Economic Convergence Scoreboard for the Western Balkans 2023

OECD

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Economic Convergence Scoreboard for the Western Balkans 2023

This document assesses the level of economic convergence of the Western Balkans with the European Union and the OECD. It was prepared as background for discussions at the Berlin Process Western Balkan Leaders' Summit 2023. The Scoreboard featured illustrates the region's convergence across five clusters key to achieving sustainable and inclusive economic growth: business environment, skills, connectivity and infrastructure, greening, and digitalisation. It primarily draws on the data and input collected as part of decade-long policy assessments by the OECD, most notably the Western Balkans Competitiveness Outlook and SME Policy Index for the Western Balkans and Türkiye. This represents the initial efforts to present the Western Balkans' economic convergence, and the scoreboard will continue to evolve through expanded data and analyses.

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BETTER POLICIES FOR BETTER LIVES

Abbreviations

ALB	Albania
BIH	Bosnia and Herzegovina
CEER	Council of European Energy Regulators
CO	Western Balkans Competitiveness Outlook
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign direct investment
GDP	Gross domestic product
GFCF	Gross fixed capital formation
ICT	Information and communication technologies
IEA	International Energy Agency
ILO	International Labour Organization
IMF	International Monetary Fund
ITU	International Telecommunication Union
KOS	Kosovo
LPI	World Bank's Logistics Performance Index
MKD	North Macedonia
MNE	Montenegro
NEET	Not in employment, education or training
OECD	The Organisation for Economic Co-operation and Development
PISA	OECD Programme for International Student Assessment
PPP	Purchasing power parity
R&D	Research and development
SMEs	Small and medium-sized enterprises
SMEPI	SME Policy Index for the Western Balkans and Türkiye
SRB	Serbia
STI	Science, Technology and Innovation
STRI	OECD Services Trade Restrictiveness Index
TFI	Trade Facilitation Index
WB	World Bank
WB6	Western Balkan Six economies

Key findings

- Despite growth in gross domestic product (GDP) per capita of 79% over the past two decades, the Western Balkans economies have made limited progress in closing the gap with the European Union (EU), with regional GDP per capita at just 38% of the EU average in 2022. This represents a modest but continued improvement from 35% of EU levels five years ago and 32% ten years ago.

- Five primary policy areas, or "clusters" – i) business environment, ii) skills, iii) connectivity and infrastructure, iv) greening, and v) digitalisation – are identified as key drivers of economic convergence and sustainable and inclusive growth in the Western Balkans. These draw on the findings of the *Western Balkans Competitiveness Outlook*.

- Business environment is the cluster with the highest degree and pace of convergence with EU and OECD levels. This success is largely the result of the region's high degree of trade and investment openness and integration, as well as recent improvements related to access to finance.

- The skills cluster displays the lowest regional performance, with most indicators not exceeding half of EU and OECD averages. There remains substantial room to improve both policies and outcomes, particularly with respect to skills needed to boost research and innovation.

- Progress towards convergence in the connectivity and infrastructure cluster has been mixed. Improvements have been particularly evident in the energy sector, while they have lagged in the transport sector – despite extensive EU investment in both domains in support of the Western Balkans' EU accession prospects.

- While the Western Balkan economies exhibit strong outcomes in the greening cluster, regional performance over time reveals a relative deterioration compared to the EU and OECD. Specifically, there have been worsening outcomes in waste generation and renewable energy, while areas such as CO_2 emissions and energy productivity show signs of stagnation.

- Performance in the digitalisation cluster has been largely positive, as the region has slowly begun converging toward EU and OECD levels. The one exception to the otherwise positive trajectory is the very low proportion of individuals with basic or above digital skills. This confirms the findings from the skills cluster, notably the need for increased policy attention to address skills deficiencies.

Context

On 21 June 2003, the European Union (EU) and Western Balkan economies – Albania, Bosnia and Herzegovina, Kosovo*, Montenegro, North Macedonia and Serbia, the WB6 – convened at the Thessaloniki Summit, where they adopted a Declaration emphasising that "*the future of the Balkans is within the EU, and solidifying the EU's unwavering support for WB6 integration*".[1] Over the past two decades, this commitment has shaped the region's journey towards accession, with the focus on achieving economic convergence with the EU.

Since then, there have been noticeable advancements in the region's economic performance. Between 2003 and 2022, the WB6's average GDP per capita[2] increased by 79%, rising from USD 9 725 to USD 17 400 (Figure 1)[3], while the EU average increased by 27% from USD 35 950 to USD 45 700. WB6's growth levels have exceeded those of the EU over the past two decades, helping to bring the region's GDP per capita levels closer to those of the EU. Convergence, in fact, occurred every year except in 2008 and 2020. In those years, shaped by the financial crisis and the COVID-19 pandemic respectively, the WB6 GDP per capita decline exceeded that of the EU. This serves as evidence that external shocks disproportionately affect WB6 economies, highlighting the need for increased resilience. Conversely, the region's most rapid convergence was achieved between 2004 and 2007. During this period, the WB6 economies saw an average convergence rate of 3.38% - two times the rate observed between 2009 and 2019 (1.66%).

Yet, despite the positive convergence trend, the Western Balkan economies have made only modest headway in narrowing the gap that separates them from their EU and OECD peers. In 2022, the Western Balkans' GDP per capita at purchasing power parity (PPP) was only slightly over one-third (38%) of both the EU and OECD averages, which stood at USD 45 700 and USD 46 000, respectively (Figure 1). Although this represents an 11 percentage-point increase from 2003, when the WB6 average was a mere 27% of those of the EU and OECD, it underscores the substantial distance the region must cover to achieve full convergence. At the current average growth levels for both the Western Balkans and the EU,[4] convergence would only be achieved in 2076 – in other words, in more than five decades.

However, the rate of convergence varies across economies due to the base effect, occurring more rapidly in those with a lower starting level of GDP per capita. For instance, between 2008 and 2022, both Kosovo and Bosnia and Herzegovina reported a 10 percentage-point increase in their GDP per capita (PPP) relative to the EU average. In contrast, Montenegro and North Macedonia saw only a five-percentage-point increase during the same period, indicating that higher-income economies in the region experienced a slower pace of convergence. However, while differences between individual economies in the Western Balkans have decreased in size, significant disparities persist. Notably, Kosovo's GDP per capita (PPP) in 2022 stood at only 27% of the EU average, while Montenegro emerged as the region's top performer with a convergence rate of 50% (Figure 1)

While GDP per capita is the main criterion for evaluating economic convergence, it alone cannot explain underlying issues that define the pace of the process. This document aims to identify and analyse the areas with an impact on the Western Balkans' economic convergence. The following section evaluates regional

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* This designation is without prejudice to positions on status, and is in line with United Nations Security Council Resolution 1244/99 and the Advisory Opinion of the International Court of Justice on Kosovo's declaration of independence.

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1. European Commission (2003), "EU-Western Balkans Summit Thessaloniki, 21 June 2003."

2. Note that the WB6 average between 2003 and 2007 contains only data for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, and Serbia. In 2008, Kosovo declared its independence; data for this economy are only available starting that year. In this context, GDP per capita refers to GDP per capita at purchasing power parity (in constant 2017 international dollars), not nominal GDP per capita. this context, GDP per capita refers to GDP per capita at purchasing power parity (in constant 2017 international dollars), not nominal GDP per capita.

3. World Bank (2023), World Development Indicators

4. To calculate the time until convergence, an average annual growth rate of 3.1% for the Western Balkans and 1.27% for the EU were used, based on data from 2003 to 2022.

Figure 1. **GDP per capita convergence of the Western Balkans**

Note: The Kosovo 2003 data point refers to the year 2008.
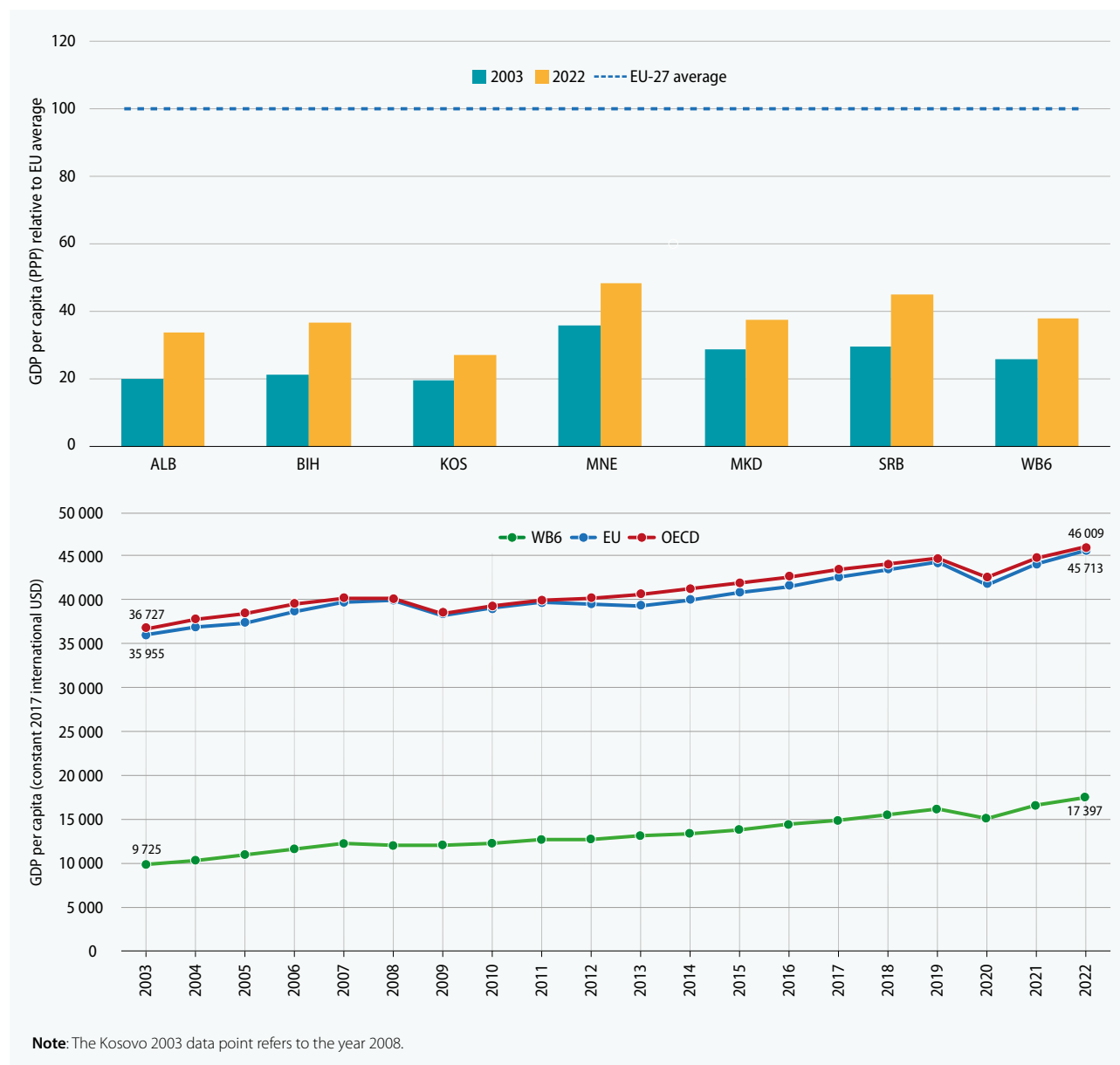
progress across five main areas (or "clusters"): business environment, skills, connectivity and infrastructure, greening, and digitalisation. The list of clusters does not aim to be exhaustive, nor does the cluster approach attempt to explain all the reasons underpinning the WB6 economies' convergence.

Each cluster plays a significant role in long-term GDP growth. A solid business environment and well-functioning public infrastructure promote capital accumulation through increased private investment. Skills development encourages human capital growth,

leading to a more productive labour force. A focus on efficient resource use and environmental aspects through the "greening cluster" is essential to ensure economic growth is sustainable, while digitalisation is a clear catalyst for total factor productivity growth.

The region's performance on these clusters to date, along with policy recommendations aimed at addressing bottlenecks to enhance economic convergence, will be presented in-depth in the upcoming edition of the OECD flagship publication, *Western Balkans Competitiveness Outlook 2024*.

Economic convergence scoreboard

The scoreboard below highlights the convergence performance of the Western Balkans relative to the EU (policy outcomes) and the OECD (good policy practices, standards and tools) across five clusters: business environment, skills, connectivity and infrastructure, greening, and digitalisation.

Table 1. **Economic convergence of the Western Balkans (WB6) in selected indicators**

The data related to the outcome indicators show the WB6 regional performance relative to the EU, i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0 · 1/3 · 2/3 · 1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	1.10	1.05	1.12	+0.02	Services Trade Restrictiveness Index	1.01	1.06	1.15	+0.14
					Trade Facilitation Index	0.68	0.74	0.78	+0.10
					CO Trade Policy	0.58	0.57	0.68	+0.10
SMEs in total exports (% of exports)	–	1.08	0.97	-0.11	SME Policy Index	0.65	0.70	0.73	+0.08
FDI net inflows (% of GDP)	1.99	1.34	3.52	+ 1.54	FDI Restrictiveness Index	1.97	1.97	1.94	-0.03
Private gross fixed capital formation (% of GDP)	0.98	0.96	0.94	-0.04	CO Investment Policy and Promotion	0.56	0.55	0.60	+0.04
New business density (registrations per 1,000 people)	1.08	1.02	1.06	-0.02					
Domestic credit to private sector (% of GDP)	0.49	0.50	0.53	+0.04	CO Access to Finance Policy	0.36	0.52	0.52	+0.16
Bank nonperforming loans (% of total gross loans)	0.60	0.83	0.76	+0.16					
Estimated informal employment (% of total employment)	0.31	0.30	0.30	-0.01	CO Anti-corruption Policy	0.52	0.43	0.50	-0.02
Control of corruption	0.61	0.62	0.60	-0.01					
SKILLS									
Employment rate (% of pop. 15-64)	0.73	0.74	0.80	+0.07	CO Employment Policy	0.47	0.43	0.52	+0.05
NEET rate (% of pop. 15-24)	0.46	0.48	0.47	+0.01					
Output per hour worked (2017 PPP USD GDP)	0.42	0.43	0.41	+0.01					
PISA average score	0.81	0.79	0.84	+0.03	CO Education Policy	0.48	0.49	0.60	+0.12
Lifelong learning (% of pop. 25-64)	–	0.42	0.41	-0.01					
Tertiary education achievement (% of pop. 25-34)	–	0.74	0.83	+0.09	CO Science, Technology, and Innovation Policy	0.30	0.32	0.42	+0.12
R&D expenditure (% of GDP)	0.16	0.20	0.21	+0.05					

Table 1. **Economic convergence of the Western Balkans (WB6) in selected indicators** *(continued)*

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km^2)	0.44	0.43	0.42	-0.02	CO Transport policy	0.34	0.40	0.40	+0.06
Road infrastructure density (km per 100 km^2)	–	0.30	0.28	-0.02					
Road in total freight transport (%)	1.09	1.09	0.92	-0.17					
Logistics Performance	0.74	0.74	0.78	+0.04					
Total power losses (% of injected energy)	0.38	0.44	0.42	+0.04	CO Energy Policy	–	0.38	0.60	+0.22
Average time to obtain electricity (days)	0.90	0.90	1.07	+0.17					
Mean download speed (Mbps)	–	0.38	0.38	0.00	CO Digital Society	0.46	0.46	0.48	+0.02
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	0.48	0.49	0.46	-0.02	CO Environment Policy	0.28	0.35	0.42	+0.14
Energy productivity (output produced per unit of gross available energy)	0.37	0.37	0.35	-0.02					
Renewable energy consumption (% of gross final energy consumption)	1.76	1.55	1.47	-0.29					
Mean population exposure to PM2.5 (micrograms per m^3)	0.54	0.52	0.56	+0.02					
Waste generation (kg per capita)	2.00	1.64	1.44	-0.56					
Municipal waste disposed of in landfills (% of municipal waste)	0.40	0.34	0.28	-0.12					
Water exploitation intensity	1.32	1.27	1.40	+0.08	CO Agriculture Policy	–	0.55	0.54	-0.01
Fertiliser consumption (kg per hectare of arable land)	1.69	1.11	1.27	-0.42					
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.35	0.49	0.61	+0.26	CO Digital Society	0.46	0.46	0.48	+0.02
Mobile cellular penetration (subscriptions per 100 people)	0.94	0.96	0.96	+0.02					
Individuals with basic or above basic digital skills (% of population)	–	0.29	0.29	0.00					
Individuals having made digital payments (% of population)	–	0.66	0.69	+0.03	Digital Services Trade Restrictiveness Index	0.71	0.87	0.89	+0.18
ICT specialists in total employment (% of employment)	–	0.57	0.63	+0.06					

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

The performance of the Western Balkans was strongest within the **business environment cluster**, showcasing both strong evidence of convergence as well as approaching absolute levels of the EU and OECD. Conversely, the region's weakest performances are in the **greening cluster,** which showed the highest proportion of worsening outcomes in terms of trailing further behind EU levels, and the **skills cluster,** which has the greatest gap with the EU.

BUSINESS ENVIRONMENT

The improved business climate results in higher trade and investment across the Western Balkans.

The regional success in the **business environment cluster** mirrors the WB6's high degree of openness and integration in both trade and investment. The regional average for trade openness has consistently exceeded that of the EU. Moreover, the WB6 exhibit fewer legal and regulatory barriers to global trade in services compared to OECD countries. In fact, scores from the *OECD's Services Trade Restrictiveness Index (STRI)* not only indicate that the Western Balkans are, on average, less restrictive than the OECD but also reveal a widening gap: while OECD countries have become slightly more restrictive on average, the WB6 economies have become less restrictive, signalling the region's increasingly strong performance. The region also maintains relatively few statutory restrictions on foreign direct investment (FDI), rendering them approximately half as restrictive as the OECD average according to the *OECD FDI Regulatory Restrictiveness Index*.

Even in the areas where the WB6 do not outperform the EU, they have made significant progress in recent years. For instance, the regional average for the *Trade Facilitation Index* has been steadily rising, approaching 80% of OECD levels. This convergence in external-facing aspects is mirrored by internal advancements in the health and resilience of the WB6's financial systems. For instance, over the past decade, the regional average of non-performing loans in banks has consistently decreased, and this rate is now only 1.5 percentage points higher than that of the EU. All these factors have contributed to creating a more conducive and welcoming business environment, which in turn encourages new business creation: the density of new businesses in the Western Balkans has consistently been above EU levels.

The one exception to this overarching convergence in the business environment is informal employment, which has remained stagnant at a rate three times higher than the average EU level since 2008. All Western Balkan economies have high levels of informal employment that in turn distorts the level playing field, as businesses relying on informal labour can bypass labour regulations, taxation, and other compliance costs to which formal businesses must adhere. As such, addressing this phenomenon in the region necessitates closer attention in order to achieve further convergence toward EU and OECD averages.

It is important to note that these outcome data do not include the most recent developments in the region, notably the slowing growth and increasing inflationary pressures, partially induced by Russia's war of aggression against Ukraine. Such developments might alter the trajectory of the region's progress. Nevertheless, the examined indicators present a narrative that aligns with policies: the region's performance in the *Competitiveness Outlook*'s Access to Finance dimension has dramatically improved, largely driven by the WB6's alignment with international banking regulations, as well as by the measures easing access to finance for businesses.

SKILLS

Skills deficiencies, coupled with high economic inactivity levels, especially among the youth, constrain productivity in the Western Balkans.

Overall, the region's progress in the **skills cluster** is limited, as the indicators not only exhibit significantly lower values compared to the EU average but also a notably slow rate of improvement over time. On the positive side, large strides forward have been made on policy alignment with OECD standards and tools, as shown by convergence levels for the Employment Policy, Education Policy, and the Science, Technology and Innovation (STI) dimensions of the *Competitiveness Outlook*. However, while these advances are promising, they remain modest; as of 2021, none of the three examined policy areas had achieved more than 60% convergence with OECD standards.

In terms of outcomes, employment rates in the region have the highest degree of convergence, rising from 73% to 80% of the EU average over the examined period. However, other employment metrics, namely

the proportion of youth not in employment, education, or training (NEET) and labour productivity (output per hour worked), have stagnated at less than half of the EU average. Conversely, education outcomes have begun converging. The regional average for the *OECD's Programme for International Student Assessment (PISA)* slightly improved, while the proportion of tertiary education achievement significantly increased by 9 percentage points. However, lifelong learning, measured as the proportion of adults who have participated in education of training, remains slightly above 40% of the EU average with no improvement over time. Together, these employment and education outcomes reflect key regional challenges, including the limited labour market relevance of education systems and notable skills gaps.

Another area of weaker performance was the region's limited research and development (R&D) expenditure, which was only 0.5% of regional GDP (compared to 2.3% in the EU) in 2020. This corresponds with the low scores for the STI dimension which, despite its progress, remains one of the areas of lowest performance for the region. These indicators coalesce to present a narrative of sluggish convergence, impeded by persistent youth unemployment and skills imbalances.

CONNECTIVITY & INFRASTRUCTURE
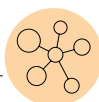
The Western Balkans have made strides in improving energy infrastructure, but the transportation sector lags behind.

The **connectivity and infrastructure cluster** exhibits overall convergence, although the degree of progress varies by policy area. In the digital domain, policies and outcomes seem to be stagnating, as evidenced by the mean download speed and the Digital Society dimension of the *Competitiveness Outlook*, respectively. Both indicators are also low compared to EU and OECD averages, underscoring the need to focus efforts on bolstering digital infrastructure.

In terms of energy policy, the region made significant progress in reforming its legislation, as evidenced by the *Competitiveness Outlook's* Energy Policy scores. This was driven in part by efforts on the part of the WB6 to align with the EU's Third Energy Package and growing investment in energy infrastructure boosted by the *Western Balkan Investment Framework*. Energy policy outcomes have also shown indications of progress over

the period examined; for instance, the average time required to obtain a permanent electricity connection in the Western Balkans has decreased by 33% from 2010 to 2020 and is now lower than the EU (88.2 days versus 93.1, respectively). However, there is still room for improvement, namely with respect to total power losses, which are more than double those in the EU. As such, the narrative presented by these indicators reveals that policies have led to improved energy infrastructure and services, but that there is still room to continue finally closing these gaps.

Transport outcomes reveal a more complicated picture. The region's transport sector faces challenges from insufficient investment in infrastructure, out-of-date legislation, and difficulties with data collection. Neither rail nor road infrastructure density has much improved in recent years, remaining far below EU levels. Moreover, the share of road freight transport rose from 60% of total inland freight transport in 2008 to 82.3% in 2021, thereby surpassing EU levels. However, there was some observed progress in the transport sector, namely an improved regional score in the Logistics Performance Index that assessed the efficiency and effectiveness of an economy's logistics network. Some of this progress might be partially attributed to the EU's Connectivity Agenda 2015-2020, which supported 37 transport projects with nearly EUR 870 million in grants.

GREENING

Insufficient decarbonisation efforts and poor resource management pose a risk to sustainable economic growth.

The region's performance in the **greening cluster** presents a multi-faceted picture. On the one hand, there has been a marked improvement in policy alignment with the EU and OECD. The *Competitiveness Outlook's* Environment Policy dimension shows that the region has improved its performance by close to 15%, thereby narrowing the policy gap with OECD best practices since 2016. This suggests that governments in the region recognise the importance of strong environmental policies, in part influenced by initiatives such as the 2020 Green Agenda for the Western Balkans that seek to align WB6 policies with those of the EU.

On the other hand, notable disparities persist across most policy outcomes. CO_2 emissions per GDP by the

WB6 have consistently remained at approximately double the EU levels between 2008 and 2020. The gap for energy productivity is even more worrying, as it has remained around one third of the EU levels during the same period.

On some other indicators, the Western Balkans, on average, fare better than the EU, but their relative performance over the years has either stagnated or worsened. For instance, although the region boasts a relatively high proportion of renewable energy consumption at 30.5%, the EU has increased its share more significantly, narrowing its gap with the Western Balkans. Additionally, upsurges in fertiliser use and waste generation, both of which started from low levels compared to the EU, further reflect this trend. For instance, between 2008 and 2020, fertiliser consumption in the Western Balkans increased by 116%, compared to a 16% increase in the EU.

All these developments indicate that economic growth in the Western Balkans has not always been accompanied by commensurate improvements in environmental sustainability or resource management, highlighting the need for enhanced implementation of greening policies.

DIGITALISATION

While digital infrastructure and technologies have advanced in the Western Balkans, digital skills have not kept pace.

The **digitalisation cluster** exemplifies the Western Balkans' notable convergence toward EU and OECD levels. The observed progress can be partially attributed to the region's imperative to embrace digitalisation as part of its EU accession goals (via the Digital Agenda for the Western Balkans) as well as to enhance resilience and recover from the effects of the COVID-19 pandemic.

The WB6 boast relatively low levels of restrictiveness on trade in digitally enabled services, approaching 90% of OECD levels. This relative absence of barriers has supported the growing adoption of digital payments, although this figure still falls short of the EU level (69% in the period 2018-22). Progress in regional performance in the *Competitiveness Outlook*'s Digital Society dimension is less apparent. Thus, although there were some marginal advancements, legal frameworks can still be

improved. Most economies are nevertheless doing well in terms of mobile cellular penetration, consistently reporting around 95% of EU levels and are continuing to approach this benchmark. Moreover, fixed broadband internet penetration in the Western Balkans has risen dramatically, with the regional rate increasing more than four-fold from 2008 to 2021 (although this average is 13 points lower than the EU average). There has been a marginal rise in the proportion of ICT specialists in total employment, separated by only one percentage point from EU levels. An outlier to this overarching convergence is the proportion of individuals with basic or above basic digital skills: whereas approximately 27% of the EU possess at least the basic level of skills, only 8% of Western Balkan citizens possess this same capacity.

CONCLUSION

Increased policy alignment with the EU needs to be accompanied by effective implementation to accelerate economic growth.

It is apparent that regional performance varies by cluster. However, one overarching trend is that while policy design in the Western Balkans increasingly incorporates and emulates OECD-EU good practices, the implementation of these policies must be stepped up to achieve the desired outcomes and to boost economic growth. As such, the region's governments need to prioritise improving outcomes across all five clusters. This focus will not only help to close the gap separating them from their OECD and EU peers but also will broadly bolster the competitiveness and resilience of the Western Balkan economies.

Economy profiles

Albania
Economy profile

Table 2. **Economic convergence of Albania (ALB) in selected indicators**
The data related to the outcome indicators show the ALB performance relative to the EU, i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0 1/3 2/3 1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	0.95	0.86	0.80	-0.15	Services Trade Restrictiveness Index	1.25	1.20	1.27	+0.02
					Trade Facilitation Index	0.69	0.79	0.81	+0.12
					CO Trade Policy	0.58	0.56	0.66	+0.08
SMEs in total exports (% of exports)	–	1.28	1.37	+0.09	SME Policy Index	0.59	0.62	0.68	+0.09
FDI net inflows (% of GDP)	2.12	2.03	4.17	+2.05	FDI Restrictiveness Index	1.12	1.12	1.11	-0.01
Private gross fixed capital formation (% of GDP)	1.17	1.05	0.90	+0.27	CO Investment Policy and Promotion	0.60	0.52	0.62	+0.02
New business density (registrations per 1,000 people)	0.37	0.42	0.45	+0.08					
Domestic credit to private sector (% of GDP)	0.39	0.41	0.39	0.00	CO Access to Finance Policy	0.36	0.50	0.50	+0.14
Bank nonperforming loans (% of total gross loans)	0.34	0.55	0.57	+0.23					
Estimated informal employment (% of total employment)	0.17	0.16	0.15	-0.02	CO Anti-corruption Policy	0.48	0.36	0.42	+0.06
Control of corruption	0.50	0.56	0.56	+0.06					
SKILLS									
Employment rate (% of pop. 15-64)	0.93	0.89	0.94	+0.01	CO Employment Policy	0.52	0.52	0.56	+0.04
NEET rate (% of pop. 15-24)	0.41	0.41	0.38	-0.03					
Output per hour worked (2017 PPP USD GDP)	0.30	0.33	0.29	-0.01					
PISA average score	0.79	–	0.87	+0.12	CO Education Policy	0.48	0.48	0.66	+0.18
Lifelong learning (% of pop. 25-64)	–	0.91	0.91	0.00					
Tertiary education achievement (% of pop. 25-34)	–	0.66	0.88	+0.22	CO Science, Technology, and Innovation Policy	0.26	0.26	0.36	+0.10
R&D expenditure (% of GDP)	0.08	–	–						

Table 2. **Economic convergence of Albania (ALB) in selected indicators** *(continued)*

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km^2)	0.26	0.22	0.15	**-0.11**	CO Transport policy	0.28	0.54	0.50	**+0.22**
Road infrastructure density (km per 100 km^2)	–	0.10	0.09	-0.01					
Road in total freight transport (%)	0.73	0.74	–	+0.01					
Logistics Performance	0.71	0.68	0.76	**+0.05**					
Total power losses (% of injected energy)	–	–	–		CO Energy Policy	–	0.38	0.64	**+0.26**
Average time to obtain electricity (days)	0.65	0.79	1.32	**+0.67**					
Mean download speed (Mbps)	–	0.24	0.23	-0.01	CO Digital Society	0.46	0.58	0.50	**+0.04**
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	1.24	1.12	1.09	**-0.15**	CO Environment Policy	0.24	0.36	0.38	**+0.14**
Energy productivity (output produced per unit of gross available energy)	0.60	0.55	0.56	**-0.04**					
Renewable energy consumption (% of gross final energy consumption)	2.27	1.96	1.94	**-0.33**					
Mean population exposure to PM2.5 (micrograms per m^3)	0.79	0.75	0.82	**+0.03**					
Waste generation (kg per capita)	–	–	–						
Municipal waste disposed of in landfills (% of municipal waste)	–	0.41	0.30	**-0.11**					
Water exploitation intensity	3.06	2.49	3.34	**+0.28**	CO Agriculture Policy	–	0.58	0.56	**-0.02**
Fertiliser consumption (kg per hectare of arable land)	1.54	1.54	1.85	**+0.31**					
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.15	0.27	0.45	**+0.30**	CO Digital Society	0.46	0.48	0.50	**+0.04**
Mobile cellular penetration (subscriptions per 100 people)	0.77	0.98	0.76	-0.01					
Individuals with basic or above basic digital skills (% of population)	–	0.15	0.15	0.00					
Individuals having made digital payments (% of population)	–	0.30	0.39	**+0.09**	Digital Services Trade Restrictiveness Index	0.84	1.37	1.38	**+0.54**
ICT specialists in total employment (% of employment)	–	–	–						

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

Bosnia and Herzegovina
Economy profile

Table 3. **Economic convergence of Bosnia and Herzegovina (BIH) in selected indicators**
The data related to the outcome indicators show the BIH performance relative to the EU,
i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0 · 1/3 · 2/3 · 1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	1.03	1.03	1.02	-0.01	Services Trade Restrictiveness Index	0.83	0.86	0.88	**+0.05**
					Trade Facilitation Index	0.63	0.70	–	**+0.07**
					CO Trade Policy	0.48	0.44	0.50	**+0.02**
SMEs in total exports (% of exports)	–	1.41	1.21	**-0.20**	SME Policy Index	0.56	0.59	0.65	**+0.09**
FDI net inflows (% of GDP)	0.63	0.54	1.41	**+0.78**	FDI Restrictiveness Index	1.73	1.70	1.70	**-0.03**
Private gross fixed capital formation (% of GDP)	0.91	0.91	0.85	**-0.06**	CO Investment Policy and Promotion	0.54	0.42	0.54	0.00
New business density (registrations per 1,000 people)	–	0.36	0.31	**-0.05**					
Domestic credit to private sector (% of GDP)	0.61	0.63	0.61	0.00	CO Access to Finance Policy	0.26	0.38	0.46	**+0.20**
Bank nonperforming loans (% of total gross loans)	0.86	0.74	0.62	**-0.24**					
Estimated informal employment (% of total employment)	0.33	0.35	0.44	**+0.11**	CO Anti-corruption Policy	0.32	0.34	0.40	**+0.08**
Control of corruption	0.63	0.61	0.54	**-0.07**					
SKILLS									
Employment rate (% of pop. 15-64)	0.64	0.65	0.73	**+0.09**	CO Employment Policy	0.42	0.40	0.40	**-0.02**
NEET rate (% of pop. 15-24)	0.42	0.44	0.47	**+0.05**					
Output per hour worked (2017 PPP USD GDP)	0.43	0.46	0.47	**+0.04**					
PISA average score	–	–	0.83		CO Education Policy	0.40	0.36	0.42	**+0.02**
Lifelong learning (% of pop. 25-64)	–	0.19	0.19	0.00					
Tertiary education achievement (% of pop. 25-34)	–	0.65	0.65	0.00	CO Science, Technology, and Innovation Policy	0.22	0.26	0.26	**+0.04**
R&D expenditure (% of GDP)	0.05	0.11	0.09	**+0.04**					

Table 3. **Economic convergence of Bosnia and Herzegovina (BIH) in selected indicators** *(continued)*

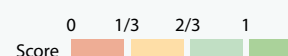| Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km^2)	0.35	0.35	0.35	0.00	CO Transport policy	0.18	0.24	0.26	+0.08
Road infrastructure density (km per 100 km^2)	–	0.12	0.13	+0.01					
Road in total freight transport (%)	1.14	1.00	0.96	**-0.18**					
Logistics Performance	0.79	0.75	0.80	+0.01					
Total power losses (% of injected energy)	0.71	0.78	0.80	**+0.09**	CO Energy Policy	–	0.28	0.42	**+0.14**
Average time to obtain electricity (days)	1.05	4.05	1.36	**+0.31**					
Mean download speed (Mbps)	–	0.35	0.29	**-0.06**	CO Digital Society	0.24	0.32	0.34	**+0.10**
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	0.35	0.33	0.31	**-0.04**	CO Environment Policy	0.28	0.26	0.34	**+0.06**
Energy productivity (output produced per unit of gross available energy)	–	0.29	0.26	**-0.03**					
Renewable energy consumption (% of gross final energy consumption)	–	1.42	1.81	**+0.39**					
Mean population exposure to PM2.5 (micrograms per m^3)	0.46	0.43	0.47	+0.01					
Waste generation (kg per capita)	1.62	1.21	1.11	**-0.51**					
Municipal waste disposed of in landfills (% of municipal waste)	0.47	0.36	0.28	**-0.19**					
Water exploitation intensity	9.72	8.10	8.12	**-1.61**	CO Agriculture Policy	–	0.50	0.40	**-0.10**
Fertiliser consumption (kg per hectare of arable land)	1.65	1.38	1.79	**+0.14**					
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.37	0.55	0.63	**+0.26**	CO Digital Society	0.24	0.32	0.34	**+0.10**
Mobile cellular penetration (subscriptions per 100 people)	0.70	0.80	0.89	**+0.19**					
Individuals with basic or above basic digital skills (% of population)	–	0.20	0.20	0.00					
Individuals having made digital payments (% of population)	–	0.49	0.74	**+0.25**	Digital Services Trade Restrictiveness Index	0.33	0.38	0.39	**+0.06**
ICT specialists in total employment (% of employment)	–	–	–						

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

Kosovo
Economy profile

Table 4. **Economic convergence of Kosovo (KOS) in selected indicators**

The data related to the outcome indicators show the KOS performance relative to the EU, i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0   1/3   2/3   1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	1.00	0.87	0.97	-0.03	Services Trade Restrictiveness Index	1.05	1.16	1.46	+0.41
					Trade Facilitation Index	–	–	–	
					CO Trade Policy	0.44	0.46	0.70	+0.26
SMEs in total exports (% of exports)	–	–	–		SME Policy Index	0.53	0.60	0.63	+0.10
FDI net inflows (% of GDP)	1.90	0.99	2.99	+1.09	FDI Restrictiveness Index	10+	10+	10+	
Private gross fixed capital formation (% of GDP)	0.89	1.04	1.14	+0.25	CO Investment Policy and Promotion	0.54	0.52	0.40	-0.14
New business density (registrations per 1,000 people)	0.31	0.82	1.22	+0.91					
Domestic credit to private sector (% of GDP)	0.37	0.41	0.55	+0.18	CO Access to Finance Policy	0.42	0.48	0.40	-0.02
Bank nonperforming loans (% of total gross loans)	0.96	1.83	1.76	+0.80					
Estimated informal employment (% of total employment)	–	–	–		CO Anti-corruption Policy	0.46	0.32	0.36	-0.10
Control of corruption	0.53	0.57	0.59	+0.06					
SKILLS									
Employment rate (% of pop. 15-64)	0.45	0.47	0.48	+0.03	CO Employment Policy	0.36	0.30	0.32	-0.04
NEET rate (% of pop. 15-24)	0.33	0.38	0.31	-0.02					
Output per hour worked (2017 PPP USD GDP)	–	0.51	0.51	0.00					
PISA average score	–	0.74	0.75	+0.01	CO Education Policy	0.40	0.50	0.64	+0.24
Lifelong learning (% of pop. 25-64)	–	–	–						
Tertiary education achievement (% of pop. 25-34)	–	–	–		CO Science, Technology, and Innovation Policy	0.20	0.22	0.26	+0.06
R&D expenditure (% of GDP)	0.05	0.04	–	-0.01					

Table 4. **Economic convergence of Kosovo (KOS) in selected indicators** *(continued)*

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km^2)	–	–	–		CO Transport policy	0.26	0.36	0.28	+0.02
Road infrastructure density (km per 100 km^2)	–	–	–						
Road in total freight transport (%)	–	–	–						
Logistics Performance	–	–	–						
Total power losses (% of injected energy)	0.18	0.22	0.21	+0.03	CO Energy Policy	–	0.46	0.60	+0.14
Average time to obtain electricity (days)	1.98	2.48	2.61	+0.63					
Mean download speed (Mbps)	–	–	0.43		CO Digital Society	0.30	0.44	0.46	+0.16
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	0.30	0.33	0.32	+0.02	CO Environment Policy	0.25	0.36	0.42	+0.17
Energy productivity (output produced per unit of gross available energy)	0.24	0.27	0.26	+0.02					
Renewable energy consumption (% of gross final energy consumption)	1.28	1.18	1.15	-0.12					
Mean population exposure to PM2.5 (micrograms per m^3)	–	0.54	0.59	+0.05					
Waste generation (kg per capita)	3.25	2.55	1.24	-2.01					
Municipal waste disposed of in landfills (% of municipal waste)	–	0.27	0.24	-0.03					
Water exploitation intensity	2.98	0.99	0.85	-2.12	CO Agriculture Policy	–	0.48	0.48	0.00
Fertiliser consumption (kg per hectare of arable land)	–	–	–						
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.27	0.38	0.55	+0.28	CO Digital Society	0.30	0.44	0.46	+0.16
Mobile cellular penetration (subscriptions per 100 people)	0.65	0.82	0.88	+0.23					
Individuals with basic or above basic digital skills (% of population)	–	–	–						
Individuals having made digital payments (% of population)	–	0.41	0.53	+0.12	Digital Services Trade Restrictiveness Index	1.17	1.37	1.38	+0.21
ICT specialists in total employment (% of employment)	–	–	–						

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

Montenegro
Economy profile

Table 5. **Economic convergence of Montenegro (MNE) in selected indicators**
The data related to the outcome indicators show the MNE performance relative to the EU,
i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0 — 1/3 — 2/3 — 1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	1.36	1.17	1.15	-0.21	Services Trade Restrictiveness Index	1.03	1.03	1.08	+0.05
					Trade Facilitation Index	0.69	0.77	0.76	+0.07
					CO Trade Policy	0.58	0.52	0.64	+0.06
SMEs in total exports (% of exports)	–	–	–		SME Policy Index	0.66	0.67	0.72	+0.06
FDI net inflows (% of GDP)	4.86	2.53	6.01	+1.15	FDI Restrictiveness Index	2.67	2.67	2.63	-0.04
Private gross fixed capital formation (% of GDP)	0.99	0.94	1.03	+0.04	CO Investment Policy and Promotion	0.54	0.52	0.64	+0.10
New business density (registrations per 1,000 people)	2.22	2.31	2.76	+0.54					
Domestic credit to private sector (% of GDP)	0.66	0.55	0.57	-0.08	CO Access to Finance Policy	0.32	0.48	0.54	+0.22
Bank nonperforming loans (% of total gross loans)	0.45	0.71	0.62	+0.17					
Estimated informal employment (% of total employment)	–	–	0.34		CO Anti-corruption Policy	0.62	0.54	0.72	+0.10
Control of corruption	0.68	0.69	0.72	+0.04					
SKILLS									
Employment rate (% of pop. 15-64)	0.76	0.83	0.85	+0.09	CO Employment Policy	0.52	0.42	0.60	+0.18
NEET rate (% of pop. 15-24)	0.71	0.66	0.56	-0.15					
Output per hour worked (2017 PPP USD GDP)	0.55	0.49	0.47	-0.08					
PISA average score	0.83	0.86	0.87	+0.04	CO Education Policy	0.50	0.56	0.64	+0.16
Lifelong learning (% of pop. 25-64)	–	0.29	0.26	-0.03					
Tertiary education achievement (% of pop. 25-34)	–	0.80	0.92	+0.12	CO Science, Technology, and Innovation Policy	0.26	0.36	0.48	+0.22
R&D expenditure (% of GDP)	0.16	0.17	0.19	+0.03					

Table 5. **Economic convergence of Montenegro (MNE) in selected indicators** *(continued)*

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km²)	0.32	0.33	0.33	+0.01	CO Transport policy	0.44	0.32	0.42	-0.02
Road infrastructure density (km per 100 km²)	–	0.44	0.48	+0.04					
Road in total freight transport (%)	1.46	1.58	–	+0.12					
Logistics Performance	0.71	0.74	0.78	+0.07					
Total power losses (% of injected energy)	0.56	0.63	0.66	+0.10	CO Energy Policy	–	0.42	0.60	+0.18
Average time to obtain electricity (days)	0.81	0.72	0.71	-0.10					
Mean download speed (Mbps)	–	0.30	0.49	+0.19	CO Digital Society	0.56	0.48	0.54	-0.02
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	0.82	0.81	0.68	-0.14	CO Environment Policy	0.35	0.36	0.48	+0.13
Energy productivity (output produced per unit of gross available energy)	0.41	0.45	0.42	+0.01					
Renewable energy consumption (% of gross final energy consumption)	2.73	2.40	1.93	-0.79					
Mean population exposure to PM2.5 (micrograms per m³)	0.64	0.60	0.66	+0.02					
Waste generation (kg per capita)	1.53	1.60	1.53	0.00					
Municipal waste disposed of in landfills (% of municipal waste)	0.43	0.33	0.27	-0.16					
Water exploitation intensity	–	–	–		CO Agriculture Policy	–	0.48	0.68	+0.20
Fertiliser consumption (kg per hectare of arable land)	10.44	0.56	0.59	-9.85					
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.39	0.57	0.78	+0.39	CO Digital Society	0.56	0.48	0.54	-0.02
Mobile cellular penetration (subscriptions per 100 people)	1.51	1.31	1.46	-0.05					
Individuals with basic or above basic digital skills (% of population)	–	0.34	0.34	0.00					
Individuals having made digital payments (% of population)	–	0.61	–		Digital Services Trade Restrictiveness Index	1.16	1.37	1.38	+0.22
ICT specialists in total employment (% of employment)	0.55	0.64	0.53	-0.02					

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

North Macedonia
Economy profile

Table 6. **Economic convergence of North Macedonia (MKD) in selected indicators**
The data related to the outcome indicators show the MKD performance relative to the EU,
i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0 | 1/3 | 2/3 | 1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	1.29	1.30	1.54	+0.25	Services Trade Restrictiveness Index	1.07	1.15	1.18	+0.11
					Trade Facilitation Index	0.65	0.70	0.79	+0.13
					CO Trade Policy	0.76	0.76	0.76	0.00
SMEs in total exports (% of exports)	–	0.70	0.55	-0.15	SME Policy Index	0.62	0.64	0.67	+0.05
FDI net inflows (% of GDP)	0.95	0.73	2.35	+1.40	FDI Restrictiveness Index	2.46	2.46	2.42	-0.04
Private gross fixed capital formation (% of GDP)	1.00	1.00	0.86	-0.14	CO Investment Policy and Promotion	0.56	0.66	0.60	+0.04
New business density (registrations per 1,000 people)	1.77	1.23	1.04	-0.73					
Domestic credit to private sector (% of GDP)	0.47	0.54	0.60	+0.13	CO Access to Finance Policy	0.42	0.62	0.48	+0.04
Bank nonperforming loans (% of total gross loans)	0.67	1.13	1.07	+0.40					
Estimated informal employment (% of total employment)	0.47	0.61	0.69	+0.22	CO Anti-corruption Policy	0.60	0.48	0.58	-0.02
Control of corruption	0.70	0.67	0.60	-0.10					
SKILLS									
Employment rate (% of pop. 15-64)	0.71	0.78	0.82	+0.11	CO Employment Policy	0.50	0.46	0.66	+0.16
NEET rate (% of pop. 15-24)	0.44	0.47	0.51	+0.07					
Output per hour worked (2017 PPP USD GDP)	0.45	0.43	0.40	-0.05					
PISA average score	–	0.76	0.83	+0.07	CO Education Policy	0.54	0.56	0.58	+0.04
Lifelong learning (% of pop. 25-64)	–	0.25	0.23	-0.02					
Tertiary education achievement (% of pop. 25-34)	–	0.76	0.86	+0.10	CO Science, Technology, and Innovation Policy	0.38	0.42	0.48	+0.10
R&D expenditure (% of GDP)	0.12	0.21	0.16	+0.04					

Table 6. **Economic convergence of North Macedonia (MKD) in selected indicators** *(continued)*

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km^2)	0.48	0.48	0.48	0.00	CO Transport policy	0.46	0.40	0.36	-0.10
Road infrastructure density (km per 100 km^2)	0.36	0.39	0.40	+0.04					
Road in total freight transport (%)	0.64	0.38	0.43	-0.21					
Logistics Performance	0.75	0.70	0.77	+0.02					
Total power losses (% of injected energy)	0.49	0.56	0.50	+0.01	CO Energy Policy	–	0.32	0.74	+0.42
Average time to obtain electricity (days)	0.81	0.97	0.97	+0.16					
Mean download speed (Mbps)		0.37	0.27	-0.10	CO Digital Society	0.64	0.46	0.48	-0.16
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	0.58	0.68	0.65	+0.07	CO Environment Policy	0.29	0.32	0.46	+0.17
Energy productivity (output produced per unit of gross available energy)	0.34	0.38	0.39	+0.05					
Renewable energy consumption (% of gross final energy consumption)	1.17	1.08	0.87	-0.30					
Mean population exposure to PM2.5 (micrograms per m^3)	0.43	0.41	0.45	+0.02					
Waste generation (kg per capita)	1.89	3.48	3.97	+2.08					
Municipal waste disposed of in landfills (% of municipal waste)	0.31	0.27	0.34	+0.03					
Water exploitation intensity	1.09	1.84	1.70	+0.61	CO Agriculture Policy	–	0.60	0.56	-0.04
Fertiliser consumption (kg per hectare of arable land)	2.26	2.18	2.34	+0.08					
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.47	0.55	0.61	+0.14	CO Digital Society	0.64	0.46	0.48	-0.16
Mobile cellular penetration (subscriptions per 100 people)	0.83	0.82	0.75	-0.08					
Individuals with basic or above basic digital skills (% of population)	–	0.31	0.31	0.00					
Individuals having made digital payments (% of population)	–	0.71	0.83	+0.12	Digital Services Trade Restrictiveness Index	1.16	1.36	1.38	+0.22
ICT specialists in total employment (% of employment)	0.38	0.46	0.49	+0.11					

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

Serbia
Economy profile

Table 7. **Economic convergence of Serbia (SRB) in selected indicators**

The data related to the outcome indicators show the SRB performance relative to the EU, i.e., EU = 1. (OECD= 1 for the OECD good policy practices, standards, and tools).

Score: 0 · 1/3 · 2/3 · 1

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
BUSINESS ENVIRONMENT									
Trade openness (% of GDP)	0.95	1.11	1.24	+0.29	Services Trade Restrictiveness Index	0.92	1.04	1.23	+0.31
					Trade Facilitation Index	0.74	0.76	0.77	+0.03
					CO Trade Policy	0.68	0.66	0.76	+0.08
SMEs in total exports (% of exports)	–	0.95	0.79	-0.16	SME Policy Index	0.66	0.72	0.76	+0.10
FDI net inflows (% of GDP)	1.45	1.24	4.19	+2.74	FDI Restrictiveness Index	1.28	1.28	1.28	+0.00
Private gross fixed capital formation (% of GDP)	0.90	0.81	0.85	-0.05	CO Investment Policy and Promotion	0.62	0.68	0.78	+0.16
New business density (registrations per 1,000 people)	0.68	0.57	0.55	-0.13					
Domestic credit to private sector (% of GDP)	0.42	0.44	0.47	+0.05	CO Access to Finance Policy	0.42	0.64	0.66	+0.24
Bank nonperforming loans (% of total gross loans)	–	–	–						
Estimated informal employment (% of total employment)	0.51	0.44	0.47	-0.04	CO Anti-corruption Policy	0.60	0.52	0.58	-0.02
Control of corruption	0.62	0.63	0.60	-0.02					
SKILLS									
Employment rate (% of pop. 15-64)	0.78	0.82	0.90	+0.12	CO Employment Policy	0.48	0.50	0.56	+0.08
NEET rate (% of pop. 15-24)	0.56	0.61	0.62	+0.06					
Output per hour worked (2017 PPP USD GDP)	0.38	0.37	0.34	-0.04					
PISA average score	–	–	0.91		CO Education Policy	0.50	0.50	0.64	+0.14
Lifelong learning (% of pop. 25-64)	–	0.44	0.44	0.00					
Tertiary education achievement (% of pop. 25-34)	–	0.82	0.82	0.00	CO Science, Technology, and Innovation Policy	0.42	0.42	0.62	+0.20
R&D expenditure (% of GDP)	0.38	0.37	0.40	+0.02					

Table 7. **Economic convergence of Serbia (SRB) in selected indicators** *(continued)*

Policy outcomes	Performance relative to the EU			Change	OECD good policy practices, standards, and tools	Performance relative to the OECD			Change
	2008-2012	2013-2017	2018-2022	2008-12 to 2018-22		2016-2017	2018-2019	2020-2022	2016-17 to 2020-22
CONNECTIVITY & INFRASTRUCTURE									
Rail infrastructure density (km per 100 km^2)	0.76	0.76	0.72	-0.04	CO Transport policy	0.40	0.52	0.60	+0.20
Road infrastructure density (km per 100 km^2)	0.32	0.35	0.35	+0.03					
Road in total freight transport (%)	2.87	1.58	1.11	-1.76					
Logistics Performance	0.80	0.80	0.81	+0.01					
Total power losses (% of injected energy)	0.42	0.46	0.47	+0.05	CO Energy Policy	–	0.44	0.60	+0.16
Average time to obtain electricity (days)	0.87	0.79	0.75	-0.12					
Mean download speed (Mbps)	–	0.62	0.59	-0.03	CO Digital Society	0.56	0.48	0.60	+0.04
GREENING									
CO_2 emissions (kg per 2017 PPP USD GDP)	0.41	0.40	0.38	-0.03	CO Environment Policy	0.25	0.42	0.44	+0.19
Energy productivity (output produced per unit of gross available energy)	0.29	0.29	0.29	0.00					
Renewable energy consumption (% of gross final energy consumption)	1.35	1.22	1.13	-0.22					
Mean population exposure to PM2.5 (micrograms per m^3)	0.51	0.51	0.53	+0.02					
Waste generation (kg per capita)	1.82	1.48	1.03	-0.79					
Municipal waste disposed of in landfills (% of municipal waste)	0.45	0.34	0.28	-0.17					
Water exploitation intensity	0.60	0.78	1.07	+0.47	CO Agriculture Policy	–	0.66	0.62	-0.04
Fertiliser consumption (kg per hectare of arable land)	0.89	1.19	1.48	+0.59					
DIGITALISATION									
Fixed broadband internet penetration (subscriptions per 100 people)	0.43	0.59	0.67	+0.24	CO Digital Society	0.56	0.48	0.60	+0.04
Mobile cellular penetration (subscriptions per 100 people)	1.11	1.05	1.00	-0.11					
Individuals with basic or above basic digital skills (% of population)	–	0.47	0.47	0.00					
Individuals having made digital payments (% of population)	–	0.77	0.98	+0.21	Digital Services Trade Restrictiveness Index	0.65	0.76	0.77	+0.12
ICT specialists in total employment (% of employment)	–	0.61	0.69	+0.08					

Notes: "–" indicates data unavailability. See Annex A for data information. See Annex B for information on the scoring methodology.

Annex A. Data information

The tables below show the availability of data for the Western Balkan economies for each indicator used for the five analysed clusters (Table A.1) as well as these indicators' definitions and sources (Table A.2).

Table A1. **Data availability for the Western Balkan economies**

Complete WB6 data coverage appears in green. In case of incomplete coverage, missing economies are displayed. "–" denotes complete data unavailability.

Policy outcomes	2008-2012	2013-2017	2018-2022	OECD good policy practices, standards, and tools	2016-2017	2018-2019	2020-2022
BUSINESS ENVIRONMENT							
Trade openness (% of GDP)				Services Trade Restrictiveness Index			
				Trade Facilitation Index	KOS	KOS	BIH, KOS
				CO Trade Policy			
SMEs in total exports (% of exports)	–	KOS, MNE	KOS, MNE	SME Policy Index			
FDI net inflows (% of GDP)				FDI Restrictiveness Index			
Private gross fixed capital formation (% of GDP)				CO Investment Policy and Promotion			
New business density (registrations per 1,000 people)	BIH						
Domestic credit to private sector (% of GDP)				CO Access to Finance Policy			
Bank nonperforming loans (% of total gross loans)	SRB	SRB	SRB				
Estimated informal employment (% of total employment)	KOS, MNE	KOS, MNE	KOS, MNE	CO Anti-corruption Policy			
Control of corruption							
SKILLS							
Employment rate (% of pop. 15-64)				CO Employment Policy			
NEET rate (% of pop. 15-24)							
Output per hour worked (2017 PPP USD GDP)	KOS						
PISA average score	KOS, SRB	ALB, BIH, SRB		CO Education Policy			
Lifelong learning (% of pop. 25-64)	–	KOS	KOS				
Tertiary education achievement (% of pop. 25-34)	–	KOS	KOS	CO Science, Technology, and Innovation Policy			
R&D expenditure (% of GDP)		ALB	ALB, KOS				

Table A.1. **Data availability for the Western Balkan economies** *(continued)*

Policy outcomes	2008-2012	2013-2017	2018-2022	OECD good policy practices, standards, and tools	2016-2017	2018-2019	2020-2022
CONNECTIVITY & INFRASTRUCTURE							
Rail infrastructure density (km per 100 km²)	KOS	KOS	KOS	CO Transport policy			
Road infrastructure density (km per 100 km²)	ALB, BIH, KOS, MNE	KOS	KOS				
Road in total inland freight transport (%)	KOS	KOS	ALB, KOS, MNE				
Logistics Performance	KOS	KOS	KOS				
Total power losses (% of injected energy)	ALB	ALB	ALB	CO Energy Policy	–		
Average time to obtain electricity (days)							
Mean download speed (Mbps)	–	KOS		CO Digital Society			
GREENING							
CO_2 emissions (kg per 2017 PPP USD GDP)				CO Environment Policy			
Energy productivity (output produced per unit of gross available energy)	BIH						
Renewable energy consumption (% of gross final energy consumption)	BIH						
Mean population exposure to PM2.5 (micrograms per m³)	KOS						
Waste generation (kg per capita)	ALB	ALB	ALB				
Municipal waste disposed of in landfills (% of municipal waste)	ALB, KOS						
Water exploitation intensity	MNE	MNE	MNE	CO Agriculture Policy	–		
Fertiliser consumption (kg per hectare of arable land)	KOS	KOS	KOS				
DIGITALISATION							
Fixed broadband internet penetration (subscriptions per 100 people)				CO Digital Society			
Mobile cellular penetration (subscriptions per 100 people)							
Individuals with basic or above basic digital skills (% of population)	–	KOS	KOS				
Individuals having made digital payments (% of population)	–		MNE	Digital Services Trade Restrictiveness Index			
ICT specialists in total employment (% of employment)	ALB, BIH, KOS, SRB	ALB, BIH, KOS	ALB, BIH, KOS				

Table A2. **Data definitions and sources**

Indicator	Definition numerator	Definition denominator (if applicable)	Source
CO policy scores	The OECD Southeast Europe Division's *Competitiveness Outlook* (CO) scores provide an evidence-based assessment of progress in designing and implementing policies related to overall economic competitiveness in a set of 16 policy areas. Higher values are associated with closer policy standards relatively to the OECD.		CO 2016, CO 2018 and CO 2021 publications
BUSINESS ENVIRONMENT			
Trade openness	Sum of exports and imports of goods and services	Gross domestic product (GDP)	World Bank (World Bank [WB] and OECD databases)
SMEs in total exports	Exports realised by firms with less than 250 employees (SME)	Total exports	OECD Exports by Business Size database ALB: CO 2018 and CO 2021 publications
FDI net inflows	New FDI flows adjusted from disinvestment	GDP	World Bank (International Monetary Fund (IMF), WB, OECD databases)
Private gross fixed capital formation (GFCF)	Land improvements, plant, and machinery equipment purchases by businesses, augmented by purchase and renovation of dwellings made by households.	GDP	World Bank (IMF, WB, OECD databases) and Eurostat (Sustainable Development Indicators database). To estimate private GFCF in ALB, BIH and MNE, the average share of private GFCF in total GFCF in the WB6 has been applied to total GFCF in ALB, BIH and MNE.
New business density	New limited liability corporations (or its equivalent) registered in a calendar year	Population aged 15 to 64	World Bank (World Bank's Entrepreneurship Database)
Domestic credit to private sector	Financial resources provided to the private sector by financial corporations that establish a claim for repayment.	GDP	World Bank (IMF, WB, OECD databases)
Bank nonperforming loans	Value of nonperforming loans	Value of the loan portfolio	World Bank (IMF, WB, OECD databases)
Estimated informal employment	Estimated number of people in informal employment	Population in employment	International Labour Organisation (ILO) Labour Force Survey)
Control of corruption	The Control of corruption measures the extent to which public power is exercised for private gain, including petty and grand forms of corruption, and "capture" of the state by elites and private interests. It also measures the strength and effectiveness of a country's policy and institutional framework to prevent and combat corruption. Higher values are associated with lower corruption patterns.		World Bank Worldwide Governance Indicators database
Services Trade Restrictiveness Index (STRI)	The STRI quantifies restrictions on foreign entry and the movement of people, barriers to competition, regulatory transparency and other discriminatory measures that impact the ease of doing business. Higher values are associated with more restrictions.		OECD Services Trade In the Global Economy database and CO 2021 (WB6 data)
Trade Facilitation Index (TFI)	The TFI assesses the specific set of measures that streamline and simplify the technical and legal procedures for products entering or leaving a country to be traded internationally. It covers the full spectrum of border procedures, from the electronic exchange of data about a shipment and simplification and harmonisation of trade documents, to the possibility to appeal administrative decisions by border agencies. Higher values are associated with easier trade.		OECD Trade Facilitation publications
FDI Regulatory Restrictiveness Index	The FDI Restrictiveness Index gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI: foreign equity limitations; screening or approval mechanisms; restrictions on the employment of foreigners as key personnel; and operational restrictions, e.g. restrictions on branching and on capital repatriation or on land ownership. Higher values are associated to more restrictions.		OECD FDI Regulatory Restrictiveness Index database
SME Policy Index	The OECD Southeast Europe Division's SME Policy Index mean score provide an evidence-based assessment of progress in designing and implementing policies related to the development of SMEs in a set of 12 policy dimensions. Higher values are associated with closer policy standards relatively to the OECD.		SMEPI 2016, SMEPI 2019 and SMEPI 2022 publications

Table A2. **Data definitions and sources** *(continued)*

Indicator	Definition numerator	Definition denominator (if applicable)	Source
SKILLS			
Employment rate	Population aged 15 to 64 in employment	Total population aged 15 to 64	ILO (Modelled Estimates database)
NEET rate	Population aged 15 to 24 not in employment, education, or training	Total population aged 15 to 24	ILO (Modelled Estimates database)
Output per hour worked	GDP	Number of hours worked	ILO (Modelled Estimates database) Kosovo's estimates are OECD calculations based on: Kosovo GDP data from the World Bank (World Development Indicators database), and the number of hours worked from the Economic Reform Programme (ERP) reports (2018-2020, 2020-2022).
PISA average score	Average value of PISA performance scores in reading, mathematics, and science. Higher values are associated to better performance.		OECD Skills Surveys
Lifelong learning	Number of persons in age class who have taken education or training	Population aged between 25 and 64 years	European Commission (European Innovation Scoreboard)
Tertiary education achievement	Number of persons in age class with some form of postsecondary education	Population aged between 25 and 34	European Commission (European Innovation Scoreboard)
Research and Development	Gross domestic expenditures on research and development (R&D)	GDP	World Bank (UIS database). Data for Kosovo are extracted from BTI 2022 Country report and Kosovo Education Strategic Plan 2017-2021
CONNECTIVITY & INFRASTRUCTURE			
Rail infrastructure density	Rail infrastructure km	Area of 100 km²	OECD (International Transport Forum database)
Road infrastructure density	Road infrastructure km	Area of 100 km²	OECD (International Transport Forum database)
Road in total freight transport	Total inland freight transport by rail	Total inland freight transport	OECD (International Transport Forum database)
Logistic Performance	The World Bank's Logistics Performance Index (LPI) analyzes countries through six components: efficiency of customs and border management clearance, quality of trade- and transport-related infrastructure, ease of arranging competitively priced international shipments, competence and quality of logistics services, ability to track and trace consignments and frequency of shipments reaching consignees within the scheduled or expected delivery time. Higher values are associated to better logistics performance.		World Bank (LPI database)
Total power losses	Total energy losses	Total energy injected in distribution and transmission grid	Council of European Energy Regulators (CEER) Report on Power Losses puwblication
Average time to obtain electricity (days)	The measure captures the median duration that the electricity utility and experts indicate is necessary in practice, rather than required by law, to complete a procedure with minimum follow-up and no extra payments. A procedure is defined as any interaction of the company's employees or its main electrician or electrical engineer (that is, the one who may have done the internal wiring) with external parties, such as the electricity distribution utility, electricity supply utilities, government agencies, electrical contractors and electrical firms.		World Bank (Doing Business database)
Mean download speed	Megabytes	One second	Cable.co.UK

Table A2. **Data definitions and sources** *(continued)*

Indicator	Definition numerator	Definition denominator (if applicable)	Source
GREENING			
CO_2 emissions	CO_2 emissions kilogram	GDP	World Bank (Climate Watch database). In the case of Kosovo, total CO_2 emissions have been extracted from the International Energy Agency (IEA) database, and GDP data have been extracted from the World Bank (World Development Indicators database).
Energy productivity	GDP	Kilogram of oil equivalent consumption	Eurostat Sustainable development indicators database
Renewable energy consumption	Total gross energy consumption from renewable sources	Total gross energy consumption	Eurostat Sustainable development indicators database
Mean population exposure to PM2.5	Fine particulate matter (PM2.5) micrograms	M^3	OECD Environment database. For Kosovo, data have been extracted from Kosovo environmental protection agency Annual report on the state of air 2019
Waste generation	Waste excluding major mineral wastes kilograms	Total population	Eurostat Sustainable development indicators database
Municipal waste disposed of in landfills	Municipal waste disposed of in landfills	Total municipal waste	Eurostat Sustainable development indicators database
Water exploitation intensity	The regionalized water exploitation intensity measures total water consumption as a percentage of the renewable freshwater resources available for a given territory and period. It quantifies how much water is abstracted monthly or seasonally and how much water is returned before or after use to the environment via river basins (e.g. leakages, discharges by economic sectors). The difference between water abstractions and water returns is regarded as 'water consumption'. Higher values indicate higher intensity (pressures).		Eurostat Sustainable development indicators database
Fertiliser consumption	Kilogram of fertiliser consumption	Hectare of arable land	World Bank (Food and Agriculture Organization of the United Nations (FAO) database)
DIGITALISATION			
Fixed broadband Internet penetration	Number of fixed broadband internet subscriptions	Total population	World Bank (International Telecommunication Union (ITU) Information and Communications Technologies (ICT) Indicators database). For Kosovo, data have been extracted from Regulatory Authority of Electronic and Postal Communications (ARKEP) reports (2009-10, 2011-13, 2013-18, 2016-21).
Mobile cellular penetration	Number of mobile cellular subscriptions	Total population	World Bank (ITU ICT Indicators database). For Kosovo, data have been extracted from ARKEP reports (2009-10, 2011-13, 2013-18, 2016-21).
Individuals with basic or above basic digital skills	Number of individuals with above basic overall digital skills, aged 16 to 74	Total number of individuals aged 16 to 74	European Commission (European innovation scoreboard)
Individuals having made digital payments	Number of individuals who made and received digital payment, aged 16 to 74	Total number of individuals aged 16 to 74	IMF Financial Access Survey
ICT specialists in total employment	Number of employed ICT specialists	Total employment	European Commission (European innovation scoreboard)
Digital Services Trade Restrictiveness	The OECD Digital STRI identifies, catalogues and quantifies barriers that affect trade in digitally enabled services across 85 countries. It captures cross-cutting impediments that affect all types of services traded digitally. Higher values are associated to more restrictiveness.		OECD Digital Services and Trade Restrictiveness index database

Annex B. Scoring methodology

For policy outcome indicators, the WB6 regional performance score for indicator X, $ScoreX_{WB6}$, is calculated as the following:

$$ScoreX_{WB6} = \frac{(\sum_i^6 X_i)/6}{\overline{X_{EU}}}$$

Where denotes the indicator value for the economy among Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia. $\frac{(\sum_i^6 X_i)/6}$ denotes the simple average of all available X_i. $\overline{X_{EU}}$ denotes the average value for indicator for the European Union.

For indicators extracted from the Competitiveness Outlook (CO) and SME Policy Index editions, the highest score is assigned to the OECD score because it's considered to represent the OECD best practices. For the Services Trade Restrictiveness Index, Trade Facilitation Index, FDI restrictiveness index and Digital STRI Index,

the OECD average value, $\overline{X_{OECD}}$, is considered as the convergence target.

It should be noted that for some indicators, higher values are associated with worse performance. The list of the indicators where lower values stand for improvements is the following: "Bank non-performing loans", "Estimated informal output", "NEET rate", PISA low achievers", "Total power losses", "CO_2 emissions", "Energy intensity level of primary energy", "CO_2 transport emissions", "Annual freshwater withdrawals", "Fertilizer consumption", "Services Trade Restrictiveness Index", "Digital Services Trade Restrictiveness Index" and "FDI Restrictiveness Index". In such cases, the inverted value of X_i, $\frac{1}{X_i}$, is considered for the calculation of the convergence scores.

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