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NORTH MACEDONIA

SYSTEMATIC COUNTRY DIAGNOSTIC UPDATE
Navigating challenges, embracing opportunities

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TABLE OF CONTENTS

Executive summary	6
CHAPTER 1: Updated Country Context: North Macedonia Today	12
Economic growth has slowed relative to peer countries	13
Weak productivity and slow human capital formation are a drag on growth and employment	19
Firm productivity remains low and stagnant due to misallocation of resources	22
High-productivity firms create highquality jobs	27
Poverty and inequality have significantly decreased in recent years	29
Despite recent progress, some groups and regions are still lagging	31
North Macedonia still faces significant labor market challenges	34
CHAPTER 2: Recent Emerging Challenges and Opportunities	37
The COVID-19 pandemic plunged North Macedonia into a recession, and subsequent shocks have prevented a swift recovery	38
North Macedonia is rapidly losing its human capital	40
Climate change is already eroding country's growth prospects, while energy security is a new challenge	41
The EU accession process is a powerful driver of reforms for growth	43
CHAPTER 3: Constraints to Growth and Prosperity in North Macedonia	44
Removing constrains for faster growth	46
Addressing constrains for more inclusive growth	55
Confronting the constrains for sustainable growth	64
CHAPTER 4: Priorities for Faster, More Inclusive, and Sustainable Growth	71
HLO 1: More accountable service delivery to citizens	73
HLO 2. Strengthened human capital formation and closing opportunity gaps for all	75
HLO 3. Induced creation of better paid jobs	79
HLO 4. Strengthened household resilience to climate change and lowered carbon intensity and air pollution	83
Annex 1: Boxes	87
References	91
LIST OF FIGURES	
Figure 1. Economic growth has been moderate relative to peer countries...	14
Figure 2. ...lagging the averages both for structural and aspirational peers	14
Figure 3. Convergence with the EU income level is slow	15
Figure 4. But increasing GDP growth to 3.5 percent a year would converge with the EU27 within a generation	15
Figure 5. Growth was consumption-intensive before and after the pandemic...	16
Figure 6. ...but net exports helped mitigate the shock during the pandemic	16
Figure 7. Return on investment is still low in comparison to peers	16
Figure 8. Low number of new exporters in sectors with higher value-added signals	17
weak economic transformation of the economy	17
Figure 9. The services sector has led the growth	18
Figure 10. Employment in the agricultural sector has steadily declined	18
Figure 11. The contribution of TFP to growth has been low or negative since 2011...	19
Figure 12. ...and labor productivity remains weak despite recent improvements	20
Figure 13. Higher employment rate led per capita GDP growth	20
Figure 14. Job growth has recently surged in the professional services and ICT sectors...	21
Figure 15. ...where wages are relatively high	21

Figure 16. The reallocation of labor across sectors has contributed little to productivity growth	22
Figure 17. A relatively large share of workers is employed in less-productive sectors	22
Figure 18. Before the pandemic, firm productivity in North Macedonia was already lower than in peer countries...	23
Figure 19. ...and it plummeted after the pandemic outbreak	23
Figure 20. Productivity varies widely across firms, especially in the services sector	24
Figure 21. In general, larger firms are not more productive than smaller firms	24
Figure 22. From 2018 to 2020, within-firm productivity growth was negative across multiple sectors	25
Figure 23. The rate of firm entry in North Macedonia is below that of peer countries	25
Figure 24. Many high-growth firms are in services; only a few are in manufacturing	26
Figure 25. North Macedonia has fewer “gazelle” firms than peer countries	26
Figure 26. Firms in lagging sectors provide a large share of employment and are not exiting the market	27
Figure 27. Employment and net job creation by within-industry tend to be low with the most productive firms	28
Figure 28. Most service-sector jobs are in small and medium firms, while most manufacturing jobs are in large firms	28
Figure 29. Micro and small firms create most service-sector jobs, while large firms create most manufacturing jobs	28
Figure 30. More-productive firms tend to offer higher wages	29
Figure 31. The poverty rate has fallen substantially, but a large share of the population remains vulnerable to falling into poverty	30
Figure 32. North Macedonia has experienced one of the largest reductions in income inequality worldwide...	30
Figure 33. ...and faster income growth among poorer households has driven a steep decline in the poverty rate	30
Figure 34. Despite recent gains, public expectations for the future are pessimistic	31
Figure 35. Further poverty reduction will require considerable effort	31
Figure 36. Gender disparities are stark in the labor market	32
Figure 37. Indicators of public acceptance of LGBTI communities are low	33
Figure 38. Poverty rates are higher in the north of the country	33
Figure 39. Job opportunities and earnings were the main drivers of poverty reduction	34
Figure 40. Both total and youth unemployment decreased considerably in recent years	35
Figure 41. Unemployment remains among the highest in ECA	36
Figure 42. Workers lose approximately 23 years of productive employment	36
Figure 43. In 2020, more firms closed, and net job creation declined	38
Figure 44. Few firms entered the SEZs in 2020 but net job creation remained positive within SEZs	38
Figure 45. Rising inflation threatens to erase recent gains in poverty reduction	39
Figure 46. Populating is getting older and shrinking	41
Figure 47. North Macedonia’s performance on several governance indicators is above the income group peers, but control of corruption remains a problem	46
Figure 48. Surveys indicate that bribes are more common to obtain contracts, electricity connections, or construction permits than with peers	47
Figure 49. Perceptions of the efficiency and integrity of the judiciary are broadly negative	48
Figure 50. North Macedonia scores poorly on indicators of governance, public-sector integrity, and corruption...	48
Figure 51. ...and the gap between North Macedonia and its EU peers on governance indicators is wide	48
Figure 52. Digital governance systems could be much improved	50
Figure 53. The quality and coverage of infrastructure remain below EU standards	50
Figure 54. Political instability, access to finance, and transport are bigger business obstacles than with the peers	51
Figure 55. North Macedonia’s firms invest less than their peers in greening their operations	51
Figure 56. Because the quality of the business environment either supports or hinders firm-level productivity...	52
Figure 57. ...improving the business environment can yield significant productivity gains	53
Figure 58. Machinery, electronics, and chemicals have driven export growth, though gains have slowed in recent years	54
Figure 59. The growth of goods exports exceeded the average for structural peers, but service exports have untapped potential	54

Figure 60. Deeper trade agreement can increase exports, especially in sectors with many large firms	54
Figure 61. Human capital accumulation is among the lowest in ECA	56
Figure 62. Standardized test scores highlight the low quality of education in North Macedonia...	57
Figure 63. ...and reveal deep disparities between students from different economic backgrounds	57
Figure 64. The quality of higher education is relatively low	57
Figure 65. Spending on tertiary education in North Macedonia is relatively low	58
Figure 66. Peer countries obtain better education outcomes at similar or lower spending levels	58
Figure 67. In addition to their enormous human cost, NCDs greatly reduce economic productivity	60
Figure 68. North Macedonia has the world's highest rate of cigarette consumption per capita	60
Figure 69. North Macedonia's level of per capita public health spending is among the lowest in the region...	61
Figure 70. ...while OOP health expenditures are relatively high and rising	61
Figure 71. Most social assistance benefits are received by lower-income households	62
Figure 72. Social assistance programs can help mitigate the impact of rising food and energy prices	62
Figure 73. Rising indebtedness due to high primary deficits	65
Figure 74. Large room for efficiency improvements of the education spending	65
Figure 75. Electricity production is mainly based on coal	66
Figure 76. The energy mix remains emission intensive	66
Figure 77. Macedonians tend to be less attuned to the benefits of upgrading their heating systems than do their regional peers	67
Figure 78. North Macedonia is less resilient to climate change than the average EU country	68
Figure 79. Reliance on exports from emissions-intensive sectors remains high	69
Figure 80. A large share of the workforce is employed in high emissions "brown" jobs	69
Figure 81. Potential output trajectories before and after COVID-19	87
Figure 82. A modest correlation can be observed between firm-level and light information from satellite pictures	88

LIST OF TABLES

Table 1. HLO 1: More accountable service delivery to citizens	73
Table 2. HLO 2: Strengthened human capital formation and closing opportunity gaps for all	76
Table 3. HLO 3: Induced creation of better paid jobs	80
Table 4. HLO 4: Strengthened household resilience to climate change and lowered carbon intensity and air pollution	83

LIST OF BOXES

Box 1. Potential output before and after COVID-19	87
Box 2. Using satellite data to assess spatial economic activity	88
Box 3. Data and knowledge gaps	89

ACRONYMS/ABBREVIATIONS

ALMP	Active labor-market programs	NATO	North Atlantic Treaty Organization
CBAM	Carbon Border Adjustment Mechanism	NBFIs	Nonbank Financial Institutions
CPF	Country Partnership Strategy	NBRNM	National Bank of the Republic of North Macedonia
DRM	Disaster Risk Management	NEET	Not in Education, Employment and Training
ECA	Europe and Central Asia	NDC	Nationally Determined Contributions
ECEC	Early Childhood Education and Care	OECD	Organization for Economic Cooperation and Development
EGD	European Green Deal	OOP	Out-of-pocket
EIB	European Investment Bank	PCG	Partial Credit Guarantee
EU	European Union	PHC	Primary Healthcare
EUR	Euro currency	PIM	Public Investment Management
EU-SILC	EU Survey of Income and Living Conditions	PISA	Programme for International Student Assessment
EV	Electric Vehicle	PIT	Personal Income Tax
FDI	Foreign Direct Investments	PMR	Product Market Regulation
GDP	Gross Domestic Product	PPP	Purchasing Power Parity
GHG	Greenhouse Gas	PPPs	Public-Private Partnership
GMA	Guaranteed minimum assistance	PPS	Purchasing Power Standards
GNI	Gross National Income	R&D	Research and Development
GVC	Global Value Chain	RER	Regular Economic Report
HCI	Human capital index	SCD	Systematic Country Diagnostic
HLO	High-Level Outcome	SEE CRIF	Southeast Europe Catastrophe Risk Insurance Facility
HR	Human Resources	SEZ	Special Economic Zones
ICT	Information and Communications Technology	SILC	Statistics on Income and Living Conditions
IFC	International Finance Corporation	SMEs	Small and Medium-sized Enterprises
IFMIS	Integrated Financial Management Information System	SOEs	State-Owned Enterprises
IMF	International Monetary Fund	SSO	State Statistical Office
IT	Information Technology	TEN-T	Trans-European Transport Network
LGBTI	Lesbian, Gay, Bisexual, Transgender, and Intersex	TIDZ	Technological and Industrial Development Zones
LiTS	Life in Transition Survey	TFP	Total Factor Productivity
LPI	Logistics Performance Index	TFPR	Revenue-based TFP
LTS	Long-Term Strategy on Climate Action	USD	US dollar
LULUCF	Land Use, Land-Use Change and Forestry	VAT	Value-added Tax
MIGA	Multilateral Investment Guarantee Agency	VET	Vocational Education and Training
MKD	North Macedonia denar	WDI	World Development Indicators
MLSP	Ministry of Labor and Social Policy	WHO	World Health Organization
MSMEs	Micro, Small and Medium-sized Enterprises		



EXECUTIVE SUMMARY

The central development narrative remains mostly unchanged

The 2018 North Macedonia SCD evaluated the country's economic development and recognized its impressive progress in reducing poverty and advancing shared prosperity. Between 2002 and 2018, income per capita doubled, and the country rose from lower-middle-income to upper-middle-income status. In the wake of the global financial crisis, a sustained increase in the incomes of households in the bottom 40 percent of the distribution halved the headcount poverty rate to about 20 percent, and years of inclusive growth drove one of the world's steepest declines in inequality.

While this assessment was broadly positive, it also highlighted challenges that could make progress difficult to sustain unless structural reforms were advanced including within the European Union (EU) accession negotiations context. The SCD presented three complementary pathways for North Macedonia to achieve faster, more inclusive, and sustainable growth: (i) increasing productivity; (ii) enhancing job opportunities for all; and (iii) achieving sustainability through effective governance, fiscal prudence, enhanced environmental management and resilience to natural hazards. Five years later, these same pathways remain central to inclusive growth and poverty reduction in North Macedonia.

North Macedonia envisions a future characterized by higher productivity and better paid jobs; enhanced infrastructure and public services that allow a more balanced regional development; a sustainable environment and higher resilience to shocks; and, ultimately, being a member of the EU. Unfortunately, the country lags on these aspirations and grapples with the pressing

issue of population decline and emigration. Numerous factors contribute to the wave of emigration, encompassing political polarization, corruption, eroded trust in public institutions, perceptions of socioeconomic inequality, persisting intergenerational poverty, low-quality healthcare and education systems, and alarming levels of air pollution.

It is an imperative for the country to curb the outmigration of its citizens by providing incentives that fulfill their yearnings for an improved quality of life. To facilitate accession negotiations and expedite convergence with standards of government effectiveness in the EU, significant strides must be made in progressing in the rule of law and safeguarding fundamental rights, while intensifying efforts in judicial and public administration reform, and in the fight against corruption and organized crime. Further, North Macedonia should rely on utilizing more efficiently the country's current natural, human, and social capital, seize the opportunities of the EU accession negotiation process to transform the economy, and build resilience against climate threats and future economic shocks to prevent setbacks. In its short history, the country has achieved important progress, including gaining independence, joining NATO, attracting large foreign investments through a competitive business environment, and launching the transformation of its social and energy sectors since 2018. These successes were built on a broad consensus on the country's future development. Going forward, it is imperative for all stakeholders to take joint and consensual decisive action in navigating existing challenges and embracing emerging opportunities. Ensuring policy continuity would improve predictability for private capital mobilization required to boost growth and job creation going forward, gradually reducing the important role the state has played in the economy since 2020.

The evolving economic and social context presents challenges as well as opportunities

Since 2018, economic growth has continued to benefit lower-income households, but the poverty rate is still relatively high, and about one-third of the population remains vulnerable to shocks. Almost 400,000 people lived in poverty in 2019—the latest year for which income data are available.¹ Employment growth and rising wages have driven poverty reduction, but deep disparities persist between urban and rural areas. The overall unemployment and youth unemployment rates have both declined substantially since 2018, but they remain among the highest in Europe and Central Asia (ECA), and long-term unemployment at 80 percent of total unemployment has remained fairly constant. Income inequality has declined considerably but is still higher than in other Western Balkan countries such as Albania and Kosovo.

Despite North Macedonia's considerable progress, surveys indicate that public perceptions of the country's future economic prospects remain pessimistic. In 2022, about 66 percent of respondents to the Balkan Barometer survey reported being unsatisfied with the economic situation, and about 40 percent believed that the economy would worsen in the coming year. These shares were among the highest in the Western Balkans. This pessimism reflects the fact that slightly more than half of people of working-age have jobs, while at the current GDP growth rate more than 235,000 people in North Macedonia will still be poor in 2030.

Economic growth has been insufficient to close the gap in living standards with advanced European countries, which continues to encourage many young Macedonians to emigrate abroad. North Macedonia has one of the largest diasporas in ECA relative to its

population, and emigration among younger generations is accelerating the process of demographic aging. Most emigrants are between 20 and 39 years old—the prime of their working lives—and they tend to cluster at the two extremes of the educational spectrum, having either very low or very high levels of educational attainment. To induce young workers to stay, Macedonian firms need to narrow the wage gap with EU, which in turn will require productivity gains, trade integration, and increased innovation. However, informality remains prevalent, and many firms are disconnected from the global economy.

The disruptions caused by Russia's invasion of Ukraine, including rising food and energy prices, exacerbated structural weaknesses in North Macedonia's economy. While the country's resilience to the crisis appears stronger than expected, its long-run potential growth rate continues to decline, driven by low and falling productivity and a chronic shortage of skilled labor. Financial sector resilience is also being tested, while the country returned temporarily to coal-fired power generation, undermining progress on its climate commitments. However, the long-awaited launch of the EU accession process in 2022 represents an opportunity for North Macedonia to align its laws and institutions and benefit from faster convergence with the EU.

Convergence with the EU income level has improved slowly: North Macedonia's per capita GDP rose from 34.4 percent of the EU27 average in 2009 to 41.5 percent in 2021, but this gap must be narrowed further to stem the tide of emigration among young workers. Moving from middle-income to high-income status will require boosting productivity, inclusion, and sustainability while reducing dependence on fossil fuels and energy intensity—all in a context of narrower fiscal space, rising costs of capital and persistent

¹ At the time of the publication the last Survey of Income and Living Conditions was from 2020 which depicts income data from 2019.

global economic uncertainty. However, some geopolitical trends may benefit North Macedonia: the post-pandemic emphasis on nearshoring/friend-shoring has already led to an increase in foreign direct investment from, and exports to, EU and NATO member states. Russia's invasion of Ukraine has accelerated EU enlargement decisions, and grant support to facilitate the implementation of the EU *acquis* and the Green Agenda is rising.

However, the current political polarization would need to be overcome to establish a broad consensus on key development and strategic goals and mobilize the resources necessary to achieve them. Moving forward with the stalled reforms in financial, tax, competition, education, and governance areas is more urgent than ever given the uncertainty of the geopolitical context and the competitive pressures the country is faced with even within the CEFTA region. Effective governance is critical to North Macedonia's continued economic and social transformation and requires a professional, non-politicized, and competent public administration that provides high-quality services to all citizens, designs evidence-based policies, and has the ability to carry forward the demanding EU accession process that would lead to transformational changes of the country.

Several constraints prevent North Macedonia from achieving faster, more inclusive, and sustainable growth

Weak governance and control of corruption continue to undermine North Macedonia's development. Low administrative capacity, political disagreements over high-level policy objectives, the politicization of the public sector, and frequent changes in ministerial leadership undermine service delivery and slow the implementation of reforms. Strategic planning is not aligned with budgeting and public investment programs, policy reversals are common, and entrenched interests

frequently thwart reform efforts. Inadequate budget allocations and inefficient spending on education and health result in poor human development outcomes, both by the standards of the EU and other Western Balkan countries.

Productivity is essential to spur growth and create more high-paying jobs, yet productivity indicators in North Macedonia are low and declining. Microenterprises are responsible for 88 percent of economic output, but these firms struggle with weak competitiveness, limited capacity for innovation and exports, insufficient access to finance, and low productivity. Unfortunately, most jobs are locked in such low-productivity firms. Foreign firms, especially automakers sourcing components, generate a significant number of jobs, but their spillover on the national economy is limited, and they are mostly tax-exempt. State aid stifles structural transformation in the agricultural sector and contribute to an inefficient allocation of productive factors. The agriculture and food sector has the potential to increase its productivity and create better jobs, but that potential is not fully explored at present. Focusing on deepening trade integration, more effective state aid and competition policy, digitalization, business environment and governance reforms would change the role of the state from its interventionist role in the economy to the guarantor of the level-playing field.

Despite advances in infrastructure, inadequate modernization and poor maintenance of the road and rail network continue to hinder economic development and slow regional economic integration. At least one-fifth of firms regard the quality of transportation infrastructure as subpar, with logistics and connectivity problems contributing to high trade costs. Digitalization can enhance productivity across all economic sectors, and can transform the labor market, increase government transparency and accountability,

and enhance the quality and accessibility of public services. However, while the country has made considerable progress in expanding digital connectivity since 2018, North Macedonia's information technology sector and digital infrastructure still lag far behind the average for the EU.

The reform of the education system is launched but needs to accelerate. The system is not adequately equipping graduates with the skills demanded by the labor market, making it difficult for young people to secure jobs. Due to unemployment and underemployment, the average Macedonian loses an estimated 23 years of potential productive employment. Moreover, limited access to early childhood education and childcare contributes to one of the lowest rates of female labor-force participation rate in ECA at 44 percent. While the country has made progress in improving human capital development, a child born in North Macedonia today can still expect to achieve just 56 percent of what his/her lifetime productivity would have been had he/she enjoyed complete education and full health (also among the lowest in ECA). While average scores on the Program for International Student Assessment (PISA) have improved since 2015, Macedonian students continue to underperform relative both to EU students and those in most Western Balkan countries. A child who starts school at age four can expect to complete 11 years of education by age 18, given the enrollment and completion rates, however, this number falls to 7.3 years when adjusted for learning quality.

Health outcomes have improved, but the management of noncommunicable diseases remains a challenge, and the provision of health services is neither as efficient nor as equitable as it could be. About 55 percent of the 2022 Balkan Barometer survey respondents expressed dissatisfaction with the quality of health services, and while child and maternal health improved, noncommunicable diseases accounted for 95 percent of all deaths in

2019. Major risk factors such as high blood pressure, tobacco use, and unhealthy diets are prevalent, and North Macedonia has one of the world's highest rates of tobacco consumption per capita. Ambient air pollution also imposes a major health burden, accounting for about 1,600 premature deaths each year.

Social assistance programs have made a significant contribution to poverty reduction, particularly during recent crises, but the coverage of means-tested programs is limited. In a context of increasingly frequent economic shocks, the efficiency of the social protection system is critical to ensuring continued progress on poverty reduction. To strengthen their impact, these programs should be further consolidated and expanded. Gender inequalities remain significant, and women have less access to economic opportunities and productive assets. Eliminating the gender gap in employment and entrepreneurship could boost annual GDP by 16 percent. In addition, minority groups such as the Roma, youth, LGBTI, and communities in remote rural areas often have very limited access to the labor market, social services, and essential infrastructure, including water, sanitation, transportation, and energy provision.

A combination of financial tightening, demographic aging, and the intensifying effects of climate change are narrowing the available fiscal space and raising sustainability concerns. The public debt stock has reached 60 percent of GDP, and the deficit significantly exceeds the pre-pandemic average. Public expenditure efficiency is weak, while mandatory spending accounts for 80 percent of total public spending. Fiscal revenues, equal to 33 percent of GDP, are among the lowest levels in the region and well below the EU average.

Climate-change adaptation will be vital to enhance resilience to environmental shocks, while decarbonization will become increasingly critical to international competitiveness as

the global transition to low-carbon growth accelerates. North Macedonia is one of the most climate-vulnerable countries in the ECA region, as environmental degradation and extreme weather events pose a serious threat to its aging and poorly managed infrastructure. The current institutional arrangements for disaster prevention, preparedness, and response are inefficient, both at the national and sub-national levels, and the country's water and wastewater infrastructure are in urgent need of investment. North Macedonia's growth has been highly carbon-intensive, as lignite dominates energy supply. Energy intensity is almost three times higher than the EU average, while heating based on solid fuels is the leading cause of air pollution in large urban areas including Skopje. North Macedonia is one of the countries most affected by ambient air pollution in the world, costing approximately an estimated 6.9 percent of GDP. Further, reliance on exports (40 percent of total) and jobs (5 percent of

total) from emission-intensive sectors remains high. Mitigation efforts made in the EU (CBAM and the Supplier Due Diligence Act) will impact trade, competitiveness, and the influx of FDI for carbon-intensive goods. Levying comparable carbon pricing to producers at home instead of paying to the EU budget would boost fiscal revenues and set signals on the right pathway.

Priorities for reducing poverty and promoting shared prosperity

The analysis presented in the SCD update highlights four High-Level Outcomes (HLOs) needed to achieve faster, sustainable, and inclusive growth, as well as 12 priorities that are crucial to poverty reduction and shared prosperity in North Macedonia. The following recommendations will inform the upcoming Country Partnership Framework (CPF) between the World Bank Group and the Government of North Macedonia.

Sustainable, Inclusive, and Resilient Growth: High-Level Outcomes and Priorities

HLO 1: More accountable service delivery to citizens	HLO 2: Strengthened human capital formation and closing opportunity gaps for all	HLO 3: Induced creation of better paid jobs	HLO 4: Strengthened household resilience to climate change and lowered carbon intensity and air pollution
Mitigate the impact of the political instability through establishment of medium-long term strategic and spending priorities	Endow people with quality and relevant skills throughout the life cycle	Close the gaps in transport, energy, and other connectivity infrastructure for international and intranational connectivity	Accelerate decarbonization and ensure energy security
Secure rule of law and build professional public institutions that are accountable to citizens	Reduce disincentives and remove barriers to labor market participation, especially for women and youth	Increase financial intermediation and inclusion	Scale up adaptation to climate change and improve preparedness, response and recovery from natural disasters
Ensure fiscal sustainability by reducing fiscal risks, improving the efficiency of spending, and enhancing revenue mobilization	Improve efficiency and access to quality public services for vulnerable and in rural areas	Improve the competitive environment and foster innovation	Improve public and private financial resilience to natural disasters



CHAPTER 1



UPDATED COUNTRY CONTEXT: NORTH MACEDONIA TODAY

North Macedonia is an upper-middle income country that began accession negotiations with the European Union in 2022. Since 2020, countercyclical macroeconomic policies have partially alleviated the impact of the pandemic and other concurrent crises on households and firms, enabling the country to rebound to its pre-crisis growth rate in early 2022. North Macedonia has shown considerable resilience in the face of multiple shocks, but it continues to struggle with underlying weaknesses, including an inefficient, import-dependent energy sector and persistently high rates of poverty and vulnerability. Amid rising external headwinds and unresolved domestic challenges, the potential GDP growth rate has fallen to less than 2 percent per year. Even prior to the pandemic the country's growth performance lagged peer countries, and at its current growth rate it will take several generations for North Macedonia to reach the average EU income level.

To achieve its development goals, North Macedonia will need robust, sustained, employment-intensive growth. The labor force is shrinking due to a combination of demographic aging and emigration, and wages will need to rise to increase labor-force participation. Promoting an efficient allocation of resources can increase productivity, employment, and wages, and structural reforms can help shift capital and labor to more-productive sectors. At the firm level, greater competition can help bolster resilience and promote technological uptake. Over the past 15 years, the country has made important strides in improving the welfare of lower-income households, but poverty remains a significant challenge. Women, young people, members of the Roma ethnic group, and the LGBTI community continue to experience poor social and economic outcomes, and many rural areas remain economically marginalized. Job opportunities have expanded, and earnings have risen—particularly among households at the bottom of the income distribution—but unemployment and inactivity remain pervasive, underscoring the need of faster, more-inclusive growth.

Economic growth has slowed relative to peer countries

After more than a decade of macroeconomic stability marked by deepening integration into global value chains (GVCs), an improving business environment, and sustained inflows of foreign direct investment (FDI), North Macedonia was hit hard by the pandemic. The average annual GDP growth rate slowed from 2.5 percent in 2011-15² to 1.7 percent in 2016-2022 (Figure 1 and Figure 2). The pandemic precipitated North Macedonia's deepest recession in two decades, causing a 4.7 percent contraction that was broadly in line with the average for structural peers. Despite substantial government support, the economy's heavy dependence on energy imports hampered its recovery in late 2021, and output did not reach its pre-pandemic level until early 2022, when Russia's invasion of Ukraine touched off a new economic shock.

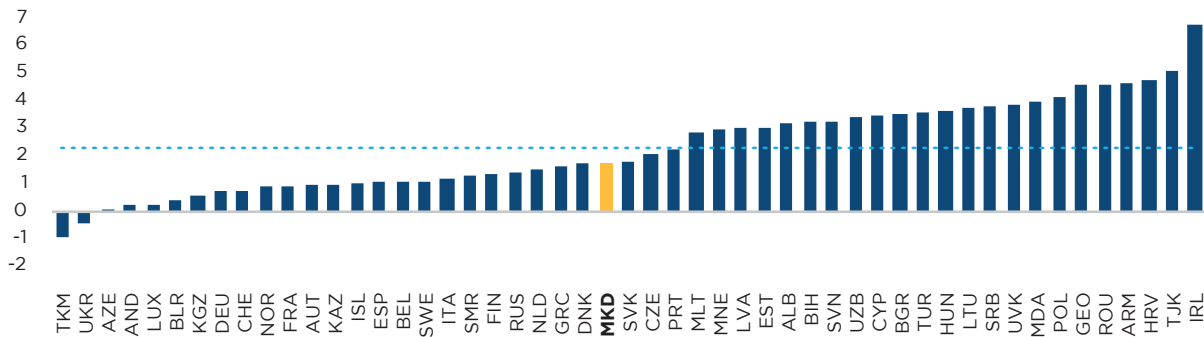
The growth rate of real per capita income was moderate even before the pandemic. Between 2017-19, the annual growth of per capita GDP (at PPP, constant 2017 international USD) averaged 2.6 percent, somewhat above the 2.2 percent ECA and 2.3 percent EU average. Real GDP per capita (in PPP, constant 2017 international USD) in North Macedonia reached \$17,129 in 2022—above the average for structural peers, but less than half the average for aspirational peers which indicates a large income convergence gap.

Convergence with the EU countries has been slow. In 2011, North Macedonia's per capita GDP was 26.8 percent of Germany's, and by 2021 it had reached just 30 percent (Figure 3). Structural peers fared somewhat better in terms of convergence speed (4.1 pp). Meanwhile, per capita GDP among North Macedonia's aspirational peers rose from an average of 59.7 percent to 67 percent

2 This growth rate was above the level of aspirational peers (Croatia, Estonia, Latvia, Lithuania, the Slovak Republic, and Slovenia) but below the level of structural peers (Albania, Bosnia and Herzegovina, Georgia, Armenia, Moldova, and Serbia).

Figure 1. Economic growth has been moderate relative to peer countries...

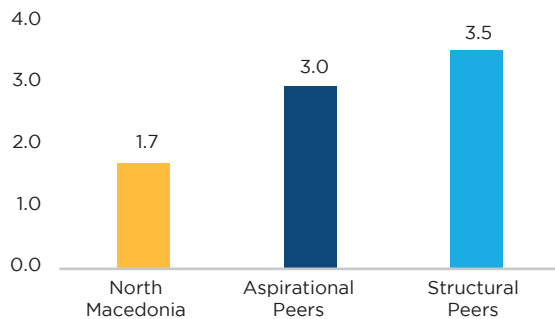
(Average annual GDP growth rate per capita, 2016-22, Percent)



Source: Authors' calculations based on data from national authorities, WDI, WEO, and Eurostat.

Figure 2. ...lagging the averages both for structural and aspirational peers

(Annual real GDP growth rate, 2016-22, Percent)



Source: Authors' calculations based on data from national authorities, WDI, WEO, and Eurostat.

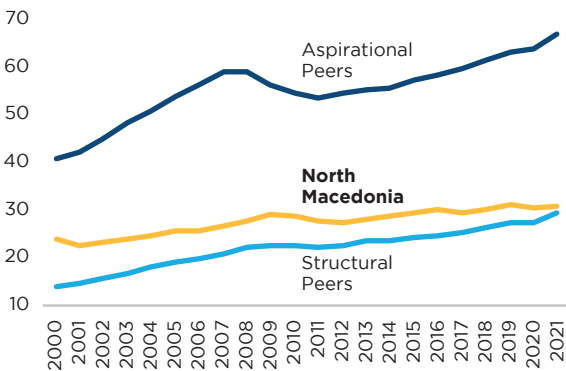
of Germany's per capita GDP. At its pre-pandemic average annual per capita GDP growth rate of 3.5 percent, it would take 40 years for North Macedonia to converge with the EU27 average GDP per capita at PPS. However, with the current annual per capita growth rates at 2 percent it would take over three generations (Figure 4).

Domestic demand drove growth over the past ten years, while net exports remained negative. Consumption represented close to 90 percent of GDP from 2017, well above the

average of 74 percent among aspirational peers and EU countries. During this period, consumption contributed 135 percent of GDP growth in North Macedonia, while the contribution of net exports was negative on average. Fueled by rising remittances, strong credit growth, and a sustained increase in wage rates, private consumption added to a widening external imbalance. As imports rose, exports also increased due to increasing integration into the global economy, including via export-oriented FDI in the automotive industry. During the pandemic, net exports helped offset the collapse of domestic demand. Output contracted by 4.7 percent as containment measures and weak consumer confidence caused a sharp drop in personal consumption and investment (Figure 5). The government ramped up spending by close to 10 percent to save jobs and firms and soften the blow to the economy. Fiscal support packages totaling about 6.5 percent of GDP included liquidity lines and interest-free loans for firms, loan repayment deferrals, basic consumption vouchers, wages and social security contribution payouts, and more tailored support for hard-hit sectors of the economy.³ At the same time, import-intensive production and consumption waned,

³ The realization of measures included in the first four packages from 2020 amounted to EUR 704 million.

Figure 3. Convergence with the EU income level is slow
(GDP Per Capita in PPP, 2017 Prices, as a share of Germany's)



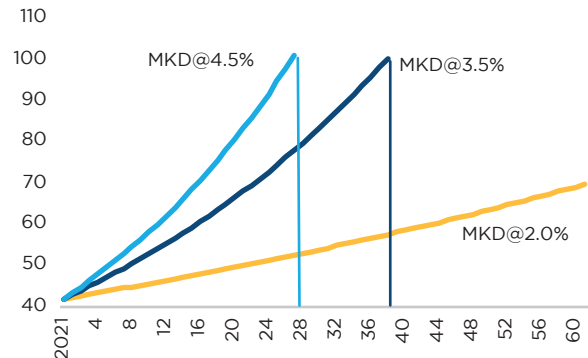
Source: Authors' calculations based on data from WDI and Eurostat.

and despite weak external demand net exports reduced the decline in output by 2.5 percentage points. As consumption plunged, household savings accumulated during 2020, laying the foundation for a recovery in 2021.

Consumption and investments led the post-pandemic rebound, while the contribution of net exports remained negative. Economic growth turned positive again in 2021, but real output did not exceed its 2019 level until early 2022. As movement restrictions were lifted, pent-up demand drove a surge in private consumption. Meanwhile, government support programs started to phase out. Exports regained their footing, but imports bounced back stronger due to supply shortages and rising commodity prices, which worsened the trade balance and dragged down growth by 4.2 percentage points on average (Figure 6). Stronger FDI inflows, remittances, and services exports helped offset the widening trade deficit in goods, but after hovering around 3 percent of GDP for three years, the current account deficit reached 6 percent of GDP in 2022.

Despite recent improvements in its structure, the relatively low rate of return on investment

Figure 4. But increasing GDP growth to 3.5 percent a year would converge with the EU27 within a generation
(Simulation of Convergence of GDP Per Capita with EU27)

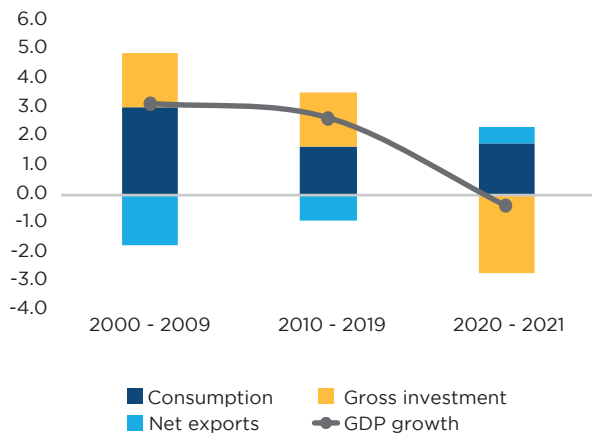


Source: Authors' calculations based on data from WDI. Note: EU27 growth rate at 1.16 percent a year.

weakened its contribution to growth. The gross investment-to-GDP ratio averaged 32 percent in 2016-22, with investment in fixed assets slowing while inventories rose. The share of private investment in fixed assets increased from 73 percent in 2010-15 to 77.1 percent in 2016-22. Historically, construction has accounted for almost 60 percent of gross investment, though this share has gradually declined since 2018 as investment in machines, equipment, and R&D has expanded. The focus of construction investment also shifted from residential buildings to other types of facilities and infrastructure, including roads, schools, hospitals, and production halls. However, low investment returns (Figure 7) highlight how weak market competition, inefficient public investment management, administrative barriers to private investment, and integration into less capital-intensive segments of GVCs contribute to the misallocation of production factors.

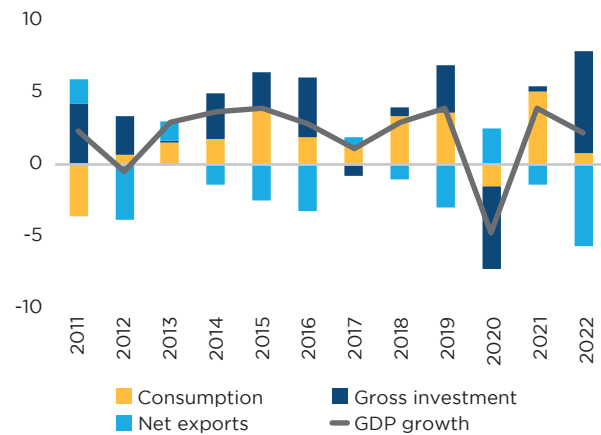
Diversification, greater domestic spillovers, and increased services exports could strengthen the contribution of trade to growth. Trade openness increased over the last decade, driven by the expansion of goods exports. However, North Macedonia's services

Figure 5. Growth was consumption-intensive before and after the pandemic... (GDP growth and contributions, Percent)



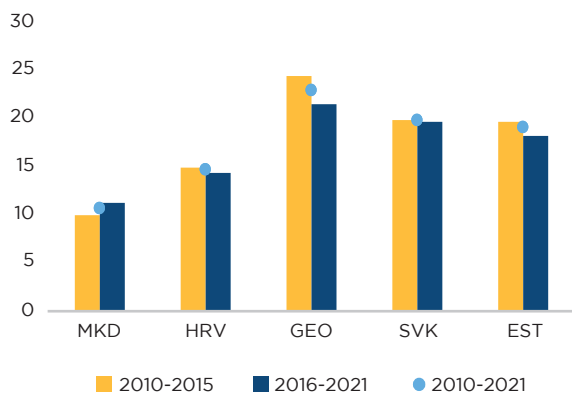
Source: Authors' calculations based on data from national authorities.

Figure 6. ...but net exports helped mitigate the shock during the pandemic (GDP growth and contributions, Percent)



Source: Authors' calculations based on data from national authorities.

Figure 7. Return on investment is still low in comparison to peers (Rate of return on Investment, Percent)



Source: Authors' calculations based on data from national authorities and WDI.

exports have fared worse than those of most structural and aspirational peers, representing just 14 percent of GDP since 2011, highlighting the untapped potential in services. In 2020, the shock of the pandemic led to a decline in North Macedonia's GVC-related exports, but the most import-dependent sectors were also those most affected by the pandemic,⁴

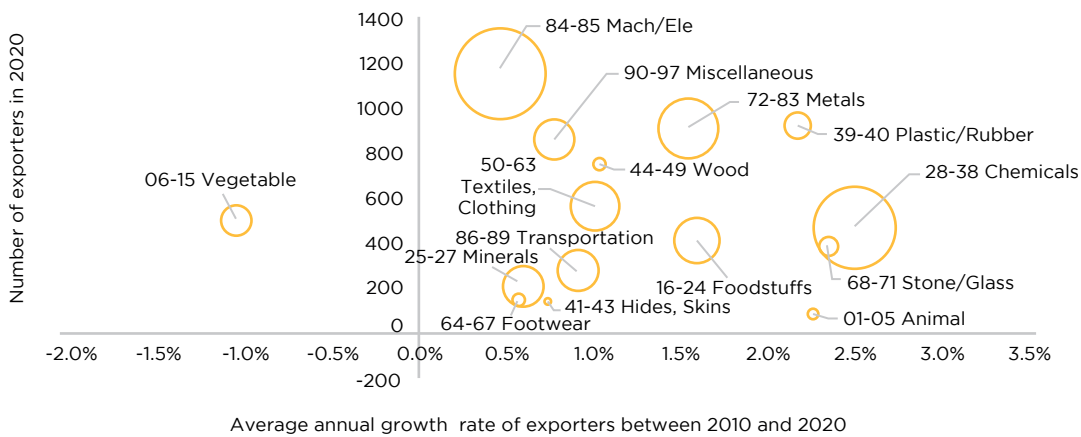
which helped to cushion the impact on the trade balance. While the extent of North Macedonia's participation in GVCs is comparable to the average for structural and aspirational peers, the country is classified as a limited manufacturing exporter,⁵ and moving into more skill-intensive services and advanced manufacturing exports will be necessary to access higher levels of the value chain, while strengthening linkages between export-oriented firms and the broader domestic economy will be vital to increase the economic benefits of trade.

Limited trade diversification impedes North Macedonia's economic transformation and undermines its export-led growth strategy.⁶

The top 5 percent of exporting firms account for more than 80 percent of total exports, and market concentration has been increasing over time, suggesting a low number of new entrants. Most exporters are in the machinery and electronics industry (15 percent in 2020), where the number of new exporting firms increased by just 0.5 percent per year. The

4 Machinery and equipment manufacturing and mechanical equipment.
 5 According to the World Bank Taxonomy of GVC Participation (2020).
 6 World Bank (2022a).

Figure 8. Low number of new exporters in sectors with higher value-added signals weak economic transformation of the economy
(Average annual growth rate of exporters between 2010 and 2020, Percent)



Note: The bubbles represent the value of exports in 2020 of each sector.
Source: Authors' calculations based on customs firm-level transactions data.

largest increase in new exporters was observed in the chemicals sector (2.5 percent between 2010 and 2020). Meanwhile, the number of new exporters in traditional industries such as textiles and footwear, vegetables, and foodstuffs did not significantly increase (Figure 8). While large exporters seemed to have longer survival rates, the probability of a small exporters surviving for five years was about 50 percent, and only half of micro exporters survived for longer than a year. Most new exporters were micro or small firms that tended to export one product to one market, and their share in total exports remained low. Overall, North Macedonia exports a smaller total number of products to a smaller number of markets than the average for peer countries, suggesting limited diversification.

Before and after the pandemic, the services sector was the primary contributor both to real value-added and employment. From 2017 to 2019, sectors such as wholesale and retail trade, transport, and tourism accounted for nearly half of the growth in real value added, followed closely by manufacturing (Figure 9).

However, the services sector was especially affected by pandemic-related restrictions, which caused a decline of over 4 percentage points in sectoral value added in 2020. Although manufacturing experienced a robust recovery, industrial activity was hindered by declines in mining and construction output. Post-crisis growth was driven by information and communications technology (ICT), which saw a surge in demand due to the pandemic-induced shift to hybrid or remote work.⁷ Despite substantial government subsidies, agriculture's contribution to value added was negative throughout the period. Sectoral employment patterns mirrored the dynamics observed before the pandemic, with wholesale and retail trade, transport, and tourism services being the main contributors to employment growth, followed by manufacturing. After the pandemic, employment in ICT surged, while the rest of the private sector struggled to return to the employment levels observed in 2019. Employment growth, which had reached a decade high of 5.1 percent in 2019, contracted by 0.3 percent in 2020 and by 6.5 percent in 2021-22. Despite an

⁷ The draft labor law currently being prepared includes flexible labor contracts for gig economy and remote work.

Figure 9. The services sector has led the growth
(Sectoral contribution to value-added growth, Percent)

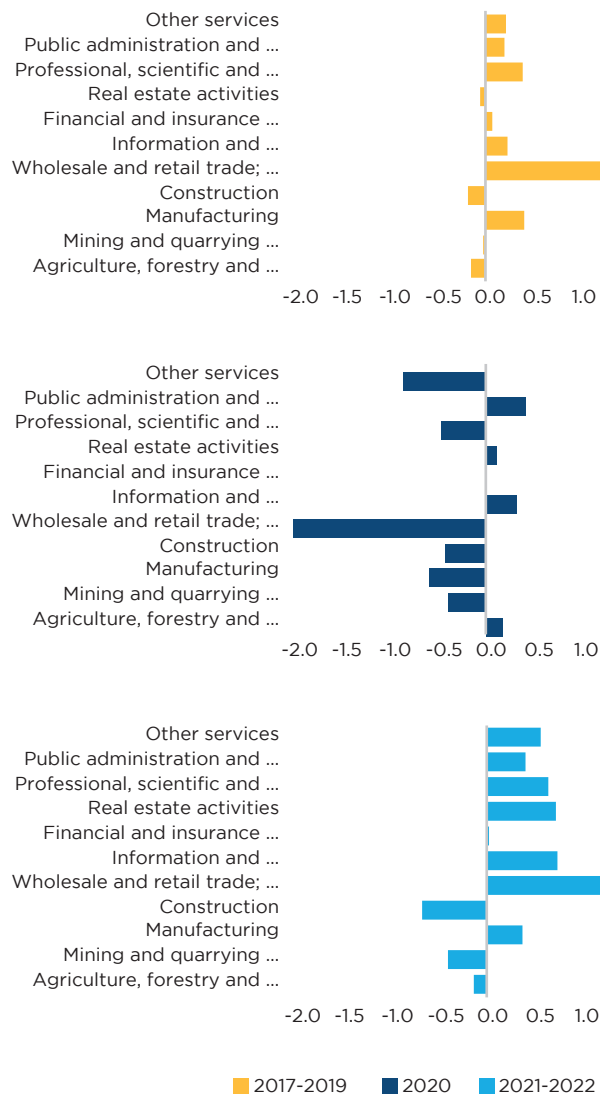
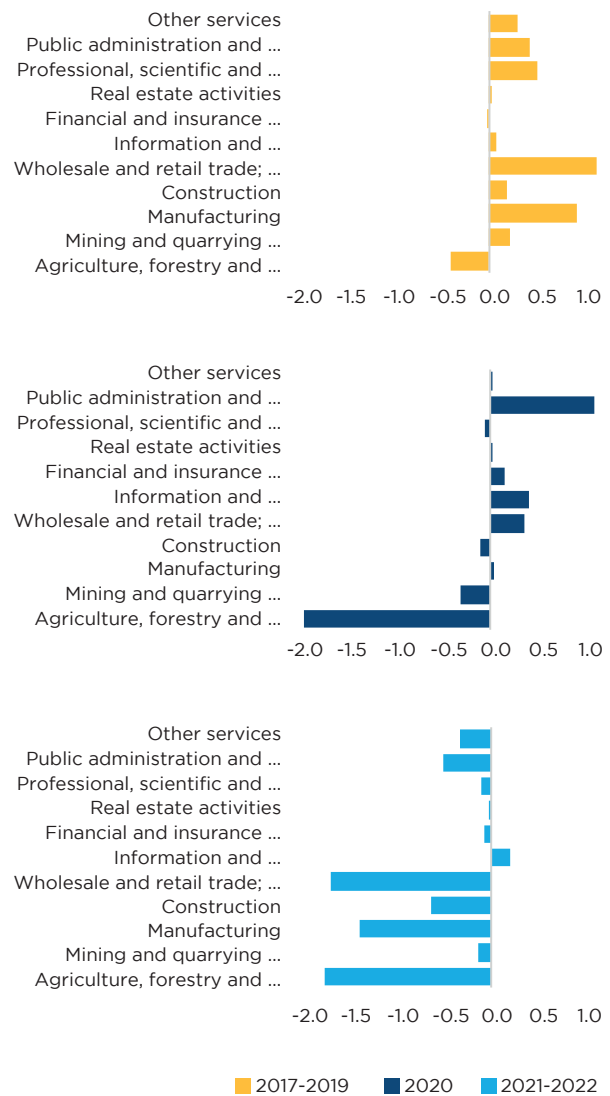


Figure 10. Employment in the agricultural sector has steadily declined
(Sectoral contribution to employment growth, Percent)



Note: The 2021-22 labor data are not directly comparable with the previous years due to the changes in the survey sample following the census results.
Source: Authors' calculations based on official employment data from national authorities.

increase in employment in higher-value-added industries like ICT, most jobs remained concentrated in less skill-intensive and less technologically sophisticated activities such as wholesale trade, retail, and assembly-based manufacturing. Formal employment in agriculture has been consistently declining since 2018 (Figure 10).

Government support played a crucial role in mitigating job losses during the pandemic, but the impact of the crisis lingers. From March 2020 to April 2021, the government implemented six support packages aimed at minimizing the economic repercussions of the pandemic. These packages included measures to sustain employment, such as

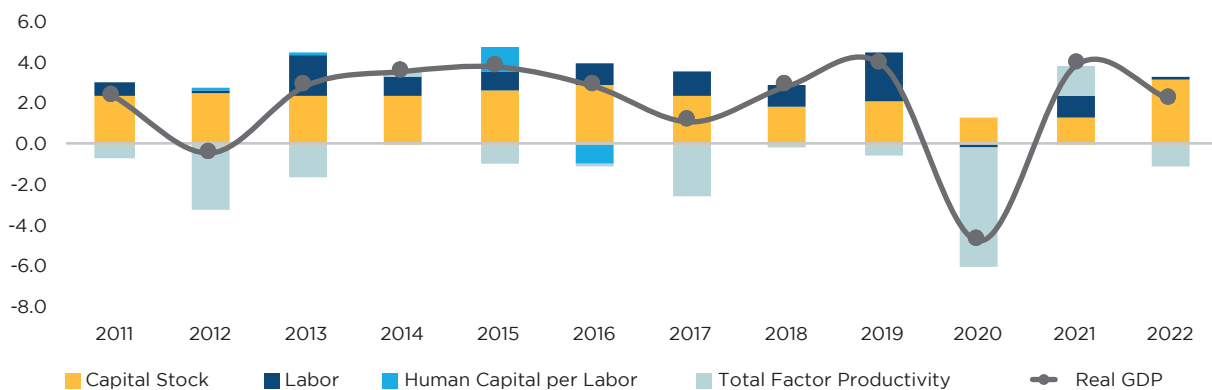
subsidies for social security contributions, wage payments, and other forms of financial assistance for both the public and private sectors. Sectors heavily affected by the pandemic, including accommodations and food service, sports, arts, and entertainment, also received support.⁸ Estimates suggest that employment-retention measures protected between 60,000 and 80,000 jobs that would have otherwise been lost.⁹ The transport, manufacturing, hospitality, and agriculture sectors experienced the most significant job losses. Although employment gradually started to recover in the third quarter of 2020, it remained below pre-pandemic levels at the end of 2022, as an increasing number of workers exited the labor force.

Weak productivity and slow human capital formation are a drag on growth and employment

The economy faces challenges stemming from low productivity and human capital, which hinder growth and limit employment

opportunities. Over the past two decades, potential output growth has fallen by nearly 50 percent, driven by diminished levels of total factor productivity (TFP) and human capital. The decline in the structural component of growth, which is closely linked with the economy's long-term productive capacity, has been particularly pronounced in the last ten years. The structural component of growth fell from 3.5 percent in 2003–2008 to 2.2 percent in 2013–2019 and reached a historic low of 1.7 percent after the onset of the pandemic (Box 1). By contrast, aspirational peers experienced less severe scarring to potential output growth, which remained close to the end-2019 level despite the pandemic. Low or negative rates of TFP and human capital formation have been significant drags on growth in North Macedonia for over a decade. An analysis of productive factors reveals that GDP growth is driven by capital accumulation, with a lesser contribution from the growth of the labor supply (Figure 11). By contrast, the contribution of TFP, which measures the productive efficiency of capital and labor,

Figure 11. The contribution of TFP to growth has been low or negative since 2011... (Contribution to GDP growth, in percentage points, by factors of production)

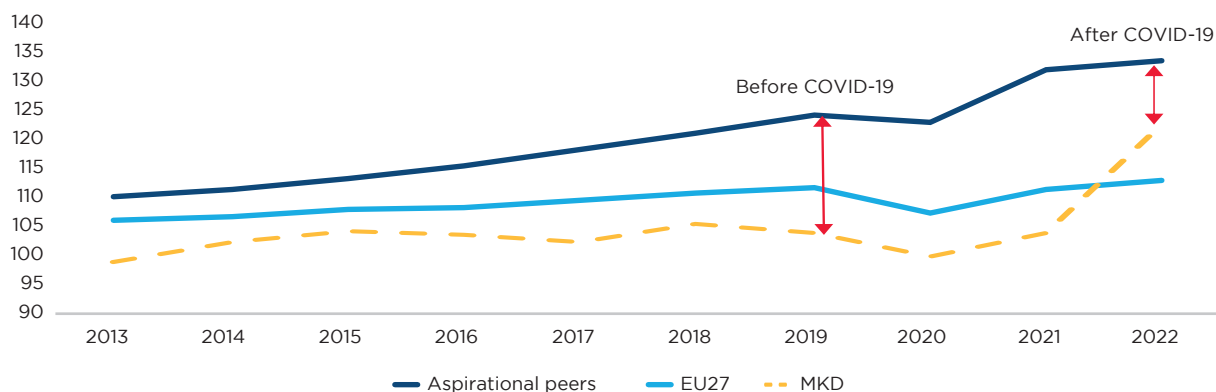


Note: Labor productivity is calculated using the annual growth of value added per worker. A steep improvement in productivity in 2022 is explained by a drop in employment following the census-adjusted labor force survey. *Source:* Authors' calculations based on data from national authorities and Eurostat.

8 Around 33 percent (€190 million) of the planned support measures (with fiscal implications) were set to alleviate the impact of the pandemic on the labor market, according to a SAO Report, May 2022. The realization of labor market measures included in the six packages was more than 90 percent. Part of the government support for social security contributions and wages (€37 million) was implemented with the assistance of the World Bank (CERC component of LRCP) that enabled job-retention at 26992 firms (more than 1/3 of the firms in the country) as recipients.
 9 FinanceThink (60,000), National Employment Strategy 2021-2027 (80,000).

Figure 12. ...and labor productivity remains weak despite recent improvements

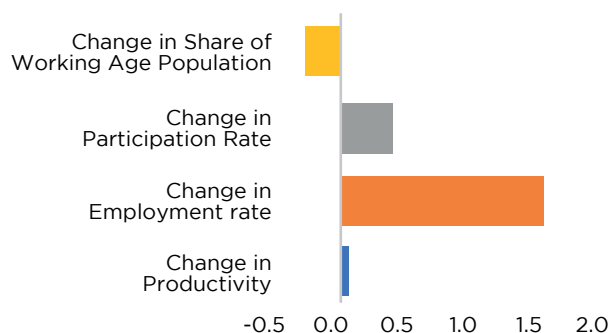
(Labor productivity index, 2009=100)



Note: Labor productivity is calculated using the annual growth of value added per worker. A steep improvement in productivity in 2022 is explained by a drop in employment following the census-adjusted labor force survey.
Source: Authors' calculations based on data from national authorities and Eurostat.

Figure 13. Higher employment rate led per capita GDP growth

(Shapley decomposition of per capita GDP growth, 2017-22, Percent)



Note: Labor productivity is calculated using annual growth of value added per worker.
Source: Authors' calculations based on data from national authorities.

has been weak or negative. Moreover, human capital formation has not contributed to growth in the last five years. Learning losses resulting from the pandemic may further reduce productivity and lifetime earnings, exacerbating inequality.¹⁰

The period leading up to the pandemic was marked by significant employment gains, which made a substantial contribution to economic growth, but North Macedonia's

marginal labor productivity continues to lag peer countries. Expressed in terms of value added per worker, the country's labor productivity currently stands at just 18 percent of the EU27 average despite recent gains (Figure 12). Among aspirational peers, value added per worker increased by 22 percent between 2012 and 2022, while value added per worker in North Macedonia rose by 26 percent. From 2017 to 2022, labor productivity made a minor contribution to the growth of GDP per capita, which was instead driven by rising employment rates until the onset of the pandemic (Figure 13).

Although labor productivity is low, robust government support has contributed to the steady growth of real wages. From 2017 to 2022, average real wages rose by approximately 9 percent. This increase was bolstered by government policies geared towards enhancing living standards and minimizing the prevalence of under-the-table "envelope wage" practices. Wage growth remained resilient even amid the pandemic, propelled by public sector pay raises and hikes in the minimum wage, even as productivity slumped. The minimum wage has

¹⁰ World Bank (2023a).

Figure 14. Job growth has recently surged in the professional services and ICT sectors... (Average annual employment growth and value added per worker, 2017-22, Percent)

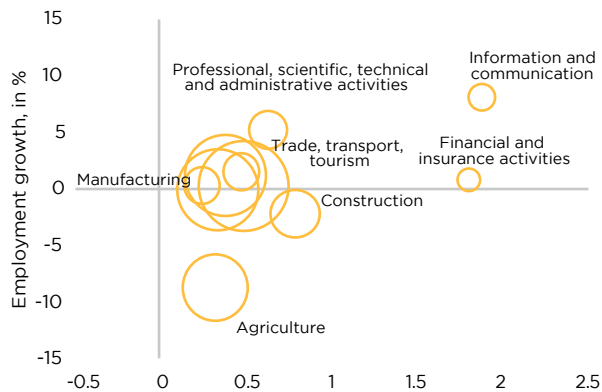
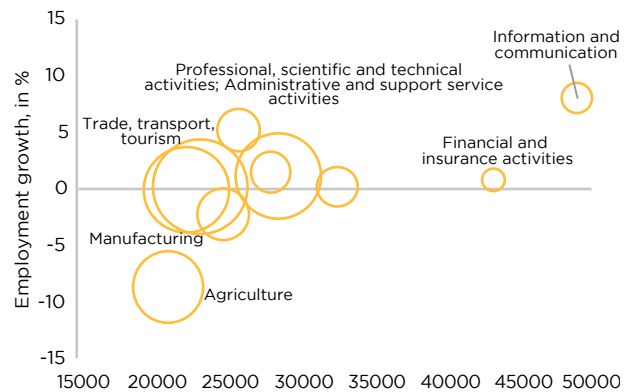


Figure 15. ...where wages are relatively high (Average annual employment growth, Percent, and average monthly net wage per employee, MKD, 2017-22)



Note: The size of the circles represents the size of the industry in terms of employment.
Source: Authors' calculations based on data from national authorities.

risen steadily since 2017, more than doubling to 20,175 MKD (about €330) by March 2023. The most recent increase was due to changes in the indexation mechanism¹¹ in the March 2022 minimum wage law.¹² Encouragingly, the influx of private investment, primarily foreign, and the resulting rise in wage premiums to attract labor, pushed manufacturing wages to nearly 90 percent of the average wage. The manufacturing sector even reported above-average wage growth during the pandemic.¹³ The trade, tourism, and transport sectors also experienced significant wage hikes.

Despite these gains, many jobs are still concentrated in sectors characterized by low value added and low wages. Real wages in the ICT sector—one of just two sectors

recording improvements in productivity—have increased by 5 percent since 2017, reaching more than twice the average wage in nominal terms (Figure 14). The ICT sector also saw the largest increase in employment, though it only accounts for about 3 percent of total employment. The agriculture, manufacturing, trade, and tourism sectors, which suffer from low productivity and low wages, collectively account for 49 percent of total employment (Figure 15).

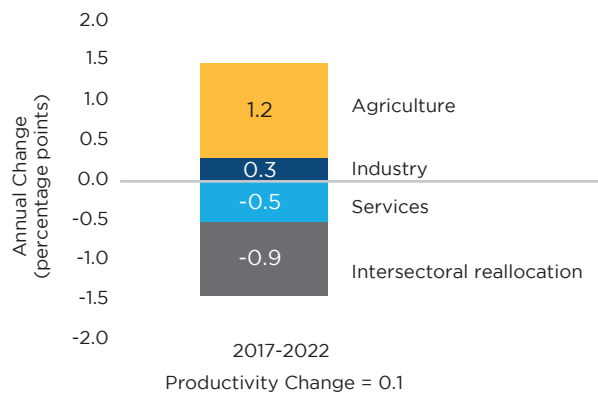
Structural transformation can bolster growth and employment, thereby enhancing labor productivity. Improvements in labor productivity can be achieved either through structural shifts in employment from lower- to higher-productivity sectors, or by driving

11 The minimum wage is now adjusted every March based on 50% of CPI growth and 50% of average wage growth in the previous year. In addition, the minimum wage cannot be lower than 57% of the average net wage in the year prior to the adjustment. The previous indexation mechanism was based on 33% of average wage growth, 33% of CPI growth, and 33% of real GDP growth in the previous year.

12 To counter the rise in labor costs, the government offered financial support to employers in the form of payments proportional to the wage prior to the adjustment, or proportional to the increase in social security contributions due to the adjustment. Starting from September 2017, the government subsidized employers with payments from 500–2000 MKD per employee (proportional to the wage prior to the increase in the minimum wage) for the first six months and for 50% of the amount paid in the next six months. From March 2022, employers were compensated for the increase in social security contributions that result from the rise in the minimum wage in the amount of 1,197 MKD. Employers were also stimulated to raise wages additionally with subsidies for social security contributions for wage increases between 600 and 6000 MKD. The measure was active from November 2019 until October 2022.

13 This wage growth was largely due to government wage and social security contributions.

Figure 16. The reallocation of labor across sectors has contributed little to productivity growth (Shapley decomposition of labor productivity growth by sector and intersectoral reallocation)



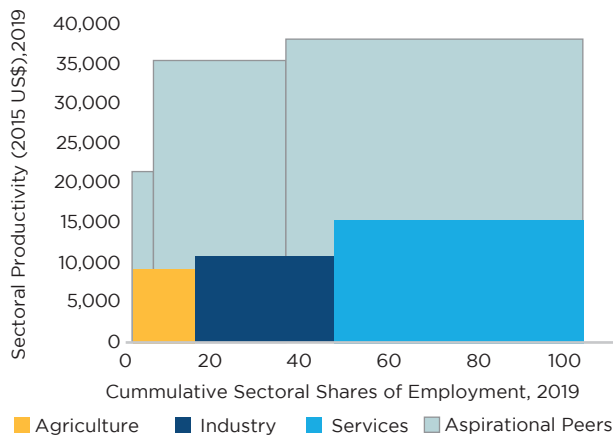
Note: Labor productivity is calculated using the annual growth of value added per worker, taking into consideration changes in the employment rate, the participation rate, and the share of working-age population. The intersectoral reallocation effect captures productivity increases associated with shifts in labor from less-productive (e.g., agriculture) to more productive (e.g., manufacturing, services) sectors. *Source:* Authors' calculations based on data from national authorities.

productivity enhancements within sectors. However, North Macedonia has garnered minimal benefits from structural employment shifts, as the intersectoral reallocation of labor contributed just 0.3 percentage points to productivity growth between 2017 and 2022 (Figure 16). Furthermore, labor productivity across all sectors continues to lag significantly behind the averages of North Macedonia's aspirational peers (Figure 17). In the wake of the pandemic, most sectors have not seen any improvement in value added per worker.¹⁴ With productivity at a standstill, disposable incomes will only increase if individuals work longer hours.

Firm productivity remains low and stagnant due to misallocation of resources

Even prior to the pandemic, firm productivity in North Macedonia was stagnant and

Figure 17. A relatively large share of workers is employed in less-productive sectors (Sectoral employment and labor productivity, 2019)



Note: Colored boxes represent North Macedonia; outlined boxes aspirational peers. Labor productivity is calculated using real value added per worker. *Source:* Authors' calculations based on data from WDI and Eurostat.

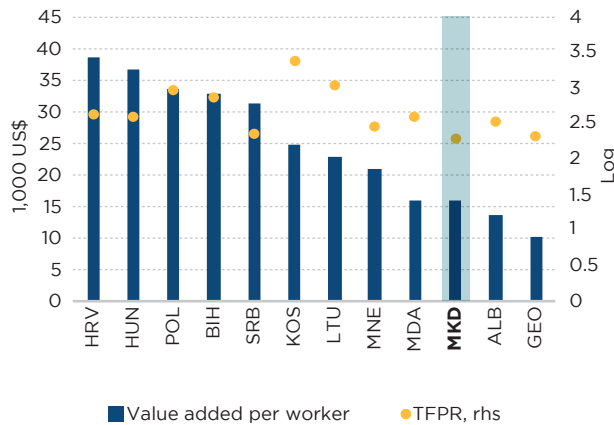
substantially lagged peer countries. Data derived from the Central Registry indicate that the growth of firm productivity was close to zero between 2015 and 2020, with a revenue-based measure of TFP (TFPR) declining by an average of 1.6 percent across all firms. The most recent World Bank Enterprise Survey, which dates from 2019, reveals the extent to which value added per worker and TFPR in North Macedonia both fell below the average of neighboring countries (Figure 18). Over the last five years, average TFPR growth in the services sector has been lower than in manufacturing. During 2020, TFPR growth dropped by 3.8 percent for manufacturing and 6.8 percent for services (Figure 19).

Firm-level productivity varies significantly in North Macedonia, reflecting differing levels of technology usage, management skills, employee expertise, product quality, and pricing across industries. These variations

¹⁴ The recent reduction in agriculture employment was stronger than the value-added decline which drove the productivity increase.

Figure 18. Before the pandemic, firm productivity in North Macedonia was already lower than in peer countries...

(Average value added per worker and average TFPR of manufacturing firms, 2019)



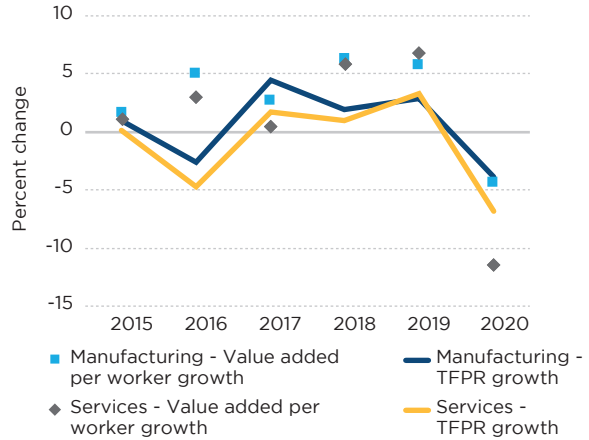
Source: Authors' calculations based on data from the World Bank Enterprise Surveys.

in productivity indicate the potential for considerable gains from the reallocation of resources from less-productive to more-productive industries. North Macedonia's productivity gap is wide, with firms in the 90th percentile being four times more productive than those in the 10th percentile (Figure 20). The retail and wholesale trade sector exhibits a particularly stark disparity: a firm in the 90th percentile is over eight times as productive as one in the 10th percentile. In the manufacturing sector, the largest variations occur in the automotive and transport manufacturing industries (4.2 times) and the construction, computers, and machinery industries (3.9 times).

Surprisingly, many large and medium-sized firms in North Macedonia are less productive than smaller ones. When factors of production are efficiently allocated, more-productive firms should expand by taking on additional labor and capital, generating economies of scale that further increase their productivity. In North Macedonia, however, this is not the case, as many large and medium-sized firms

Figure 19. ...and it plummeted after the pandemic outbreak

(Growth in TFPR and value added per worker)

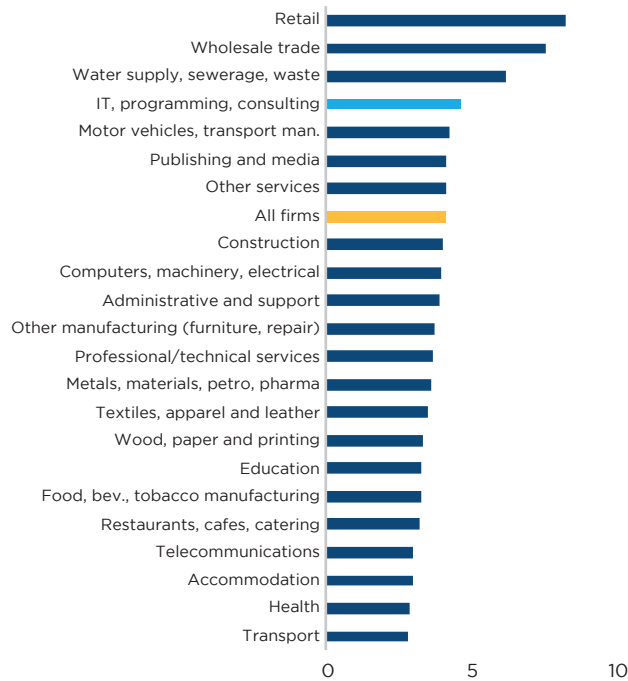


Source: Authors' calculations based on data from the World Bank Enterprise Surveys.

exhibit lower productivity levels than their smaller counterparts (Figure 21). Specifically, the median large firm (employing 100 or more workers) is 3 percent less productive than the median medium-sized firm (employing 10 to 99 workers) and 14 percent less productive than the median small firm (employing less than 10 workers).

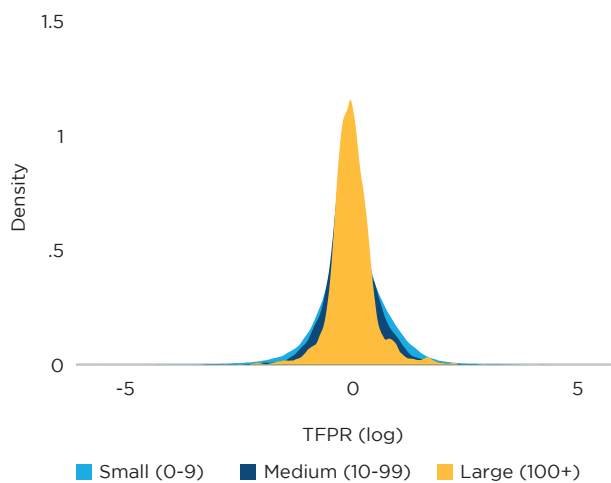
Low productivity growth in North Macedonia is largely due to productivity changes in existing firms (within-firm productivity), as opposed to capital and labor moving to more productive firms (between-firm productivity). A decomposition of TFPR growth based on firm registry data for 2011-20 reveals that the within-firm component made a negative contribution, on average, to productivity growth during 2018-20. This trend highlights the limited extent to which firms are upgrading their internal capabilities, including their capacity to innovate, adopt new technologies, or improve managerial practices. Low rates of within-firm productivity growth may reflect the high uncertainty, slowing activity, and financial constraints

Figure 20. Productivity varies widely across firms, especially in the services sector
(Productivity ratio between the 10th and the 90th percentile, 2015-20)



Source: Authors' calculations based on national business registry data.

Figure 21. In general, larger firms are not more productive than smaller firms
(Distribution of TFPR by firm size, 2015-20 average)



Source: Authors' calculations based on national business registry data.

experienced during the pandemic.¹⁵ However, the between-firm component made a positive contribution to productivity growth over the period, which may reflect gains in TFPR achieved by reallocating production factors to more-efficient firms (Figure 22). The highly volatile distribution of the between-firm and within-firm components across sectors is a key feature of TFPR growth. The contribution of the between-firm component over the last few years may indicate a self-selective environment in which the least-productive firms were compelled to exit the market, especially during the COVID-19 pandemic.

In advanced economies, firm entry and exit significantly contribute to productivity growth, but in North Macedonia their impact is much weaker. Launching new firms can enhance overall productivity by spurring research and development or by promoting market competition. Similarly, the exit of underperforming firms due to competitive pressures can lead to more efficient resource allocation. Unfortunately, the rate of firm entry in North Macedonia falls short of the average rates for neighboring countries and the OECD (Figure 23 and Box 2). This lack of market dynamism can be a roadblock to productivity growth. From 2018 to 2020, the net contribution of firm entry to productivity growth was marginal when compared to the contributions of the between-firm and within-firm components. Moreover, relatively productive firms are exiting the market, while less productive ones remain.

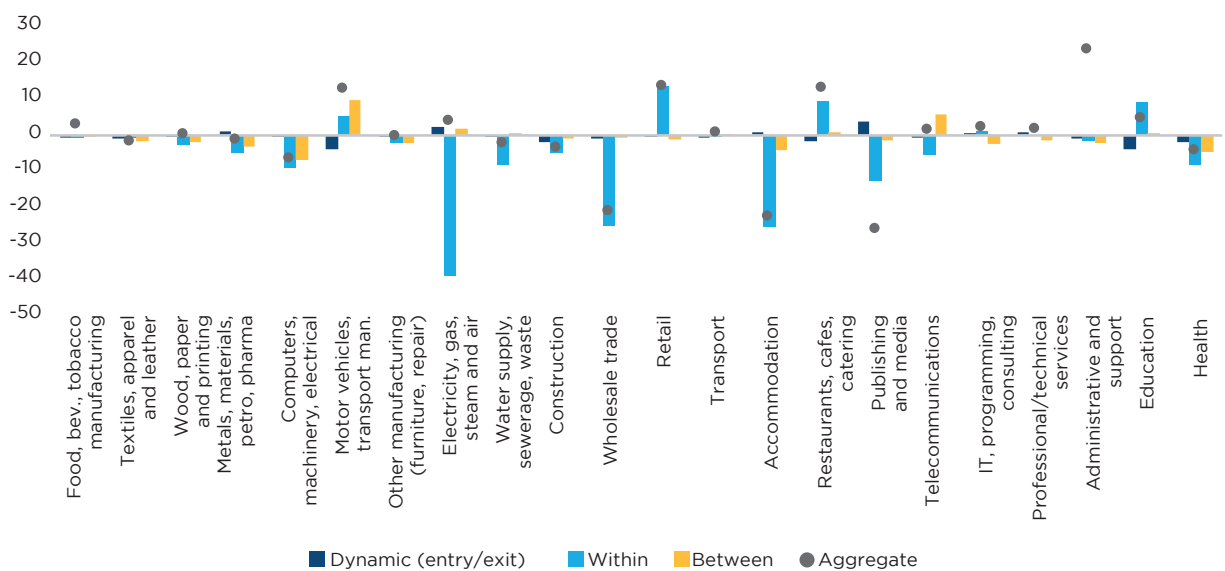
North Macedonia has relatively few high-growth and “gazelle” firms, particularly in the manufacturing sector, when compared to aspirational peer countries. High-growth firms, defined as those with an average annual employment growth rate exceeding 10 percent over a three-year period, are instrumental

¹⁵ World Bank (2020b).

in driving productivity growth in developed economies. In North Macedonia, 83 percent of high-growth firms are medium-sized. However, just 2.7 percent of manufacturing firms and 9.5 percent of service firms meet this criterion, far below the average for aspirational peers (Figure 24). “Gazelles” are young firms employing more than 10 individuals that have been operating for fewer than five years and

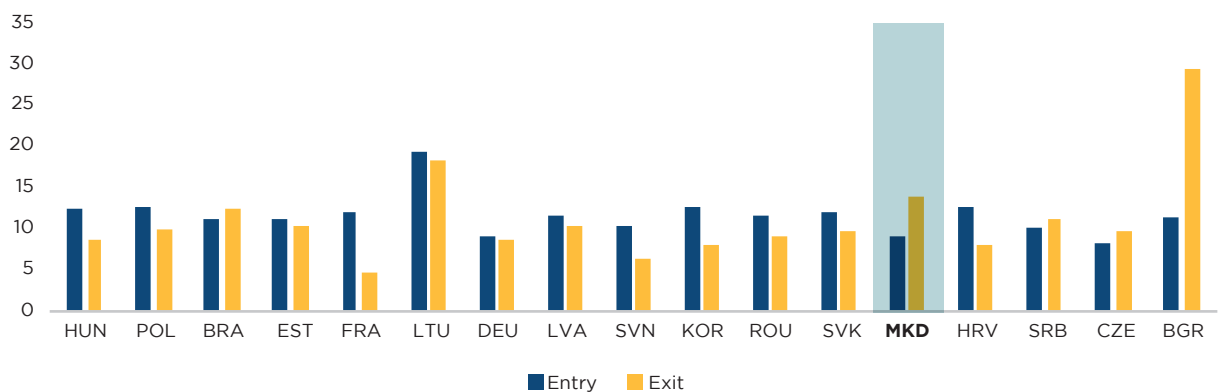
have sustained average annual employment growth rates of at least 20 percent. In North Macedonia, only 0.20 percent of firms with over 10 employees qualify as “gazelles” (Figure 25). Though few in number, these firms have played a crucial role in job creation: from 2016 to 2020, they represented 6 percent of all formal jobs, including 26,858 jobs in wholesale and 21,099 jobs in textiles.

Figure 22. From 2018 to 2020, within-firm productivity growth was negative across multiple sectors (Decomposition of TFPR growth by industry, including net firm entry 2018-20)



Source: Authors' calculations based on national business registry data.

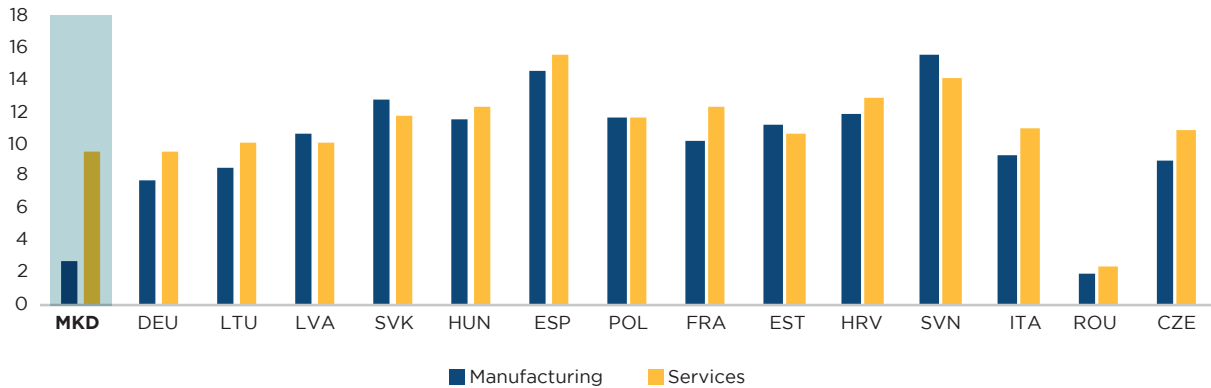
Figure 23. The rate of firm entry in North Macedonia is below that of peer countries (New firms as a percentage of total firms, 2019¹⁵)



Source: For North Macedonia, authors' calculations based on firm registry data. For other countries, OECD structural and demographic business statistics (DSBS).

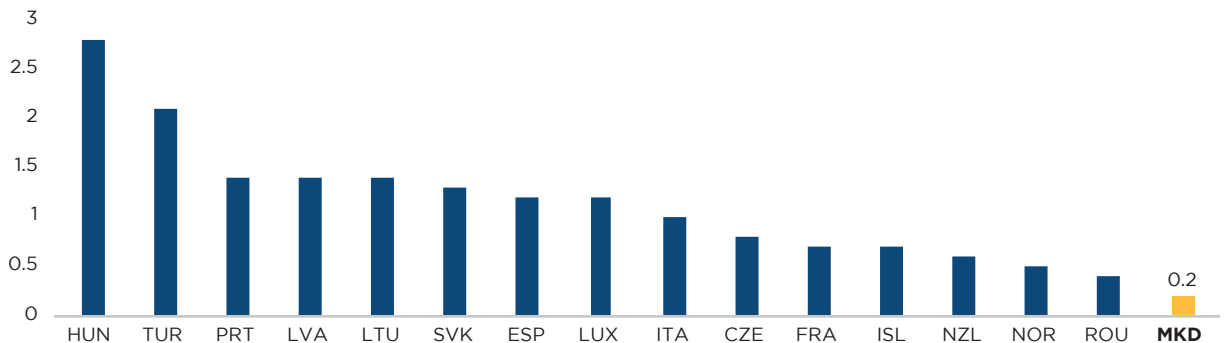
16 Latest data available for country comparison.

Figure 24. Many high-growth firms are in services; only a few are in manufacturing
(Firms with 3-year average employment growth rates of 10% or more as a share of 10+ employee firms, 2019)



Source: For North Macedonia, authors' calculations based on firm registry data. For other countries, OECD structural and demographic business statistics (DSBS).

Figure 25. North Macedonia has fewer “gazelle” firms than peer countries
(Gazelles as a percentage of all firms with 10 or more employees, 2019)



Source: For North Macedonia, authors' calculations based on firm registry data. For other countries, OECD structural and demographic business statistics (DSBS)

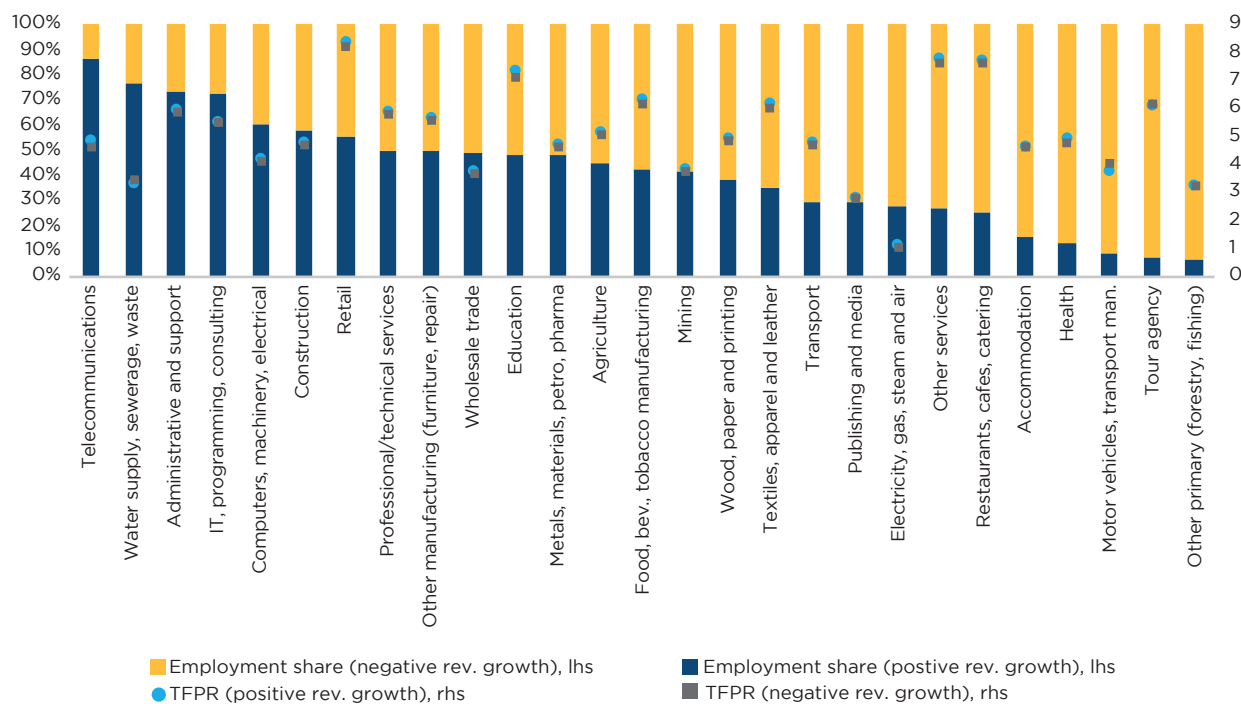
Over the past decade, numerous underperforming firms have continued to operate in North Macedonia. From 2018 to 2020, the motor vehicles manufacturing, health, transportation, and tourism sectors experienced a decline both in revenue and productivity (Figure 26). These sectors, which account for most jobs in the country, have lower average productivity levels and

fewer firms that have experienced positive revenue growth. Underperforming firms are slow to adopt new technologies, and they may contribute to resource misallocation by absorbing productive factors that could be employed more effectively elsewhere. Moreover, the COVID-19 pandemic weakened market competitiveness by exacerbating barriers to entry.¹⁷

¹⁷ World Bank (2020b).

Figure 26. Firms in lagging sectors provide a large share of employment and are not exiting the market

(Share of firms with 3-year average positive and negative revenue growth)



Source: For North Macedonia, authors' calculations based on firm registry data. For other countries, OECD structural and demographic business statistics (DSBS).

High-productivity firms create high-quality jobs

The growth rate of formal employment has risen gradually for several years. In 2019, 54.7 percent of the working-age population was employed, the largest share since 2006.¹⁸ However, the increase in formal employment did not generate a proportionate surge in productivity, as many of the new jobs were in low-productivity firms. A shortage of productive job opportunities can lead to resource misallocation and productivity losses over time, underscoring the need for improvements in management skills as well as technical, quality-assurance, and sales competencies.¹⁹

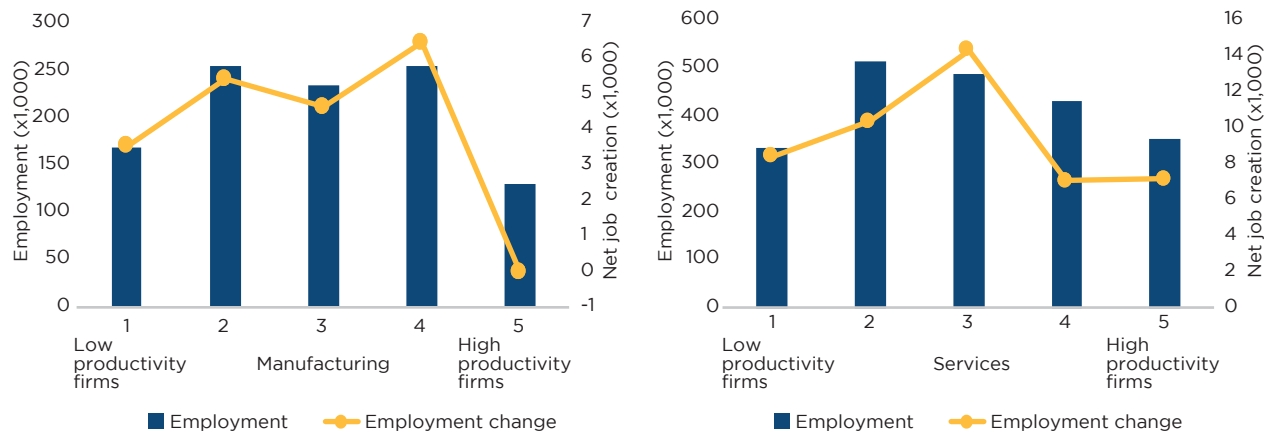
Although many jobs have been created within productive sectors, the economy still faces challenges in generating highly productive employment. During the 2011-20 period, many industries exhibiting positive productivity growth also reported negative employment growth—even after accounting for the impact of the pandemic—which suggests that high-productivity firms are not always associated with high rates of employment growth (Figure 27). Over the past decade, the structure of employment has evolved in line with the economy's structural transformation. This change is evident in the declining share of workers in agriculture, the stable share of workers in manufacturing, and the increasing share of workers in the services sector, which now employs over 55 percent of the workforce.

18 National Employment Strategy 2021-2027 with employment action plan 2021-2023. Government of the Republic of North Macedonia.

19 World Bank (2020b).

Figure 27. Employment and net job creation by within-industry tend to be low with the most productive firms

(Employment and net job creation by within-industry TFPR quantile, 2018-20)



Source: Authors' calculations based on national firm registry.

Figure 28. Most service-sector jobs are in small and medium firms, while most manufacturing jobs are in large firms

(Employment shares by sector and size, percent)

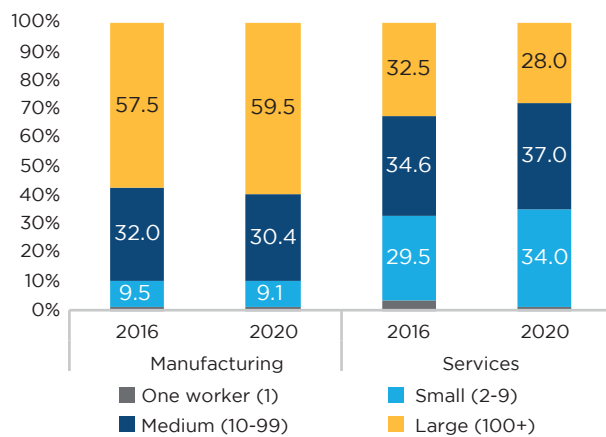
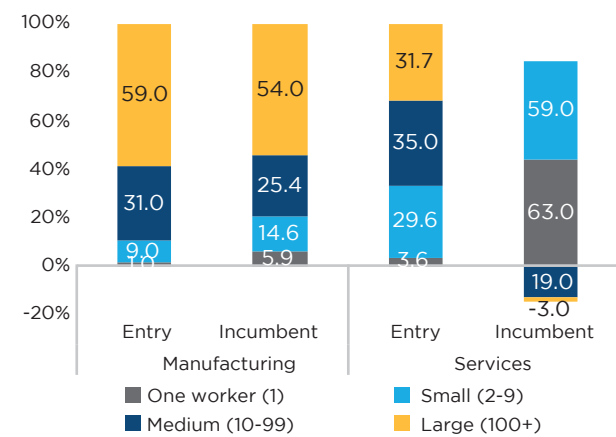


Figure 29. Micro and small firms create most service-sector jobs, while large firms create most manufacturing jobs

(Shares of net job creation by new entrants and incumbent firms, 2016-20)

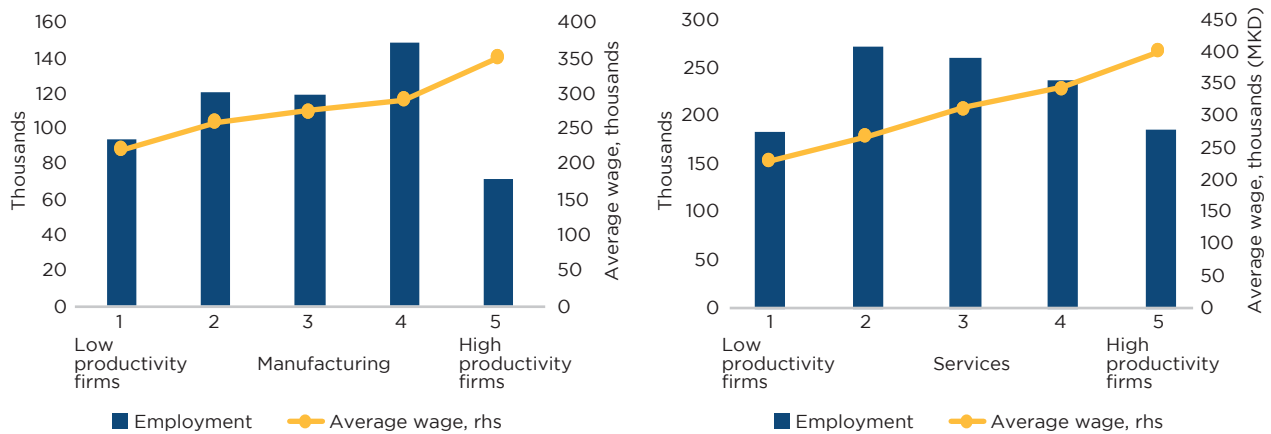


Source: Authors' calculations based on national business registry data.

The wholesale trade, motor vehicles, and metals industries have been key contributors to employment growth. Between 2011 and 2020, the motor vehicles and metals industries drove job creation in the manufacturing sector (Figure 28 and Figure 29). These industries were increasingly integrated into GVCs and benefitted from special economic zones (SEZs) job-promotion subsidies, and exemptions on payroll, corporate, and indirect taxation. Meanwhile, employment growth in

the services sector was led by wholesale and retail. Most manufacturing jobs were in highly productive new and incumbent firms, while most service jobs were in low-productivity incumbent firms. In 2020, manufacturing firms with more than 100 employees accounted for almost 60 percent of all jobs, whereas in the services sector medium and small firms provided 37 and 34 percent of jobs, respectively. Over the 2016-20 period, around two-thirds of new service jobs were created

Figure 30. More-productive firms tend to offer higher wages
(Employment and the average level of wage within-industry TFPR quintile, 2018-20)



Source: Authors' calculations based on national business registry data.

by newly established small and medium firms, while small firms accounted for 59 percent of new jobs among incumbent firms too. Firms in SEZs created 11,000 jobs, of which 6,500 were in motor vehicles firms and about 3,000 in textiles and apparel. However, in the textile and apparel industry, many existing jobs in firms outside of SEZs migrated to firms within SEZs, and jobs gains in SEZs did not fully offset job losses during the pandemic.

Higher-productivity firms are linked to higher wage rates, and productivity growth is positively correlated with wage growth. Although more-productive firms account for a smaller share of employment than their less-productive counterparts, they tend to pay higher wages. From 2016 to 2020, the most-productive services firms paid wages that were 28 percent higher than those paid by the least-productive services firms (Figure 30).

Poverty and inequality have significantly decreased in recent years

Economic growth since 2009 has significantly benefited less well-off households, contributing to a considerable decline in

the poverty rate. Progress since the global financial crisis has been remarkable, with the poverty rate²⁰ dropping from about 41 percent in 2009 to about 19 percent in 2019. Over the past decade, more than 440,000 people have seen their incomes rise above the poverty line (Figure 31). Nevertheless, poverty rates remain relatively high by regional standards, with more than 395,000 people living in poverty in 2019. While the share of people that are not at risk of falling into poverty has increased significantly since 2009 (light blue area), in 2019 about one-third of the population remained vulnerable to falling into poverty in the event of an economic shock (yellow area).

North Macedonia has experienced some of the most inclusive income growth globally, leading to a notable decrease in inequality. Since 2009, growth has been largely pro-poor. The average income of the bottom 40 percent of the population increased by an average of 6 percent per year between 2014 and 2019, outpacing the average income growth rate by around 0.8 percentage points, which yielded one of the largest shared-prosperity premiums globally (Figure 32).²¹ Income inequality decreased substantially, as

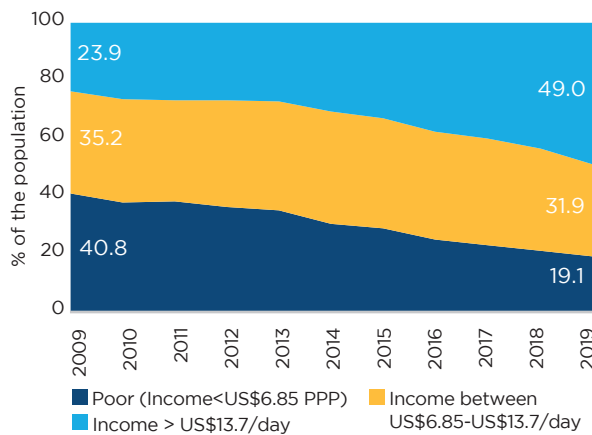
20 The poverty rate is measured at the upper-middle-income poverty line of \$6.85/day in 2017 PPP terms.

21 The shared-prosperity premium is the difference between the income growth of the bottom 40 percent and the income growth of the overall population.

the Gini index fell from approximately 42.8 in 2009 to 33.6 in 2019, though no further progress has been made in recent years as inequality has slightly increased between 2018 and 2019.²² Income growth accounted for about two-thirds of poverty reduction during

the period, with redistribution responsible for the remaining third (Figure 33).

Figure 31. The poverty rate has fallen substantially, but 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 2009-2019 income data from SILC.

Figure 32. North Macedonia has experienced one of the largest reductions in income inequality worldwide... (Correlation between shared prosperity premium and inequality reduction, circa 2012-17)

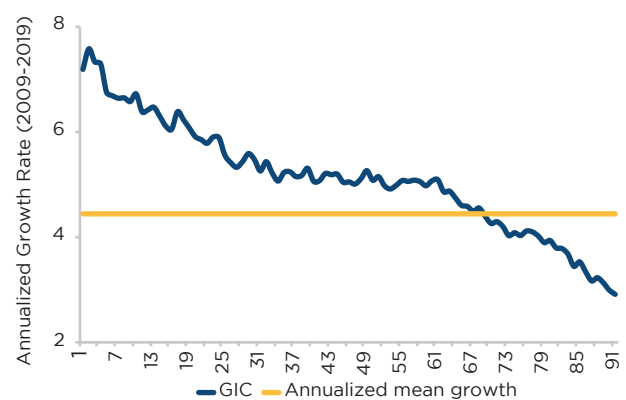


Source: World Bank (2020a).

Despite recent gains, North Macedonia still faces considerable challenges related to income inequality and intergenerational poverty. In 2019, the Gini index was still high relative to other Western Balkan countries such as Albania and Kosovo. According to the Life in Transition Survey III (LiTS III), over 70 percent of the population believes that the disparity between the rich and poor has widened—the largest share in the Western Balkans. Moreover, just 38 percent of respondents believe that children born today will lead better lives than the current generation. Self-reported life satisfaction is also low relative to peer countries, and attitudes toward the future are pessimistic.

In the LiTS III, only 35 percent of respondents express satisfaction with their lives, while according to the Balkan Barometer 59 percent reported dissatisfaction with the economic situation in 2022, and 41 percent anticipated the situation would worsen in the coming year, among the most pessimistic outlooks in the

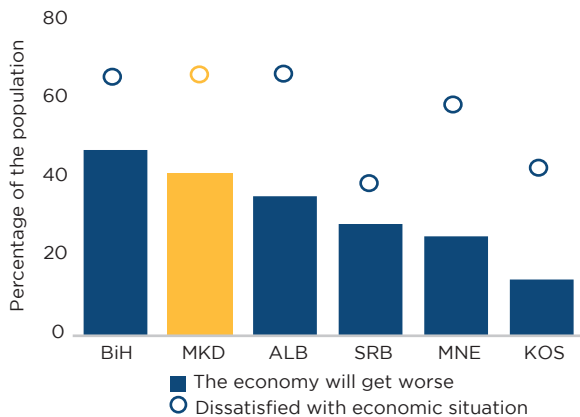
Figure 33. ...and faster income growth among poorer households has driven a steep decline in the poverty rate (Growth incidence curve (GIC), 2009-19)



Source: Author's calculation based on 2009-2019 income data from SILC. The GIC shows the annualized growth rate of per capita household income for every percentile of the income distribution (Ravallion and Chen 2003).

22 This is based on the World Bank harmonized data so it may differ from the SSO numbers. The Gini index is a statistical measure of inequality, with lower values representing greater equality.

Figure 34. Despite recent gains, public expectations for the future are pessimistic (Share of respondents who are dissatisfied with the economic situation and share who expect the economy to worsen in the next 12 months, 2022)



Source: Balkan Barometer (2022).

Western Balkans (Figure 34). The challenge of poverty reduction remains daunting. 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 (Figure 35). 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.

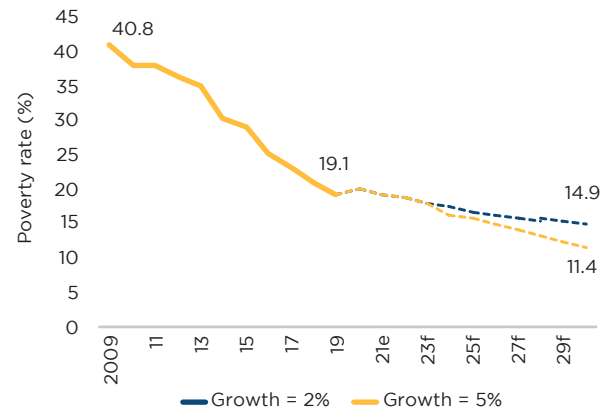
Despite recent progress, some groups and regions are still lagging

Promoting social inclusion is essential to reduce poverty in North Macedonia.

Vulnerable groups such as rural households, women, young people, members of the LGBTI community, people with disabilities (PWD), and the Roma population face substantial challenges in accessing basic services and economic opportunities. Ensuring that these groups have equitable access to economic opportunity will be vital to continue reducing poverty and to enable them to fully contribute to economic growth.

23 World Bank (2023b).

Figure 35. Further poverty reduction will require considerable effort (Poverty projections under two growth scenarios)

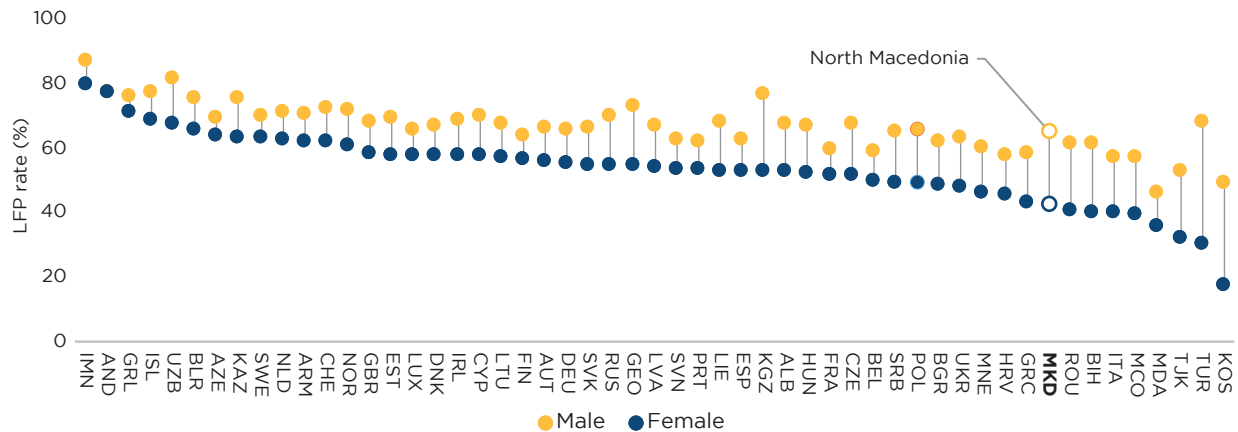


Source: Author's calculation based on 2009-19 income data from SILC. Note: Actual data: 2009-19. Nowcast: 2020-22. Forecasts are from 2023-30.

North Macedonia continues to grapple with significant gender inequalities, especially women's limited access to economic opportunities and productive assets.²³

Considerable improvements have been made in the institutional, legal, and policy frameworks for gender equality, but implementation poses a persistent challenge. Gender gaps, especially those linked to healthcare and education access, have narrowed over the past two decades, but women continue to shoulder a disproportionate share of unpaid domestic work, including childcare, which adversely affects their ability to earn income or obtain additional education. A limited supply of high-quality childcare increases the opportunity cost of work and negatively affects women's participation in the labor force. Approximately 87 percent of children under age four do not receive formal childcare, far above the EU average of 65 percent, and childcare quality indicators also lag. The female labor-force participation rate is among the lowest in ECA (Figure 36), and together with employment rates and average wage (about 8 percent lower than for men) are

Figure 36. Gender disparities are stark in the labor market
(Labor force participation rate by gender (% of population age 15+), circa 2021)



Source: WDI (last update 09/16/2022).

behind those of men. Women are less likely to start a business due to limited information regarding entrepreneurial opportunities, fear of failure, and less confidence in their competences and expertise. By eliminating gender inequalities in the labor market, North Macedonia could increase its annual GDP by more than 16 percent.²⁴ Violence against women is also prevalent, with more than half of women reporting having suffered some form of gender-based violence since the age of 15. Roma women are particularly vulnerable and report far higher rates of gender-based violence. Parliamentary representation quotas were introduced in 2006, but women remain underrepresented at the ministry and mayoral levels, as well as in political life, positions of power, and decision-making more broadly.

The Roma community, which makes up about 9.6 percent of North Macedonia’s population, faces significant challenges in accessing basic services and economic opportunities.²⁵ Just 2 percent of Roma children attend early childhood education or receive professional childcare, significantly below the EU average of 44 percent.²⁶ The share of Roma

adolescents and adults who are neither employed nor enrolled in education is about 40 percentage points higher than the share of their non-Roma counterparts. Just 46 percent of Roma between the ages of 20 and 64 have a paid job, 13 percentage points lower than the rate for the general population. In surveys, about 12 percent of Roma respondents report feeling discriminated against when seeking healthcare services, and fewer than 70 percent have health insurance. Roma communities also face higher rates of housing deprivation and overcrowding and have less access to clean water. Consequently, poverty and vulnerability rates are especially high among the Roma. In 2021, three out of four Roma individuals were at risk of poverty.

Discrimination based on sexual orientation and gender identity and expression, and sex characteristics (SOGIESC) is widespread in North Macedonia. Surveys indicate that LGBTI individuals often face violence and discrimination, and their perception of social acceptance is relatively low.²⁷ Various barriers prevent them from achieving their full potential in education and employment,

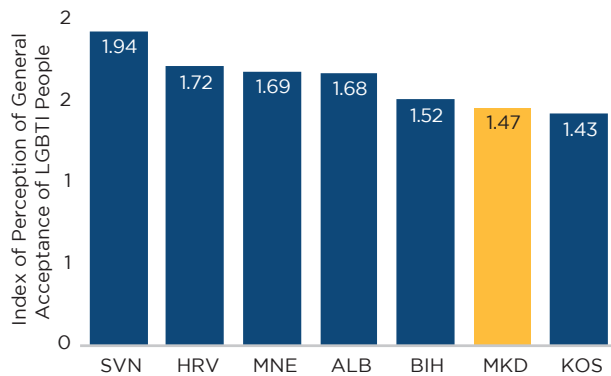
24 Cuberes and Teignier (2015), and Pennings (2021).

25 World Bank (2018b) based on the Council of Europe estimates. The 2021 census points to a lower share of 2.5 percent but is likely underreported. FRA (2022).

26 FRA (2022).

27 World Bank (2018b).

Figure 37. Indicators of public acceptance of LGBTI communities are low
(Perceived acceptance of LGBTI people, index scores)



Note: 1 = Very low acceptance 2 = Low acceptance 3 = High acceptance 4 = Very high acceptance
Source: World Bank (2018).

accessing physical and mental healthcare, and participating in other aspects of socio-economic and political life. In 2018, North Macedonia had one of the lowest scores in the Western Balkans on the LGBTI Perception of Acceptance Index (Figure 37). In addition, 9 percent of LGBTI respondents reported experiencing violence within the past year, the highest rate among the 31 participating EU countries. In 2021, large shares of LGBTI respondents reported frequently concealing their identity (52 percent), hearing negative comments about LGBTI individuals at their workplace (37 percent), receiving personal negative comments (13 percent), and experiencing workplace discrimination within the past five years (12 percent).²⁸ The international experience suggests that the social exclusion of LGBTI people could entail significant economic costs.²⁹ The annual wage loss related to SOGIESC-based exclusion was estimated to be over 0.5 percent of the 2021 GDP.³⁰

28 World Bank (2023c).

29 Badgett, Park, and Flores (2018).

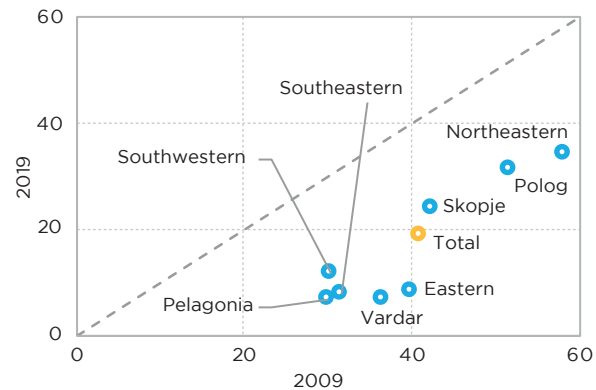
30 World Bank (2023c).

31 Own calculations based on SILC (2020).

32 Own calculations based on SILC (2020).

33 Kochoska et al. (2022).

Figure 38. Poverty rates are higher in the north of the country
(Poverty headcount at \$6.85/day poverty line in 2017 PPP terms by region, 2009-19)



Source: Author's calculation based on SILC 2009-2019.

The labor-market integration of PWD in North Macedonia is limited. About three-quarters of PWD are inactive in the labor market.³¹ This exclusion perpetuates economic inequality by denying them opportunities for income generation, financial independence, and upward mobility. Consequently, these individuals and their households rely on disability benefits and various social assistance programs relatively more.³² Recent analysis indicates that community-based services in the country suffer from fragmentation, lack of coordination, incompleteness, underdevelopment, and exclusionary practices.³³ Additionally, there is a scarcity of services and programs focused on prevention, early detection, early treatment, and rehabilitation. The country also lacks consistent and comparable statistics on PWD. Public sentiment emphasizes the need for the government to take substantial action regarding PWD. Over 90 percent of individuals believe that the government should take proactive measures to ensure

improved housing conditions for persons with disabilities and to facilitate equal access to employment opportunities for them.³⁴

Poverty rates remain elevated in rural areas and in the northern regions of the country.

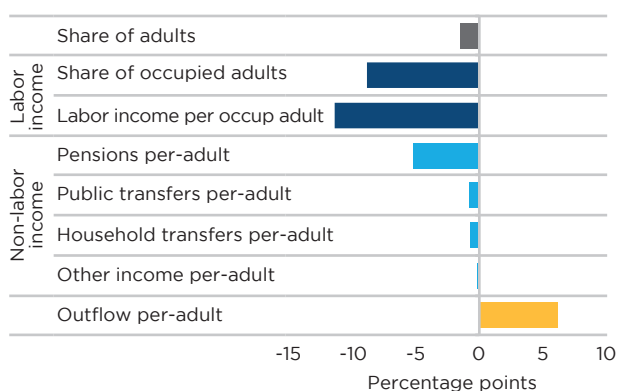
The recent decline in poverty rates has not been sufficient to eliminate these geographical disparities. The gap in poverty rates between rural and urban areas has narrowed but remains large at about 11 percentage points. Since 2009, there has been no significant change in regional poverty rankings (Figure 38). Poverty rates in the Polog and Northeastern regions still exceed 30 percent, versus less than 10 percent in the Eastern, Southeastern, Pelagonia, and Vardar regions. Despite having one of the highest poverty rates, the Polog region has contributed the most (about one-third) to overall poverty reduction. Due to their larger populations, the northern regions are also home to a higher concentration of people living in poverty: in 2019, three out of four individuals in poverty lived in the Polog, Northeastern, and Skopje regions.

North Macedonia still faces significant labor market challenges

Expanding employment opportunities and rising labor income have driven poverty reduction, but labor-market challenges persist.

In the 2022 Balkan Barometer, unemployment was the primary concern for about one-quarter of North Macedonia citizens. Expectations for future work prospects were also bleak, with 37 percent of respondents expressing uncertainty about their job security over the next 12 months—the largest share in the Western Balkans. About two-thirds of the poor population is between the ages of 15 and 64, underscoring the importance of employment and wages to poverty reduction. Despite similar labor-force participation rates among the poor (56 percent) and non-poor (62

Figure 39. Job opportunities and earnings were the main drivers of poverty reduction (Contribution of income components and employment to mean income growth, 2009-19)



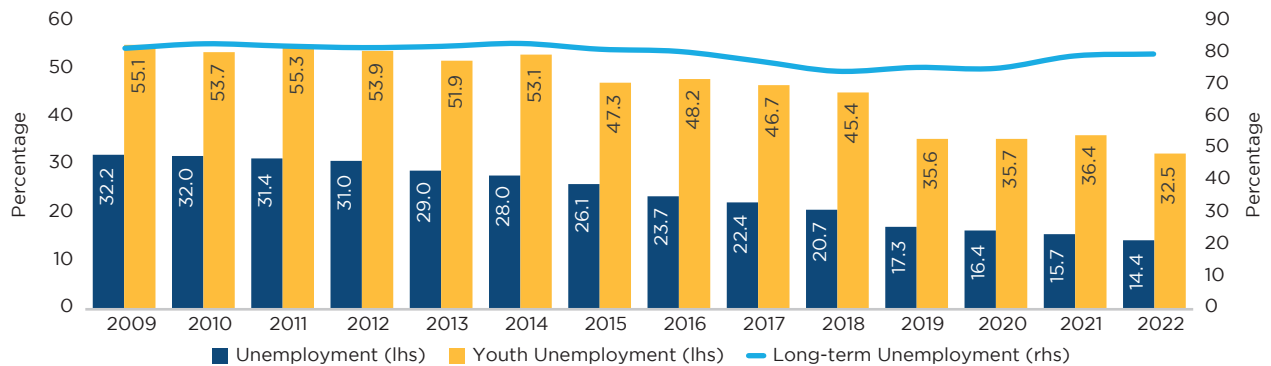
Source: Author's calculation based on 2009-2019 income data from SILC.

percent), the poor population's unemployment rate (38 percent) is much higher than that of the non-poor (13 percent). Nevertheless, labor earnings were the primary source of income for the poor in 2019, accounting for about two-thirds of household income in the lowest quintile. Job growth and wage increases have been responsible for more than 90 percent of the reduction in poverty observed since 2009 (Figure 39). The increase in labor earnings overlapped with recent hikes in the minimum wage, but a more detailed analysis would be necessary to establish a causal link. Increased pension payments also played a role in poverty reduction, albeit to a lesser degree than labor-market gains, while the impact of social assistance programs was limited due to their low coverage rates and fragmentation.

The inactivity rate is relatively high, with more than a third of the working-age population (15-64 years old) remaining out of the labor market since 2009. Combined with the high unemployment rate, about 45 percent of the working-age population was non-active in 2022—indicating a major loss of potential productivity. Rates of inactivity are particularly

34 Balkan Barometer (2022).

Figure 40. Both total and youth unemployment decreased considerably in recent years (Total, youth, and long-term unemployment, 2009-21)



Source: State statistical office.

high among workers over 55 and women. In 2022, the unemployment rate reached its lowest level in a decade (Figure 40), but it was still high by regional standards (Figure 41) and many of the unemployed had been jobless for over a year. Long-term unemployment has stayed broadly constant since 2009, with about 80 percent of the 93,000 unemployed workers being out of work for over a year, the highest long-term unemployment rate in the Western Balkans.

Unemployment is especially acute among young people. In 2022, about 57 percent of the population cited inadequate employment opportunities as the most significant problem facing young Macedonians.³⁵ Gender gaps are also prevalent among young workers, and in 2022 the youth unemployment rate was far higher for women (38 percent) than for men (29 percent). Lack of economic opportunities for the youth poses serious long-term challenges, including the loss of human capital due to inactivity and emigration. According to the Gallup World Poll’s Potential Net Youth Migration Index, if all potential young emigrants left North Macedonia, the population between the ages of 15 and 29 could decrease

by 52 percent—one of the largest percentages globally and in the Western Balkans after Bosnia and Herzegovina (57 percent).

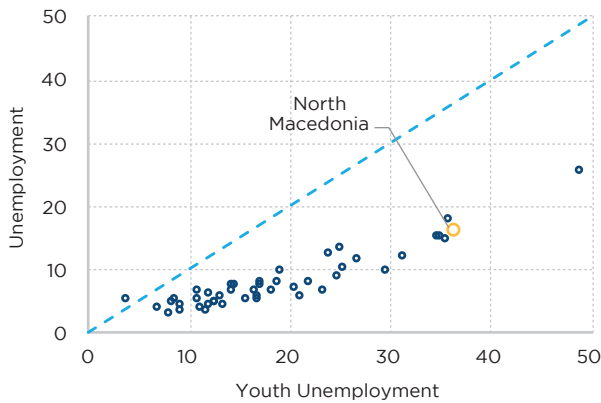
A large share of the workforce is employed in the informal sector. Although informality has declined significantly in recent years, it remains relatively high. The State Statistical Office reports that North Macedonia has made significant strides in reducing informality over the past decade, with the informality rate dropping from about 27 percent in 2009 to about 12 percent in 2022.³⁶ Nevertheless, informality remains relatively high, and in 2022 almost 85,000 workers were employed without pensions, health insurance, or other benefits. High rates of informality could impede long-term growth, as the informal workforce tends to have less education and lower productivity.

Wages in North Macedonia are low relative both to the EU and the Western Balkans. In 2022, average monthly gross wages were above the levels of Albania and Kosovo but below those of Serbia, Bosnia and Herzegovina, and Montenegro. Moreover, wages in North Macedonia, and the Western

³⁵ Balkan Barometer (2022).

³⁶ This decline is mostly due to the improvement of the national accounts’ methodology used for assessing the informality, i.e. closing the reported data gaps rather than measuring non-reported.

Figure 41. Unemployment remains among the highest in ECA
(Total and youth unemployment rates, circa 2021)



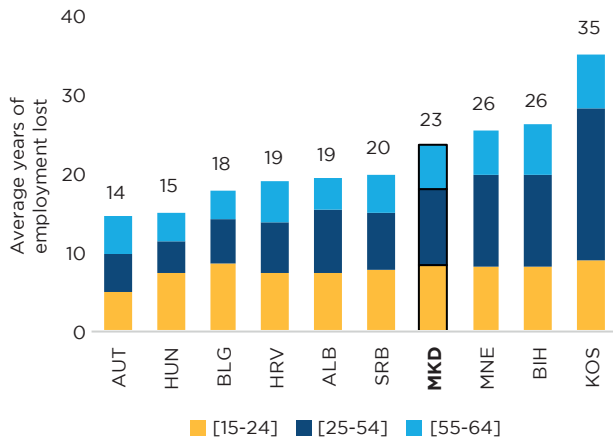
Source: WDI (last update 09/16/2022).

Balkans in general, were significantly lower than those of EU countries such as Bulgaria, Hungary, Croatia, and Austria.³⁷ The wage gap with the EU likely drives skilled workers to emigrate in search of better employment opportunities. According to the Gallup World Poll's Potential Net Brain Gain Index, the adult population with four or more years of post-secondary education or the equivalent of a bachelor's degree or higher could decrease by about 39 percent if all potential emigrants decide to leave the country, one of the highest rates globally.

These labor-market challenges result in an enormous loss of productive working years.

Despite recent progress, North Macedonia ranks poorly in many labor-market outcomes, with low labor-force participation rates, high unemployment rates (especially among young workers), high rates of long-term unemployment, and a large share of workers employed in the informal sector. Due to a lack of high-quality jobs, the average worker

Figure 42. Workers lose approximately 23 years of productive employment
(Average years of productive employment lost, circa 2021)



Source: Author's calculation based on SSE Jobs Gateway. Note: Methodology based on Arias et al. (2014).³⁸ The average years of employment potentially lost is equal to the share of total working years for the age group, multiplied by one minus the employment rate for the same age group.

between the ages of 15 and 24 loses about eight years of productive employment (Figure 42). This loss is estimated at about 11 years for workers ages 25-54 and six years for workers ages 55-64. Overall, the average worker in North Macedonia loses an estimated 23 years of productive employment throughout their lifetime.

³⁷ SEE Jobs Gateway Database.

³⁸ Arias, Sanchez-Paramo, Davalos, Santos, Tiongson, Gruen, Andrade Falcao, Saiovici, and Cancho (2014).



CHAPTER 2



RECENT EMERGING CHALLENGES AND OPPORTUNITIES

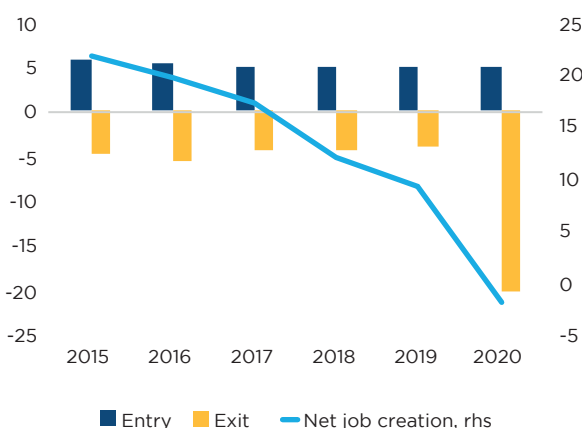
Since the 2018 SCD, North Macedonia has encountered numerous challenges. The COVID-19 pandemic led to a severe economic downturn, which hindered progress on reducing poverty, and an ongoing energy crisis and inflationary pressures have disrupted the post-pandemic recovery. Recent shocks have had an especially negative effect on lower-income households, which have a limited capacity to cope with rising consumer prices and heating costs. Meanwhile, a high rate of emigration, a rapidly aging population, and a declining fertility rate are weakening growth and productivity. However, the EU accession process represents a significant opportunity for North Macedonia to deepen its economic integration with major European markets, boosting employment growth and raising living standards. The EU-supported green and digital transitions have the potential to boost productivity and environmental sustainability, but require accelerating reforms and substantial investments, as well as careful policy action to mitigate the impact of the transitions on those at risk of being left behind. Increased levels of EU funding are becoming available to help achieve these objectives, but strategic planning and institutional capacity need to strengthen to maximize the gains.

The COVID-19 pandemic plunged North Macedonia into a recession, and subsequent shocks have prevented a swift recovery

The COVID-19 pandemic pushed the economy into its worst recession since independence.

GDP declined by 4.7 percent during 2020, with negative effects across all sectors, except agriculture and ICT sectors. The outbreak of the health crisis, together with the slow opening pace for EU accession negotiations, additionally lowered the appetite for structural reforms and discouraged foreign and domestic investors. The COVID-19 pandemic had a significant impact on the private sector. The number of firms leaving the market in 2020 was significantly higher than in the previous years (Figure 43). Specifically, 4,006 manufacturing firms and 15,994 service firms closed their operations. Additionally, net job creation decreased compared to the level observed in 2019. The COVID crisis have also discouraged foreign direct investment. However, the creation of firms within special economic zones (SEZs) remained positive in 2020 in comparison to that outside of SEZs (Figure 44).

Figure 43. In 2020, more firms closed, and net job creation declined
(Firm entry and exit, and net job creation, in thousands)

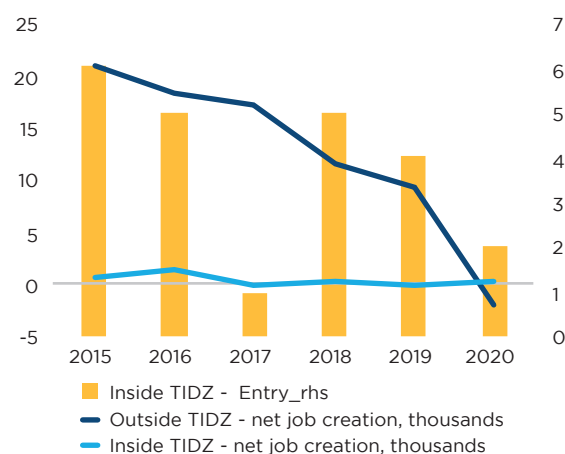


Source: Authors' calculations based on Central Registry data.

The pandemic-induced crisis also appears to have reversed recent progress on poverty reduction. The current estimates suggest that the headcount poverty rate increased by more than 1 percentage point during the year. The government implemented emergency support measures—including subsidies and social security contributions for private firms, and cash benefits and vouchers for vulnerable individuals—which partially mitigated the negative impact of the crisis on poverty and household wellbeing.

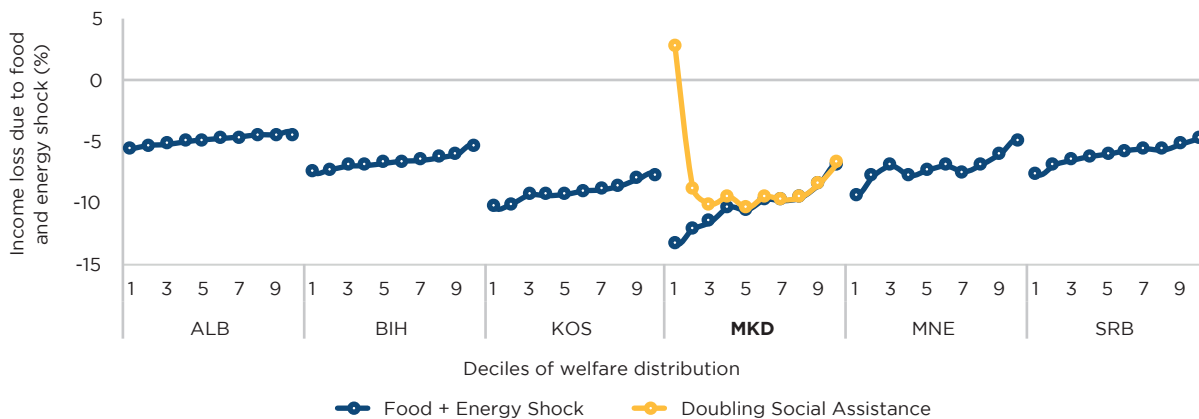
Just as poor households were beginning to recover from the pandemic-induced crisis, Russia's invasion of Ukraine caused energy and food costs to spike, driving a broad increase in inflation and disrupted the recovery. Inflation poses an especially acute threat to lower-income households, which spend a larger share of their budgets on food and energy and have fewer mechanisms to cope with rising prices. The inflation rate experienced by households in North Macedonia's lowest income decile is about 3.8 percentage points higher than the average and 6.6 percentage points higher than the

Figure 44. Few firms entered the SEZs in 2020 but net job creation remained positive within SEZs
(Firm entry and net job creation, SEZ vs. non-SEZ)



Source: Authors' calculations based on Central Registry data.

Figure 45. Rising inflation threatens to erase recent gains in poverty reduction
(Simulated welfare percentage changes after the combined food and energy price increases)



Source: World Bank staff simulations based on most recent household surveys.
Note: The figure shows the percentage change in welfare at each percentile of the welfare distribution.

rate among households in the top decile.³⁹ Nationwide, households report having a limited capacity to protect themselves from price shocks. In 2021, about half of survey respondents stated that they would be unable to cope with unexpected expenses—the highest share in the Western Balkans after Montenegro⁴⁰—and in 2022, four out of five were unsatisfied with current price levels.⁴¹ Simulations show a 10-percent overall reduction in household income due to rising prices, with especially acute losses among lower-income households (Figure 45). Social transfers can help mitigate the negative impact of higher prices, especially among the poorest and most vulnerable households, but the ability of existing programs to protect other households from welfare losses is much more limited. As it confronts an unstable external economic and geopolitical climate, North Macedonia will need to further consolidate and expand targeted social assistance programs to mitigate the impact of shocks more effectively.

As energy prices remain elevated, heating has become an especially serious challenge for lower-income households. Evidence shows that many households may be negatively affected by the energy crisis and that prevalence of such need extends far beyond households who are currently eligible for support based on current definitions of energy poverty. Spending on electricity, solid fuels, gas, and oil accounts for a larger share of total household spending in North Macedonia than in other Western Balkan countries. The average household spends about 13 percent of per capita income on energy, though this share ranges from just 7 percent among households in the top quintile to 16 percent among households in the bottom quintile.⁴² In 2020, more than one-quarter of households reported having difficulty heating their home,⁴³ including 43 percent of households in the bottom quintile compared to 11 percent in the top quintile. In addition, around one-third of households reported falling behind on their utility bills in 2020, but this figure

39 World Bank (2023d).
40 Eurostat.
41 Balkan Barometer (2022).
42 Author's calculation based on 2019 HBS survey.
43 Eurostat.

masks a vast disparity across income groups. About 65 percent of households in the bottom quintile reported paying their utility bills late or accumulating arrears, compared to just 13 percent in the top quintile. In 2022, the government introduced almost universal support for households to retain their electricity prices low through the block tariffs. To target better such household support in the future, adopting an official definition of energy poverty can facilitate the formulation of a targeted program aimed at providing support to a broader range of energy poor households.

North Macedonia is rapidly losing its human capital

North Macedonia's diaspora is among the largest worldwide, and emigration rates remain high. About one-third of the population lives abroad, most in Germany, Switzerland, Italy, Austria and Slovenia.⁴⁴ Emigrants tend to be between 20 and 39 years old, at the peak of their labor productivity, and most have either very low or very high levels of education.⁴⁵ According to the Potential Net Brain Gain Index, the size of the adult population with at least four years of post-secondary education or the equivalent of a bachelor's degree or higher could decrease by as much as 39 percent if potential emigrants choose to leave the country, one of the highest rates in the world.⁴⁶

One of the main push factors for emigration from North Macedonia is the lack of employment opportunities in the country, while higher wages in EU countries act as a significant pull factor. Unemployment, particularly among young workers, is a major concern for the population. In a 2022

survey, about one-quarter of respondents cited unemployment as their most significant challenge, and 37 percent were uncertain that they would be able to keep their jobs in the coming year—the highest share in the Western Balkans.⁴⁷ Higher wages in neighboring EU countries, coupled with general pessimism about the domestic economic outlook, create strong incentives to emigrate. North Macedonia's score on the Balkan Public Expectation Index fell from 59 percent in 2017 to 42 percent in 2022, the second-lowest score in the Western Balkans after Bosnia and Herzegovina. Other factors that may encourage emigration include corruption, lack of trust in public institutions, negative perceptions of socioeconomic inequality, high rates of intergenerational poverty, poor-quality healthcare and education services, and high levels of air pollution.

Despite North Macedonia's vast diaspora, remittances make a limited contribution to household income. Remittances often function as an informal social protection mechanism and can even lift households out of poverty. In the Western Balkans, remittances constitute 10 percent of aggregate GDP. In North Macedonia, however, remittances accounted for only 3.5 percent of GDP in 2021, the smallest share in the region.⁴⁸

North Macedonia's population is rapidly aging. By 2025, the number of people over age 65 is projected to exceed the number under 15. The fertility rate fell from about 2.2 children per woman in 1991 to about 1.3 in 2020, the fourth-lowest rate in ECA and well below the replacement rate of 2.1.⁴⁹ Demographic aging is likely to worsen over the medium and long term as the birth rate continues to decline

44 UN Migration Statistics.

45 World Bank and WIIW (2018).

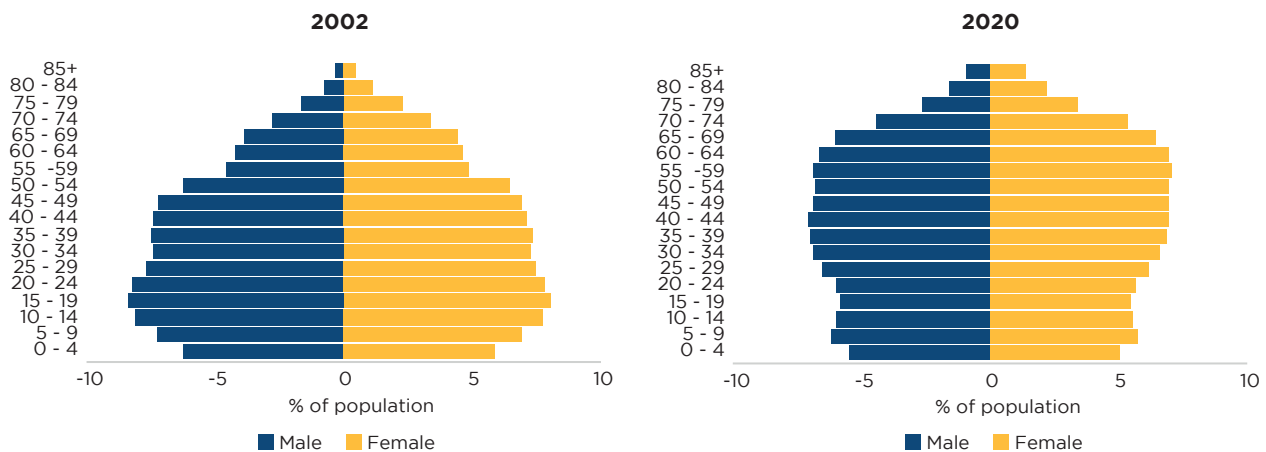
46 Gallup World Poll.

47 Balkan Barometer (2022).

48 World Development Indicators, Last Updated: 03/01/2023.

49 Represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year. World Development Indicators, Last Updated: 03/01/2023.

Figure 46. Populating is getting older and shrinking



Source: State Statistical Office.

and large-scale emigration continues.⁵⁰ 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 (Figure 46). By 2050, the population is projected to decline by another 11 percent, and more than one-quarter of Macedonians will be over the age of 65.⁵¹

These demographic trends have deep negative implications for growth and productivity.

As the population shrinks and ages, skilled labor may be in short supply despite high unemployment rates. Brain drain can lead to significant gaps in vital sectors and impede the country’s ability to capitalize on investments made in its human capital. Demographic aging will also intensify pressure on North Macedonia’s social protection system and the provision of public services, as fewer working-age people will need to support an increasing number of retirees, while an older population rises increasing pension and healthcare costs. On the other hand, migration can also offer significant opportunities for a country, such as an increase in remittances, acquisition

of new skills, FDI, and more. However, there is evidence that North Macedonia has not been able to fully leverage these advantages due to the ongoing departure of skilled young emigrants and the underutilization of remittances.

Climate change is already eroding country’s growth prospects, while energy security is a new challenge

North Macedonia is highly vulnerable to climate change. The country faces both sudden and slow-onset hazards due to the increasing intensity and frequency of storms, changes in precipitation patterns, and rising temperatures. The country is at high risk of urban and river flooding, landslides, and wildfires, while water scarcity and extreme heat hazards pose more moderate but still significant risks.⁵² The total cost of the 23 disaster events recorded since 1990 exceeded US\$409 million in direct damage, excluding the loss of human lives.⁵³ The average annual damage to critical infrastructure from climate-related hazards could quintuple by 2080,

50 United Nations, DESA, Population Division. World Population Prospects 2022.

51 United Nations Department of Economic and Social Affairs (UN DESA), Population Division.

52 Global Facility for Disaster Reduction and Recovery Think Hazard platform: <https://thinkhazard.org/en/report/241-fyr-of-macedonia>

53 World Bank (2018a).

with a major flood or other natural disaster potentially derailing economic growth, damaging agricultural incomes and, or destroying critical infrastructure.⁵⁴ Therefore, North Macedonia urgently needs to accelerate the implementation of climate-change adaptation and mitigation measures.

Poor environmental management practices are exacerbating the erosion of the country's natural resources. Despite withdrawing only 25 percent of renewable water resources, the frequency and severity of droughts are on the rise, resulting in significant damage not only to agriculture—which contributes up to 12 percent of the GDP—but also to sectors such as tourism. Lack of control over wastewater disposal from industry, mining, households, and agriculture are the leading cause of water pollution, while only 77 percent of the population has access to safe drinking water and a mere 5 percent of wastewater is safely treated.⁵⁵ The current rate of environmental degradation is likely to amplify the impacts of future climate change.

The government is pursuing ambitious mitigation targets while attempting to safeguard energy security. The country submitted the enhanced Nationally Determined Contributions (NDC) in 2021 as the second national climate pledge to the United Nations Framework Convention on Climate Change (UNFCCC).⁵⁶ The Long-Term Strategy on Climate Action and Action Plan foresee ambitious mitigation targets and adaptation priorities.⁵⁷ As a Contracting Party to the Energy Community Treaty, North Macedonia has adopted the National Strategy for Energy Development until 2040 and committed to significantly reduce local pollutants by 2027. The country has also

adopted the National Energy and Climate Action Plan in accordance with the EU Energy and Climate Package 2030 and the Strategy for Low Carbon Europe. Moreover, as a signatory to the Sofia Declaration on the Green Agenda for the Western Balkans, which is aligned with the EU's Green Deal, North Macedonia has committed to working towards the 2050 target of a carbon-neutral continent. In October 2020, the European Commission announced An Economic and Investment Plan for the Western Balkans, which sets out a substantial investment package to support inclusive growth and the regional green transition. The government must also incorporate the most recent EU legislation on industrial emissions, establish an air-quality standard for daily PM2.5 concentrations, and pass a dedicated climate law. The authorities must also strengthen the public sector's institutional capacity for policymaking, implementation, and absorption of EU funds. The institutional arrangements for disaster prevention, preparedness, and response at the national and sub-national levels are inefficient, and the sovereign financing gap associated with disaster response and recovery from disasters is growing as the limited uptake of disaster insurance increases costs liabilities. Finally, the EU Carbon Border Adjustment Mechanism (CBAM) is expected to adversely affect the terms of trade for carbon-intensive goods exports to the EU unless North Macedonia levies comparable carbon prices on domestic producers. With energy intensity of GDP almost three times higher than the EU average, a significant share of exports and employment in emission-intensive sectors, and Europe as a key export market, the country already faces questions regarding its future competitiveness and FDI attractiveness.

54 Ibid.

55 In March 2022, The Government signed a €70 million investment grant with the EIB under the Western Balkans Investment Framework (WBIF) to build a wastewater treatment plant in Skopje.

56 The updated NDC include 51 percent reduction in GHG emissions relative to 1990 levels, or 82 percent reduction in net terms.

57 https://unfccc.int/sites/default/files/resource/MKD_LTS_Nov2021.pdf

The EU accession process is a powerful driver of reforms for growth

The government's reform agenda is oriented toward EU accession. North Macedonia applied for EU membership in 2004 and became an EU Candidate Country in 2005. The European Commission has been recommending the opening of accession negotiations since 2009, but North Macedonia's name dispute with Greece was only resolved in 2018. In June of that year, 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.⁵⁸ However, a dispute 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.⁵⁹

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 inflows from the EU have increased by 7 percent per year since 2018. Seventy-seven percent of the country's exports go to the EU, rising by 9 percent per year since 2018. The number of tourist nights spent by EU citizens has increased by 28 percent per year since 2018, and EU tourists now account for half of all tourist nights. EU grants to North Macedonia through IPA I and II amounted to €1.3 billion, and IPA III envisages an allocation 60 percent higher than that received so far. Solidarity support from the EU during recent crises has been highly valuable, with

EU partners providing vaccines, opening transportation routes for goods during the pandemic, safeguarding reserve buffers after Russia's invasion of Ukraine, providing crisis support grants in 2020 and 2022, and securing energy supplies during the recent energy crisis. EU support, along with assistance from international financial institutions, has bolstered the country's resilience in the face of unprecedented shocks.

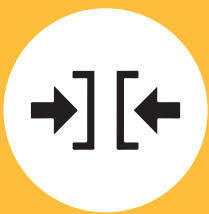
The negotiation process for EU accession will offer even more significant benefits. Aligning domestic legislation with the EU Acquis will improve standards and norms, facilitating investment and improving legal predictability. Developing professional and accountable institutions will help ensure effective governance and strengthen the rule of law. Many previous EU entrants experienced the most substantial improvements in these areas during the pre-accession period. Cohesion grants would promote more balanced regional development, while the EU Green Agenda and its supporting grant funding to the Western Balkans would facilitate a just low-carbon transition. Having a committed and professional negotiation team with representatives from all parts of society that is capable of effectively communicating the benefits of reforms to the public would enable the transformational change necessary to complete the accession process within a decade, allowing the current generation of young people to enjoy the benefits of income convergence with the EU.

⁵⁸ <https://www.consilium.europa.eu/en/policies/enlargement/republic-north-macedonia/>

⁵⁹ <https://neighbourhood-enlargement.ec.europa.eu/system/files/2022-10/North%20Macedonia%20Report%202022.pdf>



CHAPTER 3



CONSTRAINTS TO GROWTH AND PROSPERITY IN NORTH MACEDONIA

North Macedonia has made important strides in enhancing its business environment and has successfully attracted foreign investment. However, persistent weaknesses in the institutional and policy framework impede productivity growth. The domestic economy continues to lack the dynamism necessary to reach higher-income status, a challenge reflected in its low and declining productivity indicators. Firms owned by domestic investors, predominantly micro, small, and medium-sized enterprises, have exhibited weak or stagnant productivity growth in recent years. These businesses primarily serve the domestic market, with few links to regional or global value chains, and their progress on digitization and the green transition tends to lag that of their regional peers. To address its productivity challenge, North Macedonia must continue to attract FDI to facilitate technology upgrading while implementing an ambitious strategic governance, infrastructure, regulatory, and firm-level reform agenda. Rooting out corruption, nepotism, and conflicts of interest are critical to restore trust in institutions, improve tax compliance, and slow or reverse emigration among skilled workers. Focusing on deepening trade integration,

more effective state aid and competition policy, digitalization, and business environment reforms would change the role of the state towards an enabler and the guarantor of the level-playing field. By implementing comprehensive and transformative reforms, North Macedonia can boost its productivity, stimulate economic growth, and deepen its integration into regional and global markets.

The education system in North Macedonia is failing to equip graduates with the skills demanded by the labor market, resulting in high rates of youth unemployment and long-term unemployment. Access to education has improved in recent years, but education quality remains persistently low, resulting in a significant loss of human capital. The health system is another significant concern for Macedonians, and in surveys many citizens express dissatisfaction with the services they receive. Noncommunicable diseases (NCDs) are a growing concern due to demographic and lifestyle factors, as well as the heavy economic cost they entail. Poor-quality care delivered by an underfunded health system, especially at the primary level, is a major contributor to the mounting burden of NCDs. Meanwhile, low levels of public health spending also result in high out-of-pocket (OOP) costs. The government overhauled its social protection system in 2019, increasing its impact on poverty reduction and strengthening its ability to respond to crises. While poverty-targeted programs effectively reach lower-income households, there is scope to expand their coverage among the poorest. Reforms to the social services are devolving greater responsibility on local service providers and transforming the role of the Ministry of Labor and Social Policy (MLSP). Although previous reforms strengthened the sustainability of the pension system, a recent change in pension indexation has widened the system's deficit.

Bringing the public debt and fiscal deficit down after the consecutive crises requires efforts to mobilize additional domestic revenues, make spending programs more efficient, and bolster public finance management. This is critical given significant gaps in spending outcomes in social and infrastructure sectors, as well as low compliance and low effective tax rates that are unable to cover for the increasing needs of the country to meet the citizens' expectations and comply with the EU standards across sectors. North Macedonia's energy mix remains heavily dependent on coal and petroleum, resulting in significant greenhouse-gas emissions and air pollution. As the economy expands and energy demand grows, the environmental and health consequences of North Macedonia's reliance on fossil fuels will become increasingly severe. The residential sector is the primary contributor to ambient air pollution due to traditional heating sources that use inefficient and highly polluting solid fuels. Small particulate (PM2.5) air pollution is one of the leading causes of illness and death globally, and in North Macedonia its damaging effects on public health impose economic losses estimated at about 7 percent of GDP. The country is highly vulnerable to climate change and natural disasters, and adaptation policies are crucial to enhance resilience. Decarbonizing production will also be critical for North Macedonia to remain competitive and gain access to tightly regulated EU markets. As the low-carbon transition will cause changes in employment, the government must support workers in carbon-intensive sectors as they move into more sustainable jobs.

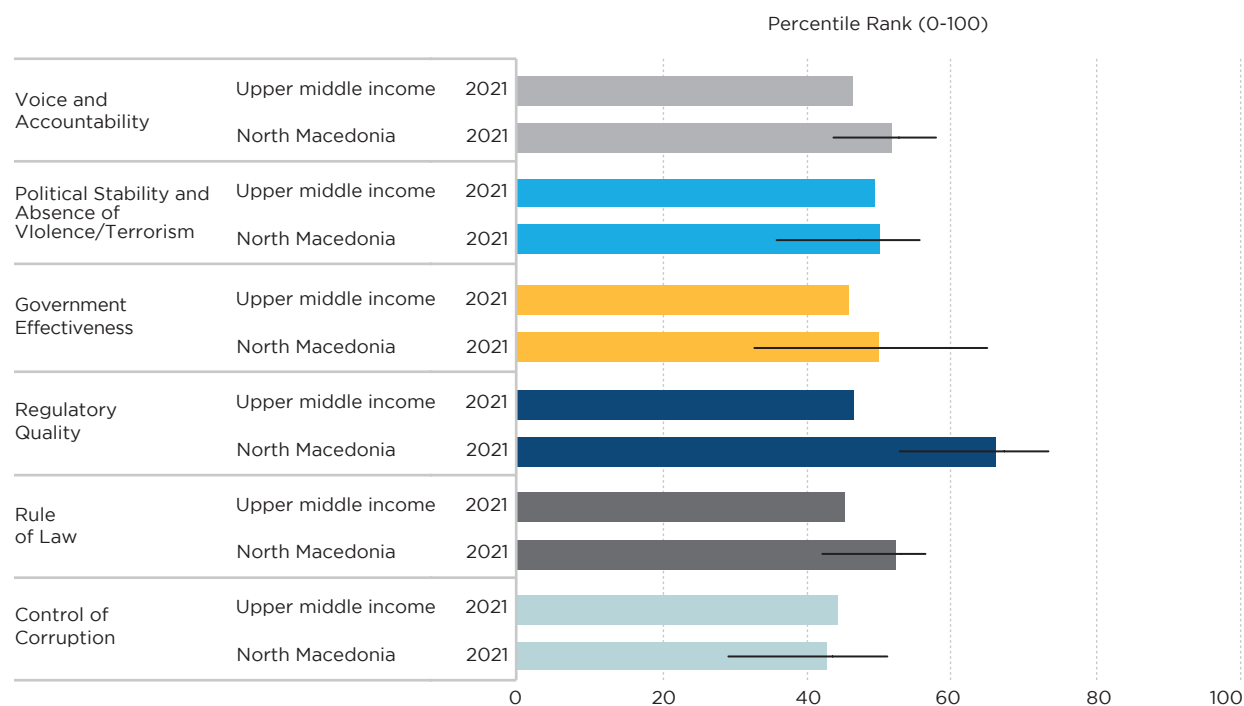
REMOVING CONSTRAINTS FOR FASTER GROWTH

Weak institutions and low administrative capacity remain key constraints on growth

Despite extensive reform efforts over the last two decades, North Macedonia continues to struggle with corruption. Driven in part by the goal of EU membership, the government has significantly improved the quality and transparency of public institutions and administrative processes since 2002. Reforms have been made in areas such as public financial management, anti-corruption measures, the judiciary, procurement, and public administration, and service delivery. Nevertheless, the country's performance on the Worldwide Governance Indicators in the

area of control of corruption is below the worldwide peers of upper-middle income countries (Figure 47). Moreover, the World Justice Project's Rule of Law Index, which utilizes surveys of households and experts, has shown a deterioration in the quality of regulatory enforcement, the judiciary, and control of corruption.⁶⁰ In the 2019 Enterprise Survey, about 17 percent of surveyed firms reported giving gifts to secure government contracts, and 10 percent of firms admitted to paying bribes to establish an electricity connection (Figure 48). These findings highlight the continuing challenges North Macedonia faces in its fight against corruption. Further reforms and measures to strengthen transparency, accountability, and integrity in public institutions and business practices will be essential for the country's economic future and its prospects for EU accession.

Figure 47. North Macedonia's performance on several governance indicators is above the income group peers, but control of corruption remains a problem (Percentile rank among all countries in the world)

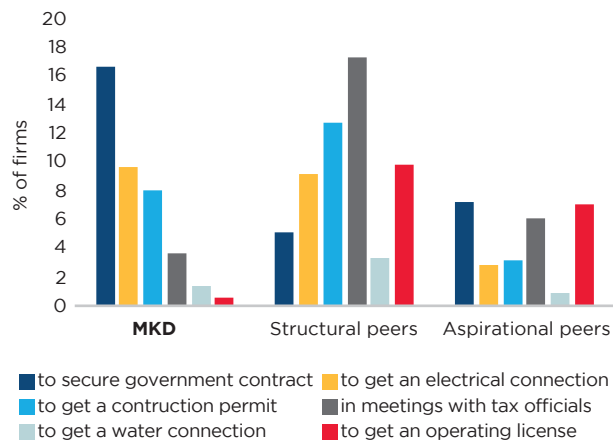


Source: Worldwide Governance Indicators, 2021.

⁶⁰ World Justice Project (2022).

Figure 48. Surveys indicate that bribes are more common to obtain contracts, electricity connections, or construction permits than with peers

(Share of firms expected to give gifts, percent)



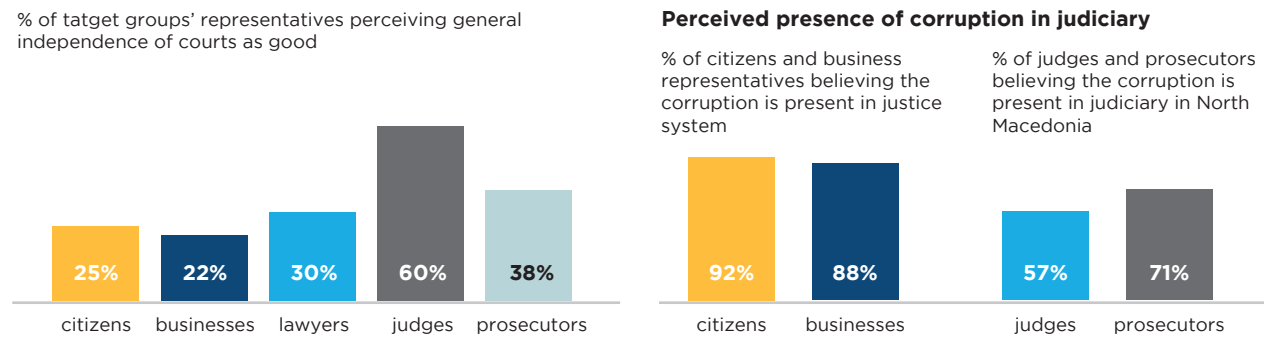
Source: Enterprise Survey 2019.

The country has made some progress in the areas of judiciary and fundamental rights, including through strengthened judicial independence, but enforcement and the fight against corruption remain weak. The country is in the final stages of implementing its 2017-2022 Judicial Reform Strategy, under which the authorities have enacted new laws and introduced new methodologies to assess the work of judges and prosecutors, and policymakers are in the process of drafting a new strategy. Both the EU and the government remain committed to judicial reform, but the implementation of new rules has been uneven, and concerns about the judiciary’s impartiality and politicization persist. While the State Commission for the Prevention of Corruption continues to perform its duties proactively, corruption remains prevalent in many areas and is an issue of concern. The efficiency ratings of the courts, based on actual court cases, are only 47 percent and 37 percent for citizens and businesses, respectively. Many citizens and businesses have negative perceptions of the independence and efficiency of the courts, with many believing corruption is rife within the judiciary. According to a recent regional justice survey by the World Bank, only 25

percent of citizens and businesses believe the courts are independent, and just 30 percent of citizens and businesses have a positive view of the general efficiency of the courts (Figure 49). A striking 90 percent of citizens and businesses perceive corruption to be present within the judiciary, a sentiment shared by 64 percent of judges and prosecutors. These numbers underscore the need for further reform and more robust anti-corruption measures within the judicial system.

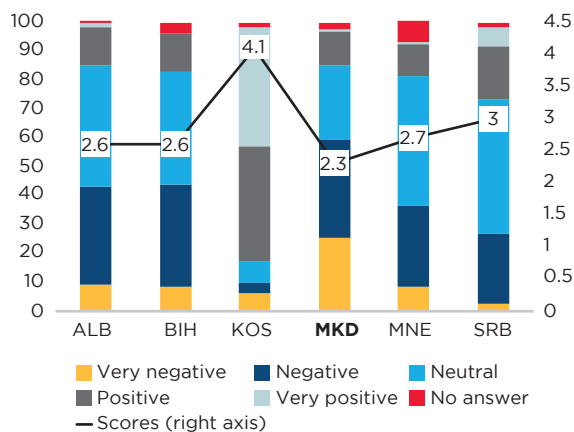
North Macedonia must professionalize its public service, regulatory agencies, and check and balance institutions. Although the public administration has cultivated a skilled workforce, turnover rates are high, and political influence at both central and local levels remains a significant concern. The Law on Administrative Servants and the Law on Public Sector Employees aim to establish uniform rules for public-sector employees at the central and local levels, but merit-based recruitment, promotion, and dismissal processes fall short of the intended standards of professionalism. Regulatory agencies have legally defined mandates and general guarantees for their independence, but their practical independence is often questionable. According to the OECD’s 2021 SIGMA report, the country’s job-classification-based remuneration system allows for a reasonable seniority progression and limited performance-related bonuses. However, the rudimentary job classification system does not adequately distinguish responsibility levels, leading to potential unfair pay differences. Several salary supplements linked to unclear criteria have been established to benefit certain public entities and staff groups, undermining the transparency of compensation. Moreover, women are underrepresented in top management positions, accounting for just 14 percent of all management staff in 2022. Finally, key institutions have yet to determine how to address absenteeism among public employees or issues involved in determining their final job positions.

Figure 49. Perceptions of the efficiency and integrity of the judiciary are broadly negative (Share of firms expected to give gifts, percent)



Source: ECA Regional Justice Survey, Country Report for North Macedonia, 2022.

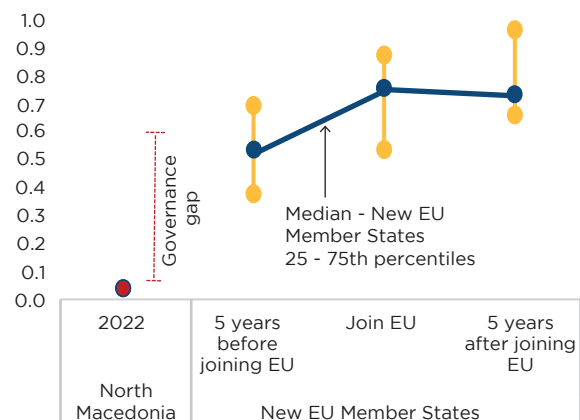
Figure 50. North Macedonia scores poorly on indicators of governance, public-sector integrity, and corruption... (Perceptions of government conduct)



Source: Balkan Barometer 2022, Business Opinion Survey. Note: All respondents - N=1203, scores are on a scale of 1 to 5 where 1 means very negative and 5 very positive, share of total, %.

Negative perceptions of governance and public integrity can erode trust, leading to lower investment levels, tax compliance, and electoral and civic participation. In North Macedonia, 59 percent of companies report having a negative or very negative perception of governance, public integrity, and corruption. These perceptions are reflected in the country's score on the Balkan Barometer 2022 Business Opinion Survey, which was the worst in the region (Figure 50). Similarly, 38 percent of surveyed businesses in North Macedonia have a negative view of transparency and

Figure 51. ...and the gap between North Macedonia and its EU peers on governance indicators is wide (Overall governance score, various years)



Source: World Bank staff simulations based on World Governance Indicators.

decision-making in the public sector, the highest percentage in the region.

North Macedonia's governance indicators lag those of aspirational peers, and insufficient improvements could impede the country's EU accession. Policymakers must redouble their efforts to catch up with peers, as the countries that joined the EU in 2004 had higher governance indicators during the pre-accession period than North Macedonia today (Figure 51). Poor governance and limited administrative capacity, particularly at the

municipal level, negatively affect the delivery of public services. Weak public institutions and political volatility—including frequent changes in leadership and politicized hiring—undermine governance quality and slow reform implementation, resulting in inefficient spending, inadequate public infrastructure and services, and the perception of unequal treatment by the authorities.

Digitalization and transport infrastructure can boost productivity and service delivery

Digital governance systems have become increasingly important in the wake of the COVID-19 pandemic. The government aims to accelerate the comprehensive digital transformation of the public administration by strengthening foundational elements such as information and communication technology (ICT) architecture, the policy and regulatory frameworks, and the quality of digital skills. In 2019, the government adopted the National Operational Broadband Plan for 2019-29, and the authorities are currently working on a long-term ICT strategy that will include a plan for developing digital skills. The Ministry of Information Society and Administration and other stakeholders have already prepared a Public Administration Reform Strategy and Action Plan covering ICT capacity-building in the public sector and the introduction of modern systems for human resource management, professional development, and regulatory reform. The second area is Information society, covering: infrastructure and support; eServices, where some progress has been made,⁶¹ eCitizens, and single-point-of-services; and open data. However, the country's underdeveloped and underutilized high-speed broadband infrastructure has resulted in a significant digital divide among the population, with negative social and

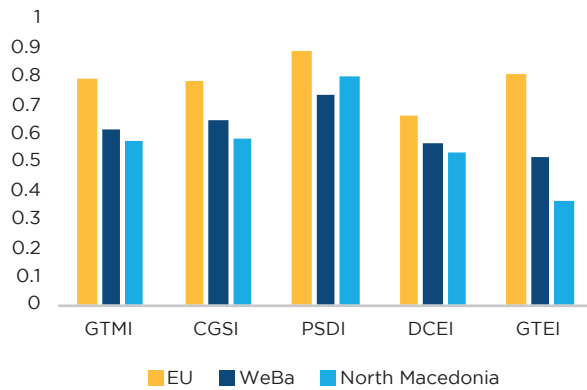
economic consequences. Although 81 percent of households have internet access, connection speed and quality are highly variable, and only 42 percent of the population has access to 4G. Furthermore, concerns persist regarding the independence of national regulatory bodies. North Macedonia also faces more significant challenges than its regional peers in terms of affordability, which disproportionately affects lower-income households and exacerbates the digital divide. In addition, a shortage of skilled workers and a significant gender gap in the ICT labor force and leadership positions hinder the growth of the ICT sector and impede the overall development of the digital economy.

The country's lagging infrastructure is reflected in its weak digital governance. According to the GovTech Maturity Index, North Macedonia outperforms its Western Balkan peers only in the indicator for public service delivery, which measures the maturity of online public service portals with a focus on citizen-centric design and universal accessibility. On the indicators for core government systems, digital citizen engagement, and GovTech enablers, North Macedonia trails both its peer countries and the EU27 member states (Figure 52).

Despite annual public investment levels of over 5 percent of GDP, the quality and coverage of infrastructure in North Macedonia fall short of EU standards. The 2019 World Economic Forum's Global Competitiveness report indicates that the country performs poorly in terms of air connectivity, efficiency of train services, and overall quality of transport infrastructure (Figure 53). Inadequate upgrades and maintenance of the road and rail network continue to hinder economic development and impede the country's regional integration. About 20 percent of firms regard the quality of transport infrastructure as poor, with logistical and

61 www.uslugi.gov.mk

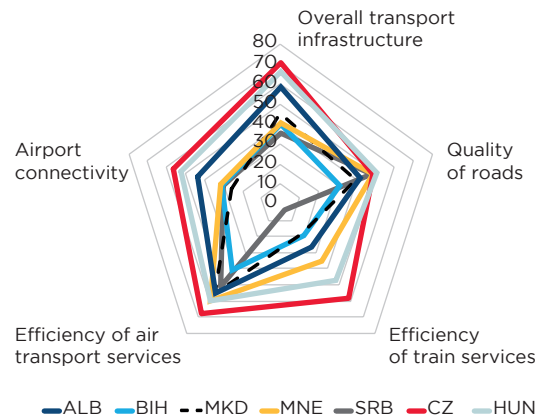
Figure 52. Digital governance systems could be much improved
(GovTech Maturity Index, 2022)



Source: <https://www.worldbank.org/en/programs/govtech/2022-gtmi>.
 Note: GTMI: GovTech Maturity Index; CGSI: Core Government Systems Index; PSDI: Public Service Delivery Index; DCEI: Digital Citizen Engagement Index; GTEI: GovTech Enablers Index.

connectivity issues leading to increased trade costs.⁶² While North Macedonia has invested in developing the road sector and completing missing EU TEN-T Corridor links, progress has been slow. TEN-T Corridor X missing links have been successfully completed at south of North Macedonia toward Greece, but Corridor linking East and West is significantly delayed. Significant governance bottlenecks exist at the planning, appraisal, and costing stages of the public infrastructure project cycle. The country currently lacks a legal or regulatory framework providing policies, standards, or procedures for appraising investment projects. For projects implemented through structured financing instruments, such as PPPs, no guidelines currently exist for economic analysis of projects. A new PPP law, currently being drafted, aims to address this issue. The decentralized and fragmented public investment system, differentiated through funding source, results in a lack of oversight of the project portfolio and its contribution to the national development

Figure 53. The quality and coverage of infrastructure remain below EU standards
(Transport infrastructure and connectivity indicators)



Source: World Economic Forum, The Global Competitiveness Report 2019.

strategy. Road agency of North Macedonia is in process of implementing a road asset management system which should help the implementation of first performance-based contracts in the road sector and to prioritize regular and periodical maintenance interventions. Municipal infrastructure—including water, wastewater, urban transport, street lighting, and solid-waste management—remains underdeveloped (at 64 percent of regional average) and requires significant investment. The local own-source revenue contribution to the expenditure takes up only a small percentage. Being coupled with fragmented and insufficient central fiscal transfer, this inadequate spending resulted in significant backlog of municipal infrastructure and services such as that only 66 percent of urban population is connected to sewerage (dropping to 11 percent for rural settlements), a non-revenue water reaches 70 percent, and almost no local budget is allocated for critical DRM services such as fire-fighting assets, equipment as well as regular cleaning/

⁶² According to the Balkan Barometer 2021, 79 percent of firms thinks that cross-border transaction costs are high—the largest among the Western Balkans.

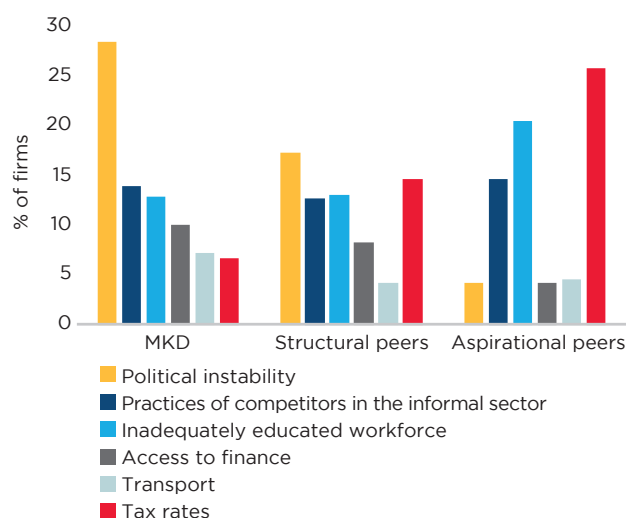
maintenance of riverbeds. Urban transport faces challenges in many cities, and the transport sector has been responsible for greatest share of the increase in GHG emissions in the country in recent years, primarily from daily commuting. E-mobility remains low. North Macedonia also lags in waste disposal, relying on polluting and inefficient landfills while recycling is almost nonexistent.

Deficiencies in the business environment undermine competition and inhibit productivity growth

Micro, small, and medium enterprises (MSMEs) that lack real estate collateral have limited access to finance. The depth of the financial sector measured by private sector credit to GDP stands at 55 percent in North Macedonia, which is in line with regional averages while significantly below EU averages. Availability of alternative financial products which can cater to the MSME sector, such as leasing, factoring and financial companies are present

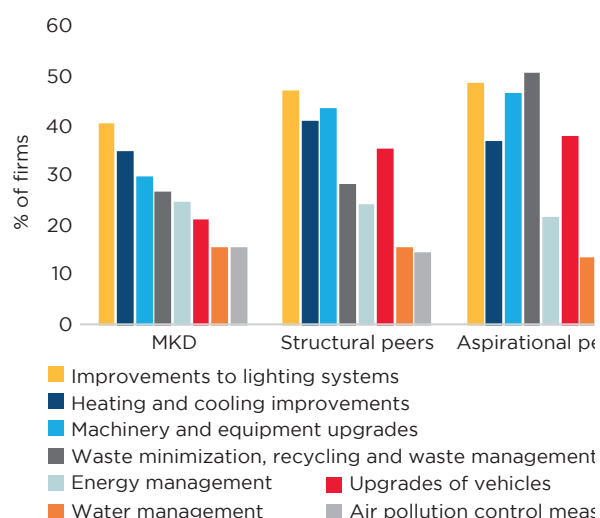
but limited with very little activity. Weak regulation (lacking necessary definitions about factoring), lack of funding, low awareness, and disadvantageous tax treatment limit the growth of factoring. Seven leasing companies mainly provide car leasing and are not targeting MSMEs. Leasing could potentially play an important role in financing MSMEs, including those in the agricultural sector. Leasing companies are required to pay VAT on interest income, a cost that is passed on to consumers, making the product even less competitive. In the 2019 Enterprise Survey, firms ranked access to finance as their top five obstacles for doing business (Figure 54).⁶³ Credit constraints pose an especially acute challenge among smaller, younger firms and those located outside of Skopje. Subsequent surveys conducted to capture the impact of the pandemic reveals that access to finance gap widened as more firms are experiencing decreased liquidity and delayed payments. On average, banks provide 35 percent of firms' external investment financing. However, banks

Figure 54. Political instability, access to finance, and transport are bigger business obstacles than with the peers (Percent of firms reporting the biggest obstacle they face)



Source: World Bank Enterprise Survey 2019.

Figure 55. North Macedonia's firms invest less than their peers in greening their operations (Percent of firms reporting investment measures adopted over the last three years)



Source: World Bank Enterprise Survey 2019.

63 The OECD SME Policy Index 2022 (https://www.oecd-ilibrary.org/development/sme-policy-index-western-balkans-and-turkey-2022_af7604c6-en) suggests that access to finance pressures eased.

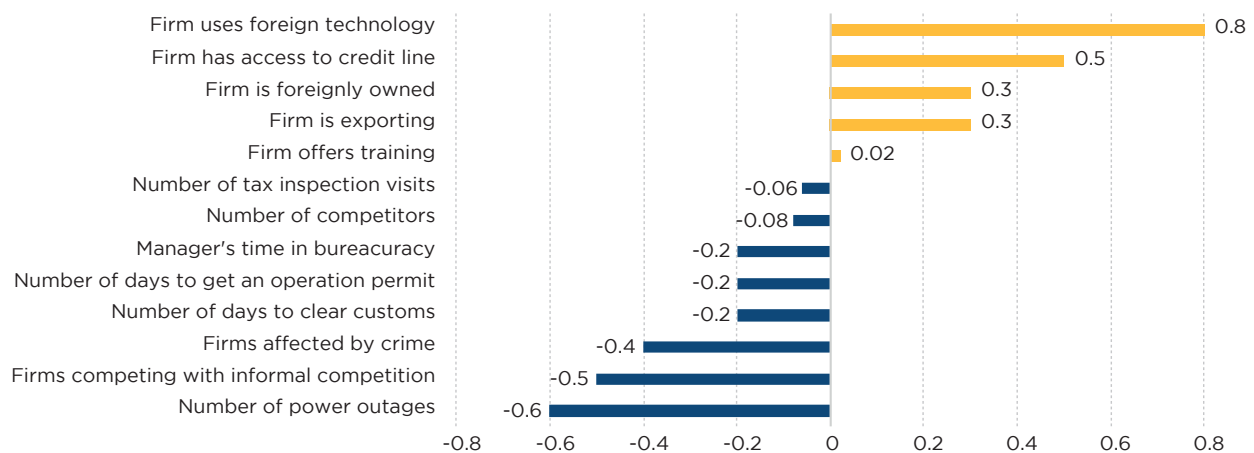
only lend to MSMEs with at least three years of business records and good financial accounts, a condition that micro firms, small firms, and startups typically cannot meet. Large loans require hard collateral equal to the loan's value, which micro and small firms often lack. Banks rarely lend against movable collateral because of limitations in the law on contractual pledges, problematic enforcement, and the non-existent secondary market. Women face a significant disadvantage as they encounter additional constraints in accessing funds, lack strong business networks, and receive limited support for unpaid domestic work and childcare. Moreover, a smaller share of women compared to men have formal institutions account ownership. Public interventions, such as a well-designed partial credit guarantee scheme, could ease collateral requirements and stimulate bank lending to MSMEs. The Development Bank introduced such a scheme in late 2020 in response to the pandemic, but it has yet to reach its full capacity. Building firms' financial management and overall managerial skills would make them more bankable and increase their access to finance.

North Macedonia's firms are less likely to undertake green investments than their peers, especially investments in waste management, recycling, and machinery, equipment, and vehicle upgrades (Figure 55). A recent analysis shows that energy-efficiency investments could reduce energy consumption among North Macedonia's firms by about 30 percent while cutting greenhouse-gas emissions and generating as much as 1.7 percent in total cost savings.⁶⁴ With public-sector support, targeted loans could help improve the energy efficiency of firms.

An analysis of the business environment's impact on firm productivity underscores the need for deeper reforms. For example, power outages and informal competition decrease productivity by 0.6 and 0.5 percent, respectively. Conversely, facilitating access to foreign technology and providing access to credit lines can improve productivity for the median firm by 0.8 and 0.5 percent, respectively (Figure 56). Simulations indicate that improvements to the business climate could significantly boost productivity. For

Figure 56. Because the quality of the business environment either supports or hinders firm-level productivity...

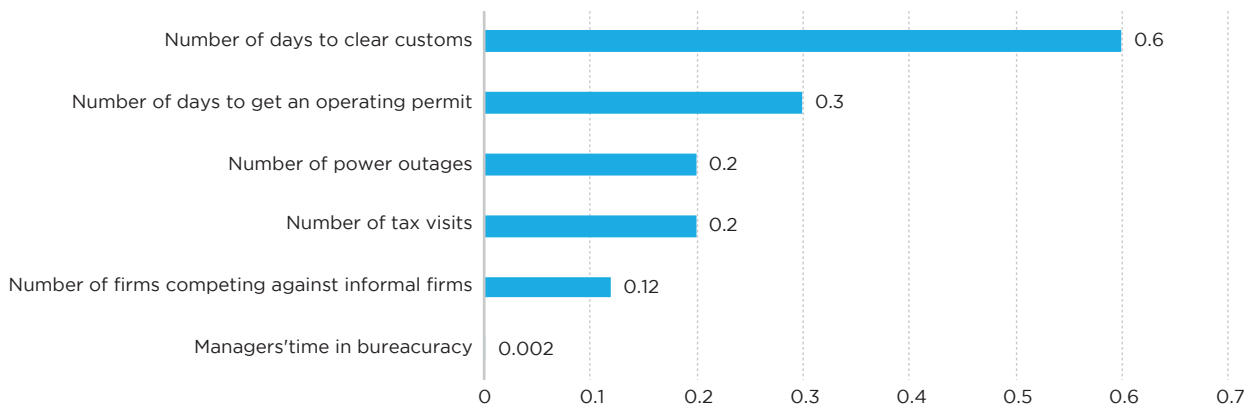
(Impact of the business climate on firm productivity, regression coefficients to TFPR)



Source: Author's calculations based on data from the World Bank Enterprise Surveys 2009-2013-2019 for North Macedonia. Total factor productivity (TFPR) is measured using deflated output and inputs and the Levinsohn-Petrin method. Given the lack of capital data for the 2013 Survey, imputation approaches have been applied to run the regressions. Control variables for the size and sector of firms have been used.

64 World Bank (2023d).

Figure 57. ...improving the business environment can yield significant productivity gains
(Percent of firms reporting investment measures adopted over the last three years)



Source: Author's calculations based on data from the World Bank Enterprise Surveys 2009-2013-2019 for FYR North Macedonia. Total factor productivity (TFPR) is measured using deflated sales and inputs and the Levinsohn-Petrin method. Given the lack of capital data for the 2013 Survey, imputation approaches have been applied to run the regressions.

example, reducing the number of days for customs-clearance procedures could increase firm-level productivity by 0.6 percent. Similarly, reducing the number of days needed to secure an operating permit and minimizing power outages could raise productivity by 0.3 and 0.2 percent, respectively (Figure 57). These findings underscore the importance of targeted policies and interventions aimed at improving the overall business environment to foster productivity growth.

Deepening the trade integration and trade policies would lead to export boost and diversification

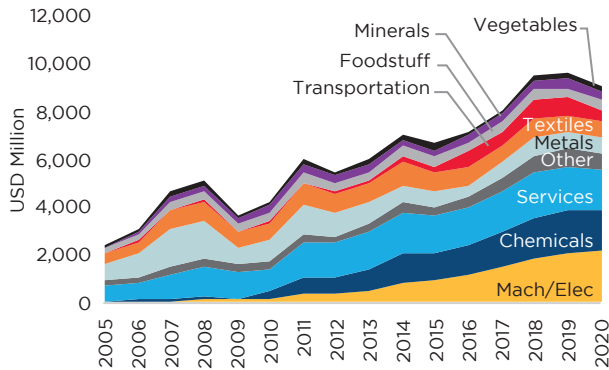
North Macedonia's FDI-supported export-oriented growth strategy is showing signs of fatigue, and the COVID-19 pandemic and Russia's invasion of Ukraine have highlighted important weaknesses. While the strategy has yielded gains, a lack of diversification—both in terms of markets and products—is weakening the country's export performance (Figure 58). The survival rate of exports is low, especially products not covered by a regional

trade agreement.⁶⁵ The survival rate for North Macedonia's exports is the third lowest in the region after Albania and Moldova. Export relationships tend to persist longer for primary-sector products and in markets where North Macedonia has an active regional trade agreement. On average, only half of medium and small exporters endure over the long term, but larger exporters have higher survival rates. Service exports have stagnated and continue to underperform their potential (Figure 59). These patterns highlight the need for a diversification strategy to boost export performance and resilience.

The government's strategy of using tax incentives to spur exports and attract FDIs needs to be redesigned to improve its effectiveness, better stimulate job creation, and incentivize linkages with the local economy. Generous tax incentives, which cost 5 percent of total tax revenue between 2017 and 2020, were primarily granted to firms operating in Technological and Industrial Development Zones (TIDZs). In 2020, these firms accounted for one-third of exports

⁶⁵ World Bank (2022a).

Figure 58. Machinery, electronics, and chemicals have driven export growth, though gains have slowed in recent years (Exports in USD million)



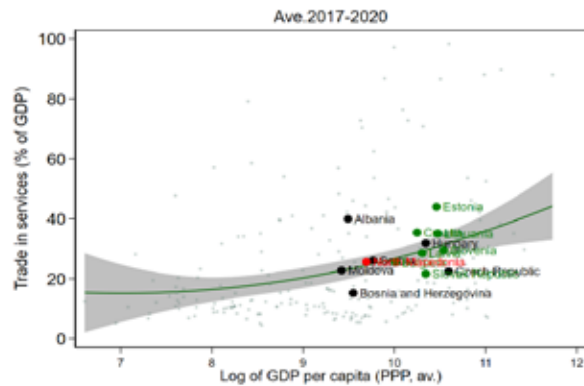
Source: World Bank staff, and SSO.

but represented just 3 percent of total employment. Moreover, tax incentives have not generated substantial spillover effects on the rest of the economy. Foreign firms continue to source only around 10 percent of their inputs from domestic suppliers. While tax incentives have boosted the profitability of FDI-financed firms in the TIDZs, they were not sufficient to overcome general investment hurdles, indicating that the firms attracted have low profit margins. These low margins could threaten the medium-term sustainability of their operations in the TIDZs, as they may choose to move to more lucrative investment locations.

Deep trade agreements (DTAs) have played a significant role in diversifying the economy by boosting exports across various sectors. The DTAs signed by North Macedonia in recent years have increased exports, facilitated the entry of domestic firms into new markets, and encouraged country's participation in GVCs.⁶⁶ However, the impact of DTAs has been asymmetric, favoring larger firms and manufacturers, which has inhibited the efficient reallocation

66 World Bank (2022a).

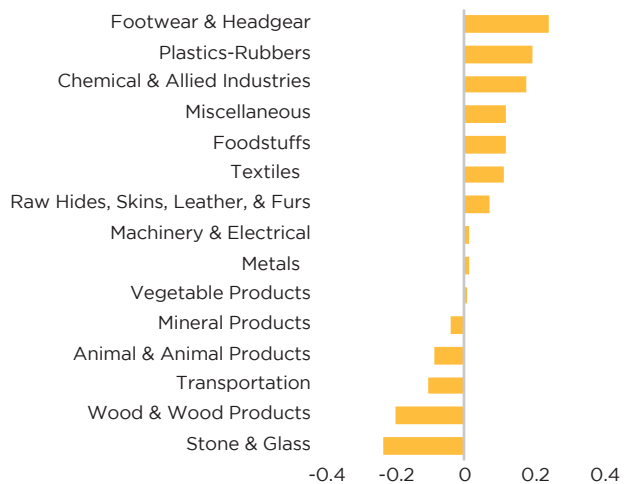
Figure 59. The growth of goods exports exceeded the average for structural peers, but service exports have untapped potential (Trade in services and GDP pc)



Source: WDI and SSO.

Figure 60. Deeper trade agreement can increase exports, especially in sectors with many large firms

(A percent increase in exports by firms for a 10-percent increase in the number of provisions in the Deep RTA)



Note: All the coefficients are statistically significant except for Raw Hides, Skins, Leather & Furs, and Miscellaneous. Source: Authors' estimations based on gravity model.

of resources towards more-productive firms. DTAs have had a clearly positive impact on manufacturing (including agribusiness), but their effect on agriculture and other parts of the primary sector has been weaker.

The largest gains have been generated in footwear and headwear, chemical products, and textiles (Figure 60).

A strong trade strategy is essential for a small, landlocked country like North Macedonia.

This strategy should facilitate climbing the GVC ladder and expanding diversification in agriculture, agribusiness, services, and more complex manufacturing. Greater diversification would accelerate job creation, increase business survival, and strengthen the resilience of the economy. To foster sustainable export growth, North Macedonia needs to implement trade policy reforms, which could include: (i) streamlining border procedures and enhancing interagency coordination to reduce customs-clearance delays and trade costs with its major trading partners; (ii) facilitating labor mobility within the Western Balkans to boost trade in services; (iii) addressing remaining gaps in transport infrastructure, including the rail network; (iv) deepening and expanding its free trade agreements and aligning its tariffs with the EU; and (v) revising tax exemptions in line with the EU Acquis to promote export readiness, foster human capital development, and promote innovation. State aid and incentive programs should be adjusted to enable firms to access higher-value-added segments of priority value chains.

ADDRESSING CONSTRAINTS FOR MORE INCLUSIVE GROWTH

The toll of limited quality of education

The education system in North Macedonia does not effectively equip graduates with the skills needed to succeed in the labor market.⁶⁷ Despite considerable progress in boosting

job creation, unemployment remains a major challenge, and North Macedonia has one of the highest rates of youth unemployment in the ECA region. In surveys, about one in six Macedonians cites inadequate employment opportunities as the biggest problem facing young people,⁶⁸ and it takes the average graduate 2.5 years to secure a stable or satisfactory job. The employment challenges facing young Macedonians are also reflected in the high rates of young population that does not study, work, or receive training (NEET). Only half of Macedonians between the ages of 15 and 29 are active in the labor market, and the country presents the second highest share of idle in Europe.

Only half of North Macedonia's firms report being able to find workers with the necessary skills, and less than 10 percent report being in contact with educational institutions.⁶⁹

Meanwhile, about one-quarter of Macedonians feel that the skills they learned in the education system did not prepare them for their current jobs.⁷⁰ The mismatch between the skills the education system imparts and those the labor market demands greatly diminishes the productivity of Macedonian workers. In addition, while female students are overrepresented in all levels of the school system, girls often face difficulties in utilizing their acquired skills as they tend to be underrepresented in the labor market.

The government is working to accelerate human capital formation,⁷¹ but its efforts to date have achieved limited gains.

A child born in North Macedonia today can expect to be just 56 percent as productive as she could have been given complete education and full health. This share is among the lowest in the Western Balkans and the ECA region (Figure 61). Low levels of productivity are caused

67 Based on World Bank (2023e).

68 Balkan Barometer 2022.

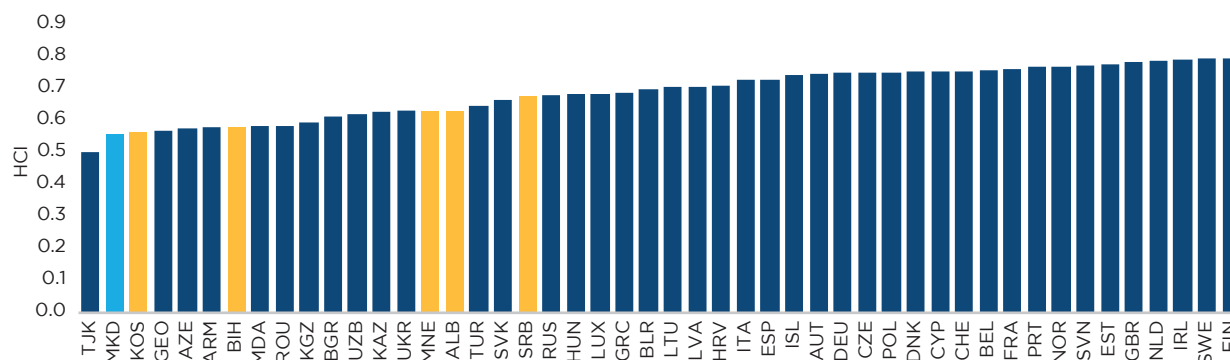
69 STEP Survey.

70 Balkan Barometer 2022.

71 Defined as the skills, knowledge, and health that individuals acquire and accumulate throughout their lives.

Figure 61. Human capital accumulation is among the lowest in ECA

(Human Capital Index (HCI) scores, indicating the average lifetime productivity of a child born in 2020)



Source: The Human Capital Project (World Bank 2021).

primarily by weak educational outcomes. Although a child in North Macedonia can expect to complete 11 years of schooling by age 18, if we adjust for learning quality, this only translates to 7.3 years of schooling, indicating a significant loss of human capital. More than one-third of Macedonians report being completely or mostly dissatisfied with the education system, the second largest share in the Western Balkans.⁷²

Over the years, education access has increased at all levels, including pre-school and tertiary education. However, despite concerted efforts to improve coverage and quality in recent years, pre-primary enrollment (age 4 and older) remains relatively low at 42 percent, below the levels of other countries in the region, the EU average, and the 2020 EU target of 95 percent. Access is also unevenly distributed; less than 10 percent of children from households in the poorest quintile attend preschool, compared to over half of children from wealthier households. Underinvestment in early childhood education (ECE) and childcare negatively impacts human capital formation, and a lack of childcare options is one of the main reasons behind the low rate of female labor-force participation. Uneven access to preschool exacerbates

socioeconomic inequalities, as many children from lower-income households start primary school without the necessary literacy and numeracy skills. Although primary enrollment is almost universal, and secondary enrollment is above 80 percent, the gross tertiary enrollment rate is just 43 percent, well below the levels of peer EU countries.

Recent efforts to improve education access have not led to better learning outcomes.

Education quality remains low, with no significant improvements observed in recent years. On the 2018 PISA, more than half of 15-year-olds failed to demonstrate basic proficiency in science, mathematics, and reading, far short of the 2020 EU target of 15 percent or fewer. While the country has made progress since 2015, students' performance is still below the average score for the EU and most Western Balkan countries (Figure 62). In addition, more than 40 percent of 10-year-olds cannot read and understand a simple text by the end of primary school, far above the 11 percent average for ECA.⁷³ There are also significant disparities in learning outcomes between students from different socioeconomic backgrounds. For example, the PISA 2018 revealed that the learning gap between students from the top and bottom

72 Balkan Barometer 2022.

73 Human Capital Project (2020).

Figure 62. Standardized test scores highlight the low quality of education in North Macedonia... (PISA 2018 results, North Macedonia and peer groups)

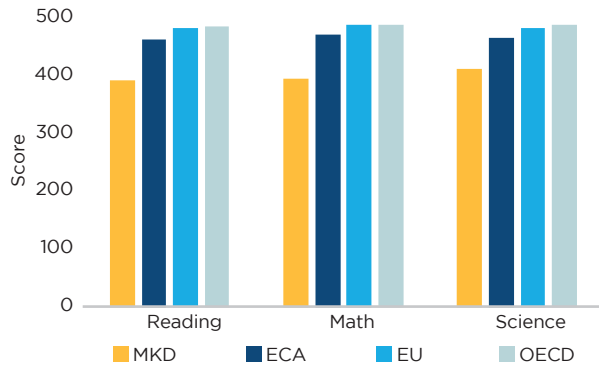
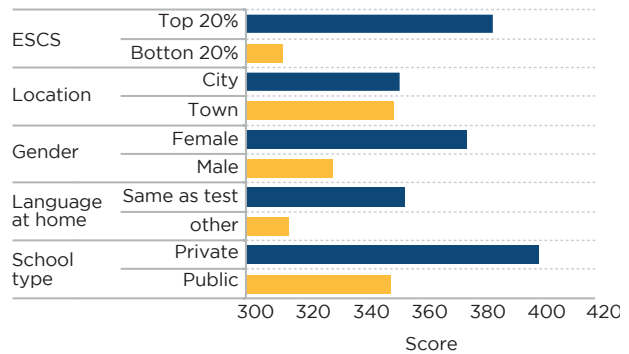
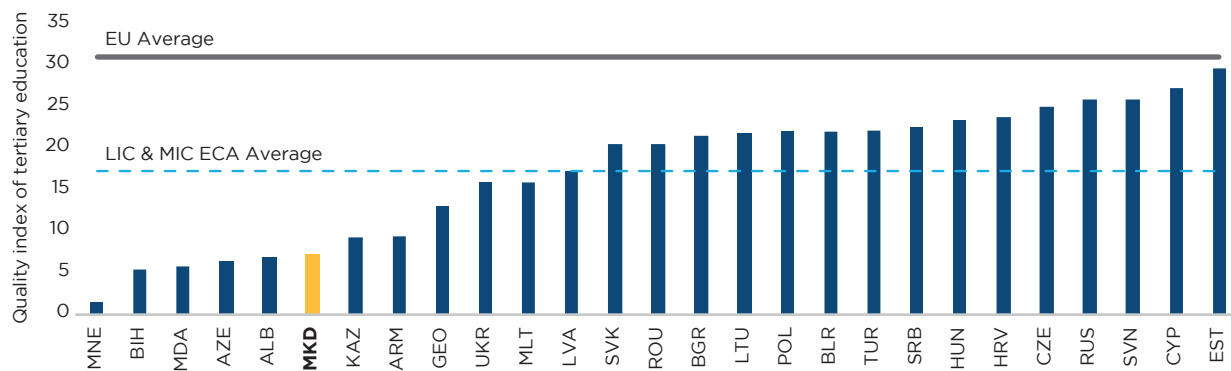


Figure 63. ...and reveal deep disparities between students from different economic backgrounds (2018 PISA equity profile, North Macedonia)



Source: World Bank (2019). North Macedonia: PISA 2018. Washington, DC: World Bank.

Figure 64. The quality of higher education is relatively low (Higher education quality index)



Source: World Bank Fall 2020 Economic Update. ECA.

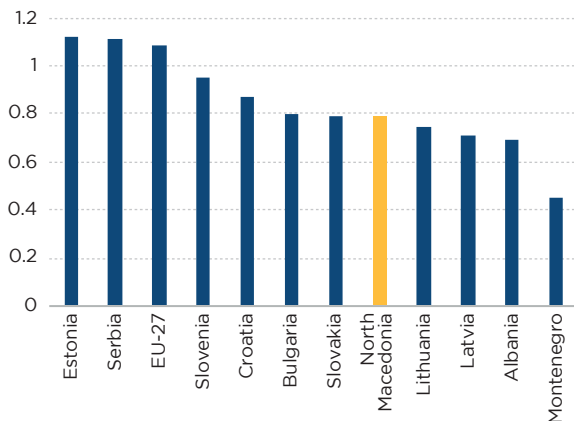
income quintiles was equivalent to almost two years of schooling (Figure 63).

The quality of higher education in North Macedonia is among the lowest in ECA (Figure 64). Inadequate institutional management and planning capacity contribute to the poor performance of higher education. Institutional governing bodies fail to regularly assess their own effectiveness and the performance of their institutions against strategic plans and operational targets, weakening performance monitoring and accountability. Moreover,

the number of higher education providers is increasing despite demographic decline and rising emigration rates, raising further concerns about the quality and value of the services they offer. Limited investment in academic talent, research capacity, and core infrastructure in North Macedonia's universities pose significant challenges to improving the quality of higher education.

As a share of GDP, North Macedonia spends slightly more on education than its regional peers but far less than other EU countries.

Figure 65. Spending on tertiary education in North Macedonia is relatively low (Spending on tertiary education, 2018 (% of GDP))



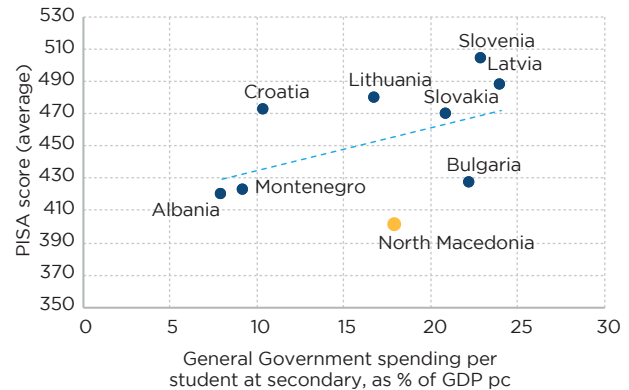
Source: UNESCO Institute for Statistics (UIS) and World Bank staff own calculations.

Public spending on education in North Macedonia fell from about 5.1 percent of GDP in 2010 to 4.0 percent in 2020, 1.4 percentage points below the average for other small Eastern European countries and 1 percentage point less than the EU27 average (Figure 65). The efficiency of resource allocation in pre-primary, primary, and secondary education is low, and comparator countries have been able to achieve better learning outcomes with similar or even lower levels of education spending (Figure 66). Education spending at these levels is dominated by current spending, with few resources devoted to capital investment. Capital investments accounted for just 4.4 percent of total spending between 2018 and 2021, far below the average of 7 percent for regional peers. Moreover, salaries and other compensation represent about 75 percent of total spending on pre-university education, and this share rises to 80 percent in primary education. Funding also varies dramatically across local governments, and students in one part of the country may attend a school that receives five times more funding than a school in another part of the country.

74 Based on World Bank (2023e).

75 Balkan Barometer 2022.

Figure 66. Peer countries obtain better education outcomes at similar or lower spending levels (PISA 2018 results and government spending)



Source: PISA database and World Bank staff calculations.

Health challenges and their impact on human capital and productive years

The status of the health system is an important concern for the population.⁷⁴ According to a recent survey, about one in five Macedonians considers the health system to be one of the most important problems facing the economy—the highest share in the Western Balkans. About 55 percent of the population is completely or mostly dissatisfied with the quality of health services.⁷⁵

Maternal and child health outcomes have improved, but immunization rates are low. The number of deaths per 1,000 live births has steadily declined, and between 2015 and 2019 the neonatal mortality rate fell from 9.6 to 3.9 deaths per 1,000 live births, the infant mortality rate dropped from 11.4 to 5.3 deaths per 1,000 live births, and under-five mortality plunged from 13.0 to 6.1 deaths per 1,000 live births. Additionally, the incidence of stunting in children has decreased significantly since 2010, falling to less than 5 percent in 2020,

the lowest rate in the Western Balkans. The maternal mortality rate fell from 13 deaths per 100,000 live births in 2000 to 7 in 2017, the latest year for which data are available. This maternal mortality rate is the second lowest in the Western Balkans and the lowest among the other seven small transition economies of Eastern Europe (STEE7). Vaccines play a critical role in protecting public health and reducing poverty,⁷⁶ but anti-vaccination movements and public mistrust pose significant threats to the gains made in children's health. Coverage rates for most vaccines ranged from 92 to 98 percent in 2019, except for MCV1 and RCV1, which dropped to 75 percent and had declined significantly since the early 2000s.

North Macedonia's low vaccination rate increases the risk of a COVID-19 resurgence.

COVID-19 vaccination rates have stagnated at about 41 percent, the lowest rate in the region after Bosnia and Herzegovina and well below the EU average of 75 percent.⁷⁷ Among the unvaccinated, about 60 percent reported being unwilling to take a vaccine, of which about 44 percent were concerned about side effects (the highest in the region), while approximately about 27 were unsure of the vaccine's efficacy.⁷⁸ A recent World Bank survey found that Macedonians are more likely to get vaccinated if they believe that vaccination is important to protect others, that their friends and family are getting vaccinated, and that the government's response has been effective.⁷⁹ According to the survey, the most trusted source of health advice among the unvaccinated is family members, while doctors, nurses, and pharmacists are

the most trusted source of medical advice among the vaccinated. Messages highlighting the effectiveness of COVID-19 vaccines in protecting both vaccinated individuals and their families and friends were found to increase willingness to get vaccinated by almost 40 percent in North Macedonia, highlighting the potential impact of a tailored appeal to specific concerns related to vaccines.

The growing challenge of managing NCDs underscores that the health system is not adequately responding to the evolving needs of the population.

The burden of NCDs is high and will continue to increase as the population ages. By 2050, more than one in three Macedonians will be over the age of 60. In 2019, NCDs accounted for 96.1 percent of all deaths in the country, with cardiovascular diseases responsible for 61 percent, cancer for 20 percent, chronic respiratory diseases for 5 percent, and diabetes for 5 percent.^{80,81} Cerebrovascular diseases were the primary cause of diminished disability-adjusted life years (DALYs) in 2019. NCDs also impose a considerable economic cost, as early retirement, disability, and premature death reduce the number of productive years for the average Macedonian. These costs are not distributed equally across age groups. People between the ages of 20 and 49 account for 18 percent of total premature deaths due to NCDs but they represent about 48 percent of productive years lost (Figure 67). High blood pressure, tobacco use, and an unhealthy diet are the primary risk factors driving mortality and disability in North Macedonia. About 58 percent of the population is overweight,

76 A recent study assesses the health and household economic impact of distributing 10 different vaccines (measles, hepatitis B, human papillomavirus, among others) in 41 low- and middle-income countries. The study finds that increasing access to these vaccines can prevent approximately 36 million deaths and about 24 million cases of medical impoverishment (Chang, et al. 2018).

77 Our World in Data.

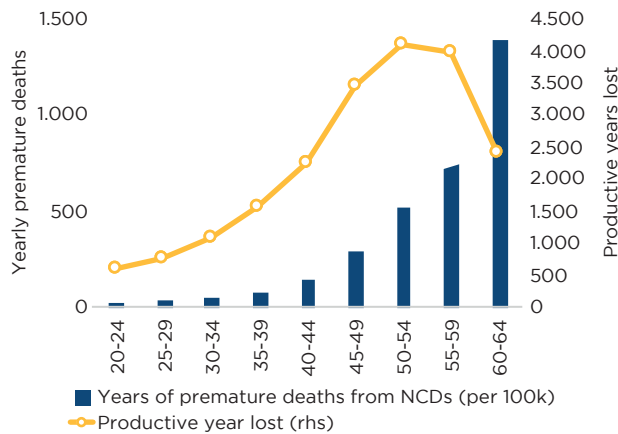
78 Balkan Barometer 2022.

79 To support the vaccination in the Western Balkans, the World Bank conducted a survey during July–August 2021 in Kosovo, North Macedonia, and Serbia. Due to advertising targeting, only four regions (Polog, Skopje, Vardar, and Pelagonia) were included in the North Macedonia sample. Thus, the surveys are not nationally representative.

80 <https://databank.worldbank.org/reports.aspx?source=2&series=SH.DTH.NCOM.ZS&country=MKD>

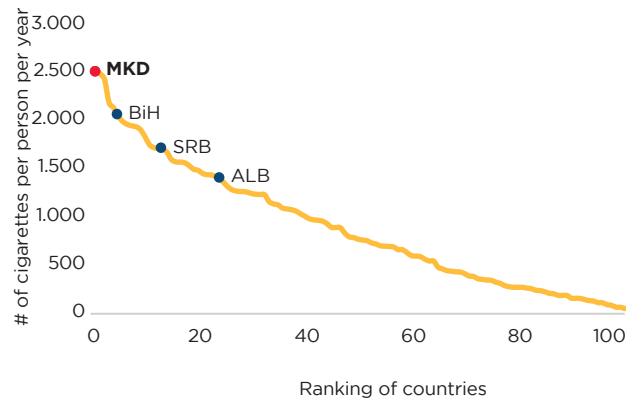
81 <https://www.euro.who.int/en/countries/north-macedonia/publications/primary-health-care-organization,-performance-and-quality-in-north-macedonia-2019>

Figure 67. In addition to their enormous human cost, NCDs greatly reduce economic productivity (Productive life years lost to NCDs annually, 2017)



Source: World Bank (2023e).

Figure 68. North Macedonia has the world's highest rate of cigarette consumption per capita (Ranking of countries based on the number of cigarettes smoked per person per year: age ≥ 15, 2019)



Source: Authors calculation based on The Tobacco Atlas.

and 24 percent is obese. Smoking is also a significant issue, with 35 percent of the population smoking, and North Macedonia has the world's highest number of cigarettes smoked per person per year at over 2,500 (Figure 68). Excise taxes are one of the most effective ways to reduce tobacco consumption and have been shown to yield clear health and economic benefits.⁸² However, taxes on tobacco are low in North Macedonia, and the country has the lowest cigarette prices in the region and when compared to the EU. In addition to tobacco use and unhealthy lifestyle, air pollution (PM2.5) imposes a considerable health burden in North Macedonia, where it causes about 1,600 premature deaths each year.⁸³

Public spending on health remains low and inefficient, contributing to a high level of out-of-pocket (OOP) spending. Public spending on health has fallen from about 5 percent of GDP in 2003 to 4.8 percent in 2022, below the averages for the EU (6 percent), the STEE7 (5 percent), and the Western Balkan countries

(5.2 percent). Per capita public health spending in North Macedonia is also lower than in comparable countries (Figure 69). In 2019, OOP payments accounted for about 40 percent of current health spending, higher than the averages for the Western Balkans, the STEE7, and the EU (Figure 70). Faced with high costs and low quality of care, many Macedonians forgo essential health services, resulting in a lack of timely treatment that increases the burden of NCDs and heightens the risks posed by infectious diseases such as COVID-19.

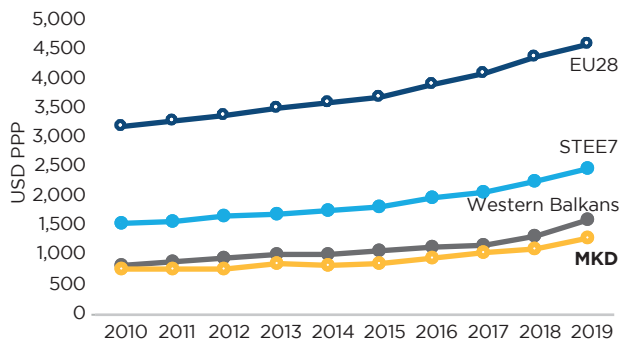
Inefficient management of chronic diseases at the primary healthcare level has led to high rates of referrals and hospital admissions.

The fragmented primary care network and the limited capacity of general practitioners and other primary healthcare professionals have increased referrals to secondary and tertiary facilities, resulting in high rates of avoidable hospital admissions. Public spending continues to focus on hospital care, with less funding going to primary and preventive care.

⁸² Fuchs, Gonzales Icaza, and Paz (2019).

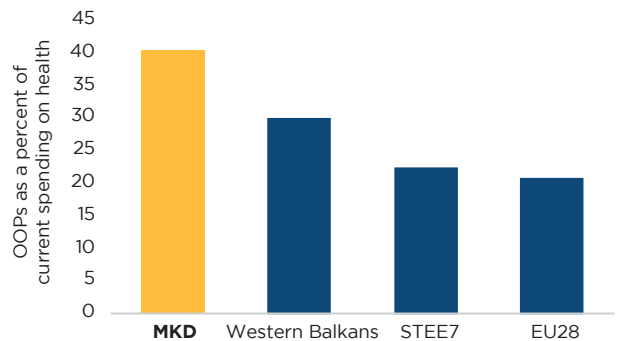
⁸³ Fine inhalable particles with diameters 2.5 micrometers and smaller.

Figure 69. North Macedonia's level of per capita public health spending is among the lowest in the region... (Current health spending per person in USD PPP, 2010-19)



Source: World Bank health nutrition and population statistics, 2022.
 Note: The United Kingdom is included in EU average through 2019; Kosovo is not included in GHED.

Figure 70. ...while OOP health expenditures are relatively high and rising (Out-of-pocket payments as a share of current spending on health, 2019)



Source: WHO Global Health Observatory Database, 2022.
 Note: The United Kingdom is included in EU averages through 2019; no data are available for Kosovo; 2018 is the latest available year for Albania.

Inefficient service delivery, high referral rates, and underdeveloped prevention services contribute to the accumulation of arrears in the health sector. Arrears in the health sector rose from 0.5 percent of GDP in 2016 to 0.66 percent in 2022. Large and mounting arrears are a systemic challenge that threatens the sustainability of health financing.

Extensive reforms have strengthened social protection, but coverage remains relatively low

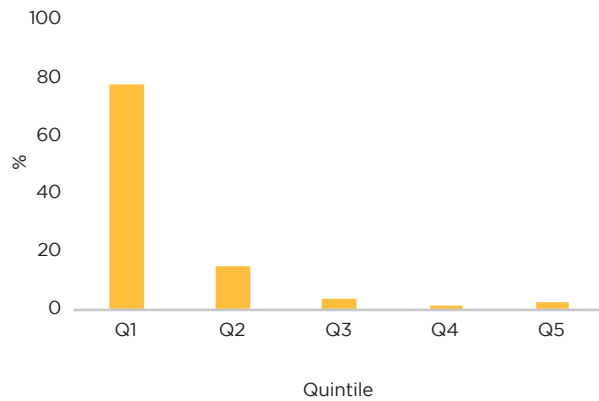
In 2019, the government launched a comprehensive reform effort aimed at consolidating its fragmented and overlapping social assistance programs.⁸⁴ Prior to the reforms, social assistance spending was relatively low, dispersed across multiple programs, and skewed toward non-means-tested programs. The reform replaced several programs with a single means-tested guaranteed minimum assistance (GMA) scheme designed to expand coverage and provide more adequate benefits. In parallel, a new means-tested social pension was

introduced for those age 65 and above; an educational allowance was created; the coverage of the existing child allowance was extended; and the parental allowance program was transformed into an income-tested program. In 2019, social assistance programs reached more than one-third of households in the poorest quintile, a higher rate than in many Western Balkan countries but still much lower than the 53 percent average for ECA, indicating that there is still scope to improve coverage among the less well-off. Means-tested and categorical-benefits programs are effectively targeted to lower-income households, and over 90 percent of least-resource social assistance benefits go to households in the bottom 40 percent of the income distribution, one of the highest rates in ECA (Figure 71).

Social assistance programs make a significant contribution to poverty reduction, particularly during times of crisis. The effectiveness of North Macedonia's social assistance programs has increased since 2019, and simulations indicate that the reforms have reduced the

84 Based on World Bank (2023e).

Figure 71. Most social assistance benefits are received by lower-income households
(Distribution of least-resource social assistance benefits, 2019)

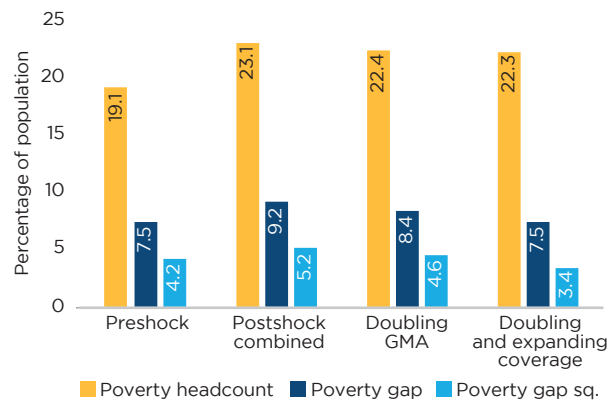


Source: World Bank staff estimates based on HBS 2019 data.

poverty rate by approximately 2.2 percentage points.⁸⁵ Moreover, the GMA played a vital role in the government’s response to the COVID-19 pandemic, and the number of beneficiaries rapidly increased to mitigate the impact of the crisis on household welfare. As climate change intensifies, social assistance will become increasingly crucial to respond to shocks. Simulation analysis reveals that government interventions can partially alleviate the impact of higher food and energy prices on extremely poor households. Increasing benefit amounts and/or expanding the coverage of the GMA could help offset the decline in income and consumption caused by a price shock (Figure 72). Because these measures are targeted to extremely poor households, they may significantly reduce the depth and severity of poverty while having little effect on the poverty rate.

The government has initiated a comprehensive reform of social services. Social services are critical to build human capital by mitigating

Figure 72. Social assistance programs can help mitigate the impact of rising food and energy prices
(Simulated effect of a food and energy price spike on the poverty rate)



Source: World Bank simulations based on 2019 consumption data from the HBS and income data from the SILC.

Note: Poverty is based on the upper middle income class poverty line of \$6.85/day in 2017 PPP. The figure simulates the change in the overall consumption surplus in response to the y-o-y food and energy price increases combined as of July 2022 and assumes an elasticity of -0.25.

risks and promoting well-being. In North Macedonia the importance of social services is poised to grow as the population ages. The Ministry of Labor and Social Policy (MLSP) is now responsible for setting standards, quality assurance, and financing, while municipalities identify the types of social services to be offered, which are then provided in partnership with nongovernmental organizations. The MLSP has reformed licensing of organizations and staff and expanded the menu of services. A case-management system has been introduced that will help create an integrated assessment of needs and vulnerabilities, which will allow social workers to tailor the range of services and benefits provided based on individual and household needs. In parallel, individual employment plans are now being used to improved coordination between Social Work Centers and Employment Centers to support the activation of social assistance beneficiaries. Early experience highlights the growing demand for social services for the elderly, specifically in-home care, as a large

⁸⁵ Simulations were done using a \$5.5/day poverty line in 2011 PPP.

share of grants to municipalities and service providers for social services were requested for home-based care for the elderly. However, there is a need to improve access to these services and strengthen coordination with the health system to help ensure that the service provided to elderly people respond to their changing needs as they age.

Although the pension system appears to effectively reduce poverty, its equity and coverage could be improved. North Macedonia and Kosovo are the only Western Balkan countries that have a multi-pillar pension systems. The poverty rate among the elderly was about 15 percent, just below the EU27 average (16 percent) in 2019.⁸⁶ However, elderly people living in poverty are less likely to receive pensions, with coverage rates ranging from 80 percent in the lowest income quintile to 98 percent in the top quintile. The government introduced a means-tested social assistance program for the elderly in 2019, which may boost coverage among the less well-off. Spending on pension benefits amounted to 8 percent of GDP in 2022, low by the standards of comparable countries; yet the pension system generates a significant deficit. Total pension expenditures in 2022 (with second pillar transition cost and health contributions) stood at 9.9 percent of GDP, with contribution revenues at 6. percent of GDP generating overall deficit of around 4 percent of GDP. The central government budget covers the deficit, consuming resources equivalent to what the country spends on education each year. Although reforms prior to 2019 set the system on a sustainable path, the more recent policy actions, including ad-hoc increases in 2019, and introduction of a more generous pension indexation pattern in 2021 increased the medium and long run pension system's fiscal risks. Increased pension contribution rate in 2020 and 2021, and recent strong growth in contribution base cushioned the

short-term fiscal risks but implicit liabilities stemming from aging population and decline in working age population are growing. Without further reforms the number of pensioners would surpass the number of contributors by 2053, while the pension deficit will remain at 3 percent of GDP despite further erosion of pension adequacy to below 35 percent replacement rate.

Reforms implemented by the Employment Service Agency (ESA) have contributed to stable employment growth in recent years.

Prior to 2020, total spending on labor-market support equaled 0.4 percent of GDP, well below the averages for the EU28 (1.2 percent) and the STEE7 (0.6 percent). The ESA provides a range of employment services and active labor-market programs (ALMPs) focused on individuals under age 29, the long-term unemployed, and GMA beneficiaries. The ESA offers training programs, wage subsidies, internships, self-employment support, and public works programs. While the coverage of ALMPs has steadily increased, with a focus on wage subsidies and self-employment support, the effectiveness of these programs is uncertain. In 2018, the ESA introduced the novel Youth Guarantee program, which provides all individuals between the ages of 15 and 29 with an offer of employment, continued education and training, or participation in an ALMP within four months of registering as a job seeker. In 2020, more than 25,000 young people were registered in the program. Within four months, about 35 percent of participants were either employed or participating in an ALMP. However, more evidence is needed to assess the effectiveness of the Youth Guarantee program. An activation strategy for GMA beneficiaries has been developed jointly with the EU, but the ESA has not received an increase in funding or human resources for several years. In fact, the number of ESA counsellors has steadily decreased, outpacing

⁸⁶ Eurostat (2019).

the decline in the number of jobseekers. As a result, the caseload ratio (the number of registered jobseekers per counsellor) has risen, undermining the ESA's effectiveness. Despite these challenges, the ESA has continued to expand its services, piloting and implementing the Youth Guarantee at the national level while developing the GMA-beneficiary activation strategy.

CONFRONTING THE CONSTRAINTS FOR SUSTAINABLE GROWTH

Fiscal space needs to be restored to safeguard resilience to future shocks

North Macedonia's strong track record of sound macroeconomic policies and financial-sector stability has supported one of the world's most inclusive economic expansions. Prior to 2020, the public debt stock remained moderate at less than 50 percent of GDP, while declining external imbalances kept the external debt stock, both public and private, at about 70 percent of GDP, with most external debt being intercompany debt. Pre-pandemic macroeconomic policies built up adequate buffers to enable a countercyclical fiscal response, which mitigated the impact of the shock. While the economy fell into recession in 2020, contracting by 4.7 percent, it rebounded by early 2022. The government provided subsidies to firms to protect jobs, keeping employment relatively stable. In 2022, Russia's invasion of Ukraine created a second shock, which was magnified by North Macedonia's heavy reliance on imported energy, the high energy-intensity of its growth model, and the fact that half of households reported being unable to cope with unexpected costs in 2021—the highest share in ECA. To shield households from the impact of rising food and energy prices, the government implemented

a near-universal energy subsidy and reduced the VAT rate on electricity and food.

While the government's crisis-response measures supported growth, preserved jobs, and protected household welfare, they also increased fiscal sustainability risks as growth slowed and financing conditions tightened.

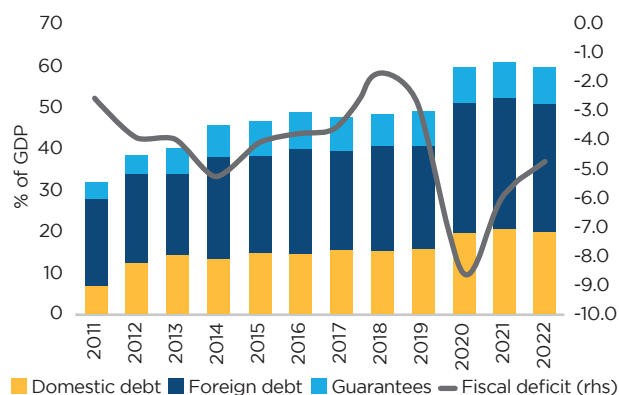
Public and publicly guaranteed debt reached 59.6 percent of GDP in 2022, up 10 percentage points from 2019 (Figure 73). Meanwhile, the fiscal deficit averaged 6.4 percent of GDP during 2020-22, including the off-budget deficit of the state road enterprise. Further fiscal risks stem from the price indexation of pensions and minimum wages, which influence wages in the public sector, as well as the renewed accumulation of public-sector arrears and the high debt levels of state-owned enterprises (SOEs).⁸⁷ North Macedonia has run higher fiscal deficits than its EU27 and WB6 peers, with a 10-year average deficit of 4.2 percent of GDP.

For a small, open economy with a pegged exchange-rate regime, fiscal policy is the primary instrument for managing the business cycle. Consequently, creating and maintaining fiscal buffers is vital to respond to shocks. Signs of expenditure inefficiency in key areas, including education, health, infrastructure, and agricultural subsidies, suggest that the same output levels could be achieved at a lower fiscal cost.⁸⁸ For example, cross-country evidence indicates that North Macedonia's current level of public education spending could yield 11 learning-adjusted years of schooling instead of the current seven (Figure 74). In addition, broad tax exemptions, compliance challenges, and widespread informality weaken the tax system, and there is scope to increase tax revenue by improving collection efficiency, reducing the regressivity of the tax structure, and broadening the tax base.

87 At end-2022, the pension deficit stood at 3 percent of GDP (without the transitional cost), arrears at 3.2 percent of GDP, and guarantees to SOEs at 8.7 percent of GDP.

88 World Bank (2023e).

Figure 73. Rising indebtedness due to high primary deficits
(Percent of GDP)



Source: MOF, World Bank staff calculations.

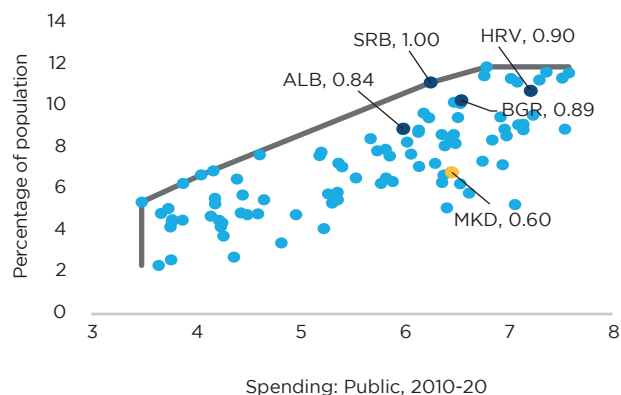
Economic growth has been highly energy-intensive

North Macedonia's energy-intensive economy relies heavily on fossil fuels.⁸⁹ The country's energy intensity is almost three times higher than the EU average. Coal and petroleum products accounted for more than 70 percent of the primary energy supply in 2021, and the electricity generation mix included coal (39 percent), gas (29 percent), and hydropower (26 percent).⁹⁰ About 70 percent of North Macedonia's electricity is produced by the state-owned company *Elektrani na Severna Makedonija* (ESM), which owns two large coal-fired thermal power plants at Bitola and Oslomej. In recent years, imported natural gas has marginally offset the use of coal for electricity production (Figure 75). Imports account for over half of energy consumption, making North Macedonia one of the most vulnerable countries in the region to energy price hikes. The transport sector is the largest consumer of energy, followed by households, industry, commerce, the public sector, and agriculture. Coal and petroleum products,

89 Based on World Bank (2021a).

90 Our World in Data based on BP Statistical Review of World Energy (2022).

Figure 74. Large room for efficiency improvements of the education spending
(Data envelopment analysis)



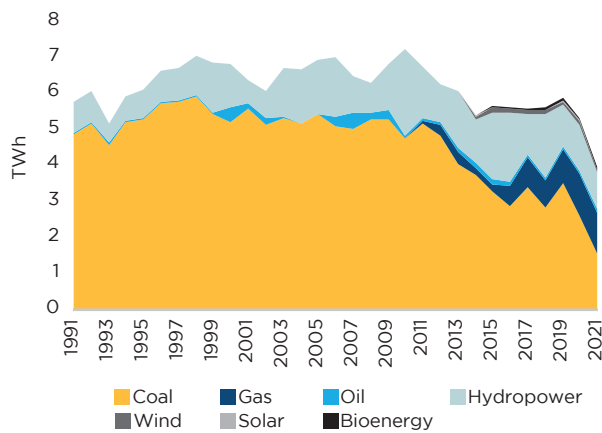
Source: WDI.

Note: Data envelopment analysis is a methodology for identifying the efficient frontier of production possibility set. Using this efficient frontier, an efficiency score is derived for each spending area. It suggests that North Macedonia is 40% below the efficiency frontier.

particularly diesel, are major contributors to energy use in North Macedonia. Electricity and wood fuel are the main sources of energy consumed by households. Only Skopje has an operational district heating system, which serves about one-quarter of households in the city.

North Macedonia's transition to a cleaner energy mix is still in its earliest stages. The country's heavy reliance on coal and petroleum products creates significant environmental and social externalities, including greenhouse-gas emissions and air pollution. While emissions have decreased slightly in recent years as natural gas has replaced a share of the coal used for power generation, the energy mix remains highly emissions-intensive (Figure 76). Fuel combustion is responsible for 70 percent of North Macedonia's greenhouse-gas emissions. Electricity production is the largest source of emissions, accounting for about 40 percent, followed by transportation (20 percent), and waste management (11 percent). The transport sector's share in total emissions doubled between 2007 and 2019, due to rising

Figure 75. Electricity production is mainly based on coal
(Electricity production by source)



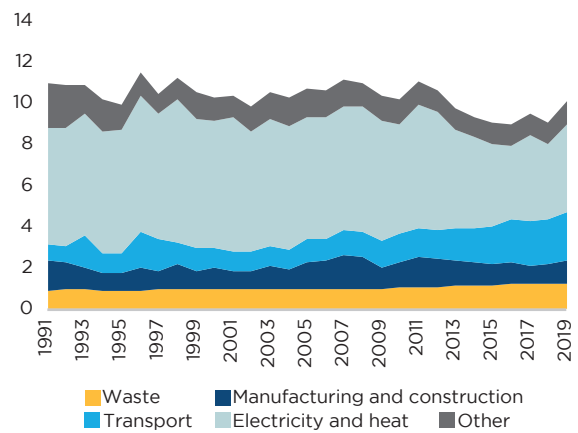
Source: Our World in Data based on BP Statistical Review of World Energy (2022).

rates of vehicle ownership, limited alternative transport modes, and the prevalence of older vehicles with few emissions controls. As economic growth further increases demand for electricity and transportation, the environmental costs of an emissions-intensive energy mix are expected to rise.

North Macedonia suffers from some of the highest rates of ambient air pollution in ECA.⁹¹ In a 2022 survey, about three out of four respondents described pollution as a serious or very serious problem, the highest rate in the Western Balkans.⁹² Multiple factors contribute to ambient air pollution, including the use of coal, firewood, and other solid fuels for domestic heating and cooking, the country’s numerous coal-fired power plants, weak pollution standards for the industrial sector, and an aging and growing vehicle fleet. Air quality is especially poor during the winter, when particulate concentrations in much of the country significantly exceed the global air quality guidelines established by the World Health Organization (WHO). Major cities, such as Tetovo and Skopje, have

91 World Bank (2019).
92 Balkan Barometer (2022).

Figure 76. The energy mix remains emission intensive
(Share of greenhouse gas emissions by sector)

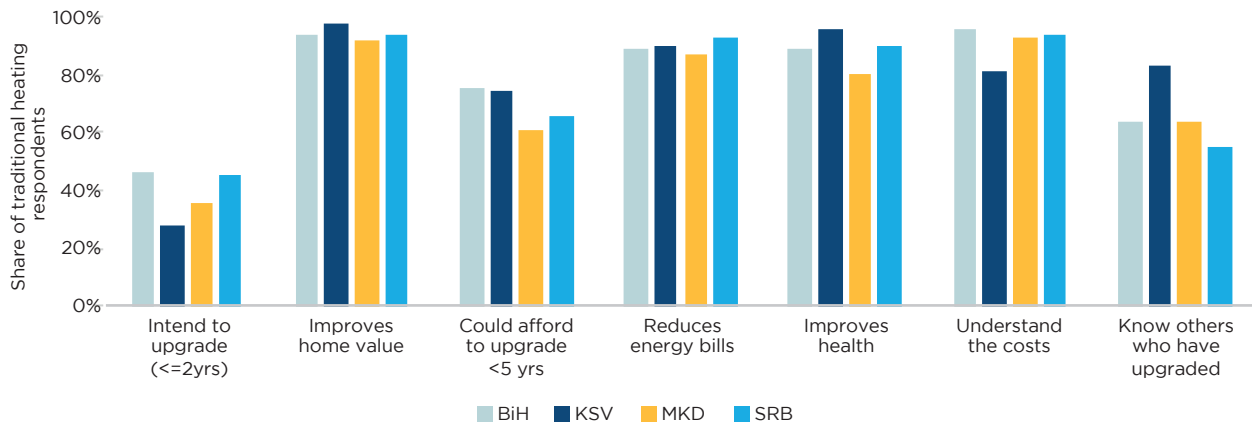


Source: Our World in Data based on Climate Analysis Indicators Tool (CAIT).

particularly poor air-quality indicators. In 2016, the average PM2.5 concentrations in Tetovo and Skopje reached six and four times the target level established in the WHO guidelines, respectively. Ambient air pollution from PM2.5 is one of the leading causes of illness and death worldwide, as it elevates risks of lung cancer, chronic obstructive pulmonary disease, heart disease, and stroke. Exposure to PM2.5 air pollution causes an estimated 1,600 premature deaths in North Macedonia each year. In 2016, the economic cost associated with increased mortality due to air pollution was estimated at 5.2-8.5 percent of GDP, while the excess health and medical costs amounted to another 7 percent of GDP.

The residential sector is the main contributor to PM2.5 emissions, driven by traditional heating practices that rely on inefficient technologies and heavily polluting solid fuels. Poorer households are especially likely to burn wood, coal, or other solid fuels for heat, and their willingness to endure the consequences highlights both their sensitivity to fuel prices and their limited access to more advanced

Figure 77. Macedonians tend to be less attuned to the benefits of upgrading their heating systems than do their regional peers
(Intentions to upgrade heating technology and attitudes towards sustainable heating)



Source: World Bank (2022b).

heating technologies. Efforts to promote the use of cleaner, more sustainable, energy-efficient heating systems must be informed by structural and behavioral factors—including not only economic concerns but also psychological and cultural attachments to traditional practices. A recent World Bank study⁹³ found that among households that used traditional heating sources, 40 percent were unwilling to upgrade their heating technology, while 21 percent were unsure about whether to upgrade. Respondents in North Macedonia were less likely than their peers to recognize the benefits of upgrading their heating systems, and relatively few intended to upgrade their systems within the next two years (Figure 77). This reluctance to upgrade seems to be driven mainly by affordability concerns, the perceived difficulty of the upgrading process, competing household budget priorities, and low levels of trust in the institutions designed to support these transitions. Insights from behavioral science suggest that pro-upgrading programs should strive to influence the attitudes, beliefs, and preferences of the population

to encourage investments in cleaner, more efficient technologies.

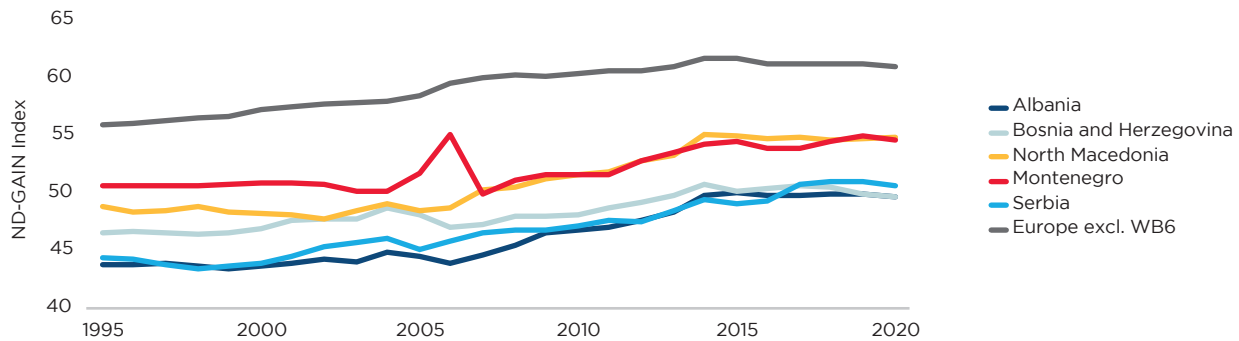
Climate-change adaptation policies will be crucial to enhance resilience, while decarbonization will be necessary to improve competitiveness and ensure sustainability

North Macedonia is one of the most vulnerable countries in ECA to the adverse effects of climate change. The country is highly exposed to floods, droughts, wildfires, and extreme heat, as its aging and poorly managed infrastructure struggles to cope with the intensifying effects of climate change. The population is highly aware of the adverse effects of climate change, with about 76 percent considering it a serious or very serious problem—the highest share in the Western Balkans.⁹⁴ The average temperature is projected to increase by about 1.9°C by 2050 and by 3.8°C by 2100. North Macedonia faces a high risk of flooding, especially in Skopje. A 100-year flood would affect about

93 World Bank (2022b).

94 Balkan Barometer (2022).

Figure 78. North Macedonia is less resilient to climate change than the average EU country (Notre Dame Global Adaptation Initiative Climate Change Country Index)



Source: University of Notre Dame. Notre Dame Global Adaptation Initiative.

20 percent of the national economy, more than in any other ECA country. Earthquake risk is also significant, particularly in the Polog area. A 250-year earthquake could affect more than 40 percent of the country's population and cause damages equal to as much as 50 percent of GDP.⁹⁵ North Macedonia's resilience indicators⁹⁶ have improved in recent years but remain well below the levels of most European countries (Figure 78). Climate change, extreme weather events, and other natural disasters can adversely affect health, nutrition, learning, skills development, and employment outcomes. These shocks have especially negative implications for poor and marginalized groups, which tend to be more exposed to their effects and have less capacity to protect themselves from welfare losses.⁹⁷ Developing and implementing adaptation policies is vital to bolster resilience to natural disasters and mitigate the vulnerability of the country and its population.

Investing in climate-resilient infrastructure is crucial to safeguard North Macedonia from the effects of drought and ensure long-term water security. Due to climate change, the eastern part of the country is expected to

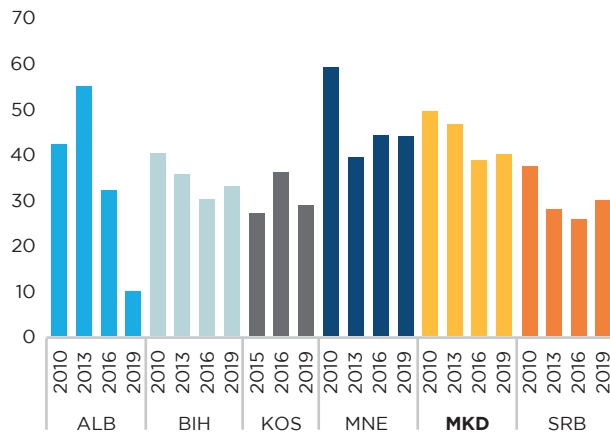
experience more frequent and intense dry spells. Precipitation levels are projected to drop by 5 percent by 2050 and 13 percent by 2100, further straining the country's limited water resources. North Macedonia receives just 3,000 m³ of rainfall per capita per year, less than half the 7,000 m³ average for the Danube basin, and its water resources are unevenly distributed. The country's water and wastewater-management infrastructure are outdated, with most systems installed more than 50 years ago. Agriculture, hydropower, industry, and municipal users compete for access to the country's limited water supply. Rising temperatures and longer dry spells are likely to significantly increase demand for irrigation, further intensifying competition between agriculture and other sectors. As droughts and floods become more severe, rainfall becomes more erratic, and crops become more vulnerable to pests and diseases, wheat yields could fall by as much as 21 percent between 2000 and 2025 and by 25 percent between 2040 and 2050, while maize production could drop by 56 percent and 86 percent over the same period unless adequate adaptation measures are put in place.

95 World Bank (2016).

96 Notre Dame Global Adaptation Initiative Climate Change Country Index.

97 World Bank (2022c).

Figure 79. Reliance on exports from emissions-intensive sectors remains high (Carbon-intensive exports as share of total exports in terms of value (%))



Source: World Bank (2021).

North Macedonia must also prioritize decarbonization to enhance its economic competitiveness and safeguard its energy security.⁹⁸ With major global markets tightening emissions standards, a development model based on coal and other fossil fuels is no longer economically viable. The EU is a global leader in climate action, and North Macedonia’s access to the common market—and to financial assistance from the EU—will hinge on its decarbonization efforts. The European Commission’s proposed EU Carbon Border Adjustment Mechanism (CBAM) provides a concrete indication of the costs that countries following a business-as-usual growth model may face. In the past decade, North Macedonia has generated over 40 percent of its export revenue from carbon-intensive sectors, and its dependence on these sectors has risen over the last three years (Figure 79). As the EU is an important trading partner for North Macedonia, the CBAM could significantly affect the terms of trade unless

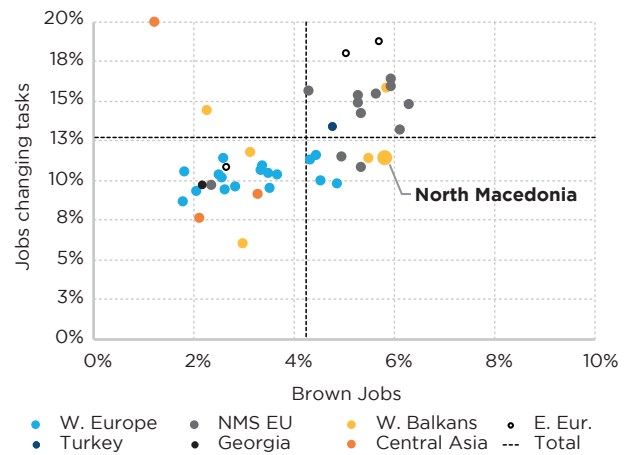
98 World Bank (2021b).

99 The Draft Law on Climate Action foresees the introduction of a carbon fee.

100 World Bank (2022c).

101 Garrote-Sanchez and Makovec (2021).

Figure 80. A large share of the workforce is employed in high emissions “brown” jobs (Share of brown and jobs changing tasks (%))



Source: Garrote-Sanchez and Makovec (2021).

North Macedonia imposes a similar carbon-pricing policy on domestic producers.⁹⁹

The low-carbon transition can pose significant social and political challenges.

The shift toward sustainable energy sources can displace workers in high-emissions industries. To prevent an increase in structural unemployment, the authorities must address the mismatch between the skills of the existing workforce and the demands of employers in low-emissions industries.¹⁰⁰ Consequently, climate-change mitigation requires sustained investments in education, training, and the retraining of displaced workers. In North Macedonia, up to 6 percent of workers may be at risk of losing their jobs amid the low-carbon transition, among the largest shares in ECA (Figure 80).¹⁰¹ For older workers nearing retirement age, the cost of investing in new skills may outweigh the benefits, causing an increase in early retirement that could exacerbate the larger demographic

challenges facing North Macedonia.¹⁰² While the green transition is vital to avoid the worst climate-change scenarios, the government must adequately prepare workers to succeed in a changing labor market.

¹⁰² World Bank (2022c).



CHAPTER 4



**PRIORITIES FOR FASTER, MORE
INCLUSIVE, AND SUSTAINABLE
GROWTH**

The following section presents a set of policy priorities for reducing poverty and fostering shared prosperity in North Macedonia. This SCD Update has examined the numerous structural challenges facing North Macedonia, as well as the adverse impact of Russia's invasion of Ukraine, escalating inflationary pressures, and the regional energy crisis. It also examined the new opportunities related to the launch of the EU accession negotiations. Based on this analysis—as well as extensive consultations with the central and local governments, civil society, academia, the private sector, international partners, and guidance from the Country Management Unit—12 priorities have been identified and organized into four High-Level Outcomes (HLOs). While the HLOs and priority actions do not represent an exhaustive list of worthwhile objectives, they are intended to provide a focal point on which the government can concentrate its constrained fiscal and institutional resources during this crucial period in the country's development. Moreover, HLOs are complex and interconnected and, as a result, multiple priorities may be applicable to multiple HLOs. For instance, enhancing human capital formation (HLO 2) can simultaneously foster the generation of higher-paying employment opportunities (HLO 3) and facilitate individuals in adapting to climate change (HLO 4).¹⁰³

The prioritization process was conducted in two stages. First, the priorities of the 2018 SCD were reviewed in the context of the updated analysis, and consultations were held with colleagues and experts within the World Bank Group to gather additional insights. Second, a series of in-person and online consultations were organized in North Macedonia to assess the relevance and importance of the prospective priorities and HLOs. Perspectives and feedback were solicited from a variety of stakeholders, enriching the prioritization process.

¹⁰³ World Bank (2022c).

Given the limited progress achieved in fulfilling the objectives outlined in the 2018 SCD, the identified priorities remain aligned with those specified in this SCD update. Nevertheless, several changes have been introduced, reflecting the country's recent emerging challenges and opportunities. These changes place greater emphasis on decarbonization and climate change adaptation. Firstly, in the 2018 SCD, decarbonization and adaptation to climate change were treated as a single priority, whereas this SCD update presents them as three distinct priorities under a separate HLO. Secondly, governance, fiscal prudence, and environmental sustainability, which were previously grouped together as one set of priorities in the first SCD, have now been divided into two HLOs in this SCD update. Moreover, the current prioritization process places increased importance on mitigating the impact of political stability by introducing an additional priority under the third HLO focused on boosting productivity and facilitating the creation of well-paying jobs.

Access to up-to-date and reliable statistics is essential for achieving the proposed priorities. Although the 2021 Census has successfully addressed a significant knowledge gap identified in the 2018 SCD—i.e., how many people are in North Macedonia—there are still remaining knowledge gaps that need to be filled—e.g., understanding the distribution of remittances in North Macedonia and assessing the well-being of ethnic minorities. Additionally, there are critical data gaps that are crucial for informing evidence-based policymaking. For example, obtaining more recent household income data is necessary to gain a better understanding of population performance over time (Annex 1).

Table 1. HLO 1: More accountable service delivery to citizens

Priorities	Proposed specific measures
Mitigate the impact of the political instability through establishment of medium- to long-term strategic and spending priorities	<ul style="list-style-type: none"> • Link strategic planning with budgeting. • Improve public investment management and align it with the national development strategy.
Secure rule of law and build professional public institutions that are accountable to citizens	<ul style="list-style-type: none"> • Increase the accountability of the judiciary and other public institutions. • Support the digital transformation of the public sector to increase transparency.
Ensure fiscal sustainability by reducing fiscal risks, improving the efficiency of spending, and enhancing revenue mobilization	<ul style="list-style-type: none"> • Adopt medium-term fiscal consolidation measures. • Improve tax administration and modernize the Treasury system.

HLO-I: MORE ACCOUNTABLE SERVICE DELIVERY TO CITIZENS

Weak governance and pervasive corruption have long hindered North Macedonia’s development. To sustain inclusive growth, the government will need to strengthen the rule of law, foster accountable public institutions, and ensure long-term fiscal sustainability. In this context, the first HLO focuses on improving the accountability of service delivery system for the citizens of North Macedonia (Table 1) highlighting three key priorities and proposing a range of policy actions.

Priority 1: Mitigate the impact of the political instability through establishment of medium- to long-term strategic and spending priorities

Link long-term strategic planning with budgeting. Work on the National Development Strategy is progressing and will provide a foundation for the future allocation of EU grants to support long-term development and EU accession. To fully benefit from improvements in the strategic planning process, policymakers

must link sectoral strategies with national development goals and fiscal resources available to achieve them. A combination of skills development and systems improvement will be necessary to enhance the strategic planning and budgeting capacities of ministries, agencies, and municipalities. The integration of strategic plans into the budget-preparation process should be coupled with improvements in performance measurement. Program budgeting therefore could be used to monitor progress if organized around substantive performance areas.

Strengthen public investment management and align with sectoral strategies and the National Development Strategy. Currently, there is no centralized body responsible for reviewing or approving all public infrastructure projects regardless of their financing source. As a result, the government tends to prioritize projects that have secured funding (i.e., from donors) even if they are not the most urgent from a development perspective. Integrating ICT planning and monitoring systems, operationalizing a central public investment management unit, and linking development plans and investment strategies would enable more informed decision-making on public

investment priorities while also allowing for more effective project monitoring. In addition, public procurement should be used as a strategic tool to advance social, environmental, and innovation objectives. Avoiding direct procurement and using the competitive practices can lead to important budgetary savings while at the same time boosting level-playing field in accessing government resources.

Priority 2: Secure rule of law and build professional public institutions that are accountable to citizens

Strengthen the accountability of judiciary and public institutions. To enhance the trust and accountability of the judiciary, the justice system must make substantial progress in investigating, prosecuting, and adjudicating corruption cases. Safeguarding the integrity and independence of the judiciary will require building the capacity of judges and prosecutors, and upgrading the automated court-case management information system to facilitate the automatic and random distribution of cases. In parallel, expediting the passage of new laws on the organization and operation of state administrative bodies, along with the revision of the Law on Administrative Servants and the Law on Public Service Employees is a priority. These efforts should be accompanied by changes to the public sector's compensation system to ensure merit-based recruitment, promotion, and dismissal. Addressing instances of cronyism, conflicts of interest, political influence, and nepotism in public sector hiring practices would help professionalize the civil service. Finally, ensuring the financial and institutional independence of oversight institutions such as the State Audit Office, the Fiscal Council, regulatory agencies, and the State Commission for the Prevention of Corruption, will be essential to restore trust in public institutions and the rule of law.

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 require improvements in data management, the development of new online platforms and services, and updates to the relevant laws and regulations. Ensuring adequate access to e-government services is also necessary for an inclusive digital transformation, and the government should take steps to improve digital literacy among the public, with a particular focus on low-education and low-income groups, the elderly, and vulnerable households.

Priority 3: Ensure fiscal sustainability by reducing fiscal risks, improving the efficiency of spending, and enhancing revenue mobilization

Adopt medium-term fiscal consolidation measures and reduce fiscal risks. To address the fiscal deficit, the government has committed in the Fiscal Strategy 2024-28 to implement a combination of revenue and expenditure reforms. The government has adopted a Tax Reform Strategy to bolster the revenue base by reducing tax exemptions, increasing health-related excise taxes, and expanding environmental taxation. On the expenditure side, the authorities aim to lower operational costs while improving spending efficiency. However, the sustainability of the pension and healthcare systems must be reviewed in the context of demographic aging, and there is ample room to rationalize subsidies and categorical social benefits. Revising

the subnational fiscal-transfer framework, developing a market-based property valuation system, and equipping local governments to improve collection of property taxes are also key priorities. Finally, SOEs financial viability would need to be assessed to adequately reduce fiscal exposures of the government. The fiscal consolidation strategy envisages a very gradual consolidation, with the primary balance reaching pre-pandemic levels only by 2027 and the public debt stock remaining above 60 percent of GDP. The measures would need to be frontloaded to create buffers and strengthen sustainability of public finances. To strengthen public financial management and ensure adherence to fiscal rules, fiscal prudence, and transparency, establishing an independent and professional Fiscal Council would be a priority.

Improve tax administration and modernize the Treasury System. Corruption and political interference within tax administration are relatively minimal, and in the 2019 Enterprise Survey North Macedonia outperformed the averages both for the ECA and the rest of the world on these indicators (with 3.7 percent of firms expected to give gifts in meetings with tax officials compared with 6.5 percent in ECA and 11.8 globally). The Public Revenue Office and the Customs Administration continue to improve online services for tax registration, tax filing, and payments, reducing transaction costs and mitigating the risk of discretionary treatment. Filing of customs declarations electronically is mandatory and in 2020, 100 percent of customs declarations were filed electronically. Tax collection rates have remained broadly stable, rising slightly from 27.1 percent of GDP in 2018 to 29.1 percent in 2021. However, with informality high at 35 percent, further work efforts are needed to build the capacity of the large-taxpayer office, enhance tax audits, improve the efficiency and effectiveness of revenue collection, and strengthen tax administration through

business-process reengineering, integrated risk management, and systems modernization. Moreover, the mandatory use of electronic invoices would increase VAT collection and help combat tax evasion. On the Treasury side, priorities include streamlining budget processes, implementing the new organic budget act, and developing a digitized integrated financial management information system (IFMIS).

HLO 2. STRENGTHENED HUMAN CAPITAL FORMATION AND CLOSING OPPORTUNITY GAPS FOR ALL

Human capital plays a vital role in the individual development of people and in the social and economic advancement of nations. Despite notable progress, North Macedonia's human capital remains underdeveloped. The government must take steps to bolster the labor supply by providing inclusive, high-quality education, protecting households against shocks, and addressing priority health challenges. The second HLO focuses on strengthening the formation of human capital and narrowing opportunity disparities for all (Table 2).

Priority 4: Endow people with quality and relevant skills throughout the life cycle

Increase the supply of integrated, affordable, high-quality early childhood education and care, especially among disadvantaged groups.

Early childhood education and care is one of the highest-return investments in education, offering lifelong and intergenerational benefits that can break the poverty cycle. By narrowing developmental gaps at a young age, early childhood education and care reduces learning risks and makes consistent school attendance more likely, increasing the chances of lifelong success in education. Active participation in

Table 2. HLO 2: Strengthened human capital formation and closing opportunity gaps for all

Priorities	Proposed specific measures
Endow people with quality and relevant skills throughout the life cycle	<ul style="list-style-type: none"> • Increase the supply of integrated, affordable, high-quality early childhood education and care, especially among disadvantaged groups. • Strengthen performance of the primary, secondary, and tertiary education sectors through financing reforms.
Reduce disincentives and remove barriers to labor market participation, especially for women and youth	<ul style="list-style-type: none"> • Develop a flexible vocational training system by aligning the curriculum with market needs. • Strengthen the activation programs for long-term unemployed and social assistance beneficiaries. • Support digital skills development among all age groups.
Improve efficiency and access to quality public services for vulnerable and in rural areas	<ul style="list-style-type: none"> • Increase access to high-quality municipal infrastructure and services. • Provide adequate social assistance and social services to poor and vulnerable groups. • Improve efficiency of health spending, boost revenue, and expand the scope of primary healthcare level, the supply of outpatient healthcare, and the coverage of insurance.

early childhood education programs is crucial to enhance children’s readiness for primary school and improve their later academic performance. To prevent children falling behind, the government should prioritize efforts to raise pre-primary enrollment rates to the EU average. Specific attention should be devoted to initiatives that reach the most vulnerable sections of society. The authorities could also consider extending the education allowance to cover enrollment in preschool and kindergarten.

Strengthen performance of the primary, secondary, and tertiary education sectors through financing reforms. Efficient educational investment can boost learning outcomes and stimulate economic growth. However, the school system is not aligned with demographic and enrollment trends, as a significant decrease in student numbers is occurring simultaneously with an increase in teachers and classes, leading to inefficiencies

and growing disparities. These challenges are exacerbated by inadequate and non-transparent funding formulas across all educational levels, which worsen inefficiency and hinder attempts to restructure the education system. While it is important to increase educational spending as a share of GDP, implementing measures to enhance spending efficiency is equally critical. Reform measures should focus on optimizing the primary and secondary education system and reassessing financing formulas from pre-primary to higher education by incorporating performance criteria and ensuring alignment with national priorities. Reallocating additional fiscal resources to non-salary expenditures is essential to improve educational outcomes. In a context of high emigration, the country may not fully reap the benefits of its investments in human capital as better educated individuals may choose to leave the country in search of better economic opportunities elsewhere.

Priority 5: Reduce disincentives and remove barriers to labor market participation, especially for women and youth

Develop a flexible vocational training system that imparts relevant skills by aligning the curriculum with market needs and improving the quality of the training provided. To build skills relevant to the job market, the government must encourage active employer involvement in the reform of vocational school curriculums and general education, so-called dual education. The quality of vocational training can be enhanced by expanding the use of curriculum modules taught by industry professionals and arranging visits from STEM education experts. Relaunching the STEP survey and other skill-needs analyses could help the country better predict skills demand. Incentives for training provisions could motivate employers to provide more training. Efforts should also be made to streamline the process for companies to engage with interns and work-based learners. The authorities should consider mandating internships for university students, expanding professional orientation centers to all vocational schools, and establishing career service centers at all universities. Implementing a systematic approach to tracking university graduates, including collecting data on their job placements, working conditions, and wages, would be an essential component of an effective professional development strategy. Sharing these data with prospective and current students could provide crucial insights and help inform their career decisions.

Strengthen the activation programs for long-term unemployed and social assistance beneficiaries, and expand care services. With the current available resources directed to ESA, the focus should be on expanding effective employment services and programs, by, among others, introducing

a transparent monitoring and evaluation framework, including a systematic graduate tracing system, for all ALMPs. More funding is needed, however, to increase the number of staff at ESA who engage with jobseekers and to update the available evidence on the effectiveness of the programs and adapt accordingly. It is necessary to strengthen outreach and promotion of the ESA services and programs targeting lesser skilled unemployed, especially youths. The country could also consider expanding the ESA's client base to include the employed who are at risk of redundancy or off-season workers. To overcome the obstacles that women face when entering and re-entering the workforce, it is essential to extend and enhance the quality of early childcare and elderly-care services accessible to families, particularly in rural regions. Furthermore, it is crucial to assist women in transforming their caregiving responsibilities into economic opportunities by providing support and resources for tasks such as caring for the elderly, operating daycare facilities for children, and undertaking housekeeping duties. Effective labor market intermediation and employment programs play a key role in fostering a more productive workforce (including the self-employed), enhance employment outcomes, and fuel faster and more inclusive growth.

Support digital skills development among all age groups. The authorities should enhance market competition in the ICT sector, enhance the independence of regulatory bodies, and implement public-sector programs supporting broadband expansion in non-commercial areas. Bridging the supply-demand gap for digital skills and closing the gender gap in ICT sector are also essential. Digital technology can help build a more resilient and efficient education system, and investments in infrastructure and human capital should be made in preparation for future crises. Key areas include expanding internet access

in schools, providing portable computers to students, improving the digital skills of teachers and students, and strengthening the capacity of educational institutions to design and implement digital pedagogy, both online and in person.

Priority 6: Improve efficiency and access to quality public services for vulnerable and in rural areas

Increase access to high-quality municipal infrastructure and services including transportation, clean water and sanitation, and disaster-risk management. Addressing the urban-rural divide and closing the infrastructure gap will require substantial investments in local infrastructure, holistic approaches, well-synchronized spatial planning, and guarantees that such investments are financially, environmentally, and economically sustainable. These investments should be anchored by improved fiscal planning and management, a refined prioritization process, and sufficient managerial capacity for operations and maintenance of acquired assets. Investments in water infrastructure must be accelerated, as wastewater treatment is currently accessible to only 13 percent of the population, and further improvements in storm-water collection and water treatment plants are necessary to ensure water security. Enhancing coordination between central agencies and local governments will be critical. New legislation that clarifies waste-management responsibilities and ownership rights would benefit the highly inefficient solid-waste management system and encourage private-sector participation. The government has initiated a comprehensive program for rethinking the approach to reform local road management and public transportation, from institutional and financial to technical and urban development perspective with the goal to increase livability and improve access to jobs and services. However, local capacity

is limited, asset-management practices are outdated and reliant on expert knowledge, financing is inadequate and used inefficiently, resilience and safety considerations are not adequately addressed, and urban mobility is rarely considered in a holistic manner. The institutional frameworks for disaster prevention, preparedness, and response are inefficient both at the national and sub-national levels, and there is an increasing financing gap associated with disaster response and recovery. As costs escalate and government explicit and implicit liabilities increase due to the limited adoption of disaster insurance, addressing this challenge will become increasingly urgent.

Provide adequate social assistance and social services to poor and vulnerable groups, including children, women, the disabled, the elderly, and victims of violence.

A comprehensive assessment of the 2019 reform effort is vital to further enhance the current social assistance system. Policymakers should examine the possibility of broadening the Guaranteed Minimum Assistance program to cover more individuals from the bottom income quintile. To strengthen social services, the government should continue to implement ongoing reforms to service delivery, financing, licensing, and monitoring and evaluation. Leveraging the case-management system will help facilitate integrated needs assessment, and the new integrated management information system can be used for seamless data exchange and referrals with other services and benefits. Capacity development at the local level should be encouraged, and the availability of long-term care for the elderly should be expanded, possibly through increased private service provision. Finally, it is critical to evaluate the coverage both of contributory and social pensions and adopt policies to ensure fiscal sustainability and improve future pension adequacy and coverage. Potential strategies

might include raising the retirement age, encouraging part-time work for retirees, establishing sustainable indexation patterns, and increasing the contribution rates for pension schemes.

Improve the efficiency of health spending, boost revenue, and expand the scope of primary healthcare level, the supply of outpatient healthcare, and the coverage of insurance. Out-of-pocket payments and informal fees represent a significant share of healthcare costs, indicating a need to increase public healthcare funding. Implementing specific taxes on products with negative health effects, such as tobacco, alcohol, and sugar-sweetened beverages, could supplement public health financing. Reducing the system's reliance on out-of-pocket payments and addressing unmet healthcare needs could help reduce disparities across regions and income groups. Strengthening multisectoral collaboration is critical to effectively manage significant risk factors, particularly for NCDs. The government could pass legislation to regulate exposure to NCD risk factors and implement behavioral-change policies to reduce the incidence of NCDs. To enhance access to equitable and cost-effective care, the delivery of health services should be reoriented to be more patient-centered and less fragmented. The authorities should modernize the hospital sector by developing a health-facility master plan that aligns with the population's health needs, integrate primary healthcare services more effectively, and ensure an equitable distribution of healthcare professionals across regions. Improving the availability of health-sector data and analytical work will be vital to support informed decision-making by enabling policymakers to monitor the health system's performance, identify areas for improvement, and design interventions tailored to the needs of the population.

HLO 3. INDUCED CREATION OF BETTER PAID JOBS

Enhancing productivity is vital to stimulate growth and increase the supply of high-paying employment opportunities. However, North Macedonia's current productivity indicators are weak and declining. To address this challenge, HLO 3 focuses on priorities for boosting productivity and spurring the creation of well-paying jobs (Table 3).

Priority 7: Close the gaps in transport, energy, and other connectivity infrastructure for international and intranational connectivity

Increase investments in and efficiency of transport infrastructure (including mobilizing private financing when appropriate) at national and subnational levels. Given the fiscal challenges faced by North Macedonia, a prudent approach to managing road assets and investments is vital to macroeconomic stability. In the transportation sector, the authorities must address the existing maintenance and rehabilitation backlog both on the road and railway networks, including networks within and beyond the TEN-T corridors. The most effective way of bringing benefits to transport users is to ensure competition in the supply of transport services, thus incentivizing efficiency and quality among operators. To this end, public-service operation contracts should incorporate clearly defined and measurable performance indicators. The use of risk mitigations solutions for infrastructure financing to mobilize private sector investments might be considered. The efficient flow of goods and people can be significantly improved through physical enhancements and upgrades to major systems and ICT infrastructure. However, improvements made to the road network to date have not yet resulted in equivalent

Table 3. HLO 3: Induced creation of better paid jobs

Priorities	Proposed specific measures
Close the gaps in transport, energy, and other connectivity infrastructure for international and intranational connectivity	<ul style="list-style-type: none"> • Increase investments in and efficiency of transport infrastructure (including mobilizing private financing when appropriate). • Invest in the transmission grid to connect renewable energy capacity and adapt energy system to work with generation variability.
Increase financial intermediation and inclusion	<ul style="list-style-type: none"> • Strengthen financial intermediation and greening the financial sector. • Improve financial inclusion for individuals and SMEs, and expanding government payments digitalization.
Improve the competitive environment and foster innovation	<ul style="list-style-type: none"> • Improve the state aid policy, including in agriculture, towards horizontal instruments. • Streamline barriers for business entry and conduct. • Further extend the coverage of free trade agreements and enable exports of services.

efficiency gains at border points. Customs and border-management practices remain burdensome, and the harmonization and digitalization of procedures have been slow. Implementing the National Single Window over the next two years is expected to mitigate these issues, and the government should prioritize the establishment of additional joint border-control posts to expedite cargo clearance, including goods destined for the EU. These efforts should be integrated with the provision of more competitive logistics services and improvements to logistical and connectivity-related infrastructure.

Invest in the transmission grid to enable the connecting renewable energy capacity and adapt energy system to work with generation variability. North Macedonia is poised for a major energy transition, as its lignite reserves are projected to be depleted in the next 10-15 years. Recognizing this, the government has made a bold decision to replace lignite-based generating capacity with new gas-fired power generation. However, the country continues

to grapple with air pollution, particularly in large urban areas like Skopje, primarily due to the use of solid fuels such as firewood and coal for heating. Establishing a day-ahead electricity market is a key priority for the energy sector. EU regulations designed to ensure the integrity and transparency of the wholesale energy market have yet to be transposed to the domestic legal framework and will require an amendment to the Energy Law. Furthermore, the transposition and implementation of the EU Acquis on renewable energy must be accelerated, along with the adoption of bylaws for implementing the Law on Energy Efficiency. Government efforts to enhance access to capital for renewable energy projects should include support from developing lending facilities (to meet different scales and technological requirements). Concurrently, policies and standards for environmental protection must be strengthened to mitigate the environmental disruption associated with new renewable energy production, including small-scale hydropower, wind, and solar.

Priority 8: Increase financial intermediation and inclusion

Strengthen financial intermediation through implementing cross-sectoral financial literacy actions and greening the financial sector. Enhancing access to finance for MSMEs will require diversifying the available financial instruments and market players while strengthening financial infrastructure. The Development Bank will play a key role in alleviating these constraints. Encouraging the use of factoring, leasing, and other financial instruments that are particularly beneficial to MSMEs would be useful. A comprehensive assessment of the legal, regulatory, tax, and market-infrastructure issues affecting the development of the capital markets could serve to identify bottlenecks and areas for improvement. Capacity-building initiatives would benefit numerous stakeholders across capital markets. Public support instruments such as credit guarantee programs for MSMEs or green-finance funds should be considered, as these measures would aim to maximize the efficiency of public resources, including those allocated through the Development Bank, in addressing market failures.

Improve financial inclusion for individuals and SMEs through diversifying financing instruments and expanding government payments digitalization. Coordinated measures are crucial to address gaps in financial inclusion. These measures could include designating a lead institution for financial inclusion with a clear mandate, developing a comprehensive approach to financial literacy for individuals and MSMEs, and deploying a coordinated strategy to support capital-market development as part of the sustainable finance agenda. Access to finance for individuals can be increased by promoting further account ownership (currently 85 percent of adults have an account, but only 53 percent owns a debit card, and 22 percent owns a credit card) and

usage and leveraging the potential of digital financial services. Key initiatives should focus on digitizing person-to-government (P2G) and government-to-person (G2P) payments; incentivize the shift away from cash; improving rural payments infrastructure to encourage electronic payment acceptance among merchants; fostering the adoption of financial technology and broader sectoral innovation; and identifying and addressing constraints to digital payments through the development of a retail/digital payment strategy. The successful implementation of these measures could substantially reduce financial inclusion gaps and promote economic growth.

Priority 9: Improve the competitive environment and foster innovation

Improve the state aid policy, including in agriculture, towards horizontal instruments to support exports, technology adoption, technology transfers, digitalization, and green transition. To ensure a level-playing field, an inventory of State aid, including de minimis aid, should be established under the authority of the Commission for the Protection of Competition. This inventory would lay the groundwork for reorienting state aid towards horizontal support measures. State aid policies should be designed to incentivize firms to digitize and go green, enhance their innovation capabilities, and strengthen managerial skills, which are all crucial elements of the transition towards Industry 4.0. Encouraging linkages between foreign firms and local suppliers could spur corporate expansion, innovation, and skills enhancement, particularly in sectors like ICT and automotive manufacturing, which already boast a significant number of highly productive companies. In addition, augmenting financial support for research and innovation could improve the quality of innovative outputs. It is critical to improve the predictability of support for the research and innovation sector and to bolster governance, coordination, and institutional capacity among

R&I policymakers and other stakeholders. Assessing the functioning of the regulatory impact assessment system could identify potential weaknesses in existing regulations and enforcement capacity while informing a more robust public-private dialogue. Further, to facilitate the green transition of the agri-food sector agricultural policy support should shift toward productivity-enhancing innovations and promotion of sustainable practices, which also decrease negative environmental impacts. Public support such as targeted investment aids, advisory services, training, and agriculture infrastructure would enhance the economic and environmental sustainability. For example, innovations such as the development of precision farming and broadband coverage would contribute to reduced pesticide and fertilizer use and potentially reduce variable production costs. Cooperation among scientific and educational bodies, extension and training services, and producers and processors should facilitate a transfer of innovative and environmentally friendly technology and farming methods, which at the same time, would improve economic performance and competitiveness of the agri-food sector.

Streamline barriers for entry and conduct in network services, trade, as well as professional services. Although there have been some improvements in allocative efficiency among firms, greater emphasis must be placed on facilitating the swift exit of insolvent firms, simplifying market entry, and eliminating conduct barriers to foster increased market competition. Special attention should be given to the services sector, as it confronts unique challenges due to anti-competitive distortions and burdensome administrative procedures that hinder the expansion of highly productive firms. The country's OECD-WBG Product Market Regulation (PMR) assessment highlights several obstacles to competition, including: (i) the failure to enforce the principle of competitive neutrality between SOEs and

private firms to compete on a level playing field, (ii) barriers to entry in network sectors, and (iii) undue restrictions on regulated professions. The government must synchronize its policy efforts to cultivate a competitive business environment and to encourage open markets. To expedite corporate restructuring, legislative amendments are necessary to expedite distress management and improve the rules for out-of-court settlements. The government should also enhance the institutional framework for insolvency practitioners, resolve their incompatibility with other professions, and establish an efficient mechanism for licensing and monitoring of their performance. Finally, to mobilize private financing, enactment of Public-Private Partnership Law, and an improvement of the concession law is needed.

Further extend the coverage of free trade agreements and enable exports of services.

For North Macedonia to maximize the benefits of deep RTAs, the government should: (i) undertake a comprehensive review and assessment of the impact of deep RTAs, (ii) expand existing RTAs and extending the range of RTAs to facilitate new market access opportunities, (iii) implement horizontal domestic support policies to enable firms of varying sizes and sectors to expand exports of sophisticated, complex manufacturing exports, and to a lesser extent to services, and (iv) explore new trade opportunities in the agricultural and services sectors. The ongoing surge in global food prices spurred by Russia's invasion of Ukraine is driving up demand for agricultural products, including staple foods. North Macedonia has significant untapped agricultural potential that could be harnessed by boosting productivity in the sector and utilizing RTAs to access foreign markets. In the services sector, the ICT industry has especially significant growth potential and can create sustainable, well-paying jobs. ICT has also proven highly resilient to global crises such as the COVID-19 pandemic. However,

the development of the services sector, in particular ICT sector, also requires a skilled labor force and should be supported by policy reforms aimed at enhancing workforce skills.

HLO 4. STRENGTHENED HOUSEHOLD RESILIENCE TO CLIMATE CHANGE AND LOWERED CARBON INTENSITY AND AIR POLLUTION

Climate change adaptation will be essential in bolstering resilience to environmental shocks and, as the world's shift towards low-carbon growth intensifies, decarbonization will play an increasingly pivotal role in maintaining international competitiveness. HLO 4 encompasses policy measures designed to strengthen household-level resilience to climate change, promote the adoption of low-carbon technologies, and reduce air pollution (Table 4).

Priority 10: Accelerate decarbonization and ensure energy security

Accelerate the transition to renewable energy sources, support to decarbonize the transition to cleaner, more efficient household economy, increase energy sources to reduce air pollution, security and increase affordability. North Macedonia possesses advantageous solar resources, substantial wind capacity, and a robust electricity infrastructure. According to the International Renewable Energy Agency (IRENA), the country has the technical potential to generate over 8GW of renewable electricity, of which roughly 2GW could be cost-competitive. Renewable resources in North Macedonia are poised to play a significant role in offsetting the potential losses from the decommissioning of existing power plants. The country's abundant hydroelectric resources, combined with increased natural gas access and the

Table 4. HLO 4: Strengthened household resilience to climate change and lowered carbon intensity and air pollution

Priorities	Proposed specific measures
Accelerate decarbonization and ensure energy security	<ul style="list-style-type: none"> • Accelerate the transition to renewable energy sources, increase energy security and energy affordability. • Support the transition to cleaner, more efficient household energy sources. • Incentivize the shift to sustainable transportation.
Scale up adaptation to climate change and improve preparedness, response and recovery from natural disasters	<ul style="list-style-type: none"> • Integrate disaster and climate resilience into sectoral legislation, strategies, and action plans. • Accelerate investments in water infrastructure and create a new mechanism to finance the water sector.
Improve public and private financial resilience to natural disasters	<ul style="list-style-type: none"> • Develop an adaptive social protection system. • Expand the availability of insurance and other risk-mitigation systems. • Enhance the financial sector's readiness to support climate-change adaptation and mitigation.

potential for battery storage, could facilitate the expansion of intermittent renewable power. The detrimental effects of air pollution alone account for approximately 6.9 percent of GDP and result in thousands of premature deaths annually (about 3,200 in 2015). This is primarily attributed to the use of solid fuels for heating purposes in large urban areas, as well as the lignite's dominance in the energy supply. One of the primary sources of air pollution in North Macedonia is the residential use of wood for heating. As a significant portion of wood is traded informally, non-fiscal measures are necessary to address air pollution and help low-income households transition to superior heating alternatives. Addressing barriers beyond affordability is crucial to ensure that support programs are well-designed and implemented to drive meaningful changes in behavior. Employing insights from behavioral science can enhance the uptake of support programs. For instance, the social recognition of early adopters, the dissemination of information through advisors and installers, and the screening of videos that summarize the experiences of early adopters can promote behavioral change and encourage participation in these programs. Evidence shows that energy poverty and consumption poverty do not always align. There is currently no official national definition of energy poverty. The financial protection of vulnerable energy consumers is regulated by two laws within the social welfare legislative framework: the 2019 Law on Social Protection and the 2019 Law on Social Security of the Elderly. These laws establish criteria for determining eligibility for the Guaranteed Minimum Assistance program and social pension among poor households and households with elderly individuals living in poverty, respectively. In addition, these categories of households are eligible to receive subsidies for their energy bills. However, the coverage of these programs is limited, and there is a pressing need for a more comprehensive official definition of energy poverty. Furthermore, it is essential

to consider design and implementation modifications which will make the safety net and the energy safety net more adaptive with respect to their ability to identify energy poor and vulnerable and respond to their needs. An adaptive energy subsidy program has the potential to foster resilience among energy-poor and vulnerable households, proactively addressing their requirements in anticipation of energy price shocks.

Promote circular economy and reduce air pollution. The circular economy aims to minimize waste generation and foster the reuse, recycling, and recovery of materials. In line with the European Green Deal, the European Commission introduced the new circular economy action plan in March 2020. As a candidate country, North Macedonia must align with and adhere to European standards. Given the waste sector's increasing contribution to emissions and its vital role in transitioning to a circular economy, it is crucial to explore additional measures for emission reduction. For instance, methane, the primary greenhouse gas emitted during waste decomposition, poses a significant environmental concern. However, international experience demonstrates that capturing methane from wastewater treatment plants and landfills can be done at a low cost. Once captured, methane can be utilized to generate electricity, which offers the potential for income while simultaneously providing a valuable domestic energy source. Embracing these types of practices will enable North Macedonia to make substantial progress towards circular economy goals.

Incentivize the shift to sustainable transportation. The variety of challenges facing the transportation sector requires a comprehensive approach. One strategy the country should consider is encouraging the adoption of lower emission modes of transport to facilitate this shift and preparing the transition to e-mobility, such as the

introduction of low emission buses. Accurate vehicle emissions testing, the establishment of standards reflecting true environmental impact, and rigorous enforcement of these standards are critical steps to curb vehicle pollution. The authorities can improve the emissions performance of the vehicle fleet through improved regulation of vehicles and fuels augmented by market mechanisms and adjustments to the tax code. These measures would not only establish unambiguous market signals to promote the adoption of eco-friendly vehicles, but also generate additional revenue for investment in sustainable transportation initiatives. Moreover, these actions would hasten alignment with the EU Acquis, and would lead to reduced air pollution.

Priority 11: Scale up adaptation to climate change and improve preparedness, response, and recovery from natural disasters

Integrate disaster and climate resilience into sectoral legislation, strategies, and action plans. Increasing the disaster- and climate-resilient building stock and investing in critical emergency-response infrastructure are urgent priorities. Land use and urbanization planning must also integrate disaster and climate resilience. Investments can be targeted to maximize cost-effectiveness, address multiple hazards, and leverage co-benefits for sustainability, inclusivity, and public wellbeing. In a context of more frequent and intense disasters, adequate surge capacity is critical to save lives, preserve livelihoods, and protect economic assets. Supporting key public institutions and the private sector can improve contingency and emergency business-continuity planning, bolstering preparedness against multiple risks. The government must ensure that it possesses adequate surge capacity for emergency response, healthcare, and social services. North Macedonia's weather forecasting, water and climate monitoring, early warning, and

information systems are underdeveloped and do not meet national needs, rated at maturity level 2.4 out of a possible 5 based on a globally standardized assessment tool. Upgrades to early warning systems, shelters, community engagement and fire equipment are urgent given the increase in extreme heat and fires. Policymakers should increase the budget of the Hydrometeorological Service, strengthen its autonomy, and expand its mandate. Gender dynamics impact various aspects of resilience, including preparedness, coping mechanisms, and recovery access. By conducting thorough impact evaluations and promoting female representation in disaster management agencies, women's contributions to risk reduction and resilience can be acknowledged and supported effectively.

Accelerate investments in water infrastructure and create a new mechanism to finance the water sector. Achieving comprehensive water security will require well-resourced and adequately staffed national and local institutions, as well as a clear policy and legislative framework. The water-related functions currently scattered across seven different ministries should be consolidated under unified agency, government department, and ministry at the national level. Likewise, water-service provision must be rationalized, as North Macedonia currently has 77 public water utilities. The authorities must also reassess the adequacy of water tariffs and prioritize investments in reducing non-revenue water (currently over 70 percent) to minimize the water sector's budgetary impact. Policymakers must identify, plan, design, finance, and implement priority water resource investments that advance national development objectives, particularly in water-dependent sectors, while ensuring long-term resilience. The government must develop a National Water Master Plan aligned with the European Union Water Framework Directive. The Master Plan should encompass areas such as food security, energy security, water

supply and sanitation, urban and rural flood protection, international transboundary issues, ecosystem services, and low-carbon growth. The plan should also account for land-use changes, urbanization, the effects of climate change, and demand for water in the agricultural sector.

Priority 12: Improve public and private financial resilience to natural disasters

Develop an adaptive social protection system. Transitioning the economy away from emissions-intensive industries and fostering the growth of new, environmentally friendly sectors will spur changes in the demand for workforce skills. To mitigate adverse effects on sectors or regions that may have difficulty transitioning to a lower-carbon economy, a variety of policies can be contemplated. These include providing support for early retirement, implementing retraining programs, and facilitating economic development initiatives. Social assistance programs have proven to be a vital component of the government's response to the COVID-19 pandemic and, given the escalating frequency of climate change-related shocks and other global trends, social assistance programs will continue to play a crucial role in addressing crises. Integrating flexibility into the system is important to effectively respond to a diverse range of shocks. Social protection is an increasingly important policy for addressing disaster vulnerability and can be carefully used to mitigate gender-differentiated disaster impacts.

Expand the availability of insurance and other risk-mitigation systems. North Macedonia and the wider region face significant vulnerability to climate change and natural disasters. To address these risks, the Southeast Europe Catastrophe Risk Insurance Facility (SEE CRIF) was established to provide insurance

coverage for natural disasters, helping countries mitigate the financial impact of catastrophic events. As one of the most vulnerable countries in ECA, North Macedonia is particularly exposed to the adverse effects of climate change, and its aging infrastructure compounds disaster losses. In this context, the authorities should continue to deepen the insurance market and expand the access of homeowners, farmers, firms, and government agencies to affordable insurance.

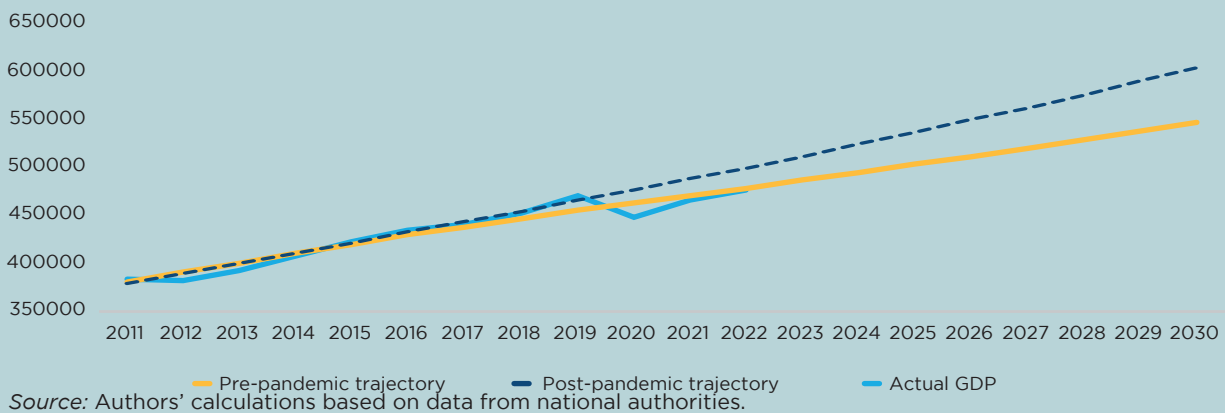
Enhance the financial sector's readiness to support climate change adaptation and mitigation. A clear funding gap is evident in many disaster scenarios, highlighting the importance of adopting a disaster-finance strategy based on predictable, rapid, and flexible financing instruments (e.g., contingent lines of credit or insurance). "Green finance" instruments can promote climate-change mitigation and enhance climate resilience. The government can support the development of green finance instruments by: (i) enhancing prudential measures to maintain the quality of financial-sector portfolios that may be subject to direct or indirect climate shocks, and (ii) enabling households, firms, and public agencies to access financial instruments that support climate adaptation and mitigation. Increasing awareness of climate and environmental risks and managing these risks through (i) enhanced financial supervision, and (ii) the introduction of green taxonomy can play a key role in changing financial behavior and mobilizing capital to support the green transition. Finally, there is the potential to crowd in local financial institutions and institutional investors (pension funds, insurance companies) to finance climate-resilient infrastructure and adaptation projects with adequate risk identification and mitigation. Authorities could also consider local currency financing (Denar financing), particularly from local institutions, to be mobilized to finance such investments.

ANNEX 1: BOXES

Box 1. Potential output before and after COVID-19

The COVID-19 global pandemic resulted in a decline of both the supply and the demand side of the economy. In 2020, measures to contain the spread of the virus prevented production factors to be fully utilized. Total factor productivity evidenced the steepest drop in more than two decades, while business bankruptcies lowered investment and employment, and school closures and rising healthcare needs eroded the country's human capital. Even before the outbreak of the pandemic, potential output growth slowed and was already on a downward track, but estimates suggest that the pandemic pushed the level of potential output further down, scarring the economy for years to come (Figure 81).

Figure 81. Potential output trajectories before and after COVID-19



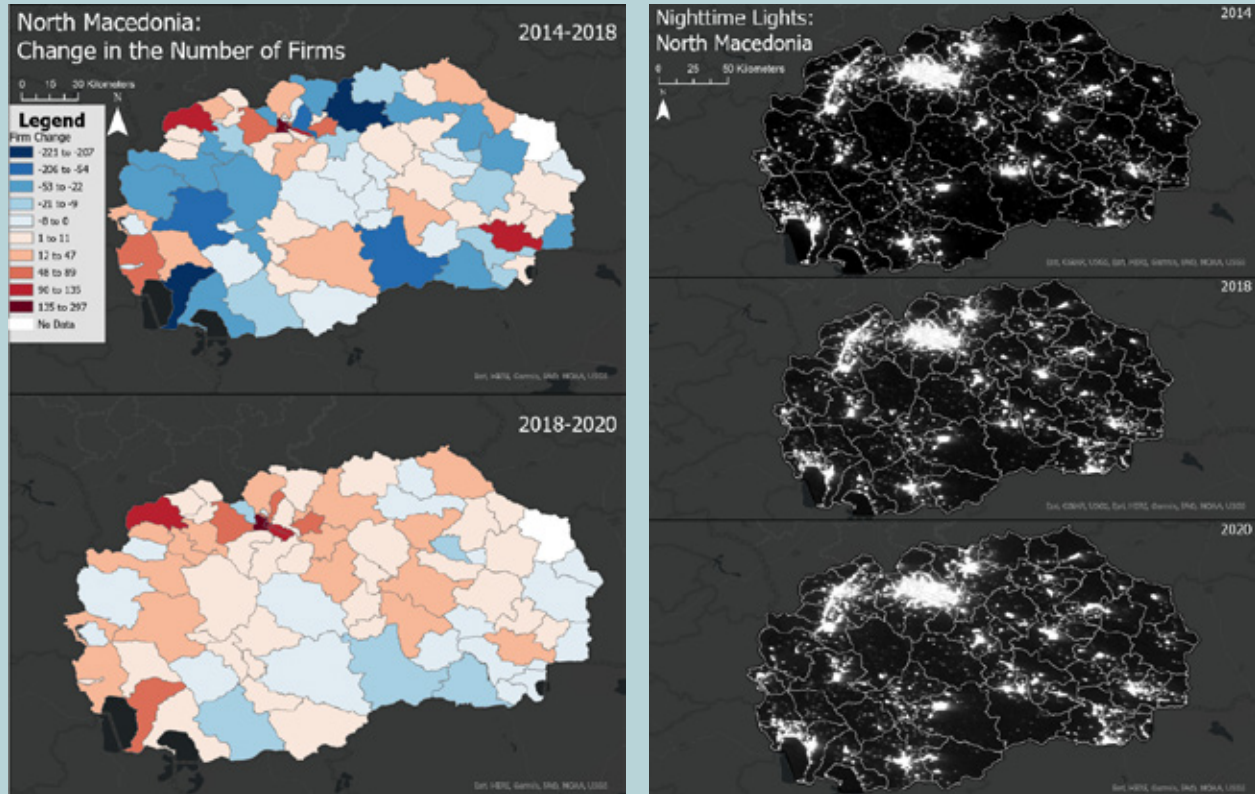
Box 2. Using satellite data to assess spatial economic activity

In recent years, the proliferation of information-sensing devices such as mobile phones, remote sensing technology, software logs, cameras, microphones, RFID readers, and wireless sensor networks has generated a vast amount of new data, known as big data. This data provides an unprecedented level of detailed, real-time information, and governments are just beginning to tap into its potential. The World Bank is also using satellite or Earth observation data more frequently to measure spatial growth and economic activity. Satellite data, especially when combined with traditional survey data, can provide accurate, up-to-date, and cost-effective measurements to inform policy decisions. The SCD team in North Macedonia conducted an analysis using satellite data to examine patterns of urbanization, economic activity, and land use. The results demonstrate the feasibility of using satellite remote sensing data to estimate and track trends in the number of firms operating in the country and the level of economic activity. For instance, we found strong and positive correlations between the reported number of firms in North Macedonia between 2014-20 and the intensity of night-light measurements and urbanization patterns. The total number of firms increased from 59,162 in 2014 to 61,077 in 2020, with the Skopje region accounting for only 43 percent of that growth. During the same period, the sum of light indicators increased from 82,139 to 103,939, and the average light value per pixel increased from 0.61 per pixel to 0.78 per pixel, with the Skopje region accounting for 28 percent of that growth, which suggests a very modest correlation of new firm entry and the regional development.

Figure 82. A modest correlation can be observed between firm-level and light information from satellite pictures

(Number of firms 2014-20)

(Sum of lights 2014-20)



Source: Authors' calculations based on VIIRS DNB satellite pictures and data from the Central Registry.

Box 3. Data and knowledge gaps

Poverty methodology: This report uses the World Bank’s international poverty rates, which employ the “dollar a day” methodology. This approach is designed to capture the minimum threshold of living standards as defined by the world’s poorest countries. It considers variations in price levels within and across countries, aiming to provide a consistent measure of poverty across different time periods and geographical locations. The international poverty rate represents the headcount of individuals living below this international threshold in a particular country. It is converted into local currencies and adjusted for temporal and spatial price differences. This rate differs from the national poverty line in North Macedonia, which is set at 60 percent of the equivalized median disposable income after social transfers. The national relative poverty rates are not necessarily indicative of absolute trends in welfare over time, as opposed to the international poverty lines. The poverty data presented in this report are expressed in 2017 Purchasing Power Parity (PPP) prices. The global poverty lines specified are \$2.15, \$3.65, and \$6.85 per day, representing the typical national poverty lines of low-income, lower-middle-income, and upper-middle-income countries in 2017 (see pip.worldbank.org for further details).

To measure poverty, this report uses the EU Survey of Income and Living Conditions (EU-SILC). In terms of data quality for monitoring welfare, the State Statistical Office (SSO) collects household surveys and generates reports with reasonable frequency. However, it is worth noting that the most recent poverty estimates provided in this report correspond to the calendar year 2020, which captures incomes from 2019. To obtain more up-to-date socioeconomic information, it is recommended that the SSO expedites its data collection processes. Additionally, concerns arise regarding the representativeness of the data due to the use of an outdated sampling frame based on the 2002 Population Census. To address this issue, the SSO has recently conducted a population census in 2021, and it is advisable for the SSO to update the sampling frame accordingly to accurately reflect changes in the population.

Poverty maps, ethnic minorities, and remittances: The 2021 Population Census has been instrumental in filling a significant knowledge gap highlighted in the 2018 SCD: determining the population of North Macedonia. However, there are other knowledge gaps that remain unresolved in the present context. For instance, the well-being of ethnic minorities and the situation of remittances are areas where substantial information is still lacking. Resolving these data and knowledge gaps is key in facilitating evidence-based policymaking.

Migration and the role of diaspora: As emphasized in the report the pull factors of emigration—higher wages in advanced European economies—are causing the demographic erosion that leads to a further decline in potential growth. While the discourse in the narrative highlights the negative aspects of emigration, the emigration also alleviates some pressures in the local labor market and overall society, and it may even create incentives for building skills that not only cater to foreign labor markets but also to local ones. Similarly, the agenda on harnessing the diaspora and return migrants can help present a more balanced picture, as North Macedonia seem to be underexploiting the potential of remittances and role of diaspora in technological progress and access to markets. Researching these areas might help designing different state aid and labor market programs.

Box 3. continue

Global value chain opportunities and diversification strategy: While the SCD update clearly identified the concentration of markets and products as a risk factor, ways to diversify and the strategies to move into higher levels of GVCs that entail more skill-intensive services and advanced manufacturing exports are not yet defined. For the diversification process, the education system needs to be revamped and the country state aid policy needs to move away from stimulating the low skilled-low paid job creation. The concrete diversification strategy presents a knowledge gap.

Climate impact on natural assets: While noting the expected impacts of climate on infrastructure, the SCD does not elaborate on climate expected effects on natural assets and sectors such as forestry and agriculture. Despite a relatively modest share of GDP (7.5%) these sectors still provide the bulk of revenues to the rural poor and present a knowledge gap.

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