

METHODOLOGICAL NOTES

Transition indicators: six qualities of a sustainable market economy

The transition indicators reflect the judgement of the EBRD's Office of the Chief Economist and the Economics, Policy and Governance department on the transition progress in the economies where the EBRD invests. According to this approach a sustainable market economy is characterised by six qualities: Competitive, Well-governed, Green, Inclusive, Resilient and Integrated.

This approach measures the state of each quality and its components in a given economy, as compared with the other economies in the EBRD regions and a few select developed economies,¹ against a frontier. The frontier is set either by the best performance in this group of economies or by an unobserved theoretical value and provides a common benchmark against which all economies are assessed consistently and comparably. The same frontier values are also applied across the years to ensure that computed scores are comparable and capture changes in underlying indicators through time.

Assessments of Transition Qualities (ATQs) are composite indices combining information from a large number of indicators and assessments in a consistent manner. The underlying indicators within each ATQ are constructed using a wide range of sources, including national and industry statistics, data from other international organisations and affiliated databases (World Bank, IMF, UN); surveys (The Business Environment and Enterprise Performance Survey (BEEPS); Life in Transition Survey (LiTS) and assessments prepared internally by EBRD experts (see Table M.1 below for the list of indicators).

The computation of ATQ indices involves multiple steps, namely: data preparation, normalisation and aggregation. Details of each of these steps are provided below.

Data preparation and treatment of missing observations

The underlying data for the majority of indicators either enter the composite index directly or are scaled using a meaningful related measure. A number of indicators may themselves be composite indices (for example, EBRD SME index or EBRD Knowledge Economy index) and they enter the ATQ composites in index form. No further transformation is applied to the underlying indicators before normalisation. For some indicators no data is available for the current year and simple imputation methods are used.² One method of imputation uses the latest available observation from past years, thus assuming that no change from the latest available observation has been observed. When there are no past or present observations available for a particular indicator, then, based on the judgement of EBRD experts, either the regional mean (using the EBRD classification of regions for the economies where it invests) or the observed regional minima are used to impute the missing observations.

CONTINUES →

¹ The group of comparator developed economies currently includes Canada, France, Germany, Japan, Sweden, United Kingdom and the United States of America.

² Due to lags in the availability of data, ATQ scores for a given year may not correspond fully to that calendar year. In particular, ATQ scores for 2022 reflect progress in transition based primarily on data available for the years 2020/2021.

To mitigate the effect that extreme values may have on scores, observations that lie above the 98th percentile are considered outliers and replaced by the next value within the acceptable range. Outlier detection and replacement is only applied to select continuous variables.

Normalisation

The raw data for each indicator are normalised to the same scale using the min-max normalisation method as follows:

$$x' = \frac{x - x_{worst}}{x_{best/frontier} - x_{worst}}$$

The resulting scores are then rescaled from 1 to 10, where 10 represents the frontier for each quality. The frontier is taken to be the best performance, observed either in an economy where we invest, a comparator country or a theoretical value determined based on expert judgement.

If an observation for a country exceeds the selected frontier, then the normalised value of the indicator is capped at the frontier value. For indicators where any deviation from the frontier is undesirable, values either below or above the frontier are treated similarly (the same score is computed and assigned to two observations that are equally distant from the frontier).

Aggregation

Normalised indicators are aggregated to a single composite index (by quality) using weights determined by expert judgement (see Table M.1 for details of weights). A simple weighted averaging method is used for aggregation.

Changes to methodology from 2021

During the past year, further work on strengthening the methodology for computing ATQ indices was carried out. This work did not involve changes to the process of computation of ATQ indices and it focused largely on modifications to the set of underlying indicators. The primary purpose of this work has been ensuring that ATQs better capture the relevant phenomena and allow adequate monitoring of the pace of reforms and transformation in the region. This work resulted in the addition of new indicators, discontinuation of the use of others and use of equivalent data series from alternative sources. Details of these changes are provided below.

Overall

- The sample of economies used to calculate ATQs was expanded to include six emerging market economies, namely: Bangladesh, Brazil, Colombia, Mexico, Thailand and South Africa.

Competitive

- Following the discontinuation of the *Doing Business* report the ease of doing business indicator and the ease of starting a business indicator were removed. In addition, the indicator measuring progress on insolvency laws and implementation was replaced by an equivalent assessment published by the EBRD in 2022.

Well-governed

- The following *Doing Business* indicators have been removed: enforcement of contracts and protection of minority shareholders' interest.

Inclusive

- The Inclusive ATQ was revised this year to reflect assessments across three pillars: human capital development, access to services and finance, and policies and norms. Some existing indicators are still reflected in this version of the Inclusive ATQ, specifically: labour force participation rate, the percentage of the population saving and borrowing from financial institutions, human capital index, women in business and law index.

Resilient

- The financial sector stability component was revised to include nine new indicators measuring capital and money market development.

Integrated

- The Doing Business indicator on electricity connection was removed. In addition, the Doing Business indicator measuring the cost of trading across borders was replaced by the World Bank ESCAP indicator measuring non-tariff costs of trading across borders.
- The ITU indicator measuring 3G mobile network coverage was replaced by an indicator measuring 4G mobile network coverage.

The following tables show, for each quality, the components used in each quality index along the indicators and data sources that were fed into the final assessments.

TABLE M.1 List of indicators used to compute Assessment of Transition Qualities (ATQs) indices

COMPETITIVE						
Components	Sub-components	Indicators	Source	Frontier economy	Frontier value	Worst performance
Market structures [50%]		Applied tariff rates ^a (weighted average) [14%]	World Bank, World Development Indicators (WDI), International Trade Centre, Market Access Map, 2020	Georgia	0.85	17.89
		Subsidies expense ^a (share of GDP) [14%]	International Monetary Fund, Government Finance Statistics, 2020	Albania	0.12	7.05
		Resolving insolvency score [14%]	EBRD assessment 2022	United States of America	88.38	38.33
		Number of new business entries (scaled by population) [14%]	World Bank, WDI, 2019	Estonia	19.43	0.04
		SME index adjusted (1 = worst, 10 = best) [14%]	EBRD assessment, 2019	United Kingdom	7.73	3.52
		Competition Law, Institutions and Enforcement index adjusted (1 = worst, 10 = best) [14%]	EBRD assessment, 2019	United Kingdom	8.02	4.89
		Share of advance business services in services exports [14%]	World Bank, WDI, 2020	United Kingdom	82.32	6.55
Capacity to generate value added [50%]		Economic Complexity Index [14%]	Harvard, Centre for International Development, 2018	Japan	2.34	-1.52
		Knowledge economy index (KEI) adjusted (1 = worst, 10 = best) [14%]	EBRD assessment, 2019	Sweden	8.02	1.92
		WB Logistics Performance Index (1 = worst, 5 = best) [14%]	World Bank, WDI, 2018	Germany	4.27	1.96
		Skills [14%]	World Economic Forum (WEF) Global Competitiveness Index, 2019	No economy was at the frontier in 2022	84.37	42.9
		Labour productivity (output per worker, GDP in constant 2011 int. US\$ PPP) [14%]	ILOSTAT, WDI, 2021	United States of America	110587	10256
		Credit to private sector ^b (per cent of GDP) [14%]	World Bank, WDI, 2021	United Kingdom*	100.00	11.58
		Global value chain participation [14%]	UNCTAD, EBRD, 2018	Slovak Republic	0.81	0.31

WELL-GOVERNED						
Components	Sub-components	Indicators	Source	Frontier economy	Frontier value	Worst performance
National level governance [75%]	Quality of public governance [53%]	Regulatory quality (-2.5 = worst, 2.5 = best) [13%]	World Bank Governance Indicators, 2020	No economy was at the frontier in 2022	1.78	-2.09
		Government effectiveness (-2.5 = worst, 2.5 = best) [13%]	World Bank Governance Indicators, 2020	Sweden	1.72	-1.28
		Budget transparency (1 = worst, 7 = best) [6%]	WEF Global Competitiveness Index, 2019	No economy was at the frontier in 2022	92.31	3.00
		Private property protection (1 = worst, 7 = best) [6%]	WEF Global Competitiveness Index, 2019	Japan	6.21	2.87
		Intellectual property protection (1 = worst, 7 = best) [6%]	WEF Global Competitiveness Index, 2019	Japan	5.98	2.91
		Burden of government regulation (1 = worst, 7 = best) [13%]	WEF Global Competitiveness Index, 2019	Azerbaijan	4.83	1.59
		Political instability ^a [4%]	World Bank/EBRD BEEPS, 2018-20	Montenegro	0.01	0.96
		Political stability and absence of violence and terrorism (-2.5 = worst, 2.5 = best) [4%]	World Bank Governance Indicators, 2020	Canada	1.04	-2.05
		Political and operational stability [4%]	Global Innovation Index, 2021	Japan	91.10	14.90
		Government ensuring policy stability (1 = worst, 7 = best) [6%]	WEF Global Competitiveness Index, 2019	Azerbaijan	5.41	1.83
		World press freedom index ^a (100 = least free, 0 = most free) [13%]	Reporters Without Borders, 2022	Estonia*	87.84	8.82
		E-government participation [7%]	WEF Global Competitiveness Index, 2019	Estonia*	1.00	0.07
		Online services index [7%]	UNDESA, 2020	Estonia	0.98	0.09
	Integrity and control of corruption [20%]	Corruption perception index (0 = highly corrupt, 100 = not corrupt) [43%]	Transparency International, 2021	Sweden	82.00	19.00
		Perception of corruption ^a [14%]	World Bank/EBRD BEEPS, 2018-20	Sweden	2.68	77.91
		Informality ^a [14%]	World Bank/EBRD BEEPS, 2018-20	Sweden	0.00	63.38
		Implementation of anti-money laundering (AML)/combating the financing of terrorism (CFT) and tax exchange standards ^a (0 = low risk, 10 = high risk) [29%]	International Centre for Asset Recovery, 2021	Bulgaria*	3.12	8.30
	Rule of law [27%]	Judicial independence (1 = worst, 7 = best) [22%]	WEF Global Competitiveness Index, 2019	Japan	6.19	1.99
		Efficiency of legal framework in settling disputes (1 = worst, 7 = best) [22%]	WEF Global Competitiveness Index, 2019	No economy was at the frontier in 2022	5.45	1.86
		Efficiency of legal framework in challenging regulations (1 = worst, 7 = best) [22%]	WEF Global Competitiveness Index, 2019	No economy was at the frontier in 2022	5.07	1.79
Rule of law (-2.5 = worst, 2.5 = best) [22%]		World Bank Governance Indicators, 2020	Sweden	1.81	-1.49	
Effectiveness of courts ^a [11%]		World Bank/EBRD BEEPS, 2018-20	Montenegro	0.60	45.40	
Corporate level governance [25%]	Corporate governance frameworks and practices [100%]	Structure and functioning of the board [20%]	EBRD Legal Transition Team (LTT) Corporate Governance Assessment, 2019	Serbia	3.55	1.34
		Transparency and disclosure [10%]	EBRD LTT Corporate Governance Assessment, 2019	Lithuania*	4.57	1.41
		Internal control [20%]	EBRD LTT Corporate Governance Assessment, 2019	Lithuania*	4.03	1.33
		Rights of shareholders [20%]	EBRD LTT Corporate Governance Assessment, 2019	Latvia*	4.15	1.99
		Stakeholders and institutions [20%]	EBRD LTT Corporate Governance Assessment, 2019	Estonia*	4.13	0.98
		Strength of auditing and reporting standards (1 = worst, 7 = best) [10%]	WEF Global Competitiveness Index, 2019	No economy was at the frontier in 2022	5.99	3.33

GREEN							
Components	Sub-components	Indicators	Source	Frontier economy	Frontier value	Worst performance	
Mitigation [35%]	Physical indicators [37%]	Electricity production from renewable sources, including hydroelectric (per cent of total) [17%]	World Bank, International Energy Agency (IEA), 2019	Albania	0.97	0.00	
		Value added from industry (construction, manufacturing, mining, electricity, water and gas) per unit of CO ₂ emissions from industry (GVA (US\$)/total CO ₂) [17%]	World Bank, IEA, 2019	United Kingdom	15,850.36	573.20	
		MWh consumed per tonne of CO ₂ emitted from electricity and heat generation (MWh/total CO ₂) [17%]	World Bank, IEA, 2019	Albania	24.45	0.49	
		GDP per tonne of CO ₂ emitted from residential buildings (from fuel combustion) (GDP (US\$)/total CO ₂) [17%]	World Bank, IEA, 2019	Sweden	#####	44,237.37	
		Number of registered vehicles per tonne of CO ₂ emitted from transport [17%]	World Health Organization (WHO), IEA, 2016	Turkmenistan	9.32	1.46	
		Agricultural sector GVA per tonne of GHG emissions from agriculture (GVA (US\$) / total CO ₂ eq) [17%]	World Bank, Food and Agriculture Organization of the United Nations (FAO), 2019	No economy was at the frontier in 2022	3,939	0.00	
	Structural indicators [63%]	Market support mechanism for renewable energy production (0 = no support, 0.5 = regulatory support, 1 = revenue support) [20%]	IEA, 2021	Canada*	1.00	0.00	
		INDC rating (0 for no INDC, 0.5 for INDC but not ratified, 1 for ratified INDC) [20%]	World Resources Institute (WRI), CAIT, 2021	Canada*	1.00	0.00	
		Carbon price (0 = worst, 1 = best) [20%]	World Bank, 2020	No economy was at the frontier in 2022	1.00	0.00	
		Fossil fuel subsidies (per cent of GDP) ^a [20%]	IMF, 2017	Sweden*	0.00	11.06	
		Just Transition Plan [20%]	EBRD assessment, 2021	Canada*	1.00	0.00	
		NDGAIN human habitat score ^a [25%]	Notre Dame Global Adaptation Initiative, 2018	Egypt	0.36	0.63	
		Aqueduct water stress index ^a [25%]	World Resources Institute (WRI), 2019	Croatia*	0.38	4.82	
Adaptation [30%]	Physical indicators [45%]	NDGAIN projected change in cereal yield ^a [25%]	Notre Dame Global Adaptation Initiative, 2018	Sweden*	0.00	0.98	
		Number of people affected by droughts, extreme temperatures, floods and wildfires in the last 10 years ^a (per 100,000 people) [25%]	EMDAT database, 2021	Jordan	6.42	866,271.76	
		Structural indicators [55%]	NDGAIN agricultural capacity ^a [20%]	Notre Dame Global Adaptation Initiative, 2019	Uzbekistan*	0.23	0.99
			World Governance Indicators: Institutional Quality (-2.5 = worst, 2.5 = best) [40%]	World Bank, World Governance Indicators, 2019	Sweden	1.82	-1.61
	Adaptation in INDCs (1 = there is a National Adaptation Plan, 0.5 = adaption is mentioned in INDCs, 0 = none of the above) [40%]	CGSpace, CGIAR, 2021	Sweden*	1.00	0.00		
	Other environmental areas [30%]	Physical indicators [37%]	Population weighted mean annual exposure to PM2.5 ^a [22%]	OECD, 2019	Estonia*	5.95	88.15
Waste intensive consumption (kg municipal solid waste/US\$ household expenditure) ^a [22%]			Waste Atlas, 2015	Japan	0.01	0.33	
Waste generation per capita (kg/cap) ^a [22%]			Waste Atlas, 2015	Armenia	149.70	777.00	
Number of animal (terrestrial and marine) species threatened as proportion of total number assessed ^a [17%]			IUNC Red list, 2020	Estonia*	0.04	0.18	
Number of plant (terrestrial and marine) species threatened normalised by total number assessed ^a [17%]			IUNC Red list, 2020	Mongolia	0.00	0.28	
Structural indicators [63%]		Vehicle emission standards (0 = worst, 6 = best) [34%]	UN Environment Programme, 2021	Sweden*	6.00	0.00	
		Municipal solid waste collected (per cent of total generated) [34%]	Waste Atlas, 2015	Sweden*	100.00	20.00	
		Proportion of terrestrial protected area (per cent of total area) [16%]	World Bank, 2021	Bulgaria	40.59	0.22	
		Proportion of marine protected areas (per cent of total area) [16%]	World Bank, 2021	No economy was at the frontier in 2022	213.43	0.00	
		Cross-cutting [5%]	Number of environmental technology patents (per cent of GDP (billion US\$)) [100%]	OECD, 2018	Japan	0.97	0.00

INCLUSIVE						
Components	Sub-components	Indicators	Source	Frontier economy	Frontier value	Worst performance
Human capital development [33%]		Labour force participation rate (% of population aged 15+) [11%]	ILOSTAT, modelled estimates, 2022	No economy was at the frontier in 2022	70.13	37.30
		Labour force participation rate (gap women/men) [11%]	ILOSTAT, modelled estimates, 2022	No economy was at the frontier in 2022	0.91	0.22
		Output per worker (GDP constant 2017 international \$ in PPP) [11%]	ILOSTAT, 2021	United States of America	134,589.00	10,256.00
		Youth not in education, employment or training (% of youth population) * [11%]	ILOSTAT, 2021	No economy was at the frontier in 2022	0.38	38.06
		Human Capital Index [11%]	WDI, 2020	No economy was at the frontier in 2022	0.84	0.41
		Firms offering formal training to employees (% firms) [11%]	WDI, 2019	No economy was at the frontier in 2022	70.30	3.40
		Individuals with standard ICT skills (% of population aged 15+) [11%]	ITU, 2019	No economy was at the frontier in 2022	47.17	2.85
		Workers employed in occupations at risk of automating (%) * [11%]	OECD, EBRD calculations, 2019	Jordan	0.38	0.53
		Workers employed in carbon-intensive sectors (%) * [11%]	Bruegel, EBRD calculations, 2019	No economy was at the frontier in 2022	0.03	0.14
Access to finance and services [33%]		Saving at financial institutions (% of population aged 15+) [14%]	World Bank Financial Inclusion Database (FINDEX), 2021	Sweden	79.74	0.12
		Borrowing from financial institutions (% of population aged 15+) [14%]	World Bank FINDEX, 2021	No economy was at the frontier in 2022	82.83	0.84
		Fixed broadband subscriptions (% of population) [14%]	ITU, 2020	France	46.92	0.06
		Cost of a 5GB fixed broadband basket (% GNI per capita) * [14%]	ITU, 2020	Croatia	0.60	12.08
		Logistics performance index: Quality of trade and transport-related infrastructure [14%]	WDI, 2018	No economy was at the frontier in 2022	4.44	1.96
		Using safely managed drinking water services (% of population) [14%]	WDI, 2020	Greece	100.00	28.64
		Using safely managed sanitation services (% population) [14%]	WDI, 2020	No economy was at the frontier in 2022	98.31	12.18
Policies and norms [33%]		Social benefit spending by the government (% of GDP) [20%]	IMF IFS, 2020	France	28.90	2.50
		Equal treatment and absence of discrimination [20%]	World Justice Project, 2021	No economy was at the frontier in 2022	0.84	0.34
		Women, Business and the Law composite score [20%]	WDI, 2021	Sweden*	100.00	26.25
		Disagreeing that "it is better for everyone involved if the man earns the money and the woman takes care of the home and children" (% population) [20%]	Life in Transition Survey, 2016	Germany*	0.92	0.05
		Women subjected to physical and/or sexual violence in the last 12 months (% female population) * [20%]	WDI, 2016	Slovenia	2.00	28.80
RESILIENT						
Components	Sub-components	Indicators	Source	Frontier economy	Frontier value	Worst performance
Energy sector resilience [30%]	Liberalisation and market liquidity [50%]	Sector restructuring, corporatisation and unbundling (0 = worst, 0.67 = best) [33%]	EBRD assessment, 2021	Estonia*	0.67	0.00
		Fostering private-sector participation (0 = worst, 0.67 = best) [33%]	EBRD assessment, 2021	United States of America*	0.67	0.00
		Tariff reform (0 = worst, 0.67 = best) [33%]	EBRD assessment, 2021	Czech Republic*	0.67	0.00
	System connectivity [20%]	Domestic connectivity (0 = worst, 0.67 = best) [35%]	EBRD assessment, 2021	Czech Republic*	0.67	0.09
		Inter-country connectivity (0 = worst, 0.67 = best) [65%]	EBRD assessment, 2021	Germany*	0.67	0.00
	Regulation and legal framework [30%]	Development of an adequate legal framework (0 = worst, 0.67 = best) [50%]	EBRD assessment, 2021	Czech Republic*	0.67	0.00
Establishment of an empowered independent energy regulator (0 = worst, 0.67 = best) [50%]		EBRD assessment, 2021	Czech Republic*	0.67	0.00	

Financial stability [70%]	Banking sector health and intermediation [50%]	Capital adequacy ratio [9%]	IMF Financial Soundness Indicators (FSI), IMF Article IV, IHS Markit, National Authorities, Fitch - Sovereign Data Comparator, EBRD FI Risk Reports, 2021	Moldova	0.27	0.06
		Return on assets [9%]	IMF FSI, IMF Article IV, IHS Markit, National Authorities, Fitch - Sovereign Data Comparator, EBRD FI Risk Reports, 2021	Kazakhstan	3.12	-12.47
		Loan to deposits ratio ^c [9%]	IMF FSI, IMF Article IV, IHS Markit, National Authorities, Fitch - Sovereign Data Comparator, EBRD FI Risk Reports, 2021	No economy was at the frontier in 2022	1.00	0.29
		Non-performing loans (NPLs) to total gross loans (per cent) ^a [9%]	IMF FSI, IMF Article IV, IHS Markit, National Authorities, Fitch - Sovereign Data Comparator, S&P BICRA, EBRD FI Risk Reports, 2021	Estonia*	0.41	54.54
		Loan loss reserves to NPLs (Provisions to NPLs) ^b [9%]	IMF FSI, IHS Markit, National Authorities, EBRD FI Risk Reports, 2021	Azerbaijan*	100.00	15.14
		Asset share of five largest banks ^d [9%]	World Bank Global Financial Development Database (GFDD), IMF FSSA, EBRD FI Risk Reports, 2020	United States of America	41.63	100.00
		Asset share of private banks [9%]	World Bank GFDD, EBRD FI Risk Reports, IMF Article IV, IMF FSSA, Bank Focus, 2020	Canada*	100.00	0.00
		Financial sector assets ^c (per cent of GDP) [9%]	IMF FSI, EBRD, Internal Sovereign Risk Report, Bank Focus, National Authorities, IHS Markit, 2021	No economy was at the frontier in 2022	100.00	28.00
		Credit to private sector ^c (per cent of GDP) [9%]	World Bank GFDD, S&P BICRA, IMF Article IV, WDI, 2021	No economy was at the frontier in 2022	80.00	4.02
		Foreign currency-denominated loans ^a (per cent of total loans) [9%]	IMF FSI, IMF Article IV, IHS Markit, National Authorities, 2021	United States of America*	0.00	100.00
Liquid assets to short-term liabilities (per cent) [9%]	IMF FSI, World Bank GFDD, IMF Article IV, National Authorities, EBRD FI Risk Overview, 2021	United States of America*	180.70	15.54		
Alternative sources of financing [32%]	Other financial corporation's assets ^b (per cent of GDP) [14%]	Legal environment for financial transactions [14%]	ISDA, ICMA, 2020	United States of America*	2.5	0.00
		Capital market infrastructure [14%]	EBRD assessment, 2020	United States of America*	1.00	0.00
		Investor base [14%]	OECD, IMF, Bloomberg, Swiss RE, WEF, IMF, ECB, S&P (SNL), 2020	No economy was at the frontier in 2022	0.92	0.00
		Market capitalisation ^b [5%]	WEF, IMF, Bloomberg, local stock exchanges, 2020	United States of America*	100	0.00
		Trading to market cap ^b [5%]	WEF, IMF, Bloomberg, local stock exchanges, 2020	United States of America*	100.00	0.00
		IPO ^b [5%]	WEF, IMF, Bloomberg, local stock exchanges, 2020	No economy was at the frontier in 2022	0.10	0.00
		FI debt ^b [4%]	Cbonds, IMF, 2020	United States of America*	0.10	0.00
		Non-FI debt ^b [4%]	Cbonds, IMF, 2020	United States of America*	0.15	0.00
		Debt diversity [7%]	Vanguard Investment, ICMA, 2020	United States of America	7.00	0.00
		Money market quality [14%]	EBRD assessment, 2020	United States of America*	1.00	0.00
Regulation governance and safety nets [18%]	Is there a well-functioning deposit insurance scheme? (1 = worst, 10 = best) [25%]	Do the banks have good risk management and corporate governance practices? (1 = worst, 10 = best) [25%]	EBRD assessment, 2020	Czech Republic*	10.00	1.00
		Is there an adequate legal and regulatory framework in place? (1 = worst, 10 = best) [25%]	EBRD assessment, 2020	Czech Republic*	10.00	1.00
		Is the supervisory body independent and competent? (1 = worst, 10 = best) [25%]	EBRD assessment, 2020	Czech Republic*	10.00	1.00
			EBRD assessment, 2020	Czech Republic*	10.00	1.00

INTEGRATED						
Components	Sub-components	Indicators	Source	Frontier economy	Frontier value	Worst performance
External integration [50%]	Trade openness [33%]	Total trade volume (per cent of GDP, five-year moving average) [50%]	World Bank, WDI, 2021	No economy was at the frontier in 2022	184.52	25.17
		Number of Regional Trade Agreements [17%]	World Trade Organization (WTO), 2021	Germany*	46.00	1.00
		Binding overhang ratio ^{a, b} (%) [17%]	WTO, 2021	Germany*	0.00	142.30
		Number of non-tariff measures ^a [17%]	WTO, 2021	No economy was at the frontier in 2022	0.00	5,439.00
	Investment openness [33%]	FDI net inflows (per cent of GDP, five-year moving average) [50%]	IMF, International Investment Position Statistics, 2021	Estonia*	0.10	-0.01
		Number of bilateral investment agreements [25%]	UNCTAD, 2021	No economy was at the frontier in 2022	183.00	8.00
		FDI Restrictiveness indicator ^a [25%]	OECD, 2020	Slovenia	0.01	0.29
	Portfolio openness [33%]	Non-FDI inflows (per cent of GDP, five-year moving average) [50%]	IMF, International Investment Position Statistics, 2021	Cyprus	0.06	-0.06
		Financial openness index (Chinn-Ito) [50%]	Chinn-Ito webpage, 2019	United States*	2.32	-1.92
	Internal integration [50%]	Domestic transport [33%]	Road connectivity ^a [25%]	EBRD assessment, 2019	United States	107.53
Quality of non-road transport infrastructure [25%]			WEF Global Competitiveness Index, 2019	Japan	89.92	24.25
Competence and quality of logistics services (1 = worst, 5 = best) [13%]			World Bank, LPI database, 2018	Germany	4.31	1.96
Tracking and tracing of consignments (1 = worst, 5 = best) [13%]			World Bank, LPI database, 2018	No economy was at the frontier in 2022	4.38	1.84
Timeliness of shipments (1 = worst, 5 = best) [13%]			World Bank, LPI database, 2018	No economy was at the frontier in 2022	4.45	2.04
Proportion of products lost to breakage or spoilage during shipping ^a [13%]			World Bank/EBRD BEEPS, 2018-20	Estonia	0.00	-1.70
Cross-border transport [33%]			Quality of customs and border management, trade and transport infrastructure and ease of arranging shipments (1 = worst, 5 = best) [50%]	World Bank, LPI database, 2018	No economy was at the frontier in 2022	4.14
		Cost of trading across borders [50%]	ESCAP - World Bank trade cost database, 2020	No economy was at the frontier in 2022	107.97	392.08
Energy and ICT [33%]		Quality of electricity supply (1 = worst, 7 = best) [25%]	WEF Global Competitiveness Index, 2017	No economy was at the frontier in 2022	6.78	1.65
		Electric power transmission and distribution losses as percentage of domestic supply ^a [25%]	IEA, 2019	No economy was at the frontier in 2022	2.34	23.73
		Broadband subscription (per 100 habitants) [13%]	International Telecommunications Union (ITU), 2020	France	46.92	0.06
		Number of internet users (per cent of population) [13%]	ITU, 2020	Canada	96.97	17.99
		Level of competition for internet services (50 = monopoly, 75 = partially competitive, 100 = competitive) [6%]	World Bank, The Little Data Book 2017	United States*	100.00	50.00
		Mobile broadband basket price ^a [6%]	ITU, 2021	Germany	0.15	3.40
		International internet bandwidth per internet user [6%]	ITU, 2020	United Kingdom*	350,370	0.00
		4G coverage (per cent of population) [6%]	ITU, 2020	Sweden*	100.00	75.70

* Additional economies are at the frontier. Further information is available on request.

a Inverted before normalisation.

b Capped at frontier.

c Mirrored from frontier.