

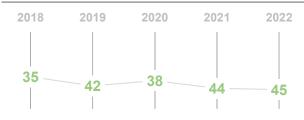
IMD World Competitiveness Yearbook 2022

# COUNTRY CHILE PROFILE

# Chile

### Competitiveness Trends - Overall

#### OVERALL PERFORMANCE (63 countries)



#### **CHALLENGES IN 2022**

- Ensure Fiscal and Monetary Policies to reduce inflation to target range.
- Reduce institutional uncertainty, improve public security and ensure the rule of law.
- Pension system reform that ensures better pensions based on individual and collective effort with a wide societal agreement.
- Implement a Tax Reform that increase tax revenue, improve public goods and foster competitiveness.
- Increase R&D and Innovation by promoting joint projects between universities and private and public sectors.

PROVIDED BY: Universidad de Chile, Facultad de Economia y Negocios (FEN)

#### BASIC FACTS Rank

Capital	Santiago de C	hile
Land area (square km '000)	757 <sup>2021</sup>	
Exchange Rate (per \$)	758.955 <sup>2021</sup>	
Population - market size (millions)	19.68 <sup>2021</sup>	28
Gross Domestic Product (GDP) (US\$ billions)	317.1 <sup>2021</sup>	37
GDP (PPP) per capita (US\$)	26,768 <sup>2021</sup>	47
Real GDP growth (%)	11.7 2021	03
Consumer price inflation (%)	4.52 2021	48
Unemployment rate (%)	8.85 <sup>2021</sup>	53
Labor force (millions)	9.11 2021	30
Current account balance (% of GDP)	-6.40 <sup>2021</sup>	59
Direct investment stocks inward (\$bn)	272.3 <sup>2020</sup>	22
Direct investment flows inward (% of GDP)	3.37 <sup>2020</sup>	14

#### COMPETITIVENESS LANDSCAPE

Ecc	nomi	c Perf	orma	nce	Go	vernn	nent E	fficie	ncy	Е	Busine	ss Eff	ficienc	У		Infra	astruc	ture	
Domestic Economy	International Trade	International Investment	Employment	Prices	Public Finance	Tax Policy	Institutional Framework	Business Legislation	Societal Framework	Productivity & Efficiency	Labor Market	Finance	Management Practices	Attitudes and Values	Basic Infrastructure	Technological Infrastructure	Scientific Infrastructure	Health and Environment	Education
24	60	31	53	19	22 -	- 22 .	28	23	53	- <b>50</b> ົ	41	. <b>35</b>	<b>36</b> .	42	47	38	57	42	<b>48</b>

#### PEER GROUPS RANKINGS





#### **Competitiveness Evolution & Attractiveness Indicators**

#### **COMPETITIVENESS EVOLUTION**

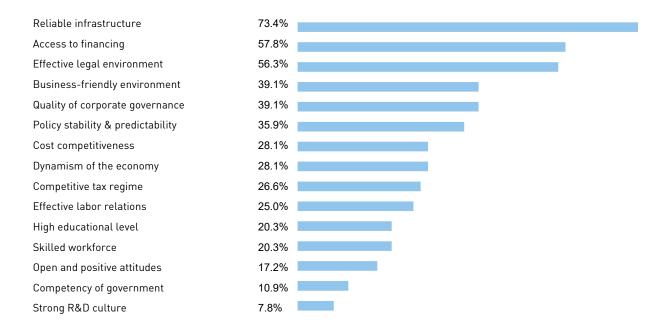
The criteria below highlight the 15 biggest Improvements and the 15 biggest Declines in the overall performance of the economy. They are determined by the largest percentage changes in the value of each criterion from one yearbook to the next.

	WCY	WCY
IMPROVEMENTS	2021	2022
1.1.14 Real GDP growth	-5.8	11.7
1.1.18 Gross fixed capital formation - real growth	-11.05	17.58
1.1.15 Real GDP growth per capita	-7.87	10.42
4.4.14 Water use efficiency	2.37	7.38
4.2.15 High-tech exports (%)	7.53	15.80
2.3.08 Exchange rate stability	0.216	0.113
1.2.08 Exports of goods (\$bn)	71.73	94.71
2.3.07 Foreign currency reserves per capita	2,013	2,605
4.4.13 Safely treated waste water	72.5	90.5
4.5.09 Student mobility inbound	0.30	0.38
1.1.20 GDP per capita	12,999	16,112
3.4.13 Entrepreneurial fear of failure	58.07	46.78
3.4.14 Total early-stage Entrepreneurial Activity	25.06	29.89
2.1.09 Pension funding	4.20	4.96
1.4.07 Unemployment rate	10.42	8.85

WCY 2021	WCY 2022
2021	2022
1.33	-6.40
0.84	0.16
-0.07	-0.11
8.67	4.43
3.04	4.52
4.56	6.54
1.84	1.13
1.48	1.98
16.5	20.9
7.18	5.67
5.74	4.55
3.35	2.69
5.31	4.30
6.93	5.64
5.69	4.64
	2021 1.33 0.84 -0.07 8.67 3.04 4.56 1.84 1.48 16.5 7.18 5.74 3.35 5.31 6.93

#### KEY ATTRACTIVENESS INDICATORS

From a list of 15 indicators, respondents of the Executive Opinion Survey were asked to select 5 that they perceived as the key attractiveness factors of their economy. The chart shows the percentage of responses per indicator from the highest number of responses to the lowest.



# Chile

# Competitiveness Trends – Factor Breakdown

#### **ECONOMIC PERFORMANCE**



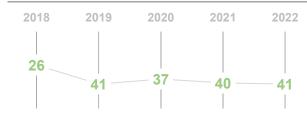
SUB-FACTOR RANKINGS:	2021	2022
Domestic Economy	48	24
International Trade	53	60
International Investment	21	31
Employment	61	53
Prices	23	19

#### **GOVERNMENT EFFICIENCY**



SUB-FACTOR RANKINGS :	2021	2022
Public Finance	15	22
Tax Policy	21	22
Institutional Framework	26	28
Business Legislation	15	23
Societal Framework	51	53

#### **BUSINESS EFFICIENCY**



SUB-FACTOR RANKINGS :	2021	2022
Productivity & Efficiency	52	50
Labor Market	46	41
Finance	32	35
Management Practices	45	36
Attitudes and Values	32	42

#### INFRASTRUCTURE



SUB-FACTOR RANKINGS :	2021	2022
Basic Infrastructure	32	47
Technological Infrastructure	43	38
Scientific Infrastructure	51	57
Health and Environment	41	42
Education	49	48



## **Balance Sheet - Factor Breakdown**

ECONOMIC PERFORMANCE	D '	WEARAICECEC	Б. 1
STRENGTHS	Rank	WEAKNESSES	Rank
1.2.24 Terms of trade index	02	1.2.25 Tourism receipts	62
1.1.14 Real GDP growth	03	1.4.04 Employment - long-term growth	59
1.1.15 Real GDP growth per capita	05	1.2.02 Current account balance	59
1.1.18 Gross fixed capital formation - real growth	06	1.2.13 Exports of commercial services (%)	57
1.3.02 Direct investment flows abroad (% of GDP)	07	1.2.17 Export concentration by partner	56
1.3.08 Direct investment stocks inward (% of GDP)	11	1.1.13 Economic complexity index	55
1.3.04 Direct investment stocks abroad (% of GDP)	16	1.2.12 Exports of commercial services (\$bn)	55
1.4.08 Long-term unemployment	21	1.2.18 Export concentration by product	54
1.3.07 Direct investment stocks inward (\$bn)	22	1.4.07 Unemployment rate	53
1.5.06 Gasoline prices	23	1.4.02 Employment (%)	51
GOVERNMENT EFFICIENCY			
STRENGTHS	Rank	WEAKNESSES	Rank
2.3.05 Central bank policy	01	2.5.05 Social cohesion	61
2.4.01 Tariff barriers	03	2.5.06 Gini coefficient	57
2.2.09 Employer social security tax rate	09	2.5.04 Risk of political instability	57
2.4.18 Immigration laws	09	2.1.02 Government budget surplus/deficit (%)	57
2.4.04 Foreign investors	09	2.3.08 Exchange rate stability	56
2.4.14 Start-up days	09	2.4.19 Redundancy costs	54
2.4.12 New business density	10	2.2.10 Employee social security tax rate	54
2.1.04 Total general government debt (%)	10	2.5.11 Equal opportunity	51
2.2.02 Collected personal income tax	12	2.5.02 Homicide	51
2.4.03 Public sector contracts	13	2.4.16 Labor regulations	48
BUSINESS EFFICIENCY STRENGTHS	Rank	WEAKNESSES	Rank
	01		60
3.4.14 Total early-stage Entrepreneurial Activity 3.3.07 Regulatory compliance (banking laws)	11	3.2.14 Labor force - long-term growth 3.1.07 Workforce productivity	58
3.2.22 Foreign highly-skilled personnel		3.2.10 Employee training	56
3.2.23 International experience	12	3.5.04 Flexibility and adaptability	54
3.5.01 Attitudes toward globalization	18 19	3.4.08 Customer satisfaction	54
3.2.01 Compensation levels	21	3.1.09 Small and medium-size enterprises	53
3.3.08 Stock markets	22	3.5.05 Need for economic and social reforms	51
	22	3.4.10 Social responsibility	49
3.3.19 Corporate debt 3.3.14 Shareholders' rights	22	3.3.05 Access to financial services - gender ratio	49
		3.2.18 Skilled labor	48
3.2.06 Working hours	23	3.2.18 Skilled labor	40
INFRASTRUCTURE		WEAVALEAGE	
STRENGTHS	Rank	WEAKNESSES	Rank
4.4.19 Forest area growth	06	4.4.27 Environmental laws	62
4.4.18 Renewable energies (%)	11	4.4.09 Medical assistance	61
4.1.07 Population - growth	12	4.5.19 Language skills	60
4.1.09 Dependency ratio	16	4.4.14 Water use efficiency	59
4.2.10 Qualified engineers	17	4.3.20 Scientific research legislation	58
4.2.03 Mobile Telephone costs	17	4.3.19 Medium- and high-tech value added	58
4.2.01 Investment in Telecommunications	18	4.4.26 Pollution problems	57
4.4.01 Total health expenditure	19	4.1.04 Access to water	56
4.2.11 Public-private partnerships	23	4.1.05 Management of cities	55

4.5.05 Pupil-teacher ratio (secondary education)

53

23

4.5.01 Total public expenditure on education

# CHILE

# **Extended Country Profile**

#### 1 · Economic Performance

1.1 · Domestic Economy	Value A	Value Average F		
1.1.00 · Exchange Rate	758.955	21,532.090	2021	
National currency per US\$ (average)				
1.1.01 · Gross Domestic Product (GDP)	317.1	1,394.4	37 <sup>2021</sup>	
US\$ billions				
1.1.02 · GDP (PPP)	526.7	1,981.9	36 <sup>2021</sup>	
Estimates ; US\$ billions at purchasing power parity				
1.1.03 · World GDP contribution	0.33	1.44	37 <sup>2021</sup>	
Percentage share of world GDP in market prices			2024	
1.1.04 · Household consumption expenditure (\$bn)	193.3	735.2	33 <sup>2021</sup>	
US\$ billions	24.0	50.4	16 <sup>2021</sup>	
1.1.05 · Household consumption expenditure (%)	61.0	53.4	16 2021	
Percentage of GDP	45.5	000.0	44 2021	
1.1.06 · Government consumption expenditure (\$bn)	45.5	232.9	44 2021	
US\$ billions  1.1.07 · Government consumption expenditure (%)	11.1	10.2	48 2021	
Percentage of GDP	14.4	18.3	40	
1.1.08 · Gross fixed capital formation (\$bn)	76.0	351.9	35 <sup>2021</sup>	
US\$ billions	76.0	331.9	33	
1.1.09 · Gross fixed capital formation (%)	24.0	22.7	23 2021	
Percentage of GDP	24.0	22.1	23	
1.1.10 · Gross domestic savings (\$bn)	78.2	379.1	38 <sup>2021</sup>	
US\$ billions	70.2	3/9.1	30	
1.1.11 · Gross domestic savings (%)	24.7	28.3	39 <sup>2021</sup>	
Percentage of GDP	27.1	20.5	33	
1.1.12 · Economic sectors			2021	
Breakdown of the economic sectors, percentage of GDP				
Economic sectors / Agriculture	3.9	3.7	2021	
Economic Sectors / Agriculture	0.0	0.7		
Economic sectors / Industry	37.2	29.1	2021	
, , <b>,</b>				
Economic sectors / Services	58.9	67.0	2021	
1.1.13 · Economic complexity index	-0.11	0.86	55 <sup>2019</sup>	
Measures knowledge intensity, by considering exports				
1.1.14 · Real GDP growth	11.7	5.6	3 2021	
Percentage change, based on national currency in constant prices				
1.1.15 · Real GDP growth per capita	10.42	5.35	5 2021	
Percentage change, based on national currency in constant prices				
1.1.16 $\cdot$ Household consumption expenditure - real growth	20.35	4.78	1 2021	
Percentage change, based on constant prices				
1.1.17 · Government consumption expenditure - real growth	10.31	4.01	6 <sup>2021</sup>	
Percentage change, based on constant prices				
1.1.18 · Gross fixed capital formation - real growth	17.58	6.32	6 <sup>2021</sup>	
Percentage change, based on constant prices				
1.1.19 · Resilience of the economy	5.97	5.88	32 <sup>2022</sup>	
Resilience of the economy to economic cycles is strong				
1.1.20 · GDP per capita	16,112	34,279	43 <sup>2021</sup>	
US\$ per capita				
1.1.21 · GDP (PPP) per capita	26,768	44,580	47 <sup>2021</sup>	
Estimates; US\$ per capita at purchasing power parity			2022	
1.1.22 · Forecast: Real GDP growth	1.5	3.7	59 <sup>2022</sup>	
Percentage change, based on national currency in constant prices			4- 2022	
1.1.23 · Forecast: Inflation	7.5	38.4	49 <sup>2022</sup>	
Percentage change			40 2022	
1.1.24 · Forecast: Unemployment	7.0	6.3	42 <sup>2022</sup>	
Percentage of total labor force			0000	
1.1.25 · Forecast: Current account balance	-4.5	1.7	56 <sup>2022</sup>	
Percentage of GDP				

1.2 · International Trade	Value A	Value Average Rank 'e				
1.2.01 · Current account balance (\$bn)	-20.3	10.4	59 <sup>2021</sup>			
US\$ billions (minus sign = deficit)						
1.2.02 · Current account balance	-6.40	1.64	59 <sup>2021</sup>			
Percentage of GDP						
1.2.03 · Balance of trade (\$bn)	2.9	-2.5	29 <sup>2021</sup>			
US\$ billions (minus sign = deficit)						
1.2.04 · Balance of trade (%)	0.90	0.27	26 <sup>2021</sup>			
Percentage of GDP						
1.2.05 · Balance of commercial services (\$bn)	-8.97	8.39	52 <sup>2021</sup>			
US\$ billions (minus sign = deficit)						
1.2.06 · Balance of commercial services (%)	-2.83	1.84	57 <sup>2021</sup>			
Percentage of GDP			0004			
1.2.07 · World exports contribution	0.36	1.45	44 2021			
Percentage share of world exports (goods and commercial services)			2024			
1.2.08 · Exports of goods (\$bn)	94.71	321.20	37 <sup>2021</sup>			
US\$ billions			2024			
1.2.09 · Exports of goods (%)	29.87	41.98	36 <sup>2021</sup>			
Percentage of GDP			2021			
1.2.10 · Exports of goods per capita	4,813	15,049	43 2021			
US\$ per capita			2021			
1.2.11 · Exports of goods - growth	28.88	27.30	22 2021			
Percentage change, based on US\$ values			2021			
1.2.12 · Exports of commercial services (\$bn)	6.56	88.34	55 <sup>2021</sup>			
US\$ billions			57 <sup>2021</sup>			
1.2.13 · Exports of commercial services (%)	2.07	15.10	57 2021			
Percentage of GDP			47 2021			
1.2.14 · Exports of commercial services - growth	8.34	17.14	47 2021			
Percentage change, based on US\$ values	404.00	400.40	44 2021			
1.2.15 · Exports of goods & commercial services	101.26	408.43	44 2021			
US\$ billions			2020			
1.2.16 · Exports breakdown by economic sector			2020			
Percentage of total exports	27.4		2020			
Exports breakdown by economic sector / Agriculture	27.1	11.3				
Exports breakdown by economic sector / Industry	65.3	64.4	2020			
Exports breakdown by economic sector / industry	00.0	04.4				
Exports breakdown by economic sector / Services	7.6	24.3	2020			
		20				
1.2.17 · Export concentration by partner	70.7	55.0	56 <sup>2020</sup>			
Exports to top 5 countries, percentage of total exports						
1.2.18 · Export concentration by product	73.9	57.6	54 <sup>2020</sup>			
Top 5 products, percentage of total exports						
1.2.19 · Imports of goods & commercial services (\$bn)	107.4	402.5	21 2021			
US\$ billions						
1.2.20 · Imports of goods & commercial services (%)	33.9	54.7	22 2021			
Percentage of GDP						
1.2.21 · Imports of goods & commerc. services growth	52.90	24.33	63 <sup>2021</sup>			
Percentage change, based on US\$ values						
1.2.22 · Imports breakdown by economic sector			2020			
Percentage of total imports						
Imports breakdown by economic sector / Agriculture	11.2	9.0	2020			
Imports breakdown by economic sector / Industry	73.2	67.7	2020			
Imports breakdown by economic sector / Services	15.7	23.3	2020			
1.2.23 · Trade to GDP ratio	59.21	102.61	43 2020			
(Exports + Imports) / GDP						
1.2.24 · Terms of trade index	119.7	99.4	2 2020			
Unit value of exports over unit value of imports						
1.2.25 · Tourism receipts	0.16	1.54	62 <sup>2020</sup>			
International tourism receipts as a percentage of GDP		-				

Employment by sector / Agriculture	6.4	7.7	2021
Employment by sector / Industry	23.0	23.5	2021
Employment by sector / Services	70.6	68.8	2021
1.4.06 · Employment in the public sector	14.45	17.83	22 2020
Percentage of total employment			
1.4.07 · Unemployment rate	8.85	8.00	53 <sup>2021</sup>
Percentage of labor force			
1.4.08 · Long-term unemployment	1.07	2.81	21 <sup>2017</sup>
Percentage of labor force			
1.4.09 · Youth unemployment	19.98	17.13	47 <sup>2021</sup>
Percentage of youth labor force (under the age of 25)			
1.4.10 · Youth exclusion	20.9	14.6	48 <sup>2020</sup>
Share of youth population (15-24) not in education, employment or training			

1.5 · Prices Value Average Rank 'ear

1.0 ° F Fices		value Average N		
1.5.01 · Consumer price inflation	4.52	29.25	48 2021	
Average annual rate				
1.5.02 · Cost-of-living index	71.70	78.37	23 2021	
Index of a basket of goods & services in the main city, including housing (New York City = 100)				
1.5.03 · Apartment rent	835	1,530	15 <sup>2018</sup>	
3-room apartment monthly rent in major cities, US\$				
1.5.04 · Office rent	442	656	29 <sup>2021</sup>	
Total occupation cost in the main city (US\$/Sq.M. per year)				
1.5.05 · Food costs	17.62	17.58	34 <sup>2021</sup>	
Percentage of household final consumption expenditures				
1.5.06 · Gasoline prices	1.07	1.26	23 2021	
Premium unleaded gasoline (95 Ron) US\$ per litre				



# **Extended Country Profile**

# 2 · Government Efficiency

2.1 · Public Finance	Value	Average F	Rank 'ear
2.1.01 · Government budget surplus/deficit (\$bn)	-23.84	-91.93	41 2021
US\$ billions			
2.1.02 · Government budget surplus/deficit (%)	-7.52	-4.00	57 <sup>2021</sup>
Percentage of GDP			
2.1.03 · Total general government debt (\$bn)	114.98	1,436.31	19 <sup>2021</sup>
US\$ billions			
2.1.04 · Total general government debt (%)	36.26	71.59	10 <sup>2021</sup>
Percentage of GDP			
2.1.05 · Total general government debt-real growth	28.11	8.58	61 <sup>2021</sup>
Percentage change, based on national currency in constant prices			
2.1.06 · Interest payment (%)	3.51	5.98	30 <sup>2021</sup>
Percentage of current revenue			
2.1.07 · Public finances	5.49	4.92	25 <sup>2022</sup>
Public finances are being efficiently managed			
2.1.08 · Tax evasion	5.07	5.05	32 <sup>2022</sup>
Tax evasion is not a threat to your economy			
2.1.09 · Pension funding	4.96	4.77	28 <sup>2022</sup>
Pension funding is adequately addressed for the future			
2.1.10 · General government expenditure	28.4	38.2	19 <sup>2021</sup>
Percentage of GDP			
2.2.01 · Collected total tax revenues	19.32	27.09	20 2020
Percentage of GDP			
2.2.02 · Collected personal income tax	1.98	6.00	12 <sup>2020</sup>
On profits, income and capital gains, as a percentage of GDP			
2.2.03 · Collected corporate taxes	4.70	2.70	59 <sup>2020</sup>
On profits, income and capital gains, as a percentage of GDP			
2.2.04 · Collected indirect tax revenues	10.61	9.41	35 <sup>2020</sup>
Taxes on goods and services as a percentage of GDP			
2.2.05 · Collected capital and property taxes	1.00	1.47	29 2020
Percentage of GDP			
2.2.06 · Collected social security contribution	1.55	7.28	12 <sup>2020</sup>
Compulsory contribution of employees and employers as a percentage of GDP			
2.2.07 · Corporate tax rate on profit	25.00	22.34	39 <sup>2021</sup>
Maximum tax rate, calculated on profit before tax			
2.2.08 · Consumption tax rate	19.00	16.37	33 <sup>2021</sup>
Standard rate of VAT/GST			
2.2.09 · Employer social security tax rate	5.0	16.0	9 2021
0/	5.0		
%	5.0		
2.2.10 · Employee social security tax rate	18.5	10.4	54 <sup>2021</sup>
		10.4	
2.2.10 · Employee social security tax rate		10.4	54 <sup>2021</sup> 28 <sup>2022</sup>

2.3 · Institutional Framework	Value /	Average R	Rank 'ear
2.3.01 · Real short-term interest rate	-3.33	-3.07	12 <sup>2021</sup>
Real discount / bank rate			
2.3.02 · Cost of capital	5.64	5.63	39 <sup>2022</sup>
Cost of capital encourages business development			
2.3.03 · Interest rate spread	2.34	3.49	24 2020
Lending rate minus deposit rate			
2.3.04 · Country credit rating	44.7	43.0	32 2021
Index (0-60) of three country credit ratings: Fitch, Moody's and S&P			
2.3.05 · Central bank policy	8.54	6.31	1 2022
Central bank policy has a positive impact on the economy			
2.3.06 · Foreign currency reserves	51.25	216.77	37 <sup>2021</sup>
US\$ billions			
2.3.07 · Foreign currency reserves per capita	2,605	9,199	38 2021
US\$ per capita			
2.3.08 · Exchange rate stability	0.113	0.072	56 <sup>2021</sup>
Parity change from national currency to SDR, 2021 / 2019			
2.3.09 · Legal and regulatory framework	6.06	5.37	23 2022
The legal and regulatory framework encourages the competitiveness of enterprises			
2.3.10 · Adaptability of government policy	4.51	4.83	38 2022
Adaptability of government policy to changes in the economy is high			
2.3.11 · Transparency	4.96	4.87	30 2022
Transparency of government policy is satisfactory			
2.3.12 · Bureaucracy	2.93	3.72	42 2022
Bureaucracy does not hinder business activity			
2.3.13 · Bribery and corruption	4.48	4.77	34 <sup>2022</sup>
Bribery and corruption do not exist			
2.3.14 · Rule of law	84.13	72.47	26 <sup>2020</sup>
Rule of Law Index			
2.3.15 · Sustainable Development Goals	77.1	75.1	29 2021
Country performance on the 17 SDGs			
2.3.16 · Democracy Index	7.92	6.97	22 2021
EIU Overall Democracy Index, © The Economist Intelligence Unit Limited 2021			

2.4 · Business Legislation	Value A	verage R	lank 'ear
2.4.01 · Tariff barriers	0.43	2.32	3 2020
Tariffs on imports: Applied weighted mean tariff rate for all products			
2.4.02 · Protectionism	5.88	5.74	29 <sup>2022</sup>
Protectionism of your government does not impair the conduct of your business			
2.4.03 · Public sector contracts	7.10	5.96	13 <sup>2022</sup>
Public sector contracts are sufficiently open to foreign bidders			
2.4.04 · Foreign investors	8.18	6.82	9 2022
Foreign investors are free to acquire control in domestic companies			
2.4.05 · Capital markets	7.25	6.57	24 2022
Capital markets (foreign and domestic) are easily accessible			
2.4.06 · Investment incentives	5.43	5.93	45 <sup>2022</sup>
Investment incentives are attractive to foreign investors			
2.4.07 · Government subsidies	1.09	2.02	20 2020
To private and public companies as a percentage of GDP			
2.4.08 · Subsidies	5.34	5.52	39 <sup>2022</sup>
Subsidies do not distort fair competition and economic development			
2.4.09 · State ownership of enterprises	6.79	6.04	19 <sup>2022</sup>
State ownership of enterprises is not a threat to business activities			
2.4.10 · Competition legislation	6.06	5.84	30 <sup>2022</sup>
Competition legislation is efficient in preventing unfair competition			
2.4.11 · Parallel economy	4.33	5.14	40 2022
Parallel (black-market, unrecorded) economy does not impair economic development			
2.4.12 · New business density	10.7	5.8	10 <sup>2019</sup>
Registered new businesses per 1'000 people aged 15-64			
2.4.13 · Creation of firms	6.64	6.63	39 <sup>2022</sup>
Creation of firms is supported by legislation			
2.4.14 · Start-up days	4.0	15.1	9 2019
Number of days to start a business			
2.4.15 · Start-up procedures	6.0	6.0	32 <sup>2019</sup>
Number of procedures to start a business			
2.4.16 · Labor regulations	4.52	5.50	48 2022
Labor regulations (hiring/firing practices, minimum wages, etc.) do not hinder business activities			
2.4.17 · Unemployment legislation	5.36	4.99	28 <sup>2022</sup>
Unemployment legislation provides an incentive to look for work			
2.4.18 · Immigration laws	6.89	5.83	9 2022
Immigration laws do not prevent your company from employing foreign labor			
2.4.19 · Redundancy costs	23.1	9.4	54 <sup>2019</sup>
Number of weeks of salary			

2.5 · Societal Framework	Value Average Rank		lank 'ear
2.5.01 · Justice	5.37	5.72	37 <sup>2022</sup>
Justice is fairly administered			
2.5.02 · Homicide	3.93	4.28	51 <sup>2019</sup>
Intentional homicide, rate per 100'000 population			
2.5.03 · Ageing of population	12.8	14.8	22 2021
Population over 65, percentage of total population			
2.5.04 · Risk of political instability	2.69	5.80	57 <sup>2022</sup>
The risk of political instability is very low			
2.5.05 · Social cohesion	2.78	5.68	61 <sup>2022</sup>
Social cohesion is high			
2.5.06 · Gini coefficient	44.40	35.03	57 <sup>2017</sup>
Equal distribution of income scale: 0 (absolute equality) to 100 (absolute inequality)			
2.5.07 · Income distribution - lowest 10%	2.30	2.75	2017
Percentage of household incomes going to lowest 10% of households			
2.5.08 · Income distribution - highest 10%	36.30	26.98	2017
Percentage of household incomes going to highest 10% of households			
2.5.09 · Income distribution - lowest 40%	15.50	18.99	45 <sup>2017</sup>
Percentile going to the lowest 40% of households			
2.5.10 · Income distribution - lowest 40% growth	-	0.34	
Percentile going to the lowest 40% of households - growth			
2.5.11 · Equal opportunity	5.04	6.17	51 <sup>2022</sup>
Equal opportunity legislation in your economy encourages economic development			
2.5.12 · Females in parliament	35.48	29.11	21 2021
Percentage of total seats in Parliament			
2.5.13 · Unemployment rate - gender ratio	1.04	1.25	30 <sup>2021</sup>
Ratio of the female and male unemployement rates			
2.5.14 · Gender inequality	0.247	0.183	45 <sup>2019</sup>
Gender Inequality Index (UNDP)			
2.5.15 · Disposable Income	72.4	72.2	37 <sup>2021</sup>
Female / male ratio			
2.5.16 · Freedom of the Press	27.36	27.85	34 <sup>2021</sup>
Reporters Without Borders: World Press Freedom Score			



# **Extended Country Profile**

# 3 · Business Efficiency

3.1 · Productivity & Efficiency	ductivity & Efficiency Value Av		Rank 'ear
3.1.01 · Overall productivity (PPP)	62,280	84,576	45 <sup>2021</sup>
Estimates: GDP (PPP) per person employed, US\$			
3.1.02 · Overall productivity (PPP) - real growth	1.76	2.84	45 <sup>2021</sup>
Estimates: Percentage change of GDP (PPP) per person employed			
3.1.03 · Labor productivity (PPP)	33.09	48.28	45 <sup>2021</sup>
Estimates: GDP (PPP) per person employed per hour, US\$			
3.1.04 · Agricultural productivity (PPP)	38,760	55,834	37 <sup>2021</sup>
Estimates: Related GDP (PPP) per person employed in agriculture, US\$			
3.1.05 · Productivity in industry (PPP)	102,804	107,180	33 <sup>2021</sup>
Estimates: Related GDP (PPP) per person employed in industry, US\$			
3.1.06 · Productivity in services (PPP)	53,124	86,235	48 <sup>2021</sup>
Estimates: Related GDP (PPP) per person employed in services, US\$			
3.1.07 · Workforce productivity	4.00	6.15	58 <sup>2022</sup>
Workforce productivity is competitive by international standards			
3.1.08 · Large corporations	6.55	6.67	38 <sup>2022</sup>
Large corporations are efficient by international standards			
3.1.09 · Small and medium-size enterprises	4.69	6.12	53 <sup>2022</sup>
Small and medium-size enterprises are efficient by international standards			
3.1.10 · Use of digital tools and technologies	5.94	6.29	37 <sup>2022</sup>
Companies are very good at using digital tools and technologies to improve performance			

3.2 · Labor Market Value Average Rank 'ear

3.2 · Labor Market	Value	Average F	≀ank ′ear
3.2.01 · Compensation levels  Total hourly compensation in manufacturing (wages + supplementary benefits), US\$	6.54	15.09	21 <sup>2021</sup>
3.2.02 · Unit labor costs for total economy	-	1.59	
Percentage change			
3.2.03 · Remuneration in services professions	23,844	28,619	30 <sup>2018</sup>
Gross annual income including supplements such as bonuses, US\$			
Remuneration in services professions / Call center agent	12,318	19,099	2018
Remuneration in services professions / Nurse	32,337	30,277	2018
Remuneration in services professions / Primary school	17,860	30,970	2018
Remuneration in services professions / Product Manager	60,615	49,302	2018
Remuneration in services professions / Sales Assistant	8,544	19,165	2018
Remuneration in services professions / Secretary / Personal	11,388	22,903	2018
3.2.04 · Remuneration of management	180,102	169,169	37 <sup>2019</sup>
Total base salary plus bonuses and long-term incentives, US\$			
Remuneration of management / CEO	298,853	306,535	2019
Remuneration of management / Director manufacturing	146,546	149,356	2019
Remuneration of management / Engineer	106,922	80,327	2019
Remuneration of management / Human resources director	168,088	140,455	2019
3.2.05 · Remuneration spread	28.42	17.99	50 <sup>2018</sup>
Ratio of CEO to personal assistant remuneration			2021
3.2.06 · Working hours	1,882	1,843	23 <sup>2021</sup>
Average number of working hours per year  3.2.07 · Worker motivation	5.31	5.87	41 2022
Worker motivation in companies is high	0.01	0.01	••
3.2.08 · Industrial disputes	0.11	12.21	17 <sup>2020</sup>
Working days lost per 1,000 inhabitants per year (average 2018-2020)  3.2.09 · Apprenticeships	4.85	5.20	40 2022
Apprenticeships are sufficiently implemented			2000
3.2.10 · Employee training	4.74	6.03	56 <sup>2022</sup>
Employee training is a high priority in companies	0.44	40.47	30 <sup>2021</sup>
3.2.11 · Labor force Employed and registered unemployed (millions)	9.11	40.47	30 2021
3.2.12 · Labor force (%)	46.29	50.09	48 2021
Percentage of population			
3.2.13 · Labor force growth  Percentage change	3.42	1.18	9 2021
3.2.14 · Labor force - long-term growth	-8.21	-0.67	60 <sup>2021</sup>
Estimates: five year percentage change			22 2020
3.2.15 · Part-time employment	16.06	15.19	22 2020
Percentage of total employment  3.2.16 · Female labor force	41.38	42.68	48 <sup>2021</sup>
Percentage of total labor force			
3.2.17 · Foreign labor force - migrant stock  Migrant stock, age 20-64, % of population	11.53	17.76	35 <sup>2020</sup>
3.2.18 · Skilled labor	4.30	5.21	48 <sup>2022</sup>
Skilled labor is readily available  3.2.19 · Finance skills	6.00	6.07	36 <sup>2022</sup>
Finance skills are readily available  3.2.20 · Attracting and retaining talents	6.36	6.82	44 2022
Attracting and retaining talents is a priority in companies			27 <sup>2022</sup>
3.2.21 · Brain drain  Brain frain (well-educated and skilled people) does not hinder competitiveness in your economy	5.33	4.93	
	6.85	5.39	12 <sup>2022</sup>
3.2.22 · Foreign highly-skilled personnel  Foreign highly-skilled personnel are attracted to your country's business environment			
Foreign highly-skilled personnel are attracted to your country's business environment  3.2.23 · International experience	6.00	5.62	18 <sup>2022</sup>
	6.00 5.21	5.62	18 <sup>2022</sup>

3.3 · Finance Value Average Rank 'ear

- I manee			
3.3.01 · Banking sector assets	108.20	157.54	41 2021
Percentage of GDP			
3.3.02 · Financial cards in circulation	3.00	3.45	22 2021
Number of cards per capita			
3.3.03 · Financial card transactions	6,352	11,334	40 2021
US\$ per capita			
3.3.04 · Access to financial services	74.35	82.66	45 <sup>2017</sup>
Proportion of adults with a bank account or mobile-money-service provider			
3.3.05 · Access to financial services - gender ratio	0.92	0.96	49 <sup>2017</sup>
Ratio of the female and male access to a bank account or mobile-money-service provider			
3.3.06 · Banking and financial services	6.72	6.24	25 <sup>2022</sup>
Banking and financial services do support business activities efficiently			
3.3.07 · Regulatory compliance (banking laws)	7.91	6.92	11 2022
Regulatory compliance is sufficiently developed			
3.3.08 · Stock markets	6.63	5.83	22 2022
Stock markets provide adequate financing to companies			
3.3.09 · Stock market capitalization (\$bn)	170.8	1,470.4	37 <sup>2021</sup>
US\$ billions			
3.3.10 · Stock market capitalization (%)	53.87	105.47	32 <sup>2021</sup>
Percentage of GDP			
3.3.11 · Value traded on stock markets	2,042	23,478	35 <sup>2020</sup>
US\$ per capita			
3.3.12 · Listed domestic companies	194	718	30 <sup>2020</sup>
Number of listed domestic companies			
3.3.13 · Stock market index	11.00	26.39	55 <sup>2021</sup>
Percentage change on index in national currency			
3.3.14 · Shareholders' rights	7.34	6.91	22 2022
Shareholders' rights are sufficiently implemented			
3.3.15 · Initial Public Offerings	391.0	4,258.5	34 <sup>2021</sup>
By acquiror nation (average 2019-2021) US\$ millions			
3.3.16 · Credit	6.52	6.05	27 <sup>2022</sup>
Credit is easily available for business			
3.3.17 · Venture capital	4.73	5.34	44 2022
Venture capital is easily available for business			
3.3.18 · M&A Activity	0.388	1.193	38 2020
Deals per listed company (average 2018-2020)			
3.3.19 · Corporate debt	6.48	5.83	22 2022
Corporate debt does not restrain the ability of enterprises to compete			

3.4 · Management Practices	Value A	verage R	Rank 'ear
3.4.01 · Agility of companies	6.12	6.08	26 <sup>2022</sup>
Companies are agile  3.4.02 · Changing market conditions	6.90	6.69	28 2022
Companies are generally extremely aware of changing market conditions	0.90	0.09	20
3.4.03 · Opportunities and threats	6.51	6.29	25 <sup>2022</sup>
Companies are very good at responding quickly to opportunities and threats	0.01	0.20	20
3.4.04 · Credibility of managers	5.52	6.15	46 2022
Credibility of managers in society is strong	0.02	00	
3.4.05 · Corporate boards	6.03	6.17	36 <sup>2022</sup>
Corporate boards do supervise the management of companies effectively		• • • • • • • • • • • • • • • • • • • •	
3.4.06 · Auditing and accounting practices	7.10	7.25	37 <sup>2022</sup>
Auditing and accounting practices are adequately implemented in business			
3.4.07 · Use of big data and analytics	4.72	5.33	45 <sup>2022</sup>
Companies are very good at using big data and analytics to support decision-making			
3.4.08 · Customer satisfaction	6.33	6.95	54 <sup>2022</sup>
Customer satisfaction is emphasized in companies			
3.4.09 · Entrepreneurship	5.64	6.07	44 2022
Entrepreneurship of managers is widespread in business			
3.4.10 · Social responsibility	5.40	6.16	49 2022
Social responsibility of business leaders is high			
3.4.11 · Women in management	26.45	31.46	44 2017
Female share of senior and middle management (% of management)			
3.4.12 · Women on boards	15.20	24.22	42 2021
Boardmembers of all companies analyzed by MSCI			
3.4.13 · Entrepreneurial fear of failure	46.78	42.81	32 2021
% indicating that fear of failure would prevent them from setting up a business			
3.4.14 · Total early-stage Entrepreneurial Activity	29.89	12.11	1 2021
% who are either a nascent entrepreneur or owner-manager of a new business			
3.5 · Attitudes and Values	Value A	werage R	Rank 'ear
3.5.01 · Attitudes toward globalization	7.03	6.47	19 <sup>2022</sup>
Attitudes toward globalization are generally positive in your society			
3.5.02 · Image abroad or branding	6.57	6.44	37 <sup>2022</sup>
The image abroad of your country encourages business development			
3.5.03 · National culture	6.60	6.82	36 <sup>2022</sup>
The national culture is open to foreign ideas			
3.5.04 · Flexibility and adaptability	5.55	6.63	54 <sup>2022</sup>
Flexibility and adaptability of people are high when faced with new challenges			2000
3.5.05 · Need for economic and social reforms	4.88	5.88	51 <sup>2022</sup>
The need for economic and social reforms is generally well understood			0000
3.5.06 · Digital transformation in companies	5.73	5.95	33 <sup>2022</sup>
Digital transformation in companies is generally well implemented			2022
3.5.07 · Value system	5.55	6.23	45 <sup>2022</sup>
The value system in your society supports competitiveness			



# **Extended Country Profile**

#### 4 · Infrastructure

Square kilometers   1000	4.1 · Basic Infrastructure	Value /	Average F	≀ank ′ear
A.1.02 - Arable area   Sept	4.1.01 · Land area	757	1,207	18 <sup>2021</sup>
Square meters per capita   4,1.03   Water resources   7,253   18,375   6   2018   10	Square kilometers ('000)			
A.1.03 - Water resources	4.1.02 · Arable area	867	2,704	50 <sup>2019</sup>
Total internal renewable per capita in cubic meters 4, 1, 1, 4. Access to water A, 1, 1, 4. Access to water A, 1, 1, 4. Access to water A, 1, 1, 5. Management of cities Management of cities supports business development 4, 1, 1, 6. Population - market size Estimates in millions 4, 1, 10, 7. Population - growth Percentage of total population Percentage change 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Square meters per capita			
A.1.04 - Access to water	4.1.03 · Water resources	47,253	18,375	6 <sup>2018</sup>
Access to water is adequately ensured and managed 4.1.05 · Management of cities supports business development 4.1.06 · Population - market size Estimates in millions 4.1.07 · Population - growth Percentage change 4.1.08 · Dependent Population Population over 65 years  12.8 14.8 2021  Perpulation under 15 years  12.8 14.8 2021  4.1.09 · Dependency ratio Population under 15 years  4.1.10 · Roads Density of the network, km roads/square km land area 4.1.11 · Railroads Density of the network, km roads/square km land area 4.1.12 · Air transportation Number of passengers carried by main companies, thousands 4.1.13 · Ouality of air transportation Quality of air transportation encourages business development 4.1.14 · Distribution infrastructure The distribution infrastructure of goods and services is generally efficient 4.1.15 · Total indigenous energy production (%) Percentage of total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent 4.1.11 · Total indigenous energy consumption per capita 4.1.12 · Total final energy consumption per capita 4.1.13 · Cotel final energy consumption per capita 4.1.14 · Distribution infrastructure into so of oil equivalent 4.1.15 · Interpretation consumption and of its of i	Total internal renewable per capita in cubic meters			
	4.1.04 · Access to water	5.67	7.90	56 <sup>2022</sup>
Management of cities supports business development 4.1.06. Population - market size Estimates in millions 4.1.07 · Population - growth Percentage change 4.1.08 · Dependent Population Population over 65 years  12.8 14.8 2071  Population under 15 years  18.7 18.7 2021  4.1.09 · Dependency ratio Population under 15 years  4.1.10 · Roads Population under 15 years  4.1.10 · Roads Population under 15 years  4.1.11 · Railroads Population under 15 and over 64 years old, divided by active population [15 to 64 years]  4.1.11 · Railroads Population under years  4.1.11 · Railroads Population under years with a special population [15 to 64 years]  4.1.12 · Air transportation Population under years with a special population [15 to 64 years]  4.1.13 · Air transportation Population under years with a special population [15 to 64 years]  4.1.14 · Distribution infrastructure of goods and services is generally efficient The distribution infrastructure of goods and services is generally efficient  4.1.15 · Chargy infrastructure of goods and services is generally efficient  4.1.16 · Total indigenous energy production [%] Percentage of total requirements in tons of oil equivalent  4.1.18 · Total indigenous energy production [%] Percentage of total requirements in tons of oil equivalent  4.1.19 · Total final energy consumption per capita  4.1.19 · Total final energy consumption per capita  4.1.10 · Electricity costs for industrial clients  9 · 200 · 2	Access to water is adequately ensured and managed			
Management of cities supports business development   4,1.06 - Population - market size   19.68   8.151   28   201   20	4.1.05 · Management of cities	5.22	6.61	55 <sup>2022</sup>
Stimates in millions				
Stimates in millions		19.68	81.51	28 2021
Percentage change	·			
A.1.08 · Dependent Population	4.1.07 · Population - growth	1.13	0.30	12 <sup>2021</sup>
Percentage of total population Population over 65 years  12.8 14.8 2021  4.1.09 · Dependency ratio Population under 15 years  4.1.10 · Roads Density of the network, km roads/square km land area 4.1.11 · Railroads Density of the network, km per square km 4.1.12 · Air transportation Number of passengers carried by main companies, thousands 4.1.13 · Quality of air transportation Quality of air transportation Quality of air transportation A.1.14 · Distribution infrastructure The distribution infrastructure of goods and services is generally efficient 4.1.15 · Fenergy infrastructure Energy infrastructure is adequate and efficient 4.1.16 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent Millions MTOE 4.1.19 · Total final energy consumption per capita MITOE per capita 4.1.19 · Electricity costs for industrial clients MICE per capita 4.1.19 · Selectricity costs for industrial clients MICE per capita 4.1.10 · Cost of total population MICE per capita 4.1.10 · Cost of total population industrial clients A.1.10 · Cost of total population per capita MITOE per capita 4.1.10 · Cost of total population industrial clients A.1.10 · Cost of total per capita 4.1.110 · Cost of total per capita	, ,			
Population over 65 years   12.8	4.1.08 · Dependent Population	31.5	33.6	2021
Population over 65 years   12.8	Percentage of total population			
4.1.09 · Dependency ratio Population under 15 and over 64 years old, divided by active population [15 to 64 years]  4.1.10 · Roads Density of the network, km roads/square km land area  4.1.11 · Railroads Density of the network, km per square km Density of the network, km per square km  4.1.12 · Air transportation Number of passengers carried by main companies, thousands  4.1.13 · Quality of air transportation Quality of air transportation encourages business development  4.1.14 · Distribution infrastructure The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients		12.8	14.8	2021
Population under 15 and over 64 years old, divided by active population (15 to 64 years)   A.1.10	Population under 15 years	18.7	18.7	2021
4.1.10 · Roads       0.11       1.39       49       2016         Density of the network, km roads/square km land area       4.1.11 · Railroads       0.003       0.049       52       2020         Density of the network, km per square km       4.1.12 · Air transportation       8,020       27,297       34       2020         Number of passengers carried by main companies, thousands       4.1.13 · Quality of air transportation encourages business development       7.79       7.07       24       2022         4.1.14 · Distribution infrastructure       7.37       7.12       32       2022         The distribution infrastructure of goods and services is generally efficient       7.16       6.81       29       2022         4.1.15 · Energy infrastructure is adequate and efficient       4.1.16 · Total indigenous energy production       13.67       169.14       40       2019         Millions MTOE       4.1.17 · Total indigenous energy production (%)       33.0       106.4       47       2019         Percentage of total requirements in tons of oil equivalent       4.1.18 · Total final energy consumption       28.31       122.04       33       2019         Millions MTOE       4.1.19 · Total final energy consumption per capita       1.48       2.46       18       2019         MTOE per capita       4.20 · Electricity co	4.1.09 · Dependency ratio	46.1	51.2	16 <sup>2021</sup>
Density of the network, km roads/square km land area	Population under 15 and over 64 years old, divided by active population (15 to 64 years)			
4.1.11 · Railroads       0.003       0.049       52       2020 Density of the network, km per square km         4.1.12 · Air transportation       8,020       27,297       34       2020 Density of passengers carried by main companies, thousands         4.1.13 · Quality of air transportation       7.79       7.07       24       2022 Density of air transportation encourages business development         4.1.14 · Distribution infrastructure       7.37       7.12       32       2022 Density of the network, km per square km         4.1.15 · Energy infrastructure of goods and services is generally efficient       7.16       6.81       29       2022 Density of the network, km per square km         4.1.15 · Energy infrastructure of goods and services is generally efficient       7.16       6.81       29       2022 Density of the network km per square km         4.1.16 · Total indigenous energy production       13.67       169.14       40       2019 Density of the network km per square km         4.1.17 · Total indigenous energy production (%)       33.0       106.4       47       2019 Density of the network km per square km         4.1.18 · Total final energy consumption       28.31       122.04       33       2019 Density of the network km per square km         4.1.19 · Total final energy consumption per capita       1.48       2.46       18       2019 Density the network km per square km	4.1.10 · Roads	0.11	1.39	49 <sup>2016</sup>
Density of the network, km per square km  4.1.12 · Air transportation 8,020 27,297 34 2020 Number of passengers carried by main companies, thousands  4.1.13 · Quality of air transportation 7.79 7.07 24 2022 Quality of air transportation encourages business development  4.1.14 · Distribution infrastructure 7.37 7.12 32 2022 The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure of goods and services is generally efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) 33.0 106.4 47 2019 Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption 28.31 122.04 33 2019 Millions MTOE  4.1.19 · Total final energy consumption per capita 1.48 2.46 18 2019 MTOE per capita  4.1.20 · Electricity costs for industrial clients 0.165 0.107 52 2020	Density of the network, km roads/square km land area			
4.1.12 · Air transportation 8,020 27,297 34 2020 Number of passengers carried by main companies, thousands  4.1.13 · Quality of air transportation 7.79 7.07 24 2022 Quality of air transportation encourages business development  4.1.14 · Distribution infrastructure 7.37 7.12 32 2022 The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) 33.0 106.4 47 2019 Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption 28.31 122.04 33 2019 Millions MTOE  4.1.19 · Total final energy consumption per capita 1.48 2.46 18 2019 MTOE per capita  4.1.20 · Electricity costs for industrial clients	4.1.11 · Railroads	0.003	0.049	52 <sup>2020</sup>
Number of passengers carried by main companies, thousands 4.1.13 · Quality of air transportation 7.79 7.07 24 2022 Quality of air transportation encourages business development 4.1.14 · Distribution infrastructure 7.37 7.12 32 2022 The distribution infrastructure of goods and services is generally efficient 4.1.15 · Energy infrastructure sadequate and efficient 4.1.16 · Total indigenous energy production 13.67 169.14 40 2019 Millions MTOE 4.1.17 · Total indigenous energy production (%) 33.0 106.4 47 2019 Percentage of total requirements in tons of oil equivalent 4.1.18 · Total final energy consumption 28.31 122.04 33 2019 Millions MTOE 4.1.19 · Total final energy consumption per capita 1.48 2.46 18 2019 MTOE per capita 4.1.20 · Electricity costs for industrial clients 0.165 0.107 52 2020	Density of the network, km per square km			
4.1.13 · Quality of air transportation Quality of air transportation encourages business development  4.1.14 · Distribution infrastructure The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  7.70	4.1.12 · Air transportation	8,020	27,297	34 2020
Quality of air transportation encourages business development  4.1.14 · Distribution infrastructure The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  7.37 7.12 32 2022  2022  2022  2022  2022  2023  2024  2019	Number of passengers carried by main companies, thousands			
4.1.14 · Distribution infrastructure The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  7.37 7.12 32 2022  2022  2022  2022  2022  2022  2022  2022  2022  2022  2022  2023  2024  2036  2049  2059  2059  2069  2070  207	4.1.13 · Quality of air transportation	7.79	7.07	24 2022
The distribution infrastructure of goods and services is generally efficient  4.1.15 · Energy infrastructure Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  4.1.20 · Electricity costs for industrial clients	Quality of air transportation encourages business development			
4.1.15 · Energy infrastructure Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  7.16 6.81 29 2022 2022 2023 2019 2019 2019 2019 2019 2019 2019 2019	4.1.14 · Distribution infrastructure	7.37	7.12	32 2022
Energy infrastructure is adequate and efficient  4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients	The distribution infrastructure of goods and services is generally efficient			
4.1.16 · Total indigenous energy production Millions MTOE  4.1.17 · Total indigenous energy production [%] Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  13.67 169.14 40 2019 2019 2019 2019 2019 2019 2019 2019	4.1.15 · Energy infrastructure	7.16	6.81	29 2022
Millions MTOE  4.1.17 · Total indigenous energy production (%) Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  And a sum of the percentage of total requirements in tons of oil equivalent  28.31 122.04 33 2019  1.48 2.46 18 2019  2019  2020  2020	Energy infrastructure is adequate and efficient			
4.1.17 · Total indigenous energy production [%] Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption Millions MTOE  4.1.19 · Total final energy consumption per capita MTOE per capita  4.1.20 · Electricity costs for industrial clients  3.0 106.4 47 2019 2019 2019 2019 2019 2019 2019 2019	4.1.16 · Total indigenous energy production	13.67	169.14	40 2019
Percentage of total requirements in tons of oil equivalent  4.1.18 · Total final energy consumption  Millions MTOE  4.1.19 · Total final energy consumption per capita  MTOE per capita  4.1.20 · Electricity costs for industrial clients  D.165 D.107 52 2020	Millions MT0E			
4.1.18 · Total final energy consumption Millions MT0E28.31122.043320194.1.19 · Total final energy consumption per capita MT0E per capita1.482.461820194.1.20 · Electricity costs for industrial clients0.1650.107522020	4.1.17 · Total indigenous energy production (%)	33.0	106.4	47 <sup>2019</sup>
Millions MTOE  4.1.19 · Total final energy consumption per capita  MTOE per capita  4.1.20 · Electricity costs for industrial clients  MIDE per capita	Percentage of total requirements in tons of oil equivalent			
Millions MTOE  4.1.19 · Total final energy consumption per capita  MTOE per capita  4.1.20 · Electricity costs for industrial clients  MIDE per capita	4.1.18 · Total final energy consumption	28.31	122.04	33 2019
MTOE per capita  4.1.20 · Electricity costs for industrial clients  0.165 0.107 52 2020				
MTOE per capita  4.1.20 · Electricity costs for industrial clients  0.165 0.107 52 2020	4.1.19 · Total final energy consumption per capita	1.48	2.46	18 <sup>2019</sup>
4.1.20 · Electricity costs for industrial clients 0.165 0.107 52 2020				
·		0.165	0.107	52 <sup>2020</sup>

4.2 · Technological Infrastructure	Value Average Ra		Rank 'ear
4.2.01 · Investment in Telecommunications Percentage of GDP	0.51	0.42	18 <sup>2021</sup>
4.2.02 · Mobile Broadband subscribers	75.1	71.5	33 <sup>2020</sup>
4G & 5G market, % of mobile market			
4.2.03 · Mobile Telephone costs	7.5	15.7	17 <sup>2020</sup>
Monthly Blended Average Revenue per User			
4.2.04 · Communications technology	8.09	7.67	26 <sup>2022</sup>
Communications technology (voice and data) meets business requirements			
4.2.05 · Secure internet servers	12,914	36,109	38 <sup>2020</sup>
publicly-trusted TLS/SSL certificates, Netcraft Secure Server Survey.			
4.2.06 · Internet users	799	839	46 <sup>2021</sup>
Number of internet users per 1000 people			
4.2.07 ⋅ Broadband subscribers	224	381	48 <sup>2020</sup>
Number of subscriptions per 1000 inhabitants			
4.2.08 · Internet bandwidth speed	103.8	93.5	25 <sup>2021</sup>
Average speed			
4.2.09 · Digital/Technological skills	6.96	6.79	31 <sup>2022</sup>
Digital/Technological skills are readily available			
4.2.10 · Qualified engineers	7.22	6.35	17 <sup>2022</sup>
Qualified engineers are available in your labor market			
4.2.11 · Public-private partnerships	6.45	6.08	23 2022
Public and private sector ventures are supporting technological development			
4.2.12 · Development & application of tech.	5.64	6.46	52 <sup>2022</sup>
Development and application of technology are supported by the legal environment			
4.2.13 · Funding for technological development	4.75	5.98	52 <sup>2022</sup>
Funding for technological development is readily available			
4.2.14 · High-tech exports (\$)	1,364	47,160	47 <sup>2020</sup>
US\$ millions			
4.2.15 · High-tech exports (%)	15.80	18.12	26 <sup>2020</sup>
Percentage of manufactured exports			
4.2.16 · ICT service exports	4.0	9.7	49 <sup>2018</sup>
Percentage of service exports			
4.2.17 · Cyber security	5.34	5.89	42 2022
Cyber security is being adequately addressed by corporations			

4.3 · Scientific Infrastructure		Average H	lank 'ear
4.3.01 · Total expenditure on R&D (\$)	953	31,953	47 <sup>2019</sup>
US\$ millions		,,,,,,,	
4.3.02 · Total expenditure on R&D (%)	0.34	1.63	53 <sup>2019</sup>
Percentage of GDP			
4.3.03 · Total expenditure on R&D per capita (\$)	49.9	647.1	50 <sup>2019</sup>
US\$ per capita			
4.3.04 · Business expenditure on R&D (\$)	320	24,238	49 <sup>2019</sup>
US\$ millions			
4.3.05 · Business expenditure on R&D (%)	0.11	1.11	52 <sup>2019</sup>
Percentage of GDP			
4.3.06 · Total R&D personnel	16.4	233.3	42 2019
Full-time work equivalent (FTE thousands)			
4.3.07 · Total R&D personnel per capita	0.86	5.37	48 <sup>2019</sup>
Full-time work equivalent (FTE) per 1000 people			
4.3.08 · Total R&D personnel in business enterprise	4.2	183.3	49 <sup>2019</sup>
Full-time work equivalent (FTE thousands)			
4.3.09 · Total R&D personnel in business per capita	0.22	3.31	50 <sup>2019</sup>
Full-time work equivalent (FTE) per 1000 people			
4.3.10 · Researchers in R&D per capita	0.5	3.6	49 <sup>2019</sup>
Full-time work equivalent (FTE) per 1000 people			
4.3.11 · Graduates in Sciences	20.57	24.75	45 <sup>2019</sup>
% of graduates in ICT, Engineering, Math & Natural Sciences			
4.3.12 · Scientific articles	7,876	39,473	41 2019
Scientific articles published by origin of author			
4.3.13 · Nobel prizes	0	9	28 2021
Awarded in physics, chemistry, physiology or medicine and economics since 1950			
4.3.14 · Nobel prizes per capita	0.00	0.19	28 <sup>2021</sup>
Awarded in physics, chemistry, physiology or medicine and economics since 1950 per million people			
4.3.15 · Patent applications	862	52,962	44 2020
Number of applications filed by applicant's origin			
4.3.16 · Patent applications per capita	4.43	80.01	48 <sup>2020</sup>
Number of applications filed by applicant's origin, per 100,000 inhabitants			
4.3.17 · Patent grants	488	25,007	42 2020
Number of patents granted by applicant's origin (average 2018-2020)			
4.3.18 · Number of patents in force	20.7	491.7	44 2020
by applicant's origin, per 100,000 inhabitants			
4.3.19 · Medium- and high-tech value added	18.70	38.63	58 <sup>2019</sup>
Proportion of total manufacturing value added, expressed as a percentage			
4.3.20 · Scientific research legislation	4.15	5.97	58 <sup>2022</sup>
Laws relating to scientific research do encourage innovation			
· · · · · · · · · · · · · · · · · · ·	5.70	6.59	48 <sup>2022</sup>
· · · · · · · · · · · · · · · · · · ·	5.70	6.59	48 2022
4.3.21 · Intellectual property rights	5.70	6.59 5.52	48 <sup>2022</sup> 52 <sup>2022</sup>

4.4.28 · Quality of life

Quality of life is high

39 2022

6.24

6.76

4.5 · Education Value Average Rank 'ear 23 2018 4.5.01 · Total public expenditure on education 5.4 5.0 Percentage of GDP 37 <sup>2018</sup> 4.5.02 · Total public expenditure on education per capita 862 1,562 US\$ per capita 42 2018 4.5.03 · Total public exp. on education per student 3,275 6,944 Spending per enrolled pupil/student, all levels 48 2019 4.5.04 · Pupil-teacher ratio (primary education) 18.60 15.95 Ratio of students to teaching staff 53 <sup>2019</sup> 4.5.05 · Pupil-teacher ratio (secondary education) 19.71 13.74 Ratio of students to teaching staff 29 <sup>2019</sup> 4.5.06 · Secondary school enrollment 95.7 92.7 Percentage of relevant age group receiving full-time education 46 2017 4.5.07 · Higher education achievement 33.7 44.2 Percentage of population that has attained at least tertiary education for persons 25-34 47 2017 4.5.08 · Women with degrees 25.6 39.7 Share of women who have a degree in the population 25-65 52 <sup>2019</sup>  $4.5.09 \cdot Student \ mobility \ inbound$ 0.38 4.01 Foreign tertiary-level students per 1000 inhabitants 47 2019 4.5.10 · Student mobility outbound 0.92 2.62 National tertiary-level students studying abroad per 1000 inhabitants 41 2018 4.5.11 · Educational assessment - PISA 438 471 PISA survey of 15-year olds Educational assessment - PISA / Mathematics 417 472 2018 Educational assessment - PISA / Reading 452 468 2018 Educational assessment - PISA / Sciences 444 472 42 2018 4.5.12 · Students who are not low achievers - PISA 42.2 58.5 % of students who are not low achievers in maths, sciences and reading 45 <sup>2020</sup> 4.5.13 · English proficiency - TOEFL 88 92 TOEFL scores 52 <sup>2022</sup> 4.5.14 · Primary and secondary education 4.12 6.10 Primary and secondary education meets the needs of a competitive economy 43 2022  $4.5.15 \cdot University \ education$ 5.61 6 40 University education meets the needs of a competitive economy 32 2022 4.5.16 · Management education 6.57 6.34 Management education meets the needs of the business community 42 2021 4.5.17 · University education index 4.55 14.07 Country score calculated from Times Higher Education university ranking 50 2017 4.5.18 · Illiteracy 3.6 2.4 Adult (over 15 years) illiteracy rate as a percentage of population

4.5.19 · Language skills

Language skills are meeting the needs of enterprises

60 <sup>2022</sup>

6.41

3.52

#### About the International Institute for Management Development (IMD)

IMD is an independent academic institution with Swiss roots and global reach, founded 75 years ago by business leaders for business leaders. Since its creation, IMD has been a pioneering force in developing leaders who transform organizations and contribute to society.

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