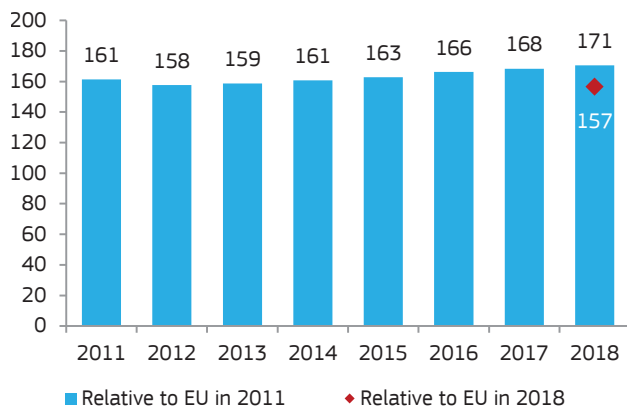




**Switzerland** is an **Innovation Leader**. Over time, performance has increased relative to that of the EU in 2011.



Switzerland	Relative to EU 2018 in		Performance relative to EU 2011 in	
	2018	2011	2018	2011
<b>SUMMARY INNOVATION INDEX</b>	<b>156.7</b>	<b>161.4</b>	<b>170.6</b>	<b>239.0</b>
<b>Human resources</b>	<b>195.5</b>	<b>229.3</b>	<b>239.0</b>	<b>239.0</b>
New doctorate graduates	170.7	269.2	247.9	247.9
Population with tertiary education	166.9	152.2	199.3	199.3
Lifelong learning	268.4	274.0	274.0	274.0
<b>Attractive research systems</b>	<b>207.9</b>	<b>226.1</b>	<b>234.2</b>	<b>234.2</b>
International scientific co-publications	265.1	385.6	385.6	385.6
Most cited publications	141.9	157.1	155.4	155.4
Foreign doctorate students	268.8	228.4	257.1	257.1
<b>Innovation-friendly environment §</b>	<b>147.0</b>	<b>175.4</b>	<b>232.4</b>	<b>232.4</b>
Broadband penetration	N/A	N/A	N/A	N/A
Opportunity-driven entrepreneurship	150.8	147.5	195.3	195.3
<b>Finance and support</b>	<b>134.9</b>	<b>84.7</b>	<b>147.6</b>	<b>147.6</b>
R&D expenditure in the public sector	150.5	105.6	139.2	139.2
Venture capital expenditures	121.8	60.0	157.5	157.5
<b>Firm investments §</b>	<b>175.0</b>	<b>172.6</b>	<b>208.7</b>	<b>208.7</b>
R&D expenditure in the business sector	177.1	193.6	203.0	203.0
Non-R&D innovation expenditures	176.1	146.1	205.6	205.6
Enterprises providing ICT training	N/A	N/A	N/A	N/A
<b>Innovators</b>	<b>157.2</b>	<b>143.7</b>	<b>142.8</b>	<b>142.8</b>
SMEs product/process innovations	139.3	169.8	135.2	135.2
SMEs marketing/organizational innovations	190.5	170.0	162.6	162.6
SMEs innovating in-house	144.7	90.7	130.3	130.3
<b>Linkages</b>	<b>158.6</b>	<b>163.8</b>	<b>164.7</b>	<b>164.7</b>
Innovative SMEs collaborating with others	79.6	82.2	85.0	85.0
Public-private co-publications	315.1	369.7	369.7	369.7
Private co-funding of public R&D exp.	140.5	134.8	134.8	134.8
<b>Intellectual assets</b>	<b>173.4</b>	<b>187.5</b>	<b>168.6</b>	<b>168.6</b>
PCT patent applications	191.1	188.6	173.8	173.8
Trademark applications	186.4	223.8	207.6	207.6
Design applications	142.4	156.7	131.3	131.3
<b>Employment impacts</b>	<b>112.3</b>	<b>106.9</b>	<b>117.2</b>	<b>117.2</b>
Employment in knowledge-intensive activities	184.7	175.6	201.3	201.3
Employment fast-growing enterprises	55.9	57.3	56.6	56.6
<b>Sales impacts</b>	<b>115.8</b>	<b>130.6</b>	<b>119.2</b>	<b>119.2</b>
Medium and high-tech product exports	88.5	125.7	95.5	95.5
Knowledge-intensive services exports	102.5	97.5	105.7	105.7
Sales of new-to-market/firm innovations	167.9	174.5	162.9	162.9

The colours show normalised performance in 2018 relative to that of the EU in 2018: dark green: above 120%; light green: between 90% and 120%; yellow: between 50% and 90%; 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.

*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, and Lifelong learning. *Employment impacts* and *Sales impacts* are the weakest innovation dimensions. Overall, Switzerland's lowest indicator scores comprise Employment fast-growing enterprises of innovative sectors, Innovative SMEs collaborating with others, and Medium and high-tech product exports.

**Structural differences** with the EU are shown in the table below. For several indicators data are not available. Many economic indicators are well above the EU average, including GDP per capita, the employment share in knowledge-intensive services, FDI net inflows, top R&D spending enterprises per 10 million population, and buyer sophistication. However, enterprise births is well below the EU average.

	CH	EU
<b>Performance and structure of the economy</b>		
GDP per capita (PPS)	47,200	29,500
Average annual GDP growth (%)	2.1	2.2
Employment share manufacturing (NACE C) (%)	12.9	15.5
of which High and medium high-tech (%)	44.6	37.5
Employment share services (NACE G-N) (%)	45.1	41.8
of which Knowledge-intensive services (%)	45.7	35.0
Turnover share SMEs (%)	n/a	37.9
Turnover share large enterprises (%)	n/a	44.4
Foreign-controlled enterprises – share of value added (%)	n/a	12.6
<b>Business and entrepreneurship</b>		
Enterprise births (10+ employees) (%)	0.2	1.5
Total Entrepreneurial Activity (TEA) (%)	8.0	6.7
FDI net inflows (% GDP)	10.6	4.3
Top R&D spending enterprises per 10 million population	67.6	19.6
Buyer sophistication (1 to 7 best)	5.0	3.7
<b>Governance and policy framework</b>		
Ease of starting a business (0 to 100 best)	75.6	76.8
Basic-school entrepren. education and training (1 to 5 best)	2.2	1.9
Govt. procurement of advanced tech products (1 to 7 best)	3.8	3.5
Rule of law (-2.5 to 2.5 best)	1.9	1.2
<b>Demography</b>		
Population size (millions)	8.4	511.3
Average annual population growth (%)	0.9	0.2
Population density (inhabitants/km <sup>2</sup> )	209.7	117.5