

Global Industry Competitiveness Index (GICI) 2025

Competitiveness analysis of the Swiss
chemical and pharmaceutical industry

A study by BAK Economics and
commissioned by scienceindustries,
the Swiss Business Association
Chemistry Pharma Life Sciences

Wirtschaftsverband
Chemie Pharma Life Sciences

science**INDUSTRIES**
S W I T Z E R L A N D

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This publication uses the generic masculine to refer to persons and positions, rather than employing both masculine and feminine forms. All terms apply equally to both men and women.

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Editorial

Top positions are not guaranteed:

Strong industries require strong framework conditions

Switzerland's chemical and pharmaceutical industry is at the heart of global dynamics: new alliances, geopolitical tensions and rapid technological change are shaping our future. The Global Industry Competitiveness Index 2025 clearly shows that we must prevail in an increasingly competitive environment – and that top positions cannot be taken for granted. Switzerland has fallen from second to third place in the current ranking, with its rivals closing in. The report makes it clear that increasing regulation is slowing down productivity in research and development – a warning sign for a leading innovation location that depends on its agility. Switzerland's leading role is therefore not a given but must be continually reaffirmed.

It is therefore particularly important at this point in time to leverage Switzerland's particular strengths: its openness, innovative spirit and reliability. And we need a location policy that secures these strengths with appropriate framework conditions. Our industry is internationally connected and locally rooted. With its products and solutions, it not only contributes to prosperity and creates jobs, but also helps to tackle global challenges such as climate change and security of supply in a concrete way.

This year's ranking shows where Switzerland excels in international comparison and where we need to catch up. The field of contenders for the top spots has expanded. This is precisely where transparency is valuable: it shows us areas of action that we need to tackle together with politicians and society in order to secure our leading position in the long term.



A handwritten signature in blue ink, which appears to read 'A. Luther'. The signature is fluid and stylized, with a long horizontal stroke at the end.

Dr. Annette Luther
President scienceindustries

Executive Summary

For the sixth consecutive time since the Global Industry Competitiveness Index (GICI) was first published in 2020, the Swiss chemical and pharmaceutical industry ranks among the three most competitive in the world. However, the gap between Switzerland and its closest rivals has narrowed significantly, with Switzerland now sharing third place with Denmark. This year's focus is industrial policy, in particular in the most important countries for the chemical and pharmaceutical industry.

The Global Industry Competitiveness Index (GICI) measures the international competitiveness of the chemical and pharmaceutical industry. It is conducted by BAK Economics on behalf of scienceindustries, the Swiss Business Association Chemistry Pharma Life Sciences. It is based on four dimensions: 'Performance', 'Market Position and Efficiency', 'Innovation and Technology Leadership' and 'Location Quality'.

Switzerland presents a balanced profile with no significant weaknesses and ranks among the top five nations in all four key dimensions of the GICI. However, its relative position has deteriorated compared to previous years. In 2024, it still ranked among the top three in all dimensions. Countries such as Denmark, the Netherlands, and the United Kingdom have notably made progress relative to Switzerland. Denmark even caught up with Switzerland.

The USA retains its leading position as the most competitive location for chemicals and pharmaceuticals, primarily due to its strong market presence and exceptionally high level of innovation. Ireland rises to second place, driven by the high productivity of its pharmaceutical industry. South Korea and Japan enter the top ten for the first time.

The top 10 most competitive chemical and pharmaceutical locations



Source: BAK Economics

Focus 2025: industrial policy

Industrial policy is growing in importance worldwide, driven by geopolitical rivalries, technological dependencies and climate change. Industrial policy measures primarily serve to secure national competitiveness, strengthen technological sovereignty and accelerate decarbonisation. Since 2017, the number of measures worldwide has quadrupled, further accelerated by responses to the Covid-19 pandemic, which prompted additional initiatives to stabilize supply chains and secure drug availability.

Industrial policy measures worldwide primarily target dual-use goods, followed by high-tech and low-carbon products. Although medical goods are less prominent, they frequently receive support owing to the critical role of the Life Sciences industry. Measures for the chemical industry are usually closely linked to climate protection strategies.

Industrial policy is analysed with reference to five countries: the United States, China, the United Kingdom, France and Germany. These countries were selected because they accounted for more than 50% of global value added in 2023, they maintain intensive trade relations with to and they also pursue an active industrial policy.

The analysis reveals considerable momentum in industrial policy: subsidies and support programmes are on the rise, intensifying competition. Increasing localisation requirements and trade restrictions, particularly by the United States and China, are limiting market access in favour of domestic companies. Germany and the United Kingdom are focusing more on improving general framework conditions and strategic development.

Switzerland is a leading location, yet it must focus on innovation-friendly framework conditions, stable trade relations and forward-looking monitoring of international industrial policy in order to secure its leading position. Action is needed above all in reducing regulatory hurdles and dealing with trade barriers to ensure long-term competitiveness. Swiss companies in the chemical and pharmaceutical industry must continuously strengthen their innovation capacity, enhance international collaboration, and closely monitor political developments in key markets to respond promptly to potential locational disadvantages.

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Key findings 2025

Starting point

As a small country, Switzerland is heavily integrated into the international economy. Recent developments in trade policy, in particular the tariffs and protectionist measures introduced by the US under President Trump, have once again highlighted the importance of open markets for Swiss prosperity. Such interventions affecting international trade lead to uncertainty in global supply chains and put particular strain on export-oriented economies such as Switzerland. This underscores the competitiveness of Swiss export industries, which is critical to their capacity to succeed in an increasingly challenging environment.

But how can competitiveness actually be measured? Many of the well-known indices and reports consider economies as a whole. This often overlooks the fact that not all sectors are equally active internationally and that different industries are influenced by very specific factors.

For this reason, BAK Economics developed a dedicated index in 2020 to assess the competitiveness of individual industries: the Global Industry Competitiveness Index (GICI). This study presents the results for the chemical and pharmaceutical industry. The GICI makes it possible to identify industry-specific strengths and weaknesses and to derive measures for further improving competitiveness. In addition, comparisons over several years allow positive and negative developments to be identified.

Protectionist measures, changing trade structures and targeted industrial policies are increasingly shaping the competitiveness of the chemical and pharmaceutical industry. It therefore depends not only on companies, but also on international framework conditions. In this context, the focus topic 2025 analyses the industrial policy of important countries in this sector.

The analysis examines the most important industrial policy measures in the following five countries: the USA, China, the UK, France and Germany, and highlights the potential risks for Switzerland as a business location.

How is competitiveness measured?

The Global Industry Competitiveness Index is based on 25 indicators relating to performance, market position and efficiency, innovation and technology leadership, and location quality. Two groups of indicators are used to measure industry-specific competitiveness: results-oriented indicators (performance, market position and efficiency) and determinant-oriented indicators (innovation and technology leadership, location quality).



Performance

'How competitive has the industry been in recent years?'

- 1 = Value added growth
- 2 = Productivity growth



Market position & efficiency

'How is the industry currently positioned?'

- 3 = Share of global industry value added
- 4 = Productivity level



Innovation & technology leadership

'What is the industry doing today to ensure future competitiveness?'

- 5 = R&D expenditure/employees
- 6 = R&D expenditure/value added
- 7 = R&D jobs/employees
- 8 = Top patents/employees
- 9 = Digital penetration of R&D
- 10 = Positioning in the global digitalised research landscape



Location quality

'How good are the framework conditions at the location today?'

- | | | | |
|----------------------------|---|---|----------------------------------|
| Infrastructure | { | 11 = Transport infrastructure | |
| | | 12 = Financial system | |
| | | 13 = Technological environment (with regard to digitalisation) | |
| Stability | { | 14 = Data availability in the healthcare system | |
| | | 15 = Macroeconomic stability | |
| Business dynamism & skills | { | 16 = Political stability | |
| | | 17 = Innovation environment | |
| | | 18 = General level of education | |
| Market access & Regulation | { | 19 = Knowledge base (digital) | |
| | | 20 = Readiness for digital transformation | |
| | | 21 = Product market regulation | |
| Tax burden | { | 22 = Labour market regulation | |
| | | 23 = Regulatory framework for the digitalisation of the healthcare system | |
| | | 24 = Corporate taxation | |
| | | { | 25 = Taxation of skilled workers |

Source: BAK Economics

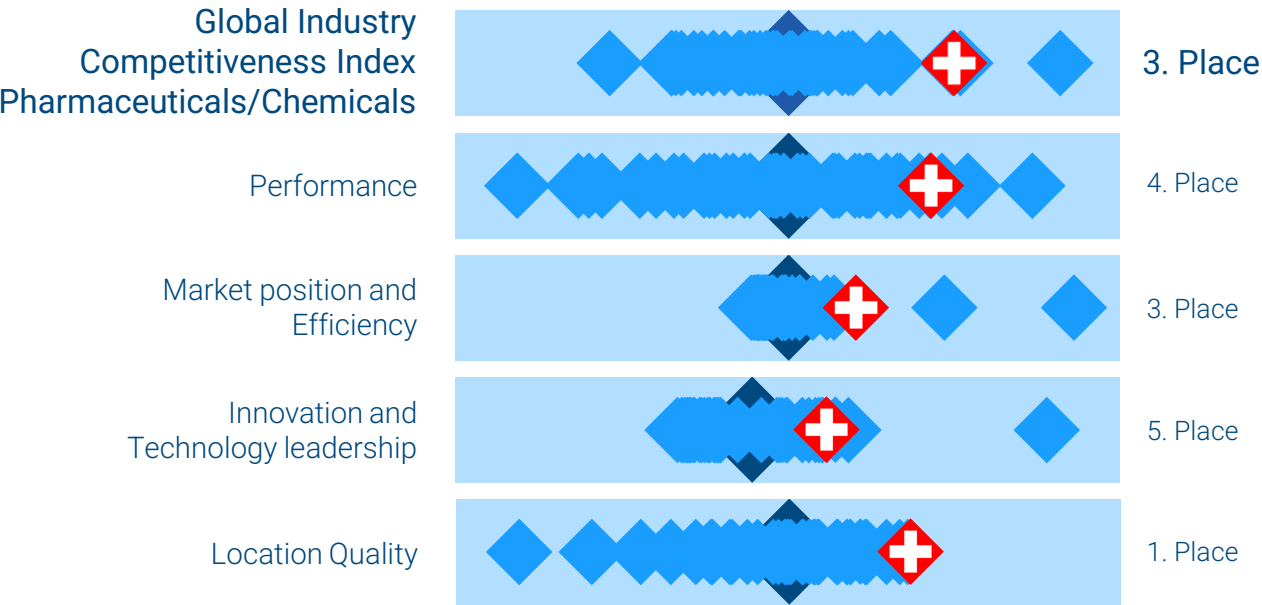
Third place for Switzerland in the GICI 2025

Switzerland barely manages to secure a place on the podium in 2025, sharing it with Denmark. The ranking is led by the USA, followed by Ireland. The gap between Switzerland and its closest rivals has also narrowed. With its third place in the GICI 2025, Switzerland has dropped one place compared to the previous year. Despite this decline, Switzerland remains one of the most competitive countries for the chemical and pharmaceutical industry and is among the top five countries in all four main dimensions of the GICI.

Switzerland's greatest strength remains the quality of its location, an area in which it ranks first worldwide. Particularly noteworthy are the high quality of its infrastructure, its financial and macroeconomic stability, and the availability of highly qualified workers.

Switzerland dropped one place in the 'Performance' pillar, as growth in value added and productivity slowed slightly. In 'Innovation and Technology Leadership', Switzerland dropped three places. It lost ground in both the chemical and the pharmaceutical industries, while other countries in the top 10 improved their positions.

Components of the Global Industry Competitiveness Index



Source: BAK Economics

The leader board

1



The USA retained the leading position it secured last year. Apart from the 'Performance' dimension, it also showed no significant weaknesses.

- Its significant domestic demand and very high level of innovation are the main reasons for the USA's leading position in the ranking.
- The USA recorded slight declines in the 'Market position and efficiency' and 'Location quality' dimensions.
- However, the USA remains by far the leading nation in the field of innovation – in terms of intensity, quality and digital penetration – and has even further expanded its position in this area.

2



Ireland secures its place on the podium mainly thanks to its strong growth and, in particular, a very high level of productivity in the pharmaceutical industry.

- Ireland's productivity levels in the pharmaceutical industry are unmatched by any other country, largely as a result of its favorable tax policy.
- In contrast, Ireland exhibits relative weaknesses in innovation activities, where its position has declined, as well as in Performance, which has decreased this year. In fact, Ireland is heavily dependent on the profits of multinational companies, which have declined from previously high levels during the Covid-19 pandemic.

3



Switzerland shares third place on the podium with Denmark. It performs strongly in all four dimensions, exhibiting no major weaknesses.

- Switzerland possesses the best quality of location worldwide, as well as a very high level of productivity and a solid growth, particularly in the pharmaceutical industry.
- Switzerland's position in innovation and technology leadership has deteriorated. Other countries have caught up significantly in this area.

The chasers

3



In recent years, **Denmark** has continuously improved its ranking and shares third place with Switzerland. The country shows no significant weaknesses and ranks among the leading nations in all dimensions. Denmark achieves the highest performance, driven by a strong growth in productivity and value added in the pharmaceutical sector.

5



The Netherlands recorded the strongest increase among the top 10 countries, mainly due to a rapid growth in value added and productivity in the pharmaceutical industry. The Netherlands also has the second highest level of innovation, behind the United States.

6



The **United Kingdom** continues its progression in the rankings. After entering the top 10 in 2023 and climbing two places last year, it ranks sixth in 2025. This year's improvement is mainly attributable to the fields of 'innovation' and 'location quality'.

7



Belgium lost ground in three of the four dimensions. Nevertheless, it remains among the top ten nations, owing to high productivity in the pharmaceutical industry and strong intensity and performance in R&D activities.

8



For the first time, **South Korea** ranks among the top 10, owing to significant increases in value added and productivity within the pharmaceutical industry. Nonetheless, it remains behind the top locations with respect to innovation.

9



Compared to previous GICI editions, **Sweden** has dropped a few places. Following strong growth during the Covid-19 period, its performance and productivity levels have fallen slightly. However, Sweden has significantly improved its position in innovation (ranked 6th in 2025).

10



After falling out of the top 10 for the first time last year, **Japan** has now returned, driven by improved performance in both the chemical and pharmaceutical sectors. The country has also strengthened its position in innovation.

The world's best by topic

Performance



Denmark holds the top position in Performance, owing to substantial increases in value added and productivity. While Denmark achieved the highest score in the pharmaceutical sector, the chemical industry also significantly improved its performance.

Market position and efficiency



Ireland dominates the ranking in the dimension 'Market position and efficiency' by a wide margin. The primary factor is an attractive tax system that encourages international companies, particularly from the United States, to establish their headquarters on the island, resulting in exceptionally high productivity levels.

Innovation and technology leadership



When it comes to research and development activities and innovation performance, the USA is in a league of its own. It overwhelmingly leads across all indicators, excelling in Performance—with the highest number of world-class patents per employee—and in digital penetration. It also demonstrates the highest innovation intensity, as measured by expenditure per employee, expenditure per value added, and the number of researchers per employee.

Location quality



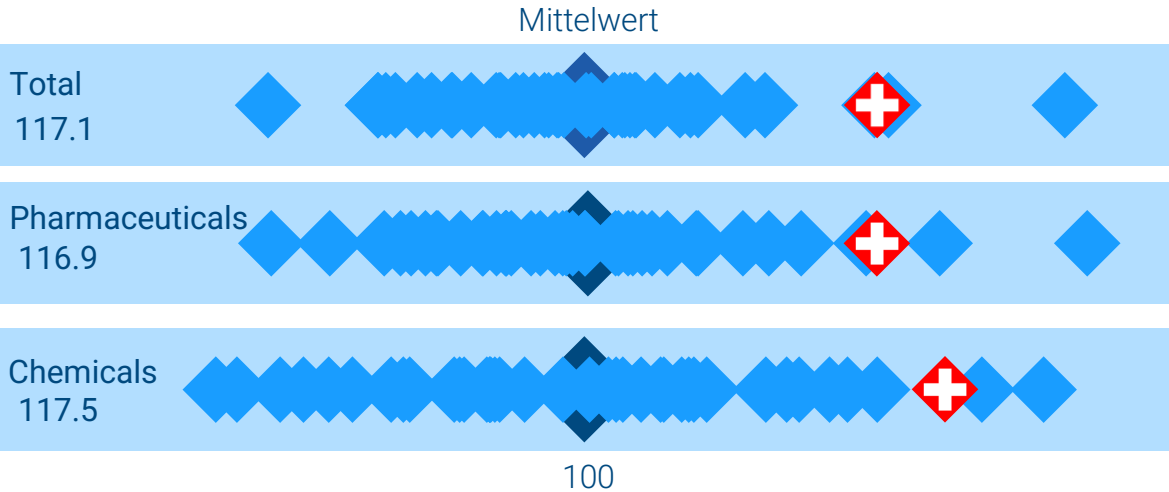
Switzerland stands out for its exceptional location quality. It has excellent infrastructure, a favourable financial situation, a stable macroeconomic environment, many skilled individuals and an advantageous tax system.

Results for Chemicals & Pharmaceuticals

The overall index is composed of the indices for both the chemical and pharmaceutical industries. To provide a basis for comparison from a Swiss perspective, the weighted aggregation across all countries is calculated according to the Swiss industry structure of the chemical and pharmaceutical industries. The 2023 value-added shares of these two industries in Switzerland serve as weights for the calculations (pharmaceuticals 87%, chemicals 13%).

Switzerland ranks third in both the chemical and pharmaceutical industries. Accordingly, it holds third place in the overall index and continues to be among the most competitive locations globally.

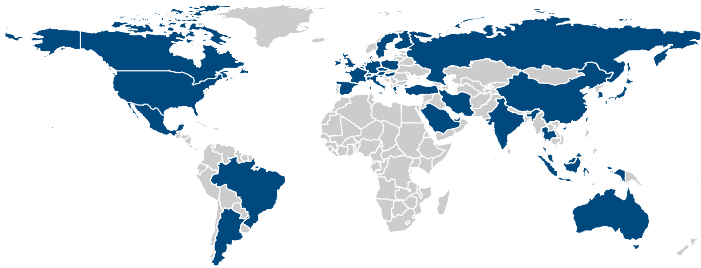
Global Industry Competitiveness Index 2025



Source: BAK Economics

Peer-Group

The group of benchmark countries consists of the 40 chemical and pharmaceutical locations with the highest added value and accounts for around 95% of global gross value added in the chemical and pharmaceutical industry.

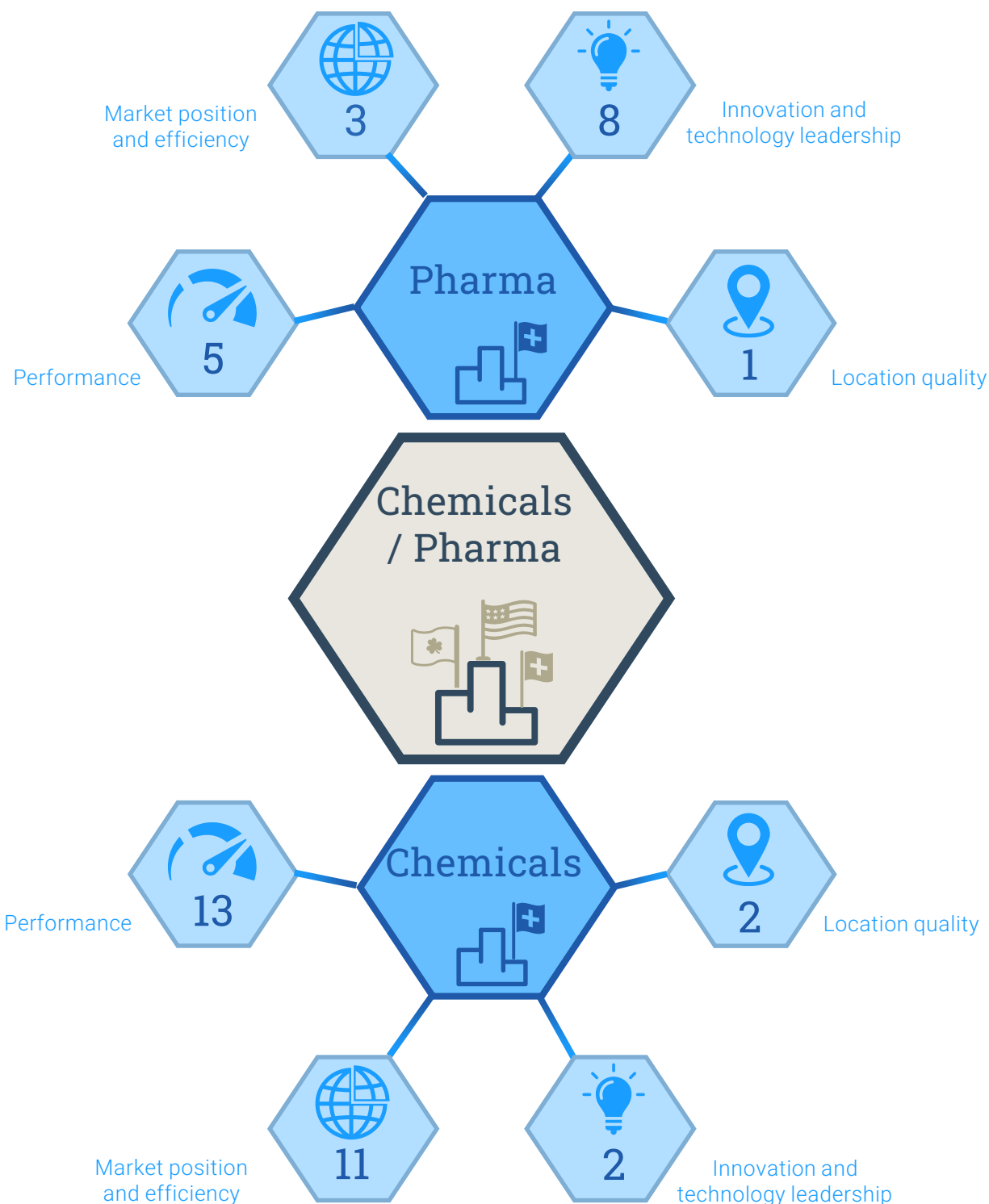


Source: BAK Economics

GICI 2025

Switzerland's ranking
in the sub-index

Indicators for calculating
the sub-indices

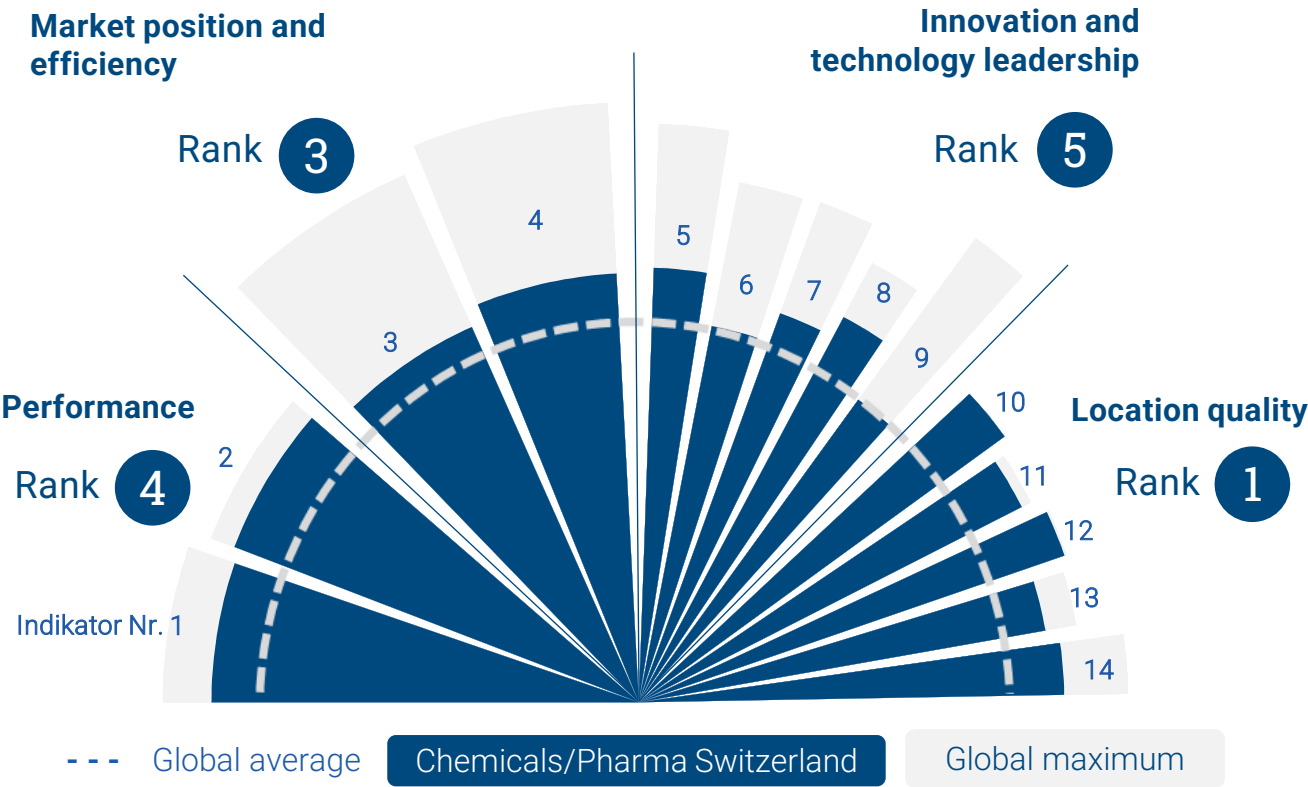


Source: BAK Economics

Switzerland's strengths and weaknesses

Switzerland ranks at least fifth in all dimensions of competitiveness and achieves above-average scores. It obtains the best result in terms of location quality. Switzerland also ranks among the top three in the field of market position and efficiency. While it maintains strong Performance and Innovation, the corresponding indicator values in these dimensions have decreased slightly from the previous year. Only in terms of digital penetration of research and development activities does Switzerland remain slightly below average.

Classification of Swiss GICI components in the global range of countries



Indicators

- 1 = Value added growth
- 2 = Productivity growth
- 3 = Share of value added
- 4 = Productivity
- 5 = R&D expenditure/employee
- 6 = R&D expenditure/value added
- 7 = R&D jobs/employee

- 8 = Top patents/employee
- 9 = Digital penetration of innovation activities
- 10 = Infrastructure
- 11 = Stability
- 12 = Business dynamism and skills
- 13 = Market access and regulation
- 14 = Tax burden

Source: BAK Economics

Switzerland's strengths



Performance: Switzerland has one of the highest scores in performance. The pharmaceutical industry achieves significantly better results than the chemical industry in this respect. However, growth momentum has deteriorated somewhat compared to the GICI 2024.



Productivity: A high level of productivity is essential for market positioning, enabling the sale of products in international markets. Productivity levels are among the highest worldwide, both in the chemical industry (ranked 9th) and in the pharmaceutical industry (ranked 2nd).



Innovation and technology leadership: Switzerland's chemical and pharmaceutical industry is one of the most innovative in the world (ranked 5th). It invests substantial resources relative to its workforce and effectively converts these resources into R&D outcomes and innovation output, including a high proportion of world-class patents (ranked 5th).



Skills and Talents: Although Switzerland is a leader in terms of location quality, there is one aspect that deserves special mention. For a strong innovative industry that produces high value-added goods, it is important to be able to recruit highly skilled workers. Switzerland is well positioned in this area, both in terms of available skills (ranked 1st), infrastructure (ranked 1st) and the tax system (ranked 6th), which are essential for attracting new talent.

Switzerland's weaknesses



Regulations (ranked 11): In terms of regulations, Switzerland's position relative to its competitors has slightly deteriorated.



Digital Readiness (ranked 16): Switzerland continues to lag significantly behind in terms of digitalisation. The low number of patents with digital elements is particularly striking. The framework conditions in this area could also be improved.

Results 2025 vs. 2024

Changes in Switzerland's ranking

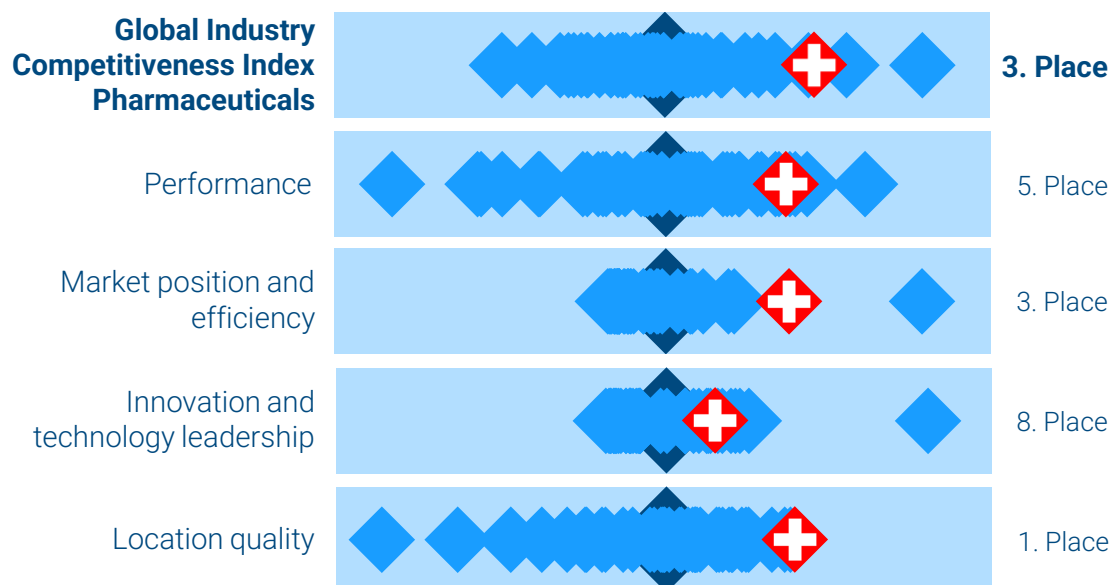
Indicators/Sub indicators	GICI 2025	GICI 2024	+/- Rank
GICI Pharmaceuticals/Chemicals	3	2	-1
1. Performance	4	3	-1
1.1 Value added growth	5	4	-1
1.2 Productivity growth	3	3	0
2. Market position and efficiency	3	3	0
2.1 Share of global value added	4	6	+2
2.2 Productivity	2	3	+1
3. Innovation / Technology leadership	5	2	-3
3.1 R&D expenditure/employees	3	2	-1
3.2 R&D expenditure/value added	17	13	-4
3.3 R&D jobs/employees	8	6	-2
3.4 Top patents/employees	5	4	-1
3.5 Digital penetration of innovation activities	26	19	-7
4. Location quality	1	1	0
4.1 Infrastructure	1	1	0
4.2 Financial system	2	2	0
4.3 IMD Technology	3	8	+5
4.4 Data availability healthcare	25	24	-1
4.5 Macroeconomic stability	2	2	0
4.6 Institutions	7	7	0
4.7 Business dynamism	4	5	+1
4.8 Skills	1	1	0
4.9 IMD Knowledge	1	1	0
4.10 IMD Future Readiness	5	6	+1
4.11 Product market	17	14	-3
4.12 Labour market	10	8	-2
4.13 Policy Regulation healthcare	10	9	-1
4.14 Taxation	7	6	-1



In-depth analysis

Swiss pharmaceutical industry

Third place in the GICI 2025



Source: BAK Economics

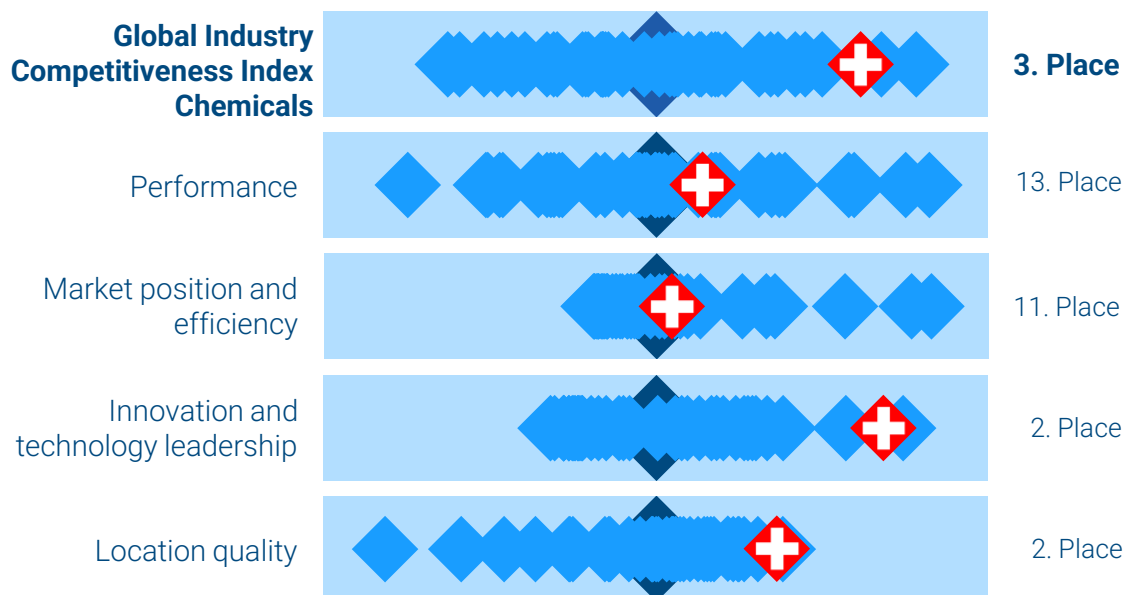
The performance of the pharmaceutical industry has declined for the second consecutive year, but remains one of the highest in the world. Thanks to this growth, it maintains high productivity and significant market share on global markets. Its innovative strength has dropped compared to other countries, especially those with extensive R&D activities such as the United States, Denmark, Sweden, the Netherlands, and the United Kingdom. In terms of location quality, Switzerland remains an attractive location for pharmaceutical companies.

High-performance R&D activities and a high level of attractiveness are crucial to securing competitiveness and future growth. It is therefore important that Switzerland remains strong in both areas in the future, especially in comparison with leading countries. One area in particular that needs to be improved in order to secure the future competitiveness of the pharmaceutical industry is digitalisation.

This is crucial for optimising production processes and, in particular, cutting-edge research. Despite its excellent resources, such as a highly skilled workforce and scientific expertise, Switzerland does not perform particularly well in this area.

Swiss chemical industry

Third place in the GICI 2025



Source: BAK Economics

The Swiss chemical industry is one of the most competitive in the world. It is characterised by a high level of innovation (ranked 2nd) and an attractive environment (ranked 2nd). These two areas are crucial to ensuring long-term competitiveness.

Switzerland lags slightly behind in the dimensions of 'performance' and 'market position and efficiency', but remains just outside the top 10. While productivity growth remains positive, value added has declined slightly over the last five years. The reclassification of companies in other sectors from 2023 onwards leads to an artificial deterioration in the performance of the chemical industry.

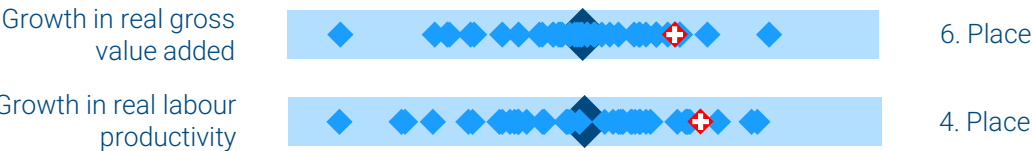
The Swiss chemical industry is one of the most innovative in the world. It has no significant weaknesses in this area, both in terms of the intensity of its research and development activities and its performance, as measured by the quality of its patents. In terms of research performance, Switzerland is even a global leader.

The good score in the 'location quality' dimension is driven in particular by the high quality of the infrastructure and the attractiveness for talent.

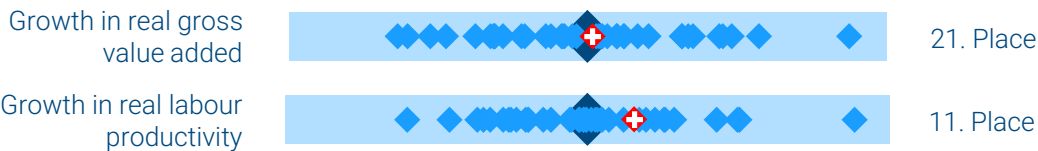
Performance

Indicators for development

Pharmaceutical industry



Chemical industry



Source: BAK Economics

The ‘Performance’ sub-index measures the industry's momentum over the last five years (2018 – 2023). Strong growth in value added and productivity during this period demonstrates the industry's success over this time frame and the likelihood that the industry can currently hold its ground on international markets.

Although the performance of the Swiss chemical and pharmaceutical industry has deteriorated slightly over the past two years, it remains one of the leaders in international comparison (ranked 4th). Growth remained high, albeit slightly lower than in the previous year.

Definition of gross value added

Value added represents the economic added value that a company or industry creates when manufacturing a product or providing a service. In mathematical terms, gross value added is calculated as the difference between the value of total production and the intermediate inputs required to produce it. Inputs include all external production factors that are sourced from third-party companies and flow into production as input factors (e.g. raw materials, energy, rents, ICT services, etc.).

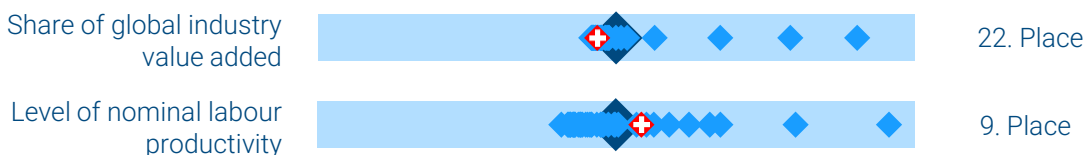
Market position and efficiency

Indicators of current competitiveness

Pharmaceutical industry



Chemical industry



Source: BAK Economics

The sub-index 'Market position and efficiency' shows the current ability of chemical and pharmaceutical companies to compete in international markets. While the size of a country can have a positive effect on market share, particularly through a large domestic market (e.g. China or the USA), smaller countries with high productivity can also achieve a significant market share (Switzerland, Ireland, Denmark). The share of global value added also illustrates the importance of the location in a global context.

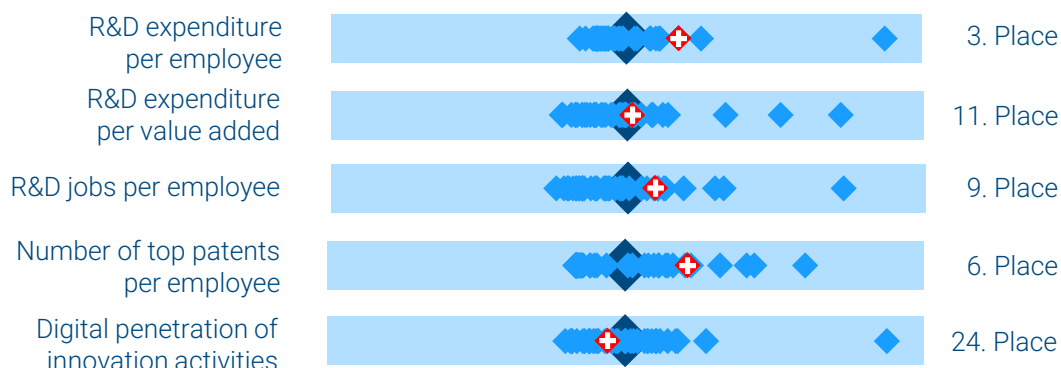
Owing to its strong productivity, Switzerland plays a significant role on the global stage and ranks fourth worldwide in the pharmaceutical industry. Switzerland's chemical industry is smaller (ranked 22nd), but is one of the most productive industries worldwide (ranked 9th). Globally, the chemical industry is highly heterogeneous and serves numerous markets with goods of varying degrees of complexity. Emerging economies often achieve significant market share via lower prices, while firms in developed countries focus on niche markets offering highly innovative products.

Although productivity levels in the pharmaceutical industry have fallen slightly in comparison with the previous year, Switzerland is surpassed only by Ireland. Productivity in the chemical industry is also slightly below the previous year's level.

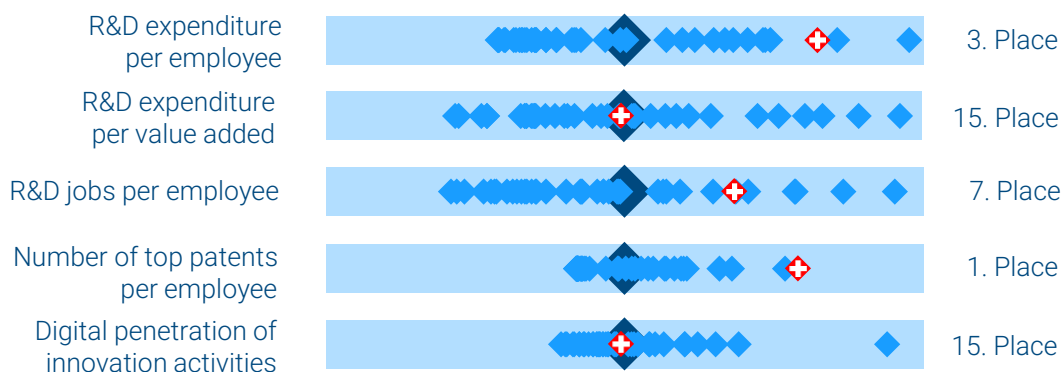
Innovation and technology leadership

Indicators for future competitiveness

Pharmaceutical industry



Chemical industry



Source: BAK Economics

Given the high cost of living and intensive capital use, the chemical and pharmaceutical industry in Switzerland must consistently improve productivity and bring innovative products to market. This requires first-class R&D activities.

Switzerland performs well in both the chemical and pharmaceutical industries, with a high level of R&D activity and, above all, a large number of world-class patents, particularly in the chemical industry. Although Switzerland is small, it brings many innovations to market, as demonstrated by the patents whose research was conducted in Switzerland.

One important area for improvement with long-term significance is the digitalisation of patents. Switzerland does not rank among the leading nations in this area (26th place), unlike countries such as the United States, Japan and Australia, as well as some European countries such as the Netherlands, Germany and the United Kingdom.

High location attractiveness

Location quality is a decisive factor for the future competitiveness of the chemical and pharmaceutical industry, particularly when it comes to attracting the required talent, offering favourable conditions and ensuring the financial and institutional stability that are essential for long-term investment.

The GICI assesses location quality based on over 40 variables covering aspects such as infrastructure, macroeconomic stability, business dynamics and skills, market access and regulation, and tax burden. It is based on numerous secondary data from sources such as the OECD, IMD, WEF and KPMG, which are combined in a consistent scoring system.

Switzerland's ranking with regard to location quality indicators



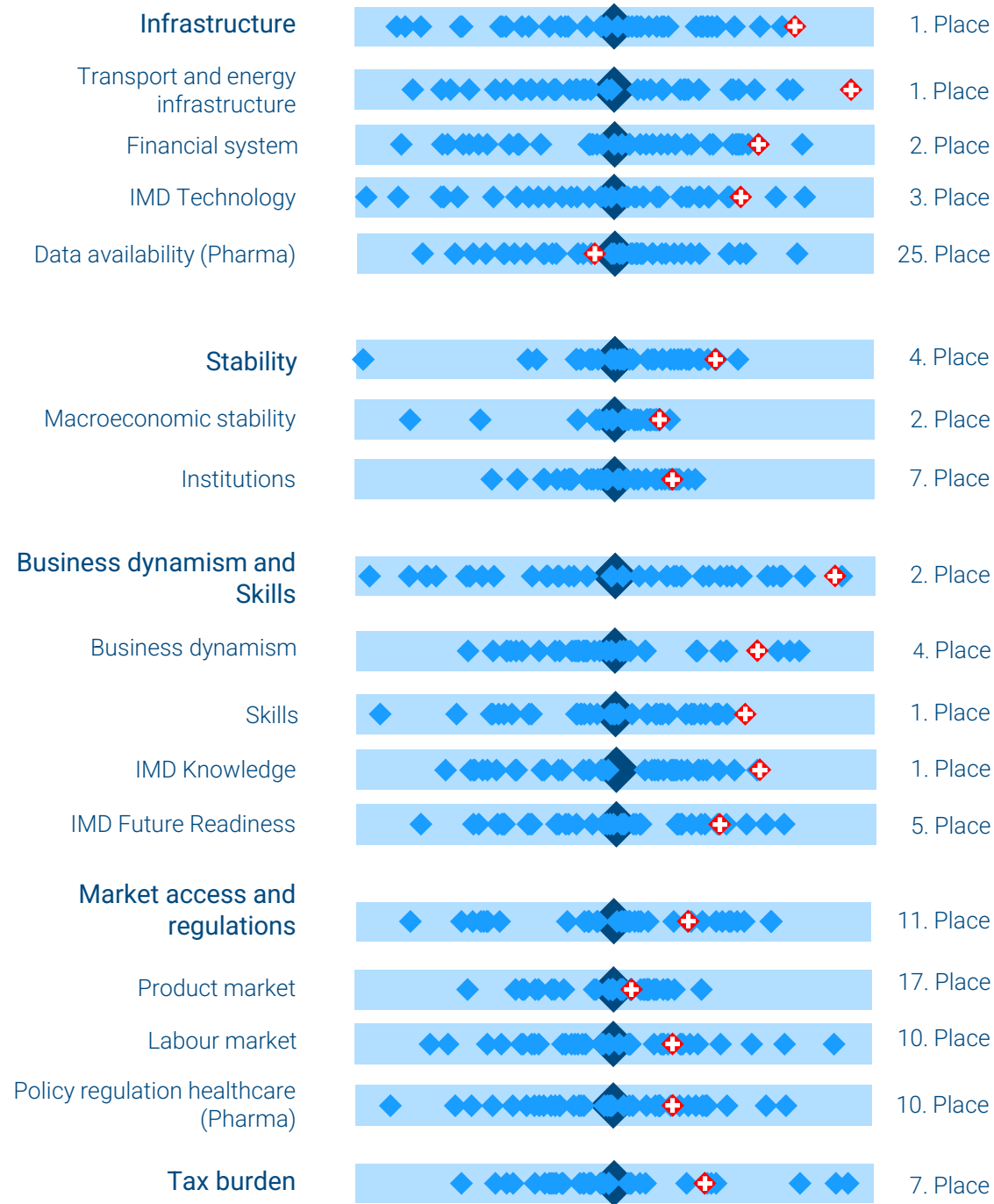
Source: BAK Economics

Although its score has fallen slightly compared to last year, Switzerland still ranks highest in terms of location quality and is particularly attractive to chemical and pharmaceutical companies. It comes ahead of Singapore, the United Arab Emirates and Denmark. It tops the rankings in terms of infrastructure quality, talent availability and the business environment. Switzerland's excellent political and financial stability favours corporate investment. The tax environment is also advantageous for the Swiss chemical and pharmaceutical companies, but has deteriorated and is likely to play a lesser role in future due to the OECD tax reform.

Regulations remain a weakness, particularly in the product market and with respect to digitalisation. Nevertheless, Switzerland possesses the requisite technological resources, expertise, and talent.

Detailed assessment of location quality

Indicators regarding the quality of location

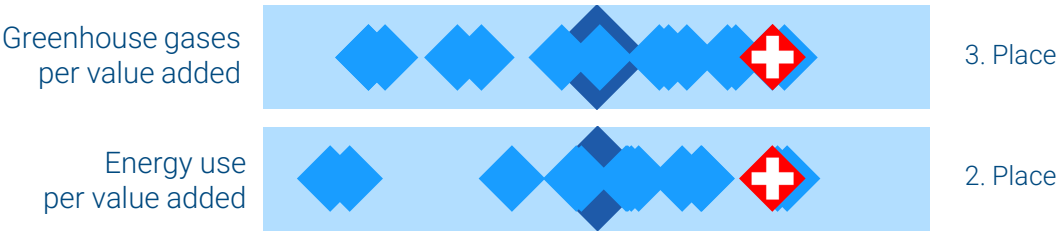


Source: BAK Economics

Sustainability

The sustainable development of an industry requires a strategy that combines economic success, social responsibility and ecological balance. The GICI focuses on economic competitiveness. Sustainability is measured using two indicators: greenhouse gas emissions and energy use per unit of value added. They focus on climate protection, in line with the goal of net-zero emissions by 2050, as stipulated in international agreements (the Paris Climate Agreement) and national legislation.

Sustainability indicators



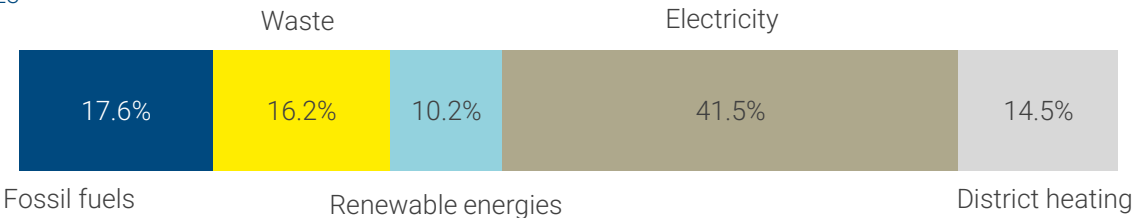
Source: Eurostat, OECD, BAK Economics

Compared with the previous year, the Swiss chemical and pharmaceutical industry continues to show strong results in sustainability. Among the European countries in the GICI 2025, it has low greenhouse gas emissions (ranked 3rd) and stands out for its high energy efficiency per value added (ranked 2nd). The Swiss chemical and pharmaceutical industry's focus on R&D or activities with high value added intensity helps to mitigate its environmental impact in Switzerland.

The energy mix of the Swiss chemical and pharmaceutical industry is heavily dominated by electricity. Fossil fuels are the second most important energy source, but their share has declined significantly in recent years. In contrast, the consumption of renewable energies has increased sharply, accounting for around one tenth of the energy mix in 2023.

Energy mix of the Swiss chemical and pharmaceutical industry

2023



Source: FSO, BAK Economics

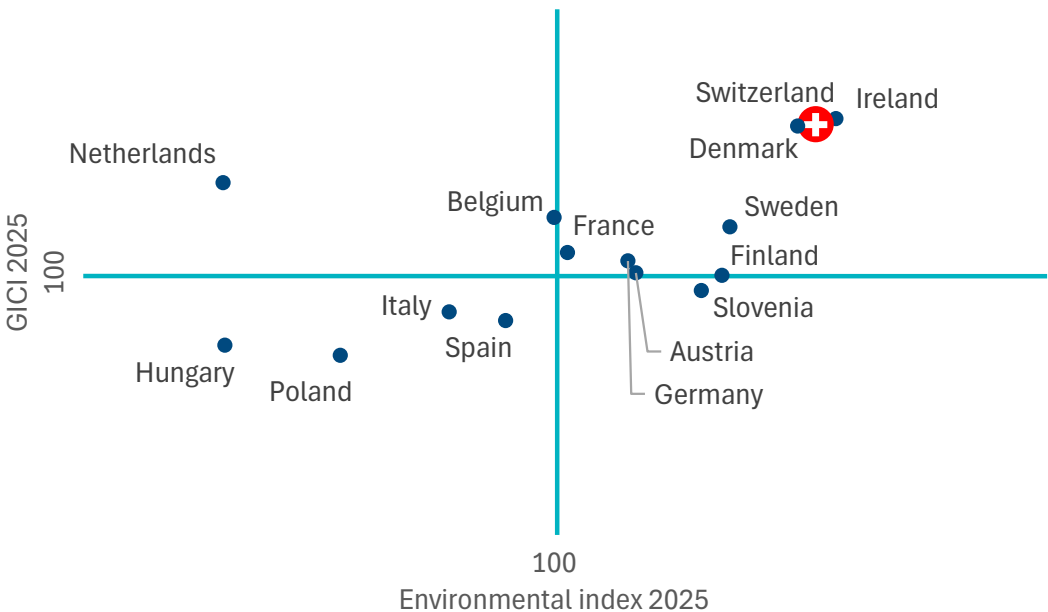
Sustainability and Competitiveness

Combining the two indicators yields an environmental index that quantifies part of the chemical and pharmaceutical industry's environmental impact. This index can also be compared with the results of this year's GICI. Economic success and competitiveness form the basis for investment in environmental protection. Both economic and ecological aspects must therefore be taken into account when designing the framework conditions.

Accordingly, the Swiss chemical and pharmaceutical industry ranks not only as one of the most competitive, but also as one of the most environmentally responsible locations in Europe.

GICI and environmental index scores for the 15 leading European locations

2025; A score above 100 indicates a value above the mean.



Source: BAK Economics



Greenhouse gas emissions per value added: measures the intensity of greenhouse gas emissions. An industry with low intensity will contribute to the net-zero target by 2050 approved by the Swiss population.



Energy use per value added: is used to measure energy intensity. Low intensity facilitates the energy transition and improves the resilience of industry to energy supply and rising energy prices.



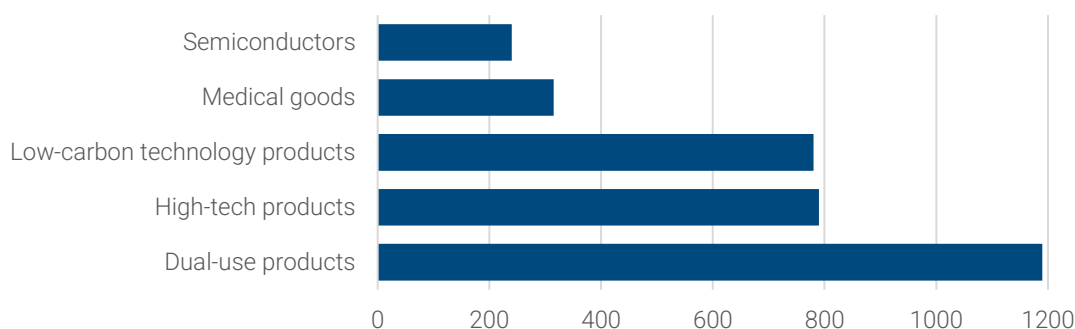
Focus: industrial policy

Focus: industrial policy

Industrial policy is currently gaining in importance again: in view of global rivalries, technological dependencies and climate change, economic policy is increasingly focusing on the targeted promotion of specific industries, technologies or even individual companies. According to the IMF-affiliated New Industrial Policy Observatory (NIPO), more than 2,500 industrial policies were recorded worldwide in 2023, almost half of them in China, the EU and the US (Evenett et al. 2024). 71% of these measures distort trade. Frequently cited objectives include ensuring security of supply and enhancing supply chain reliability. More than a third focus on strengthening competitiveness. Since the mid-2010s, the number of trade-restrictive measures has risen significantly, particularly in the form of subsidies.

Industrial policy refers to targeted government intervention aimed at supporting specific domestic companies, industries or economic activities (IMF 2024) in order to achieve certain national economic or non-economic goals. The term 'industry' does not refer solely to the manufacturing sector, but encompasses all industries. Governments have various instruments at their disposal to implement their industrial policy objectives, which can be broadly divided into two main categories: fiscal policy (e.g. subsidies, tax relief) and regulatory policy (e.g. trade restrictions, localisation requirements). Most industrial policy packages contain both aspects.

The objectives of industrial policy are reflected in the product groups that receive support. Most industrial policy measures relate to dual-use goods, followed by high-tech products and low-carbon products. Medical goods are significantly less in the spotlight than the aforementioned goods, but are often supported due to the strategic importance of the Life Sciences industry (in terms of both economic and health policy). Industrial policy measures affecting the chemical industry are primarily related to climate protection efforts.



Source: BAK Economics, Evenett et al. 2024, Avenir Suisse 2024

Focus: industrial policy

Switzerland has so far refrained from promoting key technologies, as is common practice abroad. Switzerland pursues a particularly cautious industrial policy, which differs significantly from that of many other countries.

Swiss economic policy is characterised by a liberal regulatory approach. The state primarily assumes the role of creating favourable conditions rather than actively intervening in industrial developments. The overarching goal is to strengthen overall economic competitiveness. This is achieved primarily through investment in education and research, the development of an efficient infrastructure and the guarantee of stable political and legal conditions.

In terms of tax policy, the STAF reform in 2020 introduced fiscal incentives for innovation activities in the form of a patent box and the deduction of R&D expenditure. Although these incentives are not explicitly designed for specific industries, different sectors benefit from them in very different ways. The pharmaceutical industry in particular is one of the major beneficiaries of this reform due to its high research intensity, and the advantageous taxation of research-based industries is an important asset in the competition between locations.

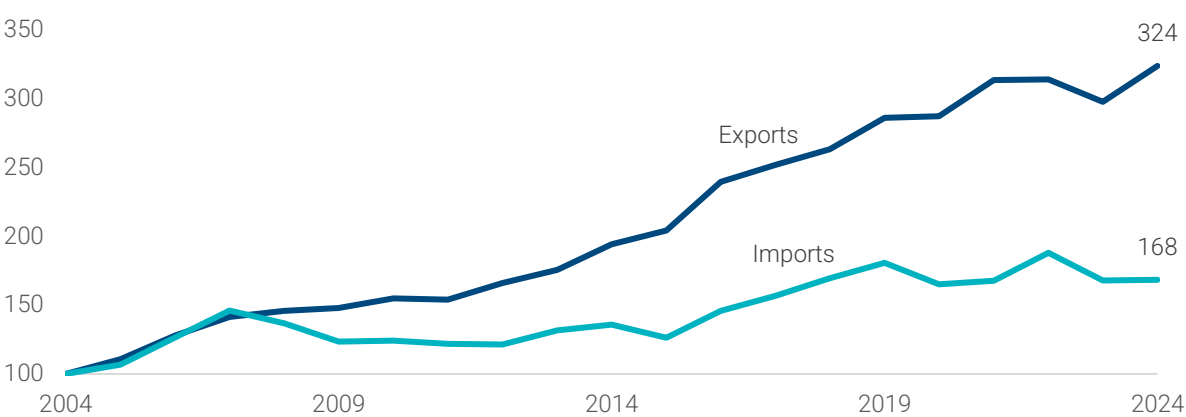
Although Switzerland itself does not pursue an interventionist industrial policy, it is strongly affected by the industrial policy strategies of other countries and must therefore take them into account in order to secure its competitiveness and innovative capacity.

Peer countries

Industrial policy is analysed by looking at five countries that are important for the chemical and pharmaceutical industries. In 2023, they accounted for just over 50% of global value added. They also pursue an active industrial policy. Finally, these countries maintain close economic ties with Switzerland. Trade in chemical and pharmaceutical products between Switzerland and these countries has increased significantly over the last 20 years. In 2023, they accounted for 33% of imports and 44% of exports.

Evolution of Swiss exports and imports of chemical and pharmaceutical products with the peer countries

2004-2024, 2004 = 100

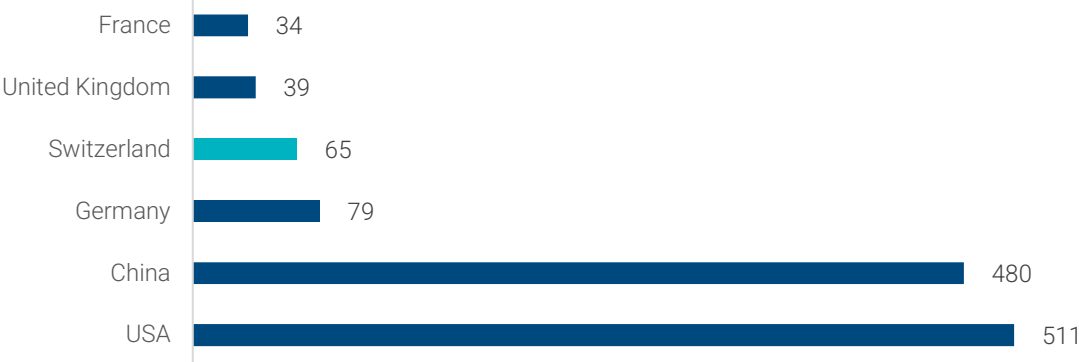


Source: FOCBS, BAK Economics

In terms of value creation, the global chemical and pharmaceutical industry is dominated by the United States and China. Due to their importance, the industrial policies of these countries influence the entire global chemical and pharmaceutical industry.

Nominal value added of the chemical-pharmaceutical industry

2023, in billion USD



Source: BAK Economics

Industrial policy of the peer countries

The following table provides an overview of the most comprehensive industrial policy initiatives and programmes that are particularly relevant to the chemical and pharmaceutical industry of the peer countries.

Countries	Selected initiatives	Key areas	Instruments
USA	IRA, CHIPS Act, Project NextGen, Green Chemistry Initiatives, OBBBA	Decarbonisation, domestic production, R&D, cost reduction for businesses	Subsidies, tax incentives (especially R&D), regulatory reforms
China	MIC 2025, 14. FJP, Sectoral sub-plans, Healthy China 2030, National Innovation Strategy	Technological sovereignty, internal market, innovation, healthcare, R&D expansion	Subsidies, tax breaks, massive R&D investments, regulatory reforms, localisation requirements
France	France 2030 (incl. Innovation Santé 2030), France Relance, IPCEI Med4Cure	Reindustrialisation, Security of supply, promotion of innovation	Investment promotion, tax incentives for R&D, public and private investment, accelerated approvals
Germany	Investitionsbooster, Nationale Pharmastrategie, WIN-Initiative, Chemieagenda (planned), MFG	Climate transformation, competitiveness, R&D, location support, innovation acceleration	Tax breaks, energy cost relief, research funding, reduction of bureaucracy
UK	Modern Industrial Strategy (2025), Life Science Funds, VPAG Investment Programme	Life sciences, clean energy, innovation promotion, R&D, pharmaceutical production, start-up scaling	Investment promotion, reduction of bureaucracy, regulatory reforms, export promotion, tax breaks

In the **United States**, several major packages have been passed in the last five years, including the Inflation Reduction Act (IRA), the CHIPS Act and the One Big Beautiful Bill Act (OBBBA). The number of measures has risen sharply in the US, particularly since 2021. The 2022 IRA introduced a very comprehensive package of industrial policy measures focusing on decarbonisation, promoting innovation, reducing drug prices and strengthening domestic production. Under President Trump, decarbonisation lost importance as a goal. The other targets are being pursued, with the OBBBA strengthening the overall attractiveness of the US for companies and highly skilled workers by extending and increasing tax breaks. The pressure on foreign pharmaceutical companies to relocate to the US is being exacerbated by Donald Trump's tariff announcements. The regulation of drug prices is a high business risk for all pharmaceutical companies worldwide.

Industrial policy at a glance

China is the frontrunner in terms of the number of new initiatives. Since 2019, the number of measures has risen steadily, particularly within the scope of Made in China (MIC) 2025 and the Five-Year Plans (FYP). In China, the focus is on technological self-sufficiency, establishing a national innovation system, strengthening the domestic market and providing massive R&D funding. Due to its dominance of socialist ideology, extensive economic planning and support programmes are being implemented. Life sciences and the chemical industry are among the strategic sectors and are specifically supported by numerous vertical programmes and measures. On the one hand, domestic production is being strengthened, among other things through localisation requirements. On the other hand, there is still an interest in supporting the flow and attraction of foreign investment and know-how.

Industrial policy measures in **France** have increased significantly since 2021. They aim to promote reindustrialisation, innovation, security of supply for medicines and the promotion of start-ups. Overall, the France 2030 programme (including Innovation Santé 2030) is very comprehensive and includes targeted support for the Life Sciences industry. Research and development are strongly encouraged.

In **Germany**, the number of initiatives has also increased significantly since 2019. Industrial policy measures focus on transforming the economy to achieve climate neutrality. There is extensive support for climate-neutral processes and products. The recently approved investment booster is intended to strengthen the overall attractiveness and competitiveness of German industry as well as research and development activities. The pharmaceutical industry is receiving particular support, as reflected in the pharmaceutical strategy. The chemical industry, as an energy-intensive industry, should benefit from electricity price reductions. It also profits from the promotion of more climate-neutral processes and products. In addition, there are plans to develop a strategy for the chemical industry in Germany in the future.

In the **United Kingdom**, industrial policy measures have long been the exception rather than the rule. However, due to the weakening economic development, support programmes are on the rise. The government has just announced a comprehensive industrial strategy. In addition to general subsidies, eight strategic sectors are being specifically promoted. These include Life Sciences, with a strong expansion of infrastructure, genomics and regulatory acceleration. Regulatory relief, innovation promotion and decarbonisation are also planned for the chemical industry.

Industrial policy of the peer countries

Programmes for the development of regional industrial clusters were not covered in this study for the individual countries, as they are not established at national level in all countries. However, measures to promote regional clusters (Life Sciences and Chemicals) exist in all the countries analysed. These are of great importance for the chemical and pharmaceutical industry, as they often form regional sector-specific ecosystems with significant impact.

The **pharmaceutical industry** is a strategic sector in all peer countries due to its economic and health policy significance. For this reason, all countries under review have specially tailored support instruments, both financial (especially with regard to research and development) and regulatory (e.g. to accelerate the process of introducing new drugs and therapies). In addition, all countries have measures in place to ensure security of supply in terms of production and supply chains. However, the countries differ in terms of the extent of their intervention. China, France and the USA in particular are attempting to promote domestic production with targeted localisation requirements and trade restrictions (USA).

The chemical industry is of strategic importance primarily as a supplier of raw materials and as an important pillar in economic decarbonisation. However, except in China, it is rarely explicitly promoted as a strategic industry. Nevertheless, Germany, France and the United Kingdom support the competitiveness of the chemical industry through electricity price relief and support for decarbonisation measures. In some countries, e.g. Germany and the EU, efforts are currently underway to develop sectoral programmes for the chemical industry.

	USA	China	France	Germany	UK
Measure changes 2019–2024	Strong increase	Very strong increase	Significant increase	Significant increase	Increase
	esp. 2021–2024	continuous	esp. 2021,	esp. 2022–2024	since 2020
	ca. +100%	ca. +100–150%	ca. +70–90%	ca. +80–100%	ca. +60–80%

Evaluating industrial policies

In order to classify the various industrial policy initiatives, despite their multitude of different approaches, objectives, instruments and target industries, an assessment is carried out on the basis of the preceding analysis and the primary sources used (e.g. legal texts, government programmes) and secondary sources such as studies and/or industry analyses. The assessment scale is as follows: 0–3: low, 4–6: medium, 7–10: high degree of intervention of industrial policy measures. In order to reflect the breadth and objectives of industrial policy measures, the following criteria were assessed:

- Financial support (subsidies, tax incentives, investment programmes)
- Research and innovation funding
- Regulatory relief (approvals, reduction of bureaucracy)
- Market access and localisation requirements
- Security of supply and supply chain policies
- Carbon neutrality and sustainability
- Specific support for the chemical and pharmaceutical industries

In addition, the various measures taken by the respective countries are assessed according to the extent to which they pose a potential threat to Switzerland's competitive position.

Criteria / Country	USA	China	France	Germany	UK
Scope of financial support	9	10	8	8	8
Research & innovation funding	10	10	9	8	9
Regulatory relief	9	7	8	8	9
Market access & localisation requirements	8	10	7	6	7
Security of supply & supply chain policies	8	9	8	8	7
Carbon neutrality & sustainability	7	6	8	9	8
Specific support Chemicals/Pharma	8	10	9	8	8
Potential threat to Switzerland	9	10	8	7	7

Evaluating industrial policies

Financial support

China provides the highest level of financial support worldwide. The United States also massively expanded its programmes in recent years (Inflation Reduction Act, CHIPS Act, One Big Beautiful Bill Act). The amounts of support provided by the other selected countries are quite high, albeit not to the same extent as the two major countries, the United States and China. Nevertheless, France and Germany increased their funding amounts in recent years. It should be noted that EU funds are also available in both countries, although they are used more extensively in France than in Germany. The United Kingdom is also in the process of setting up extensive investment programmes. Until now, programmes there have been rather modest.

Research and innovation funding

The USA and China report high investment expenditure on research and have targeted programmes to promote research in biotechnology and chemistry. The USA, for example, also relies on public-private partnerships such as ARPA-H (Advanced Research Projects Agency for Health), which promotes disruptive health technologies. France has long had high R&D funding and has strengthened this through targeted programmes such as Innovation Santé 2030 for pharmaceuticals. In the UK, strong incentives for innovation in the field of Life Sciences are also planned. Germany has a well-developed research funding system. New programmes such as the Investment Booster, the WIN Initiative and the establishment of strategic plans for pharmaceuticals and chemicals are designed to promote research and innovation. In comparison, these initiatives are less significant.

Regulatory relief

The USA has various approaches to speeding up approvals, particularly in the pharmaceutical sector (fast-track procedure). Germany and France too implemented a number of measures to speed up approvals and procedures. In Germany, for example, the pharmaceutical strategy and the Medical Research Act (MFG) are worth mentioning here. Similarly, measures to reduce bureaucracy are being considered across Europe, both for the pharmaceutical and chemical industries. The United Kingdom is also planning to reduce regulatory costs and speed up market access for innovative products, particularly for high-growth sectors such as digital, AI and Life Sciences. China is also pushing in favour of regulatory relief in some areas, but the requirements are still complex.

Evaluating industrial policies

Market access and localisation requirements

MIC 2025 and the 14th Five-Year Plan aim to strengthen the Chinese domestic market and thus domestic production. There are therefore very strong localisation requirements. The US has also introduced numerous localisation requirements with the IRA, and under the current president, Donald Trump, policy is strongly focused on domestic production, not only with subsidies but also with clear trade barriers such as tariffs. In France, reindustrialisation, relocation and security of supply play a major role in industrial policy. In Germany and the United Kingdom, market access is less regulated. They focus more on improving the general attractiveness of their locations.

Security of supply and supply chain policies

Based on experiences during the Covid-19 pandemic and increasing geopolitical rivalries, all countries implemented measures to strengthen supply security, diversification and the relocation of critical production. These measures focus primarily on specific materials, products and industries such as the pharmaceutical industry, semiconductors and critical raw materials. The measures are less pronounced in Germany and the United Kingdom than in other countries. They are particularly extensive in China.

Carbon neutrality and sustainability

Germany is a leader in this area. In recent years, German industrial policy has been strongly influenced by the desire to promote decarbonisation. In France and the United Kingdom, adaptation to climate change and decarbonisation represent a key objective, although to a lesser extent than in Germany. In the United States, subsidies under the IRA were substantial, but the new law (OBBBA) will largely abandon them. China also mentions this goal, but is less consistent in its implementation.

Specific support for the chemical and pharmaceutical industries

China, France and the United States have targeted programmes for the pharmaceutical industry with direct subsidies and tax breaks, particularly when it comes to innovation. Germany has also improved the framework conditions for the pharmaceutical industry with its pharmaceutical strategy and the MFG. Life Sciences are defined as a strategic industry with special subsidies in the new Modern Industrial Strategy. The chemical industry is also a strategic sector in China, where it is being specifically targeted for further development. In other countries, the chemical industry receives comparatively little direct support. However, there are numerous programmes that promote the chemical industry alongside other sectors by providing support for decarbonisation measures and energy prices. Germany is planning its own chemical industry agenda.

Evaluating industrial policies

Potential threat to Switzerland

China and the US pose the greatest threat to the competitiveness of the chemical and pharmaceutical industry in Switzerland due to their comprehensive and targeted industrial policy measures. The combination of subsidies, localisation requirements and innovation promotion is increasing the pressure on Swiss companies, particularly in terms of market access and production locations. France is also intensifying competition in the European market through reindustrialisation and targeted promotion, particularly through programmes such as France 2030 and Innovation Santé 2030. Germany and the United Kingdom are focusing on location promotion and innovation, but with less direct protectionist measures towards Switzerland. Competitive pressure is high, but the risk of structural displacement is lower than in China and the United States.

Conclusions

Subsidies, regulatory advantages or trade barriers abroad can have a negative long-term impact on the location decisions of Swiss industrial companies.

In view of the increase in industrial policy activities in the major industrialised countries in recent years, Switzerland should intensify its efforts to exploit opportunities for improvement with regard to general framework conditions and sector-specific regulations as a counterbalance.

A national Life Sciences Strategy is a key instrument for achieving this in the most effective and targeted manner possible.

At a higher level, the aim must be to secure stable trade relations. This includes both renewing the bilateral agreements with the EU and concluding new free trade agreements.

Sources and literature

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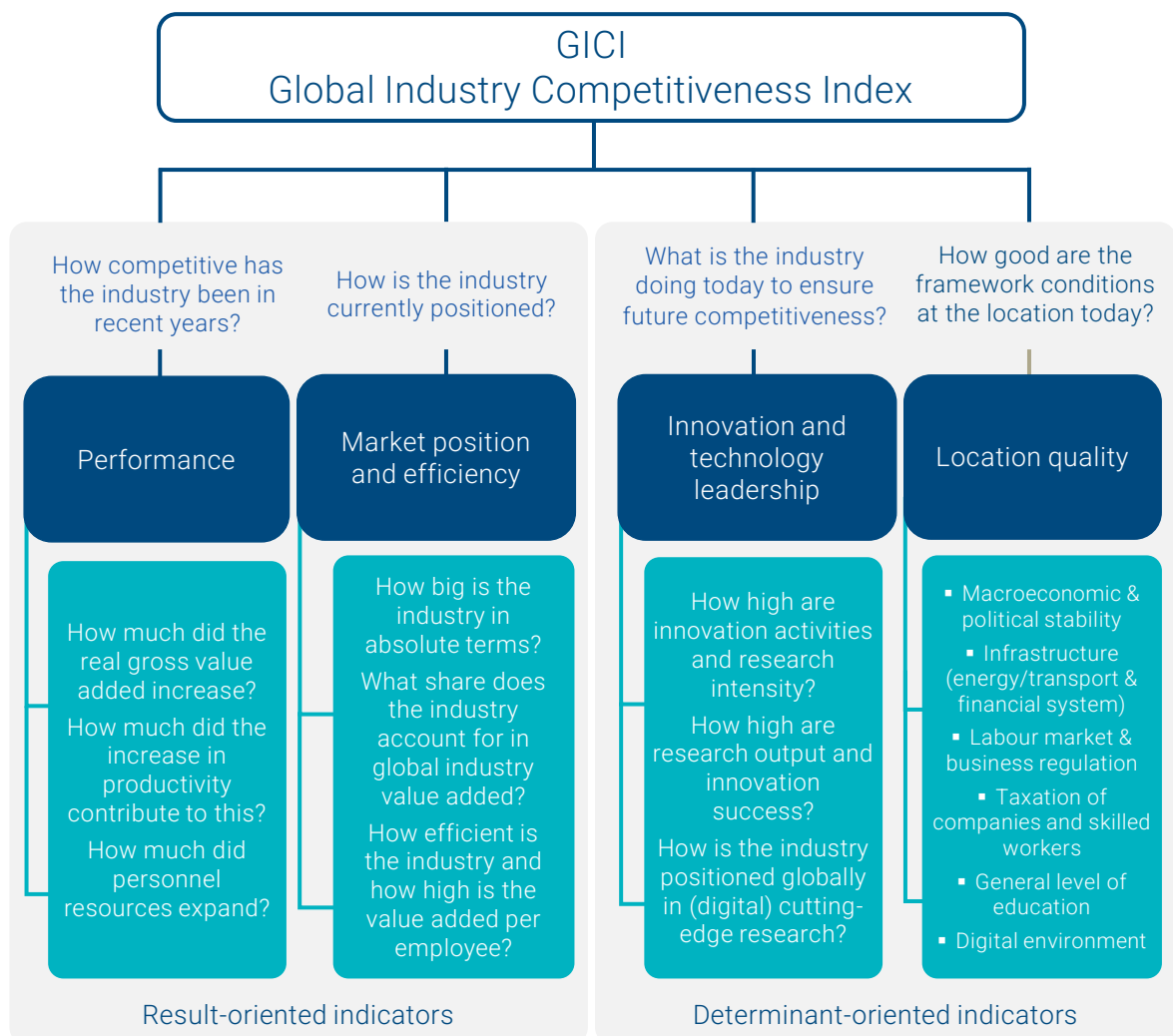


Methods and sources

Structure of the GICI

Two groups of indicators are used to measure industry specific competitiveness:

1. Result-oriented indicators: These indicators assess the development of the industry from an ex-post perspective. They measure the actual or apparent competitive position.
2. Determinant-oriented indicators: These indicators implicitly determine the competitive position. A fixed correlation between the indicator and competitiveness is assumed.



Source: BAK Economics

Index calculation

Industry classification

Chemical industry (NOGA 20) and pharmaceutical industry (NOGA 21).

Standardisation

The industry-specific Global Industry Competitiveness Indices consist of four sub-indices with a total of 14 indicators. In order to enable consistent aggregation across all indicators and indices, the individual indicators and indices are standardised.

For each component, the mean value of all observations is calculated and set to 100. In a next step, the standard deviation of the sample is determined and normalised to 10.

An index value of 110 therefore indicates a standard deviation above the sample mean. Accordingly, an index value of 80 means a score of two standard deviations below the sample mean.

Weighting

The weighting for the aggregation of the individual indicators to the sub-indices follows a prioritisation based on their relevance to competitiveness. Future-oriented indicators are weighted more heavily than past-oriented ones. At the same time, growth resulting from productivity gains is weighted more heavily in the performance sub-index than effects from employment growth.

The sub-indices are included in the industry-specific GICI with equal weightings. The aggregation of the two industries into the Global Industry Competitiveness Index for the chemical and pharmaceutical industry is based on the value added shares of the two industries in Switzerland.

Sensitivity analysis

In order to test the impact of weighting on the results, an alternative calculation of the index was performed using equal weighting of the indicators within the sub-indices. The result shows that the correlation between the two calculation variants is very high at 99% and that the index results are therefore robust compared to the weighting. At the individual country level, the reweighting leads to various shifts in ranking, as expected.

Weighting

The following table provides an overview of the weighting of the individual index components.

Components	Weight
Subindex Performance	25.0%
Real value added growth	33.3%
Real labour productivity growth	66.7%
Subindex Market position and efficiency	25.0%
Share of global value added	33.3%
Labour productivity	66.7%
Subindex Innovation / Technology leadership	25.0%
R&D expenditure/employees	11.1%
R&D expenditure/value added	11.1%
R&D jobs/employees	11.1%
Top patents/employees	53.4%
Digital penetration of innovation activities	13.3%
Subindex Location quality	25.0%
Infrastructure	20.0%
Infrastructure	6.7%
Financial system	6.7%
IMD Technology	3.3%
Data availability healthcare	3.3%
Stability	20.0%
Macroeconomic stability	10.0%
Institutions	10.0%
Business dynamism and Skills	20.0%
Business dynamism	6.7%
Skills	6.7%
IMD Knowledge	3.3%
IMD Future Readiness	3.3%
Market access and Regulations	20.0%
Product market	6.7%
Labour market	6.7%
Policy regulation healthcare	6.7%
Tax burden	20.0%

Indicators (Part 1)

The following table provides an overview of how the individual indicators are calculated.

Components	Content
Subindex Performance	
Real value added growth	Average annual growth of price-adjusted gross value added from 2018 to 2023
Real labour productivity growth	Average annual growth of price-adjusted gross value added per employee from 2018 to 2023
Subindex Market position and efficiency	
Share of global value added [Indicator for market position]	Share of the national industry as a percentage of the nominal gross value added of the industry worldwide in 2023 In USD, not adjusted for purchasing power parity
Labour productivity [Indicator for efficiency]	Nominal gross value added per employee of the industry in 2023 In USD, not adjusted for purchasing power parity
Subindex Innovation / Technology leadership	
R&D expenditure/employees [Indicator of research intensity]	R&D expenditure of the corporate sector per employee in 2023 In USD, not adjusted for purchasing power parity
R&D expenditure/value added [Indicator of research intensity]	R&D expenditure of the corporate sector as a percentage of nominal gross value added in 2023 In USD, not adjusted for purchasing power parity
R&D jobs/employees [Indicator of research intensity]	R&D jobs as a percentage of the number of employees in 2023
Top patents/employees [Indicator of research performance]	Ratio of top patents to number of employees in 2022
Digital penetration of innovation activities	Measures both the share of digital patents in all patents in the respective industry and the share of digital patents in the global stock of digital patents.

Indicators (Part 2)

The following table provides an overview of how the individual indicators are calculated.

Components	Content
Subindex Location quality	
Infrastructure	
Infrastructure	Compares the quality of transport infrastructure of road, rail, air and water, as well as access to the internet, housing, water and electricity.
Financial system	Compares capital availability and the stability and resilience of the financial system.
IMD Technology	Quantifies the digital technology framework.
Data availability healthcare	Measures the availability of health data..
Stability	
Macroeconomic stability	Compares inflation and debt trends.
Institutions	Compares various indicators of institutional quality (including political vision and stability, corruption, renewable energy regulation, environmental agreements).
Business dynamism and Skills	
Business dynamism	Compares corporate culture and competition, the state of cluster development and exports of innovative services.
Skills	Compares the skills of the current and future workforce (including inequality in education, investment in further training, digital and technological talent, availability of talent).
IMD Knowledge	Measures the intangible infrastructure needed to learn and research new technologies.
IMD Future Readiness	Examines how prepared a country is to embrace digital transformation.
Market access and Regulations	
Product market	Compares competition in domestic markets, market openness and regulations.
Labour market	Compares the flexibility, performance orientation and incentive systems of the labour market.
Policy regulation healthcare	Measures the policy framework for using health system data for innovation.
Tax burden	Compares the tax burden on companies and individuals, with corporate taxation weighted more heavily than income tax.

Source reference

The following table provides an overview of the data sources used to calculate the respective indicators.

Components of the GICI	Sources
Subindex Performance	
Real value added growth	BAK Economics, Oxford Economics, OECD, Eurostat, UNIDO, national statistical offices
Real labour productivity growth	BAK Economics, Oxford Economics, OECD, Eurostat, UNIDO, national statistical offices
Subindex Market position and efficiency	
Share of global value added	BAK Economics, Oxford Economics, OECD, Eurostat, UNIDO, national statistical offices
Labour productivity	BAK Economics, Oxford Economics, OECD, UNIDO, Eurostat, national statistical offices
Subindex Innovation / Technology leadership	
R&D expenditure/employees	BAK Economics, Oxford Economics, Eurostat, OECD, UNIDO, national statistical offices
R&D expenditure/value added	BAK Economics, Oxford Economics, Eurostat, OECD, UNIDO, national statistical offices
R&D jobs/employees	BAK Economics, Oxford Economics, Eurostat, OECD, UNIDO, national statistical offices
Top patents/employees	BAK Economics, Oxford Economics, Eurostat, OECD, UNIDO, national statistical offices
Digital penetration of innovation activities	BAK Economics, IGE
Subindex Location quality	
Infrastructure	World Bank, International Budget Partnership, Legatum Institute, Reporters without Borders, UN, Transparency International, Property Rights Alliance, WEF
Financial system	WEF, World Bank, Trading Economics, IMF
IMD Technology	IMD Digital World Competitiveness Index
Data availability healthcare	OECD, FutureProofing Healthcare Database
Macroeconomic stability	WEF, Oxford Economics
Institutions	WEF, World Bank, ESMAP, The Legatum Institute, Reporters Without Borders, UNO, Transparency International, Property Rights Alliance, International Budget Partnership
Business dynamism	WEF
Skills	WEF, UNESCO
IMD Knowledge	IMD Digital World Competitiveness Index
IMD Future Readiness	IMD Digital World Competitiveness Index
Product market	BAK Economics, World Bank
Labour market	BAK Economics, World Bank
Policy regulation healthcare	OECD, FutureProofing Healthcare Database
Tax burden	BAK Economics, KPMG

Peer countries

The following table lists the 40 countries taken into account in the comparison.

GICI peer countries	
Argentina	Mexico
Australia	The Netherlands
Belgium	Austria
Brazil	Poland
China	Qatar
Denmark	Russia
Germany	Saudi Arabia
Finland	Sweden
France	Switzerland
Greece	Singapore
India	Slovenia
Indonesia	Spain
Iran	Taiwan
Ireland	Thailand
Israel	Czech Republic
Italy	Türkiye
Japan	Hungary
Canada	United Arab Emirates
Korea	United Kingdom
Malaysia	United States of America

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BAK Economics AG (BAK) is an independent Swiss institute for economic research and economic consulting. Founded as a spin-off of the University of Basel, BAK has stood for the combination of scientifically sound empirical analysis and its practical implementation since 1980.

One of BAK's main areas of research is economic analysis of the Life Sciences industry and other key sectors of the Swiss economy. BAK has developed a broad range of analytical tools for this purpose, including global benchmarking of regional industry clusters.

In addition to traditional economic research, BAK also offers various economic consulting services for companies. Its broad model and analysis infrastructure serves as a starting point for in-depth analyses of company-specific issues and the development of solutions in the area of planning and strategy development.

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