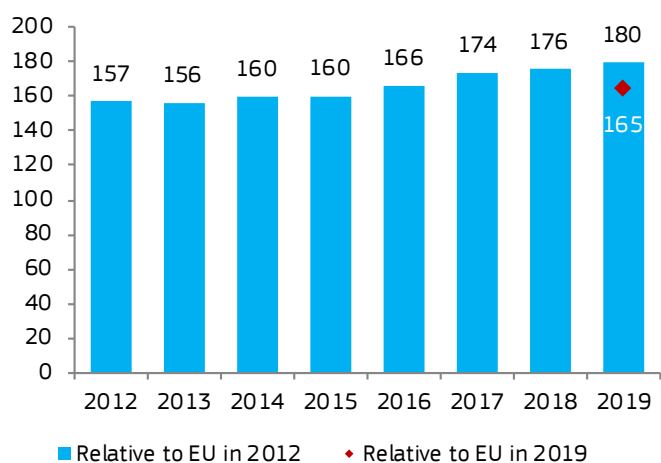




Switzerland is an Innovation Leader.

Over time, performance has increased relative to that of the EU in 2012.



Attractive research systems, Human resources and Firm investments are the strongest innovation dimensions. Switzerland scores particularly well on Public-private co-publications, Foreign doctorate students, Lifelong learning, and International scientific co-publications. *Employment impacts*, *Sales impacts* and *Intellectual assets* are the weakest innovation dimensions. Overall, Switzerland's lowest indicator scores comprise Employment in fast-growing enterprises of innovative sectors, Medium and high-tech product exports, Exports of knowledge-intensive services, and Innovative SMEs collaborating with others.

Structural differences with the EU are shown in the table below. Switzerland shows the highest positive difference to the EU in Top R&D spending enterprises, GDP per capita and FDI net inflows, and the biggest negative difference in Enterprise births, Employment share in manufacturing and Average annual change in GDP.

| Switzerland | Relative to EU 2019 in 2019 | Performance relative to EU 2012 in 2019 | 2019 |
|--|-----------------------------|---|--------------|
| SUMMARY INNOVATION INDEX | 165.1 | 157.1 | 179.7 |
| Human resources | 219.6 | 223.7 | 252.9 |
| New doctorate graduates | 202.1 | 206.2 | 222.6 |
| Population with tertiary education | 187.0 | 168.6 | 238.0 |
| Lifelong learning | 284.5 | 306.7 | 306.7 |
| Attractive research systems | 226.9 | 253.0 | 259.1 |
| International scientific co-publications | 277.1 | 406.9 | 406.9 |
| Most cited publications | 150.3 | 159.7 | 150.4 |
| Foreign doctorate students | 310.5 | 314.0 | 358.0 |
| Innovation-friendly environment | 169.8 | 137.1 | 295.2 |
| Broadband penetration | 178.3 | 104.0 | 410.0 |
| Opportunity-driven entrepreneurship | 160.1 | 159.4 | 218.1 |
| Finance and support | 165.2 | 103.0 | 190.8 |
| R&D expenditure in the public sector | 144.8 | 122.0 | 142.2 |
| Venture capital expenditures | 188.5 | 71.2 | 272.6 |
| Firm investments § | 172.3 | 221.0 | 223.8 |
| R&D expenditure in the business sector | 162.9 | 181.8 | 186.6 |
| Non-R&D innovation expenditures | 178.5 | 250.2 | 250.2 |
| Enterprises providing ICT training | N/A | N/A | N/A |
| Innovators | 159.1 | 139.8 | 142.2 |
| SMEs product/process innovations | 141.4 | 95.0 | 140.8 |
| SMEs marketing/organizational innovations | 197.8 | 163.4 | 162.4 |
| SMEs innovating in-house | 140.7 | 158.4 | 122.5 |
| Linkages | 168.5 | 169.2 | 173.6 |
| Innovative SMEs collaborating with others | 104.4 | 92.3 | 103.6 |
| Public-private co-publications | 324.9 | 367.3 | 367.3 |
| Private co-funding of public R&D exp. | 131.9 | 131.0 | 133.0 |
| Intellectual assets | 158.9 | 155.8 | 148.4 |
| PCT patent applications | 140.4 | 137.4 | 130.3 |
| Trademark applications | 183.3 | 203.8 | 195.1 |
| Design applications | 162.5 | 143.0 | 136.3 |
| Employment impacts | 115.9 | 113.3 | 125.0 |
| Employment in knowledge-intensive activities | 200.0 | 185.1 | 216.2 |
| Employment fast-growing enterprises | 47.9 | 55.3 | 51.5 |
| Sales impacts | 118.5 | 96.3 | 117.8 |
| Medium and high-tech product exports | 93.0 | 76.9 | 103.0 |
| Knowledge-intensive services exports | 101.4 | 97.5 | 104.7 |
| Sales of new-to-market/firm innovations | 175.9 | 115.4 | 147.0 |

The colours show normalised performance in 2019 relative to that of the EU in 2019: dark green: above 125%; light green: between 95% and 125%; yellow: between 50% and 95%; orange: below 50%. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

§ Due to missing data, the relative dimension score does not necessarily reflect that of the indicators.

| | CH | EU |
|---|--------|--------|
| Performance and structure of the economy | | |
| GDP per capita (PPS) | 47,300 | 29,100 |
| Average annual GDP growth (%) | 1.81 | 1.84 |
| Employment share manufacturing (NACE C) (%) | 12.8 | 16.6 |
| of which High and medium high-tech (%) | 45.0 | 37.5 |
| Employment share services (NACE G-N) (%) | 45.1 | 41.4 |
| of which Knowledge-intensive services (%) | 46.4 | 34.3 |
| Turnover share SMEs (%) | n/a | 38.3 |
| Turnover share large enterprises (%) | n/a | 43.2 |
| Foreign-controlled enterprises – share of value added (%) | n/a | 11.1 |
| Business and entrepreneurship | | |
| Enterprise births (10+ employees) (%) | 0.2 | 1.1 |
| Total Entrepreneurial Activity (TEA) (%) | 8.5 | 6.7 |
| FDI net inflows (% GDP) | 3.7 | 2.6 |
| Top R&D spending enterprises per 10 million population | 67.0 | 16.2 |
| Buyer sophistication (1 to 7 best) | 5.0 | 3.7 |
| Governance and policy framework | | |
| Ease of starting a business (0 to 100 best) | 76.6 | 76.5 |
| Basic-school entrepreneurial education and training (1 to 5 best) | 2.4 | 1.9 |
| Govt procurement of advanced technology products (1 to 7 best) | 3.8 | 3.5 |
| Rule of law (-2.5 to 2.5 best) | 1.9 | 1.1 |
| Demography | | |
| Population size (millions) | 8.5 | 446.2 |
| Average annual population growth (%) | 0.74 | 0.14 |
| Population density (inhabitants/km ²) | 211.9 | 108.6 |