Home Visiting programme as part of the primary health care system, and establish robust services to address needs of children with disabilities and mechanism for early detection of development delays.

Where Moldova Stands Now

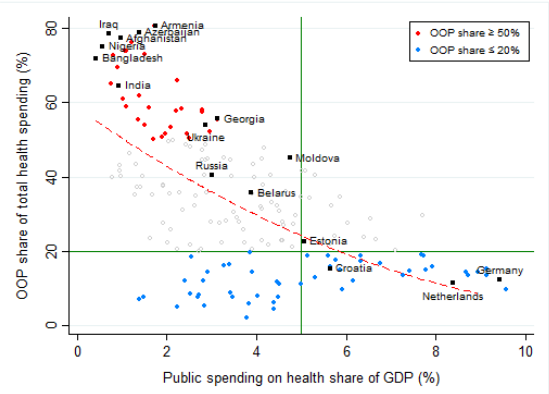
The labor market and population aging raise concerns about whether the health system is fiscally sustainable. The population is shrinking due to low birth rates and continuous emigration of the working-age population. Decreasing fertility, high net emigration, and longer life expectancy mean that in a smaller population, the share of elderly people will increase. Meanwhile, Moldova is undergoing an epidemiological transition: chronic diseases are rising as the contribution of infectious diseases, as a major contributor to mortality and morbidity, declines. Given the combination of an aging population, a growing disease burden, and declining national resources, the national authorities can expect significant challenges in coming years. By 2060, the population is projected to drop by 29 percent, 1.2 million, and the share of older people will triple to 30 percent. Although the old-age mortality rate is high, improvements in longevity will accelerate aging of the population. The concern is that the demographic dividend will be over before Moldova has reaped its economic benefits; an aging society with a shrinking working-age population may have lower productive capacity. The slower economic growth that ensues will have negative impacts on resource availability even as the government and society feel more pressure to provide pensions, health care, and the social services older people require.

Although Moldova's public spending on health compares favorably with that of neighboring countries, recent trends raise concerns about the growth of out-of-pocket (OOP) payments and the deterioration of financial protection, which affects the poorest disproportionately. The Government devotes adequate resources to health within the constraints of its economic development, but public spending on health has been eroding. Between 2012 and 2015, the share of the national budget allocated to health fell from 15.2 to 12.6 percent. OOP payments accounted for about 46 percent of total health spending in 2016. As a result, the previous gains in financial protection of the poor have been disappearing as OOP spending has been growing; the effect has been impoverishment. Lack of financial protection is mainly driven by OOP payments for

outpatient medicines for all income groups and especially for poorer households.

Access to health services for the poorest 20 percent of Moldovans was better in 2012 than in 2016. The access decline was most evident in primary health care (PHC) and hospital services, which led to a sizable reduction in health benefits for the poorest Moldovans. While inequalities in health care services were somewhat reduced, utilization rates for both outpatient and inpatient services continued to be strongly and positively correlated with household consumption.

Figure 1. Out-of-Pocket Health Spending, 2015



Source: WHO and World Bank.

Technical efficiency of public spending on health is low, largely because of inefficiencies in hospital and specialized out-patient care, which outside the capital city is usually attached to hospitals. Oversupply of hospital infrastructure absorbs considerable public resources because much infrastructure is not used well. Long-postponed rationalization of the hospital sector is one reason for a delay in efficiency gains. Improvements in the efficiency of inpatient care are mostly expected to follow from reducing the length of hospital stays and providing more day-care services. Meanwhile, the system will be seeing more demand to provide care to chronic patients.

Increasing efficiency of public spending is a priority to open up fiscal space for health in the medium term. Moldova's allocations to health care are adequate and not likely to grow in the medium term. About 10 percent of GDP is being spent on health care; the Government is covering almost half, allocating almost 13 percent of its budget to health care. With public funding on par compared to countries at a similar stage of economic development, Moldova now needs to prioritize more efficient use of those resources, and to do so using an evidence-informed approach.

The authorities need to make outcomes as well as access a health care priority. In 2017, the infant mortality rate (IMR) was 9.7 per 1,000 live births and the under-5 mortality rate (U5MR) was 11.4; both are almost triple the EU averages of 3.4 IMR and 4.1 U5MR. The maternal mortality rate of 17.6 per 100,000[117] live births was more than double the EU average of 8. An estimated 20 percent of child deaths, which are preventable if health care is sought and is timely, still occur at home or within 24 hours of hospitalization. Health insurance coverage has held steady at 86 percent and is lower than EU averages of 93–100 percent.[118] Between 2006 and 2017 vaccination for measles, mumps, and rubella (MMR) slipped from 96 to 87 percent. Access of women and girls with locomotor disabilities to health care facilities and adapted gynaecological chairs remain challenging. A continuing major hurdle to providing quality maternal, child, and adolescent health is the limited availability and high turnover of medical professionals.

Non-communicable diseases (NCDs) are a major health challenge, especially among the working age population, with significant welfare and economic costs. Widespread NCD risk factors include tobacco and alcohol consumption, unhealthy diet, hypertension and obesity.

Adolescent reproductive health needs more attention. Although it is gradually decreasing, the rate in Moldova of sexually transmitted infections (STIs) among youth was quadruple that in EU countries. The youth birth rate was 27 per 1,000 adolescent girls, 2.5 times higher than the EU average of 10.5. From 2000 to 2017, the HIV incidence among young people aged 15-24 has almost doubled from 12.2 to 21.4 per 100,000 population.[119] Moreover, one-third of young people aged 15-24 were subject to physical, sexual or psychological violence by a current or former intimate partner in the last 12 months. Roma girls in particular continued to be subjected to child marriage and early childbearing. Among teenagers, 12.5 percent are overweight, and 20 percent have a body mass deficit.[120] In 2016**,** Youth-Friendly Health Services (YFHS) were established and 41 centers were set up across the country; the number of Moldovans aged 10–24 who benefited from them went up from about 134,000 in 2016 to 163,000 in 2017. However, YHFS still reaches just 25 percent of all adolescents, and of those

[117] MHLSP, 2017.
[118] National Health Insurance Company, 2017 and OECD, 2013.
[119] National Agency for Public Health.
[120] WHO, 2014.

only 18 percent were from most-at-risk and especially vulnerable groups.

Despite Moldova's capacity on surveillance, early warning systems, laboratory diagnosis and treatment, the country needs to establish a resilient emergency preparedness cycle for health emergencies which will enable the country to align their existing capacities for a timely and effective response; identify gaps and channel resources to address the gaps; and remove bottlenecks to strengthen emergency preparedness and response.

How Moldova Can Strengthen its Health System Efficiency

Moldova allocates high share of its GDP on health, close to 10 percent. Even after the decrease of the health spending from its peak of 12.5 percent in 2009, Moldova tops the regional ranking. However, the gap between the total and public health expenditures of 5 percent of GDP is the highest in the region. While focusing on improving efficiency of spending, outcomes and access to health care needs to be tackled as a priority.

Moldova needs to make the hospital sector more efficient and shift spending toward primary health care. Savings on unwarranted hospital services can be reallocated to increase funding for population-based public health services and PHC. Because the Government has been giving hospital services priority, their share of public spending on health has been growing. In Chisinau, due to their political influence republic, municipal, and some private providers draw almost 20 percent of *Compania Naţională de Asigurări în Medicină* (CNAM) resources, which reduces the funds available for facilities in other parts of the country. Adequate funding for public health and PHC interventions is necessary if Moldova is to effectively manage and prevent NCDs. This needs to be coupled with a reduction of behavioral and other risk factors. Raising the efficiency of hospital service use by reducing unnecessary hospitalizations and managing NCDs on a PHC level could significantly improve health care spending, with the savings used to provide more services to the public. The Government should therefore rationalize the hospital sector as planned, which will have positive results over the medium to long term. Meanwhile, it is important to empower CNAM to become a strategic purchaser in the health care market and facilitate selecting and contracting the most efficient providers. Unless efficiency improves, the Government may not be able to secure the resources necessary to meet the health care needs of the nation.

Selectively contracting with health care providers based on predefined criteria could immediately optimize resource use as well as increasing the technical efficiency of public spending. Moldova, with World Bank support, has been working to improve purchasing mechanisms for all types of care; options include age-adjusted capitation in primary care, case-mix funding for hospitals, and performance-based financial incentives. As these programs continue, more attention is needed to ensure that all providers meet performance indicators. Adoption in PHC of revised performance-based incentives could help bring more attention to prevention and effective management of NCDs. Benchmarking hospital care providers by achievement of efficiency and performance indicators would better inform CNAM strategic purchasing decisions. However, this would require both passage of regulations to empower CNAM and full political support. Otherwise, underfinancing of health care services will shift even more costs onto patients and increase the financial and other barriers to getting health care.

The Government needs to give PHC services higher priority and a larger share of public spending on health care to address the needs of patients and improve financial protection. Demographic and epidemiological transitions to NCDs and comorbidities call for better-resourced PHC services and public health interventions to reduce the disease burden. Strengthened prioritization should be placed in investing in immunization to reduce the child mortality risk and the cost of hospitalization when there are crises like the measles outbreak in 2018. This will require (a) effective public health interventions reinforced by cross-sectoral coordination; (b) well-resourced and high-capacity PHC to deliver both preventive and curative services; and (c) good coverage in the benefit package of essential services like medications and vaccines. Spending on various inputs necessary for care, especially for PHC, does not appear to be adequate and responsive to the needs. It may contribute to lower utilization levels for these cost-effective services, especially for the poorest part of the society. Giving PHC more priority would improve the efficiency and cost-effectiveness of health care and give the poorest Moldovans better financial protection. Finally, diversifying procurement mechanisms, increasing transparency and efficiency in purchasing medicines and medical devices, including for modern methods of contraception, would improve cost efficiency as well as health outcomes.

Improving PHC performance also deserves more attention. Emphasizing prevention, e.g.,

through targeted work with parents, children, adolescents, and patients at risk of major NCDs, may help manage cases without any need for inpatient care. This work should be supported by programs for the entire population promoting a healthy life. These should address vaccine-preventable diseases, antenatal and perinatal care, smoking, alcohol consumption, adolescent reproductive health, healthy nutrition, and improved physical activity. Reduction of the NCD risk factors would contribute to the substantial improvement of the health status. These interventions include but are not limited to increase in excise taxes and prices on tobacco, alcoholic and sugary beverages, enacting and enforcing comprehensive bans on tobacco advertising, promotion and sponsorship, enacting and enforcing bans or comprehensive restrictions on exposure to alcohol advertising, and reduce salt intake through the reformulation of food products.

The process for strengthening emergency preparedness should follow an iterative cycle starting from assessing risks and capacity, establishing coordinating mechanisms, planning, financing and implementing capacity, to conducting simulation exercises, evaluation and taking corrective actions. The results of the capacity and strategic risk assessment can be used to guide risk-informed programming that will catalyze actions to prevent, prepare for and reduce the level of risk associated with a particular hazard and its consequences on health.

Additional resources are also necessary to improve the health information system, reduce network fragmentation, and promote cooperation among institutions in exchanging health information. Establishing an effective and well-functioning eHealth system needs to accelerate in order to generate timely data for decision making.

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