SWITZERLAND GLOBAL ENTERPRISE



KEY FIGURES

place – Global Innovation Index



place – World Talent Ranking



glace IP protection



CHF billion invested in R+D in Switzerland

Sources: WEF; IMD; WIPO; Federal Statistical Office, 2020

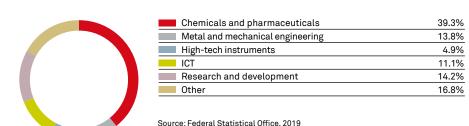
SWISS INNOVATION

AT A GLANCE

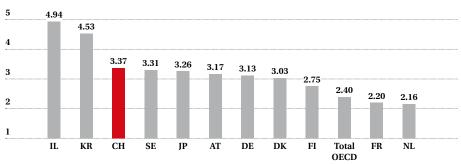
Switzerland's prosperity stems from its propensity for innovation. Swiss global corporations, as well as numerous small and medium enterprises, habitually strive to make improvements to their products, services and processes by investing heavily in research and development. This has meant that Swiss companies have been able to maintain their competitiveness over the last few years, despite the strong Swiss franc. This success is due, in part, to the presence of renowned research institutes and the ability to effectively turn research results into marketable products. Ideal conditions in the field of intellectual property and the availability of specialists in IP management also result in optimum conditions for protecting and harnessing innovation.

R+D Expenditure in Switzerland

R+D spending of private sector by economic branch in %



International rankings for gross domestic expenditure on R+D, 2018 As a percentage of GDP



Sources: OECD; Federal Statistical Office, 2020

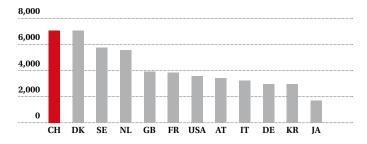


RESEARCH AND DEVELOPMENT (R+D)

• Switzerland is home to excellent public fundamental research thanks to the presence of renowned universities boasting global networks (ETH Zurich and EPF Lausanne, as well as research institutions and cantonal universities). One measure of the output of research activities is the number of scientific publications in international journals. In terms of the number of inhabitants, Switzerland is at the top of the European regions and also in front of all East Asian regions. Switzerland also occupies a top position in terms of quality and citation frequency.

Scientific articles per 1 million inhabitants

Per year, 2014 – 2018



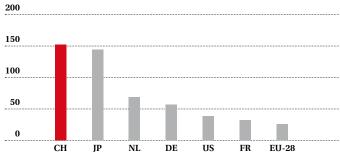
Source: SERI, 2020

- Switzerland is one of the countries that invest the most in R+D relative to GDP. Private companies contribute almost two-thirds of R+D expenditures. The strong involvement of the private sector is testament to the attractive conditions that exist for knowledge-intensive companies in Switzerland.
- Switzerland is characterized by a high and efficient knowledge and technology transfer. The close collaboration between universities and companies is an important success factor for Swiss research and innovation.
- Swiss research and innovation is based on the **high quality of the education system** among other things. Thanks to the high reputation of its universities, Switzerland is attractive to students, postgraduates and researchers from abroad. Furthermore, the Swiss vocational training system ensures the high **availability of qualified technical personnel** (lab technicians, IT technicians, polymechanics, etc.), who play a key role in the advanced technology sectors. A third of the qualified Swiss personnel in the field of R+D are educated via this non-university approach.
- In terms of the number of patent applications per capita, Switzer-land occupies a leading position worldwide. Worth mentioning is the strong international involvement of Switzerland. This is evidenced by the number of patents in international cooperation as well as patents registered by foreign companies in Switzerland. Switzerland's strengths lie in the fields of health technologies and biotechnology.

• The **Swiss participation** in the EU research and innovation funding program **Horizon 2020** represents 2.4% of all participations. The project proposals of researchers in Switzerland have so far achieved a success rate of 15.9% for Horizon 2020, which underlines the **high quality of the proposals**.

Research productivity - a global comparison

Number of triadic patents per million inhabitants in 2017



Source: Federal Statistical Office, 2020

- The Swiss Innovation Agency Innosuisse specifically promotes cooperation between science and the market through innovation projects, networking, training and coaching. Innosuisse has an annual funding budget of around 200 million Swiss francs. The lion's share of this goes to supporting innovation projects.
- As an important center of research, Switzerland attracts highly
 qualified foreign researchers. Several internationally important institutions are based here. For example, the European
 Organization for Nuclear Research CERN, the Paul Scherrer Institute (PSI) and the Swiss Center for Electronics and
 Microtechnology (CSEM). CSEM is a non-profit research and
 technology institution and is committed to both applied and
 industry-commissioned R+D building a bridging function between the economy and science.
- Private research centers, such as the multiple Nobel Prize-winning IBM Research Laboratory, Google's European Research Center (its largest research location outside the USA) or the sney Research Lab are all located in Switzerland. However, also ABB, Novartis, Roche, Hyundai Electric, Oracle, Biogen and many more conduct their cutting-edge research from here, collaborating closely with nearby universities and research institutes.

FRAMEWORK CONDITIONS AND MARKET ENTRY

 The Swiss research and innovation system is generally rated as very effective in international comparison. In the Global Innovation Index (WIPO), Switzerland has ranked first for ten years. The country scores particularly well on framework conditions and educational indicators as well as publications and patents.

International Rankings for Innovation

Global Innovation Index (GII) 2020

Country	Rank
+ Switzerland	1
Sweden	2
USA	3
United Kingdom	4
The Netherlands	5
Denmark Denmark	6
+ Finland	7
Singapore	8
Germany	9
South Korea	10

Source: World Intellectual Property Organization WIPO, 2020

- The Swiss legal system, being both stable and liberal, offers both significant protection for intellectual property and a high degree of investment security for R+D activities. As it ensures straightforward and affordable market entry for domestic and foreign partners, Switzerland is often selected as the setting for arbitral jurisdiction for international agreements.
- The **Swiss Made** label stands for quality, precision, safety and reliability attributes which contribute to buyers abroad being willing to pay higher prices for Swiss products. In order for a company's industrial product to earn the "Made in Switzerland" label, at least 60% of the product's manufacturing costs (including R+D, material and production costs including costs for quality assurance and certification) must be incurred in Switzerland. In addition, the main production stage must take place in Switzerland (see also www.s-ge.com/swissness).
- Switzerland is a member of all important international IP treaties and IP organizations, such as the European Patent
 Office (EPO) and the World Intellectual Property Organization (WIPO), based in Geneva. Having access to these protection systems makes it possible to employ a central registration procedure without the need for a local representative in each individual country.
- Switzerland's processes for the protection of intellectual property are simple and efficient.

- Companies in Switzerland have easy access to IP specialists
 (e.g. patent attorneys). The multilingual nature of Switzerland
 also makes it easier to operate across national borders, for
 example in the EU region.
- In contrast to foreign business locations, such as Germany, in Switzerland there are no legal restrictions on the transfer of intellectual property (sales, licensing, franchising, security rights, etc.).
- In Switzerland, Swiss law (Art. 332 Swiss Code of Obligations) dictates that inventions and designs which an employee produces while performing his/her duties and fulfilling his/her contractual obligations belong to the employer and not as in many other countries such as Germany and Austria to the employee.

CURRENT DEVELOPMENTS

In 2019, the Swiss electorate voted in favor of the Federal Act on Tax Reform and Old-Age Insurance Financing ("STAF"). This tax reform ensures an internationally accepted corporate taxation system (see factsheet at www.s-ge.com/corporate-taxation). The STAF comprises the following core elements:

- Patent box: A patent box that is consistent with the OECD regulations provides for a special deduction for innovative companies amounting to a maximum of 90% of revenues from patents and comparable rights that are based on qualifying expenditure for research and development.
- Increased tax breaks for research and development expenditure:
 In addition, cantons can optionally grant an additional reduction of a maximum of 50% for research and development expenditure.

 Both innovative major companies as well as small and medium enterprises can benefit from this relief.
- Relief Limit: The maximum tax relief must not exceed 70% of profits, but the cantons are free to set a lower relief limit.

SWISS INNOVATION PARKS

Switzerland Innovation, the agency of Switzerland's innovation parks, offers technology companies space to cooperate with leading international universities, including the prestigious Swiss Federal Institutes of Technology (ETH Zurich and EPF Lausanne), and to use research results to develop marketable products and services. Switzerland Innovation thrives off of interdisciplinary cooperation between science and industry, which opens up new ways of marketing for a new era. Switzerland Innovation's technology parks are the ideal location for research-oriented companies to develop their next groundbreaking or highly profitable product. Switzerland thus lives up to its reputation as the most innovative country in the world.

Innovation Focus Areas

Switzerland Innovation focuses on five innovation focus areas: health and life sciences, mobility and transportation, energy, the environment and natural resources, manufacturing and production, and computer and computational science.

Target Audience

The strategic position of Switzerland Innovation at the forefront of global research attracts many highly innovative businesses. The target audience include:

- Medium-sized and large technology companies that develop new marketable products, services, and processes.
- Established companies from high-tech industries with a high value-added ratio and a clear focus on research and development and innovation activities.
- Research groups, the research and development teams of corporations, and start-ups.

Services

A wide range of services and excellent research infrastructure have been specifically designed to ensure the full potential and operational effectiveness of R+D staff and innovation cells at Switzerland Innovation. This includes, among others:

- Support for cooperation with world-class academic partners and easy access to the best talent and researchers.
- · A network of thriving high-tech startups and spin-offs.
- A platform for the exchange of ideas and for partnering with the R+D teams of international companies.
- Industrial liaison officers who help R+D personnel to expand their options.
- Approximately 200,000 square meters of high-quality laboratories, offices, conference rooms and co-working spaces; large research institutions with accelerator facilities.
- A business-friendly and politically stable environment; access to research funding from Switzerland and the EU; very high quality of life that is attractive to top talents and their families.

CONTACTS AND FURTHER INFORMATION

Authorities and regulators

State Secretariat for Education,
Research and Innovation
sbfi.admin.ch

<u>Innosuisse - Swiss Inovation Agency</u> innosuisse.ch

External Network of Swiss
Universities
swissnex.org

Swiss Federal Institute of Intellectual Property ige.ch

World Intellectual Property
Organization
wipo.int

European Patent Office epo.org

Associations and networks

csem.ch
idee-suisse.ch
myscience.ch
swisstransitlab.com
swissuniversities.ch

Innovation and startup support

agire.ch
baselarea.swiss
swissparks.ch
switzerland-innovation.com
technopark-allianz.ch

Swiss Innovation Parks

<u>Switzerland Innovation</u> <u>switzerland-innovation.com</u>

- > <u>Switzerland Innovation Park</u> Basel Area
- > <u>Switzerland Innovation Park</u> <u>Biel/Bienne</u>
- > <u>Switzerland Innovation Park</u> <u>Innovare</u>
- > Switzerland Innovation Park
 Network West EPFL
- > Switzerland Innovation Park Zurich

Publications

<u>Forschung und Innovation</u> <u>in der Schweiz 2017 (in German)</u> <u>sbfi.admin.ch</u>

Swiss International Cooperation in Research and Innovation sbfi.admin.ch

Die Schweizer Forschung und Innovation im internationalen Vergleich
- Aktualisierte Indikatoren 2018
(in German and French)
sbfi.admin.ch

Collection of Swiss Intellectual
Property Laws
(in German, French, and Italian)
admin.ch

Swiss Venture Funding Map 2020

S-GE resources

Handbook for Investors s-ge.com/handbookforin vestors

More fact sheets on Switzerland as a business location s-ge.com/factsheets

WE OFFER FREE CONSULTATION

Are you expanding in Europe and considering Switzerland as a business location for your company? Here, you can get free advice and support throughout the entire settlement process: We will connect you unbureaucratically with the cantonal business promotion agencies and provide you with expert contacts for matters such as taxes, real estate, etc.

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