

**GKI RANK** 3 /141

**GKI SCORE** 67.9

**WORLD AVERAGE** 47.8

**COUNTRY PERFORMANCE SUMMARY**

Switzerland is a leading performer in terms of its knowledge infrastructure. It ranks 3rd out of 141 countries in the Global Knowledge Index 2024 and 3rd out of the 59 countries with very high human development.

**SWITZERLAND**

**KEY INDICATORS**

**GDP** (US\$ billions): **733.779**  
**Population**: **8,870,561**  
**HDI**: **0.967**

**AREAS OF STRENGTH**

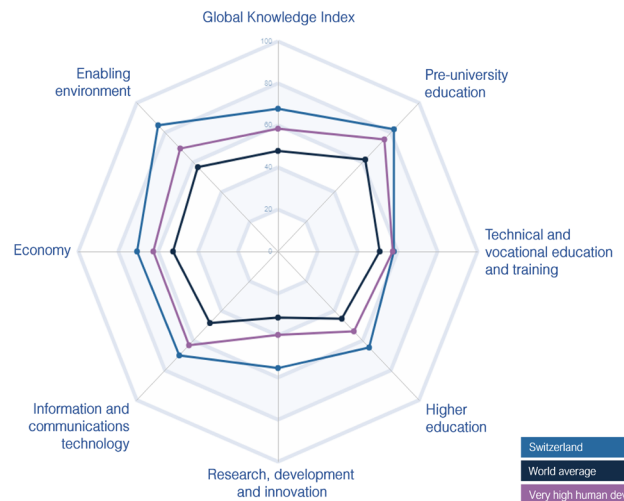
- + University-industry collaboration in R&D
- + Extent of staff training
- + Quality of vocational training
- + Intellectual property receipts (% total trade)
- + Fixed-broadband subscriptions by speed per hundred people

**AREAS OF IMPROVEMENT**

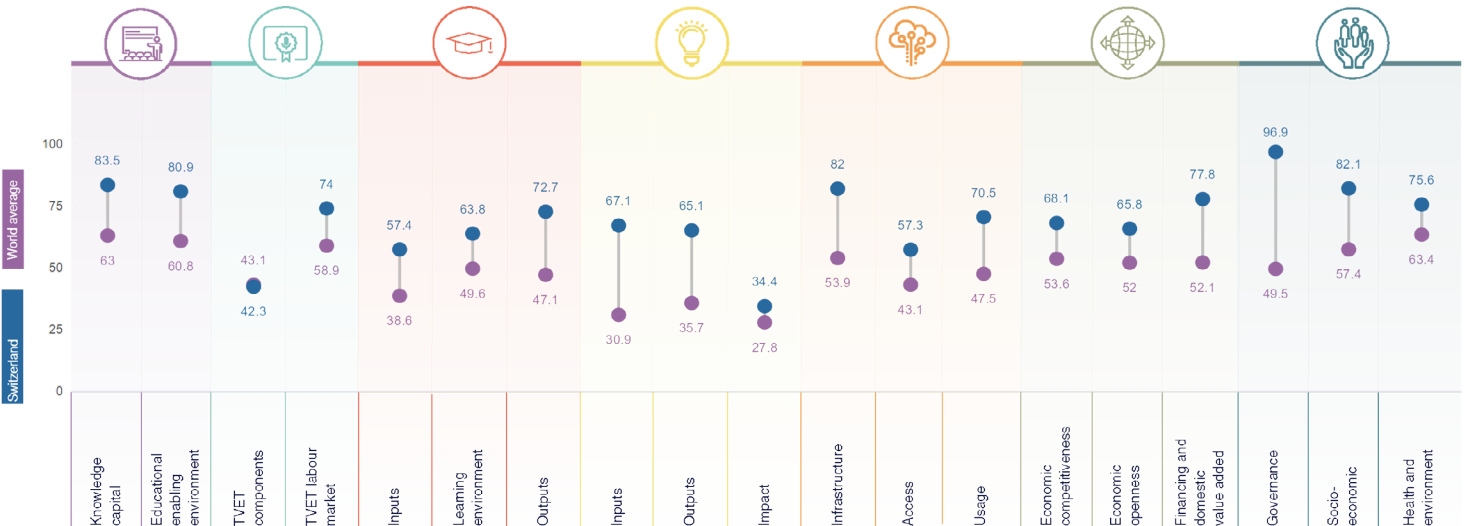
- Foreign direct investment, net inflows (% GDP)
- Ratio of high-skill TVET occupations earnings to average wage
- Share of students enrolled in post-secondary vocational programmes
- Tertiary graduates from ICT programmes (%)
- Building quality control

**SECTORAL INDICES**

	RANK	VALUE
PRE-UNIVERSITY EDUCATION	9	82.2
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING	36	58.1
HIGHER EDUCATION	2	64.6
RESEARCH, DEVELOPMENT AND INNOVATION	3	55.5
INFORMATION AND COMMUNICATIONS TECHNOLOGY	17	69.9
ECONOMY	7	70.6
ENABLING ENVIRONMENT	3	84.9



**GKI PILLARS**





# SWITZERLAND

Rank Value

PRE-UNIVERSITY EDUCATION	9	82.2
<b>Knowledge capital</b>	15	83.5
Enrolment	24	96.6
Net enrolment rate in primary education	14	99.5
Net enrolment rate in lower secondary education	11	99.6
Net enrolment rate in upper secondary education	41	90.7
<b>Completion</b>	28	79.4
Years of compulsory education in primary and secondary	45	76.9
Completion rate in upper secondary education	12	94.8
Gross intake ratio to the last grade of lower secondary education	47	66.5
<b>Outcomes</b>	14	74.4
Assessment of 15-year-old students in math, science and reading	8	66.4
Learning-adjusted years of schooling	24	82.3
<b>Educational enabling environment</b>	9	80.9
<b>Expenditure</b>	33	45.2
Government expenditure on primary education (% GDP)	46	37.4
Government expenditure on secondary education (% GDP)	53	33.8
Government funding per primary student (% GDP per capita)	13	65.6
Government funding per secondary student (% GDP per capita)	34	43.9
<b>Resources</b>	26	97.9
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 (%)	1	100
Schools with access to computers in secondary education (%)	65	95.8
<b>Early learning</b>	19	80.6
Gross enrolment ratio in early childhood education	7	80.6
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>	1	99.9
Completion rate in upper secondary education, gender parity	1	99.9
Completion rate in upper secondary education, wealth parity	n/a	n/a
Completion rate in upper secondary education, location parity	1	100
<b>TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING</b>	36	58.1
<b>TVET components</b>	68	42.3
<b>Continuous training and skilling</b>	129	19.1
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	95	19.1
<b>TVET structure</b>	42	55.1
Government expenditure on vocational education (%)	28	46.7
Share of students enrolled in secondary vocational programmes	11	55.1
Share of students enrolled in post-secondary vocational programmes	73	63.5
<b>TVET quality and qualifications</b>	17	52.6
Extent of staff training	1	80.4
Quality of vocational training	1	89.5
Ratio of high-skill TVET occupations earnings to average wage	106	17.8
Ratio of medium-skill TVET occupations earnings to average wage	81	23
<b>TVET labour market</b>	14	74
<b>Efficiency of the labour market</b>	9	83.8
Firms constrained with inadequately educated workforce (%)	n/a	n/a
Employment educational mismatch (%)	31	76.9
Proportion of skilled production workers	n/a	n/a
Unemployment rate with vocational education	23	90.7
<b>Post-TVET employment</b>	35	55.8
Share of TVET occupations	21	71.5
Manufacturing employment (%)	48	40.1
<b>Equity and inclusiveness</b>	38	82.4
Enrolment in vocational education, gender parity	71	75
Vulnerable employment rate	26	89.7

Rank Value

HIGHER EDUCATION	2	64.6
<b>Inputs</b>	7	57.4
Expenditure	8	52.6
Government expenditure per tertiary student	5	53
Teaching staff compensation (% tertiary expenditure)	34	52.2
<b>Enrolment</b>	20	48.4
Enrolment in bachelor's or equivalent level (%)	29	34.7
Enrolment in master's, doctoral or equivalent (%)	23	62.1
<b>Resources</b>	39	71.1
Pupil-teacher ratio in tertiary education	14	92.8
Researchers in higher education (%)	49	49.4
<b>Learning environment</b>	28	63.8
<b>Diversity and academic freedom</b>	37	63.8
Teachers in tertiary education, gender parity	75	59.1
Inbound mobility rate	12	47.2
Academic freedom	40	85
<b>Equity and inclusiveness</b>	n/a	n/a
Gross attendance ratio for tertiary education, gender parity	n/a	n/a
Gross attendance ratio for tertiary education, wealth parity	n/a	n/a
Gross attendance ratio for tertiary education, location parity	n/a	n/a
<b>Outputs</b>	2	72.7
<b>Attainment</b>	4	75.8
Educational attainment rate, bachelor's or equivalent	5	67.5
Educational attainment rate, master's or equivalent	9	66.8
Educational attainment rate, doctoral or equivalent	6	93.1
<b>Employment</b>	33	85.5
Labour force participation rate with advanced education	43	80.5
Unemployment rate with advanced education	38	90.5
<b>Impact</b>	12	56.9
University-industry collaboration in R&D	1	79.2
Citable documents per R&D personnel in higher education	21	34.6
<b>RESEARCH, DEVELOPMENT AND INNOVATION</b>	3	55.5
<b>Inputs</b>	4	67.1
<b>Inputs of R&amp;D institutions</b>	10	61.2
GERD (% GDP)	6	60.4
GERD per researcher	9	59.1
Researchers per thousand labour force	15	64.2
Tertiary graduates from STEM programmes (%)	40	61.3
<b>Inputs of RDI in business enterprises</b>	6	65.7
GERD performed by business enterprises (%)	4	53.6
GERD financed by business enterprises (%)	5	82.9
Researchers in business enterprises (%)	22	60.5
Firms that spend on R&D (%)	n/a	n/a
<b>Inputs of societal innovation</b>	3	80.2
High-skilled employment (%)	13	69.8
Intellectual property payments (% total trade)	1	100
State of cluster development	4	70.7
<b>Outputs</b>	1	65.1
<b>Outputs of R&amp;D institutions</b>	8	61.6
Average documents per researcher	18	36.9
Citations per document	14	64.9
Resident patent applications (per 100 billion GDP)	4	83
<b>Outputs of RDI in business enterprises</b>	1	92.2
Intellectual property receipts (% total trade)	1	100
Industrial design applications (per 100 billion GDP)	17	76.7
PCT applications (per 100 billion GDP)	1	100
Firms producing new products and services (%)	n/a	n/a
<b>Outputs of societal innovation</b>	30	44.8
Trademark applications (per 100 billion GDP)	31	24.2
Cultural goods exports (% exports)	4	98.8
Printing and publishing output (% manufactured output)	79	11.3
<b>Impact</b>	40	34.4
<b>Quality</b>	20	40.7
Research institutions prominence	16	47.6
Growth of innovative companies	14	62.6
ISO 9001 quality certificates (per billion GDP)	25	28.6
ISO 14001 environmental certificates (per billion GDP)	31	23.9
<b>Linkages</b>	13	43.5
GERD financed from abroad (%)	66	9.9
Joint ventures per strategic alliance deals (per billion GDP)	10	58.5
Computer software spending (% GDP)	7	62.1
<b>Business development</b>	125	18.9
New business density per thousand population	40	18.9
Firms with products and services new to the market (%)	n/a	n/a



# SWITZERLAND

	Rank	Value
<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<b>17</b>	<b>69.9</b>
<b>Infrastructure</b>	<b>2</b>	<b>82</b>
Coverage	6	82
3G/4G mobile network coverage (% population)	1	100
Secure Internet servers per 1 million population	5	93.2
Investment in telecommunication services (% GDP)	12	52.8
<b>Quality</b>	<b>5</b>	<b>71.7</b>
Mobile upload and download speeds	15	37.3
Fixed-broadband upload and download speeds	10	77.9
Fixed-broadband subscriptions by speed per hundred people	1	100
<b>Affordability</b>	<b>22</b>	<b>92.4</b>
Fixed broadband basket (% GNI per capita)	29	78.8
Mobile broadband basket (% GNI per capita)	18	98.5
Internet and telephony competition	1	100
<b>Access</b>	<b>30</b>	<b>57.3</b>
<b>Subscriptions</b>	<b>40</b>	<b>68.9</b>
Active mobile-broadband subscriptions per hundred inhabitants	52	51.9
International Internet bandwidth per user	64	57
Households with Internet access at home (%)	11	97.8
<b>Skills and employment</b>	<b>26</b>	<b>45.6</b>
Individuals with standard ICT skills (%)	15	63.6
Tertiary graduates from ICT programmes (%)	97	18.7
ICT employment (%)	21	54.6
<b>Usage</b>	<b>17</b>	<b>70.5</b>
<b>Services</b>	<b>40</b>	<b>61.2</b>
Government online services	36	84.1
Fixed broadband Internet traffic per subscription	69	22.3
Mobile broadband Internet traffic per subscription	18	41.3
Internet users (%)	11	97
<b>Outcomes</b>	<b>6</b>	<b>79.8</b>
ICT PCT patent applications (per 100 billion GDP)	7	84.6
E-participation	30	82.2
Internet activities by individuals (%)	17	79.5
Trade in digitally deliverable services (% total trade)	7	73
<b>ECONOMY</b>	<b>7</b>	<b>70.6</b>
<b>Economic competitiveness</b>	<b>22</b>	<b>68.1</b>
Infrastructure investment	22	63.6
Gross fixed capital formation (% GDP)	34	45.8
Logistics performance	3	77.5
Transport productive capacity	15	71.3
Building quality control	109	60
Business agility	25	72.5
Ease of starting a business	67	88.4
Insolvency recovery rate	43	50.8
Entrepreneurial employee activity rate	4	79.3
Extent of corporate transparency	51	71.4
<b>Economic openness</b>	<b>24</b>	<b>65.8</b>
Trade and diversification	25	59.9
Trade (% GDP)	21	35.5
High-technology trade (% total trade)	17	39.8
Product concentration	83	71.4
Market concentration	37	92.9
Financial openness	37	71.6
Chinn-Ito financial openness	1	100
Foreign direct investment, net inflows (% GDP)	139	14.8
Debt dynamics	1	100
<b>Financing and domestic value added</b>	<b>3</b>	<b>77.8</b>
<b>Financing and taxes</b>	<b>3</b>	<b>79.5</b>
Domestic credit to private sector (% GDP)	6	68.7
MSME financing gap (% GDP)	n/a	n/a
Tax and contribution rate (% profit)	37	72.3
Bank non-performing loans (%)	6	97.5
<b>Domestic value added</b>	<b>3</b>	<b>76.2</b>
Medium- and high-tech activities value added	3	77
Industry and services value added (% GDP)	6	90.1
Labour underutilization rate	34	80.4
Output per worker	5	57.3

	Rank	Value
<b>ENABLING ENVIRONMENT</b>	<b>3</b>	<b>84.9</b>
<b>Governance</b>	<b>1</b>	<b>96.9</b>
Political environment	2	95.7
Peace and stability	5	92.5
Voice and accountability	3	99
Quality of institutions	4	98.1
Rule of law	6	97.6
Control of corruption	7	97.2
Government effectiveness	2	99.5
<b>Socio-economic</b>	<b>10</b>	<b>82.1</b>
Gender equity	21	82.2
Female-to-male ratio in parliament	30	62.6
Female-to-male labour force participation	37	85.8
Female-to-male ratio in Internet usage	58	98.2
<b>Social inclusion</b>	<b>9</b>	<b>95</b>
Social protection coverage (% population)	1	100
Adult literacy rate	n/a	n/a
Youth not in employment, education or training (%)	17	90
Standard of living	6	69
Poverty headcount ratio (% population)	36	75.7
GDP per capita	6	62.4
<b>Health and environment</b>	<b>6</b>	<b>75.6</b>
<b>Health</b>	<b>6</b>	<b>92</b>
Universal health coverage	10	86.3
Healthy life expectancy (years)	6	91.4
Under-five mortality rate	29	98.1
<b>Environmental performance</b>	<b>50</b>	<b>59.3</b>
Renewable energy consumption (%)	66	28.8
Ecological footprint per capita	92	71.1
Natural hazard exposure	15	78

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