



Annual Convergence Report 2026 – North Macedonia –



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Overall well-being in North Macedonia in 2025

64.0% of the EU level

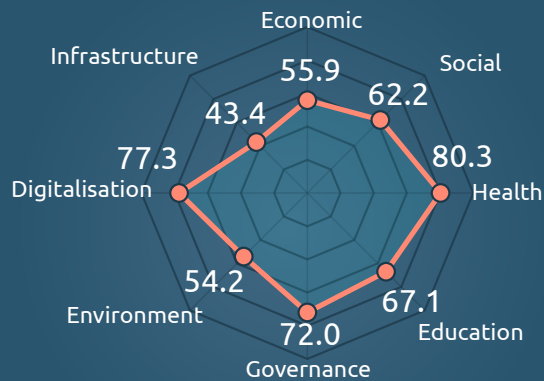
-0.1 pp
last year

+0.7 pp average over
the past 5 years

52 years to EU
(if trends from past
5 years continue)

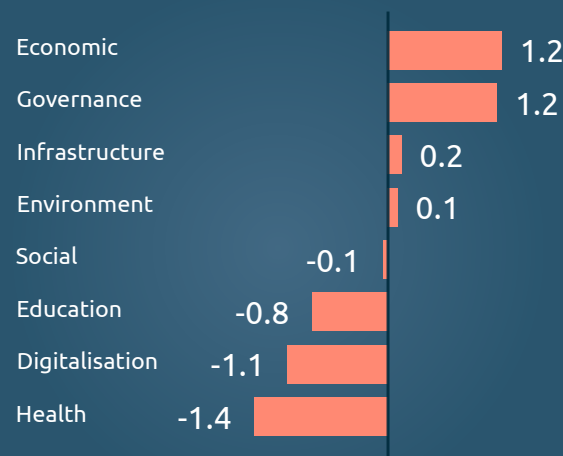
ALL AREAS OVERALL

North Macedonia, 2025, all areas overall, % of EU average



- ★ The strongest pillar in North Macedonia in 2025 was Health, at **80.3%** of the EU average.
- ★ Digitalisation and Governance followed, at around **77.3%** and **72%** of the EU level, respectively.
- ★ Education stood at **67.1%**, Social at **62.2%**, Economic at **55.9%** and Environment at **54.2%** of the EU average.
- ★ Infrastructure was behind the rest, standing at just **43.4%** of the EU level.

North Macedonia, 2025, all areas overall, year-on-year change



- ★ **4 of the 8 areas** saw an improvement in 2025, while **4** recorded a decline.
- ★ Economic and Governance showed the strongest improvements, with both gaining around **1.2 pp** relative to the EU average.
- ★ Infrastructure and Environment improved more modestly, by **0.2** and **0.1 pp**, respectively.
- ★ Social declined marginally by **0.1 pp**.
- ★ Education and Digitalisation slid more, by **0.8** and **1.1 pp**, respectively.
- ★ Health recorded the largest decline, of **1.4 pp**.

Indicator/years to EU

Indicator	years to EU
Economic	33
Social	100+
Health	18
Education	38
Governance	31
Environment	100+
Digitalisation	25
Infrastructure	100+

- ★ At the pace of improvement from the past **5 years**, Health is closest to converging to the EU level, at **18 years** away.
- ★ Digitalisation would take **25 years**, Governance **31 years**, Economic **33 years** and Education **38 years** to reach the EU average.
- ★ Social, Environment and Infrastructure remain the poorest-performing pillars in North Macedonia, with more than **100 years** needed to reach the EU level at current trends.

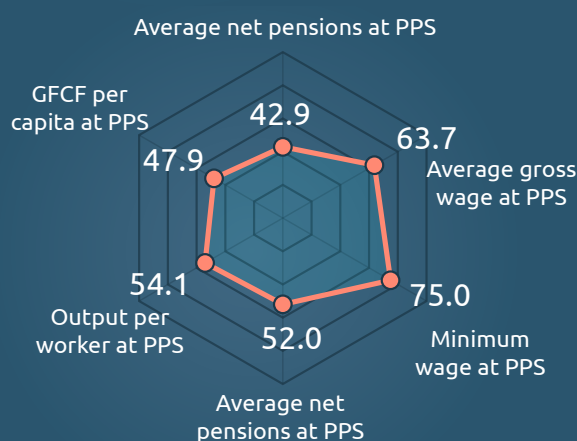
ECONOMIC PILLAR

North Macedonia, economic pillar indicators, nominal values

Indicator	Value
GDP per capita at PPS	17,840
Average gross wage at PPS	2,015
Minimum wage at PPS	990
Average net pensions at PPS	715
Output per worker at PPS	46,100
GFCF per capita at PPS	4,278

- ★ GDP per capita at EU27 purchasing power standard (PPS) in North Macedonia in 2025 stood at **EUR 17,840**.
- ★ Average gross wage at PPS stood at **EUR 2,015**.
- ★ Minimum wage at PPS stood at **EUR 990**.
- ★ Average net pensions at PPS stood at **EUR 715**.
- ★ Output per worker at PPS stood at **EUR 46,100**.
- ★ Gross investment (GFCF) per capita at PPS stood at **EUR 4,278**.

North Macedonia, economic pillar, % of EU average



- ★ Relative to the EU average, the best-performing economic indicator was Minimum wage, standing at **75%** of the EU level.
- ★ Average gross wage followed, at **64%** of the EU average.
- ★ Output per worker and Average net pensions were slightly lower, at around **53%** of the EU level.
- ★ GFCF per capita was further back, at **48%** of the EU benchmark, while GDP per capita was the weakest link, standing at just **43%** of the EU average.

North Macedonia, economic pillar, change to last year

Average net pensions at PPS	7.8
Minimum wage at PPS	3.1
Average gross wage at PPS	2.4
GFCF per capita at PPS	1.2
GDP per capita at PPS	0.6
Output per worker at PPS	0.0

- ★ **5 of the 6 indicators** in the economic pillar saw an improvement relative to the EU average in 2025.
- ★ The biggest improvement was in Average net pensions, which closed the gap to the EU level by **7.8 pp**.
- ★ The Minimum wage and the Average gross wage closed **3.1** and **2.4 pp** of the gap to the EU average, respectively.
- ★ GFCF per capita and GDP per capita improved a bit less, by **1.2** and **0.6 pp** relative to the EU.

Output per worker stagnated, showing virtually no change relative to the EU average.

Indicator/ years to EU

Indicator	years to EU
GDP per capita at PPS	100+
Average gross wage at PPS	16
Minimum wage at PPS	19
Average net pensions at PPS	23
Output per worker at PPS	81
GFCF per capita at PPS	39

- ★ At the pace of improvement from the past **5 years**, Average gross wage, Minimum wage and Average net pensions would need around **2 decades** to close the gap to the EU average.
- ★ GFCF per capita at PPS would need around **4 decades** for that.
- ★ Output per worker lags further behind, needing around **8 decades** to reach the EU level.
- ★ GDP per capita is the poorest-performing indicator in this group, with more than **100 years needed** to reach the EU level at current trends.

What explains the trends in the economic pillar?

- ★ **The improvement in the economic pillar was driven more by domestic demand and rising household incomes than by an expansion of the economy's productive capacity.** Economic growth was supported by construction, private consumption and services, with large infrastructure projects stimulating construction and related activities, while higher wages, pensions and credit strengthened household spending. Investment also recovered, supported by transport, municipal and energy projects, and foreign direct investment (FDI). However, subdued industrial demand in main EU trading partners of North Macedonia limited export growth, while delays, cost overruns and the high import content of infrastructure projects reduced the immediate domestic value added generated by investment.
- ★ **Investment recovered, but its contribution to convergence was constrained by implementation bottlenecks and a high import content.** Transport, municipal and energy projects, together with FDI, supported gross fixed capital formation (GFCF). However, delays, cost overruns and imported inputs reduced the immediate domestic value added generated by this investment, while subdued industrial demand in the main EU trading partners of North Macedonia limited export growth. The convergence effect of the current investment cycle will therefore depend on whether completed projects reduce transport and energy costs and encourage additional private investment.
- ★ **Wage growth was reinforced by labour shortages, public-sector adjustments and the increase in the statutory minimum wage.** Continued emigration and demographic decline have reduced the availability of workers, particularly in construction, manufacturing, hospitality, healthcare and technical occupations, strengthening employees' bargaining position. At the same time, adjustments in education, healthcare, the police and other public services directly raised the national wage average and created additional pressure on private employers competing for the same workforce. The minimum-wage adjustment improved the position of low-paid formal workers and helped restore purchasing power after the earlier rise in living costs. It also generated spillovers to employees earning slightly above the statutory minimum. Nevertheless, the impact differs across firms: productive companies are better able to absorb higher labour costs, while small and labour-intensive businesses may postpone recruitment, reduce reported hours or shift part of remuneration into informality. The sectoral wage dynamics reported by the State Statistical Office and the minimum-wage adjustment documented by the Ministry of Economy and Labour confirm the importance of both policy decisions and labour-supply pressures.
- ★ **The strong improvement in pensions was predominantly the result of discretionary linear increases, which simultaneously strengthened income protection and increased fiscal pressures.** Providing the same absolute increase to all pensioners generated the largest proportional benefit for recipients of lower pensions, thereby supporting older households that were particularly exposed to higher food, energy and healthcare costs. Pension income also sustains consumption in smaller towns and rural areas, where it often supports several members of the same household. However, contribution revenues remain insufficient to cover pension expenditure, and the resulting gap is financed through transfers from the central budget. Emigration, population ageing, undeclared employment and the transition costs associated with the second pension pillar further constrain the system. The IMF's assessment of the pension system of North Macedonia shows that repeated discretionary increases could widen the pension deficit and crowd out expenditure on education, healthcare and productive investment.
- ★ **The stagnation of output per worker reveals why the present form of income convergence cannot be sustained without structural change.** Recent growth was concentrated in construction, consumption, public expenditure and relatively low-productivity services rather than in broad efficiency gains within firms. Foreign-owned export companies have introduced technology and expanded exports, but their supplier and knowledge linkages with domestic enterprises remain limited. Domestic firms, particularly micro and small businesses, continue to face weak access to long-term finance, low innovation capacity, skills shortages, informality and regulatory uncertainty. The IMF's 2026 Article IV mission similarly concluded that real wages were growing faster than productivity, weakening competitiveness. The main challenge is therefore to convert the current investment and income expansion into higher value added per worker, stronger domestic supply chains and more competitive exports.

EU accession scenarios

To better understand how different EU integration pathways might influence the Macedonian convergence trajectory, this analysis considers four scenarios as defined in the converge2eu model:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In the economic pillar, the scenarios are simulated for **GDP per capita at purchasing power standards (PPS)** as the proxy indicator for overall economic convergence. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to meaningful effects across the four scenarios.

EU accession scenarios for GDP per capita

Scenario	Years needed to reach the EU average
Status quo	100+ years to EU
Full EU accession	50 years to EU
Access to EU budget	84 years to EU
EU single market	85 years to EU
Institutional reforms	100+ years to EU

- ★ **Full EU accession produces by far the strongest convergence effect, reducing the estimated period for reaching the EU level of GDP per capita to around 50 years, compared with more than 100 years under the status quo.** For North Macedonia, the decisive advantage comes from the simultaneous combination of EU financing, full single market participation,

stronger institutional credibility and lower investment risk. Together, these channels could address the country's limited fiscal space, infrastructure gaps, small domestic market and persistently weak productivity more effectively than any partial form of integration.

- ★ **Access to the EU budget would reduce the convergence period to approximately 84 years, indicating that additional financing would help yet not be sufficient to transform the economy.** EU funds could support transport, energy, environmental and human-capital investment without placing the entire burden on the national budget. However, weak project preparation, procurement delays and limited administrative capacity would restrict their effect. The result underlines that the economic value of EU funding depends on whether projects are implemented efficiently and generate higher productivity and private investment.

- ★ **Participation in the EU single market would produce a similar convergence period, of approximately 85 years.** North Macedonia already trades extensively with the EU, meaning that formal market access is not the only constraint. Domestic firms frequently lack the technology, certification, finance, skills and production capacity needed to become competitive suppliers within European value chains. Unless these weaknesses are addressed, deeper integration could increase imports and labour mobility without generating a comparable expansion of domestic production and exports.

- ★ **Institutional reforms alone would still leave convergence beyond a 100-year horizon while nevertheless improving the outcome relative to the status quo.** Better rule of law, regulatory predictability and public administration would strengthen the business environment, but they cannot independently overcome the country's limited market size, investment gap and fiscal constraints. The scenario comparison therefore shows that EU financing, single market access and institutional reform are complementary. North Macedonia would obtain the largest convergence benefit by advancing all three simultaneously, approximating the conditions of full membership during the pre-accession period.

Policy discussion & key recommendations

- ★ **Income growth should be accompanied by measures that raise industrial value added and productivity, so that higher incomes rest on a stronger productive base rather than on recurrent transfers. This calls for a modern industrial policy that identifies sectors and activities with high growth and export potential and supports them with appropriate instruments.** Minimum-wage adjustments should remain predictable and transparent but should also consider productivity, formal employment and the ability of different sectors to absorb higher labour costs. This particularly applies to minimum-wage increases; the point is not to restrain wage growth, but to ensure that it is underpinned by value added, so that increases are sustained rather than eroded. Public-sector pay should be governed by a coherent framework linking remuneration to qualifications, responsibilities and performance rather than by fragmented sectoral increases. This would allow the state to retain staff in occupations facing genuine shortages while reducing politically driven wage pressures. Social dialogue should be strengthened, so that wage decisions reflect evidence on living costs, productivity and business conditions.
- ★ **Pension adequacy should be protected through a more targeted and financially sustainable system.** Future adjustments should combine regular indexation with targeted supplements for pensioners at risk of poverty, preserving the redistributive benefits of recent increases without creating the same permanent fiscal cost for every pension category. Contribution collection should be strengthened by reducing undeclared work and improving coordination between tax, employment and social-insurance institutions. The financing side should be addressed as directly as the collection side. Raising the pension contribution rate, together with introducing a more progressive personal income tax, would widen the revenue base rather than leave the cost of adequacy to be met by future budgets. Regular actuarial assessments should be used to evaluate the long-term effect of pension measures before they are adopted. This would protect current and future pensioners while reducing the risk that pension transfers displace education, healthcare and capital investment, as cautioned in the IMF's analysis of the pension system.
- ★ **The renewed investment cycle should be managed as a productivity programme rather than merely as a construction programme.**

Major projects should be prioritised according to economic return, readiness, regional connectivity and their potential to reduce costs for firms. Independent project appraisal, transparent procurement and publication of implementation milestones and cost revisions are particularly important for large transport and energy investments. Fiscal consolidation should not be achieved by cutting well-prepared capital projects while protecting less productive current expenditure. At the same time, state aid and investment incentives should be conditional on worker training, domestic sourcing, innovation, export diversification and the creation of higher-skilled employment.

- ★ **Domestic firms need practical support to connect with foreign investors and European value chains.** Supplier-development programmes should help local companies obtain certification, introduce digital production systems, improve management and meet the quality and delivery requirements of larger exporters. Financial support for SMEs should focus on technology adoption, energy efficiency, digitalisation and long-term investment rather than on broad grants with limited evaluation. Beneficiary firms should be assessed according to additional investment, productivity, wages and exports generated. The business-environment reforms envisaged in the Reform Agenda, including reduced informality, improved access to finance, transparent state aid and better governance of state-owned enterprises, should be implemented as mutually reinforcing measures.
- ★ **Gradual integration into the EU single market should be used to remove specific costs faced by firms.** Participation in the Single Euro Payments Area (SEPA), green lanes and regional trade-facilitation arrangements should be accompanied by modernised customs, effective market surveillance, recognised product certification and stronger food-safety and standards infrastructure. Education and training programmes should simultaneously respond to verified demand for technical, digital and managerial skills. Ultimately, the convergence impact of EU integration will depend not only on formal access to markets and financing but also on whether Macedonian firms and institutions can use those opportunities to increase domestic value added, productivity and export competitiveness.

SOCIAL PILLAR

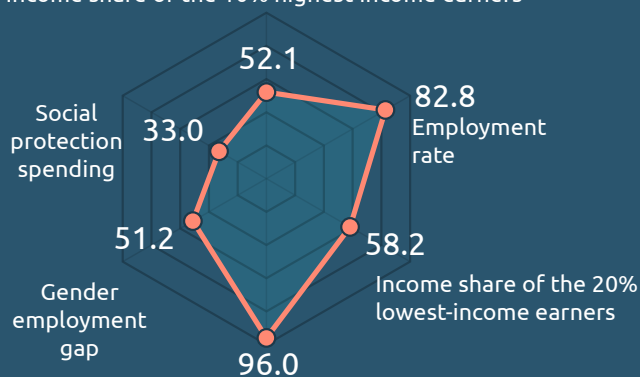
North Macedonia, social pillar indicators, nominal values

Indicator	Value
Unemployment rate	11.7
Employment rate	58.8
Income share of the 20% lowest-income earners	4.0
Income share of the 10% highest-income earners	30
Gender employment gap	17
Social protection spending	2.1

- ★ Unemployment rate in North Macedonia in 2025 stood at **11.7%** of labour force.
- ★ Employment rate stood at **58.8%** of working-age population.
- ★ Income share of the **20%** lowest-income earners stood at **4.0%** of total post-tax income.
- ★ Income share of the **10%** highest-income earners stood at **30%** of total post-tax income.
- ★ Gender employment gap stood at **17 pp**.
- ★ Social protection spending stood at **2.1%** of GDP.

North Macedonia, social pillar, % of EU average

Income share of the 10% highest-income earners



Income share of the 10% highest-income earners

- ★ Relative to the EU average, the best-performing social indicator was Income share of the **10%** highest-income earners, standing at **96%** of the EU level.
- ★ The employment rate was second, at **83%** of the EU level.
- ★ Income share of the **20%** lowest-income earners, Unemployment rate and Gender employment gap were lower, at **51-58%** of the EU level.
- ★ Social protection spending was the weakest link, standing at just **33%** of the EU average.

North Macedonia, social pillar, change to last year

Unemployment rate	2.9
Employment rate	1.1
Income share of the 10% highest-income earners	-0.3
Income share of the 20% lowest-income earners	-0.4
Social protection spending	-2.8
Gender employment gap	-4.3

- ★ **2 of the 6 indicators** in the social pillar saw an improvement in 2025 relative to the EU average.
- ★ The biggest improvement was in Unemployment rate, which closed the gap to the EU level by **2.9 pp**.
- ★ The employment rate was the second indicator that improved, closing **1.1 pp** of the gap to the EU level.
- ★ Income share of the **10%** highest-income earners and Income share of the **20%** lowest-income earners worsened relative to the EU benchmark, by **0.3** and **0.4 pp**, respectively.
- ★ Social protection spending declined more, by **2.8 pp** relative to the EU average.
- ★ Gender employment gap was the indicator with the weakest performance, falling back by **4.3 pp** relative to the EU average.

Indicator/ years to EU

Indicator	years to EU
Unemployment rate	29
Employment rate	Divergence
Income share of the 20% lowest-income earners	Divergence
Income share of the 10% highest-income earners	Divergence
Gender employment gap	Divergence
Social protection spending	76

- ★ At the pace of improvement from the past **5 years**, Unemployment rate would need around **29 years** to close the gap to the EU average.
- ★ Social protection spending lags further behind, needing around **8 decades** to reach the EU level.
- ★ The remaining four indicators – Employment rate, Income share of the **20%** lowest-income earners, Income share of the **10%** highest-income earners and Gender employment gap – are diverging from the EU average and not on track to close the gap at recent trends.

What explains the trends in the social pillar?

- ★ **The improvement in employment and unemployment reflects stronger labour demand but also the continuing contraction of the available workforce.** Construction, services and domestically oriented activities created additional employment, while labour shortages encouraged employers to recruit groups that had previously faced greater difficulty entering the labour market. Active employment measures, including training, wage subsidies and self-employment support, reinforced this development, particularly for young and long-term unemployed people. However, emigration and population ageing also reduced the number of people available to work or actively seeking work. The fall in unemployment therefore represents genuine employment growth, but it should not be interpreted as evidence that labour-market exclusion has been resolved. The European Commission's North Macedonia Report 2025 continues to identify limited activation capacity and weaknesses in the Employment Service Agency, while the 2025 Operational Employment Plan targets young people, the long-term unemployed and recipients of guaranteed minimum assistance.
- ★ **Income distribution worsened at both ends, indicating that labour-market improvements did not translate into more equal outcomes.** The income share of the poorest fifth moved further away from the EU benchmark, while the income share of the richest tenth moved in the inequality-increasing direction, implying that a disproportionate share of the gains accrued to better-off households. Wage increases mainly benefited people already in formal employment, while the poorest households are more likely to depend on irregular work, social assistance or a single low income. Higher food, housing and energy costs also absorb a larger proportion of their budgets, limiting the real distributive effect of nominal income increases. At the same time, the broadly unchanged position of the highest-income group suggests that the tax-and-transfer system has generated little additional redistribution. The official poverty data continue to show particularly high exposure among households with dependent children, while Roma households face severe material deprivation and practical barriers to claiming benefits, as documented by the State Statistical Office and the World Bank.
- ★ **The widening gender employment gap shows that women did not benefit equally from the improvement in the labour market.** A significant share of recent job creation occurred in construction, transport and other activities in which employment remains predominantly male. Women continue to carry a disproportionate share of unpaid childcare and eldercare, while access to affordable care services varies significantly between municipalities. These constraints are particularly severe for women in rural areas, Roma women and women with lower educational attainment, who may remain outside both employment and registered unemployment. The expansion of community- and home-care services has demonstrated that care investment can address both sides of the problem by enabling women with care responsibilities to seek employment and creating formal jobs for female care workers. The World Bank's assessment of Macedonian care economy confirms these employment effects, but the current scale remains insufficient to close the national gender gap.
- ★ **Social protection did not keep pace with the needs of vulnerable households or with developments in the EU.** Recent increases in social expenditure were concentrated in pensions, which are excluded from the social protection indicator used in this pillar, while poverty-targeted benefits and services have remained comparatively limited. Guaranteed minimum assistance provides important protection, but incomplete take-up, uneven access to services and weakened targeting reduce its effect on the poorest households. According to the World Bank's Public Finance Review, social assistance spending remains low by regional standards and its targeting of the poorest quintile has deteriorated. Labour-market gains were therefore offset by weaker performance in gender equality, income distribution and non-pension social protection, leaving overall social convergence broadly stagnant.

EU accession scenarios

To better understand how different EU integration pathways might influence convergence trajectory of North Macedonia in the social area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In the social pillar, the scenarios are simulated for the **income share of the bottom 20% of the population** as the proxy indicator for the overall social situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for income share of the bottom 20% of the population

Scenario	Years needed to reach the EU average
Status quo:	Divergence
Full EU accession:	100+ years to EU
Access to EU budget:	100+ years to EU
EU single market:	Divergence
Institutional reforms:	Divergence

- ★ **The status quo scenario points to continued divergence in the income position of the poorest households.** This is consistent with recent trends: employment has increased, but the income share of the bottom quintile has

not. Without stronger redistribution, better benefit coverage and access to quality employment, aggregate growth and higher average wages will continue to benefit households unevenly.

- ★ **Full EU accession changes the direction from divergence to convergence, but the estimated period remains above 100 years.** Membership would provide greater access to social and cohesion funding, support regional development and strengthen employment, childcare and social-inclusion programmes. However, the result shows that these resources would not rapidly improve the position of the bottom quintile unless national policies direct them towards disadvantaged households and communities.

- ★ **Access to the EU budget also brings the indicator onto a convergence path, although the horizon remains above 100 years.** Additional funding could expand childcare, community social services, active labour-market programmes and support for deprived municipalities. Its distributive impact would nevertheless depend on beneficiary selection, local implementation capacity and whether programmes lead to sustained formal employment rather than temporary participation.

- ★ **The single market and institutional-reform scenarios both remain on a divergent path.** Single market participation can raise employment and wages, but the initial benefits are more likely to accrue to skilled workers, export-oriented firms and urban centres, while greater labour mobility may further reduce the domestic supply of skilled workers. Institutional improvements can strengthen programme delivery, but they do not redistribute income unless accompanied by benefit, tax, care and employment reforms. The scenario results therefore show that social convergence requires explicit distributional policies and that economic integration or institutional improvement alone will not raise the income share of the poorest households.

Policy discussion & key recommendations

- ★ **Reducing inequality should become an explicit objective of social policy rather than a by-product of employment growth.** The distribution is worsening from both ends: over the past year, the income share of the poorest fifth moved 0.4 pp while the share of the richest tenth moved 0.3 pp further from the EU average, and both indicators are now diverging. The gains from higher employment and higher wages are therefore accruing disproportionately to better-off households. Two instruments follow directly. Personal income taxation should become more progressive, so that the tax system contributes to redistribution rather than remaining broadly neutral. And social protection spending, at 2.1% of GDP (or 33% of the EU average) and 2.8 pp lower than a year ago, should be raised along a credible multiannual path, as it is the weakest indicator in the pillar and the one on which benefit adequacy, activation and care services all depend.
- ★ **Employment policy should shift from reducing registered unemployment towards sustained activation of people who remain outside the labour market.** The Employment Service Agency should apply individual profiling, case management and employer-linked training more systematically, with priority given to the long-term unemployed, young people, Roma, persons with disabilities and recipients of guaranteed minimum assistance. Programme success should be assessed through formal employment and earnings six and 12 months after participation rather than through enrolment numbers. The need to strengthen the Agency's capacity and the delivery of the Youth Guarantee is also emphasised in the European Commission's North Macedonia Report 2025. Institutions should focus on making formal employment more financially attractive than informal employment, as it is currently less costly to stay outside the system than to enter the formal labour market.
- ★ **Closing the gender employment gap requires reducing the unpaid care burden that prevents women from taking paid work.** The gender employment gap was the weakest-performing social indicator in 2025, falling 4.3 pp relative to the EU average. Childcare, home care, eldercare and personal-assistance services should be expanded beyond the better-served municipalities, with stable financing and quality standards. Employment measures for women should combine vocational training with childcare, transport and outreach support. Enforcement of anti-discrimination and equal-pay provisions should also be strengthened, particularly in recruitment, pregnancy-related protection and access to career advancement.
- ★ **Social assistance should provide adequate protection while making the transition into formal employment financially worthwhile.** Adequacy is constrained above all by the size of the envelope: at 33% of the EU average and shrinking, social protection spending cannot deliver either adequate benefits or effective activation, which is why the increase proposed above is the precondition for the measures that follow. Guaranteed minimum assistance and child benefits should be reviewed regularly against essential living costs, while outreach should ensure that eligible Roma, rural households and people lacking digital access can claim support. Benefits should be withdrawn gradually when recipients enter employment rather than creating an abrupt loss of assistance. The World Bank's recommendations on social assistance similarly call for expanded coverage, unified eligibility criteria and 'make-work-pay' reforms.
- ★ **Public spending should be redirected towards measures with the strongest poverty-reduction effect.** Discretionary transfers available to broad population groups should not crowd out targeted income support, child services, housing and energy assistance or community-based care. A unified social registry and stronger exchange of data between social-work centres, the Employment Service Agency and tax authorities would improve targeting and identify households that combine low income, unemployment and care responsibilities. Municipal financing should reflect local deprivation and service needs rather than depend excessively on uneven local fiscal capacity.
- ★ **The social dimension should be integrated into every stage of EU-related reform and investment.** Infrastructure, digitalisation and green-transition programmes should include requirements for local employment, training and access for disadvantaged groups. EU financing should be used to expand durable social and employment services rather than short-term projects that disappear when external funding dries up. This would ensure that economic integration raises the income and employment prospects of households at the bottom of the distribution and prevents the social pillar from continuing to diverge despite stronger aggregate growth.

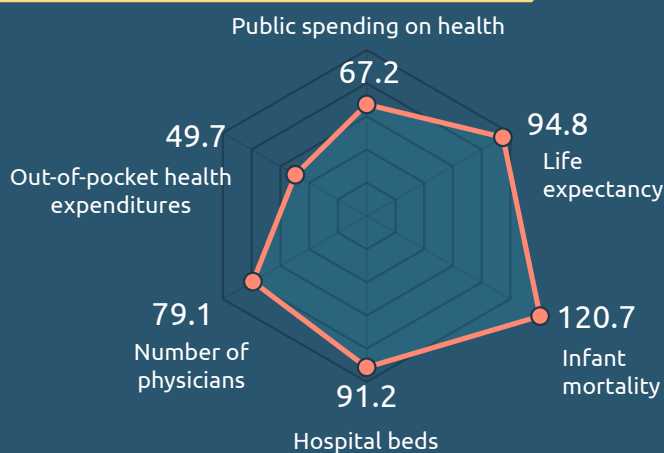
HEALTH PILLAR

North Macedonia, health pillar indicators, nominal values

Indicator	Value
Public spending on health	4.3
Life expectancy	76.6
Infant mortality	2.9
Hospital beds	463
Number of physicians	33.8
Out-of-pocket health expenditures	39.6

- ★ Public spending on health in North Macedonia stood at **4.3%** of GDP.
- ★ Life expectancy stood at **76.6 years**.
- ★ Infant mortality stood at **2.9** per **1,000** live births.
- ★ Hospital beds stood at **463** beds per **100,000** inhabitants.
- ★ Number of physicians stood at **33.8** physicians per 10,000 inhabitants.
- ★ Out-of-pocket health expenditures stood at **39.6%** of total health spending.

North Macedonia, health pillar, % of EU average



- ★ Relative to the EU average, the best-performing health indicator is Infant mortality, standing at **121%** of the EU level.
- ★ Life expectancy and Hospital beds are also solid, at above **90%** of the EU level.
- ★ Number of physicians are at around **80%** of the EU average, while Public spending on health is at around **67%**.
- ★ Out-of-pocket health expenditures remains the weakest link, standing at just **50%** of the EU benchmark.

North Macedonia, health pillar, change to last year

Public spending on health	2.0
Life expectancy	1.4
Out-of-pocket health expenditures	1.1
Number of physicians	-2.0
Hospital beds	-7.8
Infant mortality	-53.0

- ★ **3 of the 6 indicators** in the health pillar saw an improvement in 2025 relative to the EU average.
- ★ The biggest improvement was in Public spending on health, which closed the gap to the EU level by **2.0 pp**.
- ★ Life expectancy and Out-of-pocket health expenditures closed around **1 pp** of the gap.
- ★ Number of physicians gave back **2 pp** relative to the EU average, while Hospital beds slid by **7.8 pp**.
- ★ Infant mortality was the indicator with the weakest performance, falling back by **53.0 pp** relative to the EU average (though still being higher than it).

Indicator/ years to EU

Indicator	years to EU
Public spending on health	51
Life expectancy	Divergence
Infant mortality	Converged
Hospital beds	4
Number of physicians	Divergence
Out-of-pocket health expenditures	Divergence

- ★ At the pace of improvement from the past **5 years**, Hospital beds would need around 4 years to close the gap to the EU average.
- ★ Public spending on health would need around **5 decades** to close the gap to the EU average.
- ★ Life expectancy, Number of physicians and Out-of-pocket health expenditures are diverging from the EU average and not on track to close the gap at recent trends.
- ★ Infant mortality has already converged with the EU average.

What explains the trends in the health pillar?

- ★ **The decline in the health pillar reflects pressure on service capacity despite the recovery in life expectancy and a modest improvement in public financing.** Life expectancy continued to recover from the sharp deterioration during the pandemic as COVID-related mortality subsided and access to regular treatment normalised. However, the recovery has not removed the underlying gap with the EU. Cardiovascular disease, cancer, diabetes and other non-communicable diseases continue to cause high levels of preventable and premature mortality, while smoking, air pollution, unhealthy diets and insufficient screening sustain the disease burden. The WHO health-system review concludes that these outcomes could be improved through stronger prevention and more timely and effective treatment, particularly of non-communicable diseases.
- ★ **The deterioration in infant mortality interrupts a longer-term improvement and points to persistent inequalities in maternal and child healthcare.** Because the number of births and infant deaths is relatively small, the national rate can fluctuate considerably when the absolute number of deaths changes. Nevertheless, the increase should not be dismissed as statistical volatility. Access to prenatal monitoring, early diagnosis, neonatal services and postnatal support remains uneven across regions and social groups. UNICEF has identified a disproportionately high incidence of infant deaths among Roma and ethnic North Macedonian communities, while its 2024 Situation Analysis of Children and Adolescents also points to the need for continued monitoring of perinatal outcomes and service quality. The result therefore calls for investigation of individual deaths and local service gaps rather than a broad national intervention alone.
- ★ **The reduction in hospital-bed and physician capacity reflects workforce outflows and persistent imbalances in the organisation of healthcare.** Doctors and other medical professionals continue to move from the public system to private providers or abroad, while retirement and shortages in certain specialisations are not consistently matched by recruitment and training. The problem is also geo-

graphical: specialist staff and better-equipped facilities remain concentrated in Skopje and larger urban centres. Hospital capacity is unevenly used, with some institutions maintaining underused infrastructure while others face long waiting times, staffing shortages and obsolete equipment. The European Commission's North Macedonia Report 2025 confirms that the availability and geographical distribution of specialist services and medical staff remain inadequate, and that the outflow of personnel is continuing.

- ★ **Financing remains the weakest part of the health pillar: public spending is low relative to the EU benchmark, while out-of-pocket spending remains high.** The increase in the public allocation has therefore not yet translated into a comparable reduction in the financial burden on patients. Spending remains hospital-centred, and primary care is underdeveloped. Fragmented primary care and the restricted role of general practitioners lead to unnecessary referrals and greater reliance on specialist and hospital treatment. Households consequently continue to finance a large share of healthcare directly, especially outpatient medicines, diagnostics and services obtained privately to avoid waiting. The World Bank's Public Finance Review and the WHO European Observatory identify outpatient medicines as an important source of catastrophic expenditure among poorer households. The health pillar therefore weakened because the recovery in longevity and spending was outweighed by capacity constraints, unequal access and persistent household exposure to medical costs.

EU accession scenarios

To better understand how different EU integration pathways might influence Macedonian convergence trajectory in the health area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU single market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In the health pillar, the scenarios are simulated for **life expectancy** as the proxy indicator for the overall health situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for life expectancy

Scenario	Years needed to reach the EU average
Status quo:	Divergence
Full EU accession:	Divergence
Access to EU budget:	Divergence
EU single market:	Divergence
Institutional reforms:	Divergence

- ★ **All five scenarios indicate divergence in life expectancy, showing that none of the simulated integration channels is sufficient to close the health gap with the EU.** Under the status quo, the divergence reflects persistent premature mortality, weak prevention, workforce shortages and unequal access to timely treatment. Since life expectancy is also improving in the EU, a recovery from the pandemic is insufficient unless health outcomes in North Macedonia improve more rapidly and consistently.

- ★ **Full EU accession and access to the EU budget do not reverse divergence because additional financing cannot compensate for inefficient resource allocation and weak implementation.** EU resources could modernise facilities, strengthen screening, digitalise health information and improve emergency preparedness. However, their effect on life expectancy would remain limited if funding continues to favour hospital treatment over prevention and primary care or if new facilities cannot be staffed and new equipment maintained.

- ★ **Single market participation also remains divergent and could intensify health-workforce pressures.** Higher incomes and access to medicines and technology may improve care, but easier professional mobility can accelerate the departure of doctors and nurses if domestic pay, working conditions and career opportunities remain less attractive in relative terms. Institutional reforms alone also remain divergent because general improvements in governance do not directly reduce cardiovascular mortality, expand screening or ensure access to medicines.

- ★ **The scenario results place responsibility primarily on domestic health policy.** EU membership and funding can support reform, but convergence in life expectancy requires a national shift towards prevention, stronger primary care, better retention and distribution of medical staff, affordable medicines and consistent implementation across the entire territory.

Policy discussion & key recommendations

- ★ **The binding constraint in the health system in North Macedonia is financing, and it should be addressed first.** Public spending on health stands at 4.3% of GDP, or 67% of the EU average, and even after the largest single-year improvement in the pillar, it remains around five decades from convergence. Low public financing is what pushes households towards private payment: out-of-pocket expenditure accounts for 39.6% of total health spending, or twice the EU share, and is the weakest indicator in the pillar. Little else in this section can be achieved while that holds. The first step is therefore a predictable multiannual increase in public health financing, including capital investment in public hospitals, diagnostic equipment and primary-care facilities. Without these measures, neither workforce retention nor waiting times nor access to medicines can be improved on a sustained basis.
- ★ **That additional financing should be redirected towards primary care, prevention and measurable improvements in patient outcomes.** Multiannual budgeting would allow health institutions to plan staffing, equipment and maintenance instead of relying on annual adjustments and arrears. A larger share of Health Insurance Fund resources should support family medicine, screening, chronic-disease management and community care. The primary-care protocols introduced with WHO support should be implemented nationwide, with provider payments linked to prevention, treatment continuity and quality rather than mainly to registered patient numbers.
- ★ **A national health-workforce plan should connect education, recruitment, retention and regional staffing needs.** The authorities should forecast retirements and shortages by speciality and municipality, expand training where gaps are demonstrated and offer targeted incentives for work in underserved areas. Better working conditions, transparent specialisation opportunities and merit-based career advancement are necessary to retain staff in the public system. Nurses should receive broader clinical and preventive roles within multidisciplinary primary-care teams, reducing avoidable dependence on specialists and hospitals.
- ★ **Reducing out-of-pocket expenditure requires public capacity as well as broader medicine coverage and more effective purchasing. The larger share of private payment goes to privately provided hospital, specialist and diagnostic services rather than to medicines. The most direct remedy is therefore to invest in public hospitals, equipment and staffing, so that gaps in public provision do not force patients to seek private care.** The positive medicines list should be updated regularly using health-technology assessment and transparent evidence on clinical and cost effectiveness. Centralised or coordinated procurement should be used where it can reduce prices and prevent shortages, while co-payments for essential outpatient medicines and diagnostics should be capped or waived for low-income patients and people with chronic conditions. Waiting times should be published by institution and procedure, so that patients are not pushed towards private payment because public services are formally covered but practically unavailable.
- ★ **Hospital reform should improve functional capacity rather than seek to preserve the existing number of institutions or beds.** The hospital network should be reorganised according to population needs, travel times, staffing capacity and case volumes. Underused facilities can be converted to provide rehabilitative, geriatric, palliative or long-term-care services, while complex procedures should be concentrated in centres able to maintain adequate quality and safety levels. The eHealth appointment system should become interoperable with Health Insurance Fund and provider data, enabling referral tracking, waiting-list management and evidence-based purchasing, as also recommended by the European Commission.
- ★ **Convergence in life expectancy ultimately depends on reducing preventable disease and inequalities in access.** Tobacco-control rules should be enforced, health-related excise taxation strengthened and revenues partly directed towards prevention. Cancer and cardiovascular screening should use population registries and active invitations rather than rely mainly on individual initiative. Maternal and neonatal reviews should examine every avoidable death and translate findings into local service improvements. Roma communities, remote settlements and low-income households require targeted outreach, transport support and community health services. EU funds should reinforce these reforms, but sustainable financing and implementation must remain embedded in the national health system.

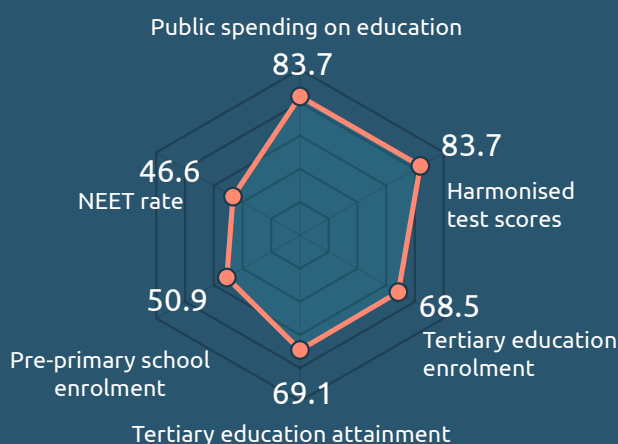
EDUCATION PILLAR

North Macedonia, education pillar, nominal values

Indicator	Value
Public spending on education	4.0
Harmonised test scores	422.8
Tertiary education enrolment	55
Tertiary education attainment	23.7
Pre-primary school enrolment	48.3
NEET rate	19.3

- ★ Public spending on education in North Macedonia in 2025 stood at **4.0%** of GDP.
- ★ Harmonised test scores stood at **422.8 points**.
- ★ Tertiary education enrolment stood at **55%** of tertiary-age population.
- ★ Tertiary education attainment stood at **23.7%** of corresponding age group population.
- ★ Pre-primary school enrolment stood at **48.3%** of corresponding age group population.
- ★ NEET rate stood at **19.3%** of labour force.

North Macedonia, education pillar, % of EU average



- ★ Relative to the EU average, the best-performing education indicators were Harmonised test scores and Public spending on education, both at **84%** of the EU level.
- ★ Tertiary education attainment and Tertiary education enrolment followed, at around **70%** of the EU average.
- ★ Pre-primary school enrolment was lower, at **51%** of the EU level.
- ★ NEET rate remains the weakest link, standing at just **47%** of the EU average.

North Macedonia, education pillar, change to last year

Public spending on education	6.8
Pre-primary school enrolment	2.2
Tertiary education enrolment	-0.3
Tertiary education attainment	-0.7
Harmonised test scores	-1.0
NEET rate	-3.9

- ★ **2 of the 6 indicators** in the education pillar saw an improvement in 2025 relative to the EU average.
- ★ The biggest improvement was in Public spending on education, which closed the gap to the EU level by **6.8 pp**.
- ★ Pre-primary school enrolment was the second indicator that improved, closing **2.2 pp** of the gap to the EU level.
- ★ Harmonised test scores, Tertiary education attainment and Tertiary education enrolment lost between **0.3** and **1 pp** relative to the EU average.
- ★ NEET rate was the indicator with the weakest performance, falling back by **3.9 pp** relative to the EU average.

Indicator/ years to EU

Indicator	years to EU
Public spending on education	Divergence
Harmonised test scores	Divergence
Tertiary education enrolment	15
Tertiary education attainment	Divergence
Pre-primary school enrolment	45
NEET rate	Divergence

- ★ At the pace of improvement from the past **5 years**, Tertiary education enrolment would need around **15 years** to close the gap to the EU average.
- ★ Pre-primary school enrolment would need around **4.5 decades** to close the gap to the EU average.
- ★ Public spending on education, Harmonised test scores, Tertiary education attainment and NEET rate are diverging from the EU average and not on track to close the gap at recent trends.

What explains the trends in the education pillar?

- ★ **The deterioration compared to the previous year reflects a widening gap between participation in education and the knowledge and skills acquired by students.** The relative position of education spending improved and pre-primary coverage expanded, but these gains were offset by weaker learning outcomes, slower progress in tertiary attainment and a rise in the share of young people not in employment, education or training (NEET). The central problem is therefore not only whether children and young people enter the education system, but whether they remain engaged, acquire foundational skills and successfully transition into further education or productive employment.
- ★ **Public education spending improved most strongly in 2025, but the longer-term position remains weak.** Its five-year trend is still divergent from the EU average, so the recent increase should be understood as a partial correction rather than closure of the financing gap. Maintaining the higher spending effort will be necessary if this longer-term divergence is to be reversed.
- ★ **The decline in harmonised test scores reflects accumulated learning losses and structural weaknesses that predate the pandemic.** Students receive relatively limited instructional time, many schools operate in shifts, and support for struggling students remains insufficient. At the same time, the distribution of human and physical resources across the school system is inefficient. Staffing levels in many schools exceed operational needs, while the school network has not been sufficiently optimised to reflect demographic changes and differences in enrolment. These inefficiencies contribute to an uneven distribution of education resources and opportunities, particularly for students from lower-income households and those living in remote and rural areas.
- ★ According to UNICEF's assessment of the education reform, students accumulate almost 900 fewer hours of instruction by the age of 14 than the OECD average. The OECD's PISA 2025 results, published in September 2026, reinforce the conclusion that North Macedonia continues to face a serious learning crisis. Performance declined further in mathematics and remained broadly unchanged in reading and science compared with 2022. Only 32% of students attained at least the baseline proficiency level in mathematics, 26% in reading and 36% in science, compared with OECD averages of 65%, 69% and 74%, respectively. According to the OECD's PISA 2025 country results for North Macedonia, almost no students reached the highest proficiency levels in any of the three subjects. This indicates that additional spending will have a limited impact unless it changes classroom practice, instructional time and support for low-performing students.
- ★ **The expansion of pre-primary education is a genuine improvement, but access remains insufficient and socially uneven.** Additional kindergarten places and the gradual recovery of enrolment have allowed more children to enter early education. Nevertheless, capacity remains concentrated in urban municipalities, while children from rural areas, Roma communities and lower-income households are considerably less likely to attend. These are the same groups that would benefit most from language development, early identification of learning difficulties and preparation for primary school. The European Commission's North Macedonia Report 2025 records a modest increase in capacity but confirms that participation remains far below the EU target. The increase in enrolment therefore improves the indicator, but its effect on later learning outcomes will remain limited unless expansion prioritises underserved children and maintains consistent quality standards.
- ★ **Higher-education participation has remained comparatively stable, but attainment and labour-market transition have failed to keep pace with the EU.** Demographic decline and the broad availability of study programmes have supported enrolment, while the share of adults with tertiary qualifications has increased only gradually. At the same time, quality assurance, accreditation and links between universities and employers remain weak, contributing to skills mismatches and graduate underemployment. The deterioration in the NEET indicator reflects these transition failures, as some young people leave education without marketable skills while others complete programmes that do not lead to suitable employment. The expansion of dual vocational education and regional vocational education and training (VET) centres is relevant, but its national impact is still emerging. Overall, the education pillar shows that increasing participation without improving quality, completion and labour-market relevance is insufficient for convergence.

EU accession scenarios

To better understand how different EU integration pathways might influence Macedonian convergence trajectory in the education area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In the education pillar, the scenarios are simulated for **tertiary education enrolment** as the proxy indicator for the overall education situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for tertiary education enrolment

Scenario	Years needed to reach the EU average
Status quo:	15 years to EU
Full EU accession:	13 years to EU
Access to EU budget:	14 years to EU
EU single market:	14 years to EU
Institutional reforms:	14 years to EU

- ★ **The status quo scenario indicates that tertiary enrolment could reach the EU level in approximately 15 years.** This comparatively short horizon reflects the existing convergence trend, supported by broad access to higher education and a shrinking tertiary-age population. However, convergence in enrolment should not be equated with convergence in educational quality, completion rates or graduate skills.

- ★ **Full EU accession produces the strongest result, shortening the convergence period to around 13 years.** The improvement would come from the combined effects of greater student and academic mobility, access to EU education and research programmes, stronger recognition of qualifications and additional investment in university capacity and quality assurance. The limited difference from the status quo nevertheless shows that membership would accelerate an already positive enrolment trend rather than fundamentally transform it.

- ★ **Access to the EU budget, single market participation and institutional reforms each result in a convergence period of around 14 years.** EU financing could expand infrastructure, digital learning and student support, while single market integration could increase the value of recognised qualifications and encourage enrolment. Institutional reforms could improve accreditation and university governance. However, each partial scenario shortens convergence by only one year because the principal quantitative expansion of higher education has already occurred.

- ★ **The scenario comparison shifts the policy question from how many students enrol to what they learn and whether they complete their studies and find suitable work.** North Macedonia can reach the EU enrolment benchmark under all scenarios, but this would have limited economic value if learning outcomes remain weak, programmes are poorly connected to labour demand, and qualified graduates continue to emigrate. EU integration should therefore be used to improve the quality and relevance of higher education rather than primarily to increase student numbers.

Policy discussion & key recommendations

- ★ **Two features of the education data should shape the priorities that follow.** Public spending on education closed 6.8 pp of the gap to the EU average over the past year, the largest single-year gain of any indicator in this pillar, but at 4.0% of GDP, it stands at around 84% of the EU level and its five-year trend remains one of divergence. Sustaining last year's increase is therefore the condition for reversing that trend, not an optional addition to the reforms below. Second, enrolment and attainment are moving apart. Tertiary enrolment is the indicator in the pillar closest to convergence, at around 15 years from the EU average, while tertiary attainment is diverging. The system is admitting students at close to the European rate but failing to convert this into qualifications, which places completion rather than access at the centre of higher-education policy.
- ★ **The first priority should be a national programme for recovering foundational learning.** Regular assessments should identify students who lack basic literacy, mathematics and science skills, followed by structured tutoring, extended learning time and individual support. Schools should receive practical guidance and resources to implement remedial programmes, while progress should be measured through student improvement rather than curriculum coverage. The findings of PISA 2026 should be translated into specific targets for reducing the proportion of students below minimum proficiency.
- ★ **The school network and teaching workforce should be reorganised around demographic realities and learning needs.** Declining pupil numbers have left many small schools with underused facilities, while urban schools operate in shifts and provide insufficient instructional time. The new primary-education funding formulas should support inter-municipal co-operation, shared teachers and transport for students where consolidation improves access and quality. Teacher policy should combine workforce planning, continuous professional development, mentoring and classroom support. Higher salaries alone will not improve outcomes unless accompanied by stronger professional standards and accountability for teaching quality.
- ★ **Pre-primary expansion should prioritise children who currently have the least access.** New public capacity, partnerships with licensed providers and targeted fee support should focus on rural municipalities, poor households, Roma children and children with disabilities. Financing should follow children and include safeguards for staff qualifications, group size and programme quality. Expanding access for disadvantaged children would improve school readiness while also enabling more mothers to participate in the labour market.
- ★ **Vocational and higher education should be more directly connected to skills demand and quality assurance.** The new VET framework and regional centres should use employer-validated curricula, substantial work-based learning and independent assessment of occupational skills. Funding for universities should gradually incorporate completion, teaching quality, research performance and graduate-employment outcomes. Accreditation bodies require operational independence and the capacity to close or restructure programmes that repeatedly fail quality or labour-market relevance standards, as also highlighted in the European Commission's 2025 assessment.
- ★ **Reducing the NEET rate requires an integrated transition from school to work.** Career guidance should begin before students select secondary and tertiary programmes, while the Youth Guarantee should combine outreach, skills assessment, training and credible employment offers. Education, employment and social-protection institutions should exchange data to identify early school leavers and inactive young people before they become disconnected from institutions. The objective should not be temporary participation in a programme, but sustained employment, return to education or completion of a recognised qualification.

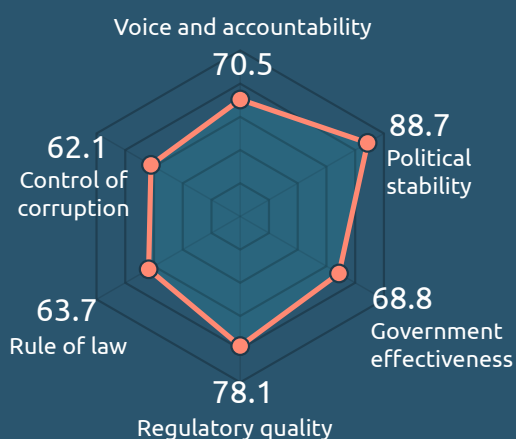
GOVERNANCE PILLAR

North Macedonia, governance pillar indicators, nominal values

Indicator	Value
Voice and accountability	51.5
Political stability	53.1
Government effectiveness	49.4
Regulatory quality	55.3
Rule of law	45.5
Control of corruption	43.4

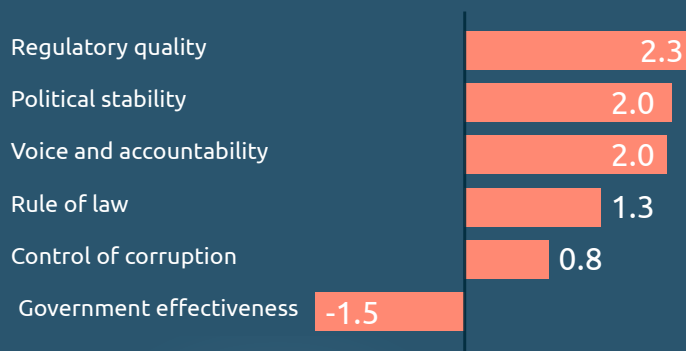
- ★ Voice and accountability in North Macedonia stood at **51.5 index points** (0–100 scale).
- ★ Political stability stood at **53.1 index points** (0–100 scale).
- ★ Government effectiveness stood at **49.4 index points** (0–100 scale).
- ★ Regulatory quality stood at **55.3 index points** (0–100 scale).
- ★ Rule of law stood at **45.5 index points** (0–100 scale).
- ★ Control of corruption stood at **43.4 index points** (0–100 scale).

North Macedonia, governance pillar, % of EU average



- ★ Relative to the EU average, the best-performing governance indicator was Political stability, standing at **89%** of the EU level.
- ★ Regulatory quality is second, at **78%** of the EU average.
- ★ Voice and accountability and Government effectiveness are at around **70%** of the EU benchmark.
- ★ Rule of law and Control of corruption are the weakest indicators in this group, standing at around **63%** of the EU average.

North Macedonia, governance pillar, change to last year



- ★ **5 of the 6 indicators** in the governance pillar saw an improvement in 2025 relative to the EU average.
- ★ The biggest improvement was in Regulatory quality, Political stability and Voice and accountability, which improved by around **2 pp** relative to the EU level.
- ★ Rule of law and Control of corruption closed approximately **1 pp** of the gap to the EU average.
- ★ Government effectiveness was the indicator with the weakest performance, falling back by **1.5 pp** relative to the EU average.

Indicator/ years to EU

Indicator	years to EU
Voice and accountability	35
Political stability	6
Government effectiveness	61
Regulatory quality	Divergence
Rule of law	85
Control of corruption	49

- ★ At the pace of improvement from the past **5 years**, Political stability is the indicator that stands closest to reaching the EU level, at around **6 years** away.
- ★ Voice and accountability would need **35 years** for that.
- ★ Control of corruption would need around **5 decades**, while Government effectiveness around **6**.
- ★ Rule of law lags further behind, needing **85 years** to reach the EU level.
- ★ Regulatory quality is diverging from the EU and not on track to close the gap at recent trends.

What explains the trends in the governance pillar?

- ★ **The mixed movement in the governance indicators reflects a widening gap between the formal development of institutions and their capacity to deliver consistent and credible results.** Political stability, voice and accountability, regulatory quality, the rule of law and control of corruption improved to varying degrees, while government effectiveness was the only indicator to deteriorate in 2025. This pattern suggests that electoral continuity, legislative alignment and individual institutional reforms generated positive signals but were not matched by stronger policy coordination, professional administration and enforcement. Governance convergence therefore remains vulnerable to political changes because many improvements are embedded in formal procedures rather than in stable institutional practice.
- ★ **The improvement in political stability and voice and accountability was supported by competitive elections, a peaceful transfer of power and the preservation of inter-ethnic stability.** The 2024 presidential and parliamentary elections offered voters a genuine political choice, fundamental freedoms were generally respected, and the change of government took place without institutional disruption. However, the campaign season was marked by polarising rhetoric, weaknesses in campaign-finance oversight and structural advantages for the largest political parties in terms of enjoying access to public funding and media exposure. The improvement consequently reflects the resilience of the democratic framework rather than the resolution of long-standing deficiencies in political competition and accountability. The OSCE/ODIHR final report on the 2024 elections confirms both the competitiveness of the process and the persistence of these regulatory weaknesses.
- ★ **Declining government effectiveness and divergence from the EU benchmark in regulatory quality expose weaknesses in both policy implementation and regulatory convergence.** Any improvement in Macedonian regulatory quality must be distinguished from progress relative to the EU; in other words, an increase in the domestic score does not constitute convergence if the distance to the EU benchmark widens. Legislative alignment and procedural reforms should therefore be assessed against both their practical implementation and developments in the EU. The decline in government effectiveness raises a related concern about administrative continuity and the capacity to implement policies consistently. The reorganisation of ministries and state bodies, changes in managerial staff, reliance on acting appointments and fragmented employment and remuneration rules provide relevant context for this deterioration, although they do not by themselves establish its causes. The weaknesses in merit-based recruitment, policy coordination and administrative accountability identified in the European Commission and OECD/SIGMA assessments help explain why formal reforms may coexist with limited institutional delivery.
- ★ **The modest improvement in the rule of law and control of corruption reflects incremental reforms whose effect on enforcement remains limited.** Greater transparency in parts of the judicial appointment process, renewed activity by anti-corruption institutions and investigations involving senior officials provided some evidence of institutional response. GRECO also recognised progress in integrity rules for senior executive officials and the police, concluding that 17 of its 23 recommendations had been satisfactorily implemented. However, complex corruption cases still rarely result in timely final convictions, while political pressure, insufficient resources and prolonged proceedings weaken the deterrent effect of the system. The European Commission's 2026 Rule of Law Report also finds that the Criminal Code amendments reduced the time and legal scope available for prosecuting certain forms of high-level corruption. The improvement should therefore be interpreted as a limited recovery from a low institutional base rather than evidence of a decisive change in the application of the rule of law.

EU accession scenarios

To better understand how different EU integration pathways might influence Macedonian convergence trajectory in the governance area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In this pillar, the scenarios are simulated for **control of corruption** as the proxy indicator for the overall governance situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for control of corruption

Scenario	Years needed to reach the EU average
Status quo:	49 years to EU
Full EU accession:	40 years to EU
Access to EU budget:	49 years to EU
EU single market:	49 years to EU
Institutional reforms:	40 years to EU

- ★ **The status quo scenario places convergence in control of corruption at approximately 49 years, reflecting the slow pace at which institutional credibility improves when reforms remain partial.** Existing anti-corruption bodies, strategies and reporting mechanisms provide a formal basis for progress, but weak implementation, limited interinstitutional cooperation and the low probability of final sanctions restrict their effect. Continuing along the present path would therefore produce gradual improvement

without resolving the enforcement weaknesses that sustain political influence, discretion and perceptions of impunity.

- ★ **Full EU accession reduces the convergence period to approximately 40 years by combining domestic reform with stronger external monitoring and enforcement.** Application of EU standards in public procurement, financial control, judicial cooperation and the protection of the Union's financial interests would restrict discretionary decision-making and strengthen the consequences of institutional non-compliance. Membership would also provide a more credible and durable framework for reform by making reversals legally and politically more costly. The nine-year improvement relative to the status quo nevertheless shows that formal accession cannot immediately compensate for accumulated weaknesses in administrative capacity, judicial efficiency and public trust.

- ★ **Institutional reforms produce the same convergence period (approximately 40 years), confirming that domestic institutional performance is the decisive channel for improving corruption control.** Independent judicial and prosecutorial decision-making, effective verification of assets and conflicts of interest, financial investigations and systematic follow-up to audit findings would increase the probability that abuses are detected and sanctioned. The result is particularly relevant for North Macedonia because the principal constraint is not the absence of legislation or specialised institutions but their limited autonomy, resources and ability to enforce existing rules consistently.

- ★ **Access to the EU budget and participation in the single market leave the convergence period at approximately 49 years because neither channel directly changes the domestic enforcement of anti-corruption rules.** Additional financing could improve administrative infrastructure, digital registers and oversight capacity, but without transparent procurement and judicial follow-up, it could also increase opportunities for rent-seeking. Deeper market integration may strengthen business demand for legal certainty, but it does not independently ensure impartial appointments, investigations or convictions. The scenario comparison therefore shows that the governance benefits of EU financing and market integration depend on parallel institutional reforms capable of protecting public resources and enforcing the law.

Policy discussion & key recommendations

- ★ **Judicial reform should focus on protecting professional decision-making from political and economic influence.** Appointments, promotions and disciplinary procedures should be based on transparent criteria, individual assessments and fully reasoned decisions, while political office-holders should refrain from putting public pressure on judges and prosecutors. The judiciary and prosecution also require adequate and predictable financing, systematic recruitment and modern case-management systems. Formal independence cannot produce convergence when courts lack judges and support staff, prosecutors carry excessive caseloads and complex proceedings cannot be completed within a reasonable period.
- ★ **Anti-corruption policy should shift from adopting strategies towards increasing the probability that detected abuses result in final sanctions.** The Criminal Code should provide adequate definitions, penalties and limitation periods for complex corruption offences, while prosecutors need specialised capacity for financial investigations, asset tracing and confiscation. The State Commission for the Prevention of Corruption should have sufficient staff and direct access to interoperable registers for the substantive verification of asset declarations and conflicts of interest. Its findings and recommendations should trigger documented responses from the responsible institutions rather than remain dependent on voluntary follow-up.
- ★ **Public procurement and high-risk sectors require stronger preventive controls because they combine large financial flows with considerable administrative discretion.** Beneficial ownership, contracts, annexes, implementation deadlines and cost revisions should be published in machine-readable form, while automated risk indicators should identify repeated single-bid procedures, contract splitting, unusual amendments and concentration among suppliers. Healthcare, infrastructure, spatial planning, energy and the use of municipal assets require particular attention. The State Audit Office, procurement-review bodies, the anti-corruption commission and prosecutorial bodies should establish procedures for exchanging information and tracking the institutional response to identified irregularities.
- ★ **Government effectiveness was the only governance indicator to lose ground over the past year, and regulatory quality is diverging on its five-year trend despite a good single year, so both warrant explicit attention. Government effectiveness should be strengthened through a professional civil service capable of preserving policy continuity across electoral cycles, and regulatory quality through predictable rule-making, substantive impact assessment and consistent application of rules to firms.** Senior and managerial appointments should be conducted through open competition, the use of acting positions should be strictly time-limited, and unjustified exemptions from general civil-service rules should be reduced. The public-sector employee register should be regularly published, while remuneration, promotion and performance-management systems should become more coherent across institutions. Strengthening the capacity of the Ministry of Public Administration and the General Secretariat would improve coordination and reduce the implementation gap between government strategies, annual budgets and the work of individual institutions.
- ★ **EU integration should be used to make governance reforms measurable, financially credible and difficult to reverse.** Disbursement of EU support should be linked to verified outcomes, such as competitive appointments, functioning asset-verification systems, implementation of audit recommendations, improved processing of corruption cases and transparent public procurement. Regulatory-impact assessments, public consultations and ex-post evaluations should become substantive requirements, including for legislation proposed by members of parliament or adopted through shortened procedures. The convergence effect of the accession process will ultimately depend on whether external conditionality changes domestic institutional incentives and produces consistent implementation after individual reform milestones have formally been completed.

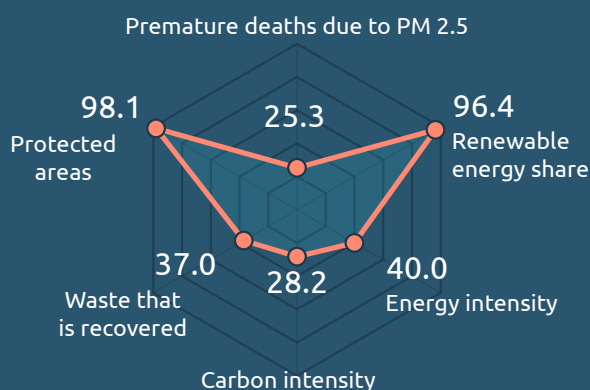
ENVIRONMENT PILLAR

North Macedonia, environment pillar indicators, nominal values

Indicator	Value
Premature deaths due to PM 2.5	222
Renewable energy share	58.8
Energy intensity	236
Carbon intensity	607
Waste that is recovered	29.2
Protected areas	26.3

- ★ Premature deaths due to **PM 2.5** in North Macedonia in 2025 stood at **222 per 100,000** of population aged 30 and over.
- ★ Renewable energy share stood at **58.8%** of total capacity.
- ★ Energy intensity stood at **236 KGOE** per thousand euros of GDP in chain-linked volumes (2015).
- ★ Carbon intensity stood at **607 kg** per thousand euros of GDP in chain-linked volumes (2015).
- ★ Waste that is recovered stood at **29.2%** of total diverted waste.
- ★ Protected areas stood at **26.3%** of land area

North Macedonia, environment pillar, % of EU average



- ★ Relative to the EU average, the best-performing environment indicator was Protected areas, standing at **98%** of the EU level.
- ★ Renewable energy share was close behind, at around **96%** of the EU average.
- ★ Energy intensity and Waste that is recovered were far below, at around **40%** of the EU level.
- ★ Carbon intensity was at **28%** of the EU level.
- ★ Premature deaths due to **PM 2.5** remains the weakest link, standing at just **25%** of the EU average.

North Macedonia, environment pillar, change to last year

Energy intensity	2.9
Carbon intensity	2.6
Renewable energy share	0.6
Premature deaths due to PM 2.5	-0.1
Protected areas	-0.1
Waste that is recovered	-0.7

- ★ **3 of the 6 indicators** in the environment pillar saw an improvement in 2025 relative to the EU average.
- ★ The biggest improvement was in Energy intensity and Carbon intensity, which closed the gap to the EU level by **2.9** and **2.6 pp**, respectively.
- ★ Renewable energy share was the third indicator that improved, closing **0.6 pp** of the gap to the EU average.
- ★ Premature deaths due to **PM 2.5** and Protected areas both slid by **0.1 pp** relative to the EU level.
- ★ Waste that is recovered was the indicator with the weakest performance, falling back by **0.7 pp** relative to the EU average.

Indicator/ years to EU

Indicator	years to EU
Premature deaths due to PM 2.5	Divergence
Renewable energy share	5
Energy intensity	100+
Carbon intensity	Divergence
Waste that is recovered	Divergence
Protected areas	1

- ★ At the pace of improvement from the past **5 years**, Protected areas and Renewable energy share would close the gap to the EU average in **1** and **5 years** respectively.
- ★ However, all the other indicators are far worse.
- ★ Energy intensity would need more than **100 years** to reach the EU level at current trends.
- ★ Premature deaths due to **PM 2.5**, Carbon intensity and Waste that is recovered are diverging from the EU average and not on track to close the gap at recent trends.

What explains the trends in the environment pillar?

- ★ **The improvement in the environment pillar in 2025 was driven mainly by the expansion of renewable electricity and lower energy and carbon intensity, while progress in air quality, waste management and effective nature protection remained considerably weaker.** This uneven pattern reflects the concentration of investment in commercially viable energy projects, particularly solar generation, compared with the slower implementation of reforms that depend on municipal coordination, environmental inspection and sustained public financing. North Macedonia is therefore approaching the EU in selected aspects of the energy transition but not yet in the broader capacity to prevent pollution, manage waste and enforce environmental standards.
- ★ **The growth of renewable capacity and the reduction in energy and carbon intensity reflect rapid investment in solar generation, lower reliance on fossil-fuel electricity during parts of the year and gradual changes in the structure of the economy.** Falling technology costs and relatively simple authorisation and connection procedures encouraged investment in photovoltaic capacity, including by businesses seeking protection from volatile electricity prices. The increasing role of services and less energy-intensive activities also reduced the amount of energy required to produce economic output. However, installed renewable capacity does not automatically translate into an equivalent share of clean electricity production, as generation remains affected by weather conditions, network constraints and limited storage and balancing capacity. The European Commission's North Macedonia Report 2025 and the Energy Community's 2025 Implementation Report consequently recognise the expansion of renewables but emphasise the continuing dependence on coal, delayed energy-efficiency measures and the need to modernise the electricity grid.
- ★ **The stagnation in pollution-related mortality shows that the expansion of renewable electricity has not yet addressed the sources of particulate pollution to which households are most directly exposed.** Residential heating with wood, low-quality fuels and inefficient stoves remains a major source of winter pollution, while traffic, construction dust, waste burning, industry and coal-fired generation add to the burden. The effect is intensified by temperature inversions and the geographical position of Skopje, Tetovo, Bitola and other urban areas, where pollutants remain trapped close to the ground. Municipal air-quality plans and heating subsidies have produced local improvements, but implementation is fragmented and monitoring and inspection capacity remain limited. The European Environment Agency confirms that pollution-related mortality has declined over the longer term, partly due to reduced fossil-fuel use in electricity and the gasification of heating plants, but exposure to fine particles remains well above EU and World Health Organization standards.
- ★ **Weak waste recovery reflects implementation failures in municipal systems rather than an absence of strategies.** Municipal waste continues to be collected largely without separation and deposited at non-compliant or informal sites, while the establishment of regional systems has been delayed by limited cooperation among municipalities, weak public-utility management and resistance to the location and financing of shared facilities. The European Commission reports that regional waste-management structures remain largely non-functional.
- ★ **Protected-area coverage is comparatively close to the EU level, but the indicator is not improving and effective management remains uneven.** The designation of Shar Mountain National Park and the earlier extension of protected sites increased formal coverage, but designation has not been matched consistently by management capacity, stable financing and control of construction, forestry and hydro-power development. The designation of potential Natura 2000 sites and the protection of Lake Ohrid, Mavrovo, Matka and Studenchishko Blato continue to face institutional delays.

EU accession scenarios

To better understand how different EU integration pathways might influence Macedonian convergence trajectory in the environment area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In this pillar, the scenarios are simulated for **energy intensity** as the proxy indicator for the overall environment situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for energy intensity

Scenario	Years needed to reach the EU average
Status quo:	100+ years to EU
Full EU accession:	54 years to EU
Access to EU budget:	100+ years to EU
EU single market:	100+ years to EU
Institutional reforms:	100+ years to EU

- ★ **The status quo scenario leaves convergence in energy intensity beyond a 100-year horizon, indicating that the current rate of improvement is insufficient to close the efficiency gap with the EU.** Renewable capacity can continue to expand under existing policies, but energy intensity will decline only slowly while buildings remain inefficient, industrial equipment is outdated, transport depends heavily on road vehicles and coal continues to play an important role in elec-

tricity generation. Since the EU is simultaneously improving its own efficiency, isolated investments will not lead to sustained convergence without a broader transformation of energy use.

- ★ **Full EU accession produces the strongest result, reducing the estimated convergence period to approximately 54 years.** The improvement reflects the combined effect of EU financing, energy-market integration, stronger climate and environmental obligations and lower investment risk for renewable generation, storage, networks and efficiency projects. Carbon pricing and compliance with EU industrial and product standards would also increase the cost of inefficient energy use and accelerate the replacement of carbon-intensive technologies. The result nevertheless remains gradual because the building stock, industrial capital and energy infrastructure can only be replaced over an extended period.
- ★ **Access to the EU budget does not generate a separately quantified acceleration in the supplied calculations, showing that financing alone cannot ensure lower energy intensity.** EU resources could support building renovation, grid modernisation, cleaner district heating and industrial efficiency, but their effect would depend on project preparation, procurement and the ability of public institutions and municipalities to maintain completed investments. The delays in making the Energy Efficiency Fund operational and implementing regional environmental infrastructure illustrate why the availability of finance does not automatically produce faster convergence.
- ★ **Single market participation and institutional reforms also do not produce a separately shorter horizon in the available results.** Market integration could expose exporters to stronger carbon and efficiency requirements, while better institutions could improve permitting, inspection and investment planning. However, neither channel independently finances the replacement of inefficient buildings, industrial equipment and energy infrastructure. The scenario results therefore indicate that meaningful environmental convergence requires the simultaneous combination of finance, market incentives, enforceable standards and large-scale investment associated with full accession.

Policy discussion & key recommendations

- ★ **Energy policy should convert the rapid expansion of renewable capacity into a reliable reduction in fossil-fuel generation and carbon emissions.** Renewable auctions should be based on transparent grid-capacity assessments, while investment in transmission, distribution, storage and balancing should proceed in parallel with new generation. The climate law and the updated National Energy and Climate Plan should establish a credible timetable for carbon pricing and the gradual retirement or transformation of coal-based capacity. The Just Transition Plan should provide concrete investment, retraining and income-support measures for workers and communities in the Pelagonia and south-western coal regions.
- ★ **Energy efficiency should become the principal instrument for lowering household costs and improving industrial competitiveness.** The Energy Efficiency Fund should be made operational with multiannual financing and prioritise deep renovation of public buildings, residential blocks and homes occupied by energy-poor households. Support should combine insulation, efficient heating and access to clean energy rather than subsidising the replacement of individual appliances in isolation. Industrial programmes should use energy audits, concessional finance and tax incentives to accelerate investment in efficient machinery, waste-heat recovery and electrification, with verified energy savings used to assess programme performance.
- ★ **Air-quality policy should target the sources responsible for population exposure rather than relying mainly on short-term measures during pollution episodes.** A national clean-heating programme should replace inefficient household stoves, expand efficient district heating where economically justified and prevent energy poverty from pushing households towards low-quality fuels. Reducing traffic emissions requires a credible alternative to the private car. Urban and suburban public transport systems need renewed fleets, higher service frequency, integrated ticketing and priority in the road network, supported by suburban rail connections between Skopje and the surrounding municipalities and by comparable investment in the other larger towns. Municipal air-quality plans should contain funded measures, implementation deadlines and clearly assigned responsibilities. Emissions from industry, construction, traffic and open waste burning require risk-based inspections and effective sanctions, while monitoring data should be complete, timely and publicly accessible.
- ★ **Waste reform should establish functioning regional systems while creating incentives for prevention, separation and recovery.** Municipalities need binding agreements on the ownership, financing and operation of regional facilities, accompanied by the closure and remediation of non-compliant dumpsites. Household collection fees should gradually reflect service costs while protecting low-income users, and producer-responsibility schemes should finance separate collection of packaging, electronic waste, batteries and other priority streams. Procurement of infrastructure should be accompanied by investment in collection vehicles, transfer stations, sorting capacity and public outreach, so that regional landfills do not become isolated facilities without a functioning collection system.
- ★ **Nature protection should move from territorial designation towards effective management and enforcement.** The legal framework should be aligned with the EU Birds and Habitats Directives, potential Natura 2000 sites should be identified, and management plans should guide land use, tourism, forestry and infrastructure decisions. National parks and other protected areas require predictable public financing, professional staff and transparent revenues rather than dependence on commercial exploitation of natural resources. Environmental-impact assessments should examine cumulative effects and credible alternatives, while inspection bodies and courts should ensure that illegal construction, logging, waste disposal and damage to protected habitats result in restoration and proportionate sanctions.

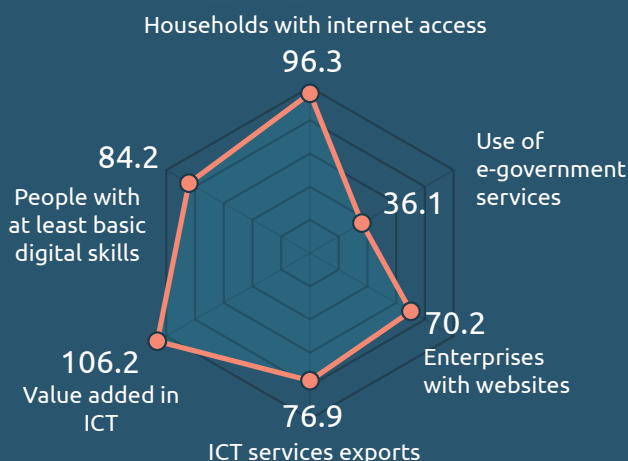
DIGITALISATION PILLAR

North Macedonia, digitalisation pillar indicators, nominal values

Indicator	Value
Households with internet access	91.2
Use of e-government services	20.8
Enterprises with websites	54.1
ICT services exports	4.0
Value added in ICT	6.0
People with at least basic digital skills	72.8

- ★ Households with internet access in North Macedonia in 2025 stood at **91.2%**.
- ★ Use of e-government services stood at **20.8%**.
- ★ Enterprises with websites stood at **54.1%**.
- ★ ICT services exports stood at **4.0%** of GDP.
- ★ Value added in ICT stood at **6.0%** of total value added.
- ★ People with at least basic digital skills stood at **72.8%**.

North Macedonia, digitalisation pillar, % of EU average



- ★ Relative to the EU average, the best-performing digitalisation indicator was Value added in ICT, standing at **106%** of the EU level.
- ★ Households with internet access was close behind, at around **96%** of the EU average.
- ★ People with at least basic digital skills were at **84%** of the EU level, ICT services exports at **77%**, and Enterprises with websites at **70%**.
- ★ Use of e-government services remains the weakest link, standing at just **36%** of the EU average.

North Macedonia, digitalisation pillar, change to last year

Enterprises with websites	0.0
People with at least basic digital skills	0.0
Households with internet access	-0.2
ICT services exports	-0.2
Value added in ICT	-4.3
Use of e-government services	-6.0

- ★ **None of the 6 indicators** in the digitalisation pillar saw an improvement in 2025 relative to the EU average.
- ★ People with at least basic digital skills and Enterprises with websites stagnated, while all other indicators dropped.
- ★ Households with internet access and ICT services exports gave back **0.2 pp** relative to the EU average.
- ★ Value added in ICT lost **4.3 pp** relative to the EU (though still exceeding it).
- ★ Use of e-government services was the indicator with the weakest performance, falling back by **6.0 pp** relative to the EU average.

Indicator/years to EU

Indicator	years to EU
Households with internet access	2
Use of e-government services	Divergence
Enterprises with websites	Divergence
ICT services exports	5
Value added in ICT	Converged
People with at least basic digital skills	Divergence

- ★ At the pace of improvement from the past **5 years**, Households with internet access and ICT services exports would need **2** and **5 years**, respectively, to close the gap to the EU average.
- ★ Use of e-government services, Enterprises with websites and People with at least basic digital skills are diverging from the EU average and not on track to close the gap at recent trends.
- ★ Value added in ICT has already converged with the EU average.

What explains the trends in the digitalisation pillar?

Digitalisation remains the second-strongest pillar in North Macedonia, at 77% of the EU level. However, 2025 was not a good year for the pillar overall, as its value fell by 1.1 pp relative to the EU level, which represents the second-biggest slide in the year. General dynamics remain positive, however, and at trends from the past five years, North Macedonia would take around 25 years to converge to the EU level in this area. Moreover, there is a notable discrepancy between individual indicators from this pillar, with some improving rapidly and others lagging behind.

- ★ **The mixed performance of the digitalisation pillar reflects a widening gap between access to digital technologies and their productive and institutional use.** Household connectivity is approaching the EU level, and the ICT sector has become an important source of value added and exports. However, the use of electronic public services has declined, business digitalisation remains shallow and the relative position of basic digital skills has weakened. North Macedonia has therefore made faster progress in providing digital infrastructure and developing a specialised ICT industry than in integrating digital technologies into public administration, traditional businesses and everyday economic activity.
- ★ **The near-convergence in household internet access reflects the expansion of fixed broadband and mobile networks, greater smartphone use and the growing necessity of connectivity for communication, work, education and payments.** Operators continued to extend high-speed and 5G coverage, while competition and bundled services made internet access available to most urban households. Remaining gaps are increasingly concentrated among rural, low-income and older households, for whom coverage does not necessarily imply affordability or effective use.
- ★ **The declining use of e-government services shows that expanding the number of services on the national portal has not been matched by simpler and fully digital administrative procedures.** Citizens frequently need to submit information already held by another institution, visit an office to complete or verify an electronic request or use identification and signature tools that are neither sufficiently user-friendly nor free of charge. Fragmented registers and uneven participation by public institutions reduce the practical value of the interoperability platform, while

limited promotion and confidence in online procedures further constrain demand. The OECD/SIGMA assessment of public administration finds that the central population register, interoperability platform and national e-services portal are functional but remain underused, partly because the country lacks a free and universal electronic-identification system.

- ★ **The growth of the ICT sector has strengthened digital exports and raised its contribution to domestic value added, but recent stagnation indicates emerging capacity constraints.** Competitive labour costs, proximity to European clients and a strong base of software and engineering skills enabled firms to expand outsourcing, software development and other remotely delivered services. The sector's further development is increasingly constrained by shortages of experienced workers, emigration, rapid wage growth and dependence on contract-based services with limited intellectual property and product ownership. Linkages with traditional domestic firms also remain weak, meaning that the success of ICT companies has not generated equally strong productivity gains across the rest of the economy. At the same time, the limited spread of websites and more advanced digital tools among enterprises reflects the prevalence of micro and small firms, informality, limited managerial capacity and insufficient incentives to reorganise business processes around technology rather than using it only for communication.
- ★ **The weakening relative position of basic digital skills shows that connectivity alone does not ensure effective participation in the digital economy.** Younger and more educated people use digital technologies intensively, but important gaps remain among older people, low-income households, rural communities and workers in less knowledge-intensive occupations. Schools and vocational institutions do not consistently develop applied digital competences, while adult-training opportunities remain fragmented and reach only a limited share of employees and inactive people. The European Commission's 2025 assessment consequently calls for digital skills to be developed more systematically throughout primary and secondary education and for teachers and educational institutions to receive stronger support.

EU accession scenarios

To better understand how different EU integration pathways might influence Macedonian convergence trajectory in the digitalisation area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In this pillar, the scenarios are simulated for **ICT services exports** as the proxy indicator for the overall digitalisation situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for ICT services exports

Scenario	Years needed to reach the EU average
Status quo:	5 years to EU
Full EU accession:	4 years to EU
Access to EU budget:	5 years to EU
EU single market:	4 years to EU
Institutional reforms:	5 years to EU

- ★ **The status quo scenario indicates that ICT services exports could reach the EU level in approximately five years.** This short horizon reflects the sector's strong expansion over the past decade, supported by demand for remotely delivered services, competitive labour costs and the ability of domestic companies and professionals to work directly for foreign clients.

However, convergence in the export indicator would not necessarily imply that the wider economy has become digitally advanced, particularly if growth remains concentrated in a relatively small number of ICT firms and skilled workers.

- ★ **Full EU accession produces the strongest outcome, shortening the convergence period to approximately four years.** Membership would combine unrestricted access to the single market with greater regulatory certainty, mobility of capital and professionals, recognition of electronic identification and stronger participation in European research and digital programmes. These channels could attract investment, expand cross-border contracts and help domestic companies move from subcontracting towards higher-value software, platforms and specialised digital products. The limited one-year improvement nevertheless shows that the sector is already converging rapidly under current conditions.

- ★ **Participation in the EU single market also reduces the convergence period to approximately four years, producing the same quantitative outcome as full accession for this indicator.** For ICT services, regulatory and commercial access is particularly important because digital products can be delivered across borders without the transport and customs costs faced by goods exporters. Alignment with EU rules on data, electronic identification, cybersecurity, digital services and consumer protection would reduce compliance uncertainty and make Macedonian providers more credible partners for European clients.

- ★ **Access to the EU budget and institutional reforms retain the five-year convergence period.** EU financing could support broadband, research, innovation and digital skills, while institutional reforms could improve electronic public services and the business environment, but neither channel independently expands foreign demand for Macedonian ICT services. The scenario comparison therefore shows that single market access is the principal accelerator of export convergence, while funding and stronger institutions are more important for spreading the benefits of digitalisation to public services, traditional firms and citizens.

Policy discussion & key recommendations

- ★ **Digital public services are the weakest part of an otherwise strong pillar – and the part moving fastest in the wrong direction: use of e-government services stands at 20.8%, or 36% of the EU average, fell a further 6.0 pp relative to the EU benchmark over the past year and is diverging. They should be redesigned around complete administrative procedures rather than the electronic submission of individual documents.** Institutions should exchange information through interoperable registers, so that citizens and firms are not required to provide data already held by the state. A free and universal electronic identity, preferably accessible through a mobile application, should enable users to identify themselves, sign documents and complete payments without additional commercial certificates. Service performance should be measured through completion rates, processing time, user satisfaction and the reduction of in-person visits.
- ★ **Exporting should be treated as a distinct objective for the ICT sector rather than a by-product of its growth.** Value added in ICT stands at 106% of the EU average and has converged, while ICT services exports stand at 77%, which indicates an industry oriented towards the domestic market and, where it does export, towards subcontracted work rather than products of its own. Export promotion should therefore be a separate strand of policy, covering market entry, certification, participation in European research and innovation programmes and the protection of intellectual property. The objective should be to enable firms to sell finished products and services under their own name and to capture the margin that goes with them rather than supplying labour to foreign contractors, as the single market scenario shows market access accelerating export convergence only modestly and the rest depending on what the sector has to sell.
- ★ **Broadband policy should concentrate on the households and locations that remain excluded from high-quality connectivity.** Public support and infrastructure-sharing obligations should be used in rural and commercially unattractive areas, while coverage information should reflect actual service quality and affordability rather than only the theoretical availability of a network. Municipal facilities, schools, healthcare providers and social-service centres should provide assisted digital access to citizens who lack devices or skills. The independence and capacity of the electronic-communications regulator should also be protected to maintain effective competition and encourage investment.
- ★ **Digital skills policy should connect education, employment and lifelong learning more directly with changing occupational requirements.** Schools need reliable equipment, trained teachers and curricula that develop information literacy, problem-solving, coding and responsible use of artificial intelligence rather than only basic software use. Vocational and higher-education programmes should be developed with employers and updated more frequently, while short, accredited courses should help workers in administration, manufacturing, retail and services adapt to digital processes. Retaining experienced ICT professionals will also require stronger research opportunities, links with innovative firms and career prospects beyond outsourcing.
- ★ **Business digitalisation policy should move beyond supporting websites and basic equipment towards the adoption of technologies that improve productivity and market access.** SME programmes should finance cloud systems, cybersecurity, e-commerce, digital production, data analytics and integration with customers and suppliers, accompanied by management advice and worker training. Support should be conditional on measurable changes in sales, exports, productivity or operating costs. ICT firms should receive stronger incentives for research, product development and intellectual-property creation, so that export growth becomes less dependent on labour-cost advantages and subcontracting.
- ★ **Cybersecurity and digital trust should develop at the same pace as online services and network expansion.** The new cybersecurity framework should be implemented through adequately staffed national response structures, mandatory risk management for essential and public services, regular testing and clear incident-reporting obligations. Public institutions require common security standards, protected cloud and data infrastructure and specialised personnel who can be retained despite private-sector salary competition. Further alignment with the EU Digital Identity Framework, the Digital Services Act and the Digital Markets Act would protect users and businesses while fostering the regulatory trust needed for deeper integration into the European digital economy.

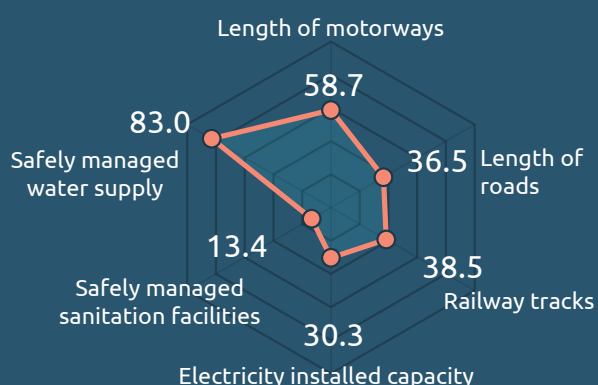
INFRASTRUCTURE PILLAR

North Macedonia, infrastructure pillar indicators, nominal values

Indicator	Value
Length of motorways	132
Length of roads	5,903
Railway tracks	357
Electricity installed capacity	1,266
Safely managed sanitation facilities	12.1
Safely managed water supply	80.8

- ★ Length of motorways in North Macedonia in 2025 stood at **132 km per 10,000 km²**.
- ★ Length of roads stood at **5,903 km per 10,000 km²**.
- ★ Railway tracks stood at **357 km per 10,000 km²**.
- ★ Electricity installed capacity stood at **1,266 MW per 10,000 km²**.
- ★ Safely managed sanitation facilities stood at **12.1%** of population.
- ★ Safely managed water supply stood at **80.8%** of population.

North Macedonia, infrastructure pillar, % of EU average



- ★ Relative to the EU average, the best-performing infrastructure indicator was Safely managed water supply, standing at **83%** of the EU level.
- ★ Length of motorways was the second-best indicator, though far behind, at **59%** of the EU value.
- ★ All other indicators were further back. Railway tracks, Length of roads and Electricity installed capacity were at between **30%** and **39%** of the EU level.
- ★ Safely managed sanitation facilities was by far the weakest indicator, at just **13%** of the EU average.

North Macedonia, infrastructure pillar, change to last year

Electricity installed capacity	0.9
Safely managed water supply	0.0
Railway tracks	0.0
Safely managed sanitation facilities	-0.1
Length of roads	-0.1
Length of motorways	-0.3

- ★ Just **1 of the 6 indicators** in the infrastructure pillar saw an improvement in 2025 relative to the EU average.
- ★ That was Electricity installed capacity, which closed the gap to the EU level by **0.9 pp**.
- ★ Safely managed water supply and Railway tracks stagnated in 2025 relative to the EU.
- ★ Safely managed sanitation facilities and Length of roads lost **0.1 pp** relative to the EU average.
- ★ Length of motorways was the indicator with the weakest performance, falling back by **0.3 pp** relative to the EU average.

Indicator/ years to EU

Indicator	years to EU
Length of motorways	Divergence
Length of roads	100+
Railway tracks	100+
Electricity installed capacity	46
Safely managed sanitation facilities	Divergence
Safely managed water supply	Divergence

- ★ At the pace of improvement from the past **5 years**, Electricity installed capacity would need around **5 decades** to close the gap to the EU average.
- ★ Length of roads and Railway tracks remain more than **100 years** away from reaching the EU level at current trends.
- ★ Length of motorways, Safely managed sanitation facilities and Safely managed water supply are diverging from the EU average and not on track to close the gap at recent trends.

What explains the trends in the infrastructure pillar?

- ★ **The uneven performance of the infrastructure pillar reflects rapid investment in electricity generation capacity alongside prolonged stagnation in transport and municipal infrastructure.** Although renewable-energy projects increased the country's generation capacity, it is still just at 30% of the EU level. Additionally, the road and railway networks expanded only marginally, and access to safely managed water and sanitation failed to improve. The central constraint is therefore not simply the volume of capital expenditure but the ability to prepare, complete and maintain interconnected infrastructure systems. Projects have frequently been delayed by weak planning, procurement difficulties, limited administrative capacity and changing political priorities, reducing their contribution to territorial and economic convergence.
- ★ **The stagnation of the road and motorway indicators reflects the long implementation period of major projects and the continued prioritisation of new construction over systematic maintenance of the existing network.** The opening of the Gradsko-Drenovo section and the Stracin-Kriva Palanka express road improved connectivity along Corridors X-d and VIII, while construction activity intensified on the motorway sections included in the Corridors VIII and X-d programme. However, much of this investment has not yet resulted in completed road kilometres, while local and regional roads continue to suffer from inadequate maintenance, weak safety infrastructure and limited resilience to flooding and extreme weather. The European Commission's North Macedonia Report 2025 confirms that most of the road network does not yet comply with Trans-European Transport Network (TEN-T) requirements and that the five-year road-maintenance plan has still not been published.
- ★ **The absence of railway expansion reflects decades of underinvestment and repeated delays in completing the country's cross-border connections.** Construction on the eastern section of Corridor VIII has advanced unevenly, while the final connection to Bulgaria has been affected by contractual, technical and bilateral coordination problems. The western connection

towards North Macedonia remains incomplete, and the existing Corridor X network requires rehabilitation, modern signalling and more efficient border procedures. Infrastructure constraints are reinforced by weak rail operations, ageing rolling stock and the renewed closure of the domestic market to third-party operators. Although EU and EBRD financing is supporting the eastern Corridor VIII sections, the Tabanovce joint border station and new electric freight locomotives, the economic effect will remain limited until projects form continuous and operational routes rather than isolated sections.

- ★ **The expansion of electricity capacity has been driven by investment in solar generation, but network and balancing infrastructure have not developed at the same pace.** Falling technology costs, private investment and the response of firms to high electricity prices produced a rapid increase in photovoltaic installations. However, new capacity is concentrated in variable generation, while the transmission and distribution networks require reinforcement, digitalisation, storage and stronger regional interconnection to integrate it reliably.
- ★ **At the same time, the stagnation of safely managed water and sanitation reflects ageing networks, high water losses, limited wastewater treatment and financially weak municipal utilities.** Safely managed sanitation stands at only 13% of the EU level, and untreated urban wastewater remains a major source of river pollution, while tariffs frequently do not cover operation, maintenance and replacement costs. The Commission's 2025 assessment therefore links sustainable water infrastructure to reform of communal enterprises, stronger technical capacity and the gradual application of cost-recovery and polluter-pays principles.

EU accession scenarios

To better understand how different EU integration pathways might influence convergence trajectory of North Macedonia in the infrastructure area, we consider the same four scenarios as before:

- ★ **Full EU Membership:** immediate accession with all rights and obligations;
- ★ **Access to EU Budget:** receiving EU budget transfers (e.g. structural and cohesion funds) as if a member, but without formal membership;
- ★ **Access to EU Single Market:** full inclusion in the EU single market (four freedoms) without other membership benefits or transfers;
- ★ **Institutional Reforms:** implementing deep EU-related reforms domestically (e.g. regarding rule of law, governance) without membership or new external resources.

A more detailed description of each scenario is provided in the methodological section.

In this pillar, the scenarios are simulated for **length of roads** as the proxy indicator for the overall infrastructure situation. The four scenarios are then compared to the baseline/status quo scenario of no change with respect to the trends from the past five years.

The scenarios are presented here through the **years needed to reach the EU average**. The results point to no meaningful effects across the four scenarios.

EU accession scenarios for Length of roads

Scenario	Years needed to reach the EU average
Status quo:	100+ years to EU
Full EU accession:	100+ years to EU
Access to EU budget:	100+ years to EU
EU single market:	100+ years to EU
Institutional reforms:	100+ years to EU

- ★ **The status quo scenario leaves convergence in road-network density beyond a 100-year horizon.** The underlying calculation indicates that the present rate of expansion is too slow to close the gap with the EU, particularly because newly constructed sections are completed intermittently and the EU network contin-

ues to develop. Continued investment under existing institutional conditions would improve individual routes but not create sufficiently rapid nationwide convergence in connectivity.

- ★ **Full EU accession produces the strongest acceleration, but the estimated convergence period still remains above 100 years.** Membership would improve access to cohesion and transport funding, integrate national priorities into the TEN-T framework and impose stronger requirements for project preparation, procurement, road safety and maintenance. However, the long remaining horizon also reflects the limits of road density as a policy objective: for a small and mountainous country, the economic value of infrastructure depends more on route quality, travel time and connection to European corridors than on reproducing the average physical density of the EU network.

- ★ **Access to the EU budget does not produce a separately quantified acceleration in the supplied calculations.** Additional grants and concessional financing could reduce the fiscal burden of major road, rail, energy and environmental projects, but financing alone would not resolve weaknesses in project selection, design, land acquisition, procurement and contract management. The Macedonian experience with delayed transport and municipal projects shows that absorption capacity and implementation quality determine whether available funds produce functioning infrastructure.

- ★ **Single market participation and institutional reforms also do not generate a separately shorter convergence horizon in the available results.** Market integration could increase freight flows and the economic return from Corridor VIII and Corridor X, while institutional reforms could improve investment planning and procurement. However, neither channel independently supplies the volume of long-term capital required to close the infrastructure gap. The scenarios therefore indicate that the strongest acceleration requires the combination of financing, TEN-T integration and implementation discipline associated with full accession.

Policy discussion & key recommendations

- ★ **Public investment management should prioritise completed and economically functional infrastructure rather than the announcement of a large number of projects.** Major investments should undergo independent appraisal of demand, economic return, climate resilience and maintenance costs before financing is approved. Procurement documentation, implementation schedules, contract amendments and cost revisions should be published, while specialised project-management teams should remain in place across political cycles. Multiannual maintenance allocations should be protected because postponing routine maintenance ultimately results in substantially higher reconstruction costs.
- ★ **Road policy should focus on the operational quality and safety of the core network while improving access for economically isolated municipalities.** Completion of the priority sections of Corridors VIII and X-d should be coordinated with border facilities, logistics centres and connections to industrial zones, so that shorter travel times translate into lower costs for firms. The national road-safety strategy and the responsible executive body should become operational, while EU standards for tunnel safety, road-infrastructure safety management and intelligent transport systems should be implemented. Local-road financing should be based on transparent assessments of accessibility, traffic and asset condition rather than the geographical distribution of small construction projects.
- ★ **Rail investment should be treated as an integrated regional-connectivity programme rather than a series of construction contracts.** North Macedonia should complete the eastern Corridor VIII connection with Bulgaria, prepare the western connection towards North Macedonia and continue rehabilitation of Corridor X. These investments need to be accompanied by modern signalling, electrification, competitive access to the network and operational reform of the railway companies. The proposed high-speed rail connection between Greece and Serbia would run along the Corridor X alignment through North Macedonia, and the national interest is to ensure that the route, the technical standards, the station locations and the arrangements for domestic services are settled early, so that the line serves Macedonian passenger and freight demand rather than transit alone. One-stop border controls at Tabanovce and effective protocols with Bulgaria, Greece and Kosovo would reduce freight delays and increase the commercial value of the infrastructure without requiring additional track kilometres.
- ★ **Installed electricity capacity is among the weakest infrastructure indicators and, despite being the only one to gain ground over the past year, would still need close to five decades to reach the EU average at the pace of the last five years. It should be expanded in line with the changing structure of generation rather than through incremental additions.** Grid-development plans should identify where transmission, distribution, storage and balancing investments are required before additional renewable capacity is connected. The interconnector with North Macedonia and planned reinforcement of the south-eastern, south-western and Pelagonia networks should be completed in coordination with regional electricity-market integration. Transparent connection rules and competitive procurement of balancing and storage services would reduce curtailment and enable renewable investment to replace, rather than merely supplement, carbon-intensive generation.
- ★ **Safely managed sanitation reaches 12.1% of the population, or 13% of the EU average, which makes it the weakest single indicator in this report, and it is diverging rather than converging. It should be treated as the country's first infrastructure priority, and the gap is overwhelmingly one of wastewater collection and treatment rather than of household facilities. Water and sanitation policy should therefore combine infrastructure investment with reform of municipal utilities.** Utilities require reliable data on network condition, metering, water losses, collection rates and operating costs, so that investment can target the areas with the greatest health and environmental benefit. Tariffs should gradually support operation and maintenance while protecting low-income households through targeted assistance. The Skopje wastewater-treatment project should be complemented by treatment and sewerage investment in other urban centres, while smaller and rural settlements require cost-appropriate decentralised solutions. Without improved utility governance, technical capacity and preventive maintenance, new facilities will not produce sustained convergence in safely managed water and sanitation services.

Conclusions

Macedonian convergence is progressing through isolated advances rather than through a broad transformation of economic and institutional capacity. Household incomes, employment, renewable-energy capacity, internet access and ICT activity have improved, but productivity, learning outcomes, healthcare capacity, environmental services and institutional effectiveness continue to lag. This imbalance makes convergence fragile: gains supported by transfers, labour shortages or individual investment cycles cannot be sustained unless they are converted into higher added value and stronger public-service delivery.

The country's central constraint is no longer the absence of strategies or formal alignment with EU standards but the capacity to implement reforms consistently. Across public administration, healthcare, education, environmental protection and infrastructure, adopted legislation is frequently followed by delayed secondary rules, insufficient staffing, fragmented responsibilities and weak monitoring. Political changes continue to disrupt institutional continuity, while limited project preparation and procurement capacity reduce the impact of both national expenditure and external assistance. Closing the implementation gap is therefore the most important horizontal reform.

Demographic decline is simultaneously improving selected headline indicators and weakening the foundations of long-term convergence. Emigration and population ageing reduce unemployment and strengthen wage growth, but they also deepen shortages of skilled workers, medical personnel, teachers, engineers and public-sector specialists. Without stronger education outcomes, higher labour-force participation and credible opportunities for professional development, wage convergence may increasingly reflect labour scarcity rather than productivity. This would weaken competitiveness while leaving vulnerable groups – particularly women,

Roma, rural households and young people outside employment or education – further behind.

The quality of public and private investment will determine whether the current development cycle produces lasting structural change. Transport corridors, renewable energy, digital infrastructure and municipal services can lower business costs and improve living standards, but only if projects are selected according to economic and social returns, completed transparently and maintained thereafter. Investment policy should therefore move away from measuring success by expenditure and physical inputs towards measuring it by effects on productivity, accessibility, service quality, emissions and territorial cohesion.

The scenario results show that EU integration can accelerate convergence, but cannot substitute for domestic reform. Full accession generally produces the strongest outcomes because it combines finance, market access, regulatory discipline and institutional commitments. Partial integration generates narrower benefits: single market participation supports competitive sectors, such as ICT, while EU funding can expand investment and social programmes, but neither automatically improves redistribution, healthcare outcomes, environmental enforcement or the rule of law. Some of the most persistent gaps remain largely unaffected even under the most ambitious integration pathways. Health outcomes continue to diverge from the EU benchmark under all five scenarios, including full membership, while convergence in road density remains more than a century away in every scenario. These results underline that EU integration can indeed provide additional resources, incentives and institutional anchors, but cannot by itself overcome structural constraints where progress depends primarily on sustained domestic policy implementation, institutional capacity and effective use of available resources. The policy priority should con-

sequently be to use the accession process as a mechanism for changing domestic incentives and implementation practices. EU-related financing should be tied to completed reforms and independently verifiable outcomes, including stronger learning, accessible healthcare, competitive appointments, final anti-corruption decisions, functioning environmental systems and completed infrastructure. Sustained convergence will depend less on the formal adoption of the *acquis* than on whether institutions, firms and citizens can use integration to raise productivity, expand opportunity and improve the quality of everyday life.

The recommendations that follow are grouped by the actor able to act on them.

a) Government of North Macedonia

- ★ Raise public health financing along a predictable multiannual path, including capital investment in public hospitals, equipment and primary care. Public spending, at 67% of the EU average, is what drives out-of-pocket payment to twice the EU share, and it constrains every other outcome in the pillar.
- ★ Make the reduction of inequality an explicit objective of social policy, combining a more progressive personal income tax with a multiannual increase in social protection spending from its present 2.1% of GDP, or 33% of the EU average.
- ★ Treat wastewater collection and treatment as the first infrastructure priority. Safely managed sanitation reaches 13% of the EU average, the weakest figure in this report, and is diverging.
- ★ Sustain last year's increase in education spending, which remains on a diverging five-year trend, and shift higher-education policy from

access to completion, since tertiary enrolment is converging while attainment is diverging.

- ★ Accompany income growth with a modern industrial policy that raises value added and productivity in identified high-potential activities, and widen the contributory base through a higher pension contribution rate, more progressive taxation and reduced undeclared work.
- ★ Restore momentum in digital public services – the weakest indicator in the digitalisation pillar, at 36% of the EU average, and its fastest-falling – by redesigning complete administrative procedures around interoperable registers and a free universal electronic identity system.
- ★ Protect judicial and prosecutorial independence, resource financial investigations and asset verification, and publish procurement data in machine-readable form. Control of corruption only improves under the institutional-reform pathway, by nine years.
- ★ Make the Energy Efficiency Fund operational with multiannual financing; pair renewable expansion with grid, storage and balancing investment; and fund a national clean-heating and public-transport programme for air quality.

b) EU institutions and EU member states

- ★ Recognise that only full accession changes North Macedonia's economic horizon materially, from beyond a century to around 50 years, against 84 and 85 years, respectively, for budget access and single market participation taken separately, and use that finding to argue for a credible and time-bound path rather than open-ended partial integration.

- ★ Increase financial support for North Macedonia, either through earlier access to the EU budget or through higher Instrument for Pre-accession Assistance (IPA) allocations, as the results show that access to EU funding has the strongest impact on convergence among the individual accession channels analysed.
- ★ Front-load single market access for ICT services, the one indicator in this report for which single market access on its own delivers the same result as full membership, and support Macedonian firms in moving from subcontracting towards exporting products of their own.
- ★ Link Growth Plan and IPA disbursement to verified outcomes, such as competitive senior appointments, a functioning asset-verification system, implemented audit recommendations and completed wastewater infrastructure, rather than to adopted strategies.
- ★ Fund technical assistance for project preparation, procurement and contract management. The recurring finding across pillars is that absorption capacity, rather than the availability of finance, determines whether investment becomes functioning infrastructure.
- ★ Address health-workforce mobility explicitly. Easier professional movement under the single market accelerates the departure of doctors and nurses, and life expectancy diverges under every scenario, including full membership.

c) Regional and international organisations

- ★ Treat Corridor VIII and Corridor X as a single regional programme, covering the eastern connection to Bulgaria, the western connection towards North Macedonia, the rehabilitation of Corridor X and the alignment through North Macedonia of any high-speed project between Greece and Serbia.
- ★ Support regional electricity-market integration and cross-border grid reinforcement, so that new renewable capacity replaces rather than supplements carbon-intensive generation.
- ★ Continue concessional financing for water, wastewater and energy-efficiency investment, paired with strengthened oversight of procurement, implementation and subsequent maintenance.
- ★ Support cross-border cooperation on air quality, which is a shared regional problem and the weakest indicator in the environment pillar.

d) Civil society organisations and think tanks

- ★ Monitor implementation rather than adoption, following secondary legislation, staffing, budget execution and the institutional response to audit and anti-corruption findings, as this report identifies the implementation gap as the central horizontal constraint.
- ★ Track public procurement and major investment projects, where financial flows and administrative discretion are both largest.
- ★ Produce independent evidence on the distribution of income and on access to health and education services for Roma communities, rural households and low-income groups, where official monitoring is weakest.
- ★ Strengthen cooperation among think tanks in North Macedonia and across the Western Balkans, so that comparable evidence supports coordinated responses to shared regional challenges.

Methodological note

What do the different numbers mean?

- ★ **% of EU average:** shows the current level of a specific indicator compared with the EU average.
- ★ **Year-on-year rate of change:** shows how the gap to the EU changed compared with the previous year in percentage points (pp).
- ★ **Rate of change over the past five years:** shows the average annual pace of change over the last five years, capturing whether the indicator has been improving or worsening recently.
- ★ **Years to EU:** shows how long it would take for a country to reach the EU average for the given indicator, assuming the recent pace of change continues.

How do we calculate the numbers for individual indicators?

% of EU Average: calculated as the native value of a certain indicator in a certain country, compared with the corresponding EU average.

Example: If the average wage in Serbia is EUR 1,150 and the average wage in the EU is EUR 3,000, then Serbia's wage level is 38% of the EU average (1,150/3,000).

For indicators where lower values mean better outcomes (e.g. unemployment, child mortality, etc.), the calculation is reversed, so that a higher percentage always indicates better performance.

Example: If the unemployment rate is 11% in Kosovo and 6% in the EU, Kosovo's relative level is 55% of the EU average (6/11).

Rate of change over the past five years: calculated as the simple average of the year-on-year changes in the indicator measured as a percentage of the EU average, over the last five years.

Example: If public health spending in North Macedonia, measured as a share of the EU average, changed

by -0.4, +7.2, -2.7, -2.1 and +0.2 pp, the five-year rate of change is +0.4 pp.

Years to EU: calculated by comparing the remaining gap to the EU average with the speed of progress over the last five years. It shows how many years it would take to close the gap if recent trends continue.

Example: If Montenegro's GDP per capita is 55% of the EU average (a gap of 45 pp) and it has been catching up by 0.9 pp per year, it would take about 50 years to reach the EU level.

How do we calculate the numbers for the pillar and overall averages?

% of EU Average: calculated as the simple average of all indicators in the pillar, each expressed as a percentage of the EU average.

Example: If North Macedonia's six environment indicators are 50%, 55%, 60%, 60%, 65% and 70% of the EU average, the overall Environment pillar stands at 60% of the EU average.

Rate of change over the past five years: calculated as the average of the year-on-year changes in the overall pillar's value measured as a percentage of the EU average, over the last five years.

Example: If Bosnia and Herzegovina's Education pillar changed by +0.5, +5.6, +0.2, +0.8 and +1.0 pp, the five-year rate of change is +1.6 pp.

Years to EU: calculated by comparing the remaining gap to the EU average for the overall pillar, with the pace of progress over the last five years.

Example: If Serbia's Digitalisation pillar stands at 98% of the EU average and has been improving by 1.0 pp per year, it would take two years to reach the EU level.

What does it mean when an indicator is 'converged' or 'diverging'?

Converged: An indicator is considered converged if its value as a percentage of the EU average is above

100%. This means the country has reached or exceeded the EU average in that area.

Example: If government spending on health in Montenegro is 105% of the EU average (6.9% of GDP vs 6.5%), Montenegro is considered converged.

Diverging: An indicator is considered diverging if its average change over the past five years (measured as a percentage of the EU average) is negative. This means the country has been moving further away from the EU average.

Example: If road density in North Macedonia, expressed as a percentage of the EU average, has been declining by 0.4 pp per year, North Macedonia is diverging.

How do we treat missing values?

Missing values between years: When data for an indicator is missing for one or more intermediate years, we substitute the missing value with the last available one for that country (in native units).

Example: If North Macedonia is missing values for Internet access in 2022 and 2023, we use the 2021 value (83.7%) for our calculations.

Missing values for the last year: If at least four of the six Western Balkan countries have data for the most recent year, we include that year and use previous values for the others. If fewer than four countries have data, we exclude that year from EU comparisons.

Example: For tertiary education in 2023, North Macedonia and Montenegro were missing data, but since four others had it, we included 2023 and used 2022 values for the missing countries. By contrast, if only one country had data (e.g. 2024 for enterprises with websites), 2024 is excluded.

Missing values at the beginning: If data start late, no EU-relative or pillar calculations are done for earlier missing years.

Example: For average pensions, Kosovo data start from 2015, so calculations begin from 2015 onward.

How we calculate pillar/area values for 2025 when some indicators are missing: We use the last available year's value for any missing indicators.

Example: To calculate the percentage of the EU average for Education in 2025, we take:

- ★ 2023 values for Public spending on education
- ★ 2024 values for Tertiary enrolment, Tertiary attainment, Pre-primary education and NEET
- ★ 2025 value for the Harmonised test scores

Which EU accession scenarios do we simulate?

To assess how different EU integration options may influence the pace of convergence across the eight pillars, we simulate projections under four alternative scenarios:

- ★ **Full EU membership:** Western Balkan economies join the EU immediately, with full rights and obligations, including access to the EU budget.
- ★ **EU budget transfers:** Western Balkan economies obtain full access to the EU budget and receive transfers as if they were member states, but without formal membership.
- ★ **EU single market access:** Western Balkan economies gain full access to the EU single market, without other elements of membership (e.g. institutional alignment or budget transfers).
- ★ **Institutional reforms:** Western Balkan economies undertake reforms equivalent to those required of EU member states, without membership or transfers.

Which indicators do we simulate?

We simulate **one indicator** from each of the **eight pillars**:

- ★ **Economy:** GDP per capita at PPS
- ★ **Social:** income share of the bottom 20%
- ★ **Health:** life expectancy

- ★ **Education:** tertiary enrolment
- ★ **Institutions:** control of corruption
- ★ **Environment:** energy intensity of the economy
- ★ **Digitalisation:** ICT exports
- ★ **Infrastructure:** road density

How do we simulate the scenarios?

We employ a **Structural Equation Modelling (SEM) approach** to estimate how EU accession affects GDP growth and other development outcomes through various transmission channels. SEM is particularly well suited for this analysis, as it allows us to disentangle the pathways through which EU integration exerts its effects.

Concretely, we focus on four main channels:

- ★ higher EU budget transfers,
- ★ increased exports to the EU,
- ★ net migration and
- ★ institutional improvements.

FDI net inflows are also estimated as a potential channel, but since their effect on growth is small and imprecisely estimated, we do not vary FDI across scenarios.

The analysis is conducted in a **panel setting** covering the period **from 1996 to 2024**. It includes **Bulgaria, Romania and Croatia as benchmarks, alongside the six Western Balkan economies**.

The concrete specifications for each of the eight simulated indicators are as follows:

- ★ **GDP per capita growth** depends on initial GDP (as in standard convergence models), the previous year's GDP growth, EU budget transfers, exports to the EU, net migration, control of corruption, FDI inflows and country fixed effects. These variables, in turn, are affected by EU accession.
- ★ The change in **income share of the bottom 20%** is linked to EU budget transfers and control of corruption, both of which are linked to EU accession.
- ★ The change in **life expectancy** is modelled as a function of GDP growth and net migration, both of which are influenced by EU accession.
- ★ The change in **tertiary enrolment** also depends on GDP growth, which itself depends on EU accession, as explained above.
- ★ The change in **energy intensity** is modelled as a function of GDP growth and control of corruption, both of which are tied to EU accession.
- ★ The level of **control of corruption** is modelled to be affected directly by EU accession, as it is one of the channels through which EU accession affects GDP growth.
- ★ **ICT exports** are linked to GDP growth, EU budget transfers and exports to the EU, all of which are influenced by EU accession.
- ★ **Road density** depends on FDI, exports to the EU and net migration. Since FDI is held fixed across scenarios, road density outcomes are in practice driven by exports and net migration.

These specifications were determined empirically, by running different regressions with different combinations of variables and checking the significance of the coefficients.

The regression estimates were then used to generate simulations of the four scenarios. This was done by augmenting the rate of change from the baseline (status quo) scenario – which is the average over the last five years – with the estimated effect of the EU accession scenario.



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