



**GKI RANK** 50 /133

**GKI SCORE** 50.2

**WORLD AVERAGE** 47.5

**COUNTRY PERFORMANCE SUMMARY**

Uruguay is a strong performer in terms of its knowledge infrastructure. It ranks 50th out of 133 countries in the Global Knowledge Index 2023 and 48th out of the 61 countries with very high human development.

**URUGUAY**

**KEY INDICATORS**

**GDP** (US\$ billions): 83.607

**Population**: 3,426,260

**HDI**: 0.809

**AREAS OF STRENGTH**

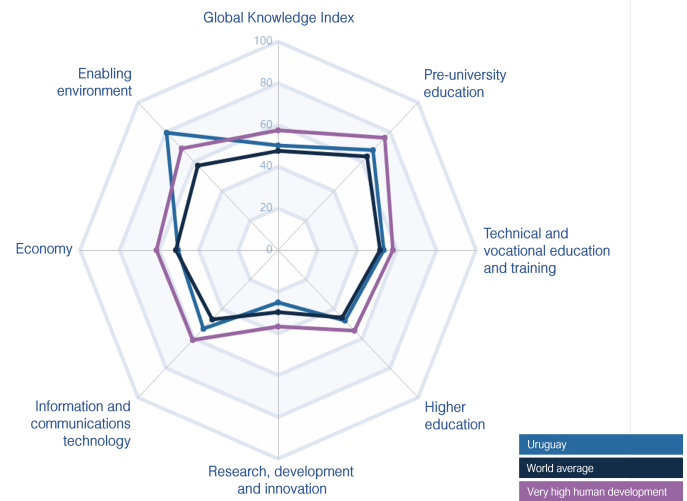
- + Teachers in tertiary education, gender parity
- + Firms producing new products and services (%)
- + Peace and stability
- + Proportion of children with stimulating home learning environments
- + Enrolment in bachelor's or equivalent level (%)

**AREAS OF IMPROVEMENT**

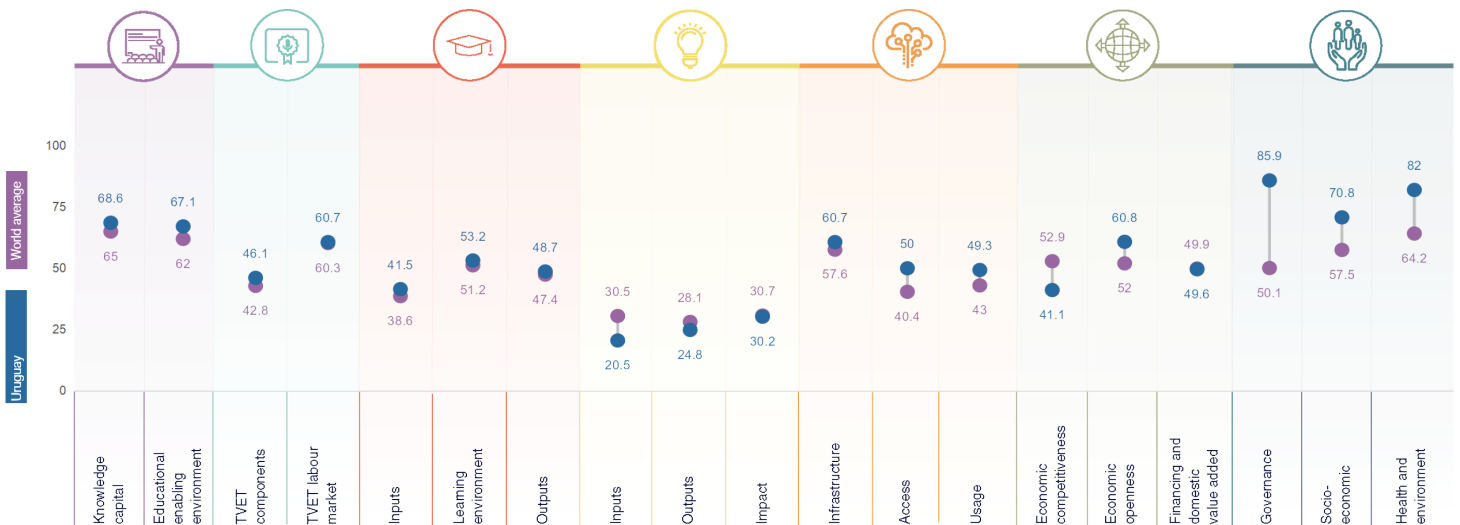
- Extent of corporate transparency
- Researchers in business enterprises (%)
- Completion rate in upper secondary education, gender parity
- Firms constrained with inadequately educated workforce (%)
- Educational attainment rate, doctoral or equivalent

**SECTORAL INDICES**

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	69	67.8
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	59	53.4
HIGHER EDUCATION	59	47.8
RESEARCH, DEVELOPMENT AND INNOVATION	84	25.1
INFORMATION AND COMMUNICATIONS TECHNOLOGY	47	53.3
ECONOMY	65	50.5
ENABLING ENVIRONMENT	12	79.6



**GKI PILLARS**





# URUGUAY

Rank Value

Rank Value

## PRE-UNIVERSITY EDUCATION 69 67.8

### Knowledge capital 73 68.6

Enrolment 35 95.4

Net enrolment rate in primary education 10 99.6

Net enrolment rate in lower secondary education 20 99.1

Net enrolment rate in upper secondary education 48 87.5

Completion 91 61.1

Years of compulsory education in primary and secondary 3 92.3

Completion rate in upper secondary education 84 48.9

Gross intake ratio to the last grade of lower secondary education 98 42.1

Outcomes 68 49.3

Assessment of 15-year-old students in math, science and reading 50 40.2

Learning-adjusted years of schooling 67 58.4

### Educational enabling environment 61 67.1

Expenditure 87 25.3

Government expenditure on primary education (% GDP) 80 26.7

Government expenditure on secondary education (% GDP) 79 24.1

Government funding per primary student (% GDP per capita) 77 32.6

Government funding per secondary student (% GDP per capita) 82 18

Resources 26 97.3

Pupil-trained teacher ratio in primary education 20 91.8

Pupil-trained teacher ratio in secondary education n/a n/a

Schools with access to computers in primary education (%) 1 100

Schools with access to computers in secondary education (%) 1 100

Early learning 23 79.8

Gross enrolment ratio in early childhood education 40 61.2

Proportion of children who are developmentally on track 9 81.9

Proportion of children with stimulating home learning environments 3 96.3

Pupil-trained teacher ratio in pre-primary education n/a n/a

Equity and inclusiveness 77 65.9

Completion rate in upper secondary education, gender parity 110 69.9

Completion rate in upper secondary education, wealth parity 42 27.7

Completion rate in upper secondary education, location parity 1 100

## TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING 59 53.4

### TVET components 43 46.1

Continuous training and skilling 30 53.8

Firms offering formal training (%) 14 70.8

Labour force participation rate with short-cycle tertiary education n/a n/a

Participation rate in formal and non-formal education and training 22 36.9

TVET structure 77 38.8

Government expenditure on vocational education (%) n/a n/a

Share of students enrolled in secondary vocational programmes 27 38.8

Share of students enrolled in post-secondary vocational programmes n/a n/a

TVET quality and qualifications 42 45.7

Extent of staff training 41 62.4

Quality of vocational training 64 55

Ratio of high-skill TVET occupations earnings to average wage 36 27.7

Ratio of medium-skill TVET occupations earnings to average wage 31 37.8

### TVET labour market 73 60.7

Efficiency of the labour market 97 61.7

Firms constrained with inadequately educated workforce (%) 91 26

Employment educational mismatch (%) 41 72.1

Proportion of skilled production workers 40 68.1

Unemployment rate with vocational education 74 80.8

Post-TVET employment 57 49.2

Share of TVET occupations 36 64.4

Manufacturing employment (%) 82 34.1

Equity and inclusiveness 73 71.1

Enrolment in vocational education, gender parity 76 69.2

Vulnerable employment rate 70 73

## HIGHER EDUCATION 59 47.8

### Inputs 59 41.5

Expenditure 91 9.9

Government expenditure per tertiary student 55 9.9

Teaching staff compensation (% tertiary expenditure) n/a n/a

Enrolment 51 30

Enrolment in bachelor's or equivalent level (%) 7 51.1

Enrolment in master's, doctoral or equivalent (%) 79 8.8

Resources 10 84.7

Pupil-teacher ratio in tertiary education 15 90.8

Researchers in higher education (%) 15 78.7

### Learning environment 57 53.2

Diversity and academic freedom 38 63.8

Teachers in tertiary education, gender parity 2 98.2

Inbound mobility rate 76 8.2

Academic freedom 43 85.2

Equity and inclusiveness 39 42.6

Gross attendance ratio for tertiary education, gender parity 44 74.6

Gross attendance ratio for tertiary education, wealth parity 44 5.9

Gross attendance ratio for tertiary education, location parity 20 47.3

### Outputs 63 48.7

Attainment 82 11.2

Educational attainment rate, bachelor's or equivalent 75 23.6

Educational attainment rate, master's or equivalent 58 7.9

Educational attainment rate, doctoral or equivalent 74 2.1

Employment 16 87.3

Labour force participation rate with advanced education 41 79.1

Unemployment rate with advanced education 9 95.5

Impact 35 47.5

University-industry collaboration in R&D 59 47.5

Citable documents per R&D personnel in higher education n/a n/a

## RESEARCH, DEVELOPMENT AND INNOVATION 84 25.1

### Inputs 100 20.5

Inputs of R&D institutions 94 19.6

GERD (% GDP) 62 8.2

GERD per researcher 63 13.8

Researchers per thousand labour force 58 10.1

Tertiary graduates from STEM programmes (%) 86 46.2

Inputs of RDI in business enterprises 111 8.1

GERD performed by business enterprises (%) 59 2.3

GERD financed by business enterprises (%) 81 5.7

Researchers in business enterprises (%) 78 0.4

Firms that spend on R&D (%) 53 24.2

Inputs of societal innovation 62 34.7

High-skilled employment (%) 59 33.7

Intellectual property payments (% total trade) 30 23.9

State of cluster development 79 46.3

### Outputs 73 24.8

Outputs of R&D institutions 98 27.1

Average documents per researcher 36 24.9

Citations per document 108 18.8

Resident patent applications (per 100 billion GDP) 87 37.5

Outputs of RDI in business enterprises 29 27.1

Intellectual property receipts (% total trade) 34 10

Industrial design applications (per 100 billion GDP) 68 5.1

PCT applications (per 100 billion GDP) 75 1.5

Firms producing new products and services (%) 4 91.9

Outputs of societal innovation 70 17.8

Trademark applications (per 100 billion GDP) 35 36.5

Cultural goods exports (% exports) 99 1.7

Printing and publishing output (% manufactured output) 56 15.2

### Impact 64 30.2

Quality 35 39.4

Research institutions prominence 72 47.3

Growth of innovative companies 51 51.1

ISO 9001 quality certificates (per billion GDP) 21 34

ISO 14001 environmental certificates (per billion GDP) 29 25.3

Linkages 82 13

GERD financed from abroad (%) 56 14.1

Joint ventures per strategic alliance deals (per billion GDP) 67 5.7

Computer software spending (% GDP) 68 19.1

Business development 68 38.1

New business density per thousand population 56 9.3

Firms with products and services new to the market (%) 57 66.9



# URUGUAY

	Rank	Value		Rank	Value
<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>			<b>ENABLING ENVIRONMENT</b>		
<b>Infrastructure</b>	<b>59</b>	<b>60.7</b>	<b>Governance</b>	<b>15</b>	<b>85.9</b>
Coverage	41	70.8	Political environment	5	90
3G/4G mobile network coverage (% population)	84	93.2	Peace and stability	6	88.2
Secure Internet servers per 1 million population	59	60.4	Voice and accountability	16	91.8
Investment in telecommunication services (% GDP)	19	58.7	Quality of institutions	25	81.8
<b>Quality</b>	<b>62</b>	<b>28.3</b>	Rule of law	17	92
Mobile upload and download speeds	48	14.1	Control of corruption	33	77.4
Fixed-broadband upload and download speeds	63	9.4	Government effectiveness	35	75.9
Fixed-broadband subscriptions by speed per hundred people	36	61.5	<b>Socio-economic</b>	<b>30</b>	<b>70.8</b>
<b>Affordability</b>	<b>87</b>	<b>83</b>	Gender equity	51	71.9
Fixed broadband basket (% GNI per capita)	64	85	Female-to-male ratio in parliament	72	35.6
Mobile broadband basket (% GNI per capita)	53	94.9	Female-to-male labour force participation	60	80.1
Internet and telephony competition	104	69.2	Female-to-male ratio in Internet usage	1	100
<b>Access</b>	<b>42</b>	<b>50</b>	Social inclusion	34	86.8
<b>Subscriptions</b>	<b>32</b>	<b>64</b>	Social protection coverage (% population)	1	100
Active mobile-broadband subscriptions per hundred inhabitants	30	48.1	Adult literacy rate	24	98.3
International Internet bandwidth per user	50	52.8	Youth not in employment, education or training (%)	70	62.2
Households with Internet access at home (%)	40	91	Standard of living	32	53.8
<b>Skills and employment</b>	<b>47</b>	<b>36</b>	Poverty headcount ratio (% population)	10	86.9
Individuals with standard ICT skills (%)	21	55.4	GDP per capita	54	20.7
Tertiary graduates from ICT programmes (%)	78	23.7	<b>Health and environment</b>	<b>3</b>	<b>82</b>
ICT employment (%)	40	29	Health	38	85.8
<b>Usage</b>	<b>44</b>	<b>49.3</b>	Universal health coverage	33	81.5
<b>Services</b>	<b>47</b>	<b>54.6</b>	Healthy life expectancy (years)	44	79.4
Government online services	50	76.4	Under-five mortality rate	42	96.6
Fixed broadband Internet traffic per subscription	40	29.2	Environmental performance	10	78.1
Mobile broadband Internet traffic per subscription	37	23.6	Renewable energy consumption (%)	26	63.5
Internet users (%)	38	89.2	Ecological footprint per capita	47	87.8
<b>Outcomes</b>	<b>42</b>	<b>44.1</b>	Natural hazard exposure	11	83
ICT PCT patent applications (per 100 billion GDP)	87	1.1			
E-participation	59	59.1			
Internet activities by individuals (%)	36	61			
Trade in digitally deliverable services (% total trade)	22	55			
<b>ECONOMY</b>	<b>65</b>	<b>50.5</b>			
<b>Economic competitiveness</b>	<b>107</b>	<b>41.1</b>			
Infrastructure investment	94	43			
Gross fixed capital formation (% GDP)	101	14.7			
Logistics performance	59	50			
Transport productive capacity	59	47.3			
Building quality control	105	60			
<b>Business agility</b>	<b>111</b>	<b>39.2</b>			
Ease of starting a business	57	89.6			
Insolvency recovery rate	43	48.3			
Entrepreneurial employee activity rate	47	19			
Extent of corporate transparency	106	0			
<b>Economic openness</b>	<b>39</b>	<b>60.8</b>			
Trade and diversification	84	47			
Trade (% GDP)	102	8.8			
High-technology trade (% total trade)	77	18.8			
Product concentration	73	72.8			
Market concentration	81	87.4			
Financial openness	28	74.6			
Chinn-Ito financial openness	1	100			
Foreign direct investment, net inflows (% GDP)	18	43.9			
Debt dynamics	36	80			
<b>Financing and domestic value added</b>	<b>71</b>	<b>49.6</b>			
<b>Financing and taxes</b>	<b>46</b>	<b>62.8</b>			
Domestic credit to private sector (% GDP)	102	7.5			
MSME financing gap (% GDP)	24	85.8			
Tax and contribution rate (% profit)	85	65.6			
Bank non-performing loans (%)	19	92.1			
<b>Domestic value added</b>	<b>78</b>	<b>36.5</b>			
Medium- and high-tech activities value added	76	23.5			
Industry and services value added (% GDP)	85	42.7			
Labour underutilization rate	93	59.2			
Output per worker	57	20.5			

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