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North Macedonia Public Finance Review

Ensuring Stability and Boosting Resilience

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North Macedonia Public Finance Review

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REPUBLIC OF NORTH MACEDONIA

Government Fiscal Year: January-December

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Weights and Measures:

Metric System

Abbreviations and Acronyms

ACSC	Ambulatory Care Sensitive Conditions	**NEA**	National Extension Agency
ALMP	Active-Labor Market Policies	**NGO**	Non-Governmental Organization
ALOS	Average Length of Stay	**NHA**	National Health Accounts
AKIS	Agricultural Knowledge and Innovation System	**NSARD**	National Strategy for Agriculture and Rural Development
bcTE	bias-corrected Technical Efficiency	**OECD**	Organization for Economic Cooperation and Development
BOR	Bed Occupancy Rate	**OLS**	Ordinary Least Squares
CAP	Common Agricultural Policy	**PAYGO**	Pay-As-You-Go
CIT	Corporate income tax	**PESR**	Public Enterprise for State Roads
COFOG	Classification of General Government Expenditure by Function	**PFA**	Permanent Financial Assistance
CPI	Consumer Price Index	**PFM**	Public Financial Management
CRI	Corruption Risk Indicator	**PHC**	Primary Health Care
CRMS	Compliance Risk Management Model	**PISA**	Programme for International Student Assessment
CRS	Constant Returns to Scale	**PIT**	Personal income tax
DEA	Data Envelopment Analysis	**PLM**	Positive list of medicine
EATR	Effective Average Tax Rate	**PPP**	Purchasing Power Parity
EC	European Commission	**PPS**	Purchasing Power Standard
ECA	Europe and Central Asia	**PRO**	Public Revenue Office
ECB	European Central Bank	**PUC**	Public Utility Company
EU	European Union	**RE**	Random Effects
EUR	Euro	**SDR**	System Dependency Ratio
FADN	Farm Accounting Data Network	**SEC**	Scale Efficiency Change
FDI	Foreign direct investments	**SFA**	Social Financial Assistance
FNVA	Farm Net Value Added	**SILC**	Survey of Income Living Conditions
GDP	Gross Domestic Product	**SMR**	Statutory Management Requirements
GMI	Guaranteed Minimum Income	**SOE**	State-Owned Enterprise

GNI	Gross National Income	**SSB**	Sugar-Sweetened Beverages
HBS	Household Budget Survey	**SSC**	Social Security Contributions
HIF	Health Insurance Fund	**SSO**	State Statistical Office
HRMIS	Human Resources Management Information System	**OOP**	Out-of-pocket
IMF	International Monetary Fund	**TC**	Technical Change
IO	Input-Output	**TE**	Technical Efficiency
IPA	Instruments for Pre-Accession Assistance	**TEC**	Technical Efficiency Change
IPARD	Instrument for Pre-accession Assistance for Rural Development	**TF**	Typology of Farms
LFS	Labor Force Survey	**TFP**	Total Factor Productivity
LGU	Local Government Unit	**TIDZ**	Technological Industrial Development Zones
LRSA	Last Resort Social Assistance	**TIMSS**	Trends in International Mathematics and Science Study
LTC	Long-Term Care	**UAA**	Utilized Agricultural Area
LTO	Large Taxpayer Office	**UMC**	Upper Middle-Income Countries
MES	Minimum Efficient Size	**UNDP**	United Nations Development Programme
MKD	Macedonian Denar	**VAT**	Value Added Tax
MOES	Ministry of Education and Science	**VRS**	Variable Returns to Scale
MOF	Ministry of Finance	**WB6**	Western Balkan countries
MOH	Ministry of Health	**WDI**	World Development Indicators
MRI	Magnetic Resonance Imaging	**WHO**	World Health Organization
NCD	Non-Communicable Diseases	**WWBI**	Worldwide Bureaucracy Indicators

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Executive Summary

A Call for Restoring Fiscal Sustainability and Rebuilding Buffers

After being the candidate country for almost 20 years, North Macedonia aspires to become a member of the European Union by the end of the decade. The country has made significant strides in improving the quality and transparency of public institutions and administrative processes, driven in part by the goal of EU membership. Reforms to public financial management, anti-corruption measures, the judiciary, procurement, and public administration have been implemented, resulting in improved governance indicators. However, challenges persist in controlling corruption and enhancing government effectiveness, and some backsliding has been observed since 2015.

The economic benefits of closer integration with the EU are already evident. Foreign direct investment (FDI) from EU member states accounts for a significant portion of North Macedonia's total FDI stock, and most of the country's exports go to the EU. Furthermore, EU grants have provided substantial development support, bolstering the country's resilience in the face of recent unprecedented shocks, such as the pandemic and successive energy crises. Despite these shocks, the country has resumed progress on poverty reduction, with the upper middle-income poverty rate halving over the last two decades to less than 19 percent.

Fiscal prudence ahead of the recent crises secured enough space for support, but fiscal outcomes worsened, and restoring fiscal sustainability and rebuilding buffers are now urgent priorities. Prolonged fiscal stimulus since 2020 has led to a sharp increase in the deficit, which remains above 5 percent of GDP. North Macedonia ran higher fiscal deficits in the last decade than all of its Western Balkan and EU peers, and at over 62 percent of GDP the public debt is now 13 ppts of GDP above its pre-pandemic 2019 level, breaching the newly introduced fiscal rules aligned with the Maastricht criteria for EU membership.[1] In addition, expenditure arrears remain stubbornly high at 3 percent of GDP due to weak fiscal discipline in public health institutions, state enterprises, and local governments.

The country has delayed fiscal adjustment, relying on economic growth to resolve its fiscal imbalances, with limited effect. However, the rate of growth has been low and declining, hindering convergence with EU income levels and exacerbating fiscal concerns. The potential growth rate has fallen to a new low of 1.5 percent due to low productivity and inadequate human capital formation, which continue to constrain the economy's productive capacity.

Looking ahead, the last government's Fiscal Strategy for 2024-2027 aimed to maintain macroeconomic stability and pursue fiscal consolidation by gradually reducing the general government deficit to 2.8 percent of GDP by 2027. The strategy targets improved revenue collection, reduced non-productive spending, increased support for private sector competitiveness, and changes to deficit financing sources. Additionally, the strategy emphasizes reducing arrears to the private sector.

However, stabilizing debt would require accelerating the consolidation plan. To ensure sustainability and resilience, North Macedonia should implement credible medium-term fiscal adjustments. The cost of capital, i.e., interest rate on external borrowing, has already increased fivefold for North Macedonia, which threatens to crowd out other spending priorities due to rising interest payments, currently at 1.8 percent of GDP, resulting from sharply increased debt. The debt-stabilizing primary balance, at 0.4 percent of GDP, is 2.5 percentage points above the 2024 target.[2]

1 These rules call for the deficit to remain within 3 percent of GDP for the debt to remain within 60 percent of GDP.
2 Measured as primary balance required to prevent further debt growth under current growth, inflation, and interest rate developments.

However, North Macedonia's public finances offer significant room for boosting tax compliance and rationalizing spending. A credible future fiscal strategy should include: (i) improved public financial management and strengthened fiscal discipline; (ii) enhanced health, education, local government, and procurement expenditure efficiency; (iii) reprioritized spending on social assistance; (iv) improved effectiveness of spending on public administration; (v) rationalization of pension and agriculture spending; (vi) a broadening of the tax base, and improved tax collection; and last but not the least (vii) enhancing fairness and equity of social spending and taxation. The country can achieve equivalent or better social outcomes with lower and more targeted spending, contributing to more effective poverty reduction. This underscores the urgency of reform, especially given the challenging combination of short-term fiscal pressures coupled with an aging population over the medium-term. A rapid aging and outmigration over the last decade are estimated to have led to a loss in personal income tax revenues of some 0.3 percent of GDP a year.

This report proposes designing such a strategy in light of macroeconomic risks. It analyzes North Macedonia's major macroeconomic and fiscal weaknesses, risks, and debt sustainability. It discusses tax policy and compliance challenges. Regarding government effectiveness, the report highlights the need to enhance public administration effectiveness and address local government finances. Furthermore, the report assesses the efficiency, effectiveness, and equity of social and education spending, emphasizing the need to improve the efficiency, equity, and delivery of healthcare and social assistance, and ensure the sustainability of the pension system. It also underscores the importance of improving the efficiency of procurement and agricultural subsidies to ensure sustainability and resilience.

Boosting Tax Revenues

The country's general government tax revenues, at 33 percent of GDP in 2023, are low compared to regional and aspirational peers.[3] The heavy reliance on indirect taxation, particularly VAT, underscores the need to improve tax efficiency (tax effort compared to tax potential). Policy exemptions and compliance issues reduce VAT collection by an estimated two-thirds, meaning that there is significant potential to increase collections. In contrast, direct taxes such as personal income tax and corporate income tax show higher tax efficiency relative to peer countries but have one of the lowest tax rates, thus collecting comparatively less revenue. Finally, removing custom exemptions granted to firms in technological zones and boosting property taxes could further enhance tax revenues.

Excise taxes also offer scope for further adjustment and provide an opportunity to simultaneously increase revenues and improve health outcomes. The landmark 2023 tobacco tax reform aimed to address affordability and substitutability, ensuring gradual alignment with the EU acquis by 2030. However, alcohol excise revenues remain significantly smaller due to low excise tax rates on alcohol and a zero-rated excise tax on wine, a significant contributor to alcohol consumption in North Macedonia. Additionally, there is no tax on sugar-sweetened beverages.

World Bank estimates suggest that there is potential to raise tax revenues by 3.5 percentage points of GDP in the short term to support fiscal consolidation and create fiscal space for more sustainable growth. Beyond rationalizing exemptions, introducing progressivity, and increasing environmental and property taxation, the country should as a priority strengthen tax administration to improve compliance and enhance revenue collection. This includes modernizing tax administration, improving information planning and utilization, applying compliance risk management approaches broadly, focusing on large taxpayers, and aligning the Public Revenue Office (PRO) training strategy with reform priorities and IT developments.

3 Regional peers are countries from the Western Balkans, while aspirational peers used in this report are small EU states (Bulgaria, Croatia, Estonia, Latvia, Lithuania, and Slovenia).

Enhancing the Effectiveness of Public Administration

At 7.3 percent of GDP, North Macedonia spends less on public administration than its EU peers, yet its public sector is comparatively large (accounting for close to 22 percent of total employment)[4] and performs poorly on indicators of government effectiveness and the rule of law. Following a 30 percent increase in 2023, the recent collective agreement on public-sector compensation has indexed wages to the national gross wage from 2024, indicating potential adverse second-round effects to already-elevated inflation. The public sector wage premium is substantial given the low labor productivity in the public sector (almost 48 percent below the private sector in 2022).

Wage differentials across types and levels of government and operational efficiency vary greatly across public sector institutions. Improving efficiency has proven difficult due to (i) the rigidity in the organizational structures and remuneration system in the public administration, where performance management systems function poorly, with ineffective sanctions for poor performance; and (ii) heavy politicization of the public administration, which undermines a merit-based system where each vacancy is filled based on education, competencies, and skills.

The government should consider implementing reforms to improve operational efficiency and professionalize public administration. The Law on Public Administration contains all the necessary elements to move towards a more performance-oriented civil service, provided it is complemented by relevant legislation on wages. Delinking the automatic wage growth from average wage movements is critical to avoid spiral risks and fueling inflation; it should instead link wages to performance. Savings achieved over the medium term through staff rationalization to create a leaner administration should be invested in promoting professional and high-performing personnel based on strengthened performance management. The absence of proper HR management control mechanisms poses fiscal risks and erodes the principle of equal pay for equal work.

Rebalancing Local Government Finances

North Macedonia operates under a one-tier subnational government system with many relatively small local government units (LGUs) and notable regional disparities. Service delivery at the local government level is hampered by fragmentation, with the small size of many municipalities raising concerns about administrative overheads and public service efficiency. Disparities across regions persist, with Skopje's GDP nearly nine times higher than that of the Northeast region, while population decline and outmigration further exacerbate regional imbalances.

LGUs rely heavily on transfers from the central government, with two-thirds of local revenues coming from intergovernmental transfers. This heavy functional and financial dependence on the central government, along with capacity constraints at the local level, may restrict the uptake of EU funds that would be available post-accession. North Macedonia's spending at the local government level stands at 5 percent of GDP, similar to the average for the Western Balkans but below the average for aspirational peers and the EU27. While their debt is low, fiscal risks arise from contingent liabilities and accumulated arrears.

To address these challenges, spending responsibilities need to be redefined to avoid duplication and overlap of functions and to increase the accountability of LGUs for their allocated tasks. Economies of scale in public service delivery can be achieved through asymmetrical decentralization or territorial reorganization, given the significant disparities across LGUs. Greater subnational reliance on own-source revenues, especially property taxes, would help promote funding adequacy and reduce dependence on the central government. Additionally, the fiscal operations of local government units need to be monitored to ensure fiscal prudence and alignment with national fiscal rules. Finally, the current fragmentation of

4 As opposed to less than 20 or 19 percent in the case of EU or regional peers, respectively.

LGUs makes it difficult to serve citizens effectively and limits their financial and human capacity to absorb future EU funds. Therefore, efforts to consolidate and optimize the structure of LGUs are essential for balanced regional development.

Improving the Efficiency, Equity and Delivery of Health Care

Health outcomes in North Macedonia continue to lag those in peer countries, and public spending on health remains relatively low and inefficient. Life expectancy at birth is lower than in many peer countries in the region and the average for the EU (80 years), largely due to gaps in the access to and quality of healthcare and high prevalence of risk factors like tobacco use, alcohol consumption, poor diet, sedentary lifestyles, and air pollution. Public spending on health (5 percent of GDP) remains among the lowest among aspirational peers, which contributes to a heavy reliance on out-of-pocket health payments (42 percent of health spending) that raises equity concerns. Spending efficiency is undermined by high rates of specialist visits and hospital admissions for ambulatory care sensitive conditions that can be successfully prevented and managed at the primary care level, as evidenced by experience in other countries.

Addressing the challenges of an aging society requires a service delivery model that improves the efficiency of public spending and expands access to high-quality health care services, including long-term care. This requires deepening of current efforts to expand the scope of care of primary care providers, strengthen health promotion and prevention, and improve coordination across healthcare providers and between the health sector and other sectors. It also specifically requires development of a sustainable system of long-term care services for an aging population, and reorganization of an inefficient hospital sector. Improving service quality also requires continued investments in the equipment, recruitment, knowledge, and skills of care providers. Moreover, enhanced quality assurance and governance mechanisms, as well as emergency response capabilities are needed across the entire healthcare system. Whenever possible, reforms and investments should be optimized using the country's emerging eHealth and mHealth capabilities.

Ensuring equitable access to healthcare also requires improvements in affordability, especially for medicines and long-term care. Improving the affordability of medicines and increasing access to high-quality pharmaceuticals require regular updating of the public drug benefit package, and revising drug pricing and coinsurance policies with a focus on better financial protection for vulnerable households. Similarly, addressing highly prevalent financial access barriers to long-term care services requires development of financial assistance mechanisms for the poor in particular.

Strengthening Social Assistance

The social assistance reform in North Macedonia, initiated in 2019, aimed to address the inefficiencies and inadequacies of existing social assistance benefit schemes. The reform consolidated fragmented and overlapping programs, focusing on expanding coverage and improving the adequacy of benefits. The introduction of the means-tested Guaranteed Minimum Assistance (GMA) scheme replaced all means-tested social assistance programs and transformed the universal Parental Allowance (PA) program into an income-tested program. Additionally, a means-tested social pension for the elderly was introduced, along with educational and child allowances to extend coverage. Although the comprehensive reform aimed to improve coverage and targeting, the latest surveys indicate that these improvements have not materialized as expected. While there was an initial rise in coverage following the reform, it declined again in 2021. The coverage of the poorest quintile by social assistance programs in North Macedonia compares well with regional peers but lags behind the ECA average.

The reform also aimed to improve the targeting of social assistance programs towards the poorest quintile. While the targeting was effective initially, it eroded by 2021. In terms of adequacy, the reform has led to improvements in the contribution of social assistance to the consumption of the overall population, particularly for households in the poorest quintile. However, concerns have been raised regarding the recent adequacy of some programs in response to rising prices. North Macedonia's spending on social assistance, at 1.7 percent of GDP in 2023, has increased over time but is still among the lowest in the region. The introduction of the GMA constitutes a significant improvement and is designed to provide a comprehensive social safety net to the poorest households. However, not all eligible children within GMA households are being enrolled in the Child Allowance and Education benefit program. The success and sustainability of the reform depend crucially on its implementation to ensure that all eligible people are reached. Without social assistance programs, the poverty rate would increase by 4 percentage points, underscoring their importance as anti-poverty measures.

Looking ahead, while the social assistance reform in North Macedonia has shown some improvements in coverage and adequacy of benefits, recommendations for sustaining and accelerating the shift towards poverty-targeted programs remain. Ensuring the implementation of the reform reaches all eligible individuals and considering an increase in coverage to protect households from emerging vulnerabilities should be a priority. The government is advised to use a single, unified set of criteria to assess eligibility for needs-based social assistance programs, consider "make-work-pay" benefit reforms, and intensify activation measures for the long-term unemployed. Strengthening administrative and IT capacity is crucial to reducing losses due to errors and addressing errors of exclusion.

The Sustainability of the Pension System

North Macedonia's pension system faces significant challenges, including large deficits, potential erosion of benefit adequacy, and uneven benefit levels across generations. The multi-pillar reform of the pension system, introduced in 2005, aimed to improve medium- and long-term fiscal sustainability while maintaining parity in benefits across generations. However, subsequent ad hoc policy changes have posed risks to these objectives. The indexation of pensions in the pay-as-you-go pillar has changed several times, leading to unpredictability in benefits and eroding trust in the system. The sustainability of the pension system is a critical concern, as the number of pensioners is projected to surpass the number of contributors by 2053. The current mandatory retirement ages (64 for men and 62 for women) are among the lowest in the Western Balkans and the EU. Current pension benefits are relatively high compared to other countries in the region and are not supported by sustainable benefit indexation, retirement-age increases, or actuarially fair contribution rates.

Spending on pension benefits increased sharply to 9.3 percent of GDP in 2023, above the levels of EU and Western Balkan peers. North Macedonia continues to have pension deficits in the PAYG pillar at above 4 percent of GDP, which is set to increase further without reform. To address these challenges, several policy proposals have been suggested to reduce the pension deficit in a growing aging society. These include reversing the recently introduced price-wage (so-called Swiss) pension indexation pattern back to previous CPI indexation, gradually increasing and equalizing retirement ages for men and women, and gradually raising contribution rates. A combined policy package integrating all three policies could yield more balanced outcomes, preventing the further buildup of pension expenditures and deficits.

In addition to changes to pension parameters, policymakers should implement complementary measures affecting labor markets, health, and long-term care expenses to adequately meet the needs of the growing elderly population as North Macedonia's demographics continue to evolve. Changes to improve trust and transparency include requiring medium- and long-term financial projections before any ad hoc changes and creating an easy-to-use pension calculator for individuals to estimate their benefits. Enhancing transparency and predictability, managing adequacy expectations of pensioners, and reducing intra- and inter-generational equity are crucial aspects that need to be addressed.

Financing The Future: Improving the Efficiency of Education Spending

North Macedonia's education spending has declined over the past twelve years, standing at 3.8 percent of GDP in 2022, slightly more compared to regional peers but far less than EU peers and below the internationally recommended levels by the Education 2030 Framework for Action. Despite the declining spending, its intensity is not well aligned across education levels and municipalities. When examining student expenditure as a share of GDP per capita, North Macedonia invests significantly in preprimary and higher education due to limited enrollment at these levels. Moreover, there are vast disparities in spending among municipalities with primary education per-student spending varying six times between the lowest and highest spending municipality. A disproportionate amount is allocated to salaries—over 80 percent of the education budget—a trend that has intensified over recent years, while capital spending remains severely underfunded. The continuous increase in the number of teachers despite declining student numbers is not due to changes in curriculum but appears to be structural. The student-teacher ratio declined by 25 percent from 13 in 2009 to 9.7 in 2022, which is far below the OECD average of 15 students per teacher.

Comparator countries have been able to achieve better learning outcomes with similar or lower levels of expenditure on education and the same or lower levels of instruction time. The country is still well below comparator peer levels in terms of education outcomes achieved by students in international large-scale assessments such as PISA or TIMSS. Access to education has improved over the years, especially in preprimary and tertiary education, and at all levels for specific minorities. Enrolment in primary school is in line with most regional peers; however, it has been on a downward trend, reaching 93 percent in 2022, leaving a significant number of children without education. The system efficiency remains low in higher education as well, with high dropout rates and long average times to completion. In 2020, only 37 percent of all university students graduated on time.

To address these challenges, it is essential to prioritize reforms to strengthen the efficiency of spending in the education system. This includes optimizing the school network, reassessing the student-teacher ratio and class-size requirements, reallocating resources to non-salary-related spending, including capital spending, and improving public financial management within the sector. The introduction of a newly drafted funding formula for primary education and the gradual optimization of the primary school network should be priorities. The current school network is costly to maintain and is not aligned with demographic and enrollment trends. Despite a significant drop in student numbers over the last decade, there has been an over-hiring of teachers in the primary and secondary school networks. Policies leading to improved equity, quality, and resilience of the education system need to be part of the system reform as well.

Improving the Efficiency of Public Procurement

Public procurement in North Macedonia accounted for 11 percent of GDP or around 26 percent of total general government spending in 2023. As multiple crises have sharply limited the availability of fiscal resources, the authorities could further improve the efficiency of public procurement. The government has made efforts to increase transparency and efficiency through digitalization. The e-procurement portal developed by the Public Procurement Bureau has increased transparency and enabled the analysis of the cost of non-competitive public procurement tendering practices and the economic impact of corruption risks. The analysis undertaken here revealed a moderate risk of corruption in public procurement, with a significant number of government institutions using procurement practices that create a high risk of corruption.

Efforts to reduce public spending and increase value for money are crucial, as North Macedonia continues to lag behind the EU average on indicators of governance quality. This analysis suggests that measures to improve competition by increasing the number of participating bidders and reducing concentration at the market and buyer levels could have the greatest impact on procurement spending. A set of efficiency-enhancing measures that could be implemented within the existing legal framework could save the government 1.6 percent of GDP. Policies and strategies to increase public procurement efficiency in North Macedonia include streamlining bidding documentation, training and revising guidelines, implementing monitoring and control mechanisms, and increasing the number of bidders. Additionally, measures to reduce concentration among buyers and suppliers, increase the number of bidders, and reduce the prevalence of single-bidder contracts are recommended to induce behavioral changes in the public and private sectors.

Rationalizing Agriculture and Rural Development Subsidies

The role of agriculture in North Macedonia's economy is modest, with a relatively small direct contribution to GDP, but higher than in most comparable economies in the Western Balkans and other upper-middle-income countries in Europe and Central Asia. However, the share of agriculture in total employment is lower than in most comparator economies, indicating higher agricultural labor productivity. Despite this, the role of agriculture in North Macedonia is on a long-term declining path, with the sector's share in total GDP shrinking over the past decade.

Public spending on agriculture and rural development in North Macedonia has declined but remains double the EU average. Between 2014 and 2020, the budget allocated nearly 1.3 percent of GDP annually to agriculture and rural development, twice as much as the WB6 and almost three times the EU average. During the 2021-2024 period, budget allocations to agriculture and rural development declined to an average of 0.75 percent of GDP, closer to the WB6 average but still double the EU average. During this period, direct farm subsidies, often coupled with production, amounted to 83 percent of the agricultural support envelope. On average, two-thirds of direct payments supported crops, especially low-value ones such as tobacco. Only 16 percent of the support envelope was directed to rural development, limiting the focus of public policy towards agricultural adjustment and modernization.

While subsidy intensity in North Macedonia is below the EU average, the economic performance of subsidized farms lags behind that of non-subsidized ones, implying that the agricultural support policy mix in North Macedonia should be revised. The landscape of farm sizes is dominated by very small, fragmented holdings, with around 61 percent of farms operating on less than one hectare. This situation, combined with factors such as limited irrigation infrastructure, poor public infrastructure, and a dysfunctional land market, constrains farm productivity.

Efforts to improve the efficiency of agricultural subsidies in North Macedonia are crucial for the country's economic transition and resilience. By aligning agricultural policies with the EU's Common Agricultural Policy and implementing targeted reforms, North Macedonia can enhance the productivity and competitiveness of its agricultural sector, contributing to broader economic growth and development. Recommendations include eliminating direct payment support to tobacco, allocating farm support towards high-value crops, shifting to decoupled payments, ensuring a just transition for vulnerable farmers, supporting farm agglomeration, repurposing rural development support towards capital investment and the adoption of innovative technologies, and removing structural difficulties that hinder the clustering of very small farms into more efficient, larger units.

Conclusion

As North Macedonia looks beyond a period of multiple overlapping shocks, it is opportune for the country to take a series of steps to achieve lasting fiscal consolidation. Government priorities for improving public financial management, strengthening fiscal discipline and fiscal responsibility, improving expenditure efficiency, broadening the tax base, and enhancing tax collection can support consolidation efforts and promote medium-term fiscal sustainability. Coherence between medium-term fiscal strategies and annual budget plans is crucial to ensure adherence to fiscal rules set to take effect in 2025 and to follow up on pending fiscal-consolidation pledges. In that context, transparency[5] and accurate reporting of government financial statistics is critical, but the country's current statistics systems are only partially aligned with ESA 2010 standards,[6] largely due to the off-budget nature of the PESR, which needs to be integrated into the government's financial accounts and regular reporting.

The risks of delayed adjustment are significant. Without a sustained and sufficient medium-term fiscal adjustment, fiscal and macroeconomic risks could escalate, with further rises in borrowing costs affecting private sector borrowing costs, stifling investments, and dragging on the overall economic recovery. High debt levels can become a drag on growth. Research indicates that the levels of debt North Macedonia is already facing are consistent with weak growth performance and rising fiscal and debt risks, especially after the global crisis.[7] Abrupt changes to fiscal policy often involve significant spending cuts or tax increases without careful planning or sufficient time to mitigate their impact on the economy and society, and ad hoc fiscal adjustments in response to new shocks should be avoided.

However, with the right policy actions, North Macedonia has an opportunity to both increase revenue collection and to improve the efficiency of public spending, and thereby shift towards a more sustainable fiscal pathway. The following table sets out a series of recommended policy actions, color-coded to underline prioritization, towards this goal. Many recommendations resemble those in the 2018 Public Finance Review (Annex 1) given the incomplete reform implementation and policy reversals.

5 The last results of the Open Budget Survey showed a decline in transparency by 6 points in 2023 relative to the peak of 41 (out of 100) observed in 2019. This level of transparency is also below the threshold of 61 that measures sufficient transparency that allows for an informed public budget debate.

6 North Macedonia EU Country Report 2023.

7 Baldacci, Gupta et al., 2010.

POLICY MATRIX	Fiscal Savings (% of GDP)	Equity/ Efficiency
A. Boosting Tax Revenues		
Raise the tax rate for all forms of capital income to 15 percent.	0.14	+/+
Raise the corporate income tax rate to 15 percent.	1.07	+/+
Consider accelerating the increase in excise taxes for cigarettes.	0.20	+/+
Reform alcohol excise taxes to control substitutability and reduce negative health effects.	0.10	+/+
Consider a tax on SSBs in line with regional and global trends.	0.10	+/+
Abolish the threshold for customs-duty exemption of 90 EUR for e-commerce and rationalize customs exemptions for TIDZ companies.		/+
Raise the standard VAT rate to the regional average at 19 percent and remove the preferential rates for all goods except those for basic use.	0.46	+/+
Increase property taxes, especially recurrent charges on residential properties and scale back transaction taxes.		+/+
Establish a domestic carbon price to anticipate the imposition of a carbon border adjustment on domestic exports to the EU starting in 2026 and to incentivize climate action.	1.40	+/+
Modernize and enhance administrative capacity of the tax administration to strengthen tax compliance.		+/+
B. Enhancing The Effectiveness Of Public Administration		
Reform the public sector remuneration system to address inflationary impacts and wage disparities within the public sector.		+/+
Improve the staff assessment system to address staff nonperformance.		
Conduct functional analysis to inform staff rationalization and de-politicize the public sector through the law on senior civil servants.		+/+
Depoliticize the public sector through the adoption of the law on senior civil servants.		+/+
Support the digital transformation of the public sector to foster transparency and transformation of a modern civil service.		neutral/+
Accelerate the full application of HRMIS and staff evaluation to improve cost controls and ensure equal pay for equal work.		+/+
Enhance strategic planning, promote professionalization, and introduce performance-based management practices in the public sector.		+/+
C. Rebalancing Local Government Finances		
Consider asymmetrical decentralization or territorial reorganization to achieve economies of scale in public service delivery.		neutral/+
Redefine spending responsibilities to avoid overlap or duplication of functions and increase accountability for tasks allocated to local governments.		+/+
Advocate for increased subnational reliance on own-source revenues to promote funding adequacy and reduce dependence on central government transfers.	0.5	+/+
Monitor fiscal operations of local governments and their utility companies to ensure fiscal prudence and adherence to national fiscal rules, as well as to reduce fiscal risks.		/+
D. Improving The Efficiency, Equity And Delivery Of Health Care		
Continue to expand the scope of care of primary care providers and their capabilities to deliver quality and coordinated care with targeted investments in infrastructure, equipment, and education		+/+

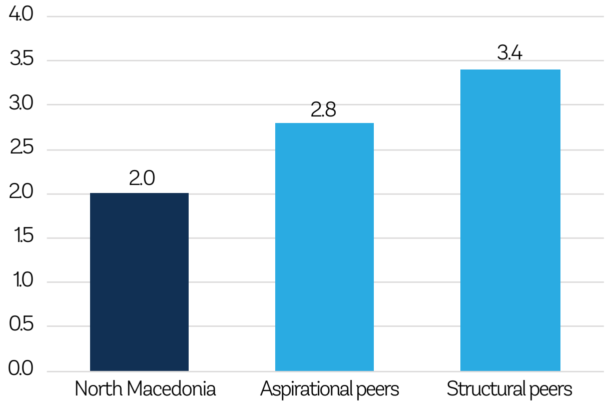
	Strengthen the delivery of quality long-term care services, especially for the most vulnerable, by employing a standardized assessment tool for a clearly defined health long-term care benefit package and developing and upholding quality assurance mechanisms.		+/+
	Improve affordability of and access to essential medicines by updating the drug positive list covered by the health insurance fund, and revising drug pricing and co-insurance policies to ensure access.		+/+
	Strengthen quality assurance through improved licensing, accrediting against minimum standards, and monitoring and enforcement mechanisms, alongside targeted investments in capacity building and equipment.		neutral/+
	Strengthen the planning and stewardship capacity of the Ministry of Health with targeted investments in capacity building and equipment, including eHealth capabilities.		neutral/+
	Develop human resource and facility masterplans for a new, integrated service delivery model which strengthens the role of primary healthcare providers and nurses, optimizes the use of hospital resources, and meets the rising needs for rehabilitative and long-term care services.		+/+
	Build up emergency preparedness and response capacity of the health system.		+/+
	E. Strengthening Social Assistance		
	Consolidate further social assistance programs and consider an increase in coverage to protect households from emerging vulnerabilities.		+/+
	Consider the use of a single, unified set of criteria to assess eligibility for needs-based social assistance programs to ensure horizontal equity and reduced administrative costs.		+/+
	Strengthen labor market activation measures for long-term unemployed and long-term social beneficiaries.		+/+
	Consider "make-work-pay" benefit reforms and review wage reservation rate.		+/+
	F. The Sustainability of the Pension System		
	Require medium- and long-term financial projections before any ad hoc changes to ensure predictability of benefits and align short-term decisions with long-term consequences.		/+
	Reconsider CPI indexation while ensuring a systematic indexation of minimum pensions and clarification of the application once the multi-pillar scheme matures in 2032.	0.5	+/+
	Allow for the diversification of the DC scheme's funds and leverage lifecycle investments to improve returns.		+/+
	Gradually increase the retirement age while introducing labor-market programs to upskill/reskill older adults.	0.1 (over medium term)	+/+
	Gradually increase pension contributions by 2.2 percent while boosting compliance.	0.7 (over medium term)	+/+
	Evaluate options for structuring and indexing payouts under the DC scheme.		neutral/+
	Establish an actuarial unit and require PIOM & MAPAS to produce actuarial reports every 2-3 years.		neutral/+
	Develop a strategy for ensuring coherence between the contributory schemes and the newly launched social pension.		+/+
	Create an easy-to-use pension calculator and improve pension awareness and incentives to boost savings under the voluntary pension scheme.		+/+
	G. Financing the Future: Improving the Efficiency of Education Spending		
	Ensure effective application of the new funding formulas for pre-university education levels.		+/+

Consolidate the school network and reduce or reallocate excess teachers in primary and secondary education.		+/+
Enforce the models stipulated in the Law on Teachers related to progressivity of teacher career and salaries and reward well-performing teachers by the savings created from natural attrition of teachers or by better allocating the existing teaching staff within the school network.		/+
Revert the unsustainable structure of spending by providing additional or re-direct existing resources to non-salary-related spending, including capital spending.		neutral/+
Improve quality assurance mechanisms and accountability and at all education levels.		+/+
Offer support to families from vulnerable socioeconomic backgrounds to reduce the number of out-of-school children and introduce programs for learning recovery to reduce their learning gaps.		+/+
Provide continuous and meaningful support to teachers for professional development and equip them with appropriate and relevant skills, knowledge and competencies		+/+
Invest in digital infrastructure by expanding access to the internet in schools, by upscaling digital skills of teachers and students, and increasing the capacity of education institutions to design and implement digital pedagogy.		+/+
H. Improving the Efficiency of Public Procurement		
Provide training and revision of guidelines to facilitate the use of the open procedure by public buyers.	0.01	+/neutral
Implement monitoring and control mechanisms to ensure that public buyers use these types of procedures correctly.		+/+
Provide training in market analytics to buyers with highly concentrated spending patterns, especially in high-risk sectors.	0.09	+/neutral
Efforts to increase the number of bidders that participate in the tendering process to reduce concentration among buyers and suppliers by reducing the prevalence of single-bidder and two-bidder contracts.	1.45	+/+
Alter the size of winning companies by encouraging smaller companies to engage with the procurement process.	0.05	+/+
I. Rationalizing Agricultural and Rural Development Subsidies		
Eliminate direct payments to support tobacco production.	0.2	neutral/+
Shift to decoupled payments and set a minimum threshold below which farms cannot receive agricultural support.		+/+
Allocate farm support towards high-value crops while looking out for food security.		+/+
Remove structural difficulties (e.g., access to finance, technology, markets) that hinder the clustering of very small farms into more efficient, larger units.		+/+
Repurpose rural development support towards capital investment and towards broader adoption of innovative technologies.		neutral/+
Total fiscal consolidation impact (short to medium term), percent of GDP	7.07	

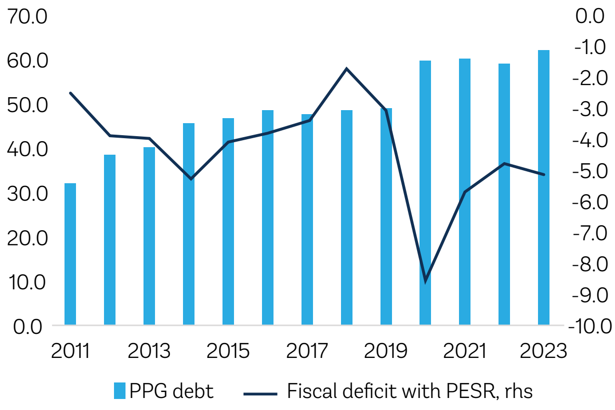
Note: Color-co reflects the urgency of reforms with **dark orange** color indicating an immediate attention, **orange** indicating a short-term priority, and **yellow** a medium-term priority.

Public Finance Review in Six Charts

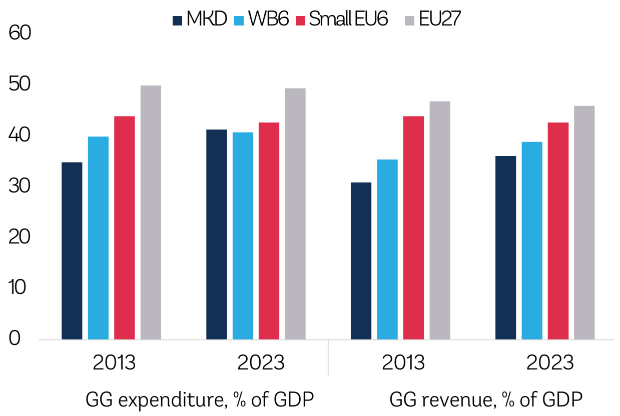
Economic growth has been lagging the structural and aspirational peers.



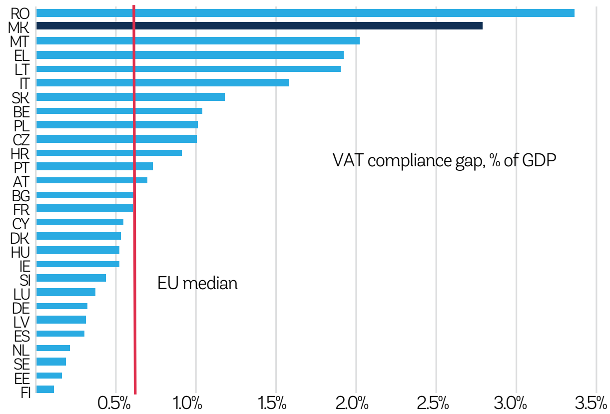
Post-pandemic, public debt and deficit remain above the decade averages.



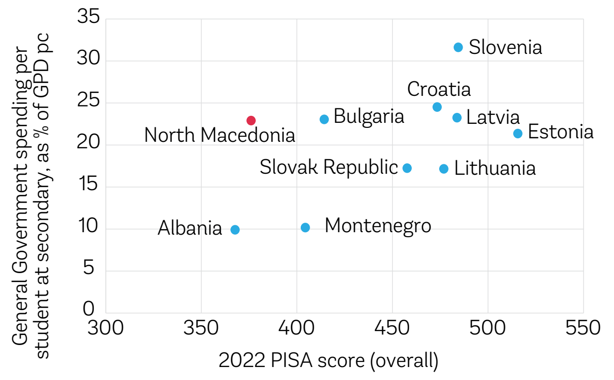
Public spending increased to the average of peers and it outpaced revenue growth.



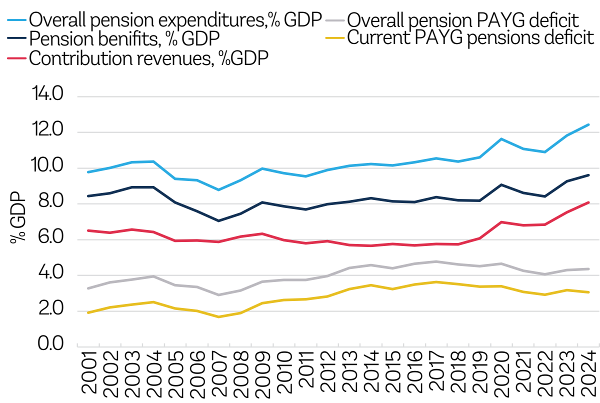
Removing exemptions, introducingcarbon tax, and strengthening compliance can boost revenues by 3.5 percent of GDP.



Public spending requires improvement of quality and efficiency...



...as well as ensuring long-term sustainability amplified by aging.



Chapter 1

Introduction

1.1 **North Macedonia aspires to become the member of the European Union by the end of the decade after being an EU candidate country for almost two decades.** North Macedonia applied for European Union (EU) membership in 2004 and became an EU Candidate Country in 2005. The European Commission had been recommending the opening of accession negotiations since 2009, but North Macedonia's name dispute with Greece was only resolved in 2018. In June 2018, the EU Council opened accession negotiations, highlighting the need for further progress in the fight against corruption and organized crime, judicial reform, improvements in the intelligence and security services, and capacity-building in the public administration, among other priority areas.[8] However, a dispute over the language and history with Bulgaria prevented the screening process from starting until 2022. The annual progress report for 2022 acknowledged the progress made in strengthening the rule of law and protecting fundamental rights, but further efforts are needed, as the country remains only moderately prepared in those areas.[9]

Figure 1. North Macedonia's performance on several governance indicators

(Percentile rank among all countries in the world)

Source: Worldwide Governance Indicators, World Bank, 2022.

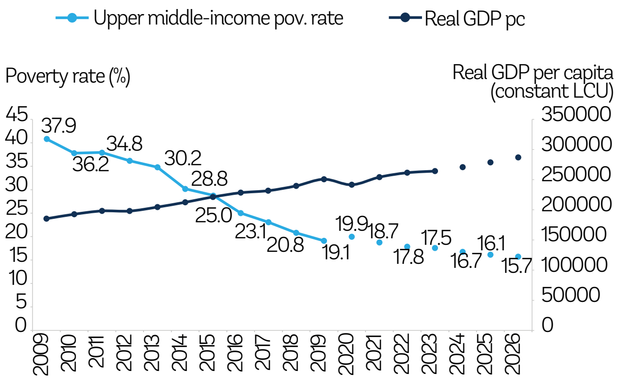
1.2 **Driven in part by the goal of EU membership, the government has significantly improved the quality and transparency of public institutions and administrative processes.** Reforms have been made in areas such as public financial management, anti-corruption measures, the judiciary, procurement, and public administration, and service delivery. Indeed, North Macedonia's performance on several governance indicators is above the income group peers, but control of corruption and government effectiveness remain a problem with some backsliding since 2015 (Figure 1).

1.3 **Nevertheless, the economic benefits of closer integration with the EU are already apparent**. FDI from EU member states currently accounts for 64 percent of North Macedonia's total FDI stock, and close to 80 percent of the country's exports go to the EU. EU grants are

8 https://www.consilium.europa.eu/en/policies/enlargement/republic-north-macedonia/
9 https://neighbourhood-enlargement.ec.europa.eu/system/files/2022-10/North%20Macedonia%20Report%202022.pdf

by far the largest development support to the country[10] and the EU support has bolstered the country's resilience in the face of recent unprecedented pandemic and energy shocks. A decade of macroeconomic and institutional reforms has also yielded important development results. North Macedonia's poverty rate, as measured by the *international* poverty line for upper middle-income country at $6.85 in 2017 PPP terms, more than halved since 2009, while the share of population vulnerable to falling into poverty if hit by a shock[11] also declined during this period (Figure 2). After a lockdown, disrupted supply chains, and a prolonged adverse epidemiological situation, the outbreak of the war in Ukraine led to a severe energy crisis and inflation surge in Europe. Given its reliance on energy imports, North Macedonia experienced a disproportionately adverse impact from these shocks, but government support programs somewhat alleviated the impact on workers and firms, and the subsequent rebound has supported a resumption of the pre-pandemic trend of poverty reduction.

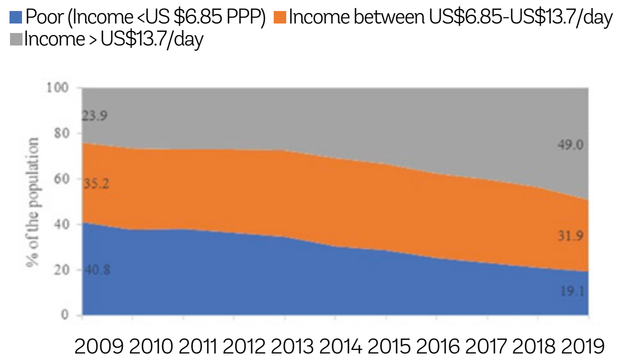
Figure 2. North Macedonia's Per Capita GDP and At-Risk-of-Poverty Rates, 2011-23



Source: Poverty and Inequality Platform and Macro-Poverty Outlook, World Bank.

Figure 3. A large share of the population remains vulnerable to falling into poverty

(Evolution of poverty and vulnerability in North Macedonia, 2009-19)



Source: Author's calculation based on 2009-2020 income data from SILC.

1.4 **Economic growth since 2009 has significantly benefited less well-off households and has lifted more than 423,000 people above the poverty line** (Figure 3). Income inequality also decreased substantially, as the Gini index fell from approximately 42.8 in 2009 to 31.4 in 2019.[12] Income growth accounted for about two-thirds of poverty reduction during the period, with redistribution responsible for the remaining third. Nevertheless, poverty rates remain relatively high by regional standards, with around 414,000 people living in poverty in 2020 (the latest available official data). Some 40 percent of the population remained at risk of poverty or social exclusion—one of the headline Europe 2020 indicators—almost double the EU27 average of 21.5 percent.[13]

1.5 **Despite recent welfare gains, North Macedonia still faces considerable challenges related to income inequality and intergenerational poverty reduction.** Even with economic growth averaging a robust 5 percent from 2023 onward, and an equitable distribution of incomes, more than 235,000 individuals would still be living in poverty by 2030. At the current average growth rate of 2 percent, poverty reduction would be even slower, underscoring the need both for faster and more inclusive growth.

10 North Macedonia received through EU IPA I and II €1.3 billion, and IPA III envisages an allocation 60 percent higher than that received so far.

11 Vulnerable to falling into poverty if hit by a shock is defined here as having a per capita income above, but less than double the $6.85 poverty threshold.

12 The SILC 2020 is the last available survey that reports on 2019 incomes. The Gini index is a statistical measure of inequality, with lower values representing greater equality.

13 The at-risk-of-poverty-or-social exclusion rate (AROPE) measures the share of population either at risk-of-poverty, facing severe material deprivation or living in household with low work intensity. For details, see https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:At_risk_of_poverty_or_social_exclusion_(AROPE)

1.6 **North Macedonia managed to navigate multiple crises in the last few years, but with a slower growth trajectory relative to peers and with comparatively larger fiscal scars.** Growth has been lower than in the Western Balkan and EU peers almost consistently since 2016 and it is expected to continue lagging regional peers over the medium term (Figure 4). Although output growth was above the EU27 average, convergence with EU peers is slow, at 42 percent of EU27 GDP at PPS in 2022. Historically, domestic demand has been the backbone of growth with consumption driving close to 90 percent of output, while net exports observed a negative contribution to growth, and investment remained sluggish. Going through successive crises, output managed to recover only in 2022, but the potential growth rate is on decline as low productivity and human capital formation keep holding back the productive capacity of the economy (Figure 5).

Figure 4. Economic growth has been lagging the structural and aspirational peers.

(Annual real GDP growth rate, 2016-23, percent)

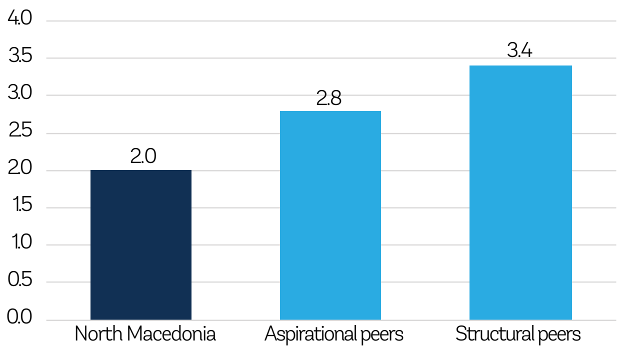
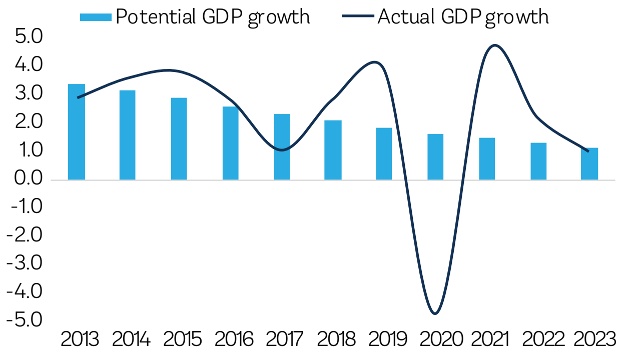


Figure 5. Potential growth has declined over the last decade

(Annual real GDP growth rate, 2013-23, percent)



Note: Aspirational peers: Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovenia; Structural peers are countries of the Western Balkans.
Source: Authors' calculations based on data from national authorities, WDI, WEO, and Eurostat.

1.7 **Structural impediments and crises-induced scars continue to affect the labor market and create pressures on public finances.** Government anti-crises support helped ramp up employment, but labor force participation, for women in particular, remains low, while aging and emigration eroded the working age population. With minimum wage hikes, labor shortages, and public sector pay raises, wages have risen 63 percent since 2017, surpassing cumulative inflation of around 37 percent. Post-2020, lingering supply shortages and pent-up savings, coupled with surging commodity prices, pushed inflation to a two-decade high. Despite monetary policy tightening, core inflation remains sticky, and together with lasting wage pressures, may keep interest rates high and suppress economic activity in the near future.

1.8 **Fiscal prudence ahead of the crises secured enough space for support, but the crises worsened fiscal outcomes and there is now a need to restore sustainability and rebuild buffers**. The prolonged fiscal stimulus since 2020 has led to a sharp increase in the deficit that remained elevated even in 2022 and 2023, at above 5 percent of GDP, despite a strong revenue performance fueled by inflation and output recovery. Relative to WB6 and EU27 peers, North Macedonia ran higher fiscal deficits in the last decade, and public debt is now close to 13 ppts of GDP above the 2019 level, while in addition expenditure arrears remain stubbornly high at 3 percent of GDP on account of low fiscal discipline in public health institutions, state enterprises, and local governments. Evidence from recent years also suggests that fiscal policy has been largely procyclical and expansionary during electoral years. Consolidating public finances during good times instead can help the government mitigate better business cycle fluctuations, enhance macroeconomic stability and generate fiscal space for times of need.

Figure 6. Total primary balance improvement during fiscal consolidation episodes in ECA

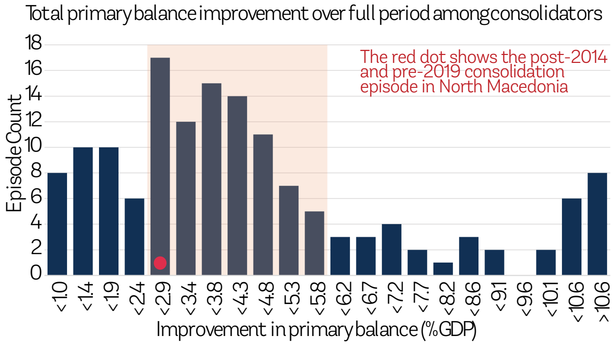
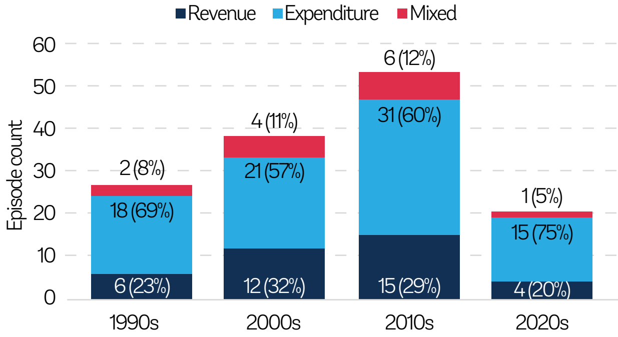


Figure 7. Fiscal consolidation episodes in ECA, 1980-2023



Source: World Bank staff estimates based on data from WDI, WEO and GFS.

1.9 **Recent experience shows that achieving a lasting consolidation may be challenging, particularly after multiple overlapping crises.** Fiscal consolidation experiences suggest that conditions that have proven to support fiscal consolidation efforts include a favorable domestic/global environment, strong fiscal institutions, as well as broad political consensus for the proposed reforms.[14] Effective strategies typically protected public investment and social welfare programs, and focused on taxing broader, less disruptive economic activities.[15] Past consolidation episodes in ECA seemed to have led to large primary balance improvements (Figure 6) and have been more often expenditure-based (Figure 7). They were underpinned by a reliable and feasible medium-term fiscal strategy and relied on solid fiscal institutions. For instance, an independent fiscal council assists fiscal consolidation efforts through a more realistic assessment of the medium-term projections and policies. Finally, maintaining commitment by policymakers throughout the entire process was critical for the realized outcomes. In North Macedonia, coherence between medium-term fiscal strategies and annual budget plans is a priority to ensure adherence to fiscal rules that will take effect in 2025. In that context, realistic growth and revenue forecasting, accurate reporting of government financial statistics and alignment with the ESA 2010 standards,[16] as well as fully functional Fiscal Council would support the credible medium-term consolidation program.

1.10 **According to the last government's Fiscal Strategy for 2024-2027, in the medium to long term, the goal is to maintain macroeconomic stability and pursue fiscal consolidation by reducing the general government deficit from 5.2 percent of GDP in 2023 to 2.8 percent in 2027** through:

- Improved revenue collection (through increased fairness, efficiency and effectiveness of revenue collection, tax transparency and the introduction of green taxation);
- Reduced and restructured expenditure (through cuts in non-productive spending, increased support for private sector competitiveness, targeted social spending, revised methodologies for transfers and subsidies);
- Changes to the sources of deficit financing (through greater diversification, realization of key projects via PPPs, creation of a development fund to support strategic investments and mobilization of private capital); and
- Reduction of arrears and increased VAT refunds to the private sector.

14 IMF Working Paper (2023): Fiscal Consolidations: Taking Stock of the Success Factors, Impact, and Design.
15 For example, the 2011-2014 fiscal consolidation program in Portugal increased social protection spending to mitigate the overall impact of total expenditure cuts and implemented structural reforms to improve spending quality in education and health.
16 North Macedonia EU Country Report 2023.

1.11 **This report aims to inform the medium-term fiscal reform agenda that would restore fiscal sustainability, boost tax revenues, and improve spending efficiency.** First, the report analyzes North Macedonia's major macroeconomic and fiscal weaknesses, risks, and debt sustainability. Second, it discusses the tax policy and compliance challenges. Third, it zooms on horizontal public finance issues: public administration, and subnational government that are critical for delivery of effective public services. Fourth, it analyzes effectiveness, efficiency, and, where possible, equity concerns for social, health, pension, and education sectors. Finally, it offers recommendations for improving efficiency of public procurement and agricultural state aid.

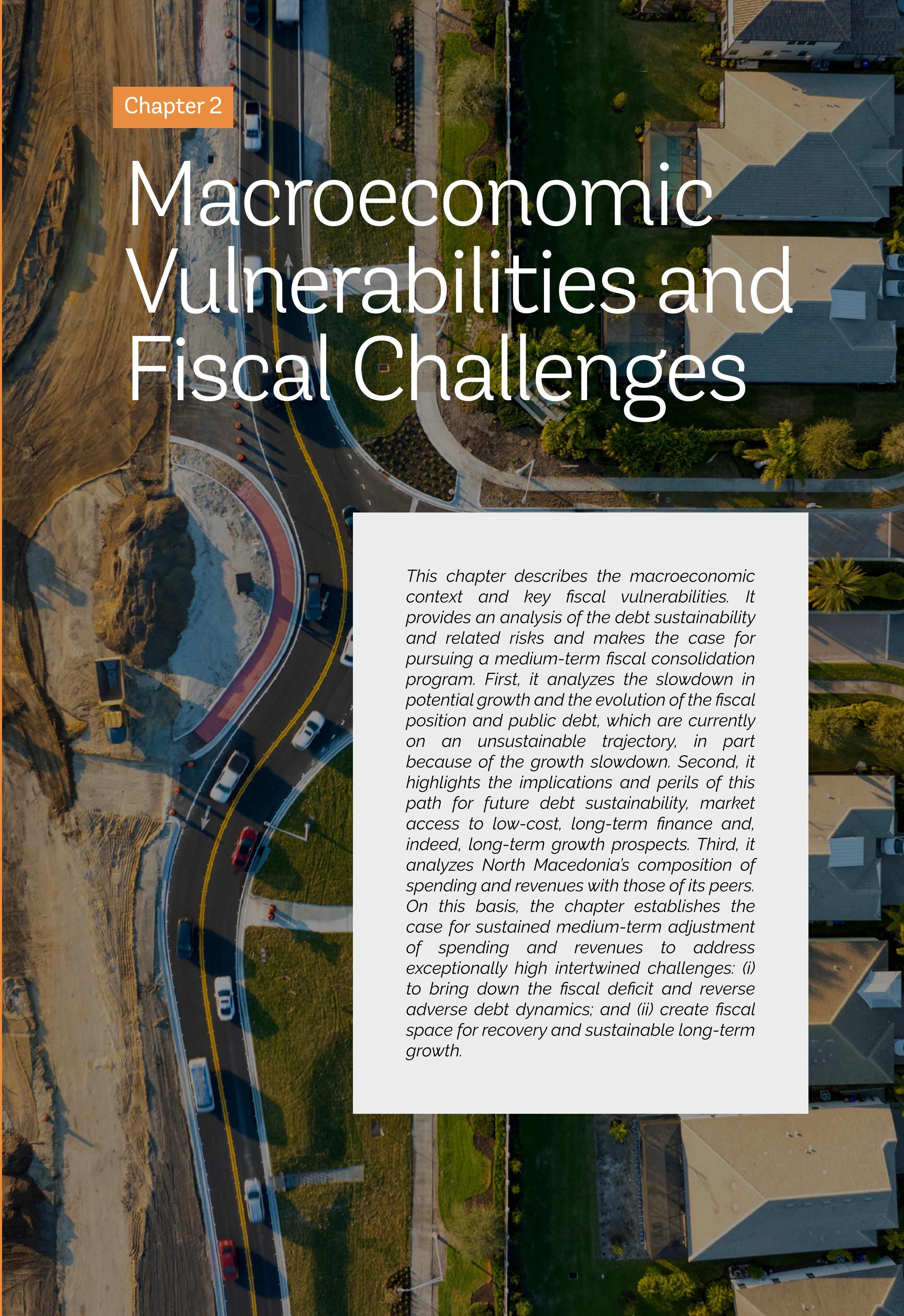
1.12 **The post-crises context calls for careful fiscal management as the era of unprecedent monetary loosening has sharply changed in response to historical inflationary pressures.** The cost of capital has already increased five-fold for North Macedonia, which threatens to crowd out other spending priorities in the future due to rising interest payments for sharply increased debt. The country has delayed fiscal adjustment with the hope that the country would "grow out" of higher deficit and debt levels. This, however, has not happened given the successive shocks. As a result, public debt and fiscal positions have become unsustainable and above the thresholds set out in the newly enacted organic budget law that introduced fiscal rules of 3 and 60 percent of GDP of public deficit and debt, respectively.

1.13 **Similarly, without accelerating structural reforms, especially in the area of investment climate and public sector efficiency, North Macedonia will face stifled prospects for recovery of growth and jobs.** Public sector efficiency has been a drag on the fiscal deficit and public debt levels, but also provides considerable scope for efficiency savings in the public sector that would not undermine performance. Without additional improvements of public investment management[17] and the business environment, these weaknesses are also likely to undermine the potential benefits of European financial integration, in terms of lower interest rates and greater, more stable and productive capital inflows. Taken together, these risks are substantial and threaten to unwind much of the economic gains that North Macedonia achieved in the previous decade.

17 IMF (2020). North Macedonia: Public Investment Management Assessment.

Chapter 2

Macroeconomic Vulnerabilities and Fiscal Challenges

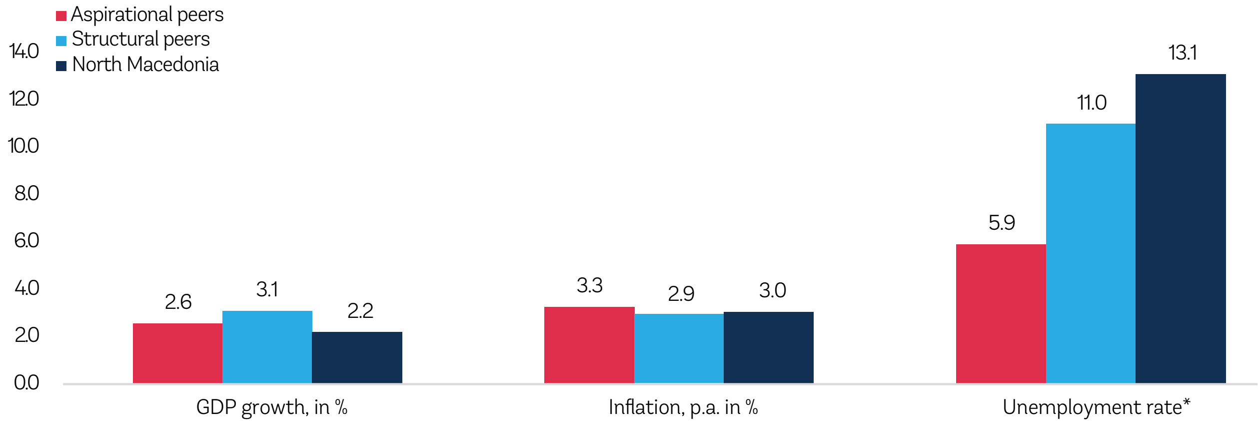


This chapter describes the macroeconomic context and key fiscal vulnerabilities. It provides an analysis of the debt sustainability and related risks and makes the case for pursuing a medium-term fiscal consolidation program. First, it analyzes the slowdown in potential growth and the evolution of the fiscal position and public debt, which are currently on an unsustainable trajectory, in part because of the growth slowdown. Second, it highlights the implications and perils of this path for future debt sustainability, market access to low-cost, long-term finance and, indeed, long-term growth prospects. Third, it analyzes North Macedonia's composition of spending and revenues with those of its peers. On this basis, the chapter establishes the case for sustained medium-term adjustment of spending and revenues to address exceptionally high intertwined challenges: (i) to bring down the fiscal deficit and reverse adverse debt dynamics; and (ii) create fiscal space for recovery and sustainable long-term growth.

A. Growth Performance

2.1 **Prior to 2020, sustained reforms that promoted macroeconomic stability, fiscal prudence, and a conducive business environment enabled the country to weather multiple subsequent crises.** A moderate output growth averaged 2.4 percent during 2009-2019, backed by a long-term government strategy to incentivize foreign direct investment (FDI) in the labor-intensive automotive supply chain and subsidize domestic job creation that helped boost exports and ease unemployment. However, due to the import-intensive nature of exports the contribution of net exports to GDP growth has mostly been negative.

Figure 8. Cross-country macro comparison, 2013-2023



Note: Unemployment rate is the 2023 data.

Source: National statistical offices, Eurostat.

2.2 **Over the past decade, output growth in North Macedonia has averaged 2.2 percent, below a 3.1-percent average for structural peers[18] and 2.6 percent average for aspirational peers** (Figure 8). The pace of convergence with EU living standards has been slow, and North Macedonia's GDP per capita at PPS rose from 34 to 42 percent of the EU average during this period. Growth has been lower than in all Western Balkan countries almost consistently since 2016, and North Macedonia is expected to continue lagging regional peers over the medium term.[19] Price trends were similar to those observed in comparator peers, but the unemployment rate stood significantly higher in North Macedonia.

2.3 **Continued government support helped boost employment growth, but labor force participation remains low, while labor shortages are increasing.** Close to 170,000 jobs were created in the decade preceding the pandemic, which pushed the employment rate to a record high in 2019. However, the labor force participation rate remained relatively low at around 52 percent. An aggressive pandemic-response program that included subsidies for social security contributions, delayed tax payments, and direct transfers to firms helped sustain employment, but a large share of workers moved to inactivity. This shift was especially pronounced among women, and the gender gap in labor force participation continues to exceed 20 ppts. More than 80 percent of unemployed workers report searching for a job for over a year, and, despite a recent decline, the youth unemployment rate (ages 15-24) remains above the WB6 and EU27 averages. Meanwhile, demographic aging and outmigration pushed the job vacancy rate up, leading to burgeoning labor shortages in construction, administration, and trade-related services.

18 Structural peers include Albania, Bosnia and Herzegovina, Montenegro, Kosovo, and Serbia, while aspirational peers include Croatia, Estonia, Latvia, Lithuania, and Slovenia.

19 Western Balkans Regular Economic Report No.24, Fall 2023.

Table 1. North Macedonia: Selected macroeconomic indicators, 2015-2023

	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real GDP growth (percent)	3.9	2.8	1.1	2.9	3.9	-4.7	4.5	2.2	1.0
Headline inflation (percent, period average)	-0.3	-0.2	1.4	1.5	0.8	1.2	3.2	14.2	9.4
Core inflation (percent, period average)	0.6	1.4	2.3	1.5	0.5	0.9	2.4	7.3	8.1
Overall fiscal balance (percent of GDP)	-3.4	-2.7	-2.8	-1.1	-2.1	-8.2	-5.3	-4.4	-4.9
Overall fiscal balance with PESR included (percent of GDP)	-4.1	-3.8	-3.4	-1.7	-3.1	-8.6	-5.8	-4.7	-5.2
Public and publicly guaranteed debt (percent of GDP)	46.6	48.7	47.6	48.4	49.2	59.8	60.3	59.0	62.0
Trade balance (percent of GDP)	-20.1	-18.8	-17.8	-16.2	-17.3	-16.6	-19.8	-26.7	-18.9
Net remittance inflows (percent of GDP)	2.5	2.2	2.2	2.1	2.0	3.1	2.9	2.7	2.5
Current account balance (percent of GDP)	-1.6	-2.4	-0.7	0.2	-3.0	-2.9	-2.8	-6.1	0.7
Net foreign direct investment inflows (percent of GDP)	2.2	3.3	1.8	5.6	3.2	1.4	3.3	5.0	3.8
External debt (percent of GDP)	69.3	74.7	73.4	73.0	72.4	78.7	80.9	82.8	84.0
Gross foreign reserves (end of period, bil. EUR)	2.3	2.6	2.3	2.9	3.3	3.4	3.6	3.9	4.5
Unemployment rate (percent, period average)	26.1	23.8	22.4	20.7	17.3	16.4	15.4	14.4	13.1
Youth unemployment rate (percent, period average)	42.6	40.8	40.6	42.0	35.6	35.7	36.3	32.5	29.3
Labor force participation rate (percent, period average)	57.0	56.5	56.8	56.9	57.2	56.4	55.8	55.2	52.3
Poverty rate ($6.85/day PPP)	28.8	25.0	23.1	20.8	19.1	20.1	19.1	18.3	17.9

Source: State statistical office, NBRNM, World Bank staff calculations. Note: Data for 2015-23 are actuals.

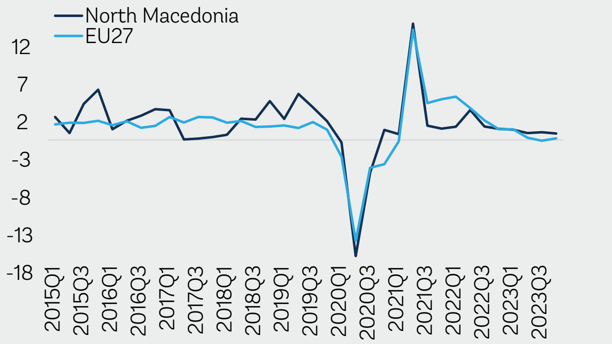
Box 1. Business cycle synchronization

Business cycles are increasingly correlated across countries, particularly those with close economic ties (Zorell and Dees, 2011). The factors believed to drive business cycle synchronization include trade linkages, financial flows, production structures, and fiscal and monetary policy (Imbs, 2004; Herrero et al., 2008; De Haan et al., 2008). In North Macedonia, an EU candidate country since 2005 with a de facto fixed exchange rate, pegged to the euro, empirical studies have shown a high degree of business cycle synchronicity with the euro area (Velickovski, 2013; Gouveia, 2014; Hildebrandt and Moder, 2015).

Table 2. Business-cycle correlation coefficients, North Macedonia and comparators

Correlation coefficients	**2005Q1-2021Q4**	**2015Q1-2021Q4**
European Union (27)	0.50	0.59
Euro Area	0.51	0.86
Germany	0.57	1.00

Figure 9. Real GDP growth rates, North Macedonia and the EU27 (%)



Source: National statistical offices, Eurostat, World Bank staff calculations.
Note: Quarterly real output data from 2005Q1-2023Q3 are input into the HP filter with a standard smoothing parameter for quarterly data of 1600. To avoid end-point asymmetry (Mise et al., 2005), correlation coefficients include data up to end-2021.

North Macedonia shows a high and increasing degree of correlation with the EU, the euro area, and Germany, which accounts for over 30 percent of its euro-denominated exports on average (Table 2). During 2005Q1-2021Q4, the correlation coefficients for the business cycles in North Macedonia and the EU27 was 0.50, nearly identical to the coefficient for the euro area (0.51) and close to the coefficient for Germany (0.57). In the 2015Q1-2021Q4 period, the correlation coefficients increased across the board, suggesting further business-cycle convergence between North Macedonia and its major trading partners. North Macedonia's GDP growth rate also closely tracks the EU27 average on a quarterly basis (Figure 9).

Monetary policy response

2.4 **The central bank has implemented an exchange rate targeting regime since 1995 to maintain price stability and foster a stable, competitive, market-oriented financial system.** Under the exchange rate targeting regime, the Macedonian denar (MKD) was originally pegged to the German mark (1995-2001) and then to the euro (2002-present). The central bank has maintained ample reserves to safeguard against threats to the peg amid relatively high but declining levels of euroization on household, corporate, and government balance sheets. In the past, several crises have led to deposit withdrawals and conversions to foreign currency, putting pressure on the exchange rate, but the continuous buildup of reserves and the use of incentives to increase denar-denominated assets in bank portfolios helped shield the country from exchange rate shocks.

2.5 **A combined monetary and fiscal response mitigated the pandemic's impact on economic activity and financial stability.** The main policy rate was cut three times, and by March 2021 it had reached a historic low of 1.25 percent. Meanwhile, the central bank reduced the amount of securities offered to banks to increase liquidity in the economy (Figure 10). The central bank also eased regulations on restructured and nonperforming loans, allowed banks to introduce loan repayment moratoria, and suspended payment of bank dividends to safeguard the stability of the financial system. To provide additional foreign-currency liquidity buffers, the central bank also requested and obtained a €400 million bilateral repo liquidity line from the ECB, which was later extended until January 2024 due to Russia's invasion of Ukraine.

Figure 10. Main policy rate and inflation

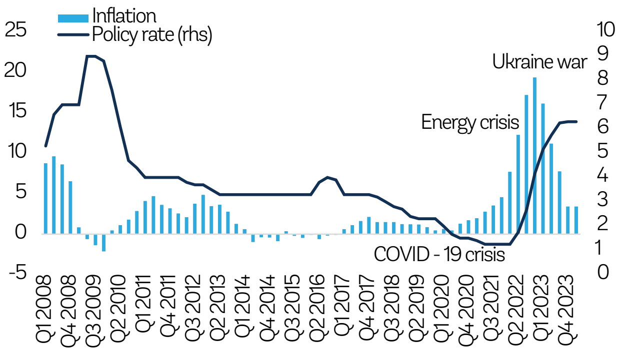
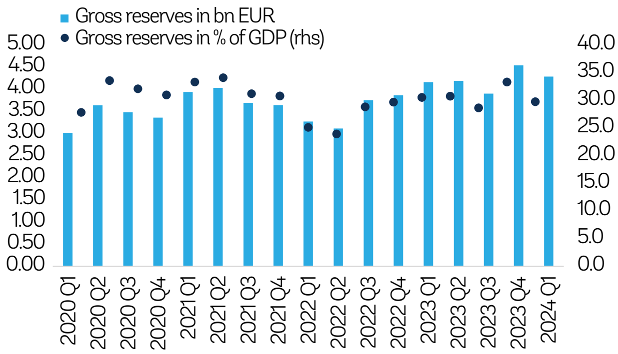


Figure 11. Gross FX reserves



Source: NBRNM, SSO and World Bank staff calculations.

2.6 **Post-pandemic supply shortages and pent-up demand, coupled with surging commodity prices and subsequent wage and pension hikes, pushed inflation up after a decade of muted growth.** Inflation picked up in mid-2021 and peaked at close to 20 percent at end-2022, led by double-digit increases in food and energy prices (Figure 10). International reserves fell at the beginning of the energy crisis in late 2021 and dropped to EUR 3.1 bn in Q2 2022 (Figure 11). However, repeated foreign-currency interventions by the central bank helped stabilize reserves, which exceeded 4 months of imports in December 2023. The central bank raised the main policy rate in multiple rounds of hikes, from a low of 1.25 percent to 6.30 percent, while the pace of borrowing gradually eased to 5.2 percent and headline inflation slowed to 3.6 percent in December. However, core inflation remains sticky at about 5 percent and, along with continued wage pressures, may prolong the tightening cycle, which would further suppress economic activity and increase financing costs going forward.

Figure 12. Net real wages and value added per worker

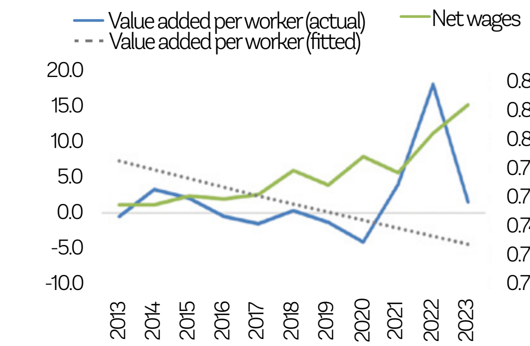
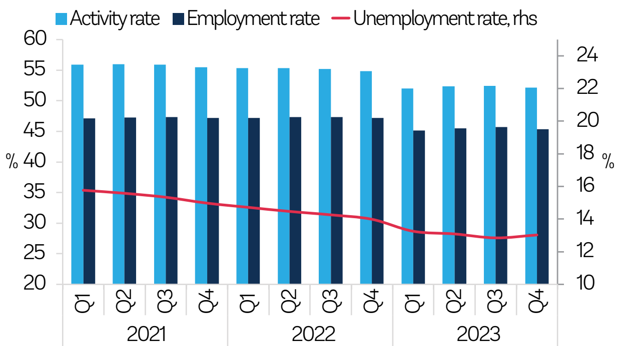


Figure 13. Labor market developments, 2021-2023



Note: LFS 2021 and 2022 releases are based on the new population census from 2021, while LFS 2023 is based on a revised methodology and is not directly comparable to earlier releases. As a result of the population decline, actual value added per worker increased, but the fitted value added per worker which extracts only the signal shows a continuous downward trend in the last decade.
Source: State statistical office, World Bank staff calculations.

2.7 **While inflation eased in 2023, structural challenges continue to affect the labor market, causing wage growth pressure.** Government support boosted employment, but labor force participation remains low, especially among women and youth. Meanwhile, the construction sector and administrative and trade-related services face mounting labor shortages. Multiple increases in the minimum wage and the public sector payroll have caused a nominal wage increase of over 20 percent since 2017 up until the pandemic, while inflation cumulated at below 5 percent during that period. Wage growth remained resilient during the pandemic, rising by 6.5 percent in real terms despite a deep contraction in output. As accelerating inflation eroded real incomes, wages increased by double digits, finally outpacing inflation in the spring of 2023. The minimum wage has more than doubled since mid-2017 and reached 57 percent of the average wage in March 2023.[20] The recently signed collective agreement on public sector compensation[21] revised the calculation coefficients and linked the base wage to the national gross wage from 2024. Wages are thus set to rise, adding second-round effects to inflation that may hurt competitiveness in the absence of productivity growth. The rigidity of wages and wcreation starting in mid-2023 (Figure 13).

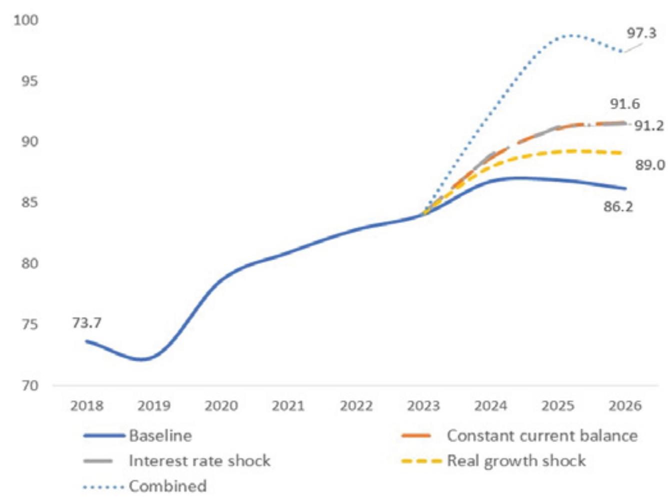
External vulnerability

2.8 **External debt increased sharply during the pandemic.** Gross external debt increased from 72.4 percent of GDP in 2019 to 84 percent at end-2023 largely due to sovereign borrowing and intercompany lending. The private sector's debt share fell to 51.3 percent, with almost half attributable to lower-risk intercompany lending. At the same time, high fiscal needs due to spending demands and debt repayments boosted the public sector's concessional borrowing as market conditions worsened.

2.9 **Despite the recent increase in external debt, debt service indicators remain moderate or low.** Gross external debt exceeded 130 percent of goods and services exports in 2020, then fell to 112 percent in 2022—below both the pre-pandemic level of 117 percent and the 165 percent threshold for moderate indebtedness. In 2022, external debt repayment increased to about 18 percent of goods and services exports—the threshold for moderate risk—as more private sector repayments came due while external demand remained soft. Foreign reserves equaled 130 percent of the short-term debt stock at end-2022, exceeding the threshold of 100 percent.

2.10 **Total external debt is projected to peak in 2025 and then decrease slightly in 2026.** In the baseline scenario, gross external debt is expected to rise to around 86 percent of GDP by the end of the projection period (Figure 14). However, the projections are sensitive to changes in the underlying macroeconomic assumptions. If GDP growth averages 1.5 percent, or interest rates rise by 200 bps, the external debt would reach 89 percent of GDP in 2025 and 91.5 percent in 2026. If the current-account deficit remains at its 2022 level of close to 6 percent of GDP, the external debt would rise to 91.6 percent of GDP. A combination of shocks would push the external debt even further to 97.3 percent by 2026.

Figure 14. External Debt, 2018–26, percent of GDP



Source: National authorities and World Bank staff estimates. Note: The baseline scenario reflects the Bank's assessment of macro scenario. The 30-percent depreciation scenario assumes a one-time real devaluation of 30 percent in 2024. The growth shock scenario assumes average growth of 1.5 percent through 2026, down from 2.7 percent in the baseline. The interest rate scenario assumes a rise in interest rates by 200 basis points. The combined shock scenario assumes there is no fiscal consolidation, lower growth, a one-off depreciation, and a higher interest rate for public debt, but without a one-off depreciation for external debt.

2.11 **External imbalances and external financing needs are expected to remain moderate throughout the projection period.** Annual external financing needs are expected to average 10.6 percent of GDP during 2024-26. Due to large domestic-content requirements, highway-related imports are expected to briefly rise and then gradually taper off,

20 In March 2022, the government revised the methodology for setting the minimum wage. Going forward, the minimum wage will be revised each year to reflect 50 percent average inflation growth and 50 percent average wage growth, and it must be at least 57 percent of the average wage. The minimum wage stood at MKD 22,567 in March 2024.

21 In mid-2023, the government signed a new collective agreement on public-sector compensation that included a 10 percent wage increase in September 2023; a revision to the wage-setting methodology in 2024 linking the base wage to the national gross wage; an annual-leave bonus equal to 30 percent of the average net wage; and loyalty bonuses.

which will help narrow the current account deficit to below 3 percent of GDP from 2025 onwards. The growth of automotive exports and transport and tourism services is projected to remain strong if the country faces no additional terms-of-trade or demand shocks. Annual FDI is set to remain high for the next three years at 3-4 percent of GDP, as the FDI subsidy program[22] continues and new manufacturing, tourism, and energy projects are implemented. FDI is expected to cover a large share of external financing requirements over the projection period.

2.12 **The country now faces a twin challenge of strengthening macroeconomic stability while fostering recovery of growth and competitiveness**. Reducing fiscal vulnerabilities will be key to macroeconomic stability and laying the foundation for stable growth. To promote growth and competitiveness, structural reforms in two areas will be critical: first, lightening of the regulatory burden in the labor market and measures to improve the investment climate; and, second, putting in place a credible fiscal consolidation plan that would rely on both the rationalization of public expenditures and domestic revenue mobilization.

B. Fiscal Performance

2.13 **Fiscal prudence ahead of the crises created adequate space for countercyclical response policies, but deteriorating fiscal outcomes will require the authorities to rebuild buffers as vulnerabilities rise.** Despite strong revenue performance fueled by rising prices and recovering output, prolonged fiscal stimulus since 2020 has widened the deficit well beyond pre-pandemic levels. Over the last decade, North Macedonia has repeatedly run fiscal deficits of over 3 percent of GDP, exceeding the levels of WB6 and EU27 peers.[23] The public debt stock has risen by 10 percentage points (pp) of GDP since 2019, while expenditure arrears remain stubbornly high at more than 3 percent of GDP due to lax fiscal discipline among public health institutions, state enterprises, and local governments. Moreover, fiscal policy has been largely procyclical and expansionary during recent electoral years, contributing to persistent budget deficits (Figure 16).

Table 3. North Macedonia: General Government Finances, 2017-2023

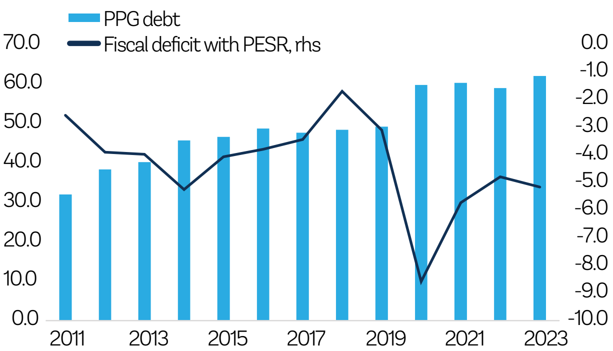
Percent of GDP	2017	2018	2019	2020	2021	2022	2023
Total revenues	32.0	31.4	32.4	31.0	33.2	33.3	36.1
Tax revenue	27.4	27.8	27.8	27.8	29.2	29.6	32.0
Non-tax revenue	2.7	2.4	3.3	2.1	2.5	2.8	2.7
Capital revenues	0.4	0.6	0.7	0.5	0.5	0.5	0.5
Grants	1.4	0.6	0.7	0.6	1.0	0.5	1.0
Total expenditures	35.4	33.1	35.5	39.6	38.9	38.1	41.3
Current expenditures	30.0	29.3	30.4	35.4	33.6	32.8	34.2
Wages and salaries	6.7	6.3	6.4	7.2	6.87	6.5	7.3
Goods and services	3.9	3.6	3.9	3.7	4.2	4.1	3.9
Interest	1.4	1.2	1.2	1.3	1.3	1.2	1.6
Subsidies and transfers	18.0	18.2	19.0	23.2	21.3	21.0	21.4
Capital expenditure	5.5	3.8	5.1	4.2	5.3	5.3	7.1
Overall balance	-3.4	-1.7	-3.1	-8.6	-5.7	-4.8	-5.2
Primary balance	-2.1	-0.5	-1.9	-7.3	-4.4	-3.6	-3.6
Public debt with guarantees	47.6	48.4	48.8	59.4	59.9	58.5	62.0
Of which: guarantees	8.2	8.0	8.4	8.6	8.5	8.1	8.4

Source: Ministry of Finance, World Bank staff calculations. Note: Data include PESR.

22 The government Growth Acceleration Plan continues to prioritize aid to firms in industrial zones, greenfield investments, SMEs, and exporters.
23 Including Public Enterprise for State Roads (PESR).

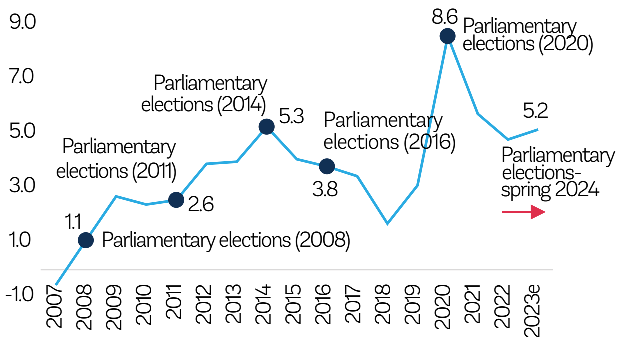
2.14 **The gradual narrowing of the deficit since 2015 gave the authorities adequate space to respond to overlapping crises, but prolonged stimulus since 2020 has depleted fiscal buffers.** In 2015, the deficit (including PESR[24]) began to gradually decrease as the government allowed the undistributed profit tax exemption to expire, raised tobacco excise taxes, lowered spending on goods and services, and continued to under-execute the capital budget. As a result, the deficit narrowed to 1.7 percent of GDP in 2018 before widening to 3.1 percent in 2019. The following year, the government intervened to mitigate the impact of the pandemic, and the deficit tripled to 8.6 percent of GDP, while the public debt stock[25] increased by more than 10 pp to 60 percent of GDP (Figure 15). Strong revenue performance helped reduce the deficit in 2021 and 2022, as rebounding growth and double-digit inflation drove up revenues, but increased spending to mitigate the energy and cost-of-living crisis kept the general government deficit at an average of 5 percent of GDP. With new spending commitments related to the construction of Corridor VIII and Xd, the increase in public-sector wages,[26] and the spring 2024 elections, the deficit reached 5.2 percent of GDP in 2023 (Figure 16). Although the fiscal multiplier from public investments was estimated to be the highest (Box 2), in 2023, it did not contribute to the rise in output largely due to public investment management inefficiencies, including weak capital budget execution rates. Despite some progress made on the 2020 PIMA report recommendations,[27] more efforts are needed to address deficiencies in public investment planning, allocation, and implementation, along with gaps in the legal and regulatory framework, IT systems, and institutional capacity.

Figure 15. Fiscal deficit and public debt stock (% of GDP)



Source: Ministry of Finance.

Figure 16. Fiscal deficits (% of GDP) and general election cycles



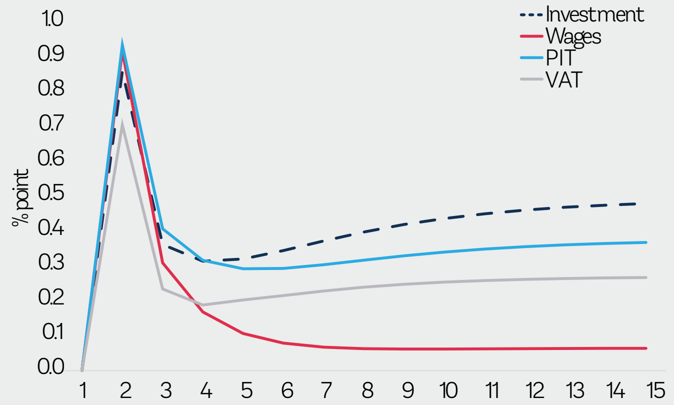
Source: Ministry of Finance and Election Archive.

24 The PESR was taken off-budget in 2013 despite implementing a sizeable central government investment agenda.
25 This figure includes a small amount of non-guaranteed public debt.
26 The increase in spending due to the new agreement is estimated at 0.7-0.8 percent of GDP per year on average and will add to the earlier minimum-wage adjustment and an increase in the wages of public officials.
27 IMF (2024). Republic of North Macedonia, IMF Country Report No. 24/27

Box 2. Fiscal multiplier: impact of fiscal policy on economic output

Fiscal multipliers measure the impact of discretionary fiscal policy on economic output, either at time *t*, when the policy change is made () or at time , when the cumulative impact is measured. Fiscal multiplier estimation is challenging, as it is difficult to isolate the direct impact of fiscal policy on output due to interactions between the two (e.g., via automatic stabilizers), model requirements, and limited data availability (Batini et al., 2014). Estimates also vary according to the methodological approach, identification strategy, and definition of fiscal multiplier used (Geli and Moura, 2023). For North Macedonia, the literature on fiscal multipliers is scarce and inconclusive. Estimates for revenue and spending multipliers for North Macedonia have been estimated with the use of the World Bank's MFMOD macrostructural model (Figure 17).

Figure 17. Revenue and spending present value multipliers



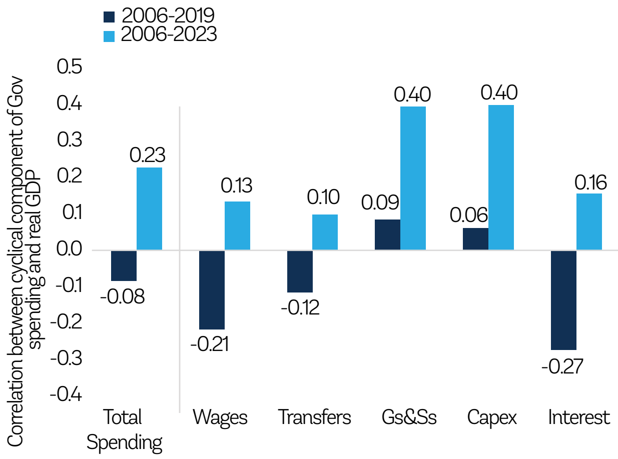
Source: MOF, SSO, World Bank staff calculations with MFMOD.

Public investment has the greatest and the longest impact on GDP. At impact, 1 percent of GDP of additional investment spending leads to 0.9 pp of additional output. The increase in output then falls to 0.5 pp by the end of the projection horizon. By contrast, spending on public sector wages has a much lower long-term impact on the economy, as it boosts output by just 0.1 pp of GDP. On the revenue side, increases in personal income tax have a more significant impact on GDP relative to increases in value-added tax, both at the time the tax increase is implemented (0.9 and 0.7 pp, respectively) and by the end of the projection horizon (0.4 and 0.3 pp, respectively).

The cyclicality of fiscal policy

2.15 **Evidence from recent years confirms that fiscal policy in North Macedonia has turned largely procyclical due to the unwound response to the COVID-19 and energy crises.**[28] In North Macedonia, the correlation coefficient between the cyclical components of different fiscal instruments and real GDP turns from -0.08 (slightly countercyclical) between 2006 and 2019 to 0.23 (highly procyclical) when the timeframe is extended to 2022 (Figure 18). Capital investment and spending on goods and services drove procyclicality over this period. The wage bill and interest payments were the main contributors to countercyclicality until 2019, but both turned procyclical in the wake of the pandemic, as the response effort was accompanied by several rounds of public-sector wage increases and new borrowing by the government to cover its still-elevated spending needs. Some factors that may have contributed to procyclicality include inaccurate and untimely assessment of the economic cycle, political pressures regardless of the economic context, as well as domestic credit constraints during crises. Going forward, the government should consider shifting back to a countercyclical orientation to help smooth the business cycle, promote macroeconomic stability, and generate fiscal space to guard against shocks.

Figure 18. Correlations between cyclical components of spending categories



Source: World Bank staff calculations based on GFS-IMF and MOF data.

C. Medium-Term Debt Sustainability

2.16 **In recent years, overlapping crises have worsened fiscal outcomes, underscoring the need to consolidate public finances.** The general government deficit (including PESR) is projected to decline toward 3.2 percent by 2026, due largely to tax reforms and improved tax compliance, cuts in non-productive spending, enhanced targeting of social assistance, and the phased elimination of crisis response subsidies. At the same time, total expenditures are projected to stay elevated, with highway construction spending totaling 9-12 percent of GDP over a five-year period[29] and new public sector compensation commitments expected to add 0.7-0.8 percent of GDP to total spending each year. Only to stabilize debt under current growth, inflation, and interest rate developments, the primary balance needs to decline to 0.4 percent of GDP, which is 2.5 percentage points above the 2024 deficit target. However, additional fiscal adjustments would be needed to align public finances with the newly introduced fiscal rules, following the Maastricht criteria.

2.17 **The public debt stock has more than doubled in the last decade, while expenditure arrears remain stubbornly high at 3 percent of GDP.** After reaching a historic low in 2008,

28 Fiscal policy is defined as procyclical (countercyclical) if it is expansionary (contractionary) during periods of high growth and/or contractionary (expansionary) during economic downturns. Procyclical fiscal policies tend to be associated with lower welfare and tend to increase macroeconomic volatility by amplifying the business cycle. Procyclical fiscal policies also tend to be less effective, as fiscal multipliers are much lower at the peak of the business cycle, limiting the impact on the economy and generating inflation. Fiscal policy should therefore attempt to smooth the business cycle by lowering taxes and increasing spending during recessions, thereby supporting aggregate demand, while increasing savings when growth is strong. However, many developing countries tend to struggle with procyclical fiscal policies (Ilzetzki and Vegh, 2008).

29 The contract is signed as FIDIC Yellow Book with Bechtel-Enka firm which means that the constructor will also deliver design and build the highways. The detailed design was, therefore, not available at the time of the contract signing, nor is available at the moment of writing.

public debt rose by an average of 2.4 pp per year until the outbreak of the pandemic, which led to a 10.6 pp increase in the debt—the largest increase in a single year. The still-elevated deficit pushed the debt-to-GDP ratio to 62 percent in 2023, while overdue payments in public health institutions, state enterprises, and local governments stood above 3 percent of GDP.

2.18 **Unlike in the aftermath of the global financial crisis, North Macedonia's public debt and interest payments are now higher than of the small EU states and other Western Balkan states**. This is indicative of North Macedonia's rising vulnerabilities. Its public debt rose much faster than that of EU small states or the countries in the region from a lower level in 2009 (Figure 19). Reflecting the rising strain public debt is putting on the budget, interest expenditures also increased significantly and much faster than in EU peers. In 2009, interest spending was just 0.6 percent of GDP, and since then it has almost tripled (Figure 20). Public debt generates an increasing pressure on the budget, squeezing other productive expenditures.

Figure 19. North Macedonia, WB5 and EU: General Government Debt (% of GDP)

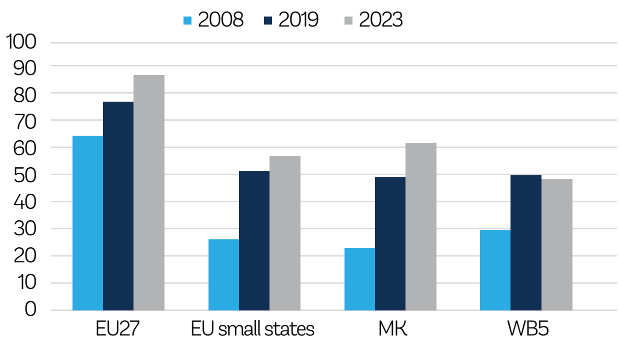
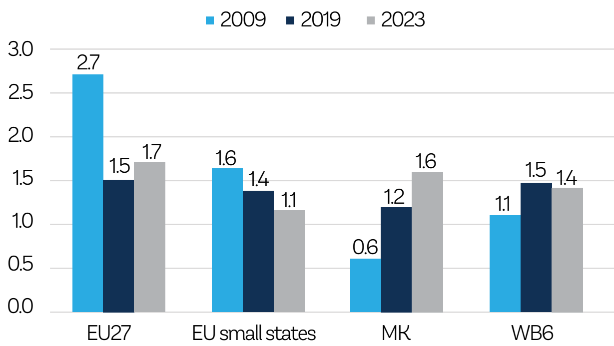


Figure 20. North Macedonia, WB5 and EU: Interest Payments (% of GDP)



Note: General Government debt, as defined by Maastricht criteria. EU small states or EU6 include: Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovenia. WB5 represents all Western Balkans without Kosovo.
Source: EUROSTAT, MoF, World Bank staff calculations and estimates.

2.19 **These developments are reflected in the country's debt profile and uncomfortably high cost of sovereign borrowing** (Table 4). Because of its fiscal position and macro vulnerabilities, North Macedonia still does not borrow very long-term in sovereign bond markets (mostly 4-5 years), and a large share of debt is denominated in foreign currency (Table 5) making it highly sensitive to changes in the exchange rate. Medium-term bonds recently carried a large premium over the German bund of about 375 basis points. This premium exceeds that of some EU countries with significant fiscal challenges, indicating the precariousness of North Macedonia's sovereign borrowing conditions. Finally, its sovereign rates clearly and significantly exceed its medium-term growth rate under any reasonable scenario, implying unsustainable debt dynamics.

2.20 **The share of variable-interest-rate debt in total debt gradually decreased until 2022, when worsening financial conditions reversed the trend.** Rising global interest rates and an overall deterioration in the external environment have increased the vulnerability of debt to adverse interest rate shocks. In response, the authorities sought to lower the cost of new borrowing, including by issuing debt with variable interest rates. In 2023, the government issued a €250 million bond with an interest rate of 3.75 percent plus the six-month Euribor average, whereas the rate on a fixed interest rate Eurobond was estimated at 8 percent at the time. Overall, the share of variable interest rate debt in general government debt rose gradually from 21 percent at end-2021 to 26.1 percent in 2023.

2.21 **Monetary policy tightening was followed by a sharp increase in interest rates despite continuous efforts to reduce interest rate risk through 2021.** Although the Ministry of Finance managed to lower the interest rate on T-bills and bonds,[30] rising domestic and international

30 The interest rate on the 12 months T-bill was lowered from 1.85 percent in 2017 to 0.5 percent in 2021; or the 3-year T-bond

interest rates have reversed this positive trend. The interest rate on a 12-month T-bill rose from 0.6 percent in January 2022 to 4.25 percent in October 2023, while the interest rate on a 15-year T-bond rose from 2.6 percent to 6.15 percent. Similarly, the interest rate on the 7-year Eurobond issued in 2021 was 1.65 percent, while for the interest rate on a shorter 4-year Eurobond issued in 2023 it was 6.96 percent. With the share of variable interest rate debt in total public debt relatively low at 28 percent in 2023, the country has remained protected from large shocks to its existing debt stock.

Table 4. Yields on Western Balkans Outstanding Eurobonds

	Coupon	Maturity	Yield in % (28 Mar 2023)	Yield in % (26 Sep 2023)	Yield in % (14 March 2024)	Spreads (basis points)
Albania	3.5	16/06/2027	6.5	5.5	4.6	206.1
	3.5	09/10/2025	6.1	5.5	4.4	103.9
Montenegro	2.785	16/12/2027	8.4	6.8	5.8	325.7
	3.375	21/04/2025	7.3	5.9	4.9	147.9
North Macedonia	6.96	13/03/2027	-	6.0	5.2	265.7
	2.75	18/01/2025	6.4	6.0	5.5	210.4
Serbia	3.125	15/05/2027	5.8	6.2	4.5	202.5
	6.25	26/05/2028	-	6.8	5.8	341.4
Bosnia and Herzegovina, Republic of Srpska	4.75	01/01/2026	7.0	7.1	7.3	445.5

Source: https://www.boerse-frankfurt.de/en, accessed on 14 March 2024
Note: Spreads refer to spreads with yields on German bonds with the same or similar residual maturity.

2.22 **A total of 75 percent of all public debt is denominated in foreign currency.** The share of euro-denominated debt in total public debt stood at 64.7 percent in 2023. Given the de facto fixed exchange rate with the euro, the government's medium-term debt strategy includes a minimum threshold of 80 percent of foreign-currency debt to be issued in or indexed to the euro to safeguard the debt portfolio from potential exchange-rate risks. The rest of the foreign-currency debt portfolio includes debt in US dollars, Japanese yen, and IMF Special Drawing Rights. Around 6 percent of debt was dollar-denominated debt was linked to the financing from China Exim Bank of the Kicevo-Ohrid and Miladinovci-Stip highway project.

2.23 **The public debt portfolio's maturity indicators have improved, but it remains exposed to exchange rate risks.** As of 2022, total average time to maturity was 6 years, up from 4.6 years in 2017. While the foreign-currency portfolio's average maturity remained at 4.7 years, the maturity of the domestic-currency portfolio was much longer, as the Ministry of Finance has successfully extended issuances of 15- and 30-years T-bills. Going forward, the Ministry of Finance expects a further reduction in the average maturity due to the amortization of concessional loans and a shift toward commercial loans.[31] Refinancing risk has also fallen since 2017, as the share of short-term domestic debt decreased from over 40 percent to about 23 percent by 2023. With 32 percent of domestically issued government securities linked to the euro, foreign-currency-denominated debt accounted for 75 percent of total public debt in 2023. Maintaining the exchange rate peg is a necessity for debt sustainability given the currency structure of the debt portfolio.

from 2.85 percent in 2017 to 0.8 percent in 2021.

31 Public debt management strategy 2024-2026 (with an outlook to 2028), May 2023.

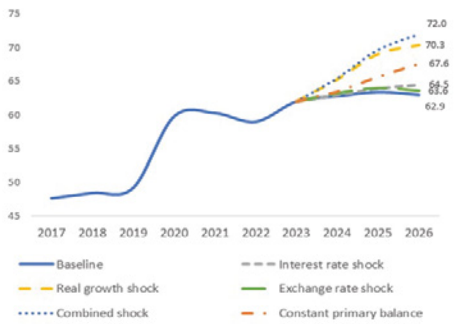
Table 5. Public Debt Structure and Dynamics (% of GDP)

	2018	2019	2020	2021	2022	2023
General government debt (Maastricht definition)	**48.4**	**49.2**	**59.8**	**60.3**	**59.0**	**62.0**
1. Breakdown by residents						
- domestic	15.5	16.3	19.9	20.8	20.3	22.9
- foreign	32.9	32.9	39.9	39.4	38.7	39.1
2. Breakdown by original maturity						
- short-term	4.9	4.7	7.2	4.5	4.4	5.1
- long-term	43.5	44.5	52.6	55.8	54.6	56.9
Change of General government gross debt	0.8	0.8	10.6	0.5	-1.3	3.0
Implicit interest rate	*2.7*	*2.6*	*2.5*	*2.4*	*2.1*	*2.8*
Contributions to change of general government gross debt:						
Primary balance	0.5	1.9	7.3	4.4	3.6	3.6
Snowball effect	-1.9	-1.0	3.0	-3.6	-4.4	-1.0
Interest payments	1.2	1.2	1.2	1.3	1.2	1.6
Growth of nominal GDP	-3.1	-2.2	1.7	-4.9	-5.5	-2.6
Stock-flow adjustment	2.2	-0.1	0.3	-0.3	-0.5	0.4
o/w Guaranteed debt*	8.0	8.4	8.6	8.5	8.1	8.4
o/w Non-guaranteed debt*	..	0.4	0.3	0.4	0.5	0.5

Note: *Refers to public enterprises and state-owned joint stock companies.
Source: MoF, World Bank staff calculations and estimates. Fiscal statistics is not harmonized fully with the ESA2010.

2.24 **In the baseline scenario, the public debt is expected to grow by 4.4 pp of GDP between 2023 and 2025 before declining from 2026 onwards**. However, the evolution of the public debt will be heavily influenced by disbursements for the highway construction, which are expected to average almost 2 percent of GDP per year. The gradual medium-term fiscal consolidation hinges on the assumption that sustained political stability and progress on EU accession negotiations will bolster confidence and accelerate growth, which is expected to reach 2.9 percent in 2025 and then slowly ease toward its long-term potential rate. Public gross financing needs would peak in 2026 at 11 percent of GDP due to the amortization of large Eurobonds, including a €700 million repayment in 2026 for the country's 2020 Eurobond, which it issued to cover the emergency financing needs arising from the pandemic.

Figure 21. Public and Publicly Guaranteed Debt, 2017–26 (% of GDP)



Source: National authorities and World Bank staff estimates. Note: The baseline scenario reflects the Bank's assessment of the fiscal and macro scenario. The 30-percent depreciation scenario assumes a one-time real devaluation of 30 percent in 2023; the growth shock scenario assumes growth of 1.5 percent through 2026; the interest rate scenario a rise in interest rates by 200 bps. The combined shock scenario assumes all but depreciation shock.

2.25 **The gradual fiscal consolidation projected in the baseline scenario is subject to downside risks.** These risks include: (i) a further tightening of European Central Bank (ECB) monetary policy and euro depreciation in case inflation remains elevated; (ii) a potential deterioration in the external environment, such as a worsening EU outlook and regional geopolitical tensions that could lower economic growth more than projected; and (iii) delays in implementing the planned consolidation, the accumulation of new arrears, or the materialization of contingent liabilities (Figure 21). A 200-bps increase in interest rates would push the public debt to 64.5 percent by 2026; a constant primary deficit would increase the debt to 67.6 percent of GDP; and a 30-percent currency depreciation (the lowest-probability shock) would push the PPG debt stock to 63.6 percent of GDP by 2026. Based on an average GDP growth rate of 1.5 percent, by 2026 the PPG debt stock would rise to 70.3 percent of GDP. A combination of shocks (without the exchange rate shock) would push the public debt to 72 percent by 2026. Without the planned fiscal consolidation, the public debt and gross financing needs would both continue to surge over the medium term, increasing financing costs, diverting resources from growth-promoting investments, and undermining the government's ability to respond to emerging economic or demographic shocks. For example, (i) the current pension deficit is over 4 percent of GDP, and an aging population is intensifying pressure on the pension system; (ii) public sector arrears reached 3 percent of GDP in 2023; and (iii) state-owned enterprise debt equaled 8.9 percent of GDP in 2023, representing a substantial contingent liability.

D. Trend and Composition of Public Revenues and Spending

2.26 **In the last decade, general government expenditures, including on the PESR, typically represented about 35 percent of GDP, but spending surged to 41 percent of GDP by 2023.** General government spending fell from 35.4 percent of GDP in 2017 to 33.1 percent in 2018 amid a historic consolidation effort, then rose to 35.5 percent in 2019 due to public-sector wage increases, increased capital spending, and employment-support programs. During the pandemic, as the government ramped up emergency health expenditures, social assistance, and job-retention subsidies, total spending surged to about 40 percent of GDP 2020, and it remained elevated in the following years as the government worked to protect households and firms from the subsequent energy and cost-of-living crises.

2.27 **For most of the last decade, public spending in North Macedonia was below the average for regional and aspirational peers, but the gap narrowed substantially since the pandemic.** In 2023, general government spending exceeded the WB6 average by 0.6 ppts of GDP (Table 6). Government consumption accounted for about 40 percent of total spending, more than four times the share of capital spending, limiting the space for investments that could accelerate income convergence with the EU.

2.28 **Rising expenditures have persistently outpaced revenue growth, reflecting a combination of comparatively low tax rates, weak revenue collection, and high informality.** Through 2023, government revenues as a share of GDP remained consistently below the average of for the WB6, EU27, and small EU6 countries. Around 40 percent of the revenues that the government collects come from indirect taxes, predominantly VAT and excise taxes. While VAT revenue slowly recovered following a 10 percent pandemic-induced drop, excise tax revenue declined more recently as the pass-through effect of high inflation eroded real prices. PIT revenue, on the other hand, increased gradually from 7 percent of total revenue in 2012 to 9 percent in 2023, while the government heavily subsidized the creation of new jobs by exempting firms from social security contributions. The share of CIT in total revenue rose three times in a decade, resulting in a cumulative increase of more than 45 percent in 2022 as firms across all sectors recorded profits, especially large enterprises (55.2 percent of economy-wide profits),[32] signaling the presence of high markups and limited domestic competition. Recent amendments to the PIT, VAT, CIT, and excise tax laws in 2023 should help broaden the tax base, including through a reduction of the number of products subject to lower VAT preferential rates, alignment of e-service taxation, and bringing tobacco excise taxes to the EU minimum, but there is still considerable scope for further improvement.

32 NBRNM. Financial Stability report for 2022.

Table 6. General government expenditures and revenues (% of GDP)

Country	GG expenditure		GG revenue		Change in expenditure (2013-23)	Change in revenue (2013-23)
	2013	2023	2013	2023		
Albania	29.2	29.3	24.2	27.9	0.1	3.7
Bosnia and Herzegovina	44.8	41.9	42.6	41.0	-2.9	-1.6
Kosovo	29.3	29.6	25.9	29.3	0.3	3.4
Montenegro	49.3	42.4	42.3	42.8	-6.9	0.5
Serbia	42.6	45.1	37.3	42.9	2.5	5.6
North Macedonia	**34.8**	**41.3**	**30.9**	**36.1**	**6.4**	**5.2**
WB6	39.9	40.7	35.4	38.8	0.9	3.5
EU6	43.9	42.6	43.9	42.6	-1.2	-1.2
EU27	49.9	49.4	46.8	45.9	-0.5	-0.9

Source: National statistical institutes, Ministries of Finance and Eurostat. EU6 includes Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovenia. General government data for North Macedonia considers the financial accounts of PESR.

Economic classification of expenditure

2.29 **Social benefits[33] account for the largest share of general government spending in North Macedonia, representing close to 43 percent of total spending and over 17 percent of GDP in 2023.** Pensions increased to 10.7 percent of GDP, due both to regular adjustments as part of the new methodology and to a series of ad hoc hikes and temporary top-ups (Table 7). Health spending also increased to 5 percent of GDP, slightly down from 5.2 percent allocated during the pandemic. Social assistance spending has been more volatile, but comprehensive reforms in 2019 consolidated benefits, expanded coverage among households in the bottom quintile, and introduced guaranteed minimum assistance to protect the most vulnerable households during the recent crises. Social assistance consequently increased to 1.7 percent of GDP and stayed at that level. Transfers to the employment agency hover around 0.3 percent of GDP as funding for active labor-market programs increased but unemployment declined.

2.30 **Spending on goods and services and wages and allowances constitutes about 27 percent of total general government spending, with capital spending accounting for additional 17 percent.** In the last 10 years, wages and allowances risen by an average of 3.6 percent per year, reflecting minimum wage corrections and public sector wage increases, but the number of public sector employees declined slightly from 132,900 in 2019 to 129,374 in 2022. Consumption spending moderated at 11.2 percent of GDP in 2023, while capital investment, including PESR, surged to over 7 percent of GDP. Subsidies and transfers have recently declined as the crisis support programs are slowly withdrawn but they remain comparatively high.

33 Includes spending on pensions, unemployment benefits, health, and social assistance.

Table 7. Economic classification of general government expenditure, 2012-2023 (% of GDP)

Economic	2012	2019	2020	2021	2022	2023
Total	**35.9**	**35.5**	**39.6**	**38.9**	**38.1**	**41.3**
Wage bill	7.7	6.4	7.2	6.9	6.5	7.3
Goods and services	4.7	3.9	3.7	4.2	4.1	3.9
Capital investments	5.2	5.1	4.2	5.3	5.3	7.1
Interest	0.9	1.2	1.3	1.3	1.2	1.6
Social Benefits	14.9	15.6	17.6	16.7	16.4	17.7
- Pensions	8.8	9.4	10.3	9.9	9.8	10.7
- Health	4.5	4.4	5.2	4.8	4.8	5.0
- Social assistance	1.2	1.4	1.7	1.7	1.6	1.7
- Unemployment benefits	0.5	0.4	0.4	0.4	0.3	0.3
Subsidies	2.3	3.1	5.0	4.2	4.3	3.6
Other	0.3	0.3	0.6	0.3	0.2	0.1

Source: BOOST, World Bank staff calculations.

2.31 **Relative to selected comparator peers, several stylized facts emerge:**

- Spending on goods and services was lower in North Macedonia than the aspirational and structural peers' average (Table 8). However, this spending item might be underestimated in North Macedonia given the rise in arrears throughout the period.
- The wage bill was also lower than that of the peers, also reflecting a decline in public employment.
- Social benefits spending in North Macedonia is among the highest within the comparator group as it surged above 17 percent of GDP with the outbreak of the pandemic and stayed elevated ever since.
- Interest payments were below the regional peers, and 0.3 ppts above the average observed for aspirational peers and are further increasing as financial conditions recently worsened.
- Capital spending is similar to the average of the upper middle-income countries, but remains well above structural and aspirational peers, despite a comparatively lower investment return.[34]

Table 8. Economic Classification of General Government Expenditure, North Macedonia and Comparators, 2012-2022 average

Percent of GDP	North Macedonia	Aspirational EU peers	Structural peers	UMI	ECA
Total	36.2	32.7	36.4	35.4	35.5
Wage bill	6.9	7.6	8.6	9.3	7.9
Goods and services	4.2	4.4	5.9	6.5	5.3
Capital investments	5.1	2.4	4.2	5.7	3.5
Interest	1.2	0.9	1.5	1.9	1.4
Social Benefits	15.6	11.6	13.4	7.1	11.7
Subsidies	3.0	0.8	1.5	2.2	1.8
Other	0.3	5.0	1.3	2.8	3.9

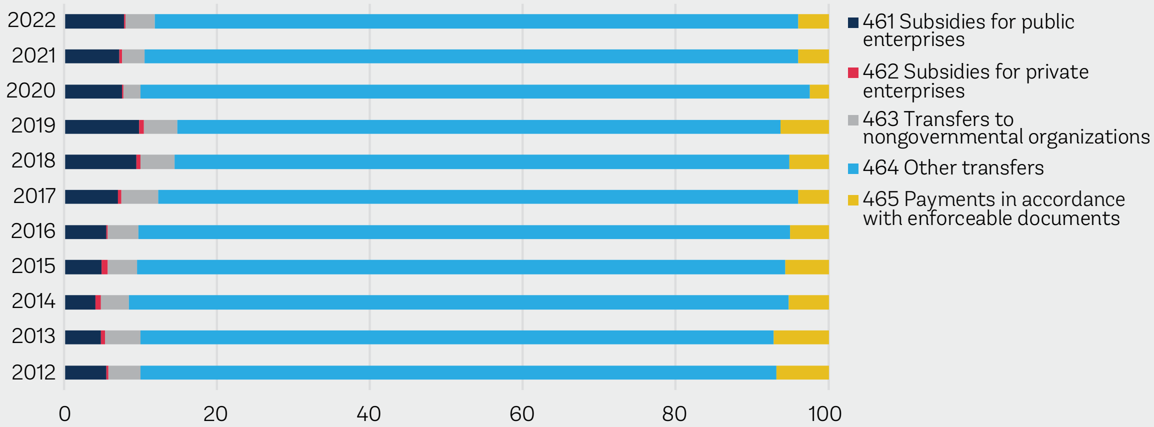
Source: BOOST, Eurostat. UMI stands for upper middle income and ECA stands for Europe and Central Asia. Aspirational peers include Croatia, Estonia, Latvia, Lithuania, Slovenia, while structural peers include Albania, Bosnia and Herzegovina, Serbia, Kosovo and Moldova (peer selection based on data availability).

34 World Bank, 2023. North Macedonia Systematic Country Diagnostic Update: Navigating challenges, embracing opportunities.

Box 3. Subsidies and Transfers Lacking Transparency

In the last decade, spending on subsidies and transfers has doubled both as a share of total spending and as a share of GDP, reaching 9 percent and 4 percent, respectively, in 2023. Subsidies to nonfinancial public enterprises have been significantly larger than subsidies to the private sector, with more than 70 percent going to railways and public utilities. Since 2012, close to 80 percent of subsidies to the private sector have gone to financial firms. Private firms and public enterprises have also received capital subsidies classified under capital expenditure, which averaged 0.3 percent of GDP from 2012 to 2022. However, subsidies to private firms and public enterprises together represented less than 10 percent of all subsidies and transfers recorded under current expenditures. More than 80 percent of subsidies and transfers are classified under "other transfers," which are often used to redistribute funds without a budget-reallocation decision (Figure 22). Some estimates of budget subsidies in specific areas can be obtained via targeted budget programs, such as those for housing and agriculture sector, those used to mitigate labor costs, and those implemented as anti-crisis measures. Agricultural subsidies account for the bulk of other transfers (budget classification 464).

Figure 22. Subsidies and transfers



Source: BOOST.

There is an increase in budget subsidies for covering higher wages and social security costs of private firms, a program that began in 2017. In 2017, the government increased the minimum wage to MKD 12,000 for all economic sectors and began providing financial support to employers[35] in the amount of MKD 500-2,000 per employee in the first six months of the year and MKD 250-1,000 in the following six months, subject to certain conditions on the employer's side. Financial support from the government for subsequent minimum wage increases continued, but the maximum subsidy amount per employee was decreased. In parallel, the government started to subsidize the social security contributions of employers who decided to voluntarily increase employee wages from MKD 600 to MKD 6,000.

35 The minimum wage up to 2017 differed per sector of economic activity. Employees engaged in textile, footwear and leather production received a lower minimum wage compared to the rest of the economic sectors.

In response to the COVID-19 pandemic, the government provided a series of fiscal support packages initially equal to 2 percent of GDP per year. These packages included loans with favorable conditions to bolster firm liquidity, installment reductions and loan rescheduling, wage support, subsidies for social security contributions for employees working in sectors most affected by the pandemic, payment cards and tourism vouchers for low-income households, grants and tax refunds for tourism firms, deferred tax payments, and reduced VAT rates for restaurants and food and beverage services, among others. This support was reallocated for the electricity subsidy support in 2022, coupled with the VAT reduction for electricity. Such program has not yet been unwound.

Functional classification of general government expenditure

2.32 **Social security spending is the single largest expenditure category in the budget.** Since 2011, social security spending has exceeded 11 percent of GDP and more than one-third of total general government spending (Table 9). Education spending fell from 14 percent of total spending (5 percent of GDP) in 2012 to around 11 percent of total spending (4.2 percent of GDP) in 2022, with more than 85 allocated to wages and goods and services, narrowing the space for maintenance and investments. Underinvestment was reflected in deteriorating scores on the 2022 PISA assessment.[36] More than 50 percent of education spending goes into primary education, followed by secondary and tertiary education. Environmental protection averaged 1 percent of total spending and less than 0.5 percent of GDP in the last decade, with around half going to waste and wastewater management and only a little over 5 percent going to pollution abatement.

Table 9. Functional classification of general government expenditure

Functional breakdown of expenditures	as % of total expenditure					as % of GDP				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
General public services	8.1	10.1	13.0	11.6	13.0	2.6	3.4	5.0	4.3	4.8
Defense	2.9	2.9	2.8	3.3	3.7	0.9	1.0	1.1	1.3	1.3
Public order and safety	6.8	6.9	6.1	6.3	6.1	2.2	2.3	2.3	2.4	2.2
Economic affairs	14.6	13.3	12.9	13.3	12.5	4.7	4.4	4.9	5.0	4.6
Environmental protection	0.8	1.2	1.4	1.0	1.2	0.3	0.4	0.5	0.4	0.4
Housing and public utilities	1.9	2.3	1.6	2.1	1.9	0.6	0.8	0.6	0.8	0.7
Healthcare	15.2	14.8	16.1	16.9	15.1	4.8	4.9	6.1	6.4	5.5
Recreation, culture and religion	2.3	2.0	1.7	1.8	2.0	0.7	0.7	0.7	0.7	0.7
Education	12.2	11.9	10.9	11.2	11.4	3.9	4.0	4.1	4.2	4.2
Social security	35.3	34.6	33.4	32.4	33.1	11.3	11.6	12.7	12.1	12.0

Source: BOOST.

36 More than 66 percent of students scored below minimum proficiency levels in mathematics, more than 74 percent of students scored below minimum proficiency levels in reading, and more than 65 percent of students scored below minimum proficiency levels in science. Results worsened relative to the 2018 PISA assessment by 5 p.p., 19 p.p., and 16 p.p., in mathematics, reading, and science, respectively.

2.33 **The structure of expenditure by functional classification in North Macedonia is broadly similar to selected comparator peers but there are also key differences** (Table 10):

- Social protection spending was the biggest functional spending category for all country groups shown in the table, ranging from the average of 6.1 percent for upper middle-income countries to 12.5 percent of GDP average for selected structural peers, while North Macedonia's average for 2018-2022 stood in the middle at 11.7 percent.
- Compared to peers, North Macedonia is spending more on public safety and healthcare, but less on education. More specifically, North Macedonia spends at least 1 ppts of GDP more on public safety than EU peers and 1.4 pp more on health, but 0.3 pp less on education than aspirational EU peers.
- Spending on economic affairs in North Macedonia exceeded those of the peers reflecting comparatively high level of subsidies and capital spending—some 1.5 pp of GDP more than aspirational peers.
- Environment-related spending in North Macedonia was in line with the average for ECA and UMI peers but below the average of aspirational EU peers.

Table 10. Cross-country comparison on the functional classification of general government expenditure, 2018-2022 average (% of GDP)

Functional	North Macedonia	Aspirational peers	Structural peers	Upper middle income	ECA
General Services	3.9	3.5	4.1	7.6	4.2
Defense	1.1	1.4	0.5	1.4	1.7
Public safety	2.3	1.3	1.9	2.0	1.9
Economic Affairs	4.6	3.1	3.5	5.7	4.4
Environment	0.4	0.5	0.2	0.4	0.4
Housing	0.7	0.4	1.7	1.8	1.0
Health	5.5	4.1	3.6	4.0	3.9
Recreations	0.8	1.2	0.6	0.6	1.0
Education	4.1	4.4	4.3	5.0	4.3
Social protection	11.9	11.0	12.5	6.1	10.8

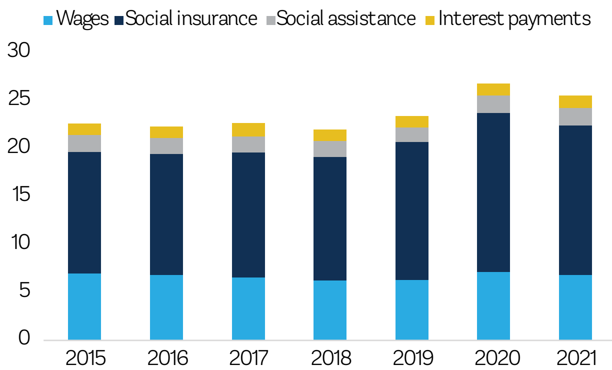
Source: BOOST based on the MOF data, and includes the PESR data under economic affairs.

Note: UMI stands for upper middle income and ECA stands for Europe and Central Asia. Aspirational peers include Croatia, Estonia, Latvia, Lithuania, Slovenia, while structural peers include Albania, Bosnia and Herzegovina, Serbia, Kosovo and Moldova (peer selection based on data availability.

Budget rigidity in North Macedonia

2.34 **North Macedonia's general government budget is highly rigid, with rigid expenditures amounting to around 70 percent of total spending.** The share of rigid expenditures remained broadly stable at around 22-23 percent of GDP before the crises (Figure 23). The largest contributor to rigidity is social insurance, followed by public sector wages, social assistance, and interest payments. When intergovernmental transfers are included, rigid expenditures approach 80 percent of total central government

Figure 23. Rigid expenditures as a share of GDP (%)

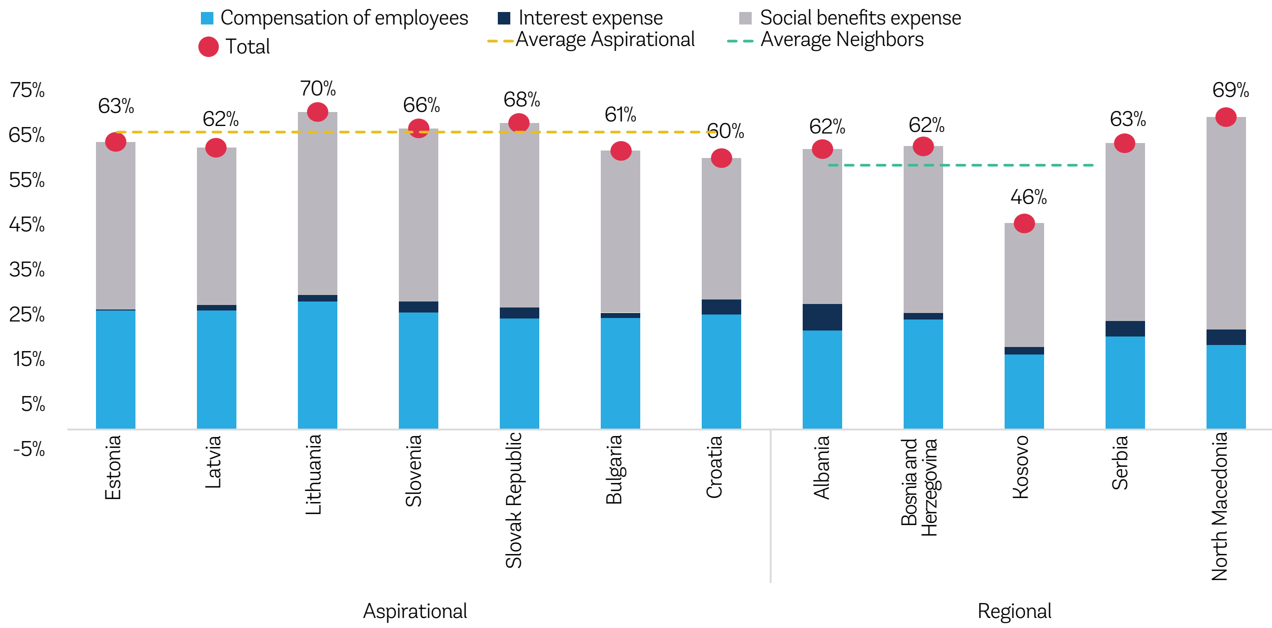


spending. Grants to other governmental units amount to about 10 percent of total spending and are only partially offset by a smaller share of wages at the central level. Budget rigidity is likely to remain high due to recent increases in public sector wages, temporary social assistance supplements, and higher interest payments, further narrowing the already limited scope to use fiscal policy in response to shocks.

2.35 **North Macedonia has one of the most rigid budgets among regional and aspirational peers, second only to Lithuania.** Due to the large share of spending on social benefits, budget rigidity in North Macedonia exceeds the level of most peer countries (Figure 24). Among countries in the Western Balkans, some of which (e.g., Kosovo) spend much less on social benefits, North Macedonia has by far the least flexible budget, with rigid expenditures 6 ppts of GDP above those of the second-least-flexible country, Serbia. At the same time, spending on public sector wages in North Macedonia is below the levels of most regional and aspirational peers.

2.36 **While some degree of budget rigidity is expected and may even be beneficial, excessively inflexible budgets can constrain fiscal policy, especially in response to shocks**. Moreover, high budget rigidity may translate into fiscal adjustments made through more flexible budget items, as shown by the frequent under-realization of public investment in North Macedonia, with a more pronounced negative impact on growth. To address high budget rigidity, policymakers could improve medium-term fiscal planning underpinned by credible fiscal institutions; end some existing inefficient spending mandates; improve fiscal reporting by including off-budget items in line with international standards; and improve budget transparency to protect allocation of resources to planned activities.

Figure 24. General government expenditure rigidities, as percent of total expenditure, 2021



Source: World Bank staff calculations based on GFS-IMF.

Chapter 3

Boosting Tax Revenues

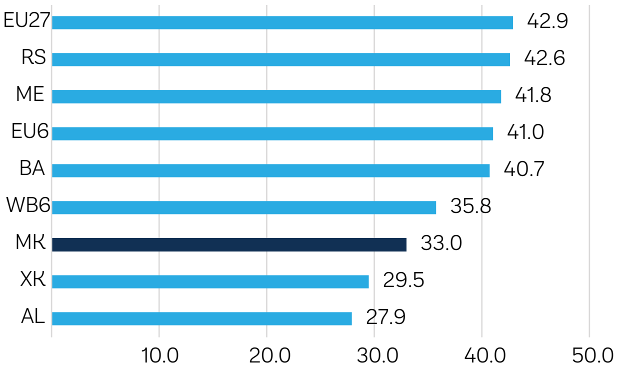
This chapter analyzes the country's comparatively weak tax performance and potential for raising tax revenues by 3.5 percentage points of GDP in the short to medium term to support fiscal consolidation and create fiscal space for more sustainable growth. First, it reveals the country's heavy reliance on value-added taxation with low efficiency, comparatively low direct taxation, an erosion of excise revenues amidst worrisome negative health externalities, as well as distortive customs exemptions for households and firms. Second, it discusses emerging avenues to collect more revenues, achieve efficiency and equity objectives and enable simplicity of the tax system. Third, it analyzes performance milestones and remaining operational, technical, and legal gaps of the tax administration. Finally, it concludes by delineating reforms that: (i) broaden the tax base by eliminating inappropriate exemptions or tax expenditures before increasing the rate, (ii) target negative externalities, and (iii) strengthen tax compliance to support fiscal consolidation efforts and bolster fiscal sustainability over the medium term.

A. North Macedonia's Tax System

Heavy reliance on indirect taxation

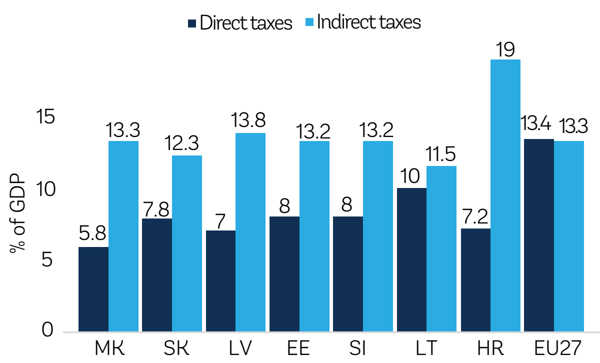
3.1 **Tax revenue in North Macedonia is low by the standards of regional and aspirational peers.** In 2023, general government revenue amounted to 33 percent of GDP, significantly below the EU27 average of 42.9 percent and the average of 41 percent for smaller EU countries (EU6).[37] The share of tax revenue in GDP also fell short of the 35.8 percent average for peer countries in the Western Balkans (Figure 25).

Figure 25. General government tax revenues, 2023 (% of GDP)



Source: IMF-Fiscal Monitor (April 2024) and World Bank staff calculations.

Figure 26. Direct and indirect taxes, 2022 (% of GDP)



Source: MOF, SSO, Eurostat and World Bank staff calculations.

3.2 **North Macedonia collects more revenue from indirect taxes and contributions than do most peer countries, but direct tax revenue remains significantly below the level of aspirational peers.** The country's tax structure resembles that of most WB6 and small EU6 comparators, with a heavy reliance on indirect taxes and social security contributions (SSCs). Over the last decade, indirect taxes have generated close to three times more revenue than direct taxes, but the gap has recently diminished. Direct tax revenue equals just 5.8 percent of GDP—the lowest share among selected EU peers (Figure 26), almost one-third of the EU27 average, and below the EU6 average of 8 percent. Nevertheless, personal income tax (PIT) revenue rose from 6.6 percent of total revenue in 2012 to 9.2 percent in 2022, while corporate income tax (CIT) revenue increased from 2.4 percent to 5.9 percent, establishing a promising trend for direct tax revenue. North Macedonia's revenue from indirect taxes is much closer to peer averages, accounting for 13.3 percent of GDP, in line both with the EU27 average of 13.3 percent and the EU6 average of 13.8 percent.

Low revenue efficiency of VAT

3.3 **Overall tax revenue efficiency in North Macedonia is low based on international standards of tax effort relative to tax potential.** Estimates of tax potential, defined as the highest level of tax revenue (excluding SSCs) a country can mobilize under comparable situations, are based on an empirically determined benchmark for a group of countries.[38] Tax effort estimates are the ratio of observed tax collection to potential tax collection, which is the highest level that can be obtained after controlling for country characteristics such as GDP per capita, the size of the agriculture sector, government effectiveness, and the perception of corruption in the public sector. Differences in tax effort estimates reflect variations in tax policy, tax compliance, and interactions between the two. Tax revenue (excluding SSCs) in North Macedonia reached 20.2 percent of GDP for 2023, below the average potential tax revenue of around 25 percent observed both in ECA and middle-income countries.

37 EU6 include EE-Estonia, HR-Croatia, LV-Latvia, LT-Lithuania, SK-Slovakia, and SI-Slovenia.
38 Benitez et. al (2023).

Table 11. Total tax buoyancy, 2000-2021

Country	short run	long run
Albania	0.574*	1.001***
Bosnia and Herzegovina	1.267***	1.045***
Bulgaria	1.602***	1.060***
Croatia	1.365***	1.075***
Czechia	1.123***	0.991***
Hungary	0.650***	0.954***
Montenegro	1.325***	1.088***
North Macedonia	1.943***	1.056***
Romania	0.526***	0.641*
Serbia	1.334***	1.184***
Slovak Republic	1.025***	1.241***
Slovenia	0.923***	0.796***
EU27	0.857***	1.011***

Notes: ***p<0.01, ** p<0.05, * p<0.1; For Montenegro, North Macedonia, and Serbia, data available from 2005.
Source: World Bank staff calculations.

Table 12. VAT C-Efficiency, 2021

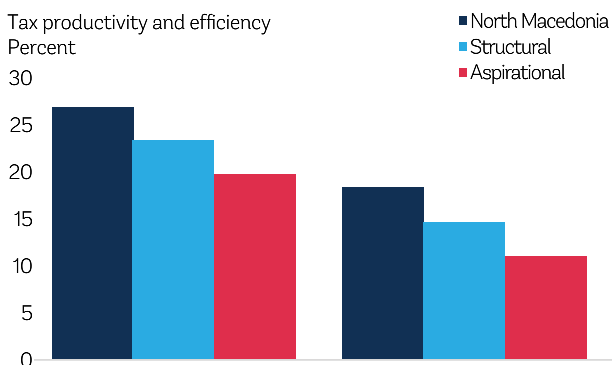
Countries	VAT C-Efficiency (%)
Albania	49.1
Bosnia and Herzegovina	81.0*
Kosovo	70.0
North Macedonia	53.3
Serbia	63.0
Montenegro	83.4
Latvia	56.0
Lithuania	59.0
Slovakia	52.9
Slovenia	57.7
Croatia	64.9
Estonia	75.8
WB6	66.7
EU6	61.0
EU27	58.0

Note: * Data is from 2019.
Source: European Commission, Statistics Agencies, Ministries of Finance in WB6, IMF and World Bank staff calculations.

3.4 **Tax revenue mobilization in North Macedonia is more responsive to changes in output than it is in comparator countries.** A tax system is considered buoyant when tax revenue increases more than one-for-one with increases in GDP. In North Macedonia over the 2005-2021 period, the long-run coefficient of tax buoyancy was 1.056, lower than the coefficients for Montenegro (1.088) and Serbia (1.184) but above the EU27 average (Table 11). CIT revenues demonstrate both high short-term and long-term buoyancy, while PIT revenues have a less-than-1 buoyancy coefficient over the short run but a higher-than-1 buoyancy coefficient over the long run. By contrast, value-added tax (VAT) revenue has a long-term buoyancy coefficient that is lower than its short-term coefficient due its greater regressivity.[39]

3.5 **Around 60 percent of indirect taxes come from VAT, which has a relatively low level of tax efficiency.** North Macedonia's VAT efficiency[40] stood at 53.3 percent in 2021 (Table 12). This is below the Western Balkans average of 66.7 percent and the EU27 average of 58 percent and only above the observed level in Albania (49.1 percent).

Figure 27. PIT and CIT productivity



Source: World Bank staff's estimates

3.6 **In contrast to VAT, direct taxes (PIT and CIT) reveal higher tax efficiency relative to peer countries.** Estimates of PIT productivity, measured as the ratio of the share of PIT revenues in GDP and the top marginal PIT rate, also used to measure the PIT efficiency, and CIT productivity, measured as the ratio of the share of CIT revenues in GDP and the CIT rate, reveal higher efficiency

39 World Bank: Tax Buoyancy (unpublished).
40 VAT tax efficiency is measured as the VAT C-efficiency ratio of actual VAT revenue to the product of the standard VAT rate and final consumption.

when compared to selected structural and aspirational peers. Although a low and uniform rate can minimize distortions in the economy, helping to maximize the efficiency of the tax system, it may not advance the government's allocative and equity goals.

Low direct tax revenues

3.7 **North Macedonia has one of the lowest PIT rates in the region, and its PIT revenue is less than half the EU27 average.** The top statutory tax rate is a flat 10 percent, while a 15 percent rate is applicable only to income for games of chance. Personal income tax rates in the WB6 vary from 10 to 23 percent, with an average of 14.7 percent. At the same time, small EU states and EU27 have top statutory rates ranging from 20 percent to 50 percent and from 10 percent to 55.9 percent, with averages of 31.3 percent and 37.9 percent, respectively. North Macedonia collects more revenues as a share of GDP than Albania, Bosnia and Herzegovina, and Kosovo (around 2 percent), but less than Montenegro and Serbia (around 4 percent) (Table 13).

Table 13. Top statutory PIT rate, 2023 or the latest

Countries	Top statutory PIT rate	PIT revenues as % of GDP
Albania	23.0%	2.2%
Bosnia and Herzegovina	10.0%	1.7%
Kosovo	10.0%	2.6%
North Macedonia	**10.0%**	**3.2%**
Serbia	20.0%	4.2%
Montenegro	15.0%	3.7%
Latvia	31.0%	5.8%
Lithuania	32.0%	7.6%
Slovakia	25.0%	3.7%
Slovenia	50.0%	5.1%
Croatia	30.0%	3.1%
Estonia	20.0%	6.3%
WB6	14.7%	2.9%
EU6	31.3%	5.3%
EU27	37.9%	7.9%

Source: European Commission, DG Taxation and Customs Union, Taxes in Europe Database, PWC, UNU-WIDER Government Revenue and World Bank staff calculations.

3.8 **PIT revenue has increased by only 1.1 percentage points (pp) of GDP over the past decade.** Since 2013, PIT revenue has been on a consistent albeit slow upward trajectory, reaching 3.6 percent of GDP in 2023 (Figure 28). This increase was largely driven by a widening of the tax base, but also by some modest tax rate adjustments (e.g., the tax rate on income from games of chance was raised from 10 percent to 15 percent in 2019). The PIT reform of 2019 introduced progressivity into the tax system (Box 4), but these changes were suspended and then abolished by the end of 2022. A widening of the tax base, a partial reduction in some deductions, and an increase in the PIT rate from 10 percent to 15 percent for games of chance led to an increase in the effective tax rate (Figure 29). The latest amendments to the PIT law have broadened the tax base to include some additional forms of capital income,[41] estimated to have further increased the progressivity of the tax that nevertheless remains low.

41 The amendments were enacted in December 2022 and entered into force in January 2023 (OG No. 274/2022). They include: (i) removal of the exemption of taxation of capital gains from sales of securities and shares issued by investment funds and other changes to the taxation concept of capital gains; (ii) delayed taxation of term deposits until the country joins the EU; (iii) redefining the base for taxation of non-monetary benefits; (iv) removal of the exemption of taxation of voluntary life insurance, voluntary health insurance and voluntary pension insurance for employees; (v) changes in the treatment of life insurance premiums paid by self-employees as non-recognized expenses; and (vi) adjustment of the tax exemption or reduction pursuant to international avoidance agreements of double taxation of income of foreigners.

Box 4. The 2019 Personal Income Tax Reform

Until 2006, the tax system had progressive rates of 15, 18, and 24 percent, but a flat tax established in 2007 applied a rate of 12 percent, which was lowered to 10 percent in 2008. In January 2019, the government introduced a set of reforms designed to create a more just tax system that would reduce social inequality and increase budget revenues. The most significant changes introduced were:

Progressive taxation of labor earnings (salaries, pensions, service contracts), revenue from copyrights, revenue from self-employment, and revenue from selling self-produced agricultural goods, with a rate of 18 percent on income over MKD 1,080,000 per year, or MKD 90,000 per month, and the standard 10 percent rate on income below that threshold;

A single rate of 15 percent for revenue from capital assets, including lease and sublease income, dividends, capital gains, and earnings from gambling; and

The suspended taxation of capital gains from securities and a 15 percent tax rate on interest on deposits.

The 18 percent marginal tax rate on income over MKD 1,080,000 was suspended in January 2020, and the 10 percent flat rate was ultimately restored for all taxpayers (with the exception of a 15-percent rate for games of chance).

Figure 28. PIT revenues in North Macedonia, 2013-2023

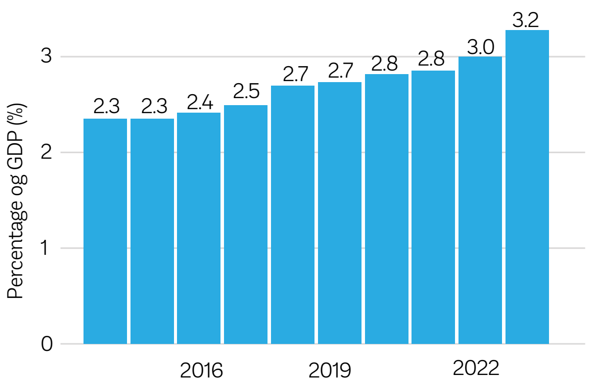
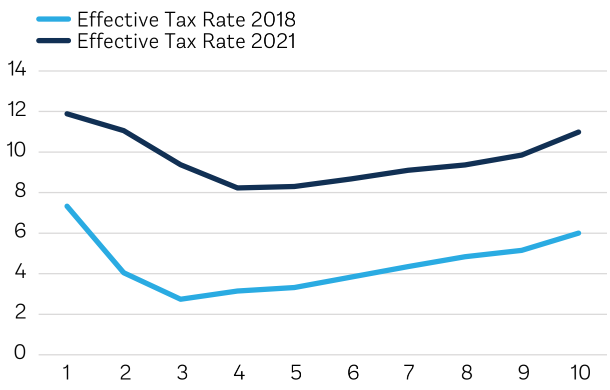


Figure 29. PIT effective tax rates (%) by decile groups, 2018 and 2021



Source: Ministry of Finance, Public revenue Office, State Statistical Office and World Bank staff calculations.

3.9 **Given its comparatively low PIT revenue, North Macedonia could replace its current 10 percent flat tax with a progressive tax structure.** Reintroducing a higher marginal tax rate for top earners could increase revenue with little distortionary effect on economic activity given the higher tax rates of peer countries. An analysis by the World Bank revealed that increasing the top marginal tax rate from 10 to 18 percent on taxable income over MKD 1,300,000 would increase revenue by 14.1 percent (0.26 percent of GDP) while affecting only the top 5 percent of earners. Kakwani index[42] with this reform would increase from 0.055 to 0.082.

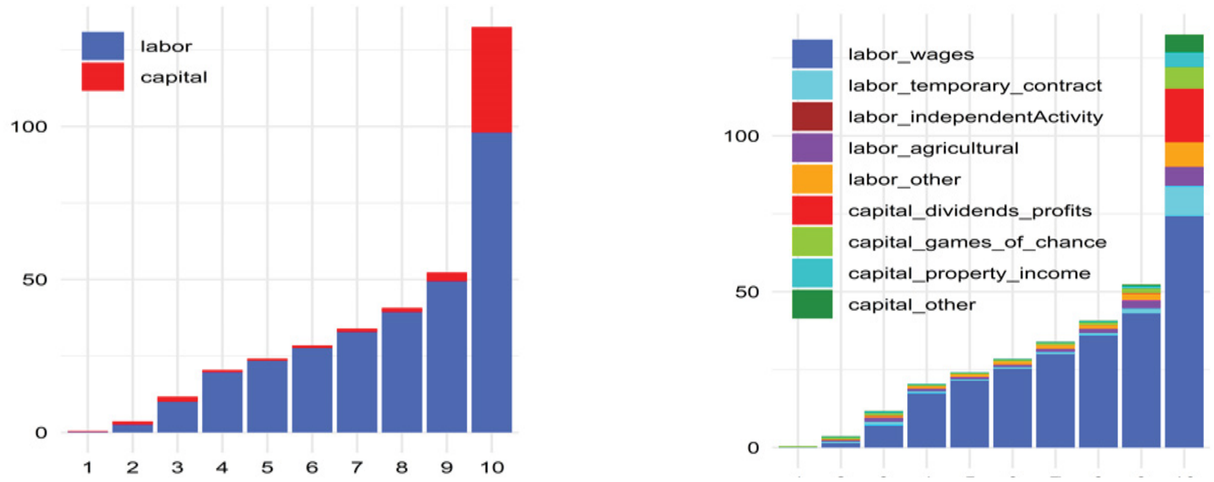
3.10 **Although broadly in line with international standards, the tax base could be further broadened, and the standard labor deduction could be decreased to boost PIT revenue.** The tax base includes revenue from salaried income, pensions, business activity, capital income (property rents, dividends, interest from loans and bonds, royalties), and capital gains. Deductions from the tax base include an annual individual tax allowance of MKD 114,480 deductible from salaried income and a reduced tax base for most capital gains. Further tax-base deductions apply to copyrights and patents (20 to 50 percent), income generated on the basis

42 The most commonly used global progressivity metric is the Kakwani (1977) index which, for an income tax, defines the overall progressivity of a tax based on the degree of deviation in the distribution of tax payments away from the distribution of pre-tax income.

of sale of usable solid waste (50 percent), and income from property and property rights (10-15 percent for maintenance and management expenses). Finally, full tax exemptions are granted for some employment-related expenses, awards and scholarships, alimony payments, social and unemployment assistance, certain donations, specific types of interest income (deposits, current accounts, government bonds), and in some cases income from firms in special economic areas known as technological industrial development zones (TIDZs).

3.11 **Labor income is the main source of income for most taxpayers, while the top 10 percent rely comparatively more on capital income.** An analysis of micro-level data from 2021 shows that labor income accounts for 87 percent of total income, while capital income accounts for the remaining 13 percent. However, the share of capital income increases with income deciles, indicating that high-income taxpayers earn more capital income than low-income taxpayers (Figure 30). In fact, 76 percent of the total income from capital is concentrated in the top decile. Half of this income is from dividends and capital gains, while the rest comes from games of chance, property, and other.

Figure 30. Structure of gross income by income deciles declared under the PIT regime, 2021 (MKD billions)



Source: Public Revenue Office and World Bank staff calculations

3.12 **Considering the above, increasing the tax rate for all forms of capital income from 10 to 15 percent could increase the progressivity, fairness, and vertical equity of the tax system.** Such a reform program would align with the principle of ability-to-pay, which posits that individuals with greater wealth should contribute proportionally more. Results from this micro simulation revealed that increasing the tax rate from 10 to 15 percent for all income derived from capital would increase PIT revenues by 0.14 percent GDP in 2025, ceteris paribus. Moreover, results suggest that the Kakwani index would increase from 0.055 to 0.069, increasing the progressivity of the tax system by 25 percent. The most affected group of taxpayers would be the top 1 percent, whose tax liability would increase by 17.9 percent.

3.13 **CIT revenue has been volatile, and the profit exemption regime has eroded revenue over the past decade.** In contrast to PIT, CIT revenue has ranged from 1 percent of GDP to 2.2 percent in recent years, reaching a peak in 2015. In 2009, in response to the impact of the global financial crisis, a profit exemption was introduced under which tax was paid only if profit was distributed. This measure was in effect for five years before being abolished in 2014, resulting in a one-time revenue boost in 2015, after which the profit-tax exemption due to reinvestment was reinstated. The latest amendments to the Law on Corporate Income Tax (OG 199/23) established a mechanism to prevent abuse of the CIT exemption[43] when reinvesting profits, which is the most substantial tax expenditure under the CIT regime, amounting to 0.24 percent of GDP.[44]

43 If a taxpayer incorrectly applies the provisions for reinvested profits, they will be held liable for five times the amount of tax that would have been paid had the exemption not been utilized.

44 Estimated in 2020 using 2017 data (last information available).

The latest amendments to the CIT law also introduced other changes aimed at phasing out tax exemptions, enhancing the efficiency of the tax system, and ending exemptions for sports donations and life insurance premiums paid on behalf of workers.

3.14 **North Macedonia has a low CIT rate and collects less CIT revenues relative to the EU.** The top statutory corporate income tax rate for North Macedonia at 10 percent is below the regional average of 12.5 percent for the WB6 countries. This disparity widens when compared to EU peers (Table 14). As a result of lower CIT rate and wide range of tax expenditures, North Macedonia collects lower CIT revenues.

Table 14. Top statutory corporate income tax rates, 2023 or the latest

Countries	Top statutory CIT rate	CIT revenues as % of GDP
Albania	15.0%	2.2%
Bosnia and Herzegovina	10.0%	1.7%
Kosovo	10.0%	1.9%
North Macedonia	10.0%	2.0%
Serbia	15.0%	2.9%
Montenegro	15.0%	1.6%
Latvia	20.0%	1.0%
Lithuania	15.0%	2.3%
Slovakia	21.0%	3.6%
Slovenia	19.0%	2.3%
Croatia	18.0%	3.2%
Estonia	20.0%	1.7%
WB6	12.5%	2.1%
EU6	18.8%	2.3%
EU27	21.2%	3.3%

Source: European Commission, DG Taxation and Customs Union, Taxes in Europe Database, PWC, UNU-WIDER Government Revenue and World Bank staff calculations.

3.15 **North Macedonia has one of the lowest effective average tax rates relative to comparator peers.** The effective average tax rate (EATR) indicates the effective tax burden on an infra-marginal investment, or in other words, whether the profitable investment generates more than the minimum required pre-tax rate of return on investment which is necessary to attain the after-tax return claimed by the investor.[45] The main focus of the calculations of the EATR is on the choice of location, given that when internationally operating companies decide on where to locate profitable investment projects or subsidiaries, they will aim for the location with the highest post-tax net present value. A comparison of the EATR shows that North Macedonia's of 7.9 percent compares to EU27 ranging from 9 percent to 29 percent, with an EU27 average of 18.6 percent.

45 Spengel, C., Heckemeyer, J., Nicolay, K., Gaul, J., Gundert, H., Spix, J., Steinbrenner, D., Weck, S., Wickel, S. (2024), Mannheim Tax Index Update 2023 - Effective Tax Levels using the Devereux/Griffith Methodology, MannheimTaxation Project, Mannheim.

3.16 **Raising the corporate income tax rate to the new global minimum at 15 percent could boost CIT revenues and maintain the country as a competitive destination for investment.** The low effective tax rate in North Macedonia, resulting from generous incentives in the form of deductions or exemptions, has eroded CIT revenues. If the CIT rate were to increase to 15 percent, not only for multinational enterprises, additional revenues raised from this policy reform are estimated at 1.07 percent of GDP, ceteris paribus. Deductions on reinvested earnings can mitigate the effect on investment as firms that do not issue new equity to finance investment can immediately expense investment that is funded by retained earnings.

Box 5. Introduction of the Minimum Global Tax

The Model Rules (GloBE Rules) under Pillar 2 of the OECD/G20 Inclusive Framework (BEPS) have established the framework for implementing a global minimum tax of 15 percent, which will affect about 8,000 of the largest multinational companies worldwide. Countries in the EU and several other jurisdictions have already introduced these rules into their domestic legislation, and the changes will take effect in 2024.

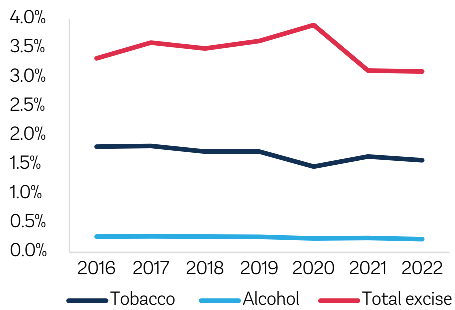
The 15 percent minimum global tax rules will apply to multinationals whose parent company had an annual income of at least €750 million reported on its consolidated financial statements in at least two of the previous four years. Based on these rules, multinational parent companies will have to pay a top-up CIT for subsidiaries operating in other jurisdictions if the effective tax rate in those jurisdictions is below the minimum global rate of 15 percent.

Source: PwC

Addressing negative externalities

3.17 **Tobacco and alcohol excise taxes are significant contributors to total tax revenue in North Macedonia.** In 2022, alcohol and tobacco contributed 9.5 and 1.4 percent to total tax revenue, or 1.6 and 0.2 percent of GDP, respectively. However, the contributions to both total tax revenue and GDP have declined in recent years not due to decreased consumption but real price erosion. Tobacco excise tax revenue declined from 1.8 percent of GDP in 2016 to 1.6 in 2022, while alcohol excise tax revenue declined from 0.3 percent of GDP to 0.2 percent (Figure 31).

Figure 31. Alcohol and tobacco excise revenue in North Macedonia, 2016-2022 (% of GDP)



Source: North Macedonia Ministry of Finance and World Bank World Development Indicators.

3.18 **While excise tax structures are overall in line with EU requirements, tax rates for tobacco products stood well below the EU minimum.** Although cigarette excise taxes have been increasing annually since 2013 in nominal terms, since 2020 there has been a steep decline in cigarette prices in real terms due to higher inflation, smaller relative excise tax increases, and changes in industry pricing strategies and consumer behaviour. At the same time, North Macedonia is evidencing a substantial burden of disease due to tobacco use. In 2019, tobacco use contributed to 24.5 percent of all deaths and 21 percent of all disability-adjusted life years (DALYs) lost,[46] significantly higher than in peer countries.

46 Global Burden of Disease Study 2019.

3.19 **The aim of the 2023 tobacco tax reform was to address affordability and substitutability and ensure gradual alignment to the EU acquis by 2030**. The amendments to the Law on Excise Taxes (OG 209/23) set cigarette excise taxes to increase to MKD 5,535 per 1,000 cigarettes while maintaining the ad valorem rate at 9 percent. Once the EU minimum rate is achieved, the specific tax should be benchmarked to either the Consumer Price Index to maintain the real value of excise tax revenue over time or to nominal wages to ensure that cigarettes do not become more affordable over time. Excise tax rates of other tobacco products are now linked to cigarette taxes via product specific equivalences and will be adjusted regularly to maintain the equivalence. This would limit substitution between products and ensure that the fiscal and health goals are not undermined by tax avoidance behavior. The World Bank modeling TA showed that increasing tobacco excise taxes to the EU minimum rates will reduce cigarette sales by approximately 16 percent within three years, but it will raise revenues from 1.5 to 1.9 percent of GDP. An alternative simulation to estimate the effect of accelerating the increases in tobacco taxes to reach the EU benchmark in 2026 rather than 2030 was conducted. To get there, annual increases of MKD 500 per 1,000 are required instead of MKD 230 per 1,000. The outcome would be a more rapid increase in tax revenue to reach 1.7 percent of GDP instead of 1.5 percent in 2026, and a decline in tobacco consumption prevalence to 40.4 percent as opposed to 41.9 percent under the current timeline.

3.20 **Alcohol excise revenues are significantly smaller given low excise tax rates on alcohol, and the zero-rated excise tax on wine, a significant contributor to alcohol consumption in North Macedonia**. Notably, beer contributed 73 percent of alcohol excise tax revenues in 2022, unsurprising given the relatively higher tax rates on beer than other alcohol products, and its relatively high share in total consumption of alcohol. While higher EU standards have driven most of the tobacco tax increases in the country, the very low EU standards are not an impediment for alcohol tax increases and highlights the significant scope for revenue generation through alcohol tax increases.

3.21 **A substantial increase in alcohol excise taxes with reduced differences between effective taxes on various alcohol products would yield considerable benefits.** Alcohol taxes have remained unchanged for nearly a decade, contributing to decline in real prices that increases the affordability of alcohol. Across different alcohol products, excise tax rates vary widely, and wine and other fermented beverages are not taxed. While excise taxes should be introduced on wine and other fermented beverages, allowances should also be made to tax wine at lower rates than other products due to the larger proportion of economic value added in the supply chain compared to other products. Furthermore, while beer taxes are relatively high compared to other EU member states and may not need substantial tax increases, distilled spirits taxes would be amongst the lowest in the EU and lower than beer. Increasing excise taxes on spirits above beer would bring North Macedonia in line with practices of other EU member states.

3.22 **Several policy options are simulated to assist policy makers in identifying pathways for future alcohol tax policy reforms.** The baseline model (model A) conducts a simulation of existing excise taxes that are not scheduled to change in future years (Table 15). Model B benchmarks excise tax rates to inflation to maintain their real value from 2024 and Model C increases excise taxes in real terms.[47] Increasing excise taxes in real terms leads to an increase of 0.1 percent of GDP in alcohol excise tax revenues (Model C), while maintaining existing excise tax rates (Model A) or benchmarking existing excise tax rates to inflation (Model B) are estimated to lead to lower excise revenues from alcohol over time.

47 Beer excises are benchmarked to affordability, increasing by nominal GDP (5.7, 4.9, and 5.0 percent in 2024, 2025, and 2026, respectively). Taxes on other fermented beverages are introduced and benchmarked to an ABV of 5.5 percent, phased in over three years. Taxes on wine are introduced and benchmarked to an ABV of 15 percent, phased in over three years. However, wine taxes are discounted by half to account for the higher value chain. Taxes on distilled spirits are simulated to increase substantially to reach 150 percent that of beer by 2026, while taxes on intermediate products are benchmarked to distilled spirits assuming an ABV of 20 percent. ABV assumptions are required to convert the excise per litres of absolute alcohol to a volumetric basis due to EU tax structure requirements.

Table 15. Simulated alcohol excise tax rates

Model A (baseline)	Base	2022	2024	2025	2026
Beer	LAA	400	400	400	400
Other fermented beverages	L	0	0	0	0
Wine	L	0	0	0	0
Intermediate products	L	33	33	33	33
Distilled spirits	LAA	340	340	340	340
Model B (inflation)	**Base**	**2022**	**2024**	**2025**	**2026**
Beer	LAA	400	412	420	429
Other fermented beverages	L	0	0	0	0
Wine	L	0	0	0	0
Intermediate products	L	33	34	35	35
Distilled spirits	LAA	340	350	357	364
Model C (increase)	**Base**	**2022**	**2024**	**2025**	**2026**
Beer	LAA	400	423	444	466
Other fermented beverages	L	0	8	16	26
Wine	L	0	11	12	35
Intermediate products	L	33	69	105	140
Distilled spirits	LAA	340	460	580	699

Source: World Bank estimates.

Table 16. Simulated nominal price increases following the proposed SSB tax introduction

Category	Taxed	Off-trade	On-trade
Carbonates (regular)	Yes	13.9%	2.1%
Carbonates (diet)	No	0.0%	0.0%
Juice (100%)	No	0.0%	0.0%
Juice (up to 24%)	Yes	13.9%	2.4%
Juice (Nectars)	Yes	10.7%	1.6%
Water (carbonated)	No	0.0%	0.0%
Water (still)	No	0.0%	0.0%
Water (flavored & functional)	Yes	29.1%	4.0%
Energy & sports drinks	Yes	2.7%	0.9%
RTD Tea & Coffee	Yes	10.7%	3.6%
Concentrates	No	0.0%	n/a

Source: World Bank estimates.

3.23 **North Macedonia should also consider implementing a tax on sugar-sweetened beverages (SSBs) in line with regional and global trends**. The externalities and internalities from consumption of SSBs are directly related to the sugar content. At the initial stage, a volumetric tax is recommended, with the potential to evolve this into a more intricate sugar-content based tax over time. Furthermore, thresholds or tiers can be applied to the sugar content, but these design features can generate significant incentives for firms to reformulate products and have significant tax administration burden.

3.24 **Policy simulations show that implementing volumetric/unitary SSB excise tax of MKD 6 per litre is expected to raise an additional 0.1 percent of GDP in annual revenues.** The SSB tax simulation model is category specific[48], breaking down the market into carbonates, juices, energy and sports drinks, RTD tea and coffee drinks, concentrates and bottled water.[49] It implements a volumetric/unitary SSB excise tax of MKD 6 per litre (approximating 10 percent of the post-tax price of full sugar carbonates in off-trade retail environments) on carbonates (excluding artificially sweetened), juices (excluding 100% fruit juices), flavoured waters, energy and sports drinks, ready-to-drink teas and coffees, and carbonates. The SSB price elasticity in the model is set higher[50] than for alcohol in absolute terms as SSBs were generally found to be less price inelastic than alcohol (World Bank, 2020).

3.25 **The SSB tax would raise nominal off-trade prices of taxed carbonates and juices by approximately 14 percent, but it will also contribute to a shift in consumer patterns towards healthier options**. Following the introduction of the tax, expected price changes across products differ, with larger percentage increases in prices of off-trade products than on-trade products since the starting prices of on-trade products are higher and thus the tax takes a smaller share in the final price. Furthermore, while prices of taxed products increase, the prices of their non-taxed substitutes do not (Table 16). This results in significant substitution effects between taxed and non-taxed beverages. The volume of taxed beverages is expected to decline by 4.4 percent, while the sales of untaxed beverages is expected to increase by 5.8 percent, with the total market increase by 0.1 percent. Importantly, this shows that the decline in sales of taxed beverages and the gain in tax revenue will not detrimentally affect the economy as people substitute towards healthier beverages.

Boosting VAT revenues

3.26 **North Macedonia has a lower standard VAT rate (18 percent) than its peers**. It positions it among countries with low VAT rates, below the regional average of 19 percent for WB6. This disparity widens when compared to the EU27 and the EU6 average of 21.5 percent. The low standard VAT rate, combined with the extensive coverage of commodities subject to a preferential tax rate of 5 percent and the limited coverage of the second preferential rate of 10 percent, has also impacted revenue collection. Relative to both regional and aspirational peers, North Macedonia collects the low amount of VAT revenues (Table 17).

48 This segmentation is important due to significant price heterogeneity within the categories but also to allow the tax to be applied to a subset of juices. Since SSBs are not taxed, the model is entirely reliant on external data from Euromonitor (2022).

49 Bottled water is an important counterfactual in the model since if a tax is applied to other products, but not to water, the relative price changes will induce a substitution from the taxed products to untaxed products. Thus, while the model includes bottled water, no tax is applied.

50 The model applies a price elasticity of demand of -0.8, an income elasticity of demand of 0.1 and cross-price elasticities of 0.1 between categories.

Table 17. Comparison of Standard VAT rates, 2023 or the latest

Countries	Standard VAT Rates	VAT as % of GDP
Albania	20%	9.3%
Bosnia and Herzegovina	17%	17.0%
Kosovo	18%	13.8%
North Macedonia	18%	8.1%
Serbia	20%	11.0%
Montenegro	21%	15.9%
Latvia	21%	9.4%
Lithuania	21%	8.4%
Slovakia	20%	7.7%
Slovenia	22%	8.2%
Croatia	25%	13.1%
Estonia	20%	9.2%
WB6	19%	12.5%
EU6	21.5%	9.3%
EU27	21.5%	8.2%

Source: Deloitte, Eurostat, UNU-WIDER Government Revenue Dataset 2023, and World Bank staff calculations.

3.27 **About 30 percent of the consumption basket is taxed at the standard VAT rate of 18 percent, and the rest is taxed at a reduced rate or exempt (around 29 percent).** Most basic foodstuffs are taxed at a rate of 5 percent, but recent amendments to the VAT Law (OG 199/23) reduced the list of foodstuffs subject to a 5-percent rate and raised the rate on certain foodstuffs to 10 percent. The same rate has applied to catering services since 2021 to mitigate the long-term damage caused by the pandemic. The range of goods and services that receive preferential VAT treatment is generally in line with the VAT directive, although the preferential treatment of some goods and services could be eliminated, especially those that are not well-targeted to poor households. A mix of standard and reduced rates can also create incentives for sellers to misclassify goods and services.[51] Base-broadening measures could be introduced along with policies to compensate poor households for any regressive effects, such as a refund based on the VAT paid per household, with a cap on the total amount to be refunded. In 2019, the government introduced a 1-percent VAT refund with a quarterly cap of MKD 1,800 per user through a mobile application called "MojDDV," demonstrating the feasibility of this approach.

3.28 **Tax expenditures and compliance issues reduce VAT collection by an estimated two-thirds.** Estimates of the VAT gap based on top-down approach[52] suggest that North Macedonia loses 2.8 percent of GDP due to compliance gap (which represents the difference between theoretical VAT revenue under full tax compliance—VTTL—and actual VAT revenues), and additional 2.8 percent due to policy gap (which is measured as the difference between notional ideal revenue VAT revenues given the current standard VAT rate and VTTL). The compliance gap is substantially higher than the EU27 median of 0.6 percent and only Romania has higher compliance gap (Figure 32). At the same time, the VAT policy gap is below the EU27 median of 3.9 percent (Figure 33). Preferential rates on "agriculture and hunting" and "food and beverages" account for about 8.5 percent and 8 percent of forgone revenue, respectively, and the two rates together account for more than half of the policy gap. Tax exemptions for healthcare and education spending reduce VAT revenue by about 12 percent.

51 There is a large number of tariff lines with preferential rates in North Macedonia. Additionally, there is inconsistency in the targeting of products eligible for preferential rates. For example, within the same tariff number, different rates apply; backpacks intended for children are taxed at 5 percent, whereas those intended for adults are taxed at 18 percent, as are pens and other items.

52 An approach based on statistical data from Supply and Use tables, which measures VAT-GAP as the difference between estimated potential revenue and actual revenues. This is a regular approach used for the EU27 where European Commission publish result in annual reports: European Commission, CASE, Poniatowski, G., Bonch-Osmolovskiy, M., Śmietanka, A., Sojka, A., VAT gap in the EU – Report 2023, Publications Office of the European Union, Luxembourg, 2023

Figure 32. VAT Compliance gap (% of GDP, 2020)

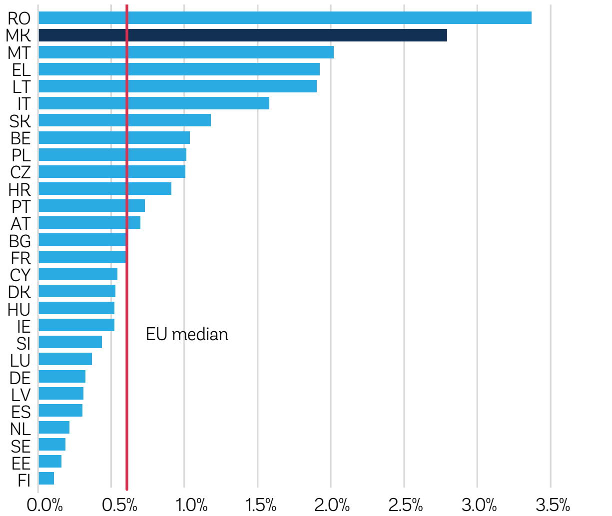
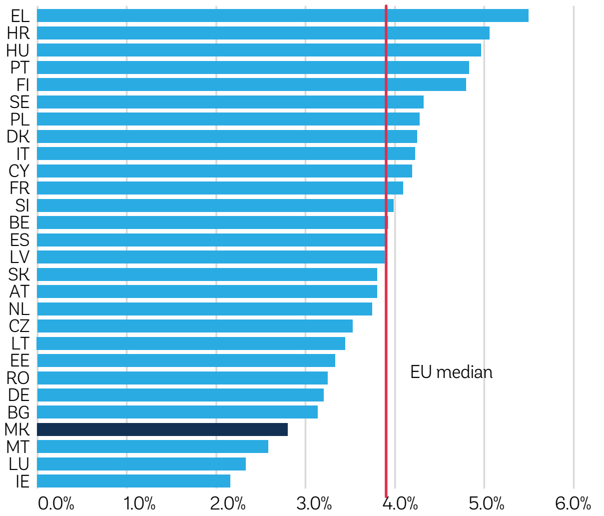


Figure 33. VAT Policy gap (% of GDP, 2020)



Source: European Commission and World Bank staff calculations.

3.29 **The policy gap was further reduced in 2023, as the government revised list of goods and services for which a VAT preferential tax rate is applied.** The revision primarily targeted the list of goods and services subject to preferential taxation. Specifically, the extensive range of goods intended for human consumption, previously taxed at 5 percent, was narrowed down to only basic products for human consumption. The preferential tax rate for all other products intended for human consumption was increased from 5 percent to 10 percent. This amendment, as outlined in the VAT Decision on the determination of goods and services subject to a preferential tax rate (OG 214/23), impacted a total of 395 groups of products divided into different HS-codes at the four, six, and ten-digit levels. According to estimates of the MOF, this reform is expected to have a positive fiscal impact of 0.3 percent of GDP after the start of its implementation.

3.30 **Increasing the standard VAT tax rate to the regional average and removing preferential rates for all goods except those used to cover basic needs will reduce regressivity and enhance vertical equity of the VAT system.** Analyzing expenditure patterns across decile groups (2020 data) reveals notable disparities: in the lowest income decile, basic items account for 80 percent of total expenditure, whereas in the highest income decile, they comprise approximately 25 percent. Considering this distribution of used assets by decile groups, a reform scenario was simulated with the primary aim of enhancing vertical equity of the tax system. This scenario involves an increase of the standard VAT tax rate from 18 to 19 percent, and an increase in the preferential VAT rate from 5 to 10 percent for all commodities except food products (both basic and non-basic), agricultural products, basic pharmaceutical products, natural water-supply services, accommodations, and food service, which remain at their 2024 rates. The results of this microsimulation indicate that the increased tax rates would increase household tax liability, but this effect would not be uniform due to variations in consumption patterns (Figure 34). Specifically, the increase would be most pronounced in the higher decile groups, where the consumption structure is heavily weighted towards goods for which the tax burden increased. For instance, among households in the first decile, food and healthcare expenses, which do not show a change in tax rates, constitute 85 percent of the consumption structure. By contrast, these expenses only account for 34 percent in the tenth decile group, where the tax burden is shifting more significantly.

3.31 **The simulated policy reform generates additional revenue and enhances the progressivity.** This increase in the effective tax rate is further corroborated by the Kakwani index which increases from an estimated 0.023 before the policy reform to an estimated 0.028 after the reform. The fiscal impact of this reform is estimated at 0.46 percent of GDP, ceteris paribus. The additional revenues generated by this reform can be used to support lower-income households through targeted social transfers, which are consistently more effective than preferential tax rates.

Figure 34. Effective VAT rate by centiles groups

Source: SSO and World Bank staff calculations.

Table 18. Applied MFN tariff rates and customs revenues, 2021

Countries	Simple average MFN applied	Customs Revenue as % of GDP
Albania	3.6%	0.40%
Bosnia and Herzegovina	6.4%	0.5%
Kosovo	/	1.57%
North Macedonia	6.7%	0.9%
Serbia	7.4%	0.99%
Montenegro	3.7%	0.52%
WB6	5.6%	0.73%

Source: World Tariff Profiles, UNU-WIDER Government Revenue and World Bank staff calculations.

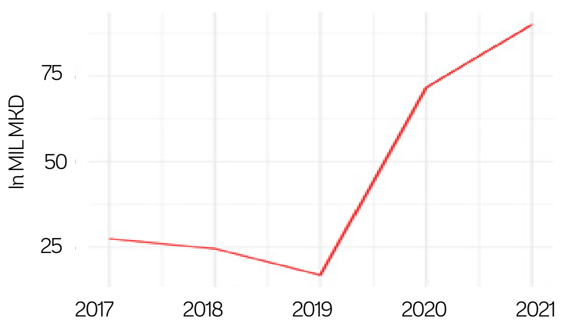
Reassessing the customs exemptions

3.32 **North Macedonia has one of the highest Most Favored Nation (MFN) tariff rates in the region and collects more customs revenues than the regional average, but the customs revenue share in GDP has more than halved in the past decade in line with international agreements signed**. The level of customs protection, as measured by the simple average MFN applied rate in 2021, stood at 6.7 percent in North Macedonia, exceeding the rate in most WB6 countries, with the exception of Serbia. Concurrently, revenues derived from customs duties amounted to 0.9 percent of GDP, surpassing the WB6 average of 0.73 percent. The Stabilization and Association Agreement (SAA), which came into effect in 2001, and North Macedonia's accession to the World Trade Organization in 2003 included transitionary periods until 2012 during which customs rates were gradually reduced. Consequently, the proportion of GDP derived from customs duties decreased from 2.4 percent in 2001 to 0.9 percent in 2012, and this percentage remained relatively stable with minor fluctuations until today.

3.33 **Custom revenues in North Macedonia are largely generated from industrial products originating from countries with which North Macedonia has not established free trade agreements**. The top three sections with the highest customs revenues are: transport equipment, electrical machinery and non-electrical machinery. In terms of geographical distribution, the top three countries account for the highest customs revenues are: China, Germany, and Türkiye.

3.34 **Companies and individuals benefit from additional custom duty exemptions**. Customs duty exemptions were made available in the form of state aid for companies in the TIDZ, the amount of which has tripled from 2017 to 2021 (Figure 35). Some customs benefits were also introduced for individuals starting on January 1, 2020, when the customs duty exemption threshold for small shipments was increased from 45 to 90 EUR. The latest proposal of the European Commission involves eliminating the customs duty exemption threshold of 150 EUR for e-commerce, along with introducing simplified rates for low-value import shipments.

Figure 35. Customs exemptions (TIDZ), 2017-2021



Source: Commission for the Protection of Competition and World Bank staff calculations.

This is due to fraud concerns with estimates showing that 65 percent of parcels entering the EU have an undervalued customs declaration to benefit from this customs exemption at the expense of EU businesses, especially SMEs, who find it difficult to compete with the consequent lower sale prices.[53] Furthermore, the current exemption encourages sellers to split larger consignments up into smaller packages, contributing further to an unlevel playing field for EU businesses, increasing packaging and harmful emissions.

3.35 **To attract FDI, North Macedonia relies heavily on TIDZs, but these special areas offer a wide range of tax and non-tax incentives that are not aligned with EU regulations and are not sustainable in the long term.** Firms in TIDZs are exempt from CIT and PIT for ten years, as well as from VAT, customs duties on machinery and equipment, utility taxes, and building permits. Non-tax incentives include concessional land leases, grants for construction, free utility connections, grants for employee training, partial compensation for investment costs, and access to support services. By contrast, EU member states face limits on the incentives that they can provide, and these limits vary depending on the size of the firm and the region where the investment is made. In Poland, for example, tax incentives in special economic areas are linked to the level of regional development, the eligibility of costs incurred by the firm, and the size of the firm. Some incentives, such as direct labor subsidies, are even prohibited in EU member states. In addition to their inconsistency with EU requirements, tax and non-tax incentives in North Macedonia's TIDZs create sizeable fiscal costs due to forgone tax revenue, grants, and administrative and compliance costs, as well as distortionary economic effects. Additional concerns around the TIDZs involve the sustainability of their economic impact and overall effectiveness, and the limited extent of their technological spillovers to domestic firms.[54]

Increasing property taxes

3.36 **Taxes collected by local governments (mainly property taxes) are low and could be increased.** On average, property tax revenue amounts to about 0.5 percent of GDP. To raise more revenue from these local taxes, the government could consider increasing the rate for more valuable properties or lowering PIT discounts from capital gains. The latter provide tax discounts for owner-occupied properties and for properties held for more than five years. By contrast, most other Western Balkan countries exempt properties from capital gains taxes only after ten years. As part of the latest round of fiscal decentralization reforms announced in 2021, the government is considering raising rates on more valuable properties to boost revenue at the local level. The property tax is relatively straightforward to administer, given the fixed nature of the assets being taxed, although it requires a comprehensive cadaster, well defined ownership rights and a well-defined, transparent process of property valuations. Not all local governments have human resources and capacity to administer them. For that reason, cooperation and shared-service delivery could be options to test in the case of North Macedonia (see chapter IV on Local Government Finances).

53 https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_2644
54 World Bank (2022). North Macedonia: The Trade Strategy 2.0.

B. Strengthening Tax Administration to Improve Compliance

3.37 **Improving the efficiency and effectiveness of tax administration is critical to address existing revenue shortfalls and cope with rising expenditure needs in a context of high informality.[55]** Continual reforms pursued by the Public Revenue Office (PRO) aimed to ensure efficient tax collection, and encourage high levels of voluntary compliance. The PRO has already developed a sound strategic planning framework, taken preliminary steps to build a risk management framework, provided an array of electronic taxpayer services, and formed an independent internal audit department, among many other milestones. Thus far, tax administration reforms have contributed to the strengthening of core tax administration functions, but there are operational, technical and legal performance gaps that are still not addressed.

3.38 **The Tax Administration Diagnostic Assessment Tool (TADAT)[56] for North Macedonia recognized the reform and modernization progress of the PRO, but it also identified many important functions to be in their early stages of development**. Most of the existing strengths of the tax administration are in the area of taxpayer service—a high rate of e–filing, resulting in good on-time filing rates; use of prefilling of declarations and withholding and advance payment arrangements; and extensive publication of operational data. However, these strengths are not fully utilized due to the poor state of the information technology (IT) system, limited execution of compliance risk management (CRM) approaches, and inadequate management of large taxpayers. In addition, the absence of an independent administrative review process, deficient management of VAT returns and refunds, and insufficient consultations with taxpayers undermine the tax administration's effectiveness and trust of the system by taxpayers.

3.39 **The World Bank's DIAMOND assessment from 2020 also identified gaps in risk management, administration and finance, revenue management, tax audit and investigation, legal affairs, international taxation, and ICT.** It recommended strengthening the compliance and institutional risk management framework, developing an updated workforce planning strategy, building capacity in international taxation, re-introducing a dispute resolution process, enhancing the monitoring of arrears, improving the audit program, and finalizing the new integrated IT system that supports all core tax administration functions. In the EU Country Report on the Republic of North Macedonia for 2023, the European Commission assessed Chapter 16 Taxation as moderately prepared. It was also noted in this context that the Public Revenue Office (PRO) still needs to enhance its operational capacity and computerization. This entails improving business processes, implementing a new integrated IT tax system to replace the current fragmented one, developing compliance risk management measures, and continuing to expand e-services.

3.40 **A new approach to understanding the taxpayer base and compliance trends, with a modern Compliance Risk Management Model (CRMS), could help improve tax compliance and efficient enforcement.** Introducing a CRMS to systematically identify, assess, rank, and deal with tax compliance risks is a priority. Its overarching objective is to stimulate and facilitate voluntary compliance with tax laws and prevent noncompliance by understanding the taxpayers' base and taxpayer risk profiles. Pursuing a risk management approach would help PRO to: (i) craft a compliance strategy that directs efforts at major compliance risks (e.g., large taxpayers who are the highest compliance risk to revenues); (ii) reflect the strategy in annual operational plans and instructions (e.g., national audit plans, audit selection parameters, taxpayer service plans, and

55 Informality is high but has trended steadily downward. Recent informality estimates using the ECM and MIMIC methods gauge the size of the informal economy at between 21.3 and 28.9 percent of GDP in 2019 (World Bank). However, pandemic-related support measures helped encourage formalization by offering wage subsidies and other benefits for formal workers and firms (Analytica, 2021), Data from the Labor Force Survey indicate that informal employment declined from 13 percent of total employment in Q4 2019 to 9.1 percent in Q3 2023.

56 IMF, March 2021.

debt collection plans[57]); and (iii) improve compliance tools (e.g., audit organization and methods, taxpayer services, and enforced collection) and the skills of tax administration management and staff to efficiently realize strategies and operational plans.

3.41 **Building capacity of PRO staff in the LTO is also a high priority for improving revenue collection.** This is often a complex task given the various corporate models and requests for highly specialized skills. The LTO needs to be fully aligned with the taxpayer segmentation approach, which is a core strategy of modern tax administration. Building capacity in units for taxpayer services and the sector strategy and development will also reduce voluntary compliance costs. Using the call center to control non-filers and delinquent taxpayers is a priority to enhance compliance.

3.42 **PRO has an impressive range of strategic planning documents, but implementation proved to be challenging.** The institutional awareness and understanding of strategic directions, as well as ensuring that strategic and business planning processes are linked and translated into instructions and procedures critical for the day-to-day work of local offices are priorities. Other priorities include strengthening IT governance to putting in place an integrated management information system, and improving the planning and exploitation of information. Human resource capacity is central to modernizing tax administration. The PRO training strategy therefore needs to be aligned with the reform priorities, current organizational conditions, business reengineering processes, and IT developments.

C. Revenue and Tax Administration Reforms for Fiscal Consolidation

3.43 **Revenue measures have been an important component of many countries' fiscal consolidation efforts, which seek to balance measures for additional revenue with support for growth, efficiency and fairness.** While the concurrent crises affected the structure of economies in various ways—for example, the reduction in domestic demand has led to large declines in income and consumption taxes—a broad consensus emerged on a set of measures to minimize distortions through (i) broadening the tax base by eliminating inappropriate exemptions or tax expenditures before increasing the rate, (ii) targeting negative externalities, and (iii) strengthening tax compliance. The proposed recommendations below highlight some highlights some key features that include the potential for switching from taxes on employment toward consumption, given concerns about still high level of unemployment, and the opportunity for introducing or increasing taxes of immovable property as being more growth friendly and efficient. The burden of property taxes is often seen as fairer as it falls mainly on middle- and upper-income individuals that own property and is less distortionary for businesses and consumer decisions than other taxes.

3.44 **Recommended reform measures include:**

- **Enhancing the vertical equity of the tax system by increasing the PIT rate on all forms of capital income from 10 to 15 percent**. This adjustment would increase the equity of the distribution of the tax burden by ensuring that individuals with higher capital income contribute a larger share of tax revenues.
- **Raising the CIT rate to the global minimum to boost revenue while maintaining investment competitiveness.** This adjustment would align North Macedonia with neighboring countries like Albania and Serbia, which already apply a 15 percent tax rate, as well as with the anticipated global minimum CIT rate of 15 percent.
- **Considering accelerating the increase in excise taxes for cigarettes**. Significant increases in excise rates are needed to achieve the EU minimum rate of €90 per 1000 cigarettes. This can be achieved by 2030 with annual increases in the specific tax of MKD 230 per year, but a more ambitious schedule could boost revenues sooner and reduce negative health externalities.
- **Reforming alcohol excise taxes to control substitutability and reduce negative health effects**. EU requirements do not oblige North Macedonia to revise its alcohol excise taxes,

57 At the end of 2020, VAT arrears debt reached 16.6 percent of VAT revenues, while the latest available data from 2024 reveals that VAT arrears stood at 9.1 percent of VAT revenues.

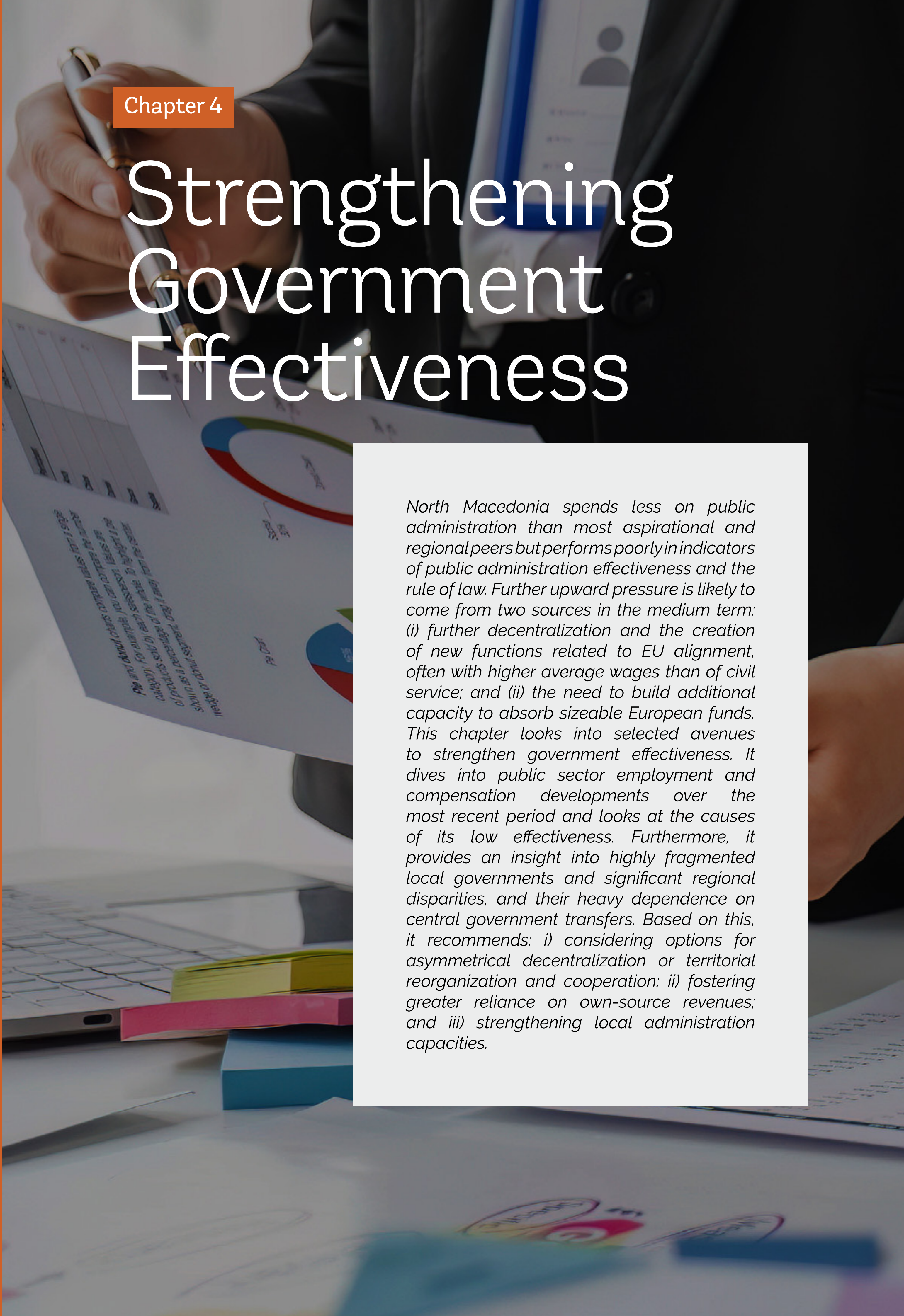
but rising consumption and the erosion of real tax rates by inflation requires action to protect public health and fiscal revenue. The authorities should raise excise rates for distilled spirits and implement excises on wine and fermented beverages that should also be benchmarked to nominal wages to ensure that alcohol does not become more affordable over time.

- **Considering a tax on SSBs in line with regional and global trends**. The government should apply a volumetric tax, which could evolve into a more precise sugar-content-based tax over time. The initial recommended rate is MKD 6 per liter (or the equivalent rate per gram of sugar) which can raise an additional 0.1 percent of GDP in revenues and contribute to a shift in consumer patterns towards healthier options and reduced health costs.
- **Abolishing the threshold for customs-duty exemption of 90 EUR for e-commerce and rationalizing customs exemptions for TIDZ companies.** The latter can be achieved by offering autonomous exemptions for raw materials, reprocessed materials, and equipment that can bring greater added value in the production process, without using this instrument for the release of final products intended for final consumption.
- **Broadening the VAT base by increasing the standard VAT rate from 18 to 19 percent and eliminating the preferential rate on non-necessities to increase revenue and reduce regressivity.** The preferential rate could be increased from 5 to 10 percent on all goods except basic consumer products, agricultural products, basic pharmaceuticals, natural water-supply services, accommodations, and food service. The additional revenues generated by this adjustment, estimated at 0.46 percent of GDP, can be used to support lower-income households through targeted social transfers, which are consistently more effective than preferential tax rates.
- **Establishing a domestic carbon price to anticipate the imposition of a carbon border adjustment on exports to the EU starting in 2026 and to incentivize climate action**.[58] The importance of carbon pricing is recognized in the government's 2021–2025 Tax System Reform Strategy, which includes environmental taxation as one of its five priority reform areas. The modeling work by the World Bank suggests that carbon pricing could raise about 1.4 to 1.9 percent of GDP a year in additional revenue. This revenue can compensate affected households and businesses, helping deliver an equitable and just transition.
- **Enhancing administrative capacity of the tax administration to improve effectiveness of revenue collection by:** (i) reinforcing the framework for compliance-risk management; (ii) developing workforce-planning strategies; (iii) moving toward a performance-oriented budget; (iv) developing audit-risk criteria for large taxpayers; (v) accurately reporting the stock of arrears; (vi) building cross-border tax capacity; and (vii) implementing the integrated IT system that is expected to support all core functions. Stronger monitoring of strategic plans should enable better decision-making and help ensure that lessons learned inform new policies and programs.

58 World Bank (2024). North Macedonia Climate Public Finance Review.

Chapter 4

Strengthening Government Effectiveness



North Macedonia spends less on public administration than most aspirational and regional peers but performs poorly in indicators of public administration effectiveness and the rule of law. Further upward pressure is likely to come from two sources in the medium term: (i) further decentralization and the creation of new functions related to EU alignment, often with higher average wages than of civil service; and (ii) the need to build additional capacity to absorb sizeable European funds. This chapter looks into selected avenues to strengthen government effectiveness. It dives into public sector employment and compensation developments over the most recent period and looks at the causes of its low effectiveness. Furthermore, it provides an insight into highly fragmented local governments and significant regional disparities, and their heavy dependence on central government transfers. Based on this, it recommends: i) considering options for asymmetrical decentralization or territorial reorganization and cooperation; ii) fostering greater reliance on own-source revenues; and iii) strengthening local administration capacities.

A. Enhancing the Effectiveness of Public Administration

Comparatively larger public sector size but lower cost

4.1 **Public administration in North Macedonia is characterized by its relatively larger size** (Figure 36). At the end of 2023, the total number of employees in the public sector[59] of North Macedonia was around 129,000. This represents 21.7 percent of total employment which is below the EU average of 25.7 percent but above the average for small EU and regional peers. In the Western Balkans region, this is the largest public employment share.

Figure 36. General Government employment (2023, % of total employment)

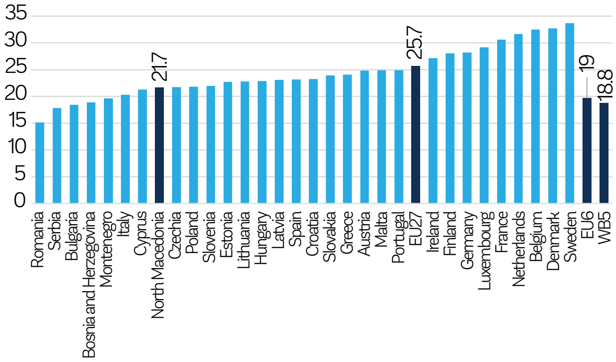
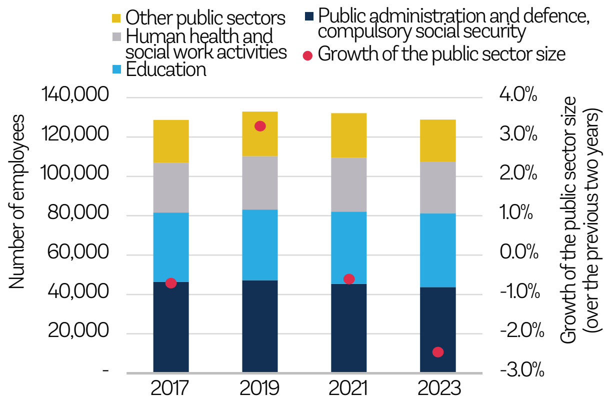


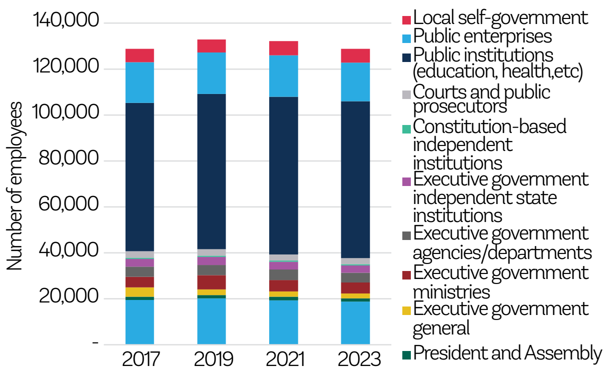
Figure 37. Size and composition of the public sector in North Macedonia



Source: Eurostat, SSOs, Ministry of Information Society and Administration. Averages are obtained as simple averages of the available data.

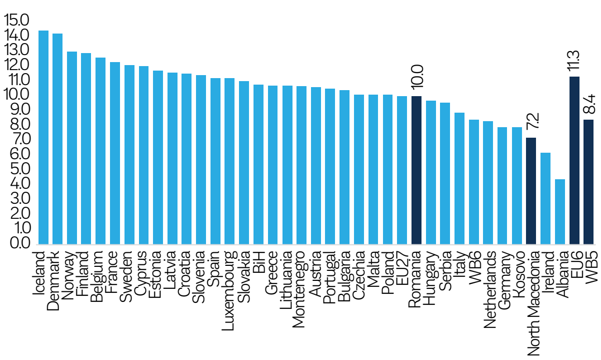
4.2 **Public employment declined slightly in 2023 but has remained broadly stable over the last five years.** On a cumulative basis, public employment declined by only 0.6 percent in 2023 compared to 2016 (Figure 37). However, in the context of the declining working-age and employed population revealed by the 2021 Census, even a small increase in public employment represents a significant expansion of the public sector. In 2023, 33.9 percent of public employees worked in the public administration, 21 percent in the education sector, 20.4 percent in the health sector, and 16.5 percent in other sectors like culture, transportation, and urban development (Figure 38). Over the last seven years the steady number of the public sector has been accompanied by a stable composition.

Figure 38. Composition of the public sector in North Macedonia, by types and levels



Source: Ministry of Information Society and Administration.

Figure 39. General Government Wage bill (% of GDP)



Note: The disaggregation past 2020 was not available.
Source: Ministry of Information Society and Administration.

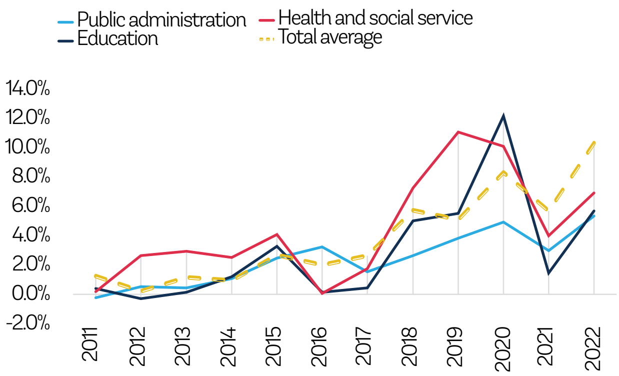
59 Employment in the public sector includes civil servants and other government employees (on a national, regional and local level) as well as armed forces and state-owned enterprises. In North Macedonia, it includes employed in education, health, culture and other sectors whose owner is the state. In this analysis, we may interchangeably use 'government employment'. Public administration refers only to ministries and departments of Government, hence being a component of the public sector.

4.3 **At 7.3 percent of GDP in 2023, the general government wage bill ranks third lowest within Europe, after Ireland and Albania** (Figure 39). One salient fact can be observed: small EU states have higher wage bills than more older EU countries. This could be explained by the fact that fixed costs of running state are similar across countries, and that they still pay premiums for civil service jobs. The current wage bill in North Macedonia is slightly higher than in 2015 when it peaked at 7 percent of GDP, and this was after a 30-percent wage increase in 2023 to compensate for years of low growth. Indeed, public administration experienced lower wage growth than the national average since 2016 (Figure 40). However, wage growth in the health and education sectors (which are mainly but not exclusively part of the public sector) outpaced the national average in some years, particularly during the COVID-19 pandemic.

4.4 **While the wage bill appears low, this estimate is subject to several caveats**. The inclusion of contract workers in the central budget under the line of "goods and services" is a well-established and politicized issue in North Macedonia. Such workers are hired to perform standard tasks and are treated as permanent workers de facto, but they are contractors delivering a service to the government de jure. Particularly in municipal budgets, such costs, as well as additional elements of compensation, may be hidden in other budget lines, preventing a proper identification of the true wage bill.

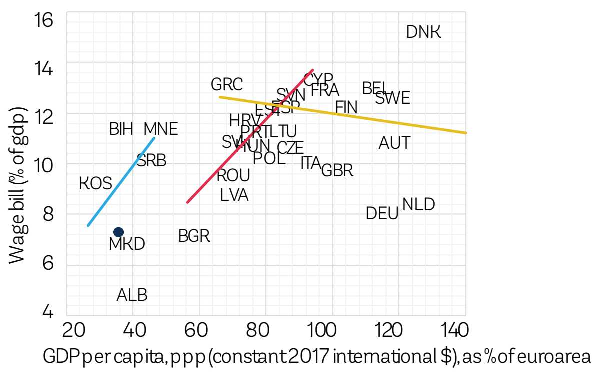
4.5 **The size of the wage bill is broadly consistent with that of comparator countries** (Figure 41). Namely, North Macedonia's general government wage bill falls below the fitted line (for the WB6 only) when the wage bill is correlated with the per capita real income, and together with Albania dragging the fitted line down, i.e. strengthening the expected positive relationship between the level of development and the government wage bill. The slope of the relationship is similar in the new EU member states. The expectation is that the wage bill will grow as the country converges towards the high-income status.

Figure 40. Annual gross wage growth in North Macedonia (%)



Source: State Statistical Office.

Figure 41. Size of the government through the wage bill

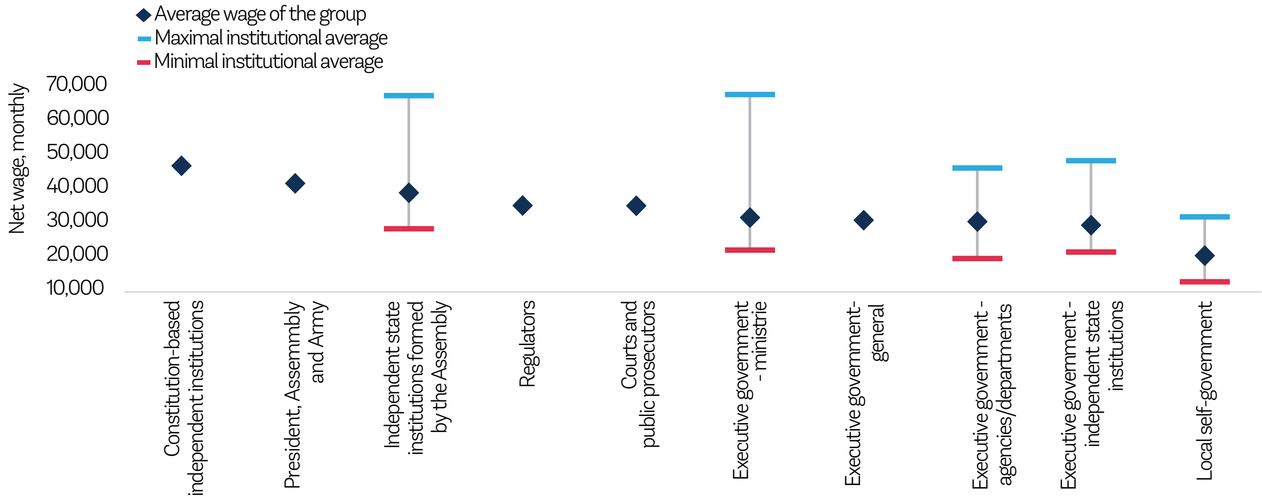


Note: Luxembourg and Ireland are not shown as they represent severe outliers in terms of GDP per capita. Source: Worldwide Bureaucracy Indicators (WWBI) for the wage bill; and World Development Indicators for GDP per capita.

4.6 **There are important wage differentials across types and levels of government (**Figure 42). Institutions established by the Constitution—i.e., the central bank, the Constitutional Court, and the ombudsman—top the wage list, followed by the Cabinet, the Assembly and the army (Figure 42). Institutions founded by the Assembly follow, with a significant variation in average wages by institution (coefficient of variation, c.o.v. of 26.8 percent). Regulators and courts have similar levels of wages, but insufficient data at the institutional level prevent a calculation of variations. Nevertheless, such variations may be high in the case of regulators, whereas courts follow unified wage rules. Ministries (and the general functions of the government) feature in the middle of the average wage distribution, with the largest variation among all institutional groups (c.o.v of 35.1 percent). This may be a reflection of the different structures of each ministry in terms of level functions and their size. The top performer by average wage is the Ministry of Foreign Affairs, while the worst performer is Ministry of Information Society and

Administration. The other agencies at lower levels of the executive government appear at the lower end of the average wage distribution, with similar averages and variations, while local governments are the worst performers, with an average wage of about MKD 20,000, but also show the least variation (c.o.v of 21.3 percent).

Figure 42. Wage variations among different groups of the public administration, 2019

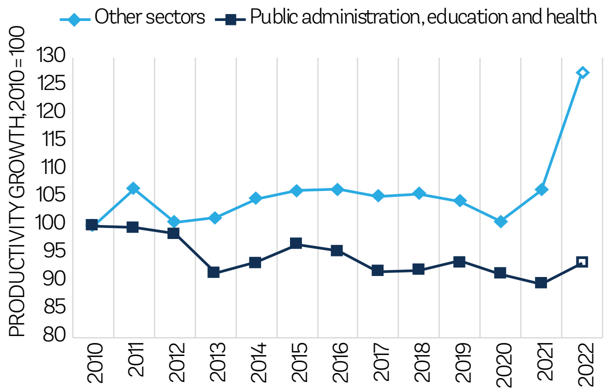


Note: Data refer to 2019, as 2021 was unavailable, while the pandemic 2020 was intentionally avoided. Variations for some of the groups are not presented either because the group is small (e.g. the first group on the graph is composed of only three institutions) or because wage data were unavailable (this is the case for most of the regulators).
Source: Ministry of Finance.

Low productivity and effectiveness

4.7 **An analysis of the productivity of public sector employees in the public administration, education and health sectors reveals an alarmingly widening gap compared to the private sector** (Figure 43). Compared to 2010, the productivity of the private sector grew by 6.4 percent (which itself may be quite unsatisfactory), while the productivity in the public sector declined by 10.3 percent. The dramatic productivity increase in the private sector in 2022 is partly due to the adjustment of the employment data with the Census 2021, but the productivity gap nevertheless widened between the private and the public sector.

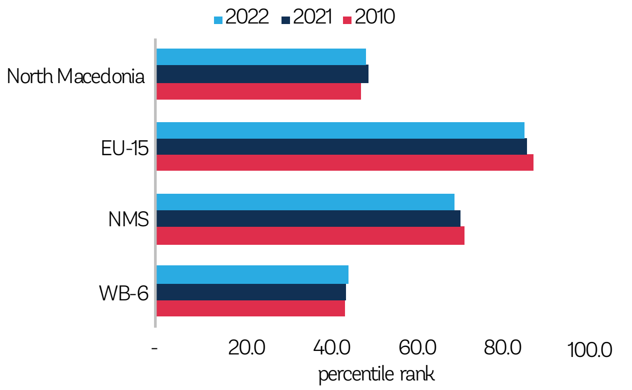
Figure 43. Productivity of the public sector



Note: Productivity is calculated as the value added per employed worker, so that the value added for the public sector is taken proportional to the number of employees in public-owned institutions.

Source: World Bank staff calculations based on SSO data.

Figure 44. Government effectiveness



Note: Aggregations are simple averages of the percentile ranks, hence should be used only indicatively. WB6 = Western Balkan 6; NMS = New member states of the EU; EU-15 = Old member states of the EU.

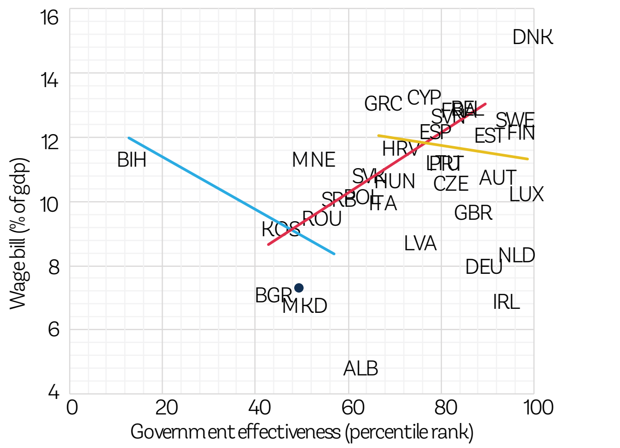
Source: World Bank Governance Indicators.

4.8 **However, government effectiveness posted a modest increase over the previous decade** (Figure 44). North Macedonia's score on the World Bank Governance Indicators improved from

48.3 percent in 2010 to 50 percent in 2021 and then declined slightly to 49.5 in 2022. These scores are slightly above the WB-6 average, but significantly lower than the average of new EU member states and almost half the average for older member states. However, over the same period, the averages of all comparator groups experienced stagnation or a decline.

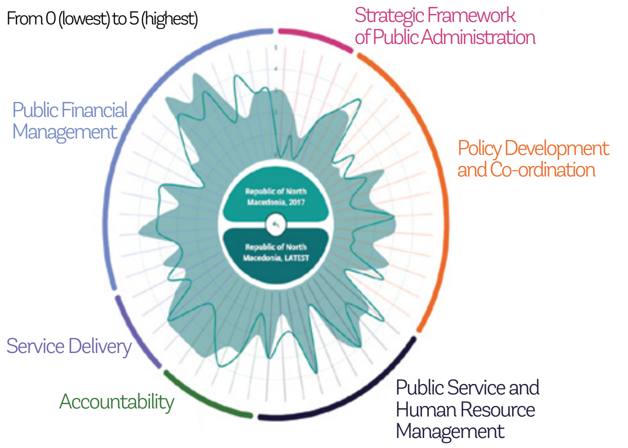
4.9 **A smaller general government wage bill is associated with greater governmental effectiveness, at least in the Western Balkans** (Figure 45). The correlation is reversed among the new EU member states, while no conclusive pattern is evident among older EU member states. The latter are also a highly heterogeneous group: countries ranked the highest in government effectiveness have both high (Sweden, Finland, Austria) and low government wage bills (Germany, Netherlands, Ireland). Assessing the performance of the public administration across a wider range of criteria yields a more mixed picture. The OECD Principles of Public Administration cover a broad spectrum of governmental effectiveness indicators (public administration management, accountability, and service delivery), which are rated on a scale from 1 (lowest) to 5 (highest). North Macedonia's scores on about half of these indicators improved over a five-year span (Figure 46).

Figure 45. The wage bill and government effectiveness



Source: Worldwide Bureaucracy Indicators (WWBI) database for the wage bill; and World Government Indicators for the Governance effectiveness.

Figure 46. Public administration performance



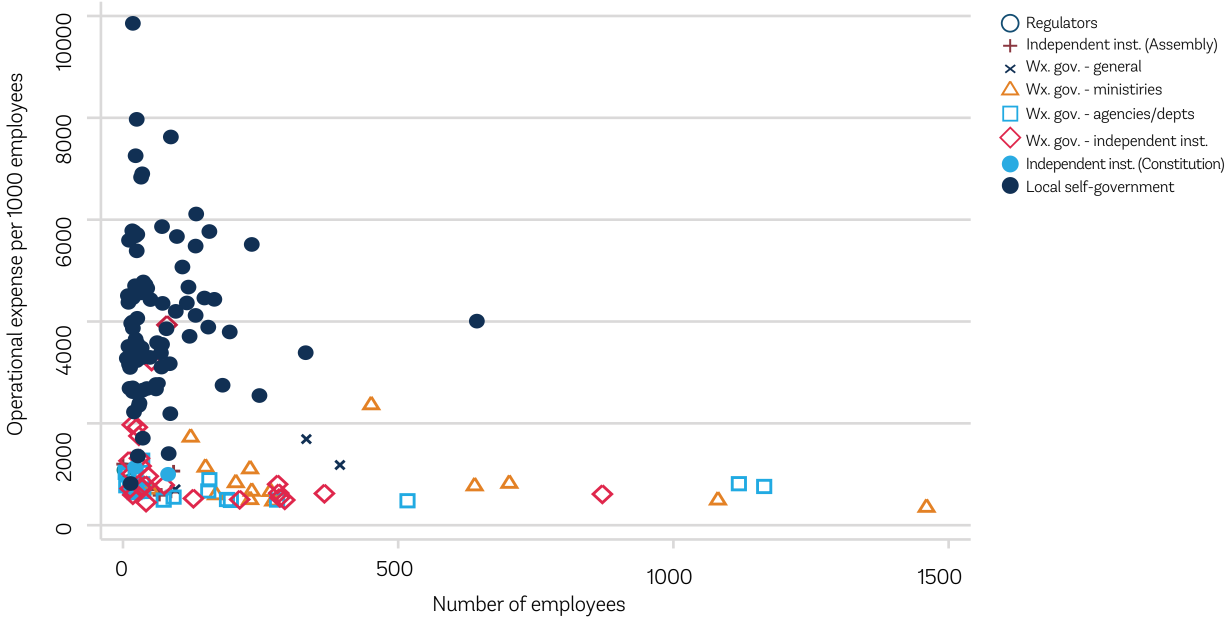
Note: The shaded area represents the latest available year, while the line represents 2017, the oldest year available

Source: OECD Principles of Public Administration; available here: https://bit.ly/3DdXa3J.

Large variation in efficiency

4.10 **Operational efficiency varies greatly across institutions** (Figure 47). Local governments account for a large share of this variation, as they range from very efficient (defined as having an operational cost of under MKD 1,000 per 1,000 employees) to very inefficient (MKD of over 13,000 per 1,000 employees). These variations are independent of the size of the local government. Variations in efficiency are also present among independent state institutions within the executive government, as smaller institutions have larger relative operational costs (with a correlation coefficient of -34.4 percent). Similar variations in operational efficiency are evident within ministries. Agencies within the executive government tend to have low levels of operational efficiency, although their size varies significantly, and larger independent institutions tend to be more efficient.

Figure 47. Operational efficiency and the size of the public administration institutions



Note: Data refer to 2019, as 2021 was unavailable for the operational efficiency, while the data during pandemic 2020 was intentionally avoided. Operational efficiency of local governments is derived from ratio of their operational expense and number of administrative workers. Armed forces and courts are not presented due to aggregation and, hence, large number of employees.

Source: Ministry of Information Society and Administration.

4.11 **Improving efficiency has proven difficult as a result of a combination of factors.** One is the high level of rigidity in the organizational structures and remuneration system in the public administration. Higher average wages are linked to higher levels of operational inefficiency, except among local governments. Such correlation for the ministries is the highest (positive 71.3 percent), suggesting that variations in operational efficiency are strongly related with the variations in wages. Another is the fragmentation of local self-government units, which are expensive, but not self-sustaining. Finally, public administration is still highly politicized, which hinders the emergence of a professional managerial cadre.

Public sector wage premium

4.12 **Globally, wages in the public sector are usually higher than in the private sector, although the public sector premium disappears at the high wage end**. A comparison of wage levels between the public and private sector can provide important information for understanding the local labor market, but also for assessing government wage policy. However, such a comparison is not without challenges. The public sector is often involved in activities that are not provided by the private sector; occupations found in the public sector are sometimes hard to find in the private sector; and skills required for the job might vary by sector. Also, wage determination is often based on largely different rules. For these reasons, a comparison of wage levels across sectors should go beyond the raw averages and consider as many aspects of worker and job characteristics as possible.

Box 6. Wage gap analysis: sources of data and coverage

This analysis is based on micro data from the 2022 Labor Force Survey (LFS). Although the LFS is primarily designed to cover labor market flows, it also collects information on the wages received at the worker's main job, which enables wage data to be combined with information on the demographic characteristics of respondents, their employers, and workplaces, producing a rich data set to compare the public with the private sector.

The sample was restricted to employees in paid employment. Self-employed and employers are excluded from the sample because their income covers not only compensation for work, but also remuneration for entrepreneurial skills. Occasional and seasonal workers were also excluded as their earnings exhibit an unclear link to labour market characteristics; they anyway represented less than 2 percent of the wage employees. After the sampling process removed observations with missing or incomplete answers on key questions, a total of 12,461 workers remained.

The LFS collects information on the ownership status and the main activity of the firm of employment. For analytical purposes, employers were divided into three types:

i. ***the public sector*** comprises non-private employers and workers engaged in providing public administration, education, and health services, according to NACE Rev.2;

ii. ***SOEs*** comprise all entities with non-private ownership engaged in activities other than the above-defined public sector; and

iii. ***the private sector*** comprises firms with reported private ownership.

Data on wages refers to the net wage (i.e., the wage after social security contributions and taxes), as they are reported in the LFS. For a large part of the sample, the wages are provided in intervals; for these, we obtain the average for the group from the cases where the exact wage was reported. The LFS does not provide data on wage supplements and fringe benefits. Original wage data refers to usual monthly wage received at the main job. Hourly wages are calculated by dividing the monthly wage by the number of weekly hours typically worked; wherever the usual hours were not available, the actual hours from the week preceding the interview were used instead.

4.13 **On average, public sector employees are older, more educated and remain longer with their present employer than private sector employees** (Table 19). Supervisory positions compose larger fractions within the public sector. The public sector has more absent workers (due to illness mostly) than the private sector, but this is not the case for the SOEs. Overall, the characteristics of employees in SOEs are close to those of public sector workers, except in terms of absences from work, where they are closer to private sector workers.

Table 19. Workers' characteristics by sector

	Share of Workers (%)			Average		Share of
		Age (years)	Education (years)	Tenure in current firm (years)	Supervisors	Absent Workers¢
Public Sector	22.2%	44.0*	14.5*	12.8*	3.7%	7.3%*
State-Owned Enterprises	9.1%	46.9*	13.2*	13.5*	4.1%*	4.0%
Private Sector	68.8%	40.2	12.5	6.4	2.5%	4.0%

Notes: * refers to a statistical difference at the 95% level of the figure for the public sector or the SOEs when compared to the private sector. ¢ Absent from work a week before the survey due to personal (sick leave, maternity leave, annual leave) or economic (bad weather, training, strike) reasons.
Source: World bank staff estimates based on the 2022 LFS.

4.14 **Public sector employees earn 14 percent higher wages than private sector employees and work shorter hours** (Table 20). Meanwhile, state-owned enterprises offer an average wage that is 13 percent higher than in the private sector.[60] Public employees also work shorter hours than private sector employees, which implies that the wage gap by sector in per hour terms is larger than in terms of monthly wages. The gap amounts to 17 percent between the public and private sector and 15 percent between the SOEs and the private sector.

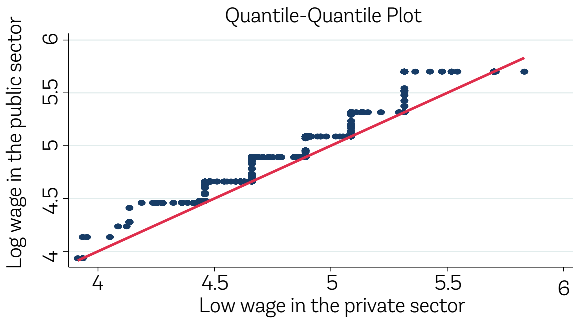
Table 20. Average wage by sector

	Monthly wage	Relative monthly wage (Private=1)	Hours worked (per week)	Relative hours worked	Hourly wage	Relative hourly wage (Private=1)
Public Sector	26,521	1.14	40.14	0.97	150.1	1.17
State-Owned Enterprises	26,220	1.13	40.33	0.97	148.1	1.15
Private Sector	23,213	1.00	41.43	1.00	128.3	1.00
Total	24,224	1.04	41.04	0.99	135	1.05

Source: World Bank staff estimates based on the 2022 LFS.

4.15 **Wage distribution in the public sector is more compressed than in the private sector.** This compression does not apply to SOEs, however, which exhibit wage dispersion quite similar to the private sector. The Gini coefficient for public sector wages is 14 percent, while for the private sector it stands at 16.5 percent. The Gini coefficient for wages in SOEs is 16.4 percent. It is interesting to note here that the Gini coefficient for total household income hovers around 31 percent,[61] which indicates that wage inequality in North Macedonia is half that of the income inequality and wages are not a significant source of that inequality.

Figure 48. Quantile-quantile plot of public and private sector wages



Source: World Bank staff estimates based on 2022 LFS.

4.16 **The public sector pays higher wages throughout the entire wage distribution, except for the highest wages.** Figure 48 illustrates wage levels at various points of the wage distribution in a comparable manner for the public and private sector. A point at the symmetry line indicates that a particular percentile of the wage distribution in the public sector has the same value as the corresponding percentile of the wage distribution in the private sector. Points above the symmetry line imply that public sector wages are higher than private sector wages for comparable percentiles.

4.17 **The gender wage gap in the public sector is roughly half that of the private sector** (Table 21). In the public sector, women earn, on average, 5.1 percent less than men, while this percentage is 9.2 percent (statistically significant difference) in the private sector. The gender gap is nonexistent in SOEs. Starker gender differences are observed in terms of the shares of female employees: women account for 53.4 percent of public sector employment, while in SOEs they account for 25.6 percent, or 43.1 percent of employment in the private sector.

60 The average wage calculated from the LFS is usually smaller than the one published by the SSO from administrative data collected from the PRO. Reasons may be manifold, but usually it is the usual underreporting and incapability to precisely capture the large wages among the key reasons when working with wage data from surveys.

61 These data are published by SSO based on the latest Survey on Income and Living Conditions.

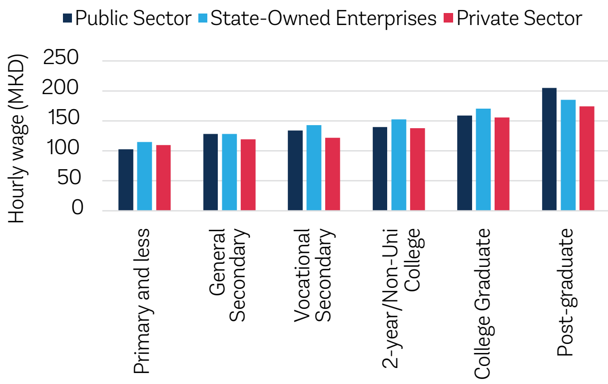
Table 21. Hourly wage by sector and gender

	Hourly wage		Relative wage (Private=1)		Gender wage gap (%)	Share of female employees (%)
	Male	Female	Male	Female		
Public Sector	154.3	146.5	1.15	1.21	-5.1%	53.4%
State-Owned Enterprises	148	148.2	1.11	1.22	0.1%	25.6%
Private Sector	133.6	121.3	1.00	1.00	-9.2%	43.1%

Source: Author's estimates based on 2022 LFS.

4.18 **Except for workers with primary education and post-graduate education, the public-private wage differential is similar across educational levels** (Figure 49). Public employees earn higher wages than private-sector ones, but lower wages than those employed by SOEs. Employees in SOEs earn the highest average wage among workers with primary education only, while workers with post-graduate qualifications (albeit a small group) are the best-paid employees in the public sector.

Figure 49. Hourly wage by sector and education level



Source: World Bank staff estimates based on 2022 LFS.

4.19 **The difference in average wages between workers with the highest and lowest education levels is more pronounced in the public than in the private sector** (Table 22). The average wage for workers holding a university diploma and employed in the public sector is 55 percent higher than the average wage for workers with a primary education or lower, while that difference is only 42 percent in the private sector. The public sector starts paying significantly higher wages from general secondary education onwards. SOEs stand in the middle: wage differences by educational level are larger than in the private sector, but smaller than in the public sector. The public sector employs a larger share of educated workers: more than half of employees in the public sector hold a university degree, versus about one-fifth in the private sector and one-third in SOEs. More than three-quarters of private sector workers possess secondary education or less, while the same is true for less than 40 percent of workers in the public sector.

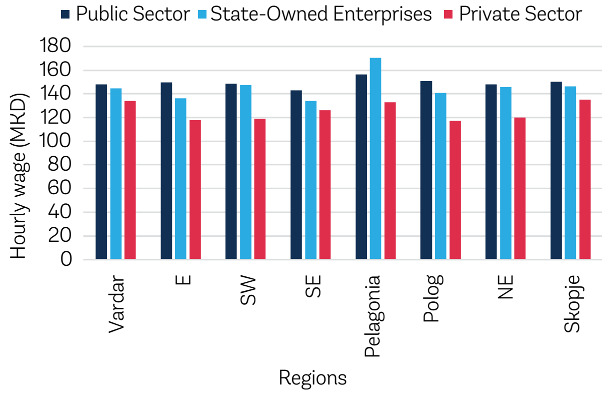
Table 22. Relative wages and composition of employment by education and sector

	Relative wage (Primary and less=1)			Composition of employment (%)		
	Public Sector	SOEs	Private Sector	Public Sector	SOEs	Private Sector
Primary and less	1.00	1.00	1.00	3.5%	7.6%	11.2%
General Secondary	1.25	1.12	1.09	13.2%	18.0%	22.5%
Vocational Secondary	1.31	1.24	1.11	21.7%	37.9%	41.9%
2-year/Non-Uni College	1.36	1.33	1.26	3.9%	3.1%	1.8%
College Graduate	1.55	1.48	1.42	50.5%	28.3%	20.6%
Post-graduate	2.00	1.61	1.59	7.2%	5.1%	2.0%

Source: World Bank staff estimates based on 2022 LFS.

4.20 **Highly skilled professionals, medium-skilled agricultural workers, and workers in elementary occupations are paid slightly more in the private than in the public sector** (Figure 50). For clerical-support workers, craft and trade workers, and plant and machine operators, the wages are on par. For other occupations, public employees are paid more, though differences are not large, except in the managerial group. This result is unexpected, as workers in top positions are typically paid significantly more in the private sector than in the public sector. The observed difference may be due to the LFS capturing the top jobs in the private sector. SOEs offer higher wages for some occupations than either the public or private sectors.

Figure 50. Hourly wage by sector and occupation



Source: World Bank staff estimates based on 2022 LFS.

4.21 **After taking into account differences in education level, occupation structure, workers' age, region, firm size and workers' supervisory responsibility, the absolute public sector wage premium disappears. However, if adjusted for the productivity gap of 34 percent with the private sector, the wage premium for working in the public sector is large.** Using a standard Mincerian earnings function and regressing log of hourly wage on a set of worker, job and employer characteristics to estimate their explanatory role for the wage level and compare return on certain labor market characteristics between the public and the private sector, removes the public sector wage premium. However, premium exists in the SOEs, at 4.1 percent. There are other stylized facts:

- **The adjusted gender wage gap hovers around 11 percent and is in line with previous estimates**. Still, this gap is slightly lower in the public sector, 6.4 percent and 5.2 percent in SOEs, as opposed to 11.3 percent in the private sector. Interestingly, age is not important for wages in the public sector, which is unexpected given that the legal rule for embedding "tenure" into the wages is strictly enforced in the public sector. In SOEs, an additional year of age (a proxy for experience) brings a 2 percent wage increase, versus only 1.2 percent in the private sector. The relation is concave, as it turns negative after certain points, roughly after 51 years of age in SOEs and 43 years in the private sector.

- **Education is rewarded, and tertiary-educated workers receive the highest returns in the public sector.** For example, a college graduate is paid 26.6 percent more in the public sector than a primary-or-less educated individual, and by only 18 percent more in the private sector. This may have been one driver of the pressure to enroll and obtain a university diploma in the last decade to decade and a half.

- **All occupations are paid less than managers, except professionals who are rewarded equally to managers in the private sector.** All sectors pay more than agriculture, which is expected, with no large difference among them. SOEs have slightly higher coefficients across the occupations.

- **Firm size matters more in the private sector.** Larger firms pay higher wages, but differences are not significant: for example, firms with over 50 employees pay 11.5 percent more than firms with fewer than 10 employees, while firms with 11-19 employees pay 6.7 percent more. Interestingly though, a supervisory role is correlated with a wage penalty in the public sector and does not matter in the private sector, but this may be due to multicollinearity problems with the occupations.

- **Regional differences are almost nonexistent in the public sector.** In the private sector, the east and the Polog regions pay the lowest average wages, 8.5 percent and 10.1 percent, respectively, lower than the wages in Skopje, followed by the southwest and northeast regions which also feature compensation worse than Skopje by 5.1 percent and 4.7 percent, respectively. The other regions offer wages similar to Skopje's.

An urgent call for reform

4.22 **The public sector of North Macedonia is characterized by larger size, but relatively low cost and high ineffectiveness.** A larger source of concern is public sector productivity, which declined by 9 percent over a decade, while that of the private sector increased, reflecting a deepening gap. While multiple factors may contribute to inefficiency, the increasing politicization of the public administration is the driving factor, as it undermines a merit-based system in which each vacancy is filled based on education, competences, and skills. During the last several decades, the main channel through which to obtain a job in the public sector (with certain exceptions) has been affiliation with political parties. Such access is supported by the "ethnic key," regulated through the Ohrid Framework Agreement, which in North Macedonia has been turned into a binding rule prescribing the ethnicity of a vacancy's occupant, which violates merit-based principles of employment. These enduring problems have hindered the emergence of a professional managerial cadre and has been strongly correlated with negative self-selection, whereby more competent, highly educated, and motivated individuals either avoid or refuse work in the public administration or abandon the public sector for jobs in the private sector, either foreign or domestic.

4.23 **Further, the organizational structures of the public institutions and the public administration as a whole are considered highly rigid: workers' demotion and dismissal are almost impossible, which propels the self-selection process.** Another problem is the remuneration system, where similar level positions within an institution (and frequently across institutions of a similar group) are highly inflexible, demotivating individuals with higher motivation in an environment populated with inadequate personnel. A third problem is visible from the cross-analysis of wages, institutional size, and efficiency revealing the strong fragmentation of local governments, which are expensive but not self-sustaining, and sometimes the proliferation of agencies. This process has lately subsided, however, and institutional reorganization is a goal of the government elected in May 2024.

4.24 **The importance of the public administration's productivity and efficiency increases as the country faces the need to commence and conduct negotiations to join the EU.** Adequate public administration capacities constitute a key requirement for EU membership. The EU recognizes that "strengthening institutional and administrative capacity, reducing the administrative burden, and improving the quality of legislation underpins structural adjustments and fosters economic growth, as well as employment". The experience of the 2004 EU entrants suggests that public administration reforms require sustained support across governments, combined with a professional, merit-based, and independent civil service. Administrative reforms require persistence and transparent monitoring over several political cycles to show results, a process that has been challenging for North Macedonia.

4.25 **Although several of North Macedonia's governments recognized the importance of civil service and administrative reforms, the process has been slow and uneven**. The professionalization of the public administration has been set as a goal in the programs of almost all key political parties, at least since the mid-2000s, but the political will was curtailed shortly after the elections, frequently followed by reversals. For example, currently, there is a debate around the law on professionalization of top civil servants' positions that started a couple of years ago, but has been hampered by a lack of transparency and insufficient will to bring the law into practice. The government advanced on e-government reforms, but there are issues with cross-government coordination and system interoperability to enable the rollout of e-government systems. Also, the country's underdeveloped and underutilized high-speed broadband infrastructure has resulted in a significant digital divide among the population that will need to be overcome to increase the use of e-services. Finally, pay and promotion decisions are not merit-based and the functional review recommendations have only been partially implemented.

4.26 **The Public Administration Reform Strategy (PAR) has been focused on the quality of the public administration rather than on its size or wages.** Although the PAR covered the period 2018-2022 and has already lapsed, it is worth mentioning that de-politicization, reorganization, and optimization, retention of competent staff, quality of service, and improved capacity for negotiating with the EU were among its key objectives. The PAR recognizes some of the problems noted in this analysis: for example, the insufficient trust of potential candidates in the objectivity of the employment process, which leads to insufficient applications per vacancy, lack of quality applications, and hiring processes that are left unfinished because of insufficient interest. Together with the frequently insufficient competences among the selection/promotion committees, this provision compromises the merit-based system in employment and propels demotivation. The PAR also recognized the need to differentiate between the political and professional levels in the public administration, i.e. the scope of the senior civil service. The law on senior civil service was proposed in 2019 but has not yet been adopted. The law prescribes, in more detail, the selection of senior managerial officials based on merit and competences, a key step in the de-politicization of public administration management. Related to this matter, at present the appointment of senior civil officers has been circumvented through the process of appointing 'acting' officials (directors, heads etc.), so as to avoid the procedures and the careful selection processes that secure a minimum level playing field, an evasion that has actually intensified in the last few years.[62]

4.27 **The ethnic balancing of employment in the public administration, while implicitly recognized in the PAR, likewise impairs merit-based employment practices.** The "BalanceER" tool is in place to secure appropriate ethnic distribution in hiring at public institutions, but this rule deprives a set of competent candidates from applying because of ethnicity and opens the door to deception. Anecdotal evidence suggests that some individuals opted for claiming different ethnicity to be able to apply and possibly get employed with or without political support.

4.28 **The inconsistencies in the remuneration systems are clearly articulated in PAR.** These inconsistencies stem from the fragmentation of the system, whereby one law regulates the wages of administrative officials (with the possibility of circumventing some of its provisions), while other legal acts, including collective agreements and bylaws, regulate wages of all other employees in the public sector. This fragmentation is reflected in the wage variations observed above, as well as in peculiar wage patterns with respect to efficiency. The latter is among the key sources of worker dissatisfaction and has prompted many capable employees to leave the public sector.

4.29 **To alleviate the problems relating to the remuneration system, a law on the system of public wages was proposed towards the end of 2022.** The law aims to unify the system for calculation of wages and their supplements, for employees of the public sector as well for elected officials. The draft law prescribes the equal wage for equal work principle, and aims to secure a level playing field for elected officials, particularly among the members of the managerial and supervisory boards in the respective public institutions, which were known for large disparities. The draft law has just been opened for public discussions and wider consultations, but no meaningful progress has yet been achieved.

4.30 **Public administration reform remains a difficult and highly sensitive issue in North Macedonia**. Adherence to current systems and practices remains strong, although these have

62 Not only has such an evasion intensified, but it has also turned into a standard practice instead of a temporary solution until an executive is selected through standard procedures. Frequently, the maximum duration of the 'acting' position is ignored as well.

created a civil service system that is relatively costly, inefficient, and structurally underperforming. If reducing the size of the state administration has been politically difficult, and is likely to remain so, improving the performance of the system is essential if North Macedonia aims to become an accepted EU Member State. The experience with public administration reforms suggests that while wage cuts and recruitment freezes may have a positive short-term fiscal impact, structural reforms that improve the effectiveness of recruitment and salary setting tend to be more sustainable (and are often used in combination), while effective downsizing tends to be more targeted than generalized.

Recommendations

4.31 **Any savings achieved over the medium term through staff rationalization to create a leaner administration should be invested into promotion of professional and highly performing cadre based on strengthened performance management.** The following recommendations could be considered:

- **Functional analysis to inform the staff rationalization and other efficiency improvements.** This would help eliminate inefficiencies, duplications, or outsourcing and digitalization to bring efficiency.
- **Immediate and decisive de-politicization of the public sector.** Putting the proposed law on senior civil servants back on a rapid track immediately after the new government is established and adopted in parliament would be a priority. Every political cycle so far has destabilized the institutional memory of the administration, and thus the professionalization of middle and lower management is crucial going forward. However, a lot of work is also needed at the technical level, primarily in securing that job vacancies are clearly written and published in an unbiased way, and that selection and promotion committees are well equipped to handle unbiased, impartial, and objective assessment of the candidates. While politicization and a high staff turnover might not have had overly visible adverse effects on the delivery of public services in the past, EU membership will surely significantly raise the demands on administration.
- **Within-public-sector wage disparities and their unclear connection with efficiency call for the immediate reform of the remuneration system.** The indexation to the national gross wage increases introduced through the collective agreement on public-sector compensation in 2023 needs to be removed given its inflationary impact as well as no linkages to the staff productivity. The proposed law on the system of public wages, announced in January 2023, whose objectives and structure are currently well positioned to secure equal pay for jobs of equal value, and support competences and skills in the public administration, needs to be communicated well, as wages may be subject to reduction for the lack of performance. Ultimately, while such a proposed law may be a part of the process of optimization of the processes in the public sector, without parallel implementation of other venues for optimization, its effectiveness may be limited.
- **The improvement and proper application of the 360-degree assessment system could help alleviate the problems related to remuneration.** Although this process has faced numerous hurdles, the proposed law on system of public wages may be used to assure that assessment results per individual employee are linked to pay and promotion decisions. The Ministry of Information Society and Administration should work not only to ensure the proper implementation of the assessment system but also to promote it as an appropriate tool among public sector employees for increasing individual and unit productivity and for proper valuation of individual and unit results.
- **Support the digital transformation of the public sector to increase transparency.** Cross-government coordination and system interoperability are necessary to enable the rollout

of e-government systems. The authorities should consider developing dedicated cloud infrastructure for the public sector while also enhancing cybersecurity measures and recruiting and retaining the skilled ICT professionals required to implement such a strategy. Enabling the digital transformation of the public sector will enable faster transformation into a modern civil service.

- **The full application of the HRMIS needs to be accelerated to improve cost controls**. Staff appraisal information, absenteeism, training and education, professional career development needs to be linked to the payroll data for the proper HR management. The absence of this control mechanism carries fiscal risks but also erodes equal pay for equal work principle.
- **Finally, the authorities must restart stalled attempts to enhance strategic planning (including the use of regulatory impact assessments), promote professionalization, and introduce performance-based management practices in the public sector.** North Macedonia's public sector cannot function properly without being part of a broader reform process to align public-sector management with performance. While these reforms are neither highly controversial nor highly visible, they are extremely important to the country's achievement of its strategic objective of becoming a well-integrated and high-performing EU Member State.

B. Rebalancing Local Government Finances

Large number of small LGUs and high population density in the capital city

4.32 **North Macedonia operates under a one-tier subnational government system with many relatively small local self-government units (LGUs)[63] and notable regional disparities.** The country has a lower number of inhabitants per municipality compared to the regional WB6 average, but a significantly higher number relative to the EU27 average (Table 23). There are 80 municipalities aside from the capital city of Skopje, which functions as a distinct local self-government unit and consists of ten municipalities. 34 of the LGUs are classified as urban municipalities and 46 are classified as rural municipalities (based on the location of the municipal seat).[64] Urban municipalities are the city of Skopje, the municipalities within the city of Skopje, and all the municipalities that have their seat in a city.[65] All of the LGUs are assigned to one of the eight statistical planning regions (the planning region of Skopje is the largest, containing 17 municipalities).

4.33 **The territorial structure of North Macedonia is fragmented with a large number of relatively small LGUs and high population density in the capital city.** Around 40 percent of the LGUs have below 10,000 inhabitants, while only 12 LGUs have above 50,000 inhabitants. The city of Skopje is the most densely populated, with 526,502 inhabitants, spread over an area of 660 km^2 (around 800 inhabitants per square km). This is due to sustained emigration from the rest of the regions in the country.

Table 23. Local Government Units and Population Distribution, 2021

	Population (in mil)	Number of LGUs	Average pop. of LGUs	Levels of subnational government	Capital city pop. as % of total	Average pop. density (per km^2)	Average size of municipality (km^2)
Albania	2.9	61	46,925	2	20.5	100	471
Bosnia and Herzegovina	3.5	144	24,417	3	13.9	69	356
Kosovo	1.8	38	46,935	1	11.2	164	287
North Macedonia	1.8	81	22,959	1	28.7	72	317
Montenegro	0.6	25	24,894	1	29.9	45	552
Serbia	7.2	145	49,565	2	23.1	81	609
EU27 average	447	88,072	5,075	--	--	102	50

Note: Indicators for North Macedonia reflect the latest available data from the census conducted in 2021.

Source: NALAS (2023), Local Government Finance Indicators in South-East Europe, Eurostat.

4.34 **Despite some improvements, disparities across regions continue to persist**. The region of Skopje has close to 9 times higher GDP than the Northeast region and its per capita GDP is 1.5 times higher than the national average. The Polog and Northeast region are the poorest. Most of the regions have evidenced limited convergence towards the national GDP per capita average in 2022, with the exception of the Polog region, which still stands at half of the national GDP per

63 Excluding the capital city.

64 Program for sustainable local development and decentralization in RM 2015-2020 (https://mls.gov.mk/images/documents/lokalnasamouprava/MK_WEB/PROGRAMA_MK_WEB.pdf)

65 Balanced regional development Law, Article 6.

capita average. The regional disparity is exacerbated by sustained emigration out of all of the regions with the exception of Skopje.

4.35 **Balanced regional development planning is complex and scattered across several institutions**. The Law on Balanced Regional Development adopted in 2021 divides North Macedonia into 8 statistical planning regions. Based on the law, regional development planning is conducted through a Balanced Regional Development Strategy (prepared for a 10-year period by the Government) that is implemented through development programs, including separate programs for each planning region (prepared for a 5-year period by the center for development of each planning region)[66] and then followed up by annual action plans. The regions have neither expenditure nor revenue assignments, but they can use several sources of financing for regional development projects, including budget transfers of at least 1 percent of GDP per year.[67] Regional development projects are then coordinated, monitored and supported by the Bureau for Regional Development.

4.36 **Subsequent fiscal decentralization reforms did not spearhead balanced regional development.** Balanced regional development planning should provide the groundwork for the next wave of fiscal decentralization reforms in the country. Empirical findings already suggest lack of convergence between regions and across time in the country despite continuous fiscal decentralization efforts.[68] By leveraging on the specific needs and potentials of each region, policymakers can prevent unequal concentration of growth in already developed areas, facilitate a more equitable distribution of resources, and contribute to a more unified and inclusive development in the country. The mechanism to incentivize regional development will need to be coupled with integration of fragmented capital investment transfer system to individual municipalities. A proliferation of single-sector, donor-financed programs and associated capital transfer or on-lending mechanism has not only been straining the limited capital investment planning capacity of municipalities but also disincentivizing planning for shared municipal service-related investments and an integrated spatial approach to municipal services.

Symmetrical expenditure assignments, but with inefficient service delivery

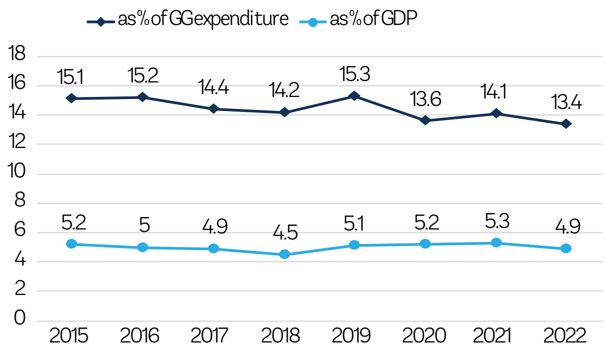
4.37 **North Macedonia's spending on the local government level stands at 5 percent of GDP, similar in size to the average for the Western Balkans, but below the average for aspirational peers (around 10 percent) and EU27 countries (around 11 percent).** In the past decade, 15 percent of total general government expenditure was executed at the local government level, out of which 2 percent were covered by the capital city of Skopje. Overall, spending ratios both as percent of total spending and as percent of GDP have been relatively stable in North Macedonia, although they have recently declined below the last decade's average (Figure 51). In contrast, the share of local in general government spending for most of the aspirational peers, such as in Croatia and Estonia, has seen an upward trend since 2015.

66 Adopted by the council for development of each planning region after receiving approval by the Council for balanced regional development (formed by the Government).

67 Allocated through the following formula: 55 percent for financing projects for development of planning regions, 15 percent for financing projects in urban areas, 15 percent for financing projects in rural areas and 15 percent for financing projects in areas with specific development needs. The allocation of funds follows the Classification of planning regions based on the degree of development.

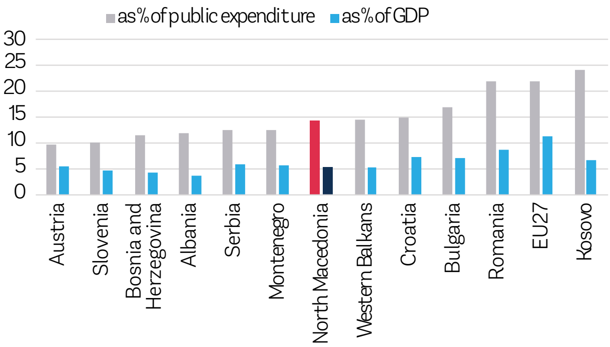
68 CEA (2024).

Figure 51. General government expenditures executed at the local level



Source: BOOST database.

Figure 52. Local spending, international comparison



Source: NALAS (2023), Local Government Finance Indicators in South-East Europe.

4.38 **Spending responsibilities of municipalities are wide-ranging and mostly symmetrical.** The municipalities in North Macedonia have a wide range of responsibilities ranging from urban planning and communal services to education, social care, and child protection.[69] All municipalities have the same responsibilities for the provision of public services regardless of their development level, fiscal capacity, or size. The City of Skopje, as a separate LGU, is an exception because it performs some of the responsibilities of the municipalities it is comprised of. This often creates a risk of duplication of tasks and further adds to the inequality of services provided as small and rural municipalities with comparatively lower capacity cannot provide their residents with the same scope and quality of public service as large and urban municipalities.

4.39 **Most of the municipal budget goes for recurrent spending.** Over three quarters of LGUs spending is allocated for current spending needs. Close to half of all spending at the local government level in the last 10 years was used to cover wages and allowances, while spending on goods and services, mainly covering energy, utilities, maintenance and other general supplies, took up one quarter of total subnational spending. The spending share of subsidies and transfers has been increasing over time, reaching a decade-high at 8.2 percent with the outbreak of the pandemic in 2020, while interest payments stayed relatively constant around 0.1 percent of total spending.

Table 24. Structure of Economic Classification of Local Spending

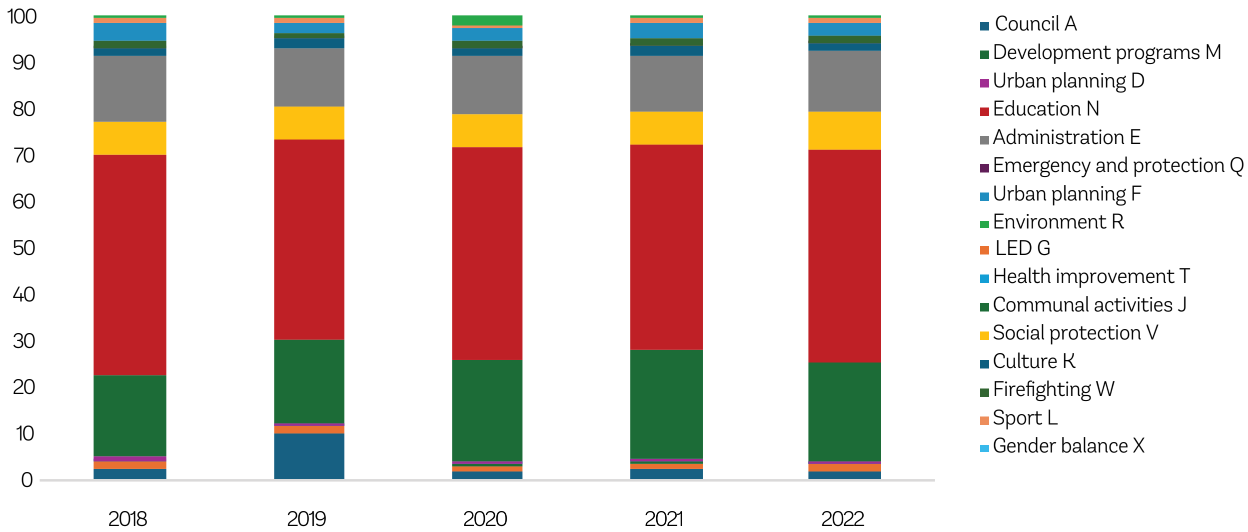
Percent of total local government spending	2018	2019	2020	2021	2022	Average (2012-22)
Wages and allowances	50.2	45.3	52.8	48.8	50.6	49.0
Goods and services	25.8	25.4	19.9	21.0	25.2	24.2
Interest payments	0.2	0.1	0.1	0.1	0.1	0.1
Social benefits	0.2	0.1	0.1	0.1	0.2	0.1
Capital expenditures	17.8	20.7	18.9	22.9	16.5	20.7
Subsidies and transfers	5.8	8.1	8.2	6.9	7.4	5.7

Source: BOOST database.

69 Article 22 of the Local government law includes: urban planning and special arrangement; environmental protection; local economic development; provision of communal services; cultural development, in accordance with the national program for culture; sports and recreation; social care and child protection; education, financing and managing of primary and secondary school in cooperation with the central government; organization of transport and food supplement for students and housing in student's homes; health care - managing the system of public health organizations and primary health care; undertaking measures for protection and rescue of citizens and material goods in case of destruction in war, natural disasters and other accidents; fire protection that is provided by the local fire units; and, supervision of over activities that come from the municipality's responsibilities and other matters as determined by law.

4.40 **Subnational capital spending has been volatile across LGUs.** Overall, capital spending amounted to 21 percent of total local government spending in the past decade, but the share varied across years (Table 24). There is also a great variation in capital spending between rural and urban municipalities as well as between the average municipal capital spending share and of the City of Skopje. Unlike the average LGU, the City of Skopje's capital budget spending amounts to a third of its budget.

Figure 53. Local government expenditure per program



Source: BOOST database.

4.41 **Most of the spending carried out by LGUs goes for education and social protection.** Local spending on education is the largest spending item as it accounts for more than 40 percent of total LGU spending, financed mostly by transfers from the central budget which are then distributed through municipalities to elementary and secondary schools. The same applies to local spending for social protection covering preschool education services (kindergartens) and elderly care homes, which account for around 7 percent of total LGU spending. Communal activities (including among else street lighting, traffic signalization, roads, parks, water supply and wastewater systems, waste landfills, parking spaces) increased their share in total spending from 18 percent in 2018 to 21 percent in 2022. Spending on general public services (functioning of LGU executive and legislative bodies as well as local administration) hovered around 15 percent of local spending (Figure 53). LGUs allocated less than 0.1 percent of all spending on environmental protection.

Box 7. Budget transparency of LGUs

Budget transparency of LGUs in North Macedonia has been improving, but there is still room for increased accountability. The municipal understanding of the need for transparency and openness of the local budget cycle, as a necessary first step in providing accountability and enabling the participation of citizens in local decision making, has significantly progressed in the last decade. The average index of budget transparency of LGUs in the country has improved from 5.59 in 2014-2015 to 10.96 in 2022-2023 (CEA, 2023). On average with each budget process and cycle, more documents have become available to the public. The most frequently available document is the enacted budget of the municipality and the final budget account, while the least frequently available budget documents are citizens' budgets and annual reports. Despite the overall continuous improvement, there are still some municipalities that are not transparent, that do not show regularly documents as they are produced, and that do not enable access to data in open and machine-readable form.

4.42 **Service delivery at the local government level is hampered by fragmentation.** The small size of many municipalities, relative to their wide range of responsibilities, raises concerns on the scale of administrative overhead and efficiency of public services. Though it is difficult to discern the precise correlation between LGU size and efficiency, research shows that efficiency begins to drop off significantly below 10,000 inhabitants.[70] North Macedonia has 33 (41 percent) municipalities below that size. Economies of scale can be achieved through asymmetrical decentralization or territorial reorganization. Given significant disparities among LGUs, having asymmetric service delivery in LGUs can provide an alternative to the current solution. Other options that do not require territorial redefinition include inter-municipal cooperation (Box 8), delegation of competencies, while options that require some territorial redefinitions include consolidation of LGUs and redefining the structure of LGUs according to a set of pre-defined criteria to target social, economic and distributional outcomes.

Box 8. Mergers and Coordination

Economic theory suggests that local efficiency gains can be achieved through merger or coordination, which internalize spillover effects and produce economies of scale. While the latter option is easier, it may end up being less transparent and missing clear accountability lines. Still, cooperation might be feasible for countries where municipalities have wide responsibilities. It might also be a prelude to eventual merger of municipalities.

Municipality mergers could be voluntary or mandatory. If voluntary, municipalities are free to join. In Finland, to promote municipal mergers, grants were offered to merging municipalities. The amount of the grant depended on the number of municipalities merging, the size of the municipality after the merger, and previous sizes of the merging municipalities. France and Finland promote cooperation. France recognizes inter-communal structures as legal entities and gives them partial subsidies. In some countries, like Turkey and Japan, municipalities may join forces in formal associations to perform such joint tasks as school management and waste disposal.

Mechanisms to encourage or discourage amalgamation or cooperation are: (i) progressively increasing grants (bigger entities obtain larger grants); (ii) threshold requirements for investment grants (to obtain financing there is a minimum population size); (iii) one-off and formula-based compensations; (iv) deterrents (promoting smaller municipalities by giving them larger grants).

High reliance on central government transfers

4.43 **Local revenues hovered around 5 percent of GDP in the last five years, increasing to 25,000 MKD per capita in 2023, but the average masks stark disparities across LGUs.** There is a significant variation of revenue per capita across urban and rural municipalities, including relative to both the national and the urban/rural averages (Figure 54). Less than half of all rural municipalities have revenue per capita even above the rural average (Figure 55). Total revenue per capita range between 37 percent of the national average (Plasnica) and 241 percent of the national average (Novaci).

70 Nikolov M. and Hrovatin N. (2013): "Cost Efficiency of Macedonian Municipalities in Service Delivery: Does Ethnic Fragmentation Matter?"; Lex Localis 11(3):743-776; DOI:10.4335/11.3.743-775(2013): https://www.researchgate.net/publication/278051681_Cost_Efficiency_of_Macedonian_Municipalities_in_Service_Delivery_Does_Ethnic_Fragmentation_Matter.

Figure 54. LGU revenue per capita as percent of the national average

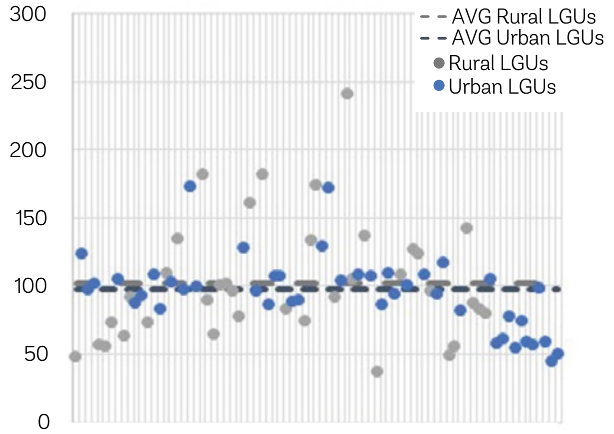
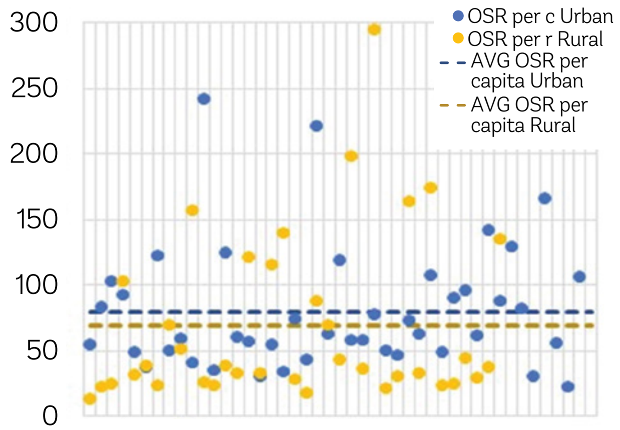


Figure 55. Own source revenues per capita as percent of the national average and Rural vs. Urban



Source: MOF, State Statistical Office.

4.44 **North Macedonia's local governments collect less own source revenues relative to the WB6 average.** LGUs collect their own source revenues through taxes,[71] fees, sale of assets and other administrative and legal charges. Own source revenues of LGUs account for around one third of total local revenue on average. Compared to the WB6, North Macedonia has the highest revenue contribution from block transfers, at the expense of a comparatively lower share of own-source revenues (Table 25). Second only to Kosovo, own source revenues in North Macedonia are slightly below the region's average, but significantly below the regional frontrunner (Montenegro).

Table 25. Comparison of LGU revenue structure, percent of total

	Own source	Shared taxes	General grant	Sectoral Block grant	Investment grant
Albania	41	4	26	12	18
Bulgaria	29	0	4	45	22
Bosnia and Hercegovina	36	15	40	0	10
Croatia	29	42	10	0	18
Kosovo	17	0	32	46	5
Montenegro	67	20	11	0	2
North Macedonia	**33**	**7**	**4**	**52**	**4**
Slovenia	34	53	0	0	13
Serbia	37	43	10	0	9
Western Balkans average	**38**	**15**	**21**	**18**	**8**

Source: NALAS (2023), Local Government Finance Indicators in South-East Europe.

4.45 **Local government units rely heavily on transfers from the central government.** Two-thirds of local revenues come from inter-governmental transfers i.e., transfers from the central government (Table 26). The intergovernmental transfers include shared taxes and delegated activity, target, block, or capital transfers, which are the most significant source of income for the LGUs. For smaller and rural municipalities, central government transfers constitute even more than two thirds of their revenues. The City of Skopje is an exception, where transfers from the central government account for less than half of total revenues. Transfers from the central government filled in between 38.5 percent (Centar) and 96 percent (Aracinovo) of total local revenues in 2022.

71 Include property taxes, inheritance taxes, taxes on real estate sales and other taxes as determined by law.

Table 26. Structure of LGU revenues in North Macedonia (2019-2023)

	2019	2020	2021	2022	2023	2019-2023
Tax revenues	26.0	23.2	29.4	27.2	25.8	26.3
Non-tax revenues	5.2	2.9	3.5	3.9	3.6	3.8
Capital revenues	6.7	3.5	4.5	4.5	4.2	4.7
Transfers and donations	62.1	70.4	62.6	64.4	66.4	65.2

Source: MOF.

4.46 **Subnational units have relatively limited taxing power and equalization is managed through the intergovernmental transfer system.** Value added tax (VAT) revenues are part of the intergovernmental transfer system and are distributed via three components: base, performance, and equalization component. The components take up 4.5 percent, 0.5 percent, and 0.5 percent, respectively, of the VAT collection in the previous fiscal year, and are allocated by a methodology that aims to correct for differences between the city of Skopje and all other LGUs. Form 2024, the VAT revenues allocated to municipalities increased to 6 percent. Under the performance component, municipalities showing own revenue performance higher than the projected own revenues and higher own revenue performance in the current year compared to the average of own revenues collected in the previous three years are awarded more funds. The equalization component is intended for overcoming the differences in terms of the fiscal capacity of the municipalities stemming from the limited resource capacity, i.e. municipalities with lower PIT revenues per inhabitant receive additional funds. All of the criteria and final allocation of VAT revenues are defined by the Government in agreement with the committee for monitoring of LGU financing on an annual basis. The 2023 methodology for allocation of VAT revenues included a fixed amount of 3 million MKD for all LGUs and a variable amount of which 88 percent was allocated to all LGUs with the exception of the City of Skopje and its LGUs (receiving 12 percent instead).[72]

4.47 **The current intergovernmental transfer system is affected by the population decline and does not provide incentives for tax collection of LGUs.** The variable allocation in the current system is to a large extent based on the number of inhabitants per municipality. Relative to the 2002 census, the resident population declined by 9.2 percent by 2021, with 65 LGUs evidencing a drop in their total number of inhabitants, excluding almost all the LGUs within Skopje. For instance, in Staro Nagoricane where the VAT transfer accounted for more than one quarter of their total revenues, the census revealed close to 28 percent decline in the number of inhabitants. Moreover, the current system removes the incentive of municipalities to increase the tax base within their jurisdiction by attracting new economic activity or by increasing the efficiency of service delivery. To retain this incentive, the central government can redesign the system such that the gap between the jurisdictional and average tax base is only partially compensated.

4.48 **The tax-sharing system gradually improved with fiscal decentralization reforms**. Personal income tax (PIT) revenues are shared tax revenues between the central and local government distributed on an origin basis to LGUs which through a series of reforms increased to 6 percent of PIT collected from individuals with permanent residency and 100 percent of PIT collected from individuals engaged in artisan activities in each unit. Relative to comparator peers, the contribution of shared taxes to total local revenues in North Macedonia stands above Albania and Kosovo (at less than 5 percent), but below Croatia, Serbia and Slovenia, at above 40 percent of total local revenues (Table 25).

4.49 **Local own tax sources (property tax, property inheritance and gifts) are subject to central government caps but can provide additional sources of revenues for LGUs.** Property

72 Official Gazette 139/2023. The variable amount is distributed further in the following manner: 65 percent according to the size of the population/number of inhabitants, 27 percent based on land area (excluding the City of Skopje), and 8 percent according to the contribution of the total number of settlements (excluding the City of Skopje).

taxes are considered a good source of local revenues given the immobility of the tax base, avoidance of tax exporting, direct financing of local services used by property owners and low sensitivity to cyclical fluctuations and other exogenous shocks, among other factors (Bird, 2010). According to the Law on Property Taxes, the council of each LGU can set the annual property tax between 0.1 to 0.2 percent of the market value of the property[73]. Across LGUs, there is a large variation in the share of property taxes in total revenues, ranging between 1 percent (Konce and Makedonska Kamenica) and around 30 percent (Centar) for 2022. Most of the LGUs set property taxes at the lowest rate but raising the rate to the legal maximum can potentially boost property tax revenues by 30 percent and reduce dependence on the central government by between 1-10 pp (CEA, 2020). However, the revenue-generating potential of property taxes for LGUs also remains restricted by lack of regular and updated assessments of the market value of properties, outdated taxpayer databases, low administrative-technical capacities at the local level and high level of informality at real estate markets.

Low indebtedness with rising fiscal risks

4.50 **Coverage of local spending by own source revenues of LGUs consistently stood between 30 and 40 percent.** The exception was 2020 when a number of municipalities evidenced a drop in their own source revenues. Municipalities in North Macedonia rely mostly on intergovernmental transfers or resort to borrowing in some cases, which often softens the local government budget constraint as the cost of spending is not adequately internalized.

4.51 **Public debt of local government units is low but there are fiscal risks arising from contingent liabilities and accumulated arrears.** The share of local government debt in total is less than 1 percent given lack of access to external markets but guarantees including for SOEs founded by local governments are on a steep rise and accumulated arrears from planning regions, local governments and their public utility companies constitute 30 percent of total general government arrears (equivalent to 1 percent of GDP at end-2023). Most of the local government debt is domestic with that share increasing steadily in the past decade (Figure 56). At the same time, guaranteed (and non-guaranteed debt included since 2019) of SOEs including those founded by local governments has more than doubled since 2013. Moreover, accumulated arrears have started to increase significantly after the outbreak of the pandemic, in particular for local utility enterprises founded by LGUs (Figure 57), adding to already rising fiscal risks and calling for prompt action of policymakers.

4.52 **Borrowing of LGUs is defined by law and limited by the recently introduced fiscal rules**. Short-term borrowing (up to 12 months) cannot exceed 30 percent of last year's total current revenues, while in the case of long-term borrowing (above 12 months), the annual total debt service cannot exceed 30 percent of last year's current revenues. The total amount of unpaid debt of the municipality cannot exceed last year's total current revenues. The municipality can also guarantee borrowing of public utility companies (PUCs) after approval of the municipal council and notification sent to the MOF. This also provides grounds for continued poor financial management of PUCs, as shown by, for instance, 6.4 percent of firms that have signed contracts for their use of waste management services of PUC Prilep[74] or 59 percent of used water from the PUC Bitola resulting as unbilled.[75] Within the maximum limits set by the borrowing regulation, no municipal credit assessment and allocation model is applied by MoF when it lends to local governments. This generates the risk that municipalities may take on borrowing that they cannot afford, thus compounding the arrears problem.

73 Assessed by a separate committee within the council of the LGU and based on a methodology determined by the central government.

74 https://dzr.mk/sites/default/files/2023-12/43_JKP_Komunalec_Prilep_izvestaj_2023.pdf

75 https://dzr.mk/sites/default/files/2023-10/Soopstenie_mediumi_JKP_Vodovod_Bitola_FINAL.pdf

Figure 56. Local government debt structure

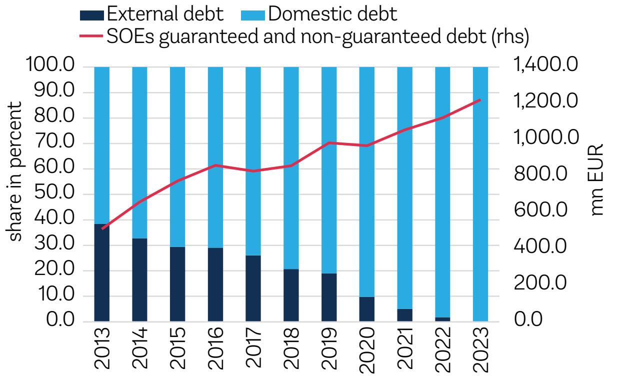
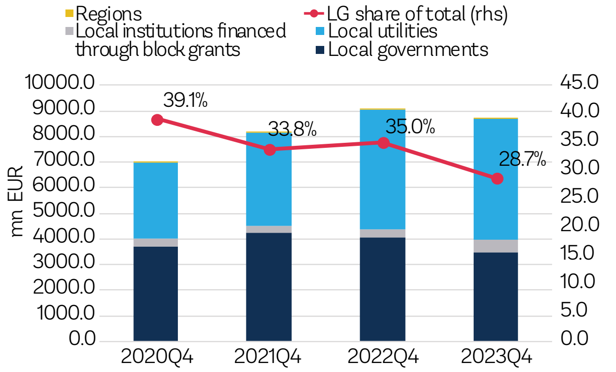


Figure 57. Arrears of LGUs, PUCs and planning regions



Source: MOF.

4.53 **Incoherent legal framework and central government oversight enable low fiscal discipline of municipalities.** According to Article 39 and Article 40 of the Law of financing for LGUs, municipalities that have blocked accounts for more than six months or within six months, every month, the total amount of due and unpaid liabilities for more than sixty days is over 80 percent of own budget revenues, have to declare a state of financial instability and prepare a set of measures to overcome that state. However, in practice, there has not been any municipality that has started the process of financial instability, although multiple municipalities have qualified for it for years (SAO reports identified 11 municipalities).[76] Municipalities are able to circumvent this requirement due to Article 218 of the Law for execution that does not allow forced collection of funds that are to be used for the conduct of designated activities but also due to the low level of oversight and control from the central government.

4.54 **EU funds can provide a much-needed boost to local finances, but capacity constraints at the local level may restrict their uptake.** The heavy subnational functional and financial dependence on the central government along with distinctive capacity constraints at the local level may restrict the uptake of EU funds that can be available for the country post accession (cohesion, regional development, social, agricultural funds) and that will require pre- and co-financing. The capacity problem relates partly to the small size of many LGUs. Initiating capacity building of local development centers, and regional development agencies that can advise and support local governments is critical. However, creating incentives or mandatory rules for LGUs to merge or otherwise unite to provide services; and attracting private capital inflows and involvement through public-private partnerships (PPPs) will be required.

Recommendations

4.55 **Spending responsibilities need to be redefined to avoid duplication and overlap of functions and to increase accountability of LGUs for the tasks allocated to them.** The next generation of fiscal decentralization reforms should clearly line out responsibilities (for example, in such areas as education and social protection), specify costing of services and identify financing sources. Accountability and efficiency concerns imply that expenditure assignments should have clear lines of demarcation between levels of government, and that there should be transparent reporting per LGU.

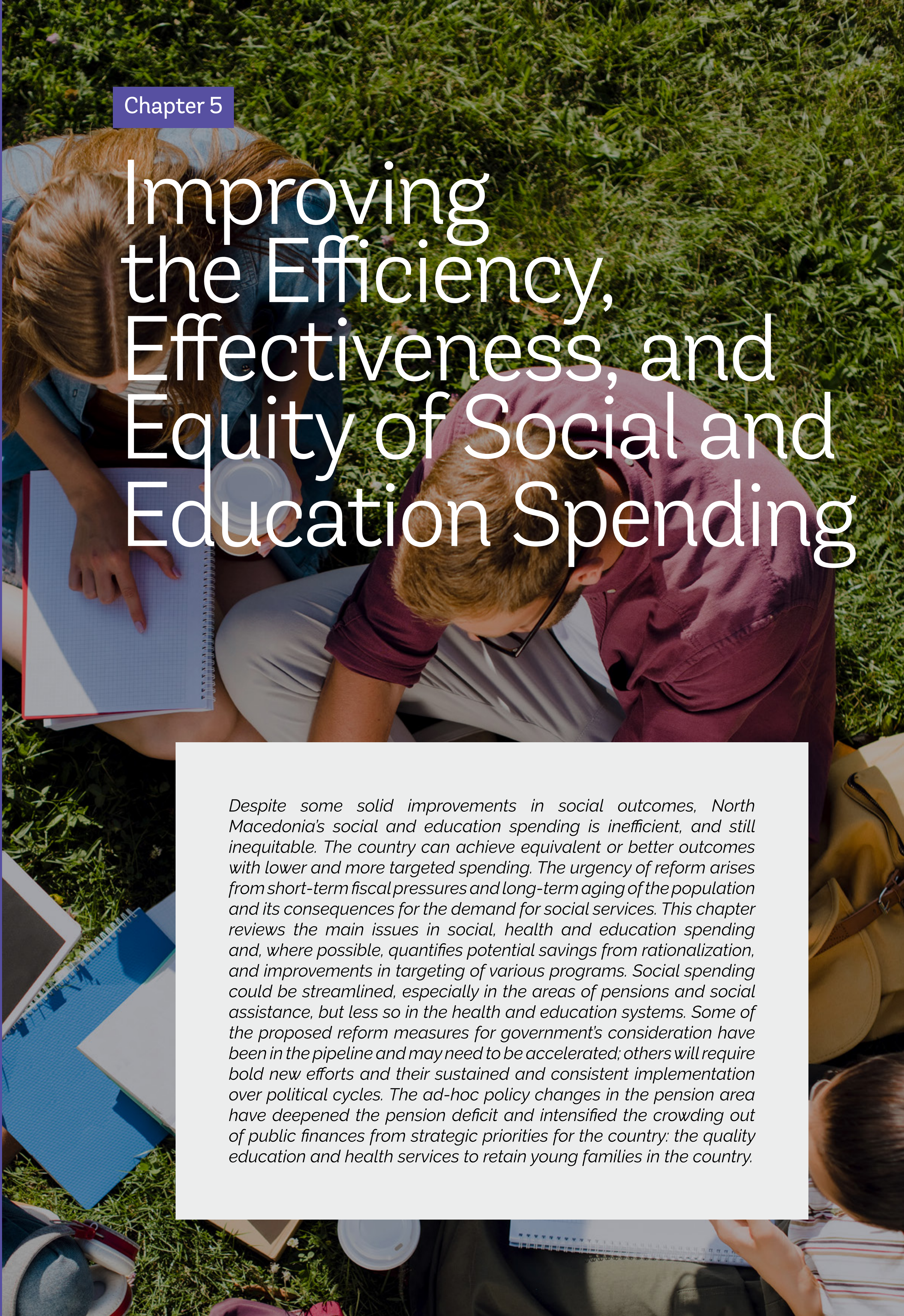
4.56 **Economies of scale in public service delivery can be achieved via asymmetrical decentralization or territorial reorganization given significant disparities across LGUs**. The territorial organization of North Macedonia exhibits significant fragmentation, with many relatively small LGUs that have limited fiscal and administrative capacities but have symmetric responsibilities allocated to them. This fragmentation reduces the efficiency in the provision of public services. Supporting an optimal territorial organization and functional fiscal decentralization can help pave the way for more efficient use of public funds and provision of public services. As an interim step, performance-based grants can incentivize joint service delivery.

76 https://dzr.mk/sites/default/files/2023-06/1_160_ELS_Tetovo_Smetka_osnoven_buxet_630_2022.pdf.

4.57 **Greater subnational reliance on own-source revenues would help promote funding adequacy and reduce the dependence on the central government**. Property taxes are considered to be a good source of own local revenues and even raising them to the current legal maximum can significantly reduce dependence from central government transfers. However, this effort should be accompanied with a simplification of the legal framework, incentivizing enhanced municipal institutional performance, as well as with a sustained build-up of the administrative-technical capacities at the local level to maximize the revenue-generating potential of property taxes.

4.58 **Fiscal operations of local government units need to be monitored to ensure fiscal prudence and alignment with the national fiscal rules**. Timely, comprehensive, and transparent financial information on planning regions, local government units and their utility companies is critical to foster fiscal discipline and prevent the accumulation of arrears. Municipal accounts also need to be consolidated with the accounts of their utility companies and need to report on any off-budget activities. Regular and frequent audits of LGUs can ensure that public funds are managed appropriately and efficiently and can promote public trust in local institutions. The Ministry of Finance also needs to develop a system for assessing the actual borrowing capacities of local governments and use this as a basis for its local government credit allocation decisions.

4.59 **The current fragmentation of LGUs makes it hard to serve citizens effectively while fragmentation also limits LGUs' financial and human capacity to effectively absorb future EU funds.** North Macedonia has a low number of inhabitants per LGU (excluding the capital), with one of the largest concentration of citizens in the capital city. Priority should be given to strengthening subnational administrative capacity, among else to assess and execute investment projects.



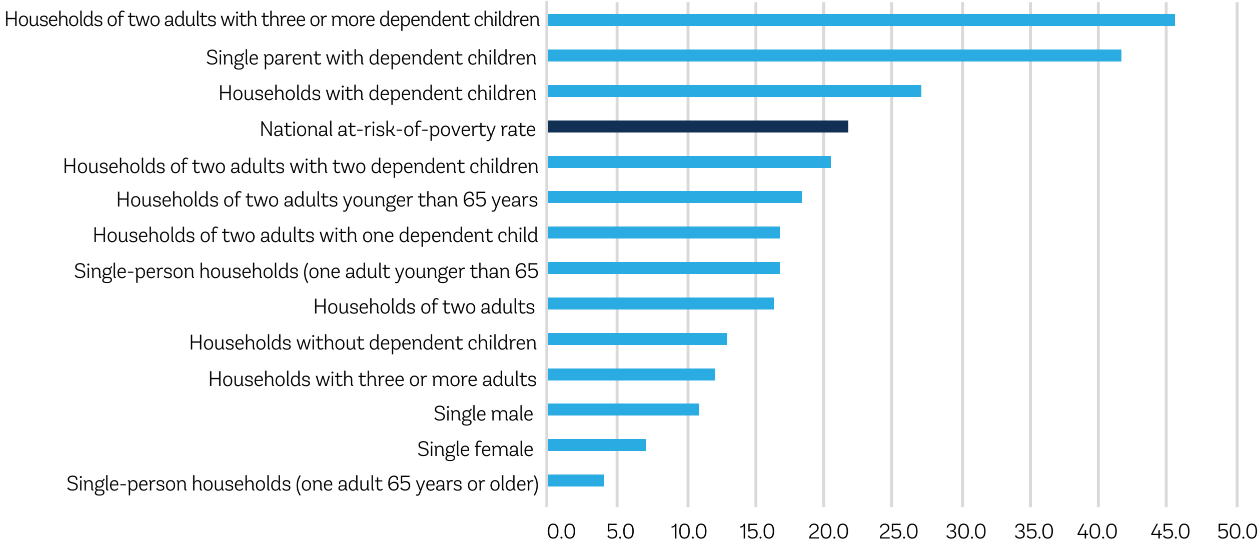
Chapter 5

Improving the Efficiency, Effectiveness, and Equity of Social and Education Spending

Despite some solid improvements in social outcomes, North Macedonia's social and education spending is inefficient, and still inequitable. The country can achieve equivalent or better outcomes with lower and more targeted spending. The urgency of reform arises from short-term fiscal pressures and long-term aging of the population and its consequences for the demand for social services. This chapter reviews the main issues in social, health and education spending and, where possible, quantifies potential savings from rationalization, and improvements in targeting of various programs. Social spending could be streamlined, especially in the areas of pensions and social assistance, but less so in the health and education systems. Some of the proposed reform measures for government's consideration have been in the pipeline and may need to be accelerated; others will require bold new efforts and their sustained and consistent implementation over political cycles. The ad-hoc policy changes in the pension area have deepened the pension deficit and intensified the crowding out of public finances from strategic priorities for the country: the quality education and health services to retain young families in the country.

5.1 **North Macedonia's combined social spending (on health and social protection) at 15.6 percent of GDP is 2-4 pp of GDP above its structural and aspirational peers, respectively.** There is considerable scope for rationalization and improvements in efficiency and equity, as many peers, including in the EU achieve better results while allocating less funding to such functions. Also, as Macedonian population ages, pressures for spending on pensions and long-term care will increase. These long-term issues, along with the macroeconomic need for medium-term fiscal consolidation, imply an urgent need for a comprehensive reform. When designing the reforms, it is important to prioritize reforms by outcomes. Clearly, the priorities should be to address child poverty which is double the national average. While the policy discussion is on boosting pensions which are already absorbing more than averages of the EU or regional peers, this population stratum has the lowest poverty rate.

Figure 58. At-risk-of-poverty rates, 2019 (percent of population)

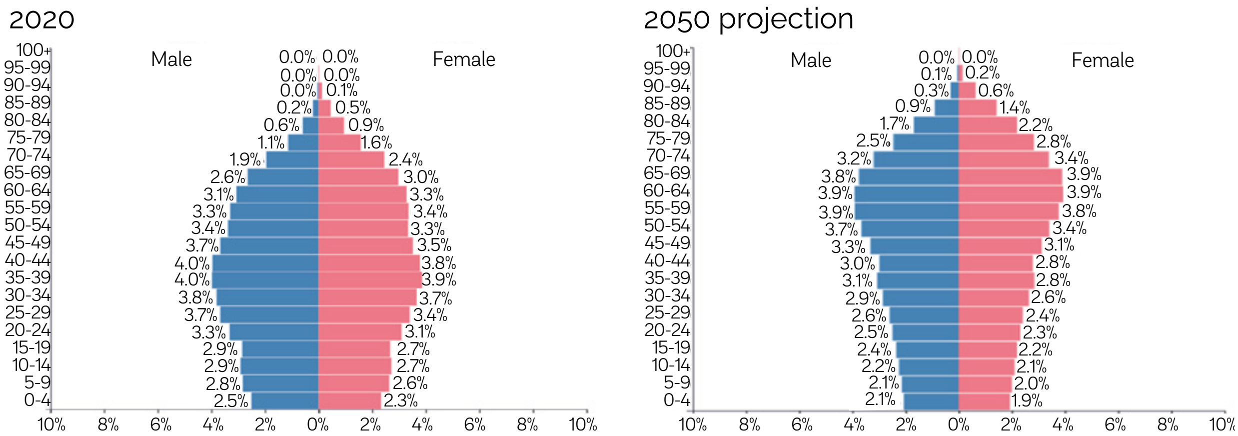


Source: State Statistical Office.

5.2 **In North Macedonia, as in its neighbors, the largest population cohort is already between 30 and 49** (Figure 59). Consequently, the elderly population will fairly soon expand dramatically: more than a third of the citizens of North Macedonia are expected to be over 60 years old by 2050.[77] Two decades ago, the largest cohort was 10-29 years old. Demographic aging is likely to worsen over the medium and long term as the birth rate continues to decline below the replacement rate and large-scale emigration continues.[78] A long-delayed population census conducted in September 2021 found that the population had fallen by about 10 percent since 2002 to about 1.8 million people. By 2050, the population is projected to decline by another 11 percent.[79] The share of people aged 80 or more, who have a higher risk of dependence, will exceed 7 percent by 2050, requiring long-term care (LTC) services that are currently in a nascent stage. However, the working age population will decline substantially and will unlikely meet the demand for care services. While protecting families with children through childcare, quality education and healthcare is essential, investment in formal long-term care services is also important to ensure an adequate care system that supports both families and a growing elderly population.

77 https://www.populationpyramid.net/tfyr-macedonia/2050/
78 United Nations, DESA, Population Division. World Population Prospects 2022.
79 United Nations Department of Economic and Social Affairs (UN DESA), Population Division.

Figure 59. Population is getting older and shrinking



Source: State Statistical Office.

5.3 **North Macedonia's Human Capital Index (0.56) shows that a child born today can expect by age 18 to have future earnings of 56 percent of what could have been if the child had enjoyed complete education and full health.**[80] This is the lowest in the Western Balkan region and with little progress over time—HCI in 2010 stood at 0.54. Future GDP per worker could be almost as twice as high if North Macedonia reached the benchmark of complete education and full health. This productivity increase is crucial not only for growth but for budget revenues that would need to finance increasing outlays for pensions and long-term care given the aging.

A. Improving the Efficiency, Equity and Delivery of Health Care

Health outcomes have improved, but regional differences are wide

5.4 **Health outcomes in North Macedonia have improved over the last two decades.** The number of deaths per 1,000 live births and the child survival rate improved between 2015 and 2021, with the infant mortality rate decreasing from 10 to 4.6 and the under-five mortality rate falling from 11.4 to 5.3 in 2019. These rates are now below the average for the six Western Balkan countries (WB6),[81] but they remain above the average of the seven small transition economies of Europe (EU7)[82] and the EU.[83] Maternal mortality per 100,000 live births has also improved over time from 12 in 2001 to 3 in 2020 (latest available year), with North Macedonia having lower maternal mortality rate than the EU (6 in 2020).[84] However, significant regional differences in infant mortality rates, which range from 1.8 deaths per 1000 live births in Struga to 21.7 in Kratovo, in 2021 indicate issues in service delivery and quality of care.[85]

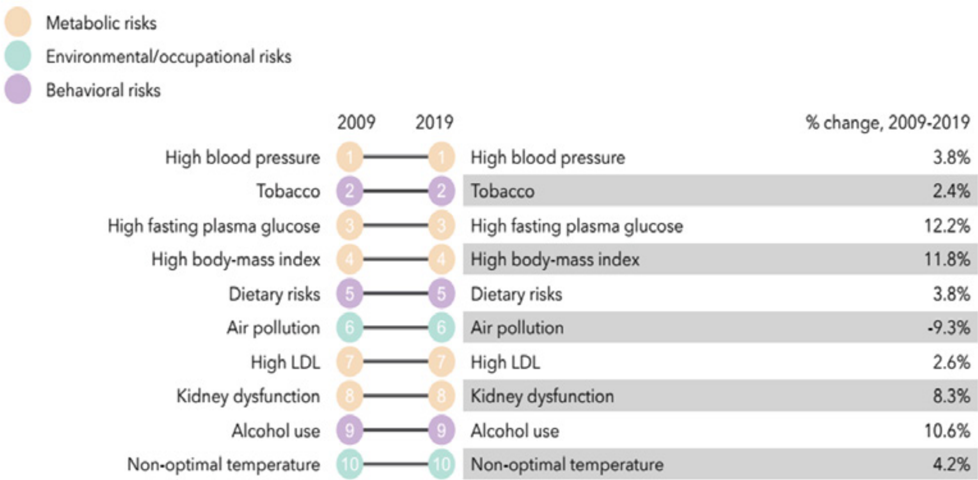
5.5 **The increasing trend of life expectancy in North Macedonia continued until the start of the COVID-19 pandemic, and by 2021 it had yet to recover to pre-pandemic levels.** Life expectancy at birth declined by 2.1 years in 2020 due to the COVID-19 pandemic which is above

80 World Bank Human Capital Index.
81 The WB6 are Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia.
82 The EU7 are Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia, and Slovenia. Their average infant mortality and under-five mortality rates are 3.3 and 4, respectively.
83 The EU infant mortality and under-five mortality rates are 3.1 and 3.8, respectively
84 Modeled estimate, per 100,000 live births, https://databank.worldbank.org/source/world-development-indicators
85 IPH, Health Map of the Republic of North Macedonia 2021, part 1, https://www.iph.mk/Upload/Documents/%D0%97%D0%94%D0%A0%D0%90%D0%92%D0%A1%D0%A2%D0%92%D0%95%D0%9D%D0%90%20%D0%9A%D0%90%D0%A0%D0%A2%D0%90.pdf

the world average of 1.7 years.[86] In 2021, it stood at 74.5 years lower than the averages of the WB6 (74.9 years), the EU7 (75.4 years), and the EU (80.4 years) countries, but higher than in Lithuania (74.3 years), Montenegro (73.8 years), Latvia (73.3 years), Serbia (72.7 years), and Bulgaria (71.5 years).

5.6 **Rates of healthy life expectancy at birth (66.14 years) and healthy life expectancy at age 60 (14.02 years) are lower than in peer countries due to differences in the risk factors that drive morbidity and mortality.**[87] The high and rising NCD burden is not only a consequence of ageing but also the high prevalence of tobacco use, alcohol consumption, poor diet, sedentary lifestyles, and air pollution (Figure 60). NCDs accounted for 96.1 percent of all deaths in 2019.[88] Even though the percentage of NCDs-caused deaths decreased to 72.6 percent in 2021 due to COVID-19 pandemic which consequently increased the percentage of deaths caused by communicable diseases, there is a steady increase in the number of NCD deaths from 15,546 in 2019 to 18,732 in 2021 with cardiovascular diseases (CVDs) maintaining the leading cause of death. Cerebrovascular diseases were the leading cause of disability-adjusted life years (DALYs) in 2019.[89] The health burden caused by ambient air pollution (AAP) in North Macedonia is also high. While the reduced emissions of PM2.5 and other key pollutants from transport and energy supply have led to improvements in air quality in Europe and reduction of premature death rates due to PM2.5 by over 20 percent between 2009 and 2019 on average in EU countries, in North Macedonia the premature death rates increased by 5 percent. North Macedonia and Serbia had the highest premature death rates per 100,000 population of 164 in 2019.[90]

Figure 60. Risk factors that drive the most death and disability in North Macedonia in 2019 and percent change 2009–2019



Source : IHME, http://www.healthdata.org/macedonia

5.7 **North Macedonia has one of the highest rates of tobacco use (48.4 percent) in the world, which imposes significant annual economic costs.** According to the UNDP and WHO estimates, the annual direct economic burden (healthcare costs) of tobacco use are 4 billion MKD (11 percent of economic costs), while the indirect costs (loss of productivity: loss of labor force, absenteeism, presenteeism, unsanctioned smoke breaks) amount to 34 billion MKD (89 percent of economic costs), meaning that the total economic costs of tobacco use in North Macedonia is 5.6 percent of GDP. The non-economic costs which are lives lost and disability

86 WB Data, World Development Indicators, https://databank.worldbank.org/source/world-development-indicators
87 Healthy life expectancy at birth is 1.11 years lower than the WB5 average (67.25 years), 1.91 years lower than the EU7 average (68.05 years), and 3.86 years lower than the average of the EU countries (70 years). Healthy life expectancy at age 60 is also 1.11 years lower than the WB5 average (15.13 years), 1.91 years lower than the EU7 average (16.39 years), and 3.67 years lower than the average of the EU countries (70 years). The burden of NCDs is high and is expected to grow due to the ageing population.
88 https://databank.worldbank.org/reports.aspx?source=2&series=SH.DTH.NCOM.ZS&country=MKD
89 http://www.healthdata.org/macedonia
90 OECD/European Union (2022), Health at a Glance: Europe 2022: State of Health in the EU Cycle, OECD Publishing, Paris, https://doi.org/10.1787/507433b0-en

and social value are 25 billion MKD. Around 25 percent of all deaths in North Macedonia are tobacco-attributable (over 5,000 deaths per year), of which half is premature death, one-third in working age, while 15 percent relate to secondhand smoke exposure (two children under the age of 15 die annually from secondhand smoke exposure).[91]

Health service delivery is suboptimal

5.8 **The health system is not responding effectively to the evolving needs of the population.** Despite some recent positive developments,[92] the governance of the health system remains weak, especially quality-of-care management. Control of infection and adverse event reporting systems are weak, funding for continuous professional development is lacking. Focus should be devoted to clinical governance and compulsory medical and clinical audit systems, risk management, effective complaint systems, use of international standards for technical departments, external benchmarking for tertiary level care, external quality assurance (e.g. laboratory performance) etc. In addition, there is a lack of management skills among the managers of health facilities. Despite the existence and use of MojTermin, there is very limited data to systematically analyze quality of care and productivity; this is true across all levels of care. Data is not available in a standardized format, and is often incomplete to analyze use of equipment, patients' needs and organization processes.

5.9 **The delivery of primary health care (PHC) services is fragmented and not patient-centered.** Patients need to consult with multiple PHC providers to receive regular services. There is a lack of coordination across the different PHC providers, and the range of PHC services (comprehensiveness) is limited. Patients' navigation through the system is not intuitive with patients playing hardly any active role in decision making (patient-centeredness). The resolution rate at the PHC level, which typically reaches 80-90 percent in countries with efficient PHC systems, is exceedingly low in North Macedonia. The referral and hospitalization rates for the five most frequent Ambulatory Care Sensitive Conditions (ACSC) in North Macedonia (Table 27) declined during the pandemic years, but in 2023, out of the 1,005,495 patients registered with a PHC doctor for one the five most frequent ACSC analyzed, 23 percent were referred to an outpatient specialist and 0.9 percent were hospitalized for one of these conditions. PHC services are mostly reactive rather than oriented to anticipate health needs. Primary care professionals generally do not engage in health promotion and health literacy among the population is generally low.[93]

Table 27. Referral and Hospitalization Rates for Ambulatory Care Sensitive Conditions (ACSC)

ACSC	Referral rate						Hospitalization rate					
	2018	2019	2020	2021	2022	2023	2018	2019	2020	2021	2022	2023
Hypertension	37%	34%	25%	30%	37%	37%	0.8%	0.6%	0.3%	0.3%	0.5%	0.5%
Angina	86%	65%	56%	63%	72%	78%	10.6%	6.5%	6.2%	6.8%	10.3%	11.1%
COPD	70%	55%	42%	46%	51%	54%	8.5%	7.3%	3.6%	3.3%	4.9%	4.9%
Gastroenteritis	31%	30%	17%	17%	21%	22%	6.3%	6.7%	4.2%	4.3%	4.5%	3.8%
ENT infections	8%	6%	4%	4%	5%	7%	0.6%	0.4%	0.2%	0.1%	0.2%	0.2%
Total	**28%**	**23%**	**18%**	**21%**	**23%**	**23%**	**1.7%**	**1.3%**	**0.7%**	**0.7%**	**0.9%**	**0.9%**

Note: International Disease Classification 10 (IDC-10) codes used for Hypertension I10.0, I11.9; IDC-10 codes for Angina I20, I24.0, I24.8, I24.9; IDC-10 codes for COPD J41-J44, J47, and J20 only as a second diagnosis in presence of a pulmonary disease; IDC-10 codes for Gastroenteritis K52.2, K52.8, K52.9; IDC-10 codes for ENT infections H66, H67, J02, J03, J06, J31.2.

Source: MojTermin data.

91 WHO and UNDP (2024), Investment case of tobacco control in North Macedonia, forthcoming.

92 For instance, the World Health Organization's Service Coverage Index that measures coverage of basic health services on a 0-100 scale increased from 58 points in 2000 to 74 points in 2021. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/uhc-index-of-service-coverage.

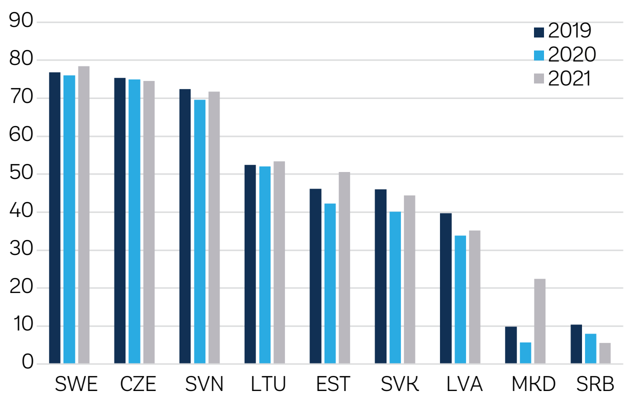
93 WB 2022, NCD Cascade analysis.

5.10 **To address these challenges, the government has launched a PHC reform program.** Reforming PHC is among the objectives in the Health Strategy 2021-2030.[94] The main goal is to improve the quality of primary health care through the reform of the payment model of PHC, which should encourage and ensure the improvement of prevention, definition and application of standards for the provision of services in accordance with evidence-based medicine, developing guidelines and protocols, encouraging the handling of certain conditions at the primary level and reducing the degree of referral to a higher level of health care, a greater number of doctors from general practice who will have specialization in family medicine, encouraging the realization of certain health services by nurses, and facilitation of administrative work. Due to lack of financial resources only a few activities have been completed. For example, the amendment of the Law on Health Insurance enabled changing the prescription regime for five medicines for the five most common NCDs so that they can be prescribed by the PHC physicians and drive the referral rate down.[95]

5.11 **Like with the NCD care, access to a quality LTC is impeded by a system requiring improvements.** An underdeveloped LTC system contributes to inefficiencies as people go without care and/or face higher OOP costs. For example, data from 2016 indicate that 63 percent of households with LTC needs forwent professional home care services because they were unaffordable, and 14 percent did not use them because they were unavailable. Anecdotal evidence also suggests that hospital beds are being occupied by patients who would be better served in LTC facilities or by home- and/or community-based care services.[96] This points to the need for a clearly defined LTC benefit package, and implementing targeting mechanisms like eligibility criteria and needs assessments, to focus services on those most in need. Similar to acute services, enforcing quality standards and a skilled workforce would ensure the delivery of effective care.

5.12 **The health system's capacity for preventive medicine remains underdeveloped and has deteriorated further in recent years, but positive developments have been observed in screening for cervical cancer.** The cervical cancer screening rate dropped from 17.4 percent of the target population in 2014 to 5.6 percent in 2020 but increased to 22.4 in 2021 (Figure 61). The screening rate for breast cancer is further declining from 0.6 percent of the targeted population in 2019 to 0.25 percent in 2021. The lack of functioning breast cancer screening program has unfavorable effect on breast cancer survival rate and health care spending as cancer is usually diagnosed in late-stage of the disease. Screening guidelines for hypertension and diabetes are not systematically implemented, and cases are identified late, often as acute cases with developed complications.[97] During the COVID-19 pandemic no screening for these two conditions were performed by the PHC doctors and the Institute and centers for Public Health.

Figure 61. Cervical cancer screening rate, percent of target population (2019-2021)



Source: EUROSTAT.

5.13 **Preventive medicine receives inadequate attention and resources across the life cycle.** Legislation and policies on salt content in food, sugar-sweetened beverages, and advertising of unhealthy food are deficient, except for rules governing the use of trans fats in fortified foods.[98] Municipalities have taken steps to foster physical activity, but much more needs to be done. In urban areas, the transformation of the green areas for recreation and relaxation into residential

94 https://zdravstvo.gov.mk/wp-content/uploads/2021/12/19.11.-SZ-posledna-Konechna-Natsrt-Strategija-MKD.pdf
95 https://fzo.org.mk/sites/default/files/fzo/legislativa/zakon-zo/36-zakon-izmena-dopolnuvanje-zakon-zdravstveno-osiguruvanje-60-2023.pdf
96 https://mld.mk/3d-flip-book/lekarski-vesnik-164/
97 WB 2022, Cascade analysis report.
98 Rulebook for amending the Rulebook on special safety requirements and requirements for the composition and labeling of fortified foods, https://extranet.who.int/nutrition/gina/en/node/125709

buildings—which appears unnecessary, as 37 percent of the apartments in the country are unoccupied[99]—does not contribute to promoting healthy lifestyle. Implementation of the national regulation on alcohol consumption requires strengthening, as well as implementing an all-inclusive approach to alcohol control.[100] Compliance with smoking prohibition in public spaces has deteriorated since the Law on Protection from Smoking was amended in March 2018. Color picture health warnings on tobacco packages are mandatory, and most direct and indirect tobacco advertising is prohibited. In 2014, in all 10 centers for public health free of charge smoking cessation counselling centers were opened, but the number of users remains low (37 persons in 2022).[101] Nicotine replacement therapies are not reimbursed. With the latest tobacco tax reform from October 2023, cigarette excise taxes in North Macedonia ensure gradual alignment with the EU acquis by 2030. However, once the EU minimum rate is achieved, the specific tax should be benchmarked to nominal wages to ensure that cigarettes do not become more affordable over time. Moreover, tax rates on other tobacco products should be increased in line with cigarette taxes and linked to equivalence ratios to reduce the risk of substitution. Given high mortality and morbidity attributable to alcohol use and increased affordability of alcoholic beverages, the country should consider increasing excises on distilled spirits and introducing excises on other non-taxed alcohol products (such as wine, other fermented beverages). Introducing excises on sugary beverages (SSB) are also recommended given that mortality and morbidity due to the prevalence of diets high in SSBs are also on the rise.

5.14 **Childhood immunization coverage has fallen; the rate of vaccination of the elderly against seasonal influenza is among the lowest is Europe; and the coverage of COVID-19 vaccinations was insufficient.** In 2022, the recommended immunization coverage of 95 percent has only been achieved for hepatitis B birth dose vaccine (97 percent). A significant and worrisome fall in measles immunization rate of 12 to 23-month-olds has been observed in North Macedonia (from 98 percent in 2010 to 71 in 2022) so as in the rest of the Western Balkan countries (Figure 62). The decline of the immunization rate for pertussis with the third dose from 95 percent in 2010 to 84 percent in 2022 resulted in an outbreak in the city of Skopje declared in February 2024. There is a decline in the immunization coverage from 2010 to 2022 for other vaccines as well. This downward trend in immunization could be due to the anti-vaccination movement in the region, insufficient trust in the system, misinformation and susceptibility to conspiracy theories[102], and low level of health education among the general population. The COVID-19 pandemic has decreased the vaccination coverage for almost all diseases, with the steepest decline for measles and rubella falling from 75 percent in 2019 to 63 percent in 2020 due to service disruptions of preventive examinations and vaccinations organized by schools. In 2020, only 11.3 percent of the elderly (people aged 65+) were vaccinated against influenza, which is an increase from 9.5 percent in 2019.

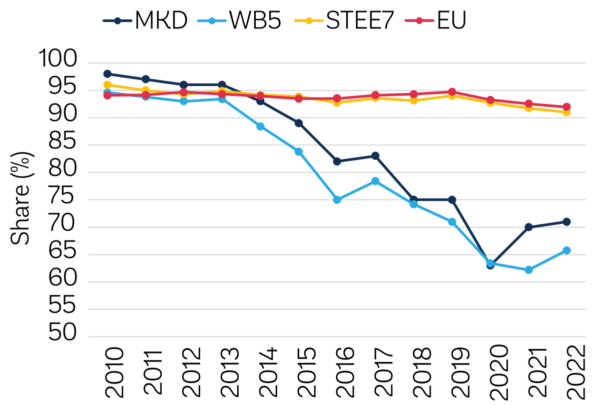
99 Census of the population, households and apartments in North Macedonia, 2021 https://www.stat.gov.mk/publikacii/2022/POPIS_DZS_web_MK.pdf

100 https://www.euro.who.int/__data/assets/pdf_file/0020/410726/North-Macedonia-Mission-Report-final-with-covers-1.pdf

101 IPH 2023, Report on the implementation of the National Program for Public Health in the Republic of North Macedonia in 2022 by the Institute for Public Health of the Republic of North Macedonia and the 10 Centers for Public Health, https://iph.mk/Upload/Documents/BOOK%20izvestaj%20za%202022.pdf

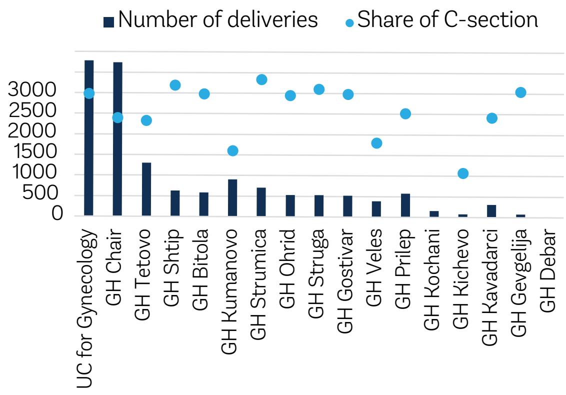
102 Research shows that more than 75 percent of the WB6 citizens believe in COVID conspiracy theories (https://biepag.eu/wp-content/uploads/2021/07/Conspiracies-and-COVID19-in-the-Balkan-English-2.pdf)

Figure 62. Measles Immunization Rate of 12 to 23-month-olds (2010-2022)



Source: WB Data, World Development Indicators.

Figure 63. Deliveries and C-Section Rate by Public Facility (2021)



Source: Health Insurance Fund of the Republic of North Macedonia
Note: UC=University Center; SH=Specialized Hospital; CH=Clinical Hospitals; GH=General Hospital

5.15 **The high number of C-section deliveries raises concerns about quality of care, patient safety, and health costs.** The total number of births declined by 18 percent from 2018 to 2021, while the C-section rate grew from 40 percent to 46 percent. The ideal rate for C-section rate is between 10–15 percent and should only be performed when medically necessary to effectively prevent maternal and infant mortality. There is no evidence that mortality rates decrease when the C-sections rate is above 10 percent.[103] Furthermore, the C-sections rate geographically varies from 19 percent (Kichevo) to 58 percent (Strumica) of deliveries among facilities and in two facilities there is no capacity for C-section deliveries. In seven out of 18 facilities (39 percent), the total number of deliveries is below 400 per year, which raises concerns about quality of care and patient safety and suggests that there is a need to concentrate services in specific facilities to allow for economies of scale (Figure 63). Similarly, hospital cases for appendectomies and abdominal and other hernia procedures in general hospitals take place where the number of cases is extremely low (below 100). The share of complications above 59 years varies from 2 percent (for Child Surgery) to 50 percent (Kochani). The COVID-19 pandemic has reduced the number of procedures in 2020–2021, but the share of complications or age above 59 from 2018 to 2021 remained unchanged around 20 percent.

5.16 **Even though improving mental health is among the priorities of the Ministry of Health, reform has been slow, and spending on mental health has declined in recent years.** The current model of care for mental health, which is based on psychiatric hospital care and outdated treatment options, is undergoing a transition outlined in the National Strategy for Promotion of Mental Health 2018–2025. The treatment of mental illnesses in North Macedonia is still almost entirely pharmaceutical, while the other forms of treatment are less prevalent. The stigma around mental health undermines the efforts to create community mental health centers. Spending on mental health fell from 0.37 percent of GDP in 2017 to 0.31 percent of GDP in 2021.[104] There is a need to redefine financing of the mental health services. Creating a budget specific to community mental health services could reduce the dependence on hospitals and focus on enhancing the range and quality of services.

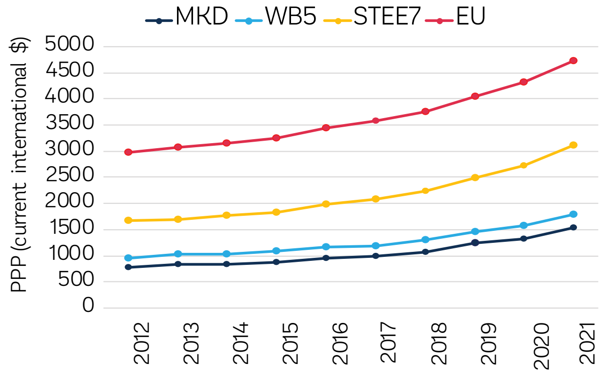
103 WHO statement on Caesarian section rates http://apps.who.int/iris/bitstream/handle/10665/161442/WHO_RHR_15.02_eng.pdf;jsessionid=FAB92037093A761E9E63C960F57FC6BA?sequence=1

104 WHO Health accounts studies, presented at WHO workshop "How data driven evidence from tracking health spending can inform and influence policy decisions in North Macedonia" held on December 20, 2023

Public health spending has increased but equity concerns remain

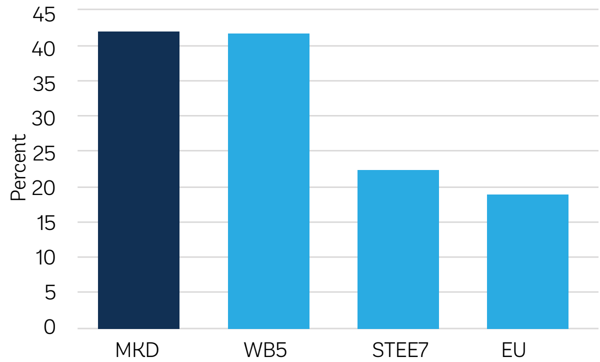
5.17 **Public spending on the health sector has recently increased but remains among the lowest compared to peers.** In 2023, public spending on health represented 5 percent of GDP, up from 4.2 percent in 2015 but down from 5.2 percent amid the COVID-19 pandemic in 2020.[105] Health spending is below the averages for the EU7 (5.5 percent) and WB6 countries (6.6 percent).[106] Current health spending per person doubled in constant US$ over the last decade (Figure 64).[107] However, health spending in North Macedonia is the second lowest among comparator countries after Albania. Moreover, ongoing assessments suggest that public spending on health LTC services accounted for only 0.5 percent of GDP in 2023.

Figure 64. Current health spending in current PPP per capita (2010–2021)



Source: WHO Global Health Expenditure Database.

Figure 65. Out-of-pocket payments as a share of current spending on health (2021)



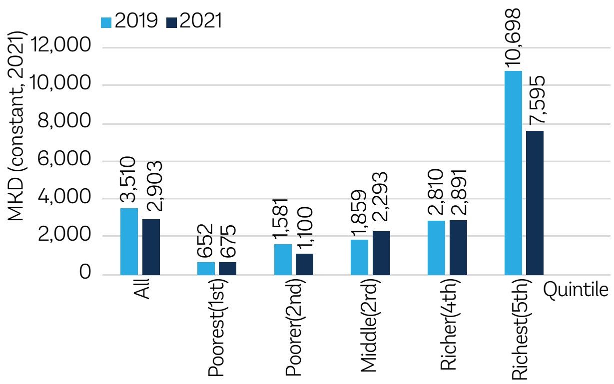
Source: WHO Global Health Expenditure Database (2024).

5.18 **Relatively low levels of public health spending contribute to a heavy reliance on out-of-pocket (OOP) payments.** Public spending on health as a share of total health spending fell from 65.6 percent in 2013 to 54.5 percent in 2021. OOP spending as a share of current health spending accounted for 41.7 percent in 2021, close to the average for the WB6, but far above the averages for the EU7 and the EU (Figure 65). High levels of OOP spending, including informal payments, make population groups with low incomes less likely to receive the health services they need. Voluntary health insurance in North Macedonia increased from 0.3 percent of current spending on health in 2020 to 2.7 percent in 2021.[108]

5.19 **In 2021, 48 percent of all households incurred OOP health costs which represented an average of 2.7 percent of total consumption.**[109] The share of consumption differed across consumption quintiles—ranging from 1.9 percent for the poorest to 3.8 percent for the richest. OOP spending levels dropped substantively during the pandemic and remained much higher among rich households in 2021 (Figure 66). Total per capita OOP amounted to MKD 2,903 on average in 2021 and continued to be starkly different across consumption quintiles—standing over ten times higher for the richest quintile compared to the poorest one.

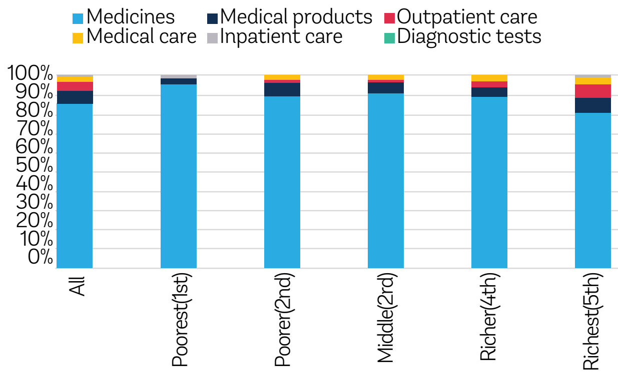
105 North Macedonia Ministry of Finance data.
106 The EU7 and WB6 figures are for 2022.
107 These figures are calculated in purchasing-power-parity terms for current international US$.
108 WHO Global Health Expenditure Database.
109 The OOP figures presented here are authors' own calculations based on household budget survey data. The data do not distinguish between OOP incurred as copayments for care included in the HIF benefits package and OOP for healthcare without HIF coverage.

Figure 66. Total OOP per year and person and by quintile (in constant 2021 MKD), 2019 and 2021



Source: North Macedonia 2019 and 2021 household budget survey data.

Figure 67. Breakdown of total OOP by type of care and quintile (2021)



Source: North Macedonia 2021 household budget survey data.

5.20 **OOP spending reached catastrophic levels for 9 percent of households and impoverished 7 percent of households in 2021.** Catastrophic spending is defined as representing at least 10 percent of total household consumption, as this level of spending typically compromises consumption of other essential goods and services like food and education.[110] While the share of households facing catastrophic OOP spending declined slightly from 10 percent in 2019, it remains very high. OOP also exacerbated poverty by pushing 7.4 percent of households below or further below the relative poverty line of 60 percent of median consumption in 2021. Such impoverishment by OOP affected 30 percent of households in the poorest quintile and 6.5 percent of households in the second poorest quintile.

5.21 **Medicines are by far the most important driver of OOP, accounting for 86 percent of all OOP in 2021**. OOP on other medical products accounted for lacking coinsurance caps for medicines and medical products in the HIF benefits package and the HIF not covering key medicines for the treatment of NCDs in particular–in fact, the positive list of medicines (PLM) covered by HIF has seen few updates since 2008.[111] Breakdowns by quintile reveal overall similar spending patterns but a somewhat lesser OOP spending share on medicines in the richest quintile where the shares of medical products, and general outpatient and dental services is higher (Figure 65). Because North Macedonia does not have effective coinsurance exemptions for poor households' medicines spending, the large spending gap between the poor and rich is indicative of substantial underuse of needed medicines among the poor due to a lack of affordability.

5.22 **An assessment of unmet needs for health care and dental care—as measured by the EU Survey on Income and Living Conditions (EU-SILC)—shows that North Macedonia has performed relatively well over the last few years compared to EU countries.** The share of the population reporting an unmet need for health or dental care due to cost, distance, and waiting time was 2.5 percent in North Macedonia, 1.8 percent in EU. However, unmet needs for health care among the poorest quintile were 11 times higher than among the richest quintile (6 percent for the poorest and under 1 percent for the richest), while unmet needs for dental care were six times higher (around 8 percent and 1 percent, respectively).

110 An alternative measure defines catastrophic OOP as exceeding 40 percent of non-food consumption. The overall share of households experiencing catastrophic OOP by this definition stood at 3.2 percent in 2021, with 4.7 percent of households suffering them in the poorest quintile compared to 2.2 percent in the richest quintile.

111 Dimkovski V, Mosca I. 2021. Can people afford to pay for health care? New evidence on financial protection in North Macedonia. Copenhagen: WHO Regional Office for Europe. (https://apps.who.int/iris/bitstream/handle/10665/349301/9789289055963-eng.pdf).

Policymakers must improve the efficiency of health spending

5.23 **Most public spending on health in North Macedonia is channeled through the Health Insurance Fund (HIF).** The HIF acts as a single payer and is the main purchaser of publicly funded health services. It pools health contributions and transfers from the government budget. The Ministry of Health plays a central role in the decision-making process in most health-related activities, while the Ministry of Finance determines the HIF budget. The HIF revenues come mainly from payroll- and pension-based contributions. In 2022, about 89 percent of the revenues came from contributions earmarked for health care. Payroll contributions are relatively low in North Macedonia compared to regional peers.

5.24 **The HIF benefits package is relatively comprehensive but lacks co-insurance caps for outpatient medicines.** The benefits package is relatively comprehensive and includes primary care visits to general practitioners, gynecologists, pediatricians, and dentists being free at the point of use for insured people. However, all other covered services and products are subject to co-insurance—between 0 percent and 20 percent of a reference price applied by HIF. There is a policy in place to protect people from financial hardship caused by co-insurance payments for health services (exemption from co-insurance based on income or certain conditions, and an annual cap on co-insurance payments); however, there is no protection against co-insurance payments for outpatient prescribed medicines.[112]

5.25 **The HIF purchases health services from contracted public and private providers.** Together, these facilities form the Health Network, which was established in 2012 to ensure even geographical access to health. About 69 percent of the HIF's spending on health services goes to public providers, up from 60.6 percent in 2016.[113] Consequently, the share of services provided by private facilities has decreased from 35 percent in 2016 to 27.9 percent in 2022.

5.26 **The largest share of resources is spent on hospitals (41.1 percent), but primary health care—including prescribed outpatient medicine (8 percent)—accounted for 24 percent of HIF spending in 2022.** However, this is a decline compared to 37 percent allocated to primary care in 2021.[114] The fragmented primary care service delivery and the limited scope of practice of general practitioners (GPs) and other primary health care professionals led to many referrals to secondary and tertiary care and high avoidable hospital admission rates. Data on mental health care and palliative care spending are nonexistent.

5.27 **The COVID-19 pandemic showed that greater public investment in the training of human resources is necessary to enhance the country's emergency preparedness and response capabilities.** North Macedonia scored 165 out of 360 total points in the ability to react to emergencies. Information management systems and training centers received the lowest scores. A scale from zero (absent) to five (full in place) showed that training and knowledge building of personnel scored only 2.5.[115]

5.28 **Arrears owed by public health care institutions remain a concern.** The actual consumption of health care is running ahead of the funding available. As a result, arrears in the health sector are substantial, at 15 percent of total realized HIF expenses in 2022. Although declined, in 2023, the health sector arrears stood at 0.5 percent of GDP (Table 28). The accumulated debts of many health care providers signal a systemic issue with health financing that lacks long-term sustainability.

112 Decision on the amount of participation of insured persons in the total costs of health services and medicines, https://fzo.org.mk/odluka-visina-ucestvo-osigureni-lica-zdravstveni-uslugi

113 Health Insurance Fund (2017). Annual Report 2016. Skopje: Health Insurance Fund (https://fzo.org.mk/WBStorage/Files/Godisen%20Izvestaj%202016.pdf)

114 Global Health Expenditure Database, https://apps.who.int/nha/database/ViewData/Indicators/en

115 World Bank (2021). Diagnostic report. Emergency preparedness and response assessment. North Macedonia. Washington DC: the World Bank (https://openknowledge.worldbank.org/handle/10986/35583).

Table 28. Health sector arrears, 2018-2023

Arrears	2018	2020	2021	2022	2023
Total	**18,740,493,439**	**17,819,296,364**	**24,159,958,445**	**25,829,001,437**	**25,142,220,998**
Public health institutions (PHC)	2,868,029,130	2,756,504,916	4,186,934,666	5,224,337,347	3,769,633,101
PHC shares of total	15.30	15.47	17.33	20.23	14.99

Source: Ministry of Finance

5.29 **Around one-third of overall spending goes to pharmaceuticals, and pharmaceutical policy must be reformed.** The positive list of medicines (PLM) lacks many cost-effective medicines that are publicly funded in other countries of the region and has few outdated medicines the coverage of which should be reconsidered. It comprises both medicines dispensed through community pharmacies (list A) and those used in hospitals (list B). New medicines have not been added to the PLM since February 2015, and the list has not been substantively reviewed since 2008. While the PLM lacks many contemporary treatments, it contains a few very old medicines that are seldom used or no longer used in the EU and are not recommended by the 2021 WHO's Model List of Essential Medicines.[116] Amending the Law on Health Insurance in March 2023 enabled changing the medicine prescription regime by the Management Board of the HIF in August 2023 for five medicines (carvedilol, losartan, statins, levothyroxine, and fluticasone) that should be prescribed by the GPs according to the newly adopted protocols for treatment of hypertension, diabetes, COPD/Asthma, and hypothyroidism. These medicines used to require specialist recommendation before they could be prescribed in primary care which led to unnecessary referrals, overburdening of specialists and unanswered health needs, particularly among patients who are not mobile or live far from specialists.

5.30 **Some novel and high-cost medicines not listed on the PLM are made available to certain patients by the Ministry of Health and hospitals, bypassing the reimbursement decision-making process.** A 2019 amendment to the Health Insurance Law streamlined the regulated reimbursement process for medicines and should be used to update the PLM. In February 2023, the methodology for determining which medicines will be covered by the HIF was adopted by the Ministry of Health, and in August 2023, the Minister of Health appointed the expert commission that works on updating the PLM. In the absence of updates of the PLM, the novel medicines have been procured at the discretion of the Ministry of Health and hospitals (with prior Ministry of Health and HIF approval), and decisions to make these products available to patients do not undergo a health technology assessment process of any sort. Furthermore, these medicines are procured in limited quantities that do not satisfy the needs of all patients. It is unclear how patients are prioritized for treatment. In the draft Law, special agreements are introduced for innovative medicines for which there is no competition which will lead to lack of transparency in public procurement. The amount of the agreed wholesale price and the total amount of the contract for the said medicines which are subject to public procurement will not be published on the e-procurement portal and will be treated as a business secret.[117]

5.31 **Prices of medicines are updated each year, and there has been a consistent increase in the number of medicine prescriptions.**[118] The Ministry of Health annually determines maximum allowed prices of medicines in North Macedonia based on international price comparisons and the HIF then calculates reference (publicly covered) prices of medicines listed in the PLM. Public expenditure on medicines dispensed through community pharmacies is published

116 These include nifuroxazide (a very old antibiotic used for the treatment of diarrhea with questionable effectiveness, available in some countries of the EU as an over-the-counter product), ethyl biscoumacetate (anticoagulant), calcitonin (as of 2012 authorized for short term use only in a limited number of indications), and others.

117 https://ener.gov.mk/Default.aspx?item=pub_regulation&subitem=view_reg_detail&itemid=74980

118 https://lekovi.zdravstvo.gov.mk/

each year with the last one published in 2022.[119] There is a continuous slight increase in the total amount spent on these medicines after introducing the new pricing legislation in 2019 (Table 29). The medicines that are paid by the HIF represent only 10 percent of the outpatient medicines consumed by the citizens in North Macedonia in 2021. The MoH covers an additional 10 percent through various programs (e.g., rare diseases, hemophilia, insulin), and the rest (74 percent) is OOP payments, including 3 percent for co-payments.

Table 29. Number of dispensed prescriptions and amounts (2015-2022)

	2015	2016	2017	2018	2019	2020	2021	2022
Number of prescriptions (million)	21.13	22.27	23.09	23.67	24.30	24.55	24.77	25.01
% different vs. previous year	9.00	5.42	3.67	2.50	2.69	1.03	0.98	0.97
Total amount (billion MKD with 5%VAT)	2.43	2.63	2.79	2.80	2.82	2.78	2.79	2.83
% different vs. previous year	7.18	8.26	6.09	0.49	0.72	-1.38	0.21	1.41

Source: HIF Annual Report 2022, Consumption of medicines from the List of Medicines that are covered by the HIF in PHC.

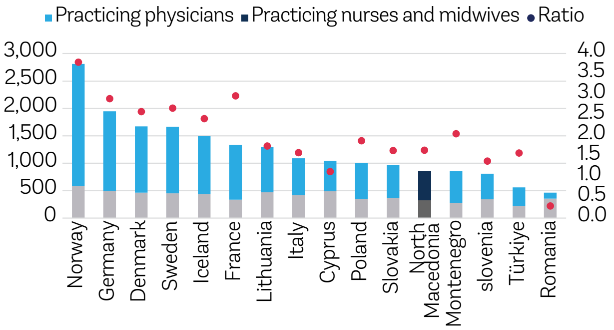
5.32 **Efforts to harmonize the procurement procedures used by hospitals have stalled, depriving hospitals of lower prices and standardized quality of procured goods and services.** Building on successful initiatives implemented by regional peers such as Croatia and Serbia, the government considered rolling out centralized procurement for selected hospital medical devices and medicines in 2018 and 2019, respectively. However, hospitals still procure goods and services individually, despite the initiation of a reform that formally requires only a decision by the Minister of Health.

5.33 **Although the number of professionally active physicians and nurses has been increasing over the years, it remains among the lowest in Europe.** The number of physicians rose from 281 physicians per 100,000 people in 2013 to 323 in 2021, while the number of nurses increased from 368 nurses per 100,000 people in 2013 to 489 in 2021. The number of nurses is among the lowest in Europe but higher than in some EU countries (Figure 68). The nurse-and-midwife-to-physician ratio of 1.65 is higher than in several EU countries. The number of nurses at primary care facilities is inadequate and varies significantly by region. Moreover, many nurses do not perform tasks that leverage their technical skills. The overall number of polyvalent patronage nurses,[120] all of whom work at the primary care level, decreased by 23 percent from 350 in 2018 to 270 in 2022. The number of inhabitants per patronage nurse varies among the regions from 33,401 in Tetovo, and 30,842 in Bitola to 2,012 in Makedonski Brod—the country average is 6,784 inhabitants per patronage nurse. The insufficient number of patronage nurses affects the provision of services and requires immediate attention.

119 https://fzo.org.mk/izvestai-potrosuvacka-lekovi-pzz

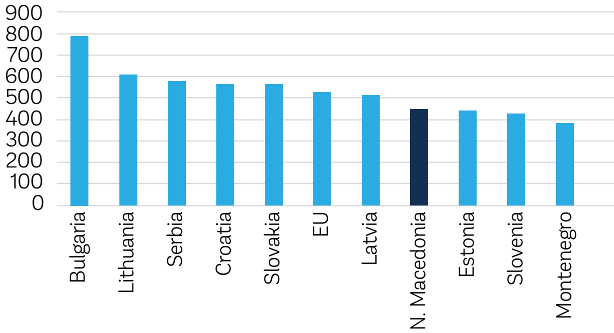
120 Polyvalent patronage service is an integral part of the public health system, an organizational unit within the health centers. The polyvalent patronage services are preventive and curative, and cover the whole family through visits of a patronage nurse in the home.

Figure 68. Professionally active physicians, nurses and midwives per 100,000 people and nurses-and-midwives-to-physician ratio, 2021



Source: EUROSTAT 2021 data (Sweden- 2020 data)

Figure 69. Hospital beds per 100,000 people, 2021



Source: EUROSTAT.

5.34 **The emigration of health workers continues despite the government's efforts to halt or reverse the trend.** By 2018, about 470 physicians from North Macedonia lived in Germany, and most of them worked in a hospital. In 2019, 180 physicians left North Macedonia, which is the same as the number of students who graduated from medical schools in that year. No data exists on the mobility of nurses. The newly established Chamber of Healthcare Workers has estimated that about 300 nurses left North Macedonia to work abroad in 2018. However, German statistics on the number of degrees from North Macedonia that are recognized suggest that the actual number could be much higher. To reverse this trend, North Macedonia introduced reforms to improve the management of the health workforce, such as increased salaries, allowing physicians to continue working after mandatory retirement, investments in health infrastructure and medical equipment, obligation for specialists to work for 10 years in institution where they specialize or pay a fee if they leave earlier, but more needs to be done.[121]

5.35 **There is room for efficiency gains in the use of inpatient services and a need to optimize hospital resources and reorganize hospital care.** The downward trend in the number of beds in North Macedonia reverted in 2018 and the number of hospital beds has been increasing recently despite the decreasing bed occupancy rate (BOR) that currently stands at 47 percent. The number of hospital beds fell from 459 beds per 100,000 inhabitants in 2010 to 449 in 2021 and it is below the EU average (Figure 69). While the overall average length of stay (ALOS) in hospitals in North Macedonia shows a downward trend, significant geographical variations in efficiency of hospitals remain. The ALOS in hospitals in North Macedonia at 6.1 days is similar to the EU average of 6.3 days. However, according to the Institute of Public Health, there are differences in the internal efficiency of hospitals, with significant geographical variations in the ALOS and BOR (Table 30). The ALOS varies from 1.9 to 6.9 days, whereas the BOR ranges from 8.8 to 48.3 percent (Skopje).

Table 30. ALOS and BOR for clinical and general hospitals, 2022

Health Institution	Region	ALOS (days)	BOR (%)
CH Bitola	Pelagonija	6.4	33.7
CH Tetovo	Polog	3.7	32.4
CH Shtip	East	4.4	34.1
GH Veles	Vardar	6.9	29.1
GH 8th of September Skopje	Skopje	6.0	48.3
GH Kumanovo	Northeast	5.2	32.1
GH Kichevo	Southwest	2.9	8.8
GH Ohrid	Southwest	5.3	36.7
GH Struga	Southwest	2.9	39.1

121 World Bank 2021, Health Workforce Mobility from Croatia, Serbia and North Macedonia to Germany.

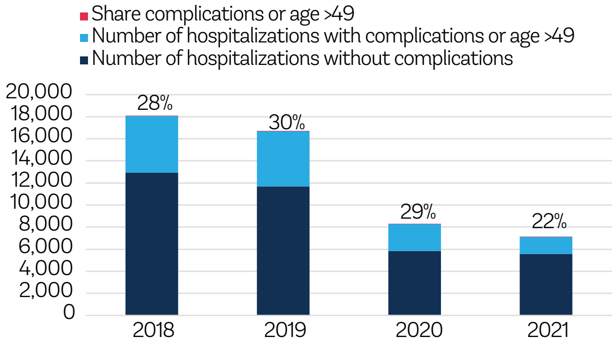
Health Institution	Region	ALOS (days)	BOR (%)
GH Strumica	Southeast	4.7	35.7
GH Gostivar	Polog	5.5	28.3
GHES Kochani	East	6.3	33.9
GHES Prilep	Pelagonija	4.5	28.1
GHES Kavadarci	Vardar	4.2	25.6
GHES Debar	Southwest	1.9	34.2
GHES Gevgelija	Southeast	6.1	36.9

Source: Institute for Public Health

5.36 **There is a scope to increase the use of outpatient services and/or primary care services.** Data on hospital admissions for acute respiratory conditions, diabetes, and hypertension suggest that some of these admissions are unnecessary. People with acute respiratory conditions, diabetes and hypertension without complications could be treated more efficiently in primary/outpatient care. The number of hospitalizations for respiratory conditions (excluding COVID-19 cases) decreased during the pandemic; however, the share of hospitalizations with complications for age above 49 decreased to 22 percent in 2021 meaning that the share of possibly unnecessary hospitalizations increased even further (Figure 70). Similarly, most hospital admissions related to diabetes and hypertension are not associated with complications and would be preventable with a management system for chronic conditions effectively organized at the primary level. In addition, variations in the share of hospitalized patients with complications suggest a need for harmonization in admission procedures (Figure 71).

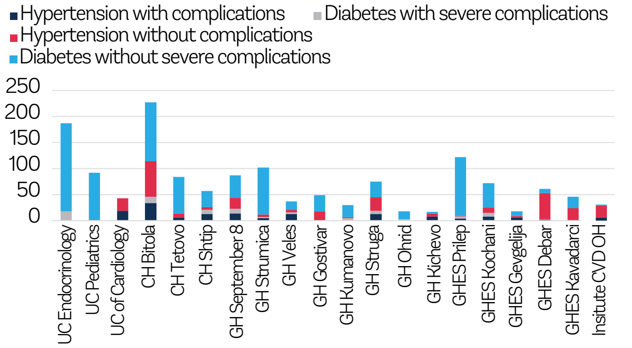
5.37 **The available medical equipment is inefficiently utilized.** The State Audit Office conducted an audit of the utilization of radiology and MRI services in 10 public health institutions and found that 15 MRI devices (seven new and eight already existing) are not used enough, and the adopted policies and measures and activities taken by the health governing institutions and health facilities do not always provide affordable and quality health services for the insured citizens. The established manner of announcing, scheduling, and using appointments for health services; the absence of a waiting list; unjustified referrals by specialists; and the significant number of nonfunctional or underutilized devices prevent publicly insured individuals from exercising their rights from the mandatory health insurance and must pay for these services out-of-pocket. The absence of standardized clinical guidelines and protocols, the performance of MRI services only for a certain type of diagnostics, the lack of trained professional, the untimely issuance or non-issuance of specialist reports in Moj Termin, and the absence of a centralized system for reading the scans remotely, reduces the quality of health services, prevents the insured individuals to exercise their rights, affects the outcome of further treatment, and increases treatment costs.[122]

Figure 70. Hospitalizations for Respiratory Conditions in North Macedonia (2018–2021)



Note: DRG codes analyzed: E62A, E62B, E62C, E65A, E65B, E67A, E67B, E69A, E69B, E69C.
Source: HIF data

Figure 71. Diabetes and Hypertension Hospitalizations by Facility (2021)



Source: HIF.

122 State Audit Office 2024, Final report on the performed audit on the utilization of services for radiology diagnostics and MRI, https://dzr.mk/sites/default/files/2024-01/57_RU_Koristenje_zdravstveni_uslugi_so_radioloska_dijagnostika_magnetna_rezonanca_2023_KOMPLET.pdf

5.38 **Appropriate governance structures are not in place.** With scarce institutional capacity for oversight and monitoring of the health system, reforms are initiated but the practical implementation often lags behind. Limited stewardship and governance do not allow an effective management of the system for quality. There is a lack of comprehensive PHC policies, a limited context-specific adaptation of clinical guidelines and development of care pathways, as well as gaps in available information and in the use of data for decision-making.

Recommendations

5.39 **The government should focus its efforts on improving the efficiency of public health spending and expanding access to high-quality health services**. Both stabilization and structural measures should be considered.

5.40 ***Stabilization measures include:***

- **Improving the affordability of medicines and increasing access to high-quality pharmaceuticals by regularly revising the PLM and enhancing the regulatory framework for pharmaceuticals**. Specific attention should be paid to improving medicine tracking to reduce falsified medicine distribution and to strengthen registration/market authorization, pharmacovigilance, procurement, and reference pricing. Policymakers should ensure that reimbursement decisions are transparent, create a joint hospital-procurement system to streamline purchases of innovative medicines, maintain transparency in public procurement, and eliminate co-payments for basic pharmaceuticals.
- **Investments to expand the scope of care of primary care providers to enhance equity and reduce unnecessary use of specialist and hospital services.** To enable primary care providers to deliver quality services under their recently expanded mandate requires investments in their equipment and training.
- **Investing in preventive care to further reduce treatment costs**. The budget for health promotion and disease prevention should be closely monitored and steadily increased from its current negligible level of total health spending. Financial investments in preventive care should be accompanied by investments in building the capacity of human resources and giving nurses an expanded role in the health system.
- **Reducing inequities across population groups by reducing the health system's reliance on OOP—including informal payments.** Poor households should be exempted from co-payments, and all user charges for low-income patients should be subject to an annual cap. Investments in the geographical distribution of health facilities and health workers should reflect disparities in access to care, while engagement with actors outside the health sector could help address inequalities in health and wellbeing.
- **Increasing taxes on products with negative health effects.** While excise taxes are primarily an instrument to change health behaviors, raising excise tax rates could create some revenue to fund reforms and other strategic health interventions.

5.41 ***Structural measures include***:

- **Developing and implementing a new service-delivery model that deepens ongoing reforms to promote high-quality patient-centered care.** Patient-centered care models improve access and equity while reducing costs by harnessing new technologies and by emphasizing quality primary health services and their close integration with higher care levels. The progress initiated under the current primary health care reform agenda can be deepened by developing an integrated service-delivery model that informs the design and implementation of updated guidelines, protocols, and patient pathways, while new master plans for health facilities and human resource for health should adequately reflect the population's current and future health needs.

- **Reforming human-resources management to strengthen meritocracy.** Care should be better integrated with the competences of the health workforce in line with the modernized delivery model while gradually transitioning from normative input-based planning and financing to output- and outcome-based data monitoring and evaluation.
- **Strengthening quality assurance capabilities and mechanisms.** Developing and enforcing quality standards for health care will require reforming the regulatory frameworks and governance structures of quality-control agencies, as well as investing in their human resources, technology, and equipment.
- **Enhancing multisectoral collaboration to address critical risk factors, especially for NCDs.** There is insufficient focus and scale of primary prevention across the life course and sectors to facilitate the uptake of healthy lifestyle. The authorities should adopt legislation that regulates exposure to NCDs risks factors and implement policies that promote behavioral change.
- **Improving the financing and provision of LTC services.** A clearly defined set of health LTC services (including co-payment guidelines) should be implemented, especially for vulnerable populations, including in rural areas. Targeting services through improved and transparent eligibility criteria and needs assessments, in coordination with the social sector, and upholding quality assurance practices would ensure quality care delivery.
- **Building emergency preparedness and response capacity** through substantial and sustained increases of public investment and the continuous training of human resources for health**.**
- **Improving the availability of health-sector data and the system's ability to analyze data and integrate it into the decision-making process.** Timely, high-quality data on the quality of care is vital to identify inefficiencies in the health system, such as the use of inappropriate or overly costly procedures. Integrating *MojTermin* and the HIF information system can help develop appropriate performance indicators and other standards.

B. Strengthening Social Assistance

Social assistance reform increased spending and coverage

5.42 **North Macedonia initiated a comprehensive social assistance reform in 2019 that aimed to consolidate its fragmented, often overlapping social assistance benefit schemes.**[123] Social assistance spending before the reform was comparatively low, highly fragmented across several programs and skewed toward non-means-tested programs. For example, one of the largest programs in terms of spending, the universal Parental Allowance (PA) program, involved a continuous benefit to the mother of the third child born alive after January 2009. Inconsistencies in the design and coverage of programs made the system inefficient, with low coverage among the poor and low adequacy of benefits. The reforms set out in the new Law on Social Protection and the amendments to the Law on Child Protection resulted in a series of changes, including the introduction of a means-tested guaranteed minimum assistance (GMA) scheme that replaced all means-tested social assistance programs and, among other changes,

123 The social protection system in North Macedonia is comprised of social assistance, social services, social insurance, and labor programs. Social insurance aims to smooth income across the life cycle and protect people from shocks and typically comprises benefits based on individual contributions (that is, old-age pensions, disability pensions and survivors' pensions). Social assistance generally aims to protect people from falling into poverty and provides support at vulnerable points in the life cycle; it encompasses noncontributory programs, including noncontributory pensions (often called social pensions), and family- and child-related cash benefits. Social services support individuals and their families to improve their living conditions when facing various risks and vulnerabilities, such as for orphans, victims of violence, persons with disabilities or older people. Finally, employment and labor market programs aim to improve the functioning of the labor market (through employment services), improve labor supply (through training) and increase labor demand (through subsidies or public works).

transformed the Parental Allowance (PA) program into an income-tested program. In addition, the new Law on Social Security for Elderly Citizens, enacted in May 2019, introduced a means-tested social pension for the elderly (age 65 years and older). Finally, amendments to the Law on Child Protection introduced an educational allowance and a reformed child allowance to extend coverage.

5.43 **The introduction of the GMA aimed to expand coverage, while providing more adequate benefits and continuing to reach the poorest households with social assistance support.** An analysis of the previous scheme (Social Financial Assistance (SFA) and Permanent Financial Assistance (PFA)) found that although it was a cost-efficient program, low coverage and low adequacy led to virtually no impact on poverty. Therefore, in addition to consolidating programs into the GMA, the reform aimed to expand coverage and improve adequacy of payments. To this end, the eligibility threshold for the GMA calculation was increased to MKD 4,000, about 40 percent higher than the SFA threshold of MKD 2,871. In terms of payments, GMA provides the difference between the household income and the established threshold, which is a maximum MKD 10,000 per month for a family of five, using an equivalence scale.[124] GMA beneficiaries automatically receive an energy allowance of MKD 1,000 from October to March and are eligible for the educational and child allowances. As a result, the combined support provided to GMA beneficiaries is more adequate than previous programs.

5.44 **The Parental Allowance program has been replaced by an income-tested allowance, which is expected to lead to significant improvements in cost-efficiency of overall social assistance spending.** Aimed at promoting population growth, the previous PA provided monthly allowance for all families that had a third child until the child reaches age 10, and the program by itself consumed 0.4 percent of GDP in 2018 with no visible benefits in terms of population increase. The reform introduced an income-test for eligibility such that the family needs to earn less than the minimum wage of the previous year to be eligible, while the current beneficiaries and those who could apply until March 2020, ten months after the reform, will continue to benefit from the previous program irrespective of their income status. As a result, expenditure on the PA only started to fall in 2022.

5.45 **In addition, a universal non-contributory pension[125] was introduced in 2019 as a means-tested social assistance program for the elderly; initial take-up of the new program was very low, although it is expanding sharply.** A monthly cash transfer of MKD 6,000 and an energy allowance of MKD 1,000 for the winter months (similar to a two-adult household benefiting from the GMA) are available for individuals aged 65 years and older who are citizens and have had a permanent residence in North Macedonia for the last 15 years. The transfer is means-tested: individuals cannot own property, have a pension or other kind of income from North Macedonia or another country, and did not generate any income in the past three months from any sources prior to the submission of the application. The same conditions apply to the partner of the applicant. The program started in May 2019 with merely 70 beneficiaries and reached over 10,000 beneficiaries by the end of 2021.

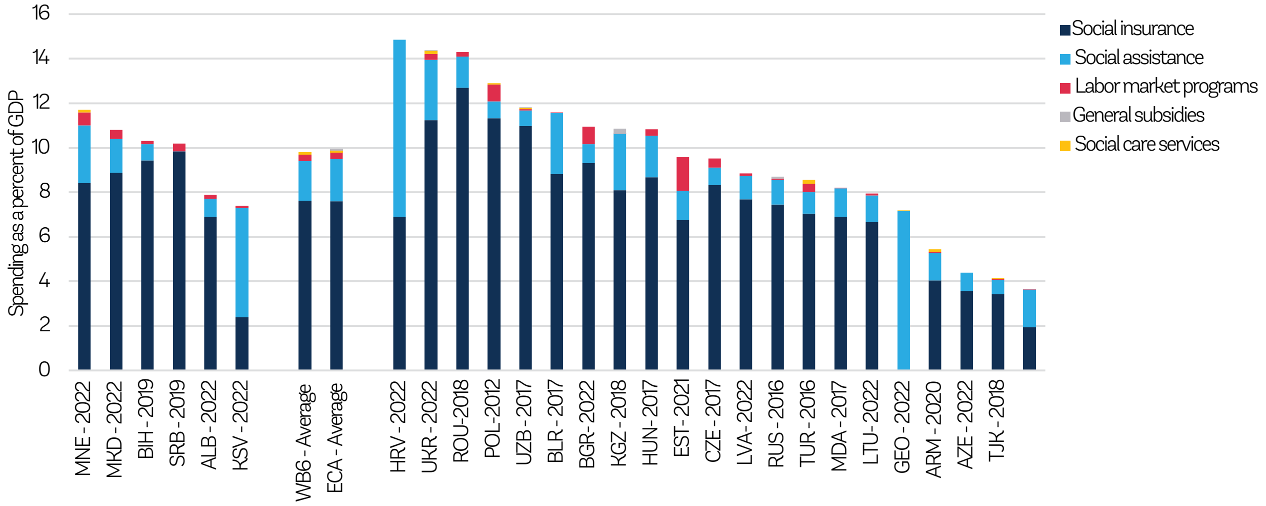
124 For further details on the formula, please see North Macedonia Situational Analysis https://openknowledge.worldbank.org/handle/10986/37873

125 Law on Social Security of Elderly, enacted in May 2019 (Official Gazette 104/2019) introduced a right and "lifetime benefit for social security of elderly," with all the features of a social pension.

Spending on social assistance is comparatively low

5.46 **North Macedonia's total spending on social protection, including social insurance, social assistance, social care services, and labor market programs, is just above the average compared with peer countries**. At 10.4 percent of GDP in 2019, it grew to 10.8 percent in 2022 (Figure 72), and to 11.8 percent of GDP in 2023 (preliminary), spending on social protection in North Macedonia is above the ECA average at 9.5 percent of GDP. The largest share of the country's social protection spending continues to be on social insurance at 9.8 percent of GDP in 2022 (and 10.7 percent in 2023). Social insurance spending has historically been high, had steadily increased in the last decades and continues to be higher than the Western Balkans average of 7.6 percent. Prior to the 2019 reform, spending on social assistance was around 1.5 percent in 2018 and fragmented, raising to 1.7 percent in 2023. Spending on social services remains low, amounting to less than 0.1 percent of GDP.[126]

Figure 72. Social protection spending, Europe and Central Asia, % of GDP (latest year available)



Source: The Europe and Central Asia (ECA) Social Protection Expenditure and Evaluation Database (SPEED), World Bank. 2022 or the most recent year data is available.

5.47 **North Macedonia's spending on social assistance, has increased over time but it still falls below the average in the region.** Spending on social assistance has almost doubled since 2010 (Figure 73). More specifically, as a result of the social assistance reform, expenditures increased sharply from the second half of 2019.[127] Much of it until 2019 was due to spending on Parental Allowance as well as disability benefits. From 2019, the rise in spending was driven by the continued effects of the 2019 reform and the emergency measures introduced by the Government to first respond to the COVID-19 pandemic and then to the spike in energy prices. More specifically, the rise in social assistance spending in 2020 was due to a jump in spending on the GMA, the program for energy vulnerable consumers, and other poverty alleviation programs, which increased by 60 percent between 2019 and 2020. This resulted in a shift in spending towards means-tested programs, with 63 percentage being allocated to means-tested programs in 2020 (Figure 74). This trend has continued, even as overall spending on social assistance has slightly declined since 2020. This decline in social assistance spending is largely driven by lower spending on the birth grant and Parental Allowance, which was foreseen in the 2019 reform. It is anticipated that as the emergency measures are pulled back, spending on social assistance will decline further. Despite this reduction in spending, the Parental Allowance remained the largest categorical social assistance benefit, making up around 70 percent of all categorical social assistance spending (i.e., non-means tested).

126 There was no data available on spending on social services in 2022.
127 The Europe and Central Asia (ECA) Social Protection Expenditure and Evaluation Database (SPEED), World Bank, 2024.

Figure 73. Spending on social assistance programs over time, (MKD billions, constant, 2019=100)

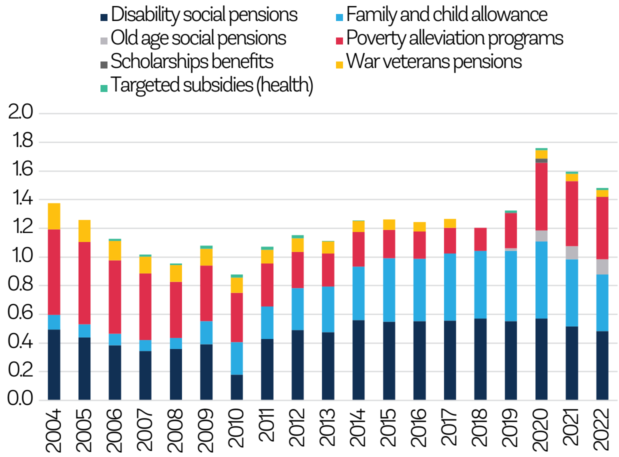
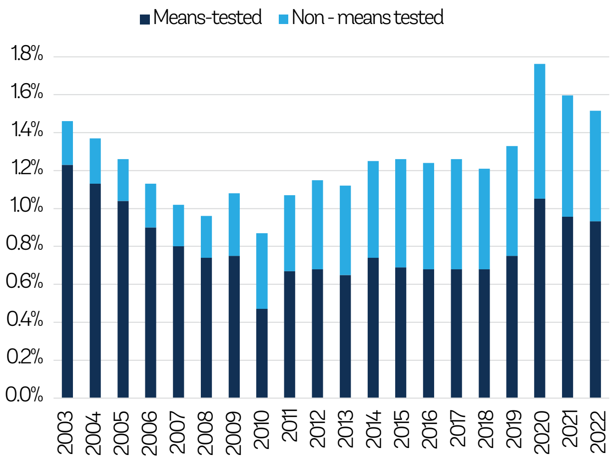


Figure 74. Spending on means-tested and non-means-tested social assistance programs over time, (% of GDP)



Note: Spending data for war veterans were not available for 2015 and it was assumed that they remained at the same level as in 2014.

Source: World Bank SPEED and the Ministry of Labor and Social Protection.

Coverage remains limited

5.48 **The comprehensive reform of the social assistance programs aimed to improve coverage and targeting, however, according to the latest surveys, it does not appear that this has been materializing.**[128] Social assistance programs covered over a third of the poorest quintile in 2019, marking a rise in coverage as compared to before the reform; however, in 2021, an analysis of the HBS suggests it declined again. Based on Household Budget Survey (HBS) results, total coverage of social assistance programs increased from 10.4 percent of the population in 2018 to 12.1 percent in 2019, but the decreased to 9.4 in 2021. The Parental Allowance and child grant continue to be the largest social assistance programs, reaching 5.1 percent of the population in 2021 and 13.7 percent of the poorest quintile. A modest increase is observed among those social assistance programs that aim to reach the poorest, the SFA and PFA and now the GMA: coverage of the population increased from 3.6 to 4.1 percent and, among the poorest quintile, coverage increased from 13.9 percent in 2018 to 14.6 percent in 2019. However, in 2021 this trend appears to reverse, with the overall coverage of the GMA falling to 3.3 percent.

Table 31. Social Protection Coverage by Quintile

		Total	Q1	Q2	Q5
2012	All social protection	49.5	54.6	52.6	39.9
	All social assistance	10.3	27.3	8.4	0.6
	SFA, PFA, and related allowances	7.3	21.3	5.8	0.6
	One-off monetary assistance for a newborn child and Parental Allowance	2.1	4.7	0.7	0.0
	Child allowance	0.9	0.6	0.5	0.0
	Personal, family or disability allowances for war veterans	0.2	0.6	0.1	0.0

128 The analysis presented in this section draws data from the Household Budget Survey (HBS) for the years 2012, 2018, and 2021 and covers social transfers for which information is available in the datasets. The poverty rate is set at the 20th percentile of population distribution, which enables us to compare results over time.

2018	All social protection	50.8	63.4	44.6	46.7
	All social assistance	10.4	34.8	6.3	5.5
	SFA, PFA, and related allowances	3.6	13.9	1.8	0.6
	One-off financial assistance for newborn baby, Parental Allowance	6.5	21.1	4.7	3.2
	Child benefits	0.6	1.6	0.0	1.5
	Scholarships	0.2	0.3	0.2	0.1
	Income in kind, food, clothes, footwear	0.4	1.2	0.1	0
2019	All social protection	48.6	60.0	41.4	46.4
	All social assistance	12.1	35.9	11	5.8
	SFA, GMA, PFA, and related allowances	4.1	14.6	3.6	0.3
	One-off financial assistance for newborn baby, Parental Allowance	6.9	20.4	7.4	4.7
	Child benefits	0.6	0.7	0.4	0.5
	Scholarships	0.3	1.1	0.0	0.3
	Income in kind, food, clothes, footwear	0.7	1.2	0.1	0.1
2021	All social protection	52.7	56.8	56.5	45.9
	All social assistance	9.4	26.2	12.8	1.6
	SFA, GMA, PFA, and related allowances	3.3	10.7	2.4	0.0
	One-off financial assistance for newborn baby, Parental Allowance	5.1	13.7	9.1	1.6
	Child benefits	0.2	0.0	0.6	0.0
	Scholarships	0.2	0.4	0.5	0.0
	Income in kind, food, clothes, footwear	0.8	1.9	0.2	0.0

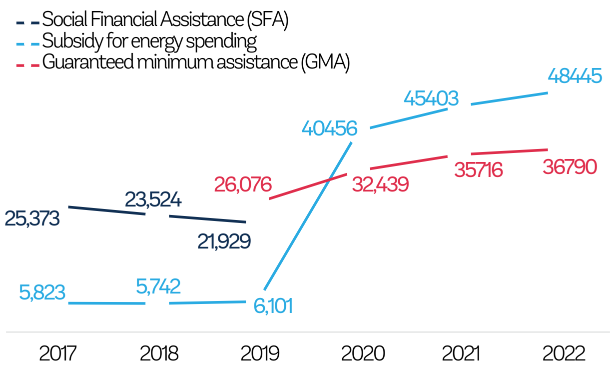
Source: World Bank staff estimates based on HBS data.

5.49 **However, an analysis of administrative data illustrates a very different trend, with coverage of social assistance, particularly the GMA and child benefits, steadily increasing, complemented by a rise in beneficiaries of crises response measures** (Figure 75). Analysis of administrative data begins to show the full extent of the 2019 reform. Thanks to the increase in the eligibility threshold introduced with the 2019 reform, the SFA beneficiaries of 23,000 in April 2019 grew to 36,000 for the GMA in 2022. In addition, the Child Allowance was only covering around 7,000 beneficiaries in March 2019 in comparison to 22,164 beneficiaries in 2022. The coverage of the social pension has similarly continued to rise, with the number of beneficiaries growing from 70 in May 2019 to over 11,714 in 2022. Analysis of administrative data also suggests, however, that not all GMA households that are eligible for the Child Allowance (that is, those households with at least one child under 18 years of age) are receiving this support, suggesting that there is potential to increase the coverage of this program further.[129] In parallel, the number of beneficiaries of Parental Allowance peaked in 2019, with 30,000 beneficiaries, and has recently started to decline.

5.50 **Importantly, analysis of these data also point to how the Government has harnessed its social assistance programs to protect people from shocks**, first the COVID-19 pandemic and more recently an increase in energy prices. This is evident in the rise in beneficiaries of the GMA, which reflects the Government's decision to expand this program to new poor households by relaxing the eligibility criteria during the pandemic. More recently, the Government expanded the program for energy vulnerable consumers beyond the traditional focus on GMA and social pension beneficiaries to low-income households, reaching over 48,000 beneficiaries in 2022.

5.51 **In terms of social assistance coverage of the lowest quintile, North Macedonia compares well with regional peers, although it continues to lag ECA countries.** Coverage of the poorest quintile by social assistance programs performs similar to most other Western Balkan countries such as Kosovo, Bosnia and Herzegovina, and Albania. However, coverage of the poorest population is still much lower than most other ECA countries and lags the ECA average of 53 percent (Figure 76).

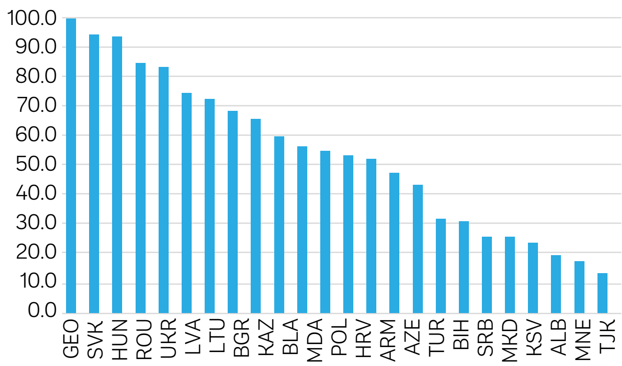
Figure 75. Number of beneficiaries of main cash benefits, 2017-2022



Note: Analysis based on administrative data provided by MLSP.

Source: Carraro L. Implementation of the social and child protection reform in North Macedonia – analysis of administrative data. Draft. World Bank, 2022.

Figure 76. Social Assistance Programs: coverage of the poorest quintile, % (2021 or latest year available)



Note: Information on ECA countries is based on standardized methodology for the assessment of social assistance programs using different household surveys and harmonized ECAPOV consumption aggregates (per capita). Households are ranked into quintiles before transfers.

Source: World Bank SPEED and the MLSP.

Targeting continues to be effective but eroded

5.52 **Poverty-targeted programs in North Macedonia seem to be targeted effectively towards to the poorest, although these may have eroded in 2021.** Around 62 percent of social assistance benefits were received by the poorest quintile in 2019, and 56 percent in 2021 (Figure 77). This includes both the means-tested and categorical benefits and therefore does not account for the differences between these two types of programs in terms of the populations that they aim to reach. While overall distribution of social assistance benefits has not drastically improved following the reform, the results are impressive when looking specifically at the last resort social assistance (LRSA) programs, including the GMA, SFA and others. In 2019, 78 percent of LRSA benefits were received by the poorest quintile, and 65 percent in 2021 (Figure 78). In addition, another 15 percent of the benefits were received by the second poorest quintile in 2019 (14.4 in 2021). This means that more than 90 percent of the LRSA benefits were targeted efficiently towards the poorest 40 percent in 2019, but only 80 percent in 2021. This decline places North

129 This analysis suggests that up to 25 percent of GMA beneficiaries who are automatically eligible for the Child Allowance are not receiving it. See: Carraro L. Implementation of the social and child protection reform in North Macedonia – analysis of administrative data. Draft. World Bank, 2022.

Macedonia at the lower end in terms of performance for targeting of LRSA benefits in the ECA region (Figure 79).

Figure 77. Distribution of Social Assistance benefits

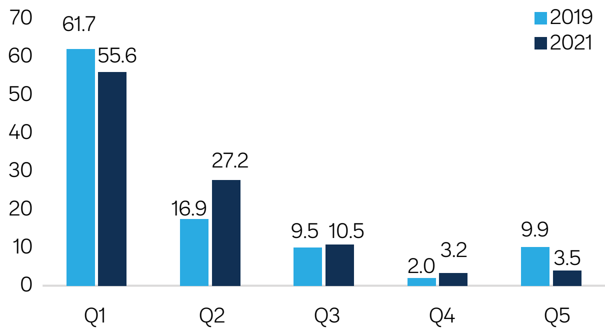
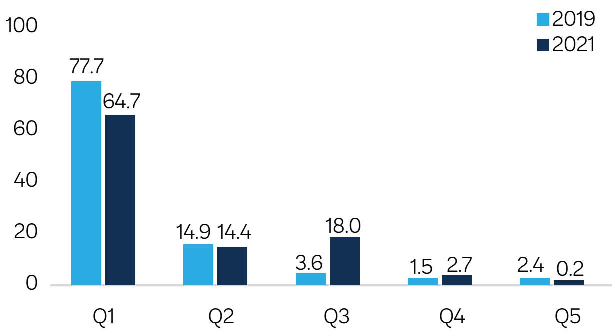
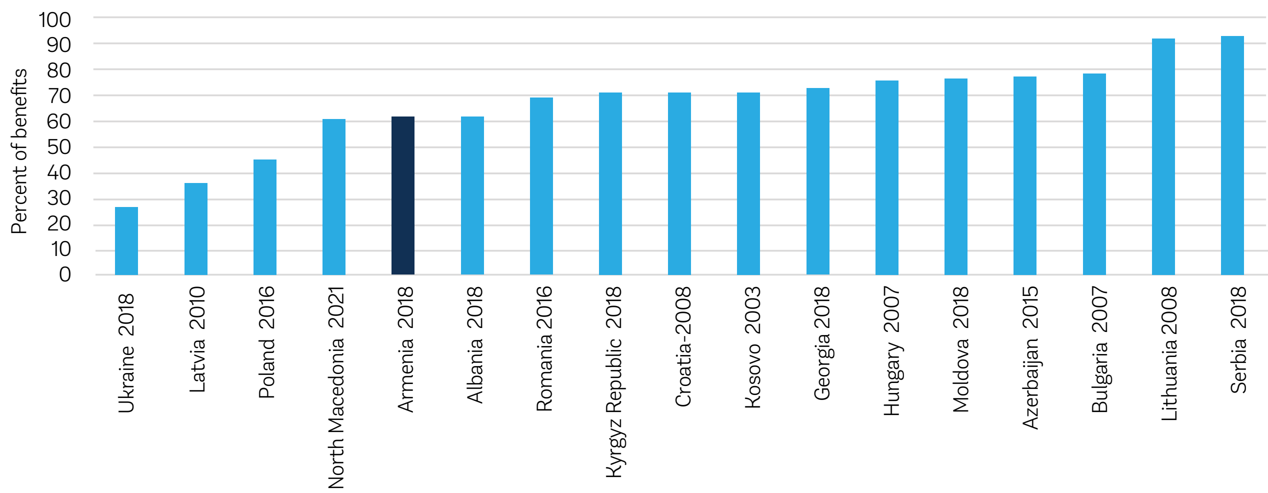


Figure 78. Distribution of LRSA Benefits



Source: World Bank staff estimates based on HBS 2019 and 2021 data.

Figure 79. All social assistance: percent of benefits received by the poorest quintile[130]



Source: World Bank SPEED and the Ministry of Labor and Social Protection.

Adequacy improved post-reform

5.53 **On average, social protection transfers (with social insurance, including pensions) account for 37 percent of the cumulative consumption of the population** (Table 32).[131] For households in the poorest quintile, social protection benefits account for 63 percent of cumulative consumption, while they account for 24 percent of aggregate consumption for the top quintile. Contributory pensions constitute 34 percent of the total cumulative population consumption. The data also suggest that pension transfers play a much more important role in the consumption of the bottom quintile than do other programs. Finally, social assistance's contribution to the consumption of the overall population has improved from 1.7 percent in 2016 to 2.3 percent in 2021. In addition, social assistance shows that it is progressive in relative terms—it contributes a higher share of total consumption among those in the poorest quintile, around 18 percent, falling to an almost negligible percentage for all other quintiles.

130 Information on ECA countries is based on standardized methodology for the assessment of social assistance programs using different household consumption surveys and harmonized ECAPOV consumption aggregates (per capita); Households are ranked into quintiles before social assistance transfers.

131 Relative incidence is the transfer amount received by a group as a share of total welfare aggregate of the group regardless of beneficiary status.

Table 32. Relative Incidence (all households), 2021

		Quintiles of per capita consumption, net of all SA transfers					Poverty Status	
	Total	**Q1**	**Q2**	**Q3**	**Q4**	**Q5**	**Poor**	**Non-poor**
Direct and indirect beneficiaries								
All social protection	37.1	63.3	54.4	43.5	35.7	24.5	62.3	34.5
All social insurance	34.3	44.3	49.1	41.7	35.1	24.1	43.8	33.3
All social assistance	2.3	17.8	4.4	1.2	0.4	0.2	17.2	0.8
Social assistance and other social protection revenues	0.8	7.0	0.8	0.7	0.2	0.0	5.9	0.3
One-off financial assistance for newborn baby, parental allowance	1.0	6.5	2.9	0.3	0.0	0.2	7.4	0.3
Child benefits	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Scholarships	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
Income in kind, food, clothes, footwear	0.5	4.3	0.3	0.2	0.2	0.0	3.6	0.1

Source: World Bank staff estimates based on HBS 2019 and 2021 data.

5.54 **LRSA programs and pensions support household consumption the most, with the impact of the reform starting to materialize.** Adequacy is calculated as total benefit amount as a share of the total welfare of the beneficiary households. The LRSA programs has an adequacy of 29 percent for all beneficiary households, and over 40 percent for the poorest 20 percent of beneficiary households (Table 33), up from 26 and 34 percent in 2016. As expected, the pensions and other contributory programs contribute the highest share in the consumption of beneficiary households. Contributory benefits cover 73 percent of consumption in beneficiary households, while it represents more than the total consumption in the poorest quintile. The adequacy of other social assistance programs, mainly one-off and PA, is also important, particularly for the households in the lowest quintile.

Table 33. Adequacy (direct and indirect beneficiaries)

	Total	Quintiles of per capita consumption, net of all SA transfers					Poverty Status	
		Q1	Q2	Q3	Q4	Q5	Poor	Non-poor
All social protection	71.9	105.6	92.1	79.1	71.6	51.8	99.9	68.2
All social insurance	73.8	109.2	101.6	86.7	72.2	53.1	104.2	70.9
All social assistance	35.4	58.7	27.6	19.7	21.8	9.3	52.4	20.0
Social assistance and other social protection revenues	40.1	61.3	26.8	19.9	26.1	23.8	61.3	23.0
One-off financial assistance for newborn baby, parental allowance	28.7	43.5	26.7	24.4	n.a.	9.0	38.5	17.7
Child benefits	12.9	n.a.	14.8	10.0	n.a.	n.a.	n.a.	12.9
Scholarships	25.1	7.5	34.0	n.a.	n.a.	n.a.	27.5	15.8
Income in kind, food, clothes, footwear	53.7	101.1	63.5	16.9	19.8	8.8	101.1	22.8

Source: World Bank staff estimates based on HBS 2019 and 2021 data.

Social protection is important anti-poverty measure

5.55 **North Macedonia's pensions and LRSA contribute to reducing the poverty rate and poverty gap.**[132] Table 34 shows the simulated impact of discontinuing a particular program or combination of social transfer programs. It assumes that households' welfare levels would diminish by the full value of the given transfers. For comparison purposes, it sets the poverty line at the 20th percentile of the population on a per capita basis, using 2021 HBS data. The poverty gap is 4 percent, down from 6 percent in 2016, and the Gini inequality index is 31 percent, down from 39 percent in 2016.[133] In the absence of the social transfers listed below, the poverty rate using this line would more than double, reaching 45 percent. Even though social insurance is not designed as an anti-poverty measure, if the contributory pensions were discontinued, the poverty rate would grow to 42 percent. In the absence of social assistance programs, the poverty rate would go up to 23 percent. The main reason the social assistance programs seem to have a lower anti-poverty impact than social insurance is the lower coverage and per capita spending on these programs compared to pensions. Effectiveness on poverty reduction, is

132 The poverty rate is set at the 20th percentile of population distribution, which enables us to compare results over time and across countries.

133 The poverty gap measures the extent to which individuals fall below the poverty line as a proportion of the poverty line (i.e. 6 percent in this case). The sum of these poverty gaps gives the minimum cost of eliminating poverty. Therefore, assuming perfect targeting, this measure indicates how much resources would be needed to lift all the poor above the poverty line. Gini index measures the extent to which the distribution of income/consumption expenditure among individuals or households deviates from a perfectly equal distribution.

therefore, analysed further by using cost-benefit ratios to control for total spending.

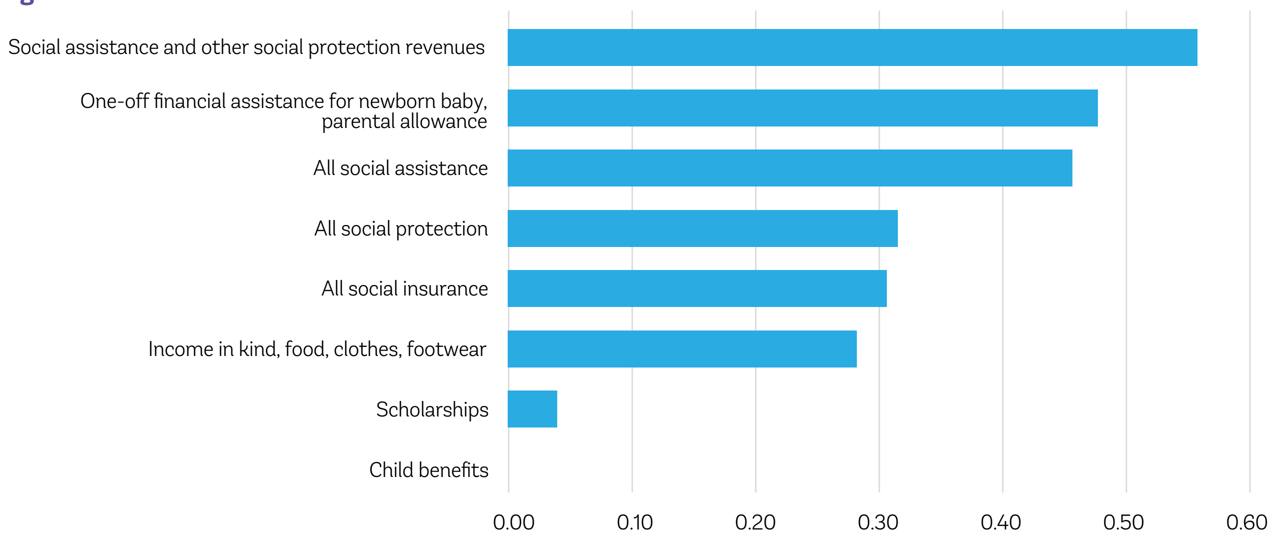
Table 34. Impact of Various Programs on Poverty Measures in the Absence of the Program

	Poverty rate	Poverty Gap	FGT2	Gini
Post-transfer Indicators	0.199	0.045	0.015	0.318
Indicators without listed transfer				
All social protection	0.448	0.282	0.231	0.490
All social insurance	0.425	0.256	0.208	0.471
All social assistance	0.227	0.066	0.033	0.336
Social assistance	0.207	0.054	0.023	0.325
One-off financial assistance for newborn baby, parental allowance	0.215	0.054	0.022	0.326
Child benefits	0.199	0.045	0.015	0.318
Scholarships	0.200	0.045	0.015	0.318
Income in kind, food, clothes, footwear	0.202	0.047	0.017	0.320

Source: World Bank staff estimates based on HBS 2021 data.

5.56 **Among the social transfers analyzed, the LRSA programs appear to be the most cost-efficient, with the ranking of programs remaining similar to 2016**. For each MKD spent on LRSA programs, the poverty gap decreases by 0.6 MKD (Figure 80). One-off financial assistance and Parental Allowance are also cost effective in 2021 and results in 0.5 MKD reduction in poverty gap for every 1 MKD spent on the program. The other social assistance programs such as scholarships and in-kind benefits do not seem to be as cost effective as the LRSA or one-off financial assistance. The results also demonstrate that, as expected, social assistance benefits overall are more cost effective than social insurance benefits. Social assistance benefits aim to support those in need, while social insurance benefits are contributory and are usually received by all strata of the society.

Figure 80. Benefit-cost ratios



Source: World Bank staff estimates based on HBS 2021 data.

5.57 **The GMA was an important part of the Government's response to the COVID-19 pandemic; rising beneficiary numbers in 2020 and 2021 were driven in part by an effort to protect additional poor households from the pandemic**. The 2019 social assistance reform allowed North Macedonia to act fast during the COVID-19 pandemic, as it provided a foundation upon which to build a rapid response. The Government acted quickly, amending the Law on Social Protection (by Official Gazette 89/2020) to relax the eligibility criteria for the GMA, which likely drove the increase in beneficiary numbers from April 2020 onward, as seen above.[134] In addition, the energy poor subsidy was extended from six months to one year. Emergency hygienic product packages were distributed to social assistance beneficiaries, and social housing beneficiaries are granted exemptions for rent payments. The Law on Child Protection was also amended (by Official Gazette 311/2020) such that during crises and emergencies, school attendance will be abolished as an eligibility criterion for education allowance. These modifications provided immediate support to many poor households in North Macedonia. More recently, in response to rising energy prices, the Government expanded the program for energy vulnerable consumers beyond the transitional focus on GMA and social pension beneficiaries to low-income households, recognizing the need to build flexibility into these programs.

Recommendations

5.58 **Since 2019, North Macedonia has been implementing an ambitious reform of its social assistance programs, which appears to be improving coverage and adequacy, although further analysis is required to confirm the full impact of the reform with future household surveys**. In the past two years, social assistance spending has increased, with a shift towards poverty-targeted programs, while these trends are illustrated through analysis of administrative data, they are less clear based on current analysis of household survey data. As a result, it will be important to monitor the impact of these changes on the performance of social assistance spending through analyses of future household surveys to understand if the reforms effectively reach their target population.

5.59 **Protecting these gains in the performance of social assistance demands concerted action to ensure that all eligible households are reached, while also protecting the real value of the transfers.** The recent shift toward poverty-targeted program has been driven, in part, by the significant increase in spending on the GMA as part of the response to COVID-19 and more recently the program for energy vulnerable consumers, it is important this shift be sustained—and, as possible, accelerated—through continuing the reform of the PA, among others. The introduction of the Guaranteed Minimum Assistance constitutes a significant improvement and is designed to provide a comprehensive social safety net to the poorest households. However, it appears that not all eligible children within GMA households are being enrolled into the Child Allowance and Education benefit. Thus, the success and sustainability of the reform crucially lay on implementation to ensure that all eligible people are reached. Additionally, the current increase in prices draws attention to the need for regular price indexing the amount of support provided to existing beneficiaries, so that the purchasing value of the welfare does not erode due to inflation.

5.60 **Current increases in prices (energy, food) raise concerns regarding adequacy in the short-term and reach of some programs (i.e., energy benefit).** The use of the poverty-targeted programs as a means of mitigating the impact of shocks is sensible and harnesses Government investments in these programs (outreach, enrolment, means-test). The increasing frequency of shocks from climate change and other global trends suggests a continued role of the social assistance programs in responding to ever more frequent crises. The Government has retained the legislative basis to expand the GMA in response to emergencies, which helps

134 Government eliminated eligibility criteria for the GMA that apply in normal circumstances but are not relevant in an emergency for all new applicants (for example, a 12-month ban for applying and awarding of the GMA, vehicle possession and real estate property; relaxation of the three-month rule for income assessment; relaxation of the activation requirement). The program's income eligibility thresholds remained the same.

position the country to respond effectively to the next crises by extending coverage to additional poor households. In parallel, the Government recognizes the need to reach additional poor households to protect them from rising energy prices, as set out in the 2022 Program for Energy Vulnerable Consumers. The challenge is to introduce such initiatives to respond to shocks in a manner that contributes to further consolidation in the sector, while also leveraging investments in its delivery systems.

5.61 **There is a strong rationale for using a single, unified set of criteria, to assess eligibility for needs-based social assistance programs, including those that are introduced to respond to crises.** *First*, unified set of criteria ensures horizontal equity: all citizens are assessed using the same criteria. Differences in the scope of different programs could still apply, for example by offering different programs to different target groups (e.g. poor families with children versus those with members who are disabled),by varying the eligibility thresholds across programs or by introducing “crises modifiers” that could reflect the differential impact of shocks on people. *Second*, it could reduce the administrative costs as the frontline staff use the same application procedures across all programs, which are then supported by a single management information system. It can also minimize the private cost of applicants, as they have to present the same documentation for different benefits. *Finally*, harmonizing the eligibility criteria for need-based programs could reduce error and fraud.

5.62 **Beyond the immediate response to the current crises, there is a need to further consolidate the social assistance programs and consider an increase in coverage to protect households from emerging vulnerabilities**. While an improvement, coverage rates among the poorest quintile remain below the average in ECA and below those for other middle-income countries. This suggests that there may be a case to further increase coverage of the poverty-targeted social assistance programs, either as a package (that is, to extend the coverage of the GMA and its supplementary benefits) or specific programs, such as is currently done with the Child Allowance.

5.63 **The 2019 reform included a commitment to promoting the activation GMA beneficiaries into work, which has not been realized.** A range of active labor market measures (employment subsidies, labor market training) aim to support young people transition from school to work, as well as support job seekers to move (back) into work. Efforts are underway to promote the uptake of these measures by GMA beneficiaries by strengthening collaboration between the Employment Offices and Centers for Social Work, including through the creation of individual employment plans. However, gaps in both implementation and the relevant legal frameworks, undermine these efforts. Adopting the amendment to the Social Protection Law, which was under consideration by Parliament, is a critical step towards promoting the movement of able-to-work beneficiaries into jobs. An analysis of the wage reservation rate would also be needed given the accumulation of benefits can deter the active job search.

C. The Sustainability of the Pension System

Recent changes to the pension system

5.64 **North Macedonia's pension system of rests on four pillars:** (i) a means-tested pillar introduced in 2019; (ii) a solidarity pay-as-you-go (PAYG) pillar; (iii) a fully funded mandatory (second) pillar based on individual accounts; and (iv) a fully funded pillar with private open and occupational pension funds. A multi-pillar reform of the pension system was launched in 2005 by introducing the second pillar and making parametric changes to PAYG pillar, notably raising of mandatory retirement age to 64 for men and 62 for women, eliminating early retirement,[135] reducing PAYG accrual rates, and introducing Swiss pension indexation formula based on 50 percent wages and 50 percent consumer price index (CPI). The second pillar was implemented in 2006, mandatory for new labor market entrants, and the voluntary funded third pillar in 2009. Additionally, the Law on Social Security for the Elderly came into force in May 2019. It introduced a zero pillar 'social pension', in the form of a means-tested benefit for people aged 65 plus who do not receive a pension or guaranteed minimum assistance.

5.65 **The objective of the multi-pillar reform was to improve medium- and long-term fiscal sustainability in the while maintaining parity in benefits across generations; but subsequent ad hoc policy changes pose risks to these objectives.** There have been three key changes in recent years with consequence on predictability of benefits and sustainability:

- *First,* the indexation of pensions in the PAYG pillar has changed several times. Pensions used to be indexed to 50 percent nominal wages and 50 percent inflation (so-called "Swiss indexation"). In 2018, following sustainability concerns, it was replaced with 100 percent inflation indexation plus an extra indexation in years when real GDP growth was above 4 percent. Following minimum wage and minimum pension increases in 2019, the government introduced an ad hoc, discretionary wage-related indexation in 2020, which undermined the positive impact of the 2018 reform. Since early 2022 the ad-hoc indexation was abolished, and Swiss indexation has been reintroduced. Supplementary pension indexation with real GDP margin exceeding 4 percent has remained.
- *Second,* the unusually high number of changes in accrual rates for the PAYG pillar over the last two decades makes it extremely difficult for individuals to estimate pension benefits, and risks having sharp drops in benefits between two subsequent retiring generations. The accrual rates differ for years pre-2001, between 2001-2012, between 2013-2018 and so on. Most recently, those retiring from multi-pillar system saw a sharp drop in benefit. This prompted the government to make two changes—increase the accrual rates for those in the mandatory multi-pillar system for years 2003-2018 from 0.75 to 1 percent for males and from 0.86 to 1.14 percent for females; and allow individuals over age 50 who voluntarily switched to the multi-pillar to go back to the mono-pillar PAYG scheme, which a large majority accepted.[136]
- *Finally*, there has been a minor increase in total contribution rates over the years from 18 to 18.8 percent in 2019-202, whereby 12.8 percent goes towards the PAYG scheme and 6 percent goes to the second pillar individual account, which does not proportionally split the contributions between two pillars.

135 Eliminating early retirement was the most pronounced policy measure in North Macedonia's pension reform. North Macedonia is the only transition country and among a small group of European countries that eliminated general early retirement. Early retirement remains an option for hazardous and arduous occupations in North Macedonia.

136 With the amendments to the Law on Mandatory Fully Funded Pension Insurance from December 2018, all members of the mandatory pension funds who had joined the second pillar voluntarily (and who were first employed before January 1, 2003) and who were born before January 1, 1967, were given the chance to choose to terminate or continue their membership in the second pillar.

5.66 **In 2023-2024, with elections approaching, there have been increases in minimum pensions for some categories, and the government has stated its intention to provide a further flat increase to all pensioners by 2025.** In November 2023, the government announced a package of social measures which included pension increases of MKD 1,500 to 3,000 per month to be implemented over a period of five winter months, when heating and electricity costs tend to be higher. A sum of €35 million was allocated for this purpose.[137] Following the election results, the new prime minister announced its intention of increasing pensions by MKD 5,000 by spring 2025.[138] These measures risk further eroding the integrity of the pension system and adding to the fiscal burden. The average old age pension in North Macedonia reached 20,195 MKD as of 2023, which is 27 percent more than in 2021. As per this most recent proposal, a 5,000 MKD increase for pensions in the first year would be a substantial 25-percent increase in average pension. If the increase is applied to all pensions (i.e., old age, disability and survivors), this would add 0.3 percent of GDP to the 2024 fiscal costs, and an additional 2.3 percent of GDP for the 2025 budget, increasing spending on pensions from 9.6 percent of GDP to 11.9 percent. With no changes to the contribution rate this would result in worsening of an already wide pension deficit but would also raise broader equity concerns. While pension adequacy for existing pensioners would increase, new pensioners would not benefit from such flat increase, leading to a difference in pensions across cohorts.

5.67 **To retain an incentive to contribute, the pension system needs to strike a balance between redistribution and maintaining a strong link between contributions and benefits.** Pension design, notably that of PAYG scheme, includes redistributive elements like minimum pension, exempting contributions for caregiving periods, early retirement for hazardous occupations etc. The higher the redistribution in the system the higher is the contribution rate levied on all contributors needed to ensure the scheme is sustainable. This is why defined contribution schemes are fully funded by design. They lack redistributive elements as the pension benefits an individual receives is a function of the individual's own contribution and investment returns earned on it. Most old age retirees in the coming two decades will be from the mono-pillar DB scheme in North Macedonia, after which retirees will get benefits from the multi-pillar system. Under such a scenario, measures like a flat increase to all pensions (which effectively means higher increases given to those earning lower pensions) increases the redistribution in the system. Over time, as individuals make note of the mismatch between what they are paying into the system during their working years (18.8 percent of wages to pensions) and the benefit they expect to receive, they could be motivated to underreport wages (a phenomenon common amongst self-employed).

5.68 **To protect the integrity of the pension system and avoid underreporting, policymakers need to manage tradeoffs between these two objectives.** As of 2022, 26 percent of all contributors paid contributions on minimum wages, whereas in 2019 contributions based on minimum wage was limited to only 6 percent of contributors. Social assistance schemes would be better suited to target low-income individuals or households in times of crises, rather than distorting pension system design. With the introduction of the means-tested social pension in 2019 there is an even bigger risk that some individuals (notably those in rural sectors, women) would avoid paying contributions all together and instead rely on social pension. The risk could be reduced by ensuring the social pension is strictly means tested, is kept at a modest level, and the eligibility age of social pension increased from 65 to 70 and growing with life expectancy.

137 https://vlada.mk/sites/default/files/dokumenti/28112023_antikrizni_merki_0.pdf
138 https://360stepeni.mk/mitskoski-najavi-finansiski-paket-vo-sorabotka-vlada-so-vlada-vo-vrednost-od-edna-milijarda-evra/

Pension spending and the deficit widened again

5.69 **Spending on pension benefits (i.e., old age, disability, survivorship) increased sharply to 9.3 percent of GDP, although with health contributions for pensioners, transition costs, and other administrative costs, overall pension expenditures increased to 11.8 percent of GDP in 2023** (Figure 81). Pension benefit spending in North Macedonia is now 2 ppts of GDP below EU average, but above the EU6 (8.1 percent of GDP) and the average of the Western Balkans (8.3 percent of GDP) (Figure 82).

5.70 **Due to relatively low contribution rate, pension contributions fall short of financing current benefit costs.** North Macedonia continues to have pension deficits in the PAYG pillar at above 4 percent of GDP. In 2020 and 2021 with higher contribution rates the deficit stabilized, and slightly shrunk, and recent minimum wage increases led to an increase in contribution revenues but still deficits remained at high levels. Overall and current deficit[139] trajectories show that the main contributor to the trend is the growing pressure of demographics on pension expenditures, not followed by adequate measures to balance the system.

Figure 81. Pension system finances, percent of GDP (2001-2024)

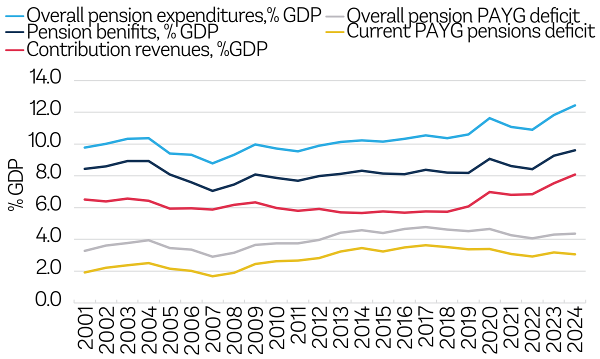
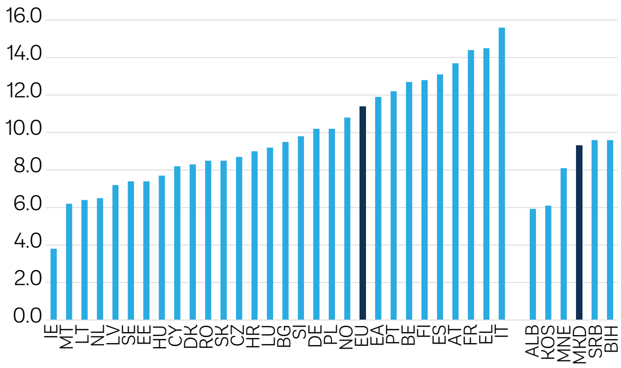


Figure 82. Total pension spending in North Macedonia, EU and other countries (% of GDP, 2022 or more recent)



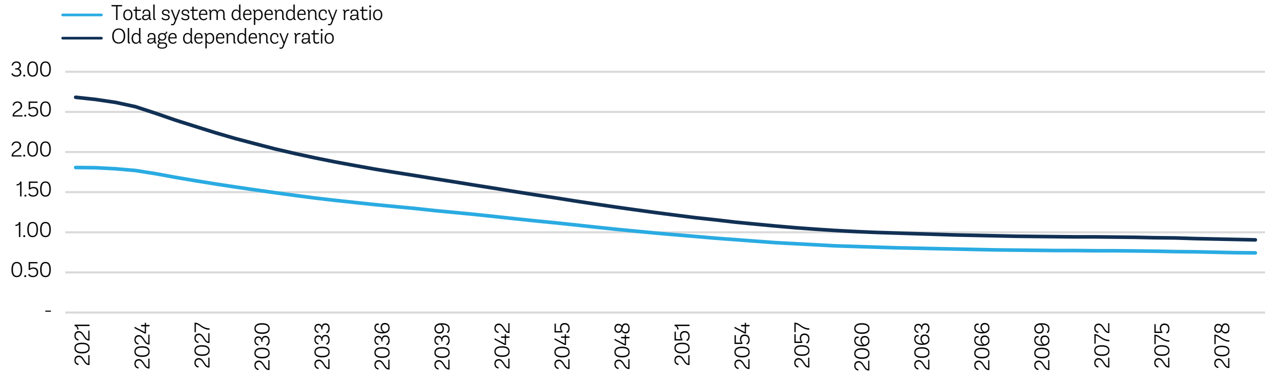
Source: PIONM and State Statistical Office, World Bank database.

5.71 **North Macedonia's system dependency ratio (SDR), at 1.75 contributors per beneficiary in 2022, is projected to worsen in the coming decades.** The key factor triggering improvement in system dependency was elimination of early retirement in pension reform of 2005 and 2006 aiming to improve the SDR which already fell below 1.3. Prior to COVID-19 breakout it reached 1.8 and then continued declining.[140] Aging is projected to worsen the SDR rapidly until 2050s at which point it will stabilize but at the low level of 1 contributor per each old age beneficiary and 0.8 contributors per all beneficiaries (old age + disabled + survivors) (Figure 83). This worsening of SDR, all else constant, signals that the scheme will face sustainability challenges unless there is an improvement in the SDR (by increasing retirement ages or an increase in number of contributors through coverage expansion/migration) or a sharp reduction in benefits. It should be noted that these projections depend on accuracy of mortality and fertility estimates published by the UN and should be reviewed on a regular basis given the uncertainty associated with any long-run demographic projections.

139 Current deficit is defined here as pension benefit payments minus PAYG part of the pension contributions. Second pillar contributions are excluded from revenues. Overall deficit incorporates other expenditures of the PAYG system, i.e. health contributions for pensioners.

140 At the end of 2022, the system served 625,000 contributors and 357,000 beneficiaries.

Figure 83. Projected fall in the system dependency ratios



Note: Total System dependency ratio is calculated as total number of beneficiaries (old age+disabled+survivor) divided by number of contributors in a given year. Old age dependency ratio is calculated as number of old age beneficiaries divided by number of contributors.

Source: World Bank staff estimates based on PROST model.

5.72 **North Macedonia's mandatory retirement age is among the lowest in Europe and gender specific.** Mandatory retirement ages, 64 for men and 62 years for women, remain the lowest in the Western Balkans and among the lowest compared to EU countries (Table 35). Furthermore, the country still maintains a lower retirement age for women than men, though the two have been equalized or in the process of equalization throughout the EU countries. However, North Macedonia is the only Western Balkans country that eliminated early retirement. In the EU there are only five other countries that eliminated it as well: Ireland, Cyprus, Hungary, Netherlands, and Poland. Future reform in North Macedonia could thus consider equalizing and raising the retirement age gradually, potentially linking it to life expectancy path once the equalization between genders is over. The increase in retirement ages should be complemented with efforts to promote longer and healthier working lives so that the retirement age increases also lead to higher pension adequacy at time of retirement. The net effect of a gradual retirement age will result in improved fiscal sustainability if the higher years of contributions paid and fewer years in retirement outweigh the increase in accrued pension benefit because of longer careers.

Table 35. Statutory retirement age and early retirement age in EU and the Western Balkans

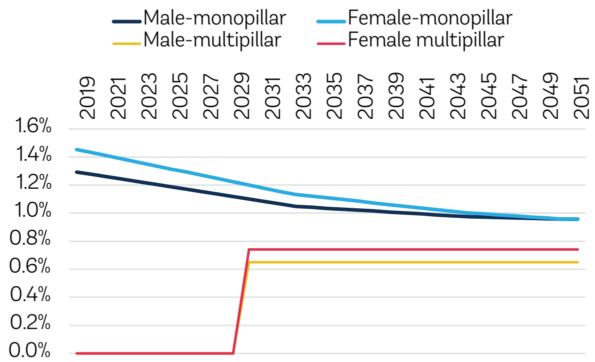
2019-22	Retirement age (early retirement)		2019-22	Retirement age (early retirement)	
country	Men	Women	country	Men	Women
BE	65 (63)	65 (63)	NL	66.3 (66.3)	66.3 (66.3)
BG	64.2 (63.2)	61.3 (60.3)	AT	65 (60)	60 (58)
CZ	63.5 (60)	61.2 (58.2)	PL	65 (65)	60 (60)
DK	65.5 (63)	65.5 (63)	PT	66.4 (60)	66.4 (60)
DE	65.7 (63)	65.7 (63)	RO	65 (60)	61.2 (56.2)
EE	63.6 (60.6)	63.6 (60.6)	SI	65 (60)	64.5 (60)
IE	66 (66)	66 (66)	SK	62.5 (60.5)	62.5 (60.5)
EL	67 (62)	67 (62)	FI	63.5 (61)	63.5 (61)
ES	65.7 (63.7)	65.7 (63.7)	SE	67 (61)	67 (61)
FR	66.8 (61.8)	66.8 (61.8)	NO	67 (62)	67 (62)
HR	65 (60)	62.3 (57.3)			
IT	67 (64)	67 (64)	MNE	66 (62.6)	62.3 (57.3)
CY	65 (65)	65 (65)	SRB	65 (59.6)	63.4 (59)
LV	63.5 (61.5)	63.5 (61.5)	FBIH	65 (62.6)	65 (57.6)

LT	63.8 (58.8)	62.7 (57.7)	RS	65 (60)	65 (58)
LU	65 (57)	65 (57)	MKD	64 (64)	62 (62)
HU	64.3 (64.3)	64.3 (64.3)	ALB	65 (62)	62 (57)
MT	62.9 (61)	62.9 (61)	KOS	65	65

Source: EU Aging Report 2021; national statistics.

5.73 **Accrual rates in North Macedonia are period and gender-specific, and effectively declining for new cohorts of retirees.** The calculation of pension benefits in North Macedonia rests on the traditional pension accrual formula.[141] Effective gross PAYG accrual rates for individuals remaining in the PAYG pillar (mono-pillar) and for those who will retire from the multi-pillar system are presented in Figure 84. Since the multi-pillar scheme was mandated for those younger than age 36 in year 2003, the first retirees are expected by 2030. Retires from the multi-pillar system will receive pension benefit from two pillars and accordingly their accrual rate from PAYG is lower than those who receive benefits only from the first pillar. The mono-pillar average gross accrual rates will decline gradually to the long run value of ~1 percent, which is close to many EU countries.[142] Mandatory second pillar participants or multi-pillar scheme participants would start drawing the combined pension in 2030 (women) and 2032 (men) and will be awarded lower PAYG accruals (0.65 percent gross accrual rate for males and 0.74 percent for females). After 2050s there will be no more individuals retiring from the mono-pillar scheme as everyone would have transitioned to the multi-pillar scheme.

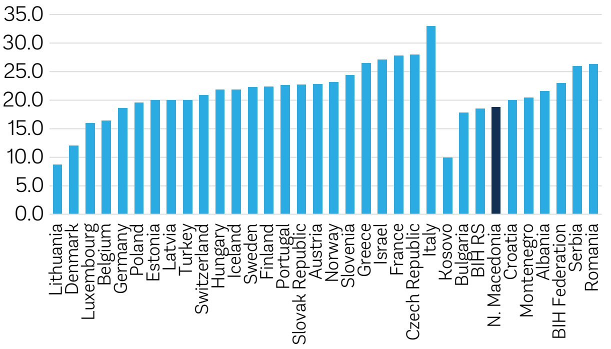
Figure 84. Average gross PAYG accrual rates based on year of retirement and mono or multi-pillar system



Note: Assuming individuals contribute for 33 years on average. Figure shows Gross accrual rates that is simply 65 percent of net accrual rate.

Source: Law on Pension and Disability Insurance, World Bank staff estimates.

Figure 85. Pension Contribution Rates, Selected OECD and non-OECD countries, 2020 or later



Sources: OECD Pensions at a Glance 2021; World Bank Pension Database.

5.74 **In the context of rapid demographic aging, to sustain the current pension benefits, contribution rates will have to increase, and further parametric changes to the system will be necessary to limit expenditure growth.** The pension contribution rate grew from 18 percent in 2020 to current 18.8 percent.[143] Although raised, the current rate remains among the lowest compared to other countries (Figure 85) and insufficient to finance current level of PAYG benefits. In the long run the 12.8-percent contribution rate to the PAYG pillar will finance a lower pension benefit but in the short run the diversion of 6 percent of contributions from the younger generations to the defined contribution scheme gives rise to a transition cost. Combined with the worsening system dependency ratio, this points to worsening fiscal sustainability.

141 Pension accrual represents a percentage of individual's pension base earned for one year of pensionable service with paid contributions. A pension accrual of 1, for example, indicates that a person gets 1 percent of pensionable base for each year of service. The pensionable base is commonly the lifetime earnings, revalued (valorized) to the wage level at point of retirement (current).

142 Effective gross accrual rates in Germany, Sweden, Estonia, Lithuania, Latvia, Slovak Republic, Romania, Poland, France, Croatia and Greece in 2019 ranged between 0.8 and 1.1 percent. In other countries the accrual rate was higher. Average accrual rate is expected to gradually decline in all EU countries.

143 Supplementary contribution rate of 0.8 percent will have no impact on pension levels. Its primary objective was fiscal: to partially fill the pension financing gap.

Fully funded pillars remain underutilized

5.75 **Despite a major dip in pension-fund returns in 2022, the long-run performance of the second pension pillar has been positive.** By the end of 2023, the three mandatory second pillar funds served 593,093 members[144] and managed individual pension assets of EUR 2.1 billion or around 15.4 percent of GDP. Until 2021 the annualized real rate of return on second pillar accounts ranged between relatively high 3 and 4 percent. The inflationary episode in 2022 and the erosion of fixed income, primarily government bonds, hit the pension funds around the globe including North Macedonia. All three pension funds registered a double-digit decline in real returns. As a consequence, the longer run performance of the pension funds fell to a lower trajectory: in the period 2015-2022 the annualized nominal rate of return of mandatory pension funds stood at 4.52 percent, with real rate of return at low 0.5 percent. While the real returns have recovered to around 1.5 percent in 2023, and few second pillar retiring members have been affected, and the inflationary episode left an important lesson for future diversification strategy. At the end of 2023, 63 percent of second pillar accumulation was invested in government bonds. In cases of equity market crises, high exposure to public debt stabilizes the pension funds' performance, but in the high inflationary periods it lowers it. Policymakers in North Macedonia should consider revising the rules for second pillar investment towards a more flexible system to market and macroeconomic shocks, synchronized with the lifecycle of its members.

5.76 **The development of voluntary funded pensions has been slow.** The voluntary third pillar was launched in April 2009, but it has not attracted much interest since. Until the end of 2023 it served 31,500 members (below 5 percent of employed individuals) and 0.3 percent of GDP in accumulated funds. Modest voluntary pension savings are not uncommon in both post-socialist countries and developed economies with strong PAYG and developing second pillars. Also, the interest for voluntary pension savings falls during the periods of economic and political instability, as was the case in past decade. Low awareness of a need for long-term savings and preference for more liquid and short-term savings options or investing in real estate influence the savings and investment decisions. Such individual savings portfolios may turn inappropriate for providing a steady and lifetime flow of income at the old age. The authorities should thus work on raising public awareness of a need for long-term savings and promoting and supporting the voluntary pension funds.

5.77 **The legal and administrative arrangements for the payout phase from the funded pillars are in place but are not being fully utilized.** The legal framework for the payout phase has been passed (Law on Pension Payouts enacted in 2012) offering variety of payout options to second pillar members upon retirement and third pillar members 10 years prior to retirement or later. Members in the second pillar can upon retirement receive a lifetime pension (annuity) through an authorized insurance company, programmed withdrawals through a pension company, or a combination of two.[145] Payout options from the third pillar are broader and include fixed annuities, variable annuities[146] and lump sum payments. At the end of 2022 there were only 30 old-age second pillar beneficiaries (of which 14 new beneficiaries retired in 2022) receiving programmed withdrawals from their pension funds.[147] Despite the existing legal framework, none of the multipillar beneficiaries chose the annuity product because no insurance company

144 The number of second pillar members is not comparable to the number of pension insured individuals. The first includes both active and passive accounts (depending if the contribution is paid or not), while the second one includes only the active accounts.

145 Programmed withdrawals in the second pillar are paid for life (benefits decline with age) or until the account is exhausted (in case of fixed amounts and longevity above the expected). They could also be arranged for a fixed period. Any remaining funds at death of a beneficiary are inherited. Life annuities, on the contrary, are paid for life regardless of the longevity, but are not inherited by the heirs. The idea behind the 2012 legislation was to allow the second pillar members to balance between the bequest and lifelong income features of the benefit.

146 Annuity that varies with value of the portfolio the reserves are invested in. Variable annuities pass the investment risk onto the beneficiary and allow the annuity provider to set a higher initial annuity.

147 In case of survivor or disability pension for the second pillar participants, the second pillar accumulation is returned to the PAYG pillar in exchange for PAYG survivor or disability pension, unless the beneficiaries decide otherwise. Given short period of accumulation, with calculated annuity amounts falling short to match the PAYG benefits, transfer to PAYG has become a default. In 2022, all 445 disability and survivor cases transferred funds to PAYG.

has been licensed for annuity provision by the Insurance Supervision Agency. Although the Pension Insurance Law of 2018 postponed the larger second pillar retirements to 2030 and later, new individual cases would continue appearing and their number will rise in the interim period. It is vital that the Insurance Supervision Agency prepares needed supplementary acts for the insurance companies to step into the annuity provision process on time.[148] On the other hand, annuity markets are rarely significant and successful unless mandated and delivered at large. Insurance companies in North Macedonia may continue to avoid or ignore entering pension annuities. The absence of a good product delivering income until death would mean that the majority of North Macedonia's private pensions would be paid out as programmed withdrawals from the second pillar and lump-sums from the third pillar. This puts the key policy objective to tackle old-age poverty at risk. A solution could be to legislate variable annuity model as a default or a dominant part of the annuity-withdrawal combination.[149]

Challenges facing the mandatory pension system

5.78 **The pension scheme in North Macedonia will need to strike a careful balance between its coverage, adequacy, sustainability, and equity objectives.** With population aging at a fast pace, outmigration of younger adults, growing unpredictability in pension rights, and structural challenges with labor markets, particularly for older adults, the pension system will increasingly face more challenges and will continue relying on the general budget besides tweaking the system parameters alone.

5.79 **Contributor and Beneficiary Coverage:**

- ***Individuals in informal employment (largely female) remain uncovered.*** As of 2023, 11 percent of the employed were informally employed, more than half of whom were employed in the agricultural sector and not mandated to join the pension scheme. These individuals' risk being vulnerable in old age, especially if they do not qualify for the means tested social pension introduced in 2019.
- ***Growing prevalence of self-employed individuals.*** Self-employed can self-report income and have irregular contribution histories. Unlike those formally employed in firms, there does not exist a way to verify the income and employment history of self-employed. This could mean that the self-employed workers have incomplete contribution histories or inaccurate wages being reported that in turn have an impact on contribution revenues collected from these workers and can lead to unmet expectations during retirement.
- ***Limited coverage of migrant workers.*** North Macedonia, like many other Western Balkan countries, has been witnessing emigration over the years. Around 650,000 people born in North Macedonia are currently residing overseas, corresponding to approximately one-third of the total population in the country. In recent years, emigration to Europe has continued to grow, which risks worsening the system dependency ratio, making pensions less affordable but also means that Macedonian emigrants, risk having limited retirement security if there are gaps in contribution history or years of contribution are not recognized in the destination country. Portability agreements with destination countries would allow migrant workers to continue accruing pension rights, but focus needs to be on awareness, coordination across countries, prompt grievance redressals and voluntary schemes for those workers who do not work in formal sector and hence not subjected to portability agreements.

148 The 2021 Census should provide the needed data to generate adequate cohort and gender mortality tables for North Macedonia.

149 Variable annuities have been used in the Swedish mandatory second pillar. In this model member's assets remain invested rather than being transferred to an insurance company and typically invested predominantly in government bonds. Annual payouts are calculated in relation to the stock of assets using assumptions for future investment returns and future mortality.

5.80 ***Adequacy:***

- ***Reducing adequacy over time.*** Among key reforms in the last decade have been the reduction in pillar one accrual rates. The mono-pillar accrual rates have been going down steadily and without an increase in average length of service among individuals will result in falling replacement rates. For younger individuals, the accrual rate in PAYG scheme is lower but they will receive benefits from the second pillar to compensate. The benefits from the second pillar could allow for adequacy to remain at similar levels or increase or go down, depending on the investment returns in the second pillar vis-à-vis wage growth in the economy. Overall, though, average adequacy would go down relative to current levels unless returns surpass current assumptions.
- ***Growing share of individuals contributing at minimum wage levels.*** The rapid increase in minimum wages in 2022-2023 and continued underreporting of salaries were likely two key reasons behind a growing share of individuals contributing at the minimum wage level. This has consequences for adequacy of benefits as the growing groups of individuals earning or reporting close to minimum wages will get low pension benefits relative to their predecessors and it would give rise to unmet expectations.
- ***Indexation affecting adequacy during retirement.*** While the benefit formula determines pension at retirement, pension indexation combined with the minimum pension has a role to play in determining pension adequacy during retirement. While wage indexation of pensions allows for pensioners to share the productivity growth of the economy, it can be prohibitively expensive prompting many OECD countries to consider inflation indexation, to protect real value of pensions but limit the spending growth. North Macedonia has oscillated between choosing Swiss indexation to inflation indexation and during COVID a temporary switch to wage indexation. The minimum pension, if increased in line with wage growth, can make indexation policy redundant as older pensioners would simply qualify for the high minimum pensions.

5.81 ***Sustainability:***

- ***Insufficient pension contribution rates and growing deficits.*** The second pillar was created by simply diversifying 6 percent of 18.8 percent in contributions, and the overall contribution rates did not go up by a lot. This has given rise to transition expenditures and combined with a rapidly worsening system dependency ratio this means that deficits will grow in the medium term unless additional reforms are carried out.
- ***Low retirement age.*** The current mandatory retirement ages (64 for men and 62 years for women), remain the lowest in the Western Balkans and among the lowest compared to EU countries. As individuals are living longer, an increase in retirement ages combined with labor market measures to promote flexible work among older adults and healthier working lives need to be prioritized so that on average individuals contribute for longer, retire with a higher pension benefit but receive the benefit for a shorter duration because of retirement ages linked to life expectancy.
- ***Inclusion of health contributions in the Pension Insurance Fund deficit.*** Health insurance contributions charged on pensions is currently added as an 'expenditure' on the pension balance sheet. When discussing overall fiscal expenditures, this distinction is irrelevant as deficits in health or pensions are inevitably covered by the state. However, for transparency and comparability's sake it can be useful to look at PAYG pension deficits separate from overall deficits which include health contributions. From a communication standpoint as well, it can be useful to point to pensioners that while their pension replacement rates are lower than EU average, adding the health insurance contributions makes it closer to EU averages.

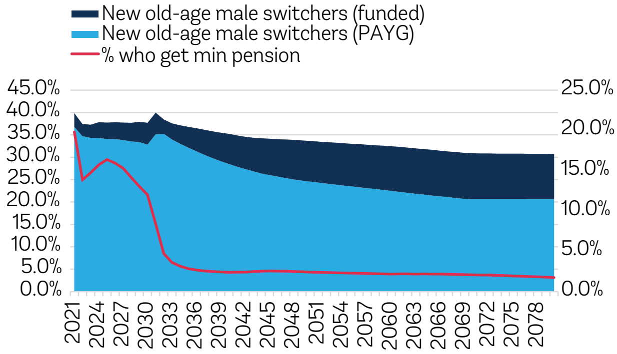
5.82 ***Equity:***

- ***Use of general revenues to finance pension deficits.*** The deficits of the pension system are financed through general revenues, i.e., taxes collected from the entire population. But with 14-20 percent of the labor force not covered under the pension scheme, the use of general revenue to finance deficits for those who will enjoy retirement security, is regressive. Ideally, pension benefits should be adjusted, or contributions increased to ensure that payroll revenues are sufficient to pay for the benefits.
- ***Differences in replacement rates between mono and multi-pillar participants.*** Besides a gradual reduction in accrual rates, the 2003 introduction of the second pillar also led to a difference in accrual rates between those who opted to stay in PAYG only and ones who chose or were mandated to join the multi-pillar scheme. Since replacement rates under pillar 2 are a function of investment returns it is expected that replacement rates from multi-pillar pensions will be ~10 percent lower compared to first-pillar pensions. These calculations assume that minimum pensions in the mono-pillar scheme will not apply to multi-pillar system; however, if there is no change in minimum pensions for multi-pillar individuals then we could expect gap between the two schemes to be lower.
- ***Unpredictability due to frequent policy changes.*** In recent years, there have been multiple changes to accrual rates, indexation policy, minimum pensions, choice of joining multi vs mono-pillar, which has led to a loss in clarity on how much individuals can expect to get in pensions when they retire. This unpredictability in benefits risks eroding the trust in the system and incentive to contribute. Lack of pension awareness further complicates the situation as individuals are likely to blame inefficiency in the system without understanding how their reported wages and number of years contributed to their pension entitlement.

Policy simulations to restore sustainability

5.83 **Without further reforms, rising dependency ratios and the erosion of pension adequacy will pose serious medium- and long-term challenges.** The number of pensioners will surpass the number of contributors by 2053. An overwhelming majority, if not all, retirees until 2032 will be from the mono-pillar scheme but by 2050s most retirees will be from the multi-pillar scheme. Pension adequacy in North Macedonia will erode in the medium and long run. Without further reforms, new gross replacement rates[150] of average PAYG-only participants ("non-switchers" to funded system) will decline from around 51 percent to 30 percent in the next decade. The main factor affecting new replacement rates is the declining effective accrual PAYG rate. Second pillar annuity, generated from a 6-percent contribution rate with moderate rate of return assumptions and an inflation indexed annuity in payout stage, would compensate for the reduction in PAYG accrual for switchers.[151] The first cohorts of males from multi-pillar scheme would have lower replacement rates from the funded pillar but it will grow over time as they accumulate more years in the funded scheme (Figure 86).

Figure 86. Replacement rate for new male 'switchers' from PAYG and Funded scheme



Source: World Bank staff estimates.

150 The ratio of first gross pension in gross average pensionable base (full career earnings).
151 The simulation assumes payout of price-indexed life annuities at retirement.

Box 9. Long-term pension projections: baseline

A status-quo simulation, assuming no changes in current parameters, was carried out using the PROST model.[152] The baseline data for the model is 2019 but it has been adjusted using 2022 numbers. The PROST model incorporates North Macedonia's most recent demographic and economic data (up to 2022), projected economic and demographic trends, and macroeconomic assumptions. The macroeconomic assumptions rely on the Government's medium term macroeconomic framework and the IMF macroeconomic framework for North Macedonia. The projection assumes alleviating inflationary trends and restoration of moderate real wage growth since 2023. Long run sluggish GDP trend, with long run GDP growth rate falling below 1 percent, results from the population aging and no-immigration assumptions applied in the baseline.[153] Simulation assumes a steady state real annual rate of return of 2 percent on second pillar accumulation[154] and 1 percent real rate of return during decumulation (annuity payment) phase for the whole simulation period which ends in 2080.[155]

5.84 **In the absence of further reforms, the pension deficit will widen further.** The 2022 switchback to Swiss indexation without accompanying fundamental parametric changes (like retirement age increase or higher contribution rate) has fueled into pension expenditures and deficit projection. Prior to the indexation reversal, the pension deficit exhibited a declining pattern in the next decade and its elimination in the long run. Reintroducing Swiss indexation and upward adjustment of accrual rates in the PAYG scheme has deepened the deficit in the coming decade, as system dependency worsens. Unless the pension system parameters are adjusted, the public PAYG pension system will continue to crowd out more funds from other public needs and prevent further adjustments between pension pillars (Figure 87).

5.85 **Policies to address pension adequacy and fiscal sustainability include reforming indexation, changing contribution rates, and increasing the retirement age** (Table 36). Simulation 1 tests the impact of reversing the recently introduced Swiss pension indexation pattern (50 percent CPI and 50 percent average gross wage) back to previous CPI indexation, which is the best international practice. Simulation 2 gradually increases and equalizes retirement ages for men and women and tests how this would impact pension levels and expenditures. In Simulation 2 retirement age increases by 3 months per year for women and 1.8 months per year for men (parallel with an increase in life expectancy) until they are equalized at 67 (by 2044) and grows by 2 months per year for both genders, parallel with life expectancy until 2080.[156] Simulation 3 tests the impact of gradually rising PAYG contribution rate from 18.8 to 21 percent in 2025 with additional rate fully allocated to PAYG in the same manner as in 2020 and 2021. Simulation 4 shows a combined impact of all policy proposals (Figure 88).

5.86 **Individual policy measures would only partially stabilize the pension system's finances.** A gradual increase in the retirement age would prolong workers' stay at the labor market and increase new replacement rates if accompanied with an increase in the length of service. It would slow the labor outflow to retirement, and gradually reduce pension expenditures and deficits by up to 2.5 percent of GDP in the long run (Figure 87). Indexing pensions to the CPI instead of using the Swiss formula would reduce pension deficits as strong as the higher

152 Prepared with World Bank's Pension Reform Options Simulations Toolkit (PROST) model, adjusted to fit North Macedonia's pension system parameters. There have been four revisions of the PROST model for North Macedonia since 2000.

153 It is assumed that the activity rates of the working age population would remain unchanged and that the wage bill would remain a constant fraction of GDP. As a result, the productivity growth reflected in real wages and the real GDP growth would ultimately result in a (sluggish) growth trajectory of a typical aging economy.

154 Note that the rate of return on DC scheme not only affects adequacy from pillar 2 but also affects the likelihood of individuals qualifying for minimum pensions e.g. if Dc scheme returns are lower than the growth rate of minimum pensions then more individuals would simply get minimum pensions, which as is the case currently, applies to both pillar 1 and pillar 2 benefits.

155 The rate of return assumption is slightly below the real rate of return of 3.6 percent that second pillar funds realized since inception.

156 Increasing the retirement age with life expectancy keeps the duration of retirement period unchanged for all future generations.

retirement age and the savings would be more immediate as a change in the retirement age only affects flows into retirement, while a change in the indexation affects both stock and flow of pensions. It would, however, come at the expense of declining average replacement rates as the savings would come from lower relative pensions. Higher PAYG contribution rate would bring in revenues immediately, but would have a lower impact on deficit reduction. All three policies individually would prevent the further buildup of PAYG pension expenditures and/or deficit, though they impose a burden on a certain cohort – future pensioners who are forced to work longer (retirement age), all current and future pensioners (CPI indexation), or current and future pension system participants (contribution rate).

Figure 87. Simulation results of individual policy measures: Overall pension deficit (% of GDP)

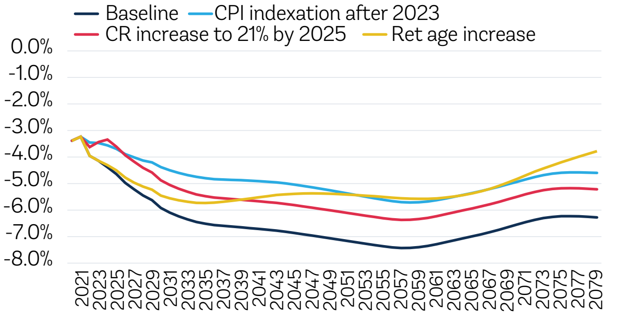
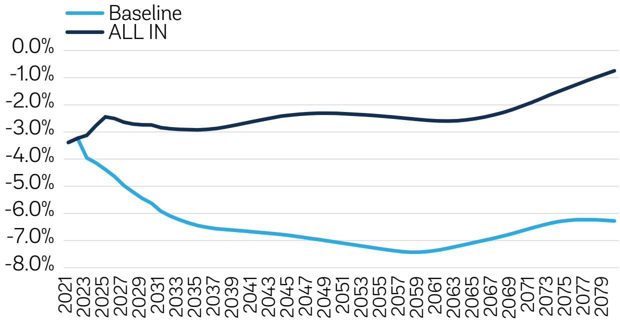


Figure 88. Baseline vs Combined policies–Overall pension deficit (% of GDP)



Note: These deficits include the spending on health contributions to pensioners.
Source: World Bank staff estimates.

Table 36. Pension Policy Scenarios Simulated for North Macedonia

Scenario	Individual Policy Measures
100% CPI	Baseline + pensions indexed with CPI inflation from 2024 (return to previous indexation pattern).
Retirement age	Baseline + retirement age increases starting from 2024 going up to 67 by 2044 (by 1.8 months per year for men, 3 months for women), and to 73 by 2080 (by 2 months per year).[157]
Contribution rate slow	Increases to 21% in 2025 (15% 1st pillar, 6% 2nd pillar) gradually: In 2023 contribution rate is set at 19.5% (13.5% 1st pillar, 6% 2nd pillar) In 2024 contribution rate is set at 20.3% (14.3% 1st pillar, 6% 2nd pillar) In 2025 contribution rate is set at 21% (15% 1st pillar, 6% 2nd pillar
ALL IN	Baseline + 1 + 2 + 3

5.87 **A policy package that integrates all three policies described above could yield more balanced outcomes** (Figure 88). A combined package (ALL IN) channels the supplementary contribution rate to PAYG only. PAYG expenditures decline strongly below the baseline values. Higher replacement rates (for new beneficiaries) that come with a higher retirement age counterbalance the negative impact of the switchback to CPI indexation on benefit ratios (of existing pensioners). New retirees start retirement wealthier and keep the same purchasing standard (with CPI indexation) instead of starting low with gradually rising standard due to a real wage growth (with Swiss indexation). With higher retirement ages both PAYG-only and multi-pillar pension replacement rates fall slower and stabilize earlier than in the baseline. Overall pension deficit of the ALL-IN package would be halved in about a decade.

157 Under this scenario it is assumed that among those workers who would be subject to higher retirement ages, 70% will continue to contribute, 20% will claim early retirement and 10% will claim disability.

Recommendations

5.88 **Prior to recent policy interventions, the pension system in North Macedonia already faced large deficits, the potential erosion of benefit adequacy, and the risk of uneven benefit levels across generations.** The current level of pension benefits is relatively high in comparison to other countries in the region and is not supported by strict and sustainable benefit indexation, retirement-age increases, or actuarially fair contribution rates. The funding reserve of the mandatory pensions has been growing, but much of it remains invested in government bonds. Changes to pension parameters combined with ad hoc increases and reversals by the government have also eroded trust and weakened the transparency of the system.

5.89 **Reform options requiring stakeholder consensus:** (i) reconsider CPI indexation; (ii) gradually increase pension contributions by 2.2 percent while boosting compliance; (iii) gradually increase the retirement age while introducing labor-market programs to upskill/reskill older adults; (iv) allow for the diversification of the DC scheme's funds and leverage lifecycle investments to improve returns; and (v) evaluate options for structuring and indexing payouts under the DC scheme.

5.90 **Changes to ensure integrity of the overall system:** (i) require medium- and long-term financial projections before any ad hoc changes to ensure predictability of benefits and align short-term decisions with long-term consequences; (ii) systematically index minimum pensions and clarify how minimum pensions will be applied once the multi-pillar scheme matures in 2032; (iii) establish an actuarial unit and require PIOM & MAPAS to produce actuarial reports every 2-3 years; and (iv) develop a strategy for ensuring coherence between the contributory schemes and the newly launched social pension.

5.91 **Changes to improve trust and transparency:** (i) stop reporting health contributions as part of the pension balance to ensure transparency; (ii) create an easy-to-use pension calculator so individuals can estimate their benefits, either from mono-pillar or multi-pillar scheme; and (iii) improve pension awareness and consider incentives to boost savings under the voluntary pension scheme.

5.92 **Policy reforms need to be complemented by measures to enhance transparency and predictability.** The adequacy expectations of pensioners need to be managed through proactive communications, and future reforms should aim to reduce intra- and inter-generational equity. In addition to changes to pension parameters, policymakers must also implement complementary measures affecting labor markets, health, and long-term care expenses so that needs of a growing elderly population are adequately met as North Macedonia's demographics continue to evolve.

D. Financing The Future: Improving the Efficiency of Education Spending

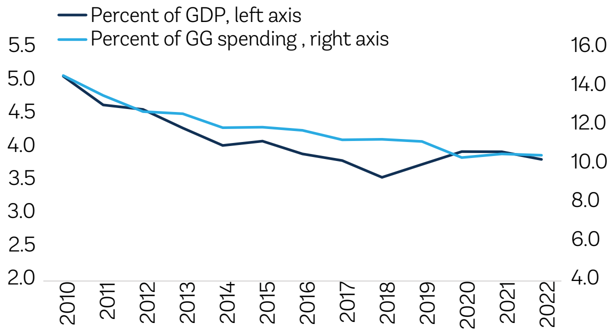
Education spending is low and inefficient

5.93 **Education spending has declined markedly over the past twelve years.** It stood at 5.1 percent of GDP in 2010 to decline to 3.8 percent in 2022 (Figure 89).[158] During the same period, there was a decline of education financing as percent of overall General Government (GG) spending from 14.6 in 2010 to 10.5 in 2022. Compared to regional peers such as Bulgaria, Montenegro and Serbia, North Macedonia spends slightly more on education as a share of GDP, but far less than other small European countries[159] (1.4 percentage points less) and the EU27 (1

158 There has been a slight increase in 2020 and 2021 due to the effects of GDP decline due to the COVID-19 pandemic and some additional financing for COVID-19 related spending in these two years, mostly done thought local governments own financing.
159 The seven small European countries (EU7) include: Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovenia and Slovakia.

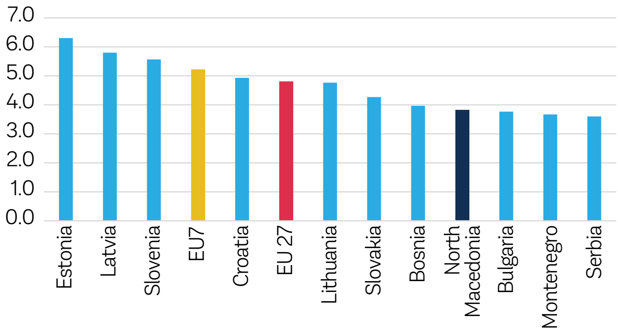
ppts less) (Figure 90). North Macedonia's spending on education is below the internationally recommended levels by the Education 2030 Framework for Action, stating that at least 4-6 of GDP and/or at least 15–20 percent of total public expenditure should go to education.[160]

Figure 89. Education spending, % of GDP and general government spending



Source: MoF and World Bank staff own calculations.

Figure 90. General government education spending as % of GDP (average 2018–2020)



Source: Eurostat, national authorities, and World Bank staff own calculations.

5.94 **Apart from the low spending, the efficiency of spending could be improved as well.** The input allocative efficiency indicates the capacity of the government to distribute resources to meet its strategic objectives. This requires strategic planning and an ex-post evaluation of the ongoing programs. In the case of North Macedonia, input efficiency score[161] indicates that North Macedonia spends about 37 percent more to achieve the same output levels (as measured by PISA 2022 results) than the most efficient producer, suggesting that either better results could be achieved with the same level of spending, or the same results could be achieved with less public resources (Figure 91). Comparator countries have been able to achieve better learning outcomes (as measured by PISA testing) also with the same or lower level of instruction time (Figure 92). The country is still well below comparator peer levels in terms of education outcomes achieved by students in international large-scale assessments such as PISA or TIMSS.

Figure 91. Efficiency of government spending and learning outcomes

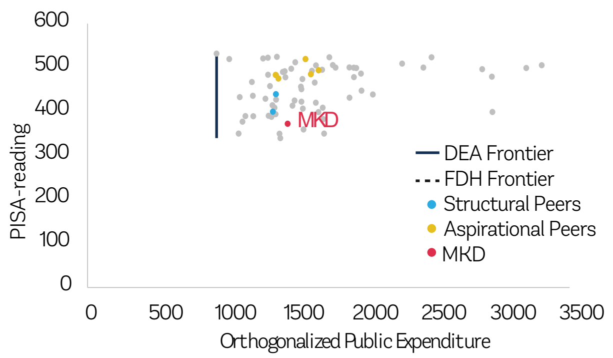
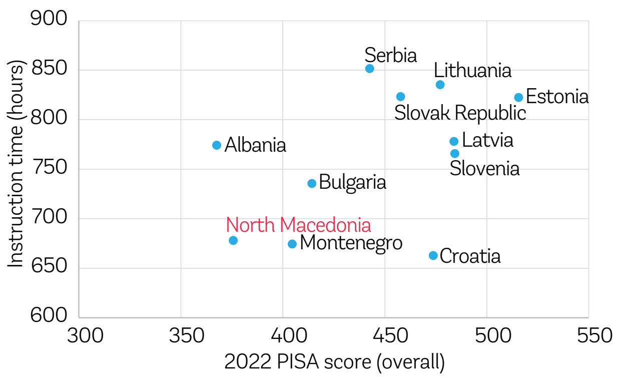


Figure 92. PISA results 2022, government spending and instruction time



Note: Structural peers include Albania, Bosnia and Herzegovina, Montenegro, Serbia, Kosovo and Moldova, while aspiration peers include Croatia, Estonia, Latvia, Lithuania and Slovenia.

Source: Eurydice, PISA database, MoF, and World Bank staff calculations.

160 https://uis.unesco.org/sites/default/files/documents/education-2030-incheon-framework-for-actionimplementa-tion-of-sdg4-2016-en_2.pdf

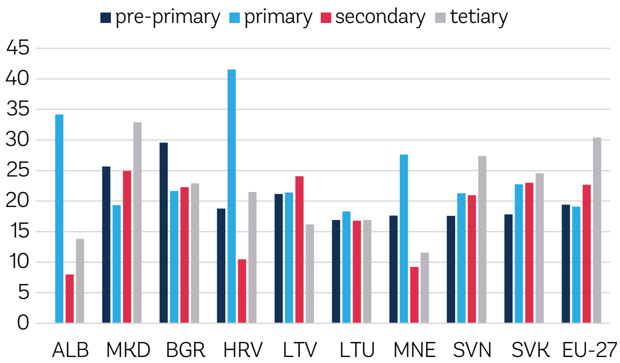
161 The estimation of education efficiency scores is done with the use of the following methodologies: i) Data envelopment analysis (DEA); ii) Bootstrapped DEA; iii) Free Disposal Hull (FDH); and iv) Bootstrapped FHD. The country efficiency score is calculated as an average of all methodologies used.

5.95 **Moreover, despite the declining spending, its intensity[162] is not well aligned across education levels and municipalities.** When examining student expenditure as a share of GDP per capita, North Macedonia invests significantly in preprimary and higher education due to limited enrollment at these levels. Conversely, despite representing the bulk of educational spending, primary education sees lower investment per student. In comparison to neighboring countries, North Macedonia's spending per primary student ranks second to last, only surpassing Bosnia and Herzegovina (Figure 93).

5.96 **Moreover, there are vast disparities in spending among municipalities.** Many municipalities spent far less than the national per-student average of MKD 87,853 (US$ 1,500) in 2022.[163] In primary education, per-student spending ranges from MKD 39,000 (US$ 670) to MKD 229,000 (US$ 3,930), a difference of almost six times between the lowest and highest spending municipality. The disparity is even more pronounced in secondary education. Part of these differences may be explained by the type of municipality (rural versus urban) and the transport needs for schools, but also on the current funding formula that seeks to ensure that less-populated municipalities receive more funding to cover all their expenses which leads to inefficiencies in the system.

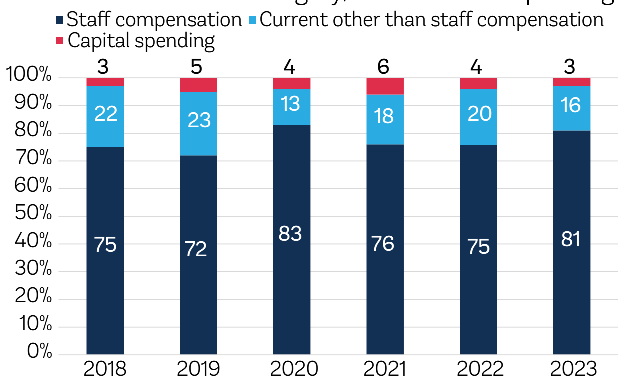
5.97 **Spending on tertiary education in North Macedonia is also lower compared to peer countries.** It stood at 0.77 percent of GDP in 2020 (the latest available for international comparison), declining from 0.82 in 2018 and far below the EU27 average of 1.27 percent of GDP. As a result, public universities lack the adequate infrastructure and resources needed to improve the quality of teaching and research. On the other hand, North Macedonia has the highest spending per student in tertiary education which, combined with the low enrolment rate and high rate of late graduation, points to possible inefficiencies in the system.[164]

Figure 93. Spending per student and education level 2020, as % of GDP



Source: Eurostat, national authorities, and World Bank staff own calculations.

Figure 94. Spending on pre-university education, by economic category, as % of overall spending



Source: National authorities and World bank staff calculation.

5.98 **The current spending structure reveals a pronounced imbalance and inefficiency, with a disproportionate amount allocated to salaries—a trend that has intensified over recent years.** In pre-university education, staff compensation, including salaries, constitutes 80 percent of total expenditures, surging to over 85 percent in primary education in 2023, up from 77 percent in 2019 (Figure 94). The salary increases, aimed at aligning education sector wages with broader economic salary growth, have led to reductions in non-salary current expenditures—from 23 percent in 2019 to just 16 percent in 2023. Consequently, funding for essential school needs such as utilities and transportation has dropped, causing financial strain for local governments and resulting in accumulating school arrears. This unsustainable spending pattern jeopardizes the system's viability and diminishes the capacity to support other vital areas, such as capital investments and teacher professional development.

162 Spending per student

163 Spending in nominal terms has increased significantly due to the rising prices in 2021 and 2022 (up from MKD 66,875 in 2020), but as percent of GDP it has declined as mentioned above.

164 For more information please see Public Finance Review North Macedonia–Education, Chapter 2 and 3 (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099558203072321711/idu046907b9306ebd044340842506d4d21aee907)

5.99 **The problem of unequal distribution of spending is also evident in the capital spending which is severely underfunded.** The Central Government bears the primary responsibility for funding capital expenditures in schools. Nonetheless, Local Governments (LGs) are tasked with the crucial role of maintaining and repairing school facilities, as outlined in the division of delegated functions. Despite this mandate, LGs allocate little funding (if any) for these purposes, as they are faced with a combination of low financing and rising financial difficulties. Thus, both the flow of funding and the investment level, as well as the spending for recurrent maintenance are far from optimal standing at just 3 percent of the overall spending in pre-university education. This is less than the average of 7 percent in regional peer countries that are at a higher level of development and likely have less immediate needs for reconstruction but still invest more.

5.100 **Mobilizing more resources is only part of the challenge, which should go hand in hand with ensuring that resources are used efficiently.** There is a clear need to reverse the trend of declining education spending, but raising the level of funding without first reducing spending inefficiencies may not lead to the desired outcomes, which appears to be a bigger challenge. Prioritizing reforms to strengthen the efficiency of spending in the system by ensuring that every Denar spent delivers the maximum possible value is therefore an essential first step for the country.

Optimization of the school network is necessary

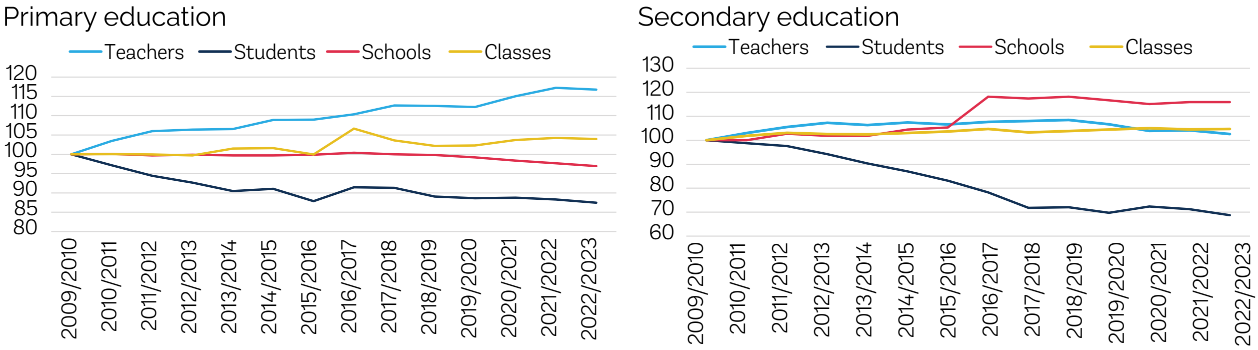
5.101 **The population of North Macedonia is experiencing a decline driven by aging and substantial out-migration, which has consequential effects on the demand for educational services.** The country needs to optimize the use of resources within the education system and make it more efficient. The steps that can be taken to improve efficiency of spending include optimizing the school network, reassessing the student-teacher ratio and the class-size requirements, and improving the public financial management within the sector aimed at streamlining the division of functions between local and central levels and the oversight and accountability. These are the most obvious shortcoming that should be addressed with urgency, both from the perspective of network optimization and of revisiting the financing formulas—a reform that has already started.

5.102 **Consolidating the school network is a necessary step in optimizing the financing and increasing the efficiency and effectiveness.** The current school network is costly to maintain and is not following demographic and enrolment trends. Despite a significant drop in students over the last decade, there has been an over-hiring of teachers in the primary and secondary school networks. Over the past two decades, the average decline of the population age 3–18 years is 1.6 percent per year, a cumulative drop of 27 percent, which significantly reduces the number of enrolled children. For instance, in 2022, 84 percent of primary schools noticed a decrease in the number of enrolled students compared to 2009. Despite this, there has been a phenomenon of proliferation of teachers and classes in the primary and secondary school networks (Figure 95).

5.103 **The continuous increase in number of teachers despite declining student numbers is not due to changes in curriculum, but the causes appear to be structural.** Thus, over 2009-2022 for every 8 students lost there was one additional teacher hired, which looks contradictory.[165] As a result, the student teacher ratio declined by 25 percent from 13 in 2009 to 9.7 in 2022. This is far below the OECD average of 15 students per teacher. Moreover, this decline of student-teacher ratio has not led to improvements in the quality of education given the PISA results. Going forward, the teacher hiring process needs to tighten and centralize to avoid over-hiring, and prevent further erosion of the system efficiency.

165 For example, between 2009 and 2022, there are only 8 LGUs which had decreased teaching staff as a result of the decline in students. On the other hand, remaining 72 LGUs had increased teaching staff despite loss of students.

Figure 95. School network indicators, primary and secondary education (index 2009 = 100)



Source: State Statistical Office and World Bank staff own calculations.

5.104 **The introduction of the newly drafted funding formula for primary education and gradual optimization of the primary school network should be a priority.** The old formula provides no incentives to optimize the network and maintains the declining efficiency. The Ministry of Education and Science has drafted the new funding formula[166] for primary education and developed an optimization plan. The goal of the new formula is to convert the current unfunctional formulas into 'per student' formula that incorporates performance-based financing, to improve management of school networks and human resources in education. In addition, the newly proposed per-student funding formula[167] for primary education is estimated to increase education spending in North Macedonia to the average of the EU by the end of 2026, with the effective share of salaries in the total transfers expected to decline in favor of other expenditures, including a cost-saving potential in the future and an opportunity for more effective use of the existing infrastructure. Both the optimization plan and the introduction of a new funding formula are anticipated to correct some of the inefficiencies that exist in the system of education financing in North Macedonia.

5.105 **In parallel with the optimization plan, the Government needs to work on streamlining the Public Finance Management (PFM) process in the education sector.** Given the significant fiscal constraints the government faces, it is critical that the PFM system is responsive to clearly defined human capital outcomes. This is particularly true in the case of connecting the different functions of the central and local governments in education, their adequate definition, implementation, and financing. To enhance local government financial management in education, it's recommended to refine PFM systems, define fiscal roles, ensure block grants cover only essential costs, and foster annual inter-agency budget discussions. Additionally, the Ministry of Education should bolster its supervisory role to guarantee effective fund allocation and monitor educational outcomes.[168]

Inefficiency leads to inequity in access to and quality of education

5.106 **Access to education has improved over the years, especially in preprimary and tertiary education, and at all levels for specific minorities.** However, there is still a wide gap in coverage compared to other countries in the region and the EU average (Figure 96). Preprimary enrolment for five-year old children has seen an expansion from 26 percent in 2010 to 38 percent in 2022 as the access to preprimary education in the country improved by taking specific measures

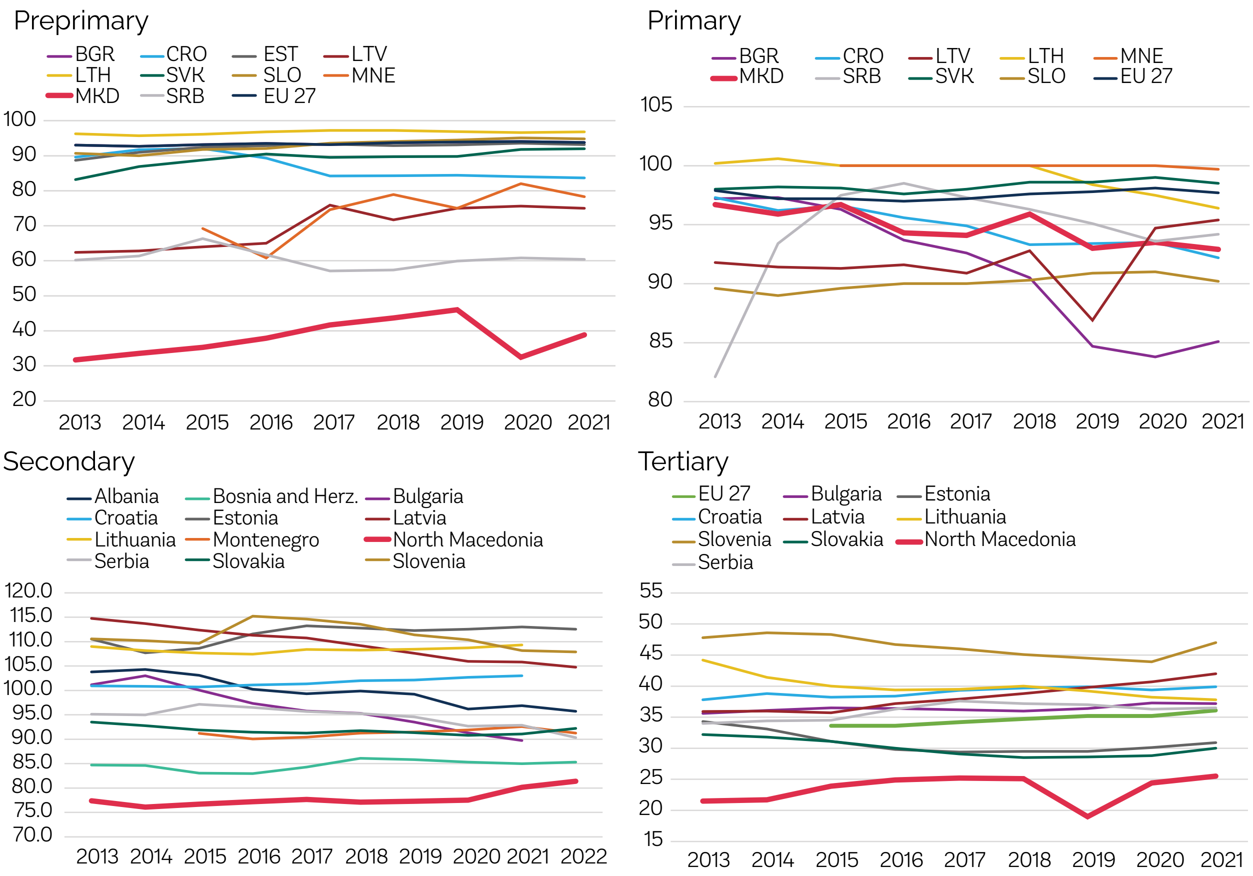
166 Supported by the World Bank financed Primary Education Improvement Project and in partnership with UNICEF.

167 The newly proposed funding formula consists of four components: (1) basic component (applies to all students without exception); (2) variable component (applies only to certain students and covers the costs for vulnerable categories); (3) adjusting component (provides a smoothing effect on the results obtained from the previous two components); and (4) development component (provides performance-based incentives to schools).

168 For more information please see Public Finance Review North Macedonia – Education, Chapter 3 part C (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099558203072321711/idu046907b9306ebd044340842506d4d21aee907

to increase resources and expand preschool places.[169] Nevertheless, this is still below the EU average of 95 percent. Access to preprimary education is particularly uneven for Roma children, reaching only 4 percent. Less than 10 percent of children in the poorest quantile attend preprimary school compared to more than 50 percent of the wealthiest children. Low levels of preprimary enrolment create an uneven playing field, with many children entering primary school without basic literacy and numeracy skills.

Figure 96. Enrollment ratios, per education level



Source: Eurostat, UNI and World Bank staff own calculation.

5.107 **Enrolment in primary school is in line with most regional peers; however, it has been on a downward trend.** Enrolment at the beginning of the last decade stood at 96 percent, but has steadily declined to 93 percent in 2022, leaving a significant number of children without education. In secondary education, even though enrolment rates have increased, from 77 percent in 2013 to 81 percent in 2022, it is still far behind the level of EU and regional peers (98 percent on average). This discrepancy is especially concerning given that secondary education is compulsory in North Macedonia. Enrolment ratios in tertiary education, despite some moderate improvements, are the lowest among comparators. These low enrolment rates across all education levels translate into deficiencies in the labor market and reduce the quality of human capital, which in turn dampens possibilities to improve productivity and growth.

5.108 **The low enrolment rates translate into a significant number of children not being covered by the education system.** A high gross enrolment rate generally indicates a high degree of participation, whether the pupils belong to the official age group or not.[170] In North Macedonia, the difference between the actual level of gross enrolment was some 4-10 ppts

169 In 2018, the Government adopted a new comprehensive Education Strategy (2018–2025) which outlines a goal to "significantly increase the coverage of children in preschool education". One of the strategic priorities of the Government was to increase the percentage of children attending preschool children by 50 percent over four years (2017–2021).

170 A gross enrolment ratio approaching or exceeding 100 percent indicates that a country is, in principle, able to accommodate all of its school age population.

below the full coverage in primary education; however, it increases to 60 ppts in pre-primary education. This translates into a significant number of out-of-school children. For example, the average number of children out-of-school for preprimary age is over 14,000 children. In primary education this number is over 10,000, while in the secondary it increases to over 22,000 children (Figure 97 and Figure 98).[171] The system efficiency remains low in high education as well, with high dropout rates and long average time to completion. In 2020, only 37 percent of all university students graduated on time.

Figure 97. Enrolment rates and number of out-of-school children

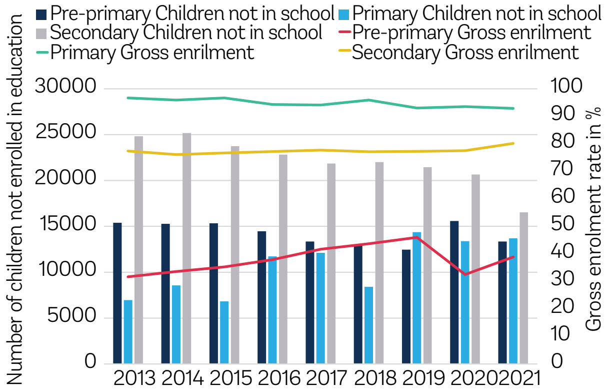
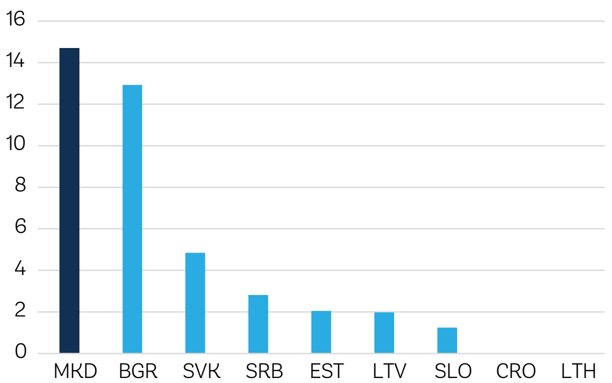


Figure 98. Out-of-school children at end of primary education in 2019 (% of the population of the corresponding age)



Note: Out-of-school rate is calculated as 100 – (students of a particular age who are enrolled in education at any level / Total population of that age ×100).

Source: Eurostat, State Statistical Office and World Bank staff own calculation.

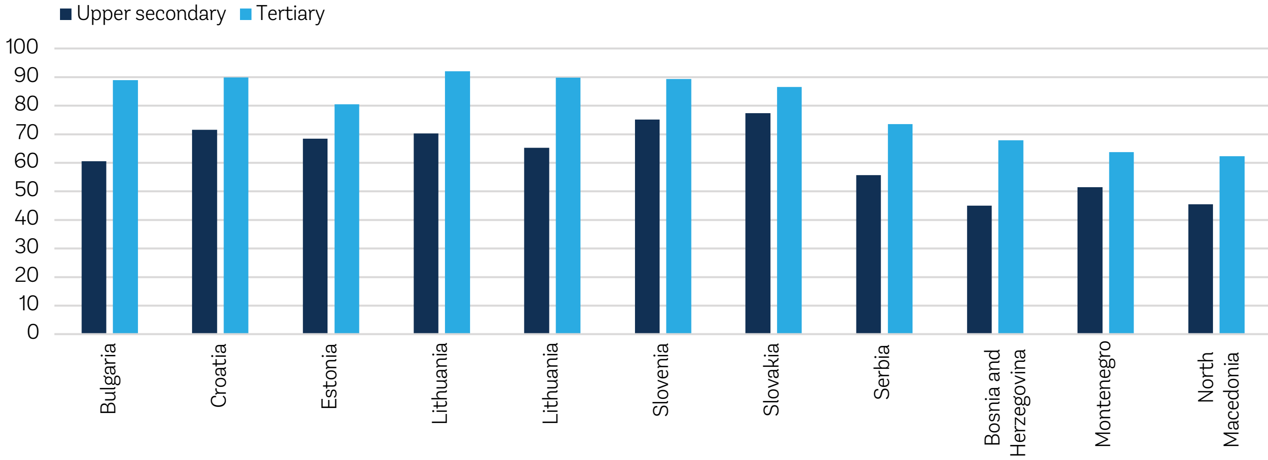
5.109 **The educational landscape is marred by gaps that later hinder the seamless shift from school to the workforce**. Low participation rates at various stages of the educational journey culminate in a significant segment of youth being disengaged—not only from educational pursuits but also from the labor market. North Macedonia faces a particularly stark reality, with 26.2 percent of its young population—translating to over 103,000 individuals or about 6.4 percent of the total population in 2020—caught in this dividing line, neither employed nor acquiring skills through education or training. Their potential contributions to the economy remain unrealized.

5.110 **Moreover, even those who successfully finish education face difficult conditions on the labor market.** Even though education returns (in terms of wages) increase when a higher degree of education is obtained,[172] employability in North Macedonia is the lowest compared to regional peers (Figure 99). Only around 45 percent of young people with upper secondary education find a job within 1 to 3 years of completing school. This is far below the 75 percent average of the EU peers and also lower than in Montenegro or Serbia. Having a university diploma also does not guarantee success in the labor market. Only 62 percent of university graduates find a job within 1 to 3 years, far below the 88 percent average of the EU and all Western Balkan peers.

171 If we consider the net enrolment rate that only refers to the actual school participation of official school-age population for the given level of education (that is, it does not include overage/underage or remitting students), the numbers are even higher.

172 For more information please see Public Finance Review North Macedonia – Education, Chapter 3 part A (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099558203072321711/idu046907b9306ebd044340842506d4d21aee907

Figure 99. Employment rates by level of education, 1 to 3 years from completing the highest education level, ages 18–34, average 2019–2023



Source: Eurostat and World Bank staff own calculation.

Education system also delivers suboptimal quality outcomes

5.111 **International results for 15-year-old students reveal concerning trends in student performance.** The latest PISA 2022 results indicate a significant increase in the share of below minimum proficiency level[173] students in all disciplines (reading, mathematics, and science) compared to 2018 results. The worst performance is registered in reading, where 74 percent of students are below minimum proficiency level (Level 2), while in mathematics the level reaches 66 percent. Moreover, for all three subjects, the share of students in North Macedonia below basic proficiency was significantly higher, almost twice as high, compared to the ECA region average. Compared to the results of 2018, the drop in reading and mathematics exceeded 30 score points in 2022—roughly a year-and-a-half worth of education. In North Macedonia, almost no students scored at Level 5 or higher.[174]

5.112 **Performance results were worst for disadvantaged students.** 82 percent of students in the lowest socioeconomic quintiles were below minimum proficiency (Level 2) compared to 44 percent of students in the highest socioeconomic quintiles.[175] However, over the most recent period (2018 to 2022), the gap on PISA between the highest-scoring students (10 percent with the highest scores) and the weakest students (10 percent with the lowest scores) narrowed in mathematics, reading and science, meaning that low achievers became stronger and higher achievers became weaker.[176]

5.113 **The COVID-19 pandemic does not provide the sole explanation for the drop in student performance; yet it seems an obvious factor that may have impacted results.** In the 2019-2022 period, on average, schools in North Macedonia were closed for five months due to the pandemic (equivalent to almost two-thirds of an academic year). This compares to an average of three months of school closures in Europe and Central Asia (ECA).[177] In addition, many students

173 PISA results group student performance according to six proficiency levels for each subject, from the lowest performing ones (Below Level 2) to the best performing students (Level 6). Level 2 is used as a reference and baseline group and represents the level of proficiency at which students begin to demonstrate the competences that will enable them to participate effectively and productively in life as continuing students, workers and citizens. Students who do not attain baseline Level 2 are referred to as "low performers". Students who attain Level 5 or Level 6 are top performers and well on their way to becoming the skilled knowledge workers of tomorrow.

174 Level 5 students can comprehend lengthy texts, deal with concepts that are abstract or counterintuitive, and establish distinctions between fact and opinion, based on implicit cues pertaining to the content or source of the information.

175 World Bank. 2023. North Macedonia PISA 2022 results brief. Washington, DC: World Bank.

176 OECD. 2023. North Macedonia PISA 2022 fact sheet.

177 World Bank. 2023. North Macedonia PISA 2022 results brief. Washington, DC: World Bank.

reported having technical problems learning remotely and challenges to do schoolwork.[178] Support for students' well-being was also limited when schools were closed: only 22 percent of students reported that they were asked daily, by someone from the school, how they were feeling.

Teacher qualifications and training

5.114 **Teacher qualification levels have increased over the past decade.** Most of the teachers in primary and secondary education hold a university degree. In primary education, the share of teachers holding a university diploma has increased in both primary and secondary education, from 61 percent to 72 percent and from 77 percent to 80 percent, respectively. At the same time the share of teachers with a masters or a PhD diploma has also increased at both levels, even though from a low level, standing at 3 and 6 percent, respectively.

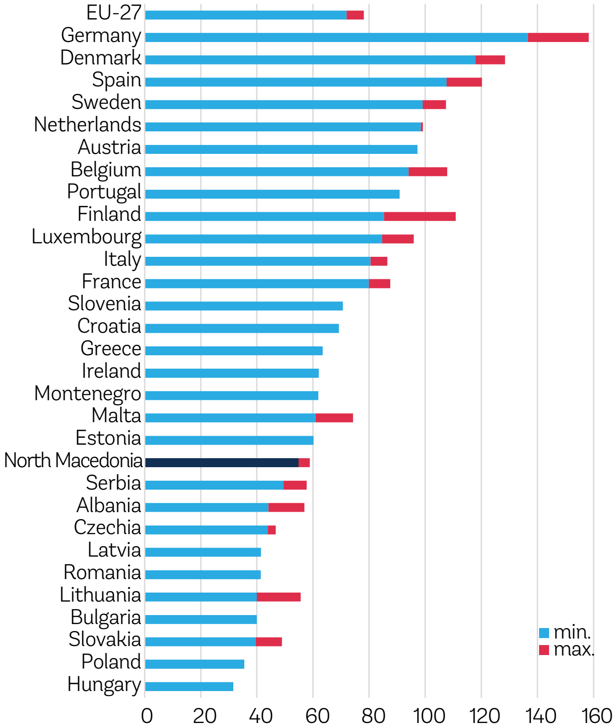
5.115 **The age structure of the teaching staff is on par with regional peers.** Around half of teachers in preuniversity education in the country are between 35 and 49 years of age. Relatively older teachers (aged 50 or over) account for 30 to 37 percent of all teaching staff, depending on the level of education. Aging is posing a challenge to the system going forward and should be addressed. The share of young teachers (ages 25–34) in primary education had declined by 7 ppts from 2013 to 2021. This is the highest decline among regional peers (together with Croatia) and it is contrary to the developments in other countries, where the share of young teachers has actually grown. The same trend is observed in the secondary education where the decline in the share of young teachers is 6 ppts in the same period. This negative dynamic is likely driven by the declining prestige and attractiveness of teaching as a profession, combined with the lack of professional development and career advancement opportunities.

5.116 **Teacher salaries in North Macedonia appear to be on par compared to regional peers, but are far below those of countries with better education outcomes.** Considering teacher salaries as percentage of purchasing power parity (PPP) adjusted GDP per capita, salaries in North Macedonia stand below 60 percent of GDP per capita level (the average for the EU27 countries is 78 percent) (Figure 100). However, if we compare teachers' salaries with education outcomes (Figure 101), North Macedonia's PISA results are far behind comparator countries. Thus, it seems that teacher salaries are one of the determining factors but not the only one in securing a motivated teacher workforce that can deliver a high-quality instruction in schools. Salary progression is minimal, which may lead to demotivation of teachers and the low attractiveness of the teaching profession among prospective students. Although starting salaries are important in attracting new teachers, they are not the only factor to consider. In the case of North Macedonia, entry salaries are relatively low and the difference between the statutory salary of a new teacher in primary and lower secondary and one that has 10 or 15 years of experience is just 5.1 percent and 7.8 percent, respectively.[179]

178 During remote learning, 40 percent of students in North Macedonia had problems at least once a week with understanding school assignments and 36 percent of students with finding someone who could help them with schoolwork (OECD averages: 34 percent and 24 percent.

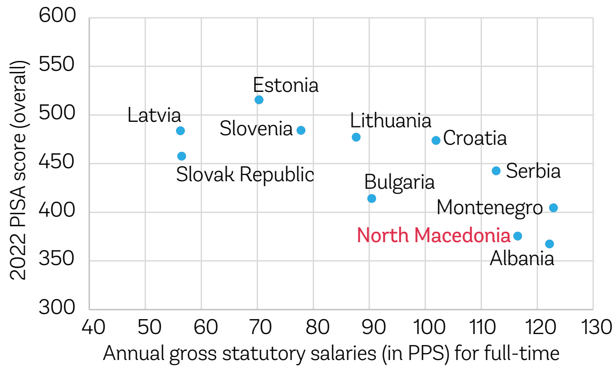
179 https://op.europa.eu/en/publication-detail/-/publication/4b900c13-6977-11ee-9220-01aa75ed71a1/language-en

Figure 100. Teacher salaries (% of GDP per capita, PPP adjusted)



Note: Minimum salaries refer to preprimary and maximum to upper secondary.
Source: Eurydice and World Bank staff own calculations.

Figure 101. Teacher's salaries vs. PISA 2022 outcomes



Source: Eurydice, PISA database, and World Bank staff own calculations.

5.117 **Finally, the professional development of teachers is significantly underfunded and not being treated as a policy priority.** The investment in this area has been declining over time and reached a low point in 2020 when no funds were allocated for teacher training.[180] Between 2015-2023, the average spending per teacher on professional development was a mere EUR 2.8 (with the average for the period 2020-2023 being just EUR 1.2).[181] The insufficient investment in teacher professional development impedes opportunities for teachers to meet the requirements of the new Law on Teachers that stipulates teachers to pass 60 hours of professional learning within three years. Although the new Law requires more mandatory professional development hours (20 hours) compared to most regional peers, it is still less than half of the time that an average teacher in the EU is required to take in a year. To address this situation, the Bureau for Development of Education (BDE) has recently renewed and improved the procedures for identifying teachers training needs and selecting quality providers. This reform needs to be sustained beyond the pilot stage as persistent professional development enables teachers to continually improve their skills and knowledge, which in turn enhances student learning and educational outcomes.

Recommendations

5.118 **Policies leading to improved efficiency:**

- Ensure effective application of the new funding formulas for pre-university education levels, with performance elements and links to national priorities, as well as ex-post analysis of the reform.
- Consolidate the school network and reduce or reallocate excess teachers in primary and secondary education to make spending more efficient. The savings from such actions can be used to increase the competitiveness and progressivity of teacher salaries and financing

180 This is despite the shift to online learning due to COVID-19 school closures and also despite the fact that most teachers were not prepared for this type of teaching and needed training and support.
181 Calculation is drawn from the World Bank Primary Education Improvement Project in North Macedonia.

of teacher training programs.

- Revert the unsustainable structure of spending by providing additional or re-direct existing resources to non-salary-related spending, including capital spending that needs to be covered and accounted for in the education budget (including medium-term planning), which is vital for improving education outcomes.
- Ensure a stronger package of accountability mechanisms with a clear and transparent division of roles and responsibilities between the local and central levels, an increased level of coordination among institutions and stronger oversight from MoES on achieving the desired education outcomes—with funding strings attached that leave some key decisions in the hands of the MoES.

5.119 **Policies leading to improved equity:**

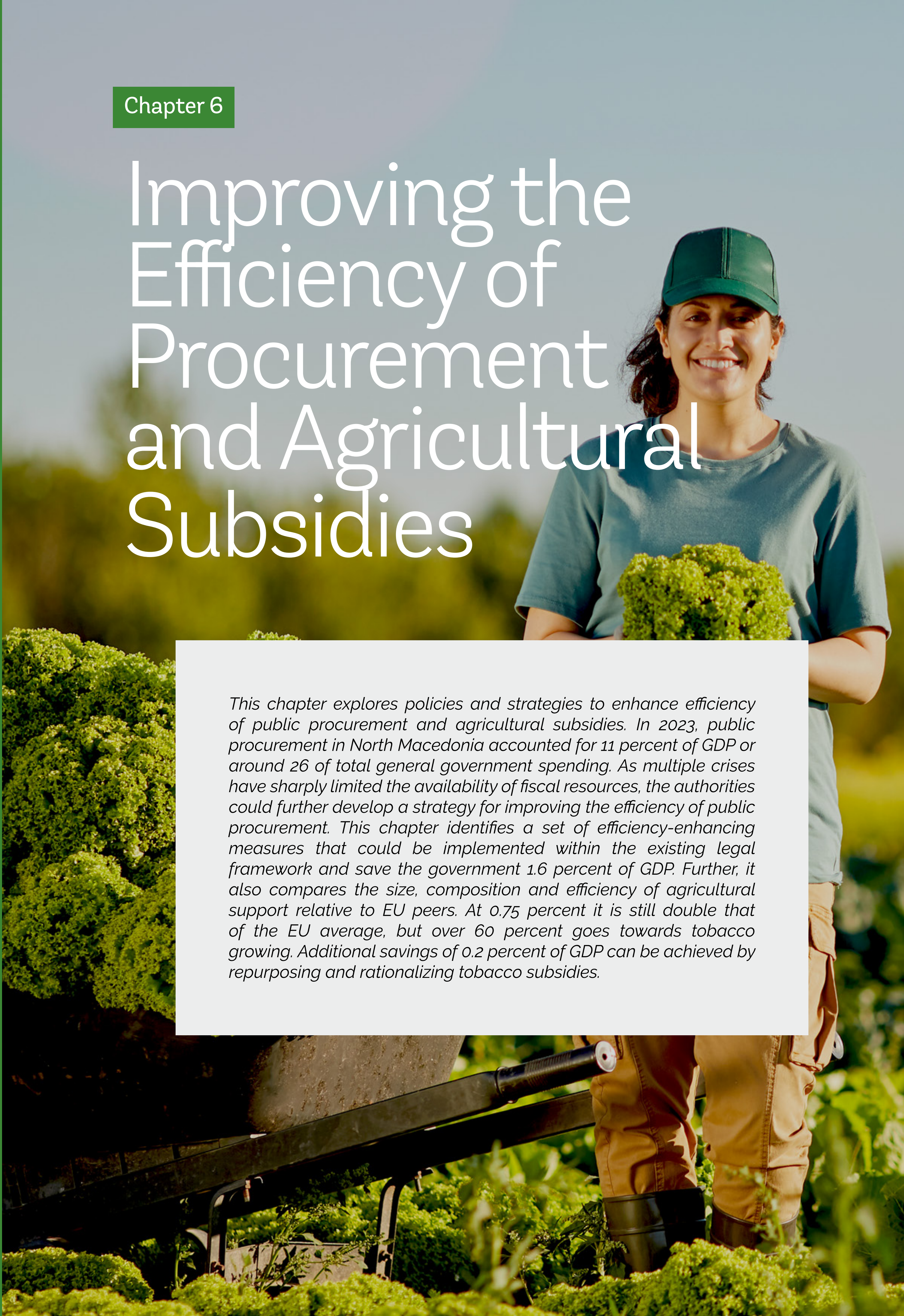
- Reduce the number of out-of-school children through improving enrolment in compulsory levels of education by offering financial and other type of support to families from vulnerable socioeconomic backgrounds. This can be achieved through better utilization of already existing mechanisms such as the education allowance and development of early warning systems preventing student drop-out.
- Ensure that adequate resources are made available to introduce programs for learning recovery to reduce learning gaps for students from disadvantaged socio-economic background.

5.120 **Policies leading to improved quality:**

- Improve the quality assurance mechanisms at all education levels so that they become an essential and regular element of accountability. This could involve improving data collection instruments and quality assurance practices, strengthening internal review processes (such as, the self-evaluation process of education institutions) and setting adequate follow-up procedures.
- Foster job-relevant skills in education and further strengthen the collaboration between education institutions and employers, especially in vocational and tertiary education.
- Enforce the models stipulated in the Law on Teachers related to progressivity of teacher career and salaries and reward well-performing teachers by the savings created from natural attrition of teachers or by better allocating the existing teaching staff within the school network.
- Provision of continuous and meaningful support to teachers in providing opportunities for professional development and equipping them with appropriate and relevant skills, knowledge and competencies—as essential elements to improve teaching quality.
- Improve student outcomes through a better use of existing resources; increasing spending without accompanying pedagogical reforms may not lead to substantial improvements in student outcomes.

5.121 **Policies leading to improved resilience:**

- Finally, the country needs to prepare for possible future shocks by investing in systemic and human capacities. This may include investment in digital infrastructure by expanding access to the internet in schools, by upscaling digital skills of teachers and students, and increasing the capacity of education institutions to design and implement digital pedagogy whether online or in person in the classroom. Further, investments into and maintenance of the school infrastructure needs to embed climate-smart and seismic designs.



Chapter 6

Improving the Efficiency of Procurement and Agricultural Subsidies

This chapter explores policies and strategies to enhance efficiency of public procurement and agricultural subsidies. In 2023, public procurement in North Macedonia accounted for 11 percent of GDP or around 26 of total general government spending. As multiple crises have sharply limited the availability of fiscal resources, the authorities could further develop a strategy for improving the efficiency of public procurement. This chapter identifies a set of efficiency-enhancing measures that could be implemented within the existing legal framework and save the government 1.6 percent of GDP. Further, it also compares the size, composition and efficiency of agricultural support relative to EU peers. At 0.75 percent it is still double that of the EU average, but over 60 percent goes towards tobacco growing. Additional savings of 0.2 percent of GDP can be achieved by repurposing and rationalizing tobacco subsidies.

A. Improving the Efficiency of Public Procurement

Digitalization of public procurement increased transparency

6.1 **The government can help reduce public spending by improving procurement practices and increasing value for money.** North Macedonia continues to lag the EU average on indicators of governance quality. This gap is widest in areas critical to economic growth such as the rule of law, control of corruption, and government effectiveness. Thanks to the digitalization of public procurement data and the use of electronic systems for procurement, audits, and judicial processes, government analysts and civil society watchdogs now have access to electronic data on public procurement transactions, including the details of individual state contracts.

Figure 102. Number of Public Contracts by Type, 2011-2022

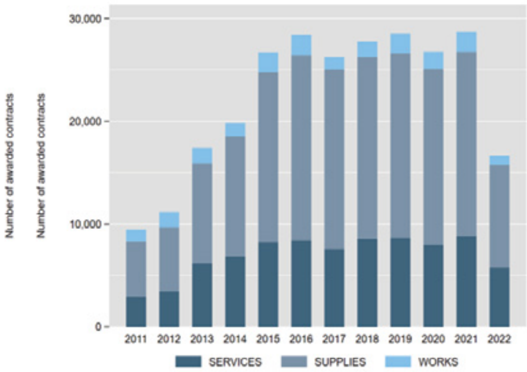
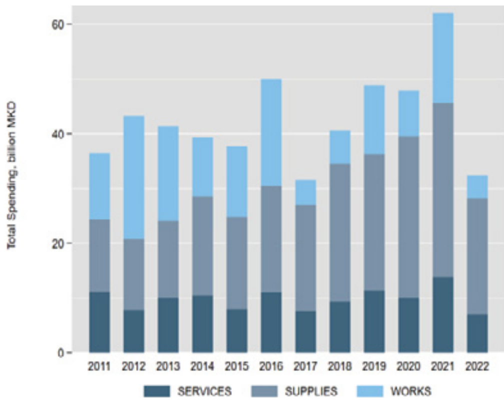


Figure 103. Annual Spending by Contract Type, 2011-2022



Source: Public Procurement portal and World Bank staff calculations.

6.2 **The e-procurement portal developed by the Public Procurement Bureau increased the transparency by enables the analysis of the cost of non-competitive public procurement tendering practices and assessing the economic impact of corruption risks.**[182] The following analysis is based on a public procurement dataset for the period from 2011 to 2022 encompassing 267,427 contracts with a total value of MKD 512 billion. The contracts are split into three types: supply contracts (MKD 247 billion), works contracts (MKD 147 billion), and services contracts (MKD 118 billion).[183] Over the period, supply contracts were consistently the largest type in terms of total value, and they represented 62 percent of all awarded contracts (Figure 102). By contrast, works contracts were the second largest type by value, yet they accounted for just 7 percent of total contracts (Figure 103).

6.3 **The analysis uses buyer addresses to assign buyers to eight statistical regions of North Macedonia, enabling the disaggregation of contracts and spending by region.** The number of contracts and total spending are both heavily skewed toward the Skopski region, where the capital, Skopje, and all major government agencies are located. During the period, the Skopski region accounted for 50 percent of awarded contracts (Figure 104) and more than 75 percent of total spending (Figure 105).

182 Abdou, A., Basdevant, O., David-Barrett, E., & Fazekas, M. (2022). Assessing Vulnerabilities to Corruption in Public Procurement and Their Price Impact. IMF Working Papers, 2022(094).

183 North Macedonia public procurement data portal: https://e-nabavki.gov.mk/.

Figure 104. Number of Contracts by Region, 2011-2022

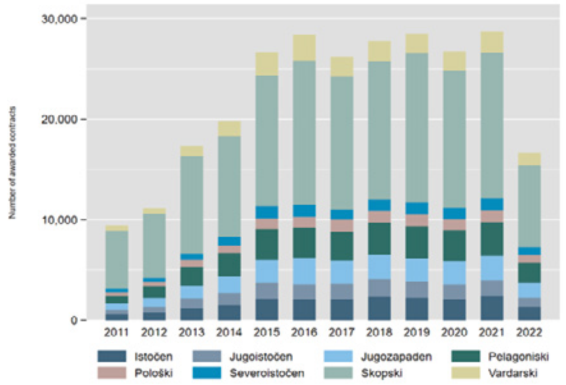
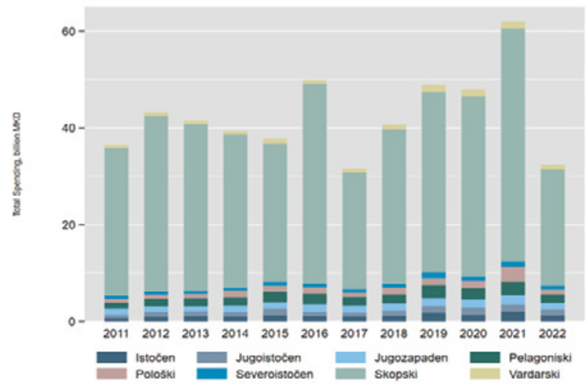


Figure 105. Total Spending by Region, 2011-2022



Source: Public Procurement portal and World Bank staff calculations.

Moderate risk of corruption in public procurement

6.4 **To explore the risk of corruption and its impact on prices, the analysis uses a corruption risk index (CRI) tailored to the context in North Macedonia.** The CRI is a composite index based on seven public procurement risk indicators: (i) the prevalence of single bidding; (ii) the length of the submission period; (iii) the procedure type; (iv) the length of the decision period; (v) the degree of supplier dependence; (vi) the presence of suppliers registered in tax havens; and (vii) deviations from Benford's law.[184] These indicators capture the potential for corruption in various stages of the procurement process. The composite CRI is a simple average of the seven indicators that takes values between 0 and 1. Contracts that are considered at high risk of corruption have scores close to 1, while contracts with a low risk of corruption have scores close to 0. Almost 730 government institutions used procurement practices that are prone to corruption, as reflected in CRI scores higher than 0.5, and the mean CRI score per buyer is 0.48 (Figure 106).

Figure 106. Distribution of Procurement Authorities by Average CRI Score

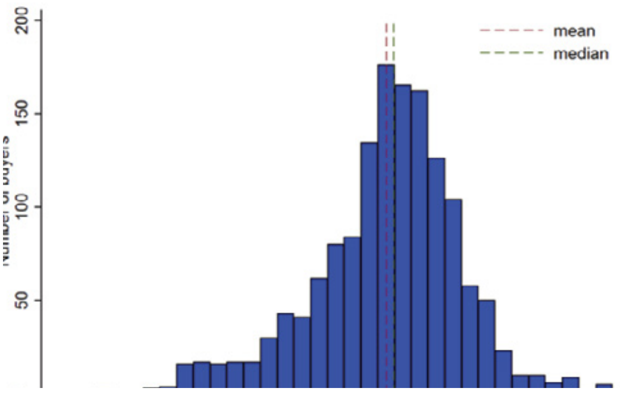
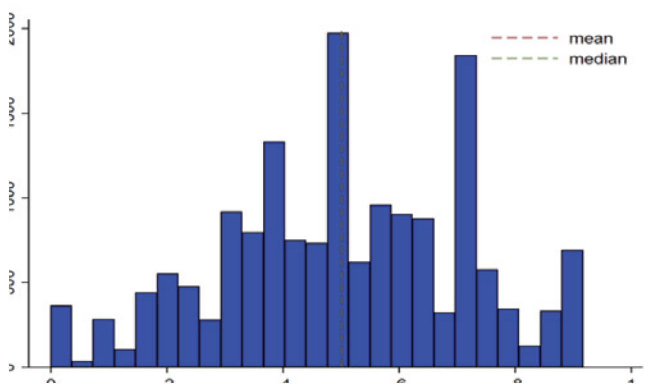


Figure 107. Figure 107. Distribution of Awarded Firms by Average CRI Score



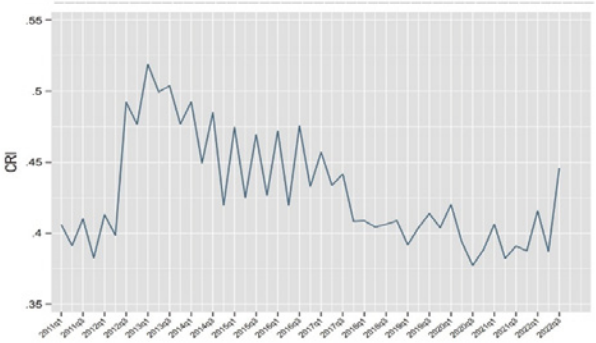
Source: Public Procurement portal and World Bank staff calculations.

184 Fazekas, Mihály, and Gábor Kocsis. 2020. "Uncovering High-Level Corruption: Cross-National Objective Corruption Risk Indicators Using Public Procurement Data." British Journal of Political Science 50 (1): 155–164.

6.5 **A large number of government institutions use procurement practices that carry a moderate risk of corruption, while less than one percent had a high risk of corruption.** Twelve of the 1,470 government institutions included in the dataset had average CRI scores greater than 0.75, indicating a consistently high risk of corruption. The peak of the distribution is between 0.45 and 0.55, indicating a moderate risk of corruption. Only a few government institutions use procurement practices with very low CRI scores, and none have scores of 0, indicating that some level of corruption risk is present in every procurement process. At 0.5, the average CRI score for suppliers is marginally higher than the average score for buyers, and the unbalanced distribution indicates that most firms face an elevated risk of corruption (Figure 107). However, the CRI scores of suppliers are more widely distributed than those of buyers, and some suppliers have scores close to 0.

6.6 **Though CRI scores vary across the period, the overall trend from 2011 to 2022 reveals a marginal increase in corruption risk.** The average CRI score increased significantly from 2011 to 2013, fluctuated between 2013 and 2017, declined steadily until mid-2021, then increased through 2022 (Figure 108). Throughout the period, corruption risks are linked to the budgeting cycle, with a decrease in corruption risk in the first quarter of the fiscal year, typically followed by a sharp increase in the fourth quarter.

Figure 108. Average CRI Scores by Quarter



Source: Public Procurement portal and World Bank staff calculations.

Purchasing System Review

6.7 **A purchasing-system review is a type of analysis based on the supply-positioning matrix, which locates the importance of a particular market for a buyer while revealing the complexity and riskiness of conducting public procurement.**[185] The matrix (Figure 109) has two axes: purchasing risk and spending value. Above the horizontal axis (quadrants C and D) are markets that are considered to be riskier, while right of the vertical axis (quadrants B and D) are markets that account for larger amounts of spending. Optimal purchasing strategies differ for each quadrant. Each identified market in North Macedonia appears as a point in one of the four quadrants, and each point is scaled according to the number of awarded contracts.

185 Kraljic, Peter. 1983. Purchasing Must Become Supply Management. Harvard Business Review. September-October, 1983, pp. 109-117.

Figure 109. Supply-Positioning Matrix, North Macedonia 2011-2022

Source: Public Procurement portal and World Bank staff calculations.

6.8 **A regression analysis predicting relative prices in North Macedonia forms the basis for two sets of proposed policy reforms.** To analyze the impact of corruption risk on public procurement spending, the analysis treats the relative price of procurement contracts as the dependent variable. The relative price represents the ratio between the final contracted price and the estimated contract value, also known as the reference contract price. All else being equal, tenders that face high levels of corruption risk should tend to have higher relative prices.[186] According to this methodology, the total savings that could have been achieved during the 2011-2022 period equals 14 percent of total spending (Figure 110). The largest share of savings comes from measures to increase the number of bidders that participate in the tendering process. Increasing the number of bidders per tender to three or four could have yielded cost savings estimated at 4.8 percent of total spending over the period. Sizable savings could also be generated by interventions that aim to diversify the supplier base or dilute monopolistic and oligopolistic market power. These strategies could have produced savings of 3.7 percent of total spending at the buyer level or 2.5 percent at the market level during the period.

Figure 110. Relative savings associated with each intervention (% of total spending)

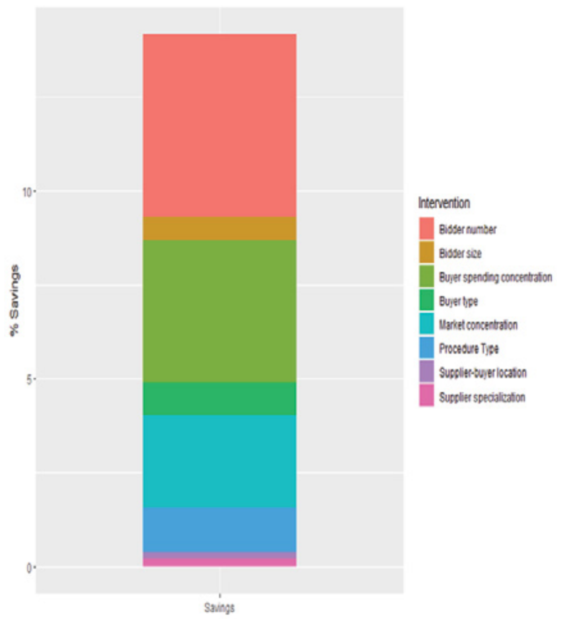
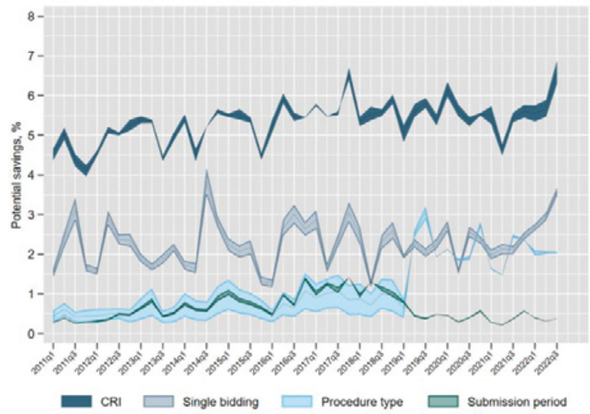


Figure 111. Quarterly potential savings rate by eliminating CRI and other selected corruption risk indicators



Source: Public Procurement portal and World Bank staff calculations.

186 Abdou, A., Basdevant, O., David-Barrett, E., & Fazekas, M. (2022). Assessing Vulnerabilities to Corruption in Public Procurement and Their Price Impact. IMF Working Papers, 2022(094).

Box 10. Mapping state capture in North Macedonia

A large-scale network analysis can estimate the extent of state capture in public procurement in North Macedonia. To better observe patterns and trends, the change of political administrations in 2017 can be used to create two roughly similar periods of analysis. The network lens can help identify patterns of corruption-risk clustering, enabling the analysis to distinguish between clean and randomly corrupt contracting networks and to isolate state-capture networks.[187] Table 37 shows the total contract values for the two periods, the average corruption risk scores, the median contract values (Panel A), and shifts in network patterns (Panel B). While some parameters remain broadly similar, the change in political administrations is followed by a reduction in the CRI score by 0.05. This and other changes between the two periods suggest a shift in procurement patterns and possibly a change in the types of suppliers being awarded contracts.

Table 37. Summary of Procurement and Network Statistics before and after 2017

	Jan 2011-May 2017	Jun 2017-Dec 2022
A) Procurement Statistics		
Total contract value	221 billion MKD	254 billion MKD
Number of procurement authorities	1,215	1,356
Number of suppliers	9,527	6,940
Median # contracts (PA)	179	193
Median # contracts (Supplier)	34	68
Median Total contract value (PA)	148 million MKD	142 million MKD
Median Total contract value (Supplier)	-21 million MKD	45 million MKD
Average CRI	CRI 0.48	0.43
B) Network Statistics		
Number of ties	39,939	53,173
Average degree	15.12	19.39
Clusters	225	62
Modularity	0.405	0.350
Closeness Centrality	0.256	0.272
Betweenness Centrality	185,186	9,401

The number of distinct ties in the procurement network increased substantially after 2017, and the average number of degrees in the network rose from 15 to 19, suggesting an increase in network connectivity. Greater network connectivity may indicate that procurement authorities and suppliers became less reliant on specific nodes to act as brokers between them. After 2017, the number of high-risk network ties decreases, while higher-risk connections tend to migrate from the center of the network to the periphery, indicating a lower degree of network capture (Figure 112). Similar trends are also evident in the construction sector. After 2017, the sector's CRI score falls from an average of 0.49 to 0.42, and high-risk connections migrate from the center to the periphery. Meanwhile, the sectoral network grows, its connectivity becomes denser, the number of isolated groups declines, and the average number of degrees in the network increases (Figure 113). In addition, the average CRI score for each tie appears to decline, and fewer ties have high CRI scores.

187 Fazekas, Mihály, and István János Tóth. "From corruption to state capture: A new analytical framework with empirical applications from Hungary." Political Research Quarterly 69, no. 2 (2016): 320-334

Figure 112. Procurement Network Representation before and after 2017

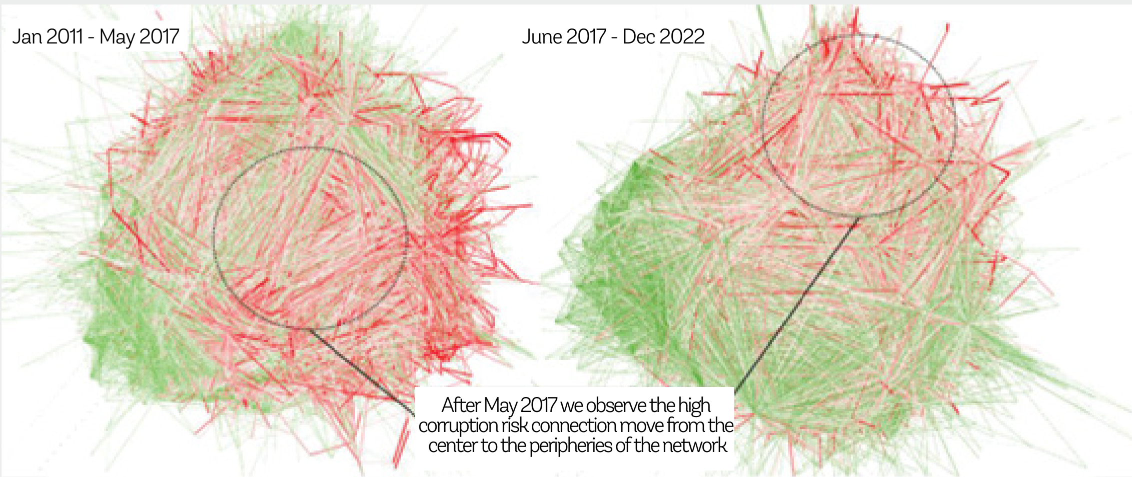
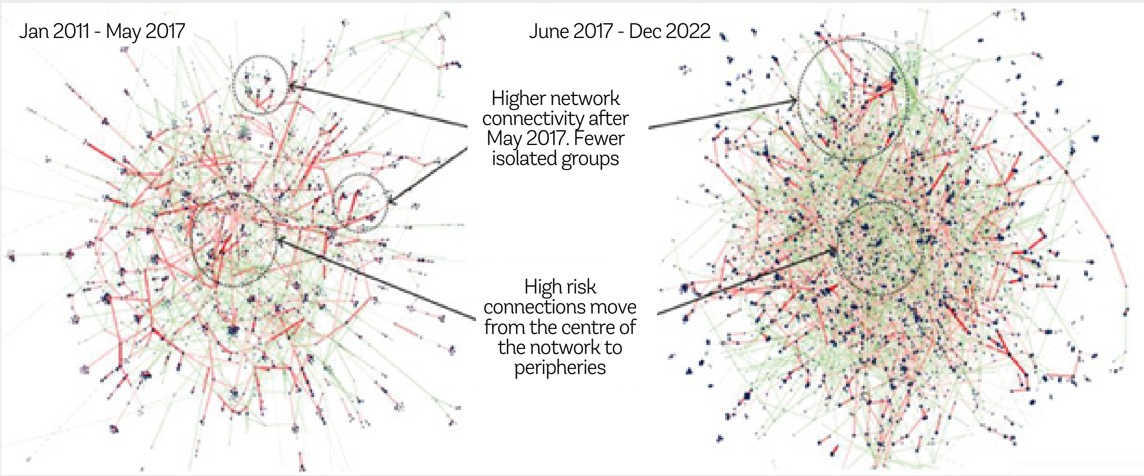


Figure 113. Construction Sector Procurement Network Representation before and after 2017



Source: Public Procurement portal and World Bank staff calculations.

Political transitions in other countries have been associated with similar declines in indicators of state capture. Intuitively, one might expect that to be the case, as neither the procurement authorities nor the suppliers can be sure how strictly procurement regulations will be enforced by the new government, leading them to err on the side of caution. A political transition might also be followed by changes in the staffing or organizational structure of the procurement authorities, which would force a partial reset of their relationships with suppliers and could severe some preexisting corrupt ties. The cause of the observed reduction in state capture is important, as the current administration may point to this as evidence of their integrity, when in fact it may just be the result of a political transition having taken place.

6.9 **The optimal combination of procurement reforms could have reduced total procurement spending by as much as 5.3 percent during 2011-2022.**[188] Moreover, the estimated savings begin to rise substantially in early 2021 and could have reached as much as 7 percent (Figure 111). Reducing the number of single-bid tenders offers the greatest potential savings, which amount to between 1.5 and 4 percent of total spending. The extensive use of the new simplified procedure since 2019 is linked with a significant increase in relative prices and therefore appears to pose a medium risk of corruption.

Recommendations

6.10 **Quantifying the potential savings generated by each policy option can allow policymakers to prioritize reforms and plan a phased implementation that balances fiscal impact with implementation feasibility.** The analysis shows that measures to improve competition by increasing the number of participating bidders or by reducing concentration at the market and buyer levels could have the greatest impact on procurement spending. Table 38 summarizes the savings that could have been generated by each intervention, as well as recommended policies and strategies for implementing them. The scenario analysis is based on two sets of policies, each of which entails several possible interventions.

6.11 **Policies that directly affect the cost of public procurement**:

- Tendering procedure or the use of bulk-purchasing arrangements.[189] North Macedonia's 2019 Public Procurement Law modified tender procedures and eliminated the request-for-proposals method, which was associated with higher relative prices and single-bidder offers. Since the adoption of the new law, the largest share of procurement spending has been allocated through the open procedure, the simplified open procedure, and the low-value procedure.
- Training and revision of guidelines to facilitate the use of the open procedure by public buyers. Measures that further expand the use of the open procedure could yield additional savings, and the government should offer mandatory trainings to public buyers.
- Implementing monitoring and control mechanisms can help ensure that public buyers use these types of procedures correctly.[190] For example, engaging civil-society groups and media in monitoring procurement (like the Center for Civil Communications[191]) increases the probability of detecting wrongdoing and decreases costs.[192] Efforts to strengthen processes must be complemented by measures to increase competition, as the potential savings derived from the expanded use of the open procedure will be limited if the number of bidders is not increased.
- Training in market analytics should be provided to buyers with highly concentrated spending patterns, especially in sectors identified as being at high risk in the supply-positioning matrix, such as construction services and information technology. The authorities can ease concentration at the buyer level by removing barriers to competition and by lowering transaction costs through streamlined specifications and bid requirements, objective evaluation criteria, and expanded public information about bidding opportunities.

188 As North Macedonia's data portal only publishes data at the tender level, and it cannot be broken down to the level of contracts or lots, this analysis relies exclusively on single-lot tenders. These 132,902 tenders represent 78.3 percent of all tenders and 65.6 percent (MKD 335.5 billion) of the total contract value.

189 Fazekas, Mihály; Ziolkowska, Barbara; and Regos, Nóra (2022) Public Procurement: Saving and Greening. In World Bank (2022) Poland Public Finance Review, World Bank, Washington DC. Chapter 4.

190 In December 2019, North Macedonia introduced the Red Flag System, harnessing real-time data and advanced analytics to achieve the same objective The Red Flags System identifies suspicious patterns in procurement data that may indicate collusion or tender manipulation (https://blogs.worldbank.org/en/governance/transparent-and-fair-public-procurement-north-macedonia-experience).

191 Center for Civil Communications - Проекти (ccc.org.mk).

192 Lagunes, P. (2021) The Eye and the Whip: Corruption Control in the Americas. Oxford: Oxford University Press.

6.12 **Policies that reduce procurement costs and increase competition indirectly by inducing behavioral changes both in the public and private sectors**:

- Efforts to increase the number of bidders that participate in the tendering process. Interventions may include offering training programs for potential suppliers, drafting more precise guidelines, and reducing documentation requirements. For example, transaction costs can be reduced by standardizing procedures, simplifying participation requirements, and increasing the information available to each participant through public outreach.[193]
- Alter the size of the winning companies by encouraging smaller companies to engage with the procurement process.
- Reduce concentration among buyers and suppliers by reducing the prevalence of single-bidder and two-bidder contracts. Diluting the power of monopolies and oligopolies at the market and buyer levels can have a significant impact on prices, which are closely linked with the relative concentration of buyers and markets. Further analysis is necessary to determine why certain markets are characterized by a heavy dependence on certain suppliers. Improved market analysis could help increase the number of participating bidders by enabling the authorities to more accurately determine which suppliers are not participating and devise strategies to bring them into the procurement process.[194] Greater market knowledge can also enable public buyers to eliminate barriers to market entry and reduce transaction costs, further improving competition.[195]

Table 38. Policies and strategies to increase public procurement efficiency in North Macedonia

Variable with impact on contract value	Total savings (in billion MKD), 2011-2022	Recommended policy or strategy
Number of bidders	**15.29**	**1.** Streamline bidding documentation to: • eliminate barriers to market entry and • reduce transaction costs. **2.** Implement training programs to help bidders prepare the necessary documentation. **3.** Improve monitoring and oversight of irregularities to increase bidders' trust in the public procurement system.
Monopolies and oligopolies at the buyer level	**11.8**	**1.** Provide training on improved procurement practices to buyers that depend on a small number of suppliers. **2.** Improve the availability of information on tendering opportunities.
Monopolies and oligopolies at market level	**7.73**	**1.** Train buyers in market analytics and provide them with greater market information. **2.** Encourage new suppliers to enter concentrated procurement markets, including foreign suppliers.
Procedure type	**3.65**	**1.** Encourage the use of the open procedure by providing training and preparing guidelines for public buyers. **2.** Improve monitoring and oversight to ensure compliance with the open procedure.
Buyer type	**2.75**	**1.** Encourage smaller regional authorities to establish bulk-purchasing arrangements.

193 OECD. 2011. Competition and Procurement. https://www.oecd.org/daf/competition/sectors/48315205.pdf
194 OECD. 2021. Public Procurement in the State of Mexico. Enhancing Efficiency and Competition. Chapter 5. https://www.oecd-ilibrary.org/sites/766c9308-en/index.html?itemId=/content/component/766c9308-en.
195 Fazekas, Mihály, and Gábor Kocsis. 2020. "Uncovering High-Level Corruption: Cross-National Objective Corruption Risk Indicators Using Public Procurement Data." British Journal of Political Science 50 (1): 155–164.

Variable with impact on contract value	Total savings (in billion MKD), 2011-2022	Recommended policy or strategy
Company size	**1.98**	**1.** Encourage joint bidding by small and medium-sized firms to increase their competitiveness.
Supplier specialization	**0.75**	**1.** Bundle products to encourage the participation of a more diverse range of companies.
Supplier and buyer at the same location	**0.53**	**1.** Develop a mechanism to automatically notify local companies about bidding opportunities. **2.** Help local companies with the bidding process by • drafting guidelines on how to submit bids and • creating a hotline to assist small and medium-sized firms.

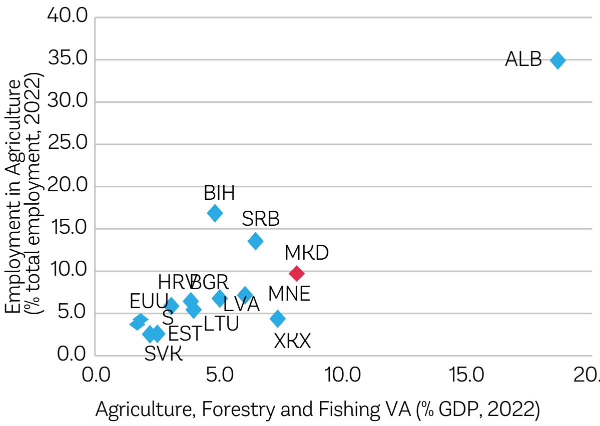
B. Rationalizing Agriculture and Rural Development Subsidies

6.13 **Agriculture and food processing are two distinct but closely related sectors that are central to North Macedonia's EU membership ambitions; during the COVID pandemic, both sectors gained a new salience in food-security issues.** As a country's income level rises, the agricultural sector's contribution to GDP typically wanes. In North Macedonia, however, the sector continues to play a key role in the economy. Agriculture is an important engine of growth and trade, a pillar of climate mitigation and adaptation, and a bulwark against food insecurity in a post-pandemic world.

The role of agriculture in North Macedonia is modest

6.14 **Agriculture makes a modest and shrinking contribution to economic output in North Macedonia.** The country has a very long tradition of producing fruits and vegetables, and grapes for winemaking, along with cereals (wheat and maize, mainly). More recently, tobacco has become an important crop. North Macedonia is also a significant livestock subsector: cows and sheep use about half of all agricultural land, and in recent years agricultural land has covered close to 40 percent of the country's total area. The relatively small direct contribution of agriculture to GDP (7.6 percent in 2023) places it well behind other sectors like wholesale and retail trade, industry, real estate activities. However, the contribution of agriculture in GDP in North Macedonia is higher than in most comparable economies in the Western Balkans, and small states in the EU (Figure 114). At the same time, value added by agrifood processing at 3.1 percent of GDP seems comparatively lower than in most comparator countries, and its share remains constant since 2010.

Figure 114. Agriculture's contribution to GDP and total employment, North Macedonia and selected countries, 2022



Source: World Development Indicators, World Bank.

6.15 **Agriculture's contribution to employment is modest but larger than in most peer countries.** Employment in agriculture in 2022 was at nearly 10 percent of total employment. Put differently, nine out of every ten workers were employed in *other* sectors: for larger ones, industry, wholesale and retail trade, construction, government administration, and education and health employ more people. In contrast to GDP, the share of agriculture in total employment is lower than that of most countries of this group of comparator economies, meaning that agricultural labor productivity is higher than with comparators.

6.16 **Moreover, the relative importance of agriculture is in long-term decline.** From 2013 to 2022, the sector's share in total GDP shrank by nearly 19 percentage points. The economy is moving away from agriculture, towards other activities such as services. During 2013-2022, average growth for the whole economy (2.3 percent) was triple that for agriculture (Figure 115), and agriculture value added was more volatile than the overall output (Figure 116). A declining trend in the share of agriculture has been observed by most comparator economies throughout the early transition. In the EU, the share of agriculture in total GDP has remained more or less stable over the 2013-2022 period, at 1.7 percent.

Figure 115. Agricultural value added and GDP growth in North Macedonia and selected countries, 2013-2022 (annual average % growth)

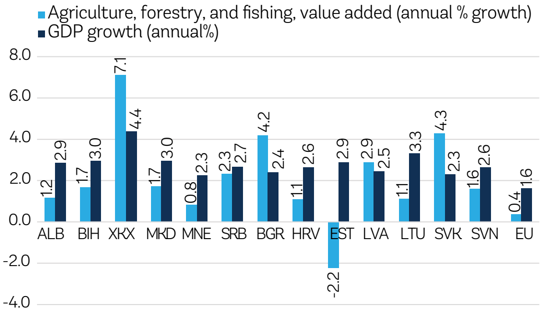
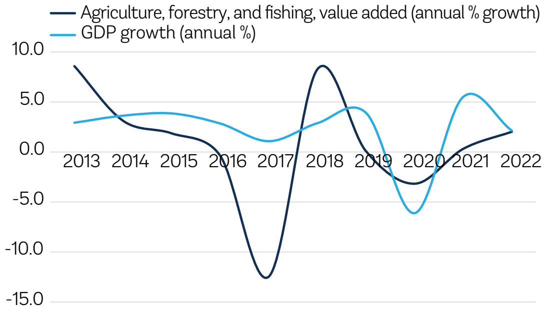


Figure 116. Agricultural value added and GDP growth in North Macedonia, 2013-2022 (annual % growth)



Source: World Development Indicators (WDI).

6.17 **Productivity in agriculture is low, indicating a need for a further shift of resources to other economic sectors.** Small farm size and low farm technology have led to low labor productivity (Figure 117). Compared to other similar economies, North Macedonia ranks considerably higher than other Western Balkan countries (except Montenegro) but lags substantially compared to EU small states. Limitations in technology uptake and irrigation infrastructure seem to result in low cereal yields (Figure 118). North Macedonia underperforms almost all similar economies in terms of cereal yields.

Figure 117. Agricultural value added per worker, North Macedonia and selected countries, 2022 (constant 2015 US$)

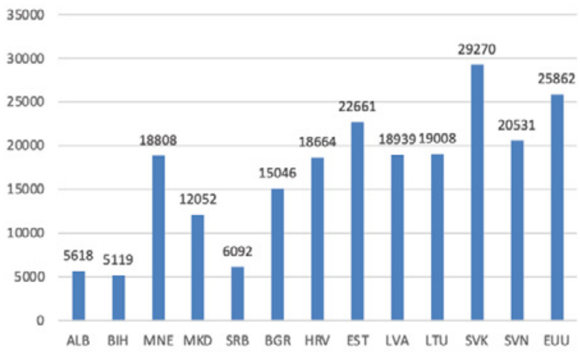
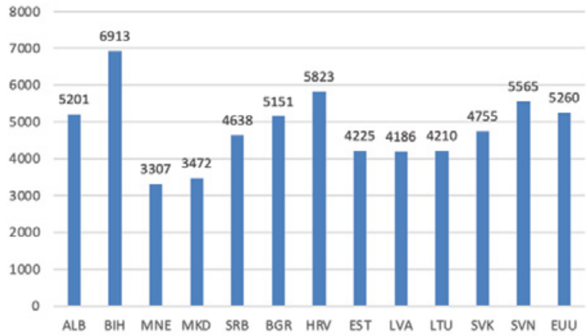


Figure 118. Cereal yields, North Macedonia and selected countries, 2022 (Kg per ha)



Source: World Development Indicators (WDI).

6.18 **North Macedonia farms are characterized by technical inefficiency, but there is some variation.** The bias corrected technical efficiency scores (bcTE)[196] are low and present a significant variation—the mean efficiency score is 0.416 indicating that the average farm in the sample can produce the same output using 58.5 percent fewer inputs, given the available production technology. TE distribution indicates a polarization phenomenon. Around 55 percent of sampled farms seem to be comparatively quite inefficient, with their bcTE score not exceeding 0.4. In parallel, about 22 percent of farms seem to be performing quite well, exhibiting a high TE (bcTE score exceeds 0.6). Almost two-thirds of the sample farms could produce the same level of output employing half the of the inputs they currently use. This could mean that farms are using too many inputs or/and an increase in input prices is making inputs too expensive considering the value of generated output. In parallel, farms seem to have adjusted their scale towards the optimal, most productive, scale, and hence, they operate well in terms of the returns to scale of technology. The mean scale efficiency (SE) is considerably high (0.657), indicating that the average farm can operate at the optimal scale by adjusting its input scale by 34 percent. Over 35 percent of the sample farms have an SE score exceeding 0.80. The high performance of North Macedonia farms with respect to scale economies should be interpreted in the context of the experience of producers, which allows them to utilize their knowledge when scale decisions are made.

Box 11. Methodology of efficiency analysis

The analysis of efficiency performance of farms in North Macedonia utilizes the most recently available (2021) individual-farm Farm Accounting Data Network (FADN) national dataset for 2021 to estimate current technical (TE) and scale efficiency (SE) performance of farms in the country and assess the impacts of drivers associated with current production practices and agriculture policy support mix. The 2021 FADN sample consists of 762 observations (farms). Of those, 67 farms exhibit negative output values or zero values for the input of land. These farms were excluded. Hence, the final sample used for the analysis contains 695 observations. Two outputs are considered: (i) total output of crops and crop products and (ii) total output of livestock and livestock products. Five production factors are considered: (i) labor input, (ii) total Utilized Agricultural Area (UAA), (iii) total specific costs, (iv) total farming overheads and (v) total assets. All the variables, except labor and land inputs are measured in monetary values. Labor is measured in time worked in hours by total labor input on holding, while the land input is measured in hectares. Farm-type classifications are utilized, reflecting differences in economic size, subsidization status, production orientation, and regional location.

The TE of each farm is computed with reference to the best performing or best-practice farms in North Macedonia, which defines the production frontier. The analysis defines efficiency as the proportionate reduction of inputs that a farm can achieve while maintaining its level of output, using the available production technology. It provides a rich set of estimations of both simple and bias corrected TE, as well as of scale efficiency (SE) scores. With respect to additional characteristics of the production technologies, Variable and Constant Returns to Scale (VRS and CRS, respectively) versions of the frontier have been estimated.

The analysis is based on a multi-input, multi-output distance function, adopting non-parametric estimation techniques, specifically the Data Envelopment Analysis (DEA) approach and correcting for bias. One of the DEA advantages is that the approach does not impose any restriction on the functional form of the technology set. On the other hand, DEA does not consider the noise in data (Simar and Wilson, 1998; 2000), which may result in an underestimation of the efficiency of analyzed farms. To address this limitation of DEA, a two-stage bootstrapped DEA was used for this analysis and results present bias corrected TE (bcTE) scores. The second stage of the analysis assesses efficiency drivers, estimating regression models with a set of explanatory variables.

196 The difference between bias corrected and bias non-corrected technical efficiency scores under variable returns to scale is statistically significant; therefore, bias corrected VRS technical efficiency scores are used, hereafter denoted as bcTE. The mean value of the non-corrected technical efficiency was found to be equal to 0.541.

6.19 **Medium-sized farms are the least technically efficient in North Macedonia, indicating a "missing middle" phenomenon.** Micro farms exhibit superior productive performance in terms of TE (bcTE: 0.521;Figure 119). On the other hand, medium-sized and larger farms perform worse (bcTE: 0.348 - 0.358), while very large farms also perform better (bcTE: 0.473). Large and very large farms exhibit superior SE. In fact, they are not far away (SE: 0.901 and 0.842) from the Minimum Efficient Size (MES) or in other words they are not under-invested, while medium farms also perform well in terms of SE (Figure 120). Subsidies provided to these farm size classes facilitate liquidity which in turn, enable better scale decisions. In contrast, micro farms and to lesser extent, small farms, suffer SE losses due to scale inefficiencies. They are underinvested and do not exploit returns to scale as efficiently as their larger peers. The MES of North Macedonia agriculture is quite high and hence, significant investments are needed by small and especially micro farms to converge to minimum costs conditions.

Figure 119. Difference in bcTE and SE by economic size, North Macedonia, 2021

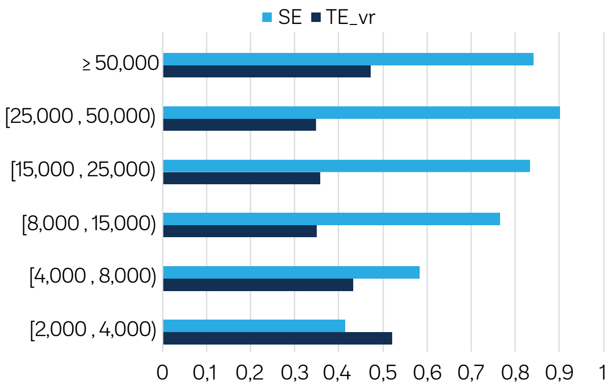
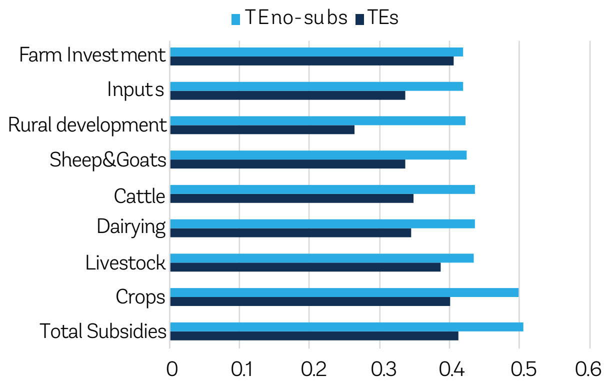


Figure 120. Difference in bcTE by subsidization status, North Macedonia, 2021



Source: World Bank staff calculations.

Box 12. Farm productivity in North Macedonia

The COVID-19 pandemic seems to have hit hard productivity of North Macedonia farms. Between 2019 and 2020, total factor productivity (TFP) declined by about 6 percent while a slight recovery is estimated for 2021, leading to a cumulative decline of around 3 percent (Table 39). As expected, this decline was due to a significant regression in technical efficiency (TEC) (-16.3 percent between 2019 and 2020, and -19 percent cumulatively), most likely attributed to shortages in working capital and adjustments in managerial performance due to a technical change. Also, scale efficiency (SEC) declined significantly (-20.5 percent between 2019 and 2020, and -18 percent cumulatively), most likely due to problems in availability and quality of farm labor and other inputs. These declines were followed by a partial recovery in 2020-2021 (Figure 121). TFP declined for 70 percent of sampled farms in 2019-2020 and increased for nearly 50 percent in 2020-2021.

Table 39. Cumulative growth of Malmquist TFP and its components, 2019-2021

	Cumulative TFP and components growth: 2019=1			
Year	**TFP Malmquist**	**TEC**	**TC**	**SEC**
2019	1.000	1.000	1.000	1.000
2020	0.942	0.837	1.168	0.795
2021	0.973	0.810	1.149	0.820

Source: World Bank staff calculations.

Farm size and technological characteristics seem to be affecting productive performance in a causal manner. Multivariate analysis shows that an increase in farm size negatively affects TFP (coefficient of -0.007), and TEC (-0.013); in the case of the latter, a U-shaped relationship shows that as farm size increases, TEC declines up to a size threshold. After this threshold, TEC starts to increase very slightly. Production orientation and regional location also seem to matter; in the case of TFP, farms specialized in other permanent crops have a negative differential (-0.228) compared to specialist COP farms (baseline). In the case of TEC, the opposite is observed for other livestock farms (+0.457) and mixed farms (+0.256). Compared to farms located in Vardarski (baseline), farms located in Istocen (+0.166) and Poloski (+0.246) have positive TEC differentials.

Technological progress and innovation were the main defense lines of North Macedonia farms during the COVID-19 crisis. The pandemic seems to have led to a significant improvement in technical change (TC), and the adoption of innovation. In 2019-2020 TC increased by around 17 percent, while the cumulative increase was 15 percent (Table 39). TC increased for 61 percent of farms in 2019-2020, and for almost all remaining (i.e., 37 percent) farms of the sample between 2020 and 2021 (Figure 122). This finding indicates a convergence of North Macedonia farms towards a new best practice of technology adoption during the pandemic. Causal analysis confirms the above findings; an increase in farm size positively affects TC (+0.009). Production orientation and regional location also seem to matter; farms specialized in dairying (-0.291), other livestock (-0.354) and mixed farming (-0.266) have negative TC differentials compared to specialist COP farms (baseline). Compared to farms located in Vardarski (baseline), farms located in Istocen (-0.165), Jugoistocen (-0.125) and Skopski (-0.166) have negative TC differentials. Perhaps most important, higher capital to labor ratios positively affect TC (+0.056), showing the importance of policies promoting capital investment in North Macedonia agriculture.

Figure 121. Kernel Density subperiods: TFP Malmquist

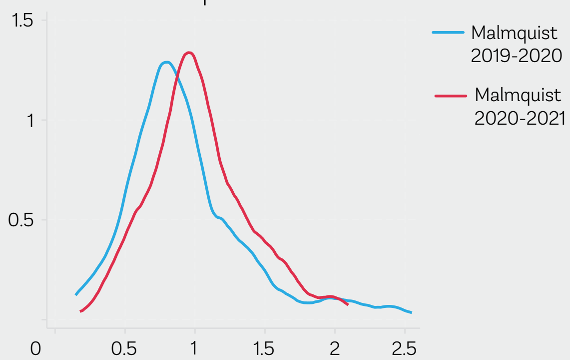
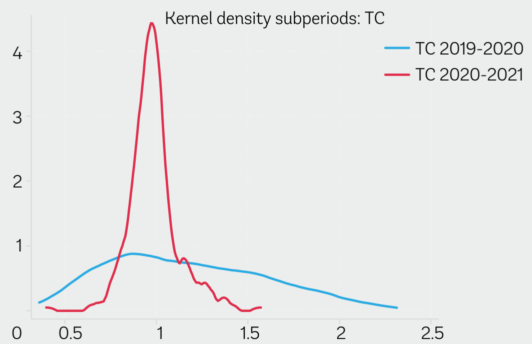


Figure 122. Kernel Density subperiods: technical change



Source: World Bank staff calculations.

6.20 **Links between agriculture and food processing with the rest of the economy are rather low and declining.** This holds for backward output multipliers which slightly declined between 2010 and 2020 and for the forward output multiplier for food processing, which has declined by 2.34 percent over this period. In contrast, forward output links between agriculture and the rest of the economy have increased by almost 5 percent. Value added in both sectors is also on decline (direct value-added coefficients declined by 5 and 15.5 percent, respectively). Direct employment creation is high and increasing for agriculture and low and declining for food processing; however, indirect employment effects are comparatively high and increasing for food processing and low and declining for agriculture.

6.21 **Integration between agrifood and the rest of the economy seems to be shrinking.** Low and declining links between agrifood sector and the rest of the economy are confirmed by expanded value-added analysis.[197] First, in contrast to other countries of a similar development

197 Foster and Valdes (2015).

level[198], expanded value-added links for agriculture are much higher than those of food processing (Table 40). Second, except for backward links for food processing, net links which do not include direct value addition are a small proportion of total expanded value-added. Third, both gross and net links have declined between 2010 and 2020.

Table 40. Expanded value-added analysis for agriculture and food processing (% share of forward and backward links on economy-wide value added; 2010 and 2019)

	Gross Forward Links (%)	Net Forward Links (%)	Gross Backward Links (%)	Net Backward Links (%)
Crop and animal production, hunting and related service activities				
2010	13.1	2.8	11.0	0.7
2020	11.2	2.4	9.6	0.8
Manufacture of food products, beverages and tobacco products				
2010	5.1	0.4	7.7	5.1
2020	4.1	0.3	7.6	4.9

Source: World Bank staff calculations

6.22 **Another marker of the shifting role of agriculture is the changing pattern of foreign trade.** Patterns of comparative advantage evolve over time, which can make economic interventions increasingly inefficient. In North Macedonia, the government intervenes by providing direct subsidies to agricultural producers (often based on units of production) that target products in which the country has low comparative advantage. Yet, food imports have expanded by nearly 55 percent over 2014-2023, while food exports have expanded more slowly, by nearly 27 percent.

6.23 **The government's agricultural interventions do not benefit the poorest households.** The agricultural sector mainly consists of very small, fragmented holdings, with around 61 percent of farms operating on less than one hectare (ha), nearly 90 percent on less than three ha. These farm sizes are too small for their farmers to either make it worth, while investing in more efficient techniques to earn a decent living. In fact, since 2013, there has been a rise in the number of very small subsistence farms and a concomitant decline in the number of more efficient medium-sized farms. Since 2015, the distribution of direct payments has shifted in favor of larger farms; the share of micro (economic size of up to EUR 4,000 farms in total direct payments has declined (from 7.5 percent in 2015 to 4.8 percent in 2021), while that of larger farms (over EUR 15,000) has increased from 52.7 percent to 57.4 percent. In addition, factors such as limited irrigation infrastructure, poor public infrastructure, an underdeveloped Agricultural Knowledge and Innovation System (AKIS)[199] and a dysfunctional land market, all constrain the farm productivity, that is, the average quantity produced whether measured per person (labor productivity) or by area (land productivity).

198 World Bank (2024). The Future of Agri-food System Jobs in the Maghreb Region. Agriculture and Food Global Practice, MENA Region.

199 AKIS comprise the agencies that generate and disseminate knowledge and information to support production, marketing, and post-harvest handling of products, and the management of natural resources, through, for example, agricultural research and extension services, or education activities.

Spending on agriculture and rural development is declining

6.24 **Public spending for agriculture and rural development has declined but is still far above the levels of comparator groups.** Between 2014 and 2020, the budget allocated nearly 1.3 percent of GDP every year to agriculture and rural development. This was twice as much as the WB6 (still Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia) and almost three times the EU average. In the 2021-2024 period, budget allocations to agriculture and rural development declined to an average of 0.75 percent of GDP; closer to the WB6 average, but still double the EU average.

6.25 **During 2021-2024, 83 percent of all agricultural support consisted of direct farm subsidies, which are often coupled to production.** On average, two thirds of direct payments have supported crops, especially low-value ones such as tobacco. Only 16 percent of the support envelope is directed to rural development (very marginal increase compared to 2017-2020); this implies a persistent limited focus of public policy towards agricultural adjustment and modernization. In the same period (2021-2024), public expenditure on food safety and veterinary services amounts to 10 percent of total, and the residual, 1 percent, to extension services. In short, the budget has been allocating funding for low value crops, reducing the support for activities with high value added.

6.26 **In recent years, farm subsidies have declined relative to farm net value added.** The concept often used to describe the "generosity" of subsidies is subsidy intensity, which indicates the share of value added covered by direct payments. In 2021, subsidy intensity in North Macedonia, amounted to 22.2 percent, against the EU average of close to 32 percent. According to NSARD 2021-2027, this indicator has decreased since 2017, when it accounted for 34.3 percent. However, between 2018 and 2021, subsidy intensity has increased by around 5 percentage points for large and very large farms, which in parallel have a much higher subsidy intensity than small and medium farms. Outside of direct subsidies, rural development support in the country has been better aligned with the EU's Common Agricultural Policy (CAP), being targeted at veterinary services and food safety. Still, public advisory services face problems of low capacity and low resources, while as regards food safety, more needs to be done to align national legislation with the EU Acquis.

6.27 **Farm subsidies distort the allocation of productive resources in North Macedonia.** During period 2017-2020, subsidies granted for tobacco represented 24.9 percent of total agriculture and rural development policy outlays. The relevant share for direct payments for milk was 7.2 percent. Despite the marginal decline of these shares in 2021-2023 (22.5 and 6.3 percent, respectively), around one third of the agriculture and rural development support envelope is still directed towards coupled support. Furthermore, these heavily supported sectors do not seem to be performing well in terms of value-added creation; between 2018 and 2021, subsidy intensity for tobacco and milk has increased by around 3 percentage points, even though these two sectors have already been amongst those with the highest subsidy intensity.

Farm performance is lower in subsidized farms and higher in low input-intensity ones

6.28 **The economic performance of subsidized farms lags that of non-subsidized ones, implying that North Macedonia should change its agricultural support policies.** In 2021 (Figure 120), farms receiving any type of subsidy had lower technical efficiency (TE) scores (bcTE: 0.412) than non-subsidized farms (bcTE: 0.506). This finding holds for farms receiving crop subsidies (bcTE: 0.401 compared to 0.498 for those not receiving crop subsidies), dairy subsidies (bcTE: 0.346 vs 0.436), other cattle subsidies (bcTE: 0.348 vs 0.436), and sheep and goats subsidies (bcTE: 0.336 vs 0.424). In addition to the direct payments referred above, rural development area payments (bcTE: 0.265 vs 0.422) and subsidies on intermediate consumption (bcTE: 0.336 vs 0.419) also seem to be associated with lower productive performance. Also, the provision of rural development investment support does not seem to be linked to any TE differentials between subsidized and non-subsidized farms (bcTE: 0.406 vs 0.420). This can likely be attributed to the so-called "productivity paradox", which implies that the adoption of new technologies using subsidy grants, may result, at least in the short run, in significant adjustment costs mainly attributed to organizational and human capital features of the farm. The engagement of farm extension services which can facilitate the reduction of the cost of adopting new technologies could help address this challenge. Finally, tobacco farms have far lower levels of productive performance than other farms (bcTE: 0.362 vs 0.419). A causal (linear regression) analysis shows that subsidy intensity (total subsidies per ha of UAA) exerts a slight positive impact (0.005) on TE. However, this is up to a threshold, as a further growth in subsidy intensity seems to be negatively influencing TE. With respect to TFP (i.e., changes in technical efficiency, scale efficiency and technology), in 2019-2021, subsidy intensity exerts a U-shaped impact which shows that very low levels of support per ha do not induce improvements in productive performance. Most likely, administration and transaction adjustments and other related costs seem to be greater than corresponding benefits. However, when the support per hectare exceeds a threshold, net benefits are observed.

6.29 **Farms characterized by low input-intensity are performing better in terms of TE compared to other farms in the country.** For 2021, their TE score is estimated at 0.508. Farms adopting medium- input-intensity practices do not exhibit TE differentials, while those with high input-intensity are less efficient (bcTE: 0.349). A causal analysis shows that for low input-intensive farms, subsidy intensity (total subsidies per ha of UAA) exerts a slight positive impact (0.005) on TE, but a further growth in subsidy intensity does not seem to be affecting productive performance.

6.30 **Overall, the broad support provided under the AKIS has not helped the sector overcome its structural constraints.** There are too many gaps and weaknesses. For example, the country's public advisory system is narrow in terms of services provided to farmers and on the methods. Information and communication provisions are insufficient. Considerable efforts are needed on the environment, especially natural resource management and climate change, plant protection controls (the full array of prevention and control of pests in plants), and the sustainable use of pesticides.

6.31 **Going forward, the government will need to fully align its agriculture and rural development policies with the EU's CAP.** The 2021-27 National Strategy for Agriculture and Rural Development (NSARD) embeds the CAP 2023-2027 framework in national policy, in both in terms of its strategic direction and its ten specific objectives. It includes a commitment for a gradual adoption of decoupled support, including the CAP's direct payment schemes foreseen in the 2023-2027 CAP—schemes to help poor farmers, young farmers, small farmers, and schemes for climate and environmental support schemes, "eco-schemes"), and it introduces "cross-compliance requirements"**—**obligations that farmers must respect in exchange for state aid. The NSARD also has an extensive program of coupled support targeted at sub-sectors that obey a variety of imperatives, for example the promotion of food safety (more cereals), the promotion of health (less tobacco), the promotion of exports (wine), or still more policy components aimed at making use of the country's unique endowment (to name just a few, medicinal, aromatic and spice plants). Finally, the architecture of rural development interventions under the NSARD also gives some priority to environmental protection and conservation, and to adaptation and mitigation of the effects of climate change.

6.32 **Finally, the NSARD envisages a rebalancing of public financial support from agriculture to rural development.** Under the financial plan, the direct payments envelope will only slightly increase in nominal terms (by around 3 percent) compared with the average levels over 2014-2020. However, the foreseen threefold increase on average annual spending on rural development is a large step in the right direction.

Recommendations

6.33 **The government must fully implement the NSARD by:**

- **Eliminating direct payments to support tobacco production.** North Macedonia's subsidy policies encourage farms to specialize in certain crops despite their lack of technical efficiency. This is particularly the case for heavily supported crops such as tobacco, which is one of several farm sub-sectors supported through coupled direct payments.
- **Shifting to decoupled payments as required by the EU Acquis and aligning agricultural support with market principles.** Enabling farmers to choose what to produce in response to market signals would yield positive effects, as production decisions would be based on competitive advantage; farm investment and production specialization would increase; farmers would shift land use towards high-value production; and public support would have a greater "income smoothing" effect, especially among very small farms.
- **Ensuring a just transition.** For policy makers and for citizens concerned about the social impact on poor and old farmers of this policy approach, it is important to stress that these vulnerable people will *not* be forgotten, only that *how* they will be helped should change: social goals should use social policy tools (like cash transfers), other goals should use other tools. Efficiency gains and fiscal savings on ill-advised schemes provide the money to help the poor.
- **Supporting farm agglomeration.** Also embedded in the policy framework along with decoupled subsidies, the authorities should set a minimum threshold below which the farms would not receive agricultural support. Combined with the adoption of the CAP's good environmental practices, it will facilitate the closure of very small, inefficient farms and promote more efficient, more innovative farmers. This is again a measure consistent with standard practice in EU Member States. It will release money for investment into the North Macedonia farm sector, or, if the authorities do not want to invest in the sector, it will release money for flowing back towards the social goals of helping the poor.
- **Allocating farm support towards high-value crops.** Continued support for low-value crops reduces the sector's contribution to economic growth at the national level and limits its ability to create income opportunities in rural areas. Conversely, support for investment in high-value crops can both significantly improve the sector health and foster higher farm incomes. However, the authorities should also remain conscious of food-security issues.
- **Reallocating rural development support towards capital investment, and especially towards the broad adoption of innovative technologies, should become a top policy priority.** Higher agricultural productivity, and higher farm incomes, will flow from the adoption of innovative technologies and practices by Macedonian farmers, helping them to raise yields, manage inputs more efficiently, adopt new crops and production systems, and improve the quality of their products. New technologies are also critical to conserve

natural resources, adapt to climate change, and improve farmers' resilience to shocks. These gains in the agriculture sector will spill over into the food processing sector. Hence, higher incentives should be provided for this purpose and an "adequate" share of the 2021-2027 rural development envelope should be committed to providing just these incentives.

- **Gains in efficiency leading to the greener production system transformation is the route to a more competitive and export-oriented agri-food sector in North Macedonia.** Efficiency gains induced by a repurposed agri-food policy mix would reduce negative climatic and environmental impacts of agricultural practices and improve farm economic performance in the longer term. For instance, the development of precision farming and broadband coverage may contribute to a reduction in pesticide and fertilizer use. In so doing, such innovations have the potential to reduce variable production costs. On the other hand, they require investments that increase fixed costs.
- **Public support in the form of targeted investment aids, should be triggered to facilitate the adoption of innovation which facilitates more sustainable practices**. Innovation adoption in North Macedonia agriculture has been low. A lack of information and skills, constraints in public infrastructure and in credit supply and uncertainty about the performance of new technology could explain the low rates of adoption. To encourage their uptake, in addition to better infrastructure, accompanying actions that include dissemination of innovative practices and adapted agricultural advice services are required.
- **Removing structural challenges, such as constraints on access to finance, technology, and markets, that hinder the consolidation of very small farms into larger, more efficient units**. The authorities should encourage the consolidation process, with producer associations and cooperatives playing a lead role. The government should also invest more in public goods, including advisory, training, technical and information support; agricultural research and development; infrastructure, including roads and the expansion of storage capacities; and the AKIS.

Annex 1. The 2018 Public Finance Review recommendations

Recommendations	Progress
Public Financial Management	
Draft a strategy to clear arrears that is orderly, transparent, and credible	No progress
Reinforce the treasury system to record the date of receipt of an invoice and its due date, monitor and report monthly on all accounts payable by age, based on due dates, amounts, and specific creditor information, and record commitments before contracts are signed	Some progress
Gradually align accounting and financial reporting with international standards	Some progress
Centralize and strengthen macro-fiscal forecast capacity	Some progress
Strengthen the link between government priorities and sectoral strategies and investment decisions	Some progress
Draft a comprehensive MTBF, linked to the overarching fiscal strategy	Some progress
Reinforce assessment and monitoring of fiscal risks by drafting a consolidated fiscal risk management statement, include provisions in OBL to facilitate capacity development for fiscal risk management and publication of consolidated reports on extra-budgetary spending units, consolidate oversight of fiscal risks within a single body	Some progress
Improve the transparency of SOEs by publishing the financial reports of all SOEs in accordance with IFRS and consider the publication of a summary financial report for all SOEs	Some progress
Better monitor LGUs' financial performance, including through formally notifying LGUs in financial difficulty and requiring concrete actions to rectify the situation	Some progress
Fiscal decentralization and service delivery	
Enhance the clarity of functional assignments, especially the delegated services currently financed through block grants, by better defining responsibility for rulemaking and for financing	Some progress
Consider measures to increase local own-revenue capacity (introducing new tax sources and measures for better collection of current taxes)	No progress
Explore avenues for improving the effectiveness of conditional block grants (making more transparent their calculation and selection of municipalities to get transfers)	Some progress
Clearly define the objectives of the overall strategy for reforming intergovernmental fiscal transfers	Some progress
Consider the possibility of asymmetric assignments of responsibilities and further develop and support inter-municipal cooperation in delivering services that require some minimum scale for efficiency and administrative capacity	No progress
Improve the measurement of spending needs derived from functional assignments, to help clarify whether services are being underprovided and underfunded, and to better understand the need for higher transfers and granting LGs more revenue- generating capacities	No progress
Improve LG revenues by increasing the amount of PIT collections going to the municipalities, including against other revenue enhancing options and the institutional capacity of LGs	Some progress

Enhance the equalization capacity of the general grant by reforming the current formula to better capture expenditure needs, and by allowing different LGs greater revenue collection capacity	Some progress
Restructure the system of capital grants	Some progress
Reform the Development Fund to have more impact on the broad goal of regional economic convergence	No progress
Control local government debt and reduce budgetary arrears	Some progress
Tax policy	
Remove the tax exemption on the sale of securities as is international best practice	Done
Introduce a higher tax bracket for the PIT, with a top marginal tax rate above 15 percent	No progress
Consider broadening the capital income tax base and raising the standard PIT deduction to make the PIT more progressive and realign the ETRs on labor and capital	Some progress
Expand the VAT base by removing preferential treatment for selected items, and combining this with a package of cash transfers to compensate low-income households for the increase in living costs	Some progress
Accelerate the increase in excise taxes on cigarettes and energy to meet EU requirements	Some progress
Conduct a tax expenditure review for the PIT, CIT, and VAT to clarify the revenue cost of exemptions, incentives, and special regimes	Some progress
Implement the recommendations of the TADAT assessment to modernize tax administration	Some progress
Conduct a cost-benefit analysis of special economic zones to determine whether supporting TIDZ is an efficient use of public revenue	No progress
Review cadaster valuations and increase revenue from the property tax	No progress
Assess the efficiency, tax revenue, and equity costs of PIT and VAT reforms	Some progress
Bring the CIT rate closer to 15 percent	No progress
Review which CIT incentives to retain, based on the tax expenditure review, the cost-benefit analysis of special economic zones, and the availability of non-tax instruments to achieve similar goals	No progress
Increase the tenure to qualify for capital gains exemption of owner-occupied housing to 10 years or more to bring it closer to EU practice and increase the share of revenue from property taxation	No progress
Pension spending	
Legislate CPI indexation of pension benefits and refrain from any ad hoc pension increases	No progress
Consider a gradual increase and equalization of the retirement age for men and women	No progress
Given the frequent ad hoc increases in pensions in recent years, a temporary (3-year) pension indexation freeze should be considered to counterbalance the increases	No progress
Gradually increasing the PAYG contribution rate by 2 pp would generate additional revenues and reduce the share of pension deficit financing in general revenues	Some progress
Consider reforms to early retirement for hazardous occupations	Some progress
Explore removing the accrual cap for voluntary switchers or gradually equalize PAYG accrual rate differentials between non-switchers and second-pillar switchers (or both)	Some progress

After the retirement age for women equalizes with that of men, consider linking retirement age to North Macedonia's average life expectancy	No progress
Consider raising the contribution rate for the second pillar	No progress
Social assistance spending	
Consider discontinuing the Parental Allowance program	Some progress
Expand coverage of the poor through the main social assistance program in a fiscally sustainable way	Done
Education spending	
Conduct a feasibility study on optimizing the school network that looks for better ways of using facilities and the extent to which different optimization options are possible	Done
Re-evaluate current primary and secondary per-student funding formulas to improve efficiency	Done
Introduce per-student funding for preschool and higher education	Some progress
Increase instructional time by lengthening the school day by increasing the time spent on quality learning and on remedial or extra-curricular activities	Some progress
Improve the learning environment through better teaching practices	Some progress
Raise the qualification and motivation of teachers at all levels of education	Some progress
Broaden access to preschool	Some progress
Promote transparency throughout the decentralized education system	No progress
Reinforce QA mechanisms to promote university transparency and competitiveness	Some progress
Health spending	
Prepare a health facility master plan for specialist health care, taking the population's needs into account, and formulate recommendations to optimize the supply	No progress
Gradually centralize procurement procedures to help reduce unit prices for hospital drugs and consider managed-entry agreements to lower drugs prices for high-cost patented medicines	No progress
Add to the lists of drugs covered by the HIF new but cost-effective therapies	No progress
Implement priority measures to improve the cost-effectiveness of provider payments	No progress
Increase specific taxes to ensure mobilization of adequate resources for health	Some progress
Make health sector data more available	No progress
Agricultural subsidies	
Gradually reduce the size of direct farm subsidies from 0.84 percent of GDP to the EU-28 average of 0.33 percent to improve efficiency and support structural transformation	Some progress
To heighten the impact of public spending on farm competitiveness, move from largely coupled and unconditional subsidies to decoupled and conditional support	Some progress
Intensify spending on programs that support rural development	Some progress
Modernize agriculture and make it more productive and competitive	No progress
Support the transformation of mid-size farm units to use inputs more efficiently	No progress
Distinguish between agricultural support and social assistance to make government use of its fiscal resources more efficient	No progress

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