

Swiss economy

Cantonal Competitiveness Indicator 2019: Update following the Swiss tax reform (STAF)

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- Following the adoption of the tax reform (STAF) on 19 May 2019, the canton of Zug remains the most competitive canton, as in 2018. Basel-Stadt has overtaken the canton of Zurich.
- The cantons of Appenzell Innerrhoden and Glarus boast the most attractive cost environments. The canton of Bern has lost some of its tax appeal.
- The tax reform burdens cantons' finances to different extents. In the near term, the cantons of Geneva and Basel-Stadt are likely to lose revenue from profit tax.

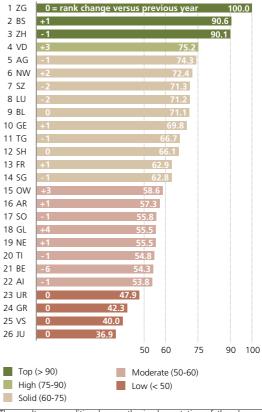
Following the approval of tax reforms (STAF) in a recent referendum, cantons now need to make changes to their profits taxes. Although some cantons announced considerable cuts to profit taxes prior to the voting, others were more reluctant. Accordingly, the relative competitiveness of the cantons will change. For this reason, we have recalculated the UBS Cantonal Competitiveness Indicator (CCI).

Cantonal profit tax cuts change relative competitiveness

The canton of Zug again takes first place in the CCI 2019. It leaves the cantons of Basel-Stadt and Zurich well behind in second and third place. Another significant gap separates the three highestranking cantons from the other cantons. Nevertheless, we have found the canton of Waadt to be highly competitive as well. A group of 10 cantons has robust growth prospects. These are the cantons of Nidwalden, Schwyz and Lucerne in central Switzerland, the cantons of Thurgau and St. Gallen in eastern Switzerland, the cantons of Geneva and Fribourg in western Switzerland and the cantons of Aargau, Basel-Landschaft and Schaffhausen. The growth prospects of the small mountainous cantons of Obwalden, Glarus, Appenzell Innerrhoden and Appenzell Ausserrhoden are moderate. The same applies to the cantons of Solothurn, Neuchâtel, Bern and Ticino. The competitiveness of the cantons of Uri, Graubünden, Valais and Jura is low.

Tax reform reshuffles the deck

Due to the significant reduction of the cantonal profit tax rate in the canton of Basel-Stadt, this canton has swapped places with the canton of Zurich since CCI 2018. The canton of Glarus, which offers a more attractive cost environment than last year, has made the greatest leap forward, improving its ranking by four places. The cantons of Waadt and Obwalden have each improved by three places.



Cantonal Competitiveness Indicator 2019

The results are conditional upon the implementation of the plans as outlined at the cantonal level. Some cantonal implementation plans could be or will be subject to cantonal referendums. Source: UBS

Interpretation and methodology

The CCI provides insight into a canton's longterm relative competitiveness. In the long run, cantons with a high relative competitiveness are likely to grow more than the Swiss economy as a whole. By contrast, cantons with a low relative competitiveness are expected to undergo below-average growth. To determine the CCI, an average is calculated from eight thematic pillars for each canton and scaled so that the highest cantonal score is 100.

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The canton of Nidwalden has gone up two places. Appenzell Ausserrhoden and the cantons of Geneva, Fribourg and Neuchâtel have each improved one place. In some cantons, however, the long-term competitiveness has fallen. Bern canton now has the highest profit tax rate in Switzerland, resulting in a six-place drop in the CCI ranking, after voters in the canton rejected a proposal for implementing the reform. The canton of Solothurn has dropped one place after the rejection of a cantonal referendum. The cantons of Schwyz and Lucerne, which have only reduced the profit tax marginally or not at all, have each lost two places. The cantons of Aargau, Thurgau, St. Gallen, Ticino and Appenzell Innerrhoden have each dropped one place.

Cantonal state finances affected to different extents

With the abolition of individual tax privileges, all companies are now subject to a uniform cantonal rate. Almost all cantons have reduced their profit tax rates. Despite this reduction, most status companies that used to benefit from tax privileges will have to pay more taxes. By contrast, companies that used to pay the normal tax rates will benefit from the tax reductions.

Initially, the implementation of the tax proposal is likely to dent the finances of a number of cantons. The greater the fall in the profit tax rate and the larger the proportion of companies that previously paid the normal tax rate (and which will henceforth pay less tax) in a canton, the greater the expected encumbrance. In terms of total revenue, the canton of Geneva, which has cut its tax rates significantly and which has relatively few status companies, is expected to suffer the greatest loss of tax revenue. However, part of the loss will be buffered by the distribution of the a billion francs from federal tax revenue.

The situation is different in cantons in which the former status companies and relatively low pre-reform profit tax rates play a key role. In the cantons of Neuchâtel and Zug, for example, where status companies accounted for more than half of the profit taxes, the tax reform is likely to result in an effective increase of the tax rate paid in the canton and thus in higher profit tax revenue. However, a factor that affects all cantons is that the introduction of cantonal patent boxes and deductions for research and development will additionally weigh on revenue, depending on the significance of patents in the respective canton.

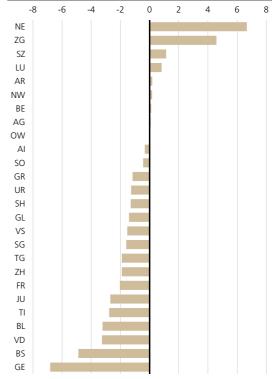
Long-term effects not yet ascertainable

The changed relative tax attractiveness between the cantons will lead to company relocations. Companies that previously benefited from tax privileges will be tempted to relocate if the cost environment deteriorates too drastically. Additionally, even companies that used to pay the normal tax rates may reconsider their location.

Switzerland is able to retain its international competitiveness due to the reduction of many cantonal tax rates. Unless the tax laws in the OECD or the EU change significantly, it will most likely be possible to compensate part of the tax losses by means of company relocations from abroad.

Profit tax cut can reduce income

Change in the tax revenues of legal entities (canton and its communities) in the total revenue, static calculation for 2016, in percent



Sources: EFV, Hinny, UBS

Overview of the proposals

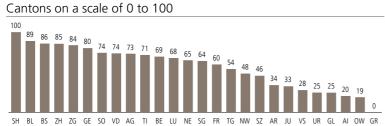
The individual cantons are responsible for the implementation of the tax proposal. The most important amendments to the statutory framework conditions are as follows:

- All companies in a canton are to be taxed at the same profit tax rate, and tax privileges are to be abolished.
- The new patent box regime provides that profits from patents are subject to a reduced tax rate. Additionally, deductions for research and development can be introduced.
- Dividends are subject to a higher tax rate.
- The share of cantons in the federal tax revenue is increased from 17 to 21.2 percent, which means an amount of about CHF 1 billion.

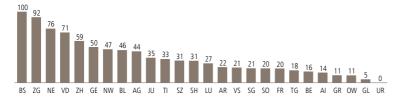
The eight pillars of competitiveness

The Cantonal Competitiveness Indicator (CCI) comprises 57 individual indicators that provide insight into the cantons' competitiveness. These individual indicators are grouped into eight competitive pillars: economic structure, innovation, human capital, labor market, ease of access, catchment area, cost environment and state finances. For each competitive pillar, cantons are assigned a relative score between 0 and 100. This eight-dimensional view enables a detailed analysis of the relative strengths and weaknesses of a canton's economy and serves as the basis for strategic decisions concerning a particular region.

Economic structure

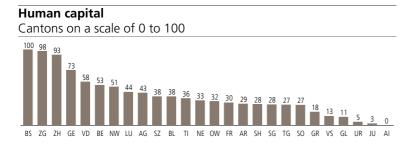


Innovation Cantons on a scale of 0 to 100

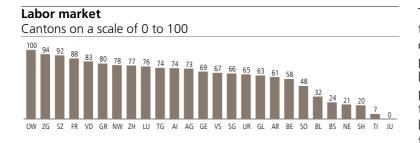


The future growth dynamics of a canton depend on its economic structure. The most important indicator is our competitiveness and market positioning of the various industries. International trade is also included in the cantonal comparison with growth potential taken into consideration based on export intensity (exports as a percentage of economic output) and the growth prospects of the main trading partners. The economic structure can also exhibit concentration risks if, for example, growth is driven by just a few industries. Broadly diversified cantonal economies are in a better position to make up for weakness in one industry or a crisis in an export destination. A measure of concentration (the Herfindahl-Hirschmann index) assesses the extent to which cantonal economic output is dependent on individual sectors and trading partners.

Entrepreneurial progress and maintaining economic competitiveness are based on innovation, i.e. the ability to create and market new products and services. Industry clusters (high regional concentrations of people working in related industries) offer an optimal environment for innovation. A canton's level of innovation also depends on the percentage of people engaged in research and development. The number of patent filings and the amount of venture capital investments highlight the potential for future competitive advantages arising from innovation. Other indicators of innovation include the number of successful startups, newly founded companies and jobs created at these companies.

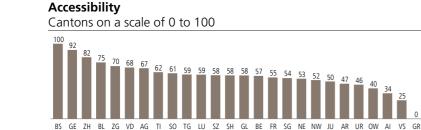


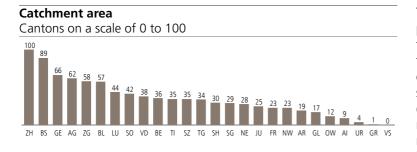
The level of education of the population and the human capital available are key drivers of economic growth. A better-educated population normally generates more added value. The local availability of highly skilled manpower also makes the canton more attractive for companies. To compare the level of education among cantons, the percentage of the population with a university or college degree or higher professional qualification is determined. Another indicator used is the net migration of graduates between cantons.



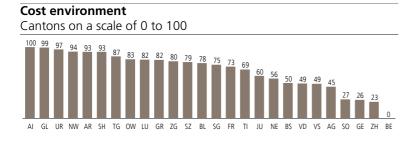
The more heavily the population participates in the labor market, the better use is being made of a canton's economic potential. However, the percentage of pensioners, people on disability benefits and the unemployed reduces participation in the labor market. Youth and longterm unemployment are considered particularly bad, as these can permanently reduce the labor force potential. By contrast, expected growth in the working population (growth in the cohort of 16- to 65-year-olds) has a positive effect on a canton's score, as it implies a higher percentage of the population is potentially productive.

Good accessibility means infrastructure as well as procurement and sales markets can be reached quickly. Accessibility describes the average time needed to reach airports, universities or regional centers. The calculation is based on travel times using public transport and private motorized transport. All Swiss universities, the nearest metropolitan area and the closest regional center as defined by the Federal Office for Spatial Development (FOSD) are taken into consideration. The four international airports of Basel, Geneva, Zurich and Milan are taken into account when assessing accessibility to flight connections, along with regional airports.

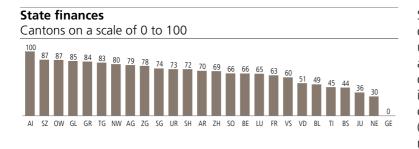




The catchment area refers to the number of people that can reach an area within a certain time. A large catchment area is a win-win for companies: they enjoy greater availability of suppliers and potential employees, and the sales market is larger. The catchment area is determined based on travel time by private motorized transport and public transport. The number of cross-border commuters in a canton indicates the catchment area from neighboring countries.



Local costs are a key variable when companies are deciding on a location. The cost of a location is significant both for companies establishing themselves there and in the retention of existing companies. They include commercial rents, energy prices, wages and tax rates. Apart from the profit and capital tax rate, exemptions from patent boxes, excess deduction for research and development for legal entities, the tax rates for high-income persons are also taken into consideration.



Sound state finances are essential for a growthoriented fiscal and economic policy. Sustainable use of scarce financial resources is reflected in a lean administration and a high percentage of capital investment. The more a canton is indebted, the less leeway it has to improve its competitiveness through fiscal policy measures (e.g. tax reductions or infrastructure investments). Apart from the debt ratio, net investments, a canton's average interest costs and coverage of the pension funds under public law are also taken into consideration.

List of variables

U UI	variables		
	Variable	+/-1	Source
	Sector positioning by market attractiveness	+	BAK, SFSO, KOF, UBS
Economic structure	Sector positioning by competitive position	+	BAK, SFSO, KOF, UBS
	Export intensity	+	SCA, UBS
	Percentage of export-intensive sectors	+	SFSO, UBS
	Average economic growth in international trading partners	+	SCA, IMF, UBS
	Average economic growth in country of origin of guests, weighted by overnight stays	+	SFSO, IMF, UBS
	Diversification of jobs within growth sectors	+	BAK, SFSO, KOF, UBS
	Diversification of jobs within all sectors	+	BAK, SFSO, KOF, UBS
	Export diversification by country	+	SCA, UBS
	Diversification of overnight stays by country	+	SFSO, UBS
Innovation	Percentage of FTEs ² in sector clusters	+	SFSO, UBS
	Percentage of FTEs ² in research and development	+	SFSO, UBS
	Patent filings per inhabitant and FTE ²	+	OECD, SFSO, UBS
	Venture capital investments per FTE ² and financing rounds	+	SECA, University of Basel, UBS
	Number of startups per inhabitant and FTE ²	+	Startup.ch, UBS
	Newly started companies compared to number of existing companies	+	SFSO, UBS
	Jobs in newly started companies compared to overall employment	+	SFSO, UBS
	Percentage of new entries in commercial register	+	SFSO, Bisnode, EHRA, UBS
Human capital	Percentage of population with higher professional education	+	SFSO, UBS
	Percentage of population with tertiary education	+	SFSO, UBS
	Net migration rate of graduates one year after graduation	+	SFSO, UBS
Ū	Net migration rate of graduates five years after graduation	+	SFSO, UBS
Labor market	Unemployment rate	-	SECO, UBS
	Long-term unemployed as a percentage of total unemployed	-	SECO, UBS
	Youth unemployment rate compared to unemployment rate	-	SECO, UBS
	People receiving disability benefits as a percentage of the total population	-	SFSO, UBS
	People over age 65 as a percentage of the total population	-	SFSO, UBS
	Cohort potential of 16- to 65-year-olds out to 2025	+	SFSO, UBS
	Cohort potential of 16- to 65-year-olds out to 2030	+	SFSO, UBS
Accessibility	Travel time to nearest international airport by private transport	-	TranSol, FOCA, UBS
	Travel time to nearest regional airport by private transport	-	TranSol, FOCA, UBS
	Travel time to nearest metropolitan area by private and public transport	-	TranSol, SFSO, UBS
	Travel time to regional center by private and public transport	-	TranSol, SFSO, UBS
	Travel time to nearest university by private transport	-	TranSol, SFSO, UBS
ŗ	Catchment area (people) by private transport with/without traffic congestion	+	TranSol, SFSO, UBS
a	Catchment area (people) by public transport	+	TranSol, SFSO, UBS
Catchment area	Catchment area (people) from abroad by private transport with/without traffic congestion	+	TranSol, foreign statistics auth., UBS
	Percentage of cross-border commuters	+	SFSO, UBS
Cost environment	Income tax burden for legal entities	-	Hinny, cantonal tax offices, UBS
	Exemptions from patent boxes	+	Hinny, cantonal tax offices, UBS
	Excess deductions for R&D	+	Hinny, cantonal tax offices, UBS
	Capital tax burden for legal entities	-	Hinny, cantonal tax offices, UBS
	Income tax burden for high-income individuals	-	Hinny, cantonal tax offices, UBS
	Office rents	-	Wüest Partner, UBS
	Energy prices	-	ElCom, UBS
	Wages	-	SFSO, UBS
State finances	Average debt interest rate	-	SFFA, UBS
	Net interest charges	-	SFFA, UBS
	Gross debt per inhabitant (cantonal and municipal debts)	-	SFFA, SFSO, UBS
	Gross debt ratio (cantonal and municipal debts)	-	SFFA, SFSO, UBS
	Net debt per inhabitant (cantonal and municipal debts)	-	SFFA, SFSO, UBS
	Net debt ratio (cantonal and municipal debts)	-	SFFA, SFSO, UBS
	Public-sector pension fund shortfall	-	Various pension funds, SFSO, UBS
	Investment efforts	+	SGSPA, SFFA, UBS
	Net investment per inhabitant and FTE ²	+	SFSO, SFFA, UBS
51		-	SFFA, UBS
51	Administrative expenses per inhabitant and FTE ² Employees in public administration (canton, district and municipalities) per inhabitant and FTE ²	-	SFFA, UBS SFSO, UBS

Appendix

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