



**GKI RANK** 46 /133

**GKI SCORE** 51.5

**WORLD AVERAGE** 47.5

**COUNTRY PERFORMANCE SUMMARY**

Chile is a strong performer in terms of its knowledge infrastructure. It ranks 46th out of 133 countries in the Global Knowledge Index 2023 and 45th out of the 61 countries with very high human development.

**CHILE**

**KEY INDICATORS**

**GDP (US\$ billions): 507.465**

**Population: 19,493,185**

**HDI: 0.855**

**AREAS OF STRENGTH**

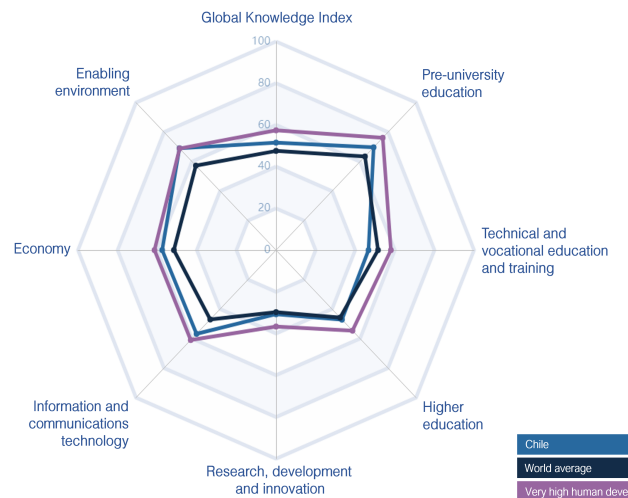
- + MSME financing gap (% GDP)
- + Fixed broadband Internet traffic per subscription
- + Gross attendance ratio for tertiary education, wealth parity
- + Average documents per researcher
- + Enrolment in bachelor's or equivalent level (%)

**AREAS OF IMPROVEMENT**

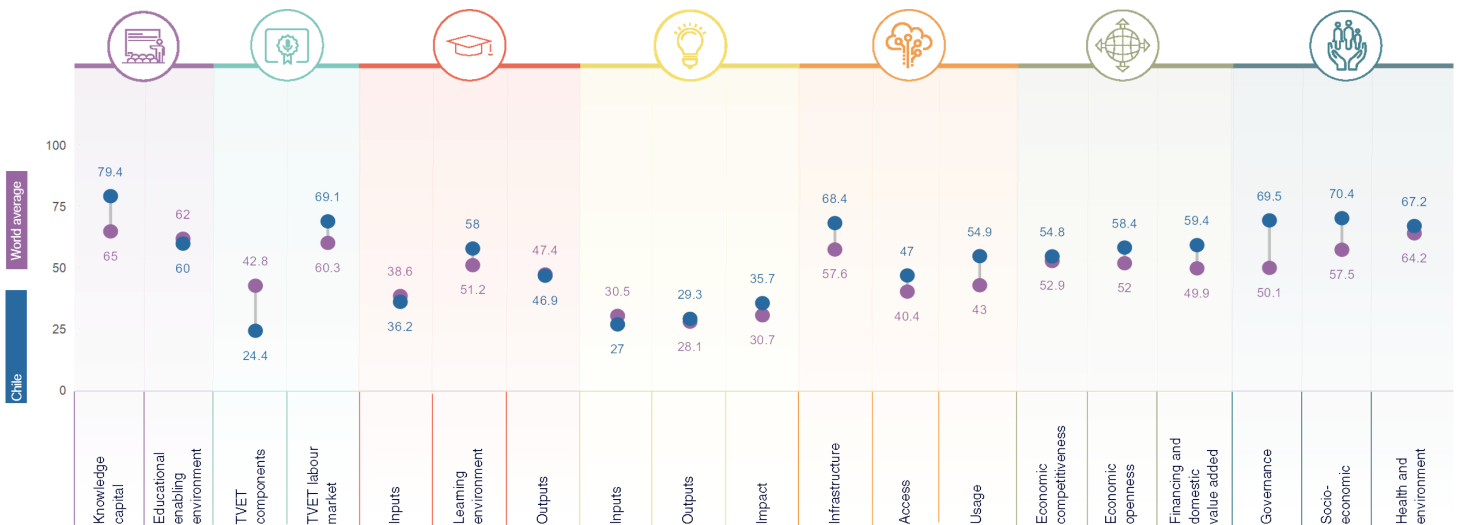
- Ratio of medium-skill TVET occupations earnings to average wage
- Ratio of high-skill TVET occupations earnings to average wage
- Industrial design applications (per 100 billion GDP)
- Cultural goods exports (% exports)
- Natural hazard exposure

**SECTORAL INDICES**

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	65	69.7
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	98	46.7
HIGHER EDUCATION	64	47.1
RESEARCH, DEVELOPMENT AND INNOVATION	49	30.7
INFORMATION AND COMMUNICATIONS TECHNOLOGY	40	56.8
ECONOMY	44	57.5
ENABLING ENVIRONMENT	30	69



**GKI PILLARS**





# CHILE

Rank Value

Rank Value

PRE-UNIVERSITY EDUCATION	65	69.7
<b>Knowledge capital</b>	<b>36</b>	<b>79.4</b>
Enrolment	29	96.4
Net enrolment rate in primary education	56	95.1
Net enrolment rate in lower secondary education	40	97.8
Net enrolment rate in upper secondary education	14	96.2
Completion	8	85
Years of compulsory education in primary and secondary	3	92.3
Completion rate in upper secondary education	32	88.5
Gross intake ratio to the last grade of lower secondary education	11	74.3
<b>Outcomes</b>	<b>55</b>	<b>56.7</b>
Assessment of 15-year-old students in math, science and reading	44	46.6
Learning-adjusted years of schooling	45	66.7
<b>Educational enabling environment</b>	<b>83</b>	<b>60</b>
<b>Expenditure</b>	<b>53</b>	<b>38</b>
Government expenditure on primary education (% GDP)	41	37.8
Government expenditure on secondary education (% GDP)	63	31.1
Government funding per primary student (% GDP per capita)	42	51
Government funding per secondary student (% GDP per capita)	54	32.2
<b>Resources</b>	<b>97</b>	<b>63.4</b>
Pupil-trained teacher ratio in primary education	n/a	n/a
Pupil-trained teacher ratio in secondary education	n/a	n/a
Schools with access to computers in primary education (%)	73	51.6
Schools with access to computers in secondary education (%)	88	75.1
<b>Early learning</b>	<b>99</b>	<b>46</b>
Gross enrolment ratio in early childhood education	63	46
Proportion of children who are developmentally on track	n/a	n/a
Proportion of children with stimulating home learning environments	n/a	n/a
Pupil-trained teacher ratio in pre-primary education	n/a	n/a
<b>Equity and inclusiveness</b>	<b>30</b>	<b>92.8</b>
Completion rate in upper secondary education, gender parity	34	96.1
Completion rate in upper secondary education, wealth parity	10	84.5
Completion rate in upper secondary education, location parity	22	97.8
<b>TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING</b>	<b>98</b>	<b>46.7</b>
<b>TVET components</b>	<b>129</b>	<b>24.4</b>
Continuous training and skilling	121	16.9
Firms offering formal training (%)	n/a	n/a
Labour force participation rate with short-cycle tertiary education	n/a	n/a
Participation rate in formal and non-formal education and training	70	16.9
<b>TVET structure</b>	<b>103</b>	<b>21.3</b>
Government expenditure on vocational education (%)	47	26
Share of students enrolled in secondary vocational programmes	63	16.7
Share of students enrolled in post-secondary vocational programmes	n/a	n/a
<b>TVET quality and qualifications</b>	<b>114</b>	<b>34.9</b>
Extent of staff training	46	61.1
Quality of vocational training	70	53.2
Ratio of high-skill TVET occupations earnings to average wage	100	10.7
Ratio of medium-skill TVET occupations earnings to average wage	110	14.5
<b>TVET labour market</b>	<b>34</b>	<b>69.1</b>
<b>Efficiency of the labour market</b>	<b>29</b>	<b>75.1</b>
Firms constrained with inadequately educated workforce (%)	n/a	n/a
Employment educational mismatch (%)	40	73
Proportion of skilled production workers	n/a	n/a
Unemployment rate with vocational education	84	77.1
<b>Post-TVET employment</b>	<b>59</b>	<b>48.6</b>
Share of TVET occupations	47	62
Manufacturing employment (%)	78	35.1
<b>Equity and inclusiveness</b>	<b>34</b>	<b>83.6</b>
Enrolment in vocational education, gender parity	16	91.9
Vulnerable employment rate	66	75.3

HIGHER EDUCATION	64	47.1
<b>Inputs</b>	<b>81</b>	<b>36.2</b>
<b>Expenditure</b>	<b>74</b>	<b>21.7</b>
Government expenditure per tertiary student	49	12
Teaching staff compensation (% tertiary expenditure)	58	31.3
<b>Enrolment</b>	<b>43</b>	<b>37.3</b>
Enrolment in bachelor's or equivalent level (%)	9	47.5
Enrolment in master's, doctoral or equivalent (%)	52	27.2
<b>Resources</b>	<b>98</b>	<b>49.7</b>
Pupil-teacher ratio in tertiary education	n/a	n/a
Researchers in higher education (%)	50	49.7
<b>Learning environment</b>	<b>47</b>	<b>58</b>
<b>Diversity and academic freedom</b>	<b>71</b>	<b>49.6</b>
Teachers in tertiary education, gender parity	n/a	n/a
Inbound mobility rate	84	4.6
Academic freedom	12	94.5
<b>Equity and inclusiveness</b>	<b>5</b>	<b>66.5</b>
Gross attendance ratio for tertiary education, gender parity	17	91.1
Gross attendance ratio for tertiary education, wealth parity	4	40.2
Gross attendance ratio for tertiary education, location parity	7	68.3
<b>Outputs</b>	<b>69</b>	<b>46.9</b>
<b>Attainment</b>	<b>69</b>	<b>17.7</b>
Educational attainment rate, bachelor's or equivalent	64	29.7
Educational attainment rate, master's or equivalent	70	5.6
Educational attainment rate, doctoral or equivalent	n/a	n/a
<b>Employment</b>	<b>46</b>	<b>82.3</b>
Labour force participation rate with advanced education	13	86.8
Unemployment rate with advanced education	84	77.9
<b>Impact</b>	<b>55</b>	<b>40.7</b>
University-industry collaboration in R&D	79	42.9
Citable documents per R&D personnel in higher education	17	38.4
<b>RESEARCH, DEVELOPMENT AND INNOVATION</b>	<b>49</b>	<b>30.7</b>
<b>Inputs</b>	<b>69</b>	<b>27</b>
<b>Inputs of R&amp;D institutions</b>	<b>87</b>	<b>20.8</b>
GERD (% GDP)	71	6.2
GERD per researcher	42	19.3
Researchers per thousand labour force	69	6.5
Tertiary graduates from STEM programmes (%)	70	51
<b>Inputs of RDI in business enterprises</b>	<b>57</b>	<b>25.6</b>
GERD performed by business enterprises (%)	55	2.8
GERD financed by business enterprises (%)	54	38.9
Researchers in business enterprises (%)	40	35.1
Firms that spend on R&D (%)	n/a	n/a
<b>Inputs of societal innovation</b>	<b>36</b>	<b>41.1</b>
High-skilled employment (%)	45	39.8
Intellectual property payments (% total trade)	18	36.6
State of cluster development	74	46.7
<b>Outputs</b>	<b>54</b>	<b>29.3</b>
<b>Outputs of R&amp;D institutions</b>	<b>24</b>	<b>45.7</b>
Average documents per researcher	7	60.2
Citations per document	70	29
Resident patent applications (per 100 billion GDP)	66	47.9
<b>Outputs of RDI in business enterprises</b>	<b>119</b>	<b>3.7</b>
Intellectual property receipts (% total trade)	60	2.4
Industrial design applications (per 100 billion GDP)	107	0.7
PCT applications (per 100 billion GDP)	35	7.8
Firms producing new products and services (%)	n/a	n/a
<b>Outputs of societal innovation</b>	<b>55</b>	<b>21.9</b>
Trademark applications (per 100 billion GDP)	15	54.1
Cultural goods exports (% exports)	112	0.7
Printing and publishing output (% manufactured output)	80	10.8
<b>Impact</b>	<b>42</b>	<b>35.7</b>
<b>Quality</b>	<b>57</b>	<b>34.3</b>
Research institutions prominence	35	62.5
Growth of innovative companies	57	49.1
ISO 9001 quality certificates (per billion GDP)	59	12.8
ISO 14001 environmental certificates (per billion GDP)	61	12.6
<b>Linkages</b>	<b>50</b>	<b>22.9</b>
GERD financed from abroad (%)	72	8.5
Joint ventures per strategic alliance deals (per billion GDP)	51	9.1
Computer software spending (% GDP)	21	51.1
<b>Business development</b>	<b>24</b>	<b>50</b>
New business density per thousand population	11	50
Firms with products and services new to the market (%)	n/a	n/a



# CHILE

	Rank	Value		Rank	Value
<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>			<b>40 56.8</b>		
<b>Infrastructure</b>			<b>41 68.4</b>		
<b>Coverage</b>			<b>35 72.5</b>		
3G/4G mobile network coverage (% population)	91	90.1			
Secure Internet servers per 1 million population	41	75.5			
Investment in telecommunication services (% GDP)	28	51.9			
<b>Quality</b>			<b>44 39.8</b>		
Mobile upload and download speeds	73	9			
Fixed-broadband upload and download speeds	10	65.1			
Fixed-broadband subscriptions by speed per hundred people	51	45.1			
<b>Affordability</b>			<b>46 93.1</b>		
Fixed broadband basket (% GNI per capita)	57	87.6			
Mobile broadband basket (% GNI per capita)	29	97.5			
Internet and telephony competition	79	94.1			
<b>Access</b>			<b>51 47</b>		
<b>Subscriptions</b>			<b>28 64.9</b>		
Active mobile-broadband subscriptions per hundred inhabitants	41	45.3			
International Internet bandwidth per user	32	58.3			
Households with Internet access at home (%)	41	91			
<b>Skills and employment</b>			<b>61 29.2</b>		
Individuals with standard ICT skills (%)	35	46.6			
Tertiary graduates from ICT programmes (%)	98	17.5			
ICT employment (%)	44	23.5			
<b>Usage</b>			<b>33 54.9</b>		
<b>Services</b>			<b>20 67.9</b>		
Government online services	28	82.8			
Fixed broadband Internet traffic per subscription	5	56			
Mobile broadband Internet traffic per subscription	14	43.1			
Internet users (%)	37	89.6			
<b>Outcomes</b>			<b>46 42</b>		
ICT PCT patent applications (per 100 billion GDP)	41	5.6			
E-participation	41	69.3			
Internet activities by individuals (%)	n/a	n/a			
Trade in digitally deliverable services (% total trade)	30	51.1			
<b>ECONOMY</b>			<b>44 57.5</b>		
<b>Economic competitiveness</b>			<b>58 54.8</b>		
Infrastructure investment	38	55.9			
Gross fixed capital formation (% GDP)	43	28.4			
Logistics performance	59	50			
Transport productive capacity	40	58.3			
Building quality control	21	86.7			
Business agility	71	53.7			
Ease of starting a business	51	91.4			
Insolvency recovery rate	49	45.6			
Entrepreneurial employee activity rate	18	49			
Extent of corporate transparency	90	28.6			
<b>Economic openness</b>			<b>49 58.4</b>		
Trade and diversification	89	46.4			
Trade (% GDP)	81	13.8			
High-technology trade (% total trade)	67	21.1			
Product concentration	87	69.2			
Market concentration	98	81.4			
Financial openness	33	70.5			
Chinn-Ito financial openness	56	70			
Foreign direct investment, net inflows (% GDP)	20	41.4			
Debt dynamics	1	100			
<b>Financing and domestic value added</b>			<b>26 59.4</b>		
<b>Financing and taxes</b>			<b>10 75.9</b>		
Domestic credit to private sector (% GDP)	17	41.2			
MSME financing gap (% GDP)	3	95.7			
Tax and contribution rate (% profit)	52	73.6			
Bank non-performing loans (%)	14	93.2			
<b>Domestic value added</b>			<b>60 42.9</b>		
Medium- and high-tech activities value added	74	24.7			
Industry and services value added (% GDP)	53	52			
Labour underutilization rate	64	71.3			
Output per worker	48	23.6			
			<b>ENABLING ENVIRONMENT</b>		
			<b>30 69</b>		
			<b>Governance</b>		
			<b>38 69.5</b>		
			Political environment		
			39 64.8		
			Peace and stability		
			57 51.4		
			Voice and accountability		
			27 78.3		
			Quality of institutions		
			36 74.2		
			Rule of law		
			28 80.7		
			Control of corruption		
			44 69.3		
			Government effectiveness		
			36 72.6		
			<b>Socio-economic</b>		
			<b>34 70.4</b>		
			Gender equity		
			46 73.7		
			Female-to-male ratio in parliament		
			37 55		
			Female-to-male labour force participation		
			90 70.1		
			Female-to-male ratio in Internet usage		
			73 96.1		
			Social inclusion		
			39 83.9		
			Social protection coverage (% population)		
			37 82.5		
			Adult literacy rate		
			37 96.1		
			Youth not in employment, education or training (%)		
			49 73.2		
			Standard of living		
			33 53.7		
			Poverty headcount ratio (% population)		
			13 85.5		
			GDP per capita		
			53 21.9		
			<b>Health and environment</b>		
			<b>51 67.2</b>		
			Health		
			29 88.8		
			Universal health coverage		
			27 82.3		
			Healthy life expectancy (years)		
			29 88.1		
			Under-five mortality rate		
			48 96		
			Environmental performance		
			105 45.6		
			Renewable energy consumption (%)		
			63 27.8		
			Ecological footprint per capita		
			85 70.9		
			Natural hazard exposure		
			112 38		

\*All values are normalized to a scale from 0 (worst) to 100 (best).