

Locational competition: Interim balance after years of upheaval

Locational quality 2021 | August 2021



LQI 2021
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cantons eases off in the meantime**

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Locational competition between cantons eases off in the meantime

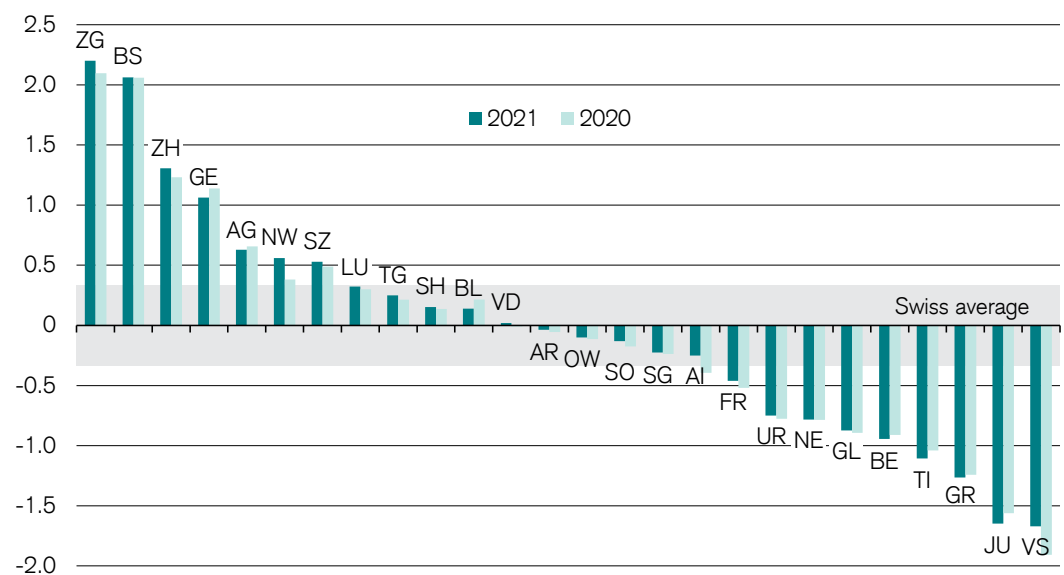
After years of flux following Switzerland’s corporate tax reform, the locational quality rankings have proved stable in 2021. Canton Zug has consolidated its position at the top – ahead of Canton Basel-City – thanks to a reduction in its cantonal tax rate for a limited period of three years. Nidwalden, Schaffhausen, and Thurgau each move up one place, while Basel-Country drops down two places and Schwyz one. International efforts to reform global corporate taxation could lead to renewed upheaval in the coming years.

The Locational Quality Indicator by Credit Suisse

The long-term economic potential of the Swiss cantons is largely determined by the overall conditions for business. Firms tend to invest primarily in attractive locations, thus creating jobs and bringing added value and prosperity. Intense competition between different locations forces the Swiss cantons and regions to take steps to optimize their appeal to the greatest extent possible. The annual Credit Suisse Locational Quality Indicator (LQI) measures the attractiveness of the Swiss cantons and regions to business compared to the Swiss average (see appendix for detailed results). Figures between -0.3 and +0.3 can be considered mid-field territory, with higher figures signifying above-average appeal and lower figures less appeal. The LQI is based on the following seven quantitative sub-indicators (see box on page 7): tax burden on legal entities and private individuals¹, availability of specialist labor and highly qualified personnel, population and employee accessibility, and access to airports. The LQI therefore serves on the one hand as a guide for companies that are in the process of evaluating potential locations, and on the other as a benchmarking tool for the optimization of cantonal or regional location policy.

Locational quality of Swiss cantons

Locational Quality Indicator (LQI), synthetic index, CH = 0



Source: Credit Suisse

¹ Tax treatment depends on the specific circumstances of the individual client, and may change over time. This document does not contain tax advice of any kind. Any general tax-related information contained in this document cannot act as a replacement for comprehensive personal tax advice. Seek the advice of a professional tax consultant if you consider this necessary.

Zug ahead of Basel-City; Jura and Valais almost level at bottom of rankings

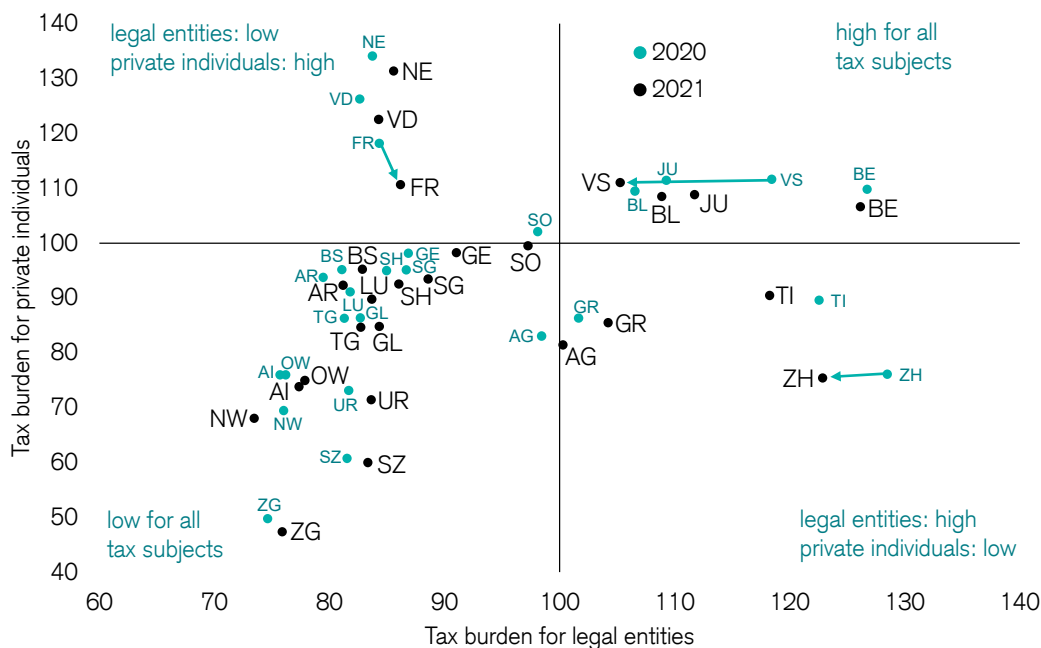
The time-limited reduction of Zug's cantonal tax rate from 82% to 80% for the tax years 2021 to 2023 – a measure adopted to combat the financial consequences of the coronavirus pandemic for individuals and companies, and accepted by the Zug electorate in March 2021 – has cemented Zug's leading position. In the 2021 cantonal rankings, Zug once again appears in first place, followed by Canton Basel-City (see Fig. on previous page). Both cantons now offer a very favorable combination of appeal factors. Cantons Zurich and Geneva come next, but are some way behind. Other cantons with clearly above-average results include Aargau, Nidwalden, and Schwyz. In the mid-table positions headed by Canton Lucerne, both Thurgau and Schaffhausen have now overtaken Basel-Country. Thanks to a reduction in its corporate tax rate in September 2020 (backdated to the start of 2020), Canton Valais has almost drawn level with Canton Jura.

Another handful of reductions in corporate tax rates

The availability of sufficiently qualified personnel and the accessibility of a location are extremely important to companies when choosing a base. However, these factors typically evolve only slowly.² By contrast, tax policy is much quicker to adjust. Once again, the key changes in this year's locational quality rankings are attributable to corporate tax rate developments. As part of Switzerland's corporate tax reform (Federal Act on Tax Reform and OASI Funding [TRAF]) a small number of cantons have reduced their corporate tax rates this year (cf. Fig.), although the major changes in this area were implemented in previous years. For example, the effective maximum profit tax rate in Sion (VS) now stands at 18.72% (2020: 20.29%), and in Zurich at 19.70% (2020: 21.15%). However, a number of other cantons remain more fiscally attractive: In our tax index for legal entities, which is based on the tax burden faced by companies with varying profit situations in all Swiss municipalities, Canton Nidwalden has reclaimed top spot after a year in second place, just ahead of Canton Zug (cf. Fig.). Next come Appenzell Innerrhoden and Obwalden. However, the differences between the cantons have narrowed in recent years – hence so too has the relative benefit of lower corporate tax rates. Due to the staggered nature of many of the reductions in corporate tax rates, there are likely to be a number of further minor shifts in the locational quality rankings over the coming years. Moreover, international efforts to reform global corporate taxation could put certain cantons under pressure to raise their corporate tax rates somewhat going forward. In particular, the planned introduction of an international minimum tax rate for

Valais and Zurich slightly more attractive than in 2020 from a corporate tax standpoint

Development of tax burden 2021 compared to 2020, tax burden on private individuals (income and wealth taxes) and legal entities (profit and capital taxes), synthetic indices, CH = 100



Source: TaxWare, Credit Suisse

² On regional differences in the level of education, see "Locational quality: Zug just ahead of Basel-City, Geneva closes gap on Zurich", Credit Suisse, October 2020

high-revenue companies would partially restrict or even eliminate tax competition (see box). In intercantonal location competition, other factors would thus gain in importance - not least access to qualified labor and accessibility. In international competition, Switzerland's traditional strengths must be preserved, such as political stability, high-quality infrastructures and educational institutions, and sound public finances.

Reform of international corporate taxation

On July 1, 2021, the Organisation for Economic Co-operation and Development (OECD) unveiled a number of key priorities for the future taxation of large, internationally active companies. Shortly thereafter, the finance ministers of the group of the 20 leading industrialized and developing nations (G-20) agreed on an international form of corporate taxation. Although the implementation details have for the most part yet to be nailed down, the general thrust is clear.

First, a minimum tax for companies is to be established globally. A minimum tax rate of 15% is currently being discussed, although this would only apply to companies with annual sales of EUR 750 mn or more. The Federal Council estimates that between 3,000 and 4,000 companies based in Switzerland would be affected, including 250 Swiss companies. Although individual countries are likely to be granted a certain freedom of maneuver when calculating corporate profits, a number of Swiss cantons could come under pressure to raise their corporate tax rates.

The second part of the reform is expected to affect only the world's 100 largest companies: Here the OECD is targeting companies with annual sales in excess of EUR 20 bn and profit margins of more than 10%. In the future, these large companies should also pay some of the taxes in the countries where they generate their profits – irrespective of whether they maintain a physical presence there. As only five Swiss companies would be affected, this element of the reform is likely to have only limited consequences for Switzerland.

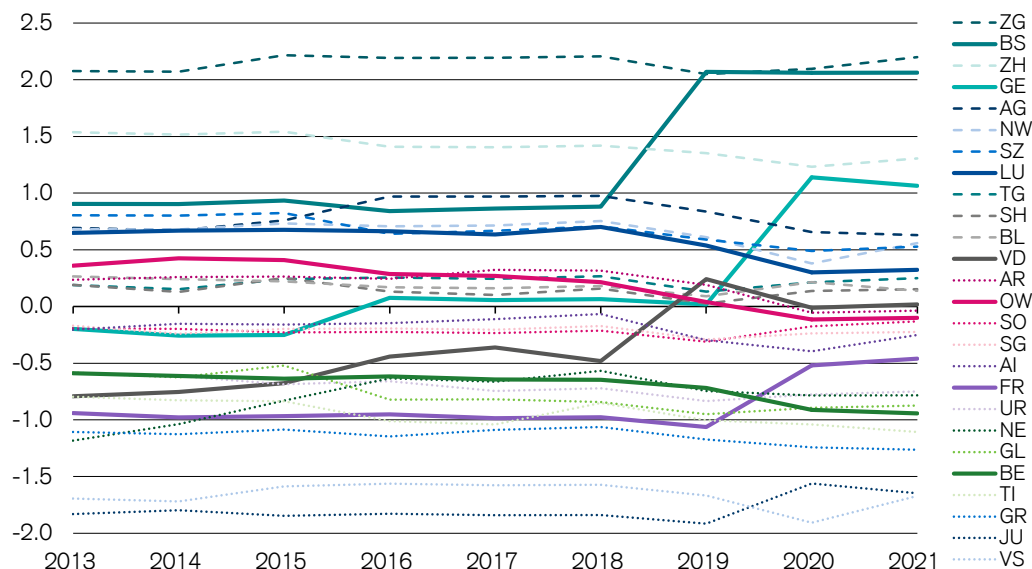
More detailed information can be obtained from the State Secretariat for International Tax Matters SIF (sif.admin.ch).

**2013-2021:
Geneva, Basel-City,
and Vaud have
become more
attractive, whereas
Obwalden, Bern and
Lucerne have fallen
back**

The development of the cantonal locational quality rankings over the years shows that the fundamental parameters typically change only gradually: In the majority of cases, cantonal positions in the ranking have changed only slightly between 2013 and 2021 (cf. Fig.). However, a few cantons have improved their positions compared to 2013 thanks to a sharp increase in their fiscal attractiveness to legal entities: Basel-City is hot on the heels of top-ranked Canton Zug, while

LQI, 2013 to 2021: Corporate tax reform drives movement in locational rankings

Locational Quality Indicator (LQI), synthetic index, CH = 0



Source: Credit Suisse

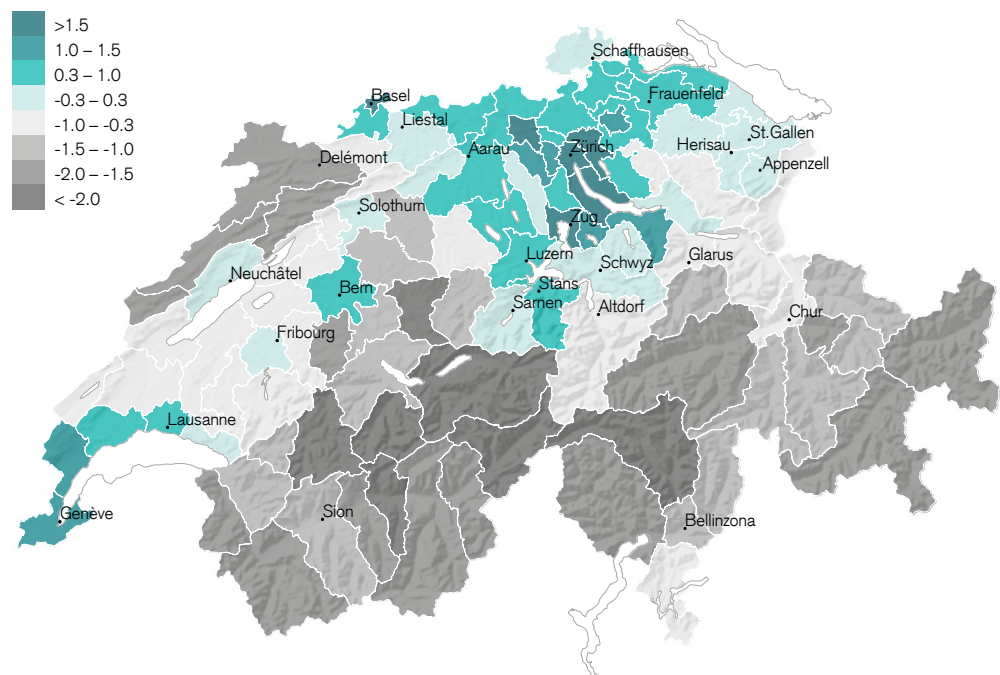
Geneva and Valais have surged an impressive eleven and eight places respectively. Relative to other cantons, Obwalden, Bern, and Lucerne have lost the most appeal over the observation period in question, as is reflected in a fall of six, four, and one place(s) respectively.

**Regional view:
significant
differences within
the cantons**

For the larger, heterogeneous cantons in particular – notably Bern, Vaud, Ticino, and Graubünden – an analysis solely at cantonal level is too superficial. We therefore also analyze locational quality at the level of Switzerland’s 110 economic regions. The illustration below shows the results for the LQI 2021. The highest degree of attractiveness is exhibited by the urban centers of Zurich, Zug, Basel, Baden, and Geneva, as well as their wider agglomerations, thanks not least to their transport accessibility. Many of the changes in this year’s regional ranking are the result of changes to cantonal tax burdens. The Sion region has recorded the greatest improvement compared to last year, rising ten positions to 86th place. Other Valais regions have also improved, e.g. Brig and Sierre by eight and seven places to 94th and 93rd respectively. The Nidwalden/Engelberg region has climbed nine places to 22nd. Over in Ticino, the Lugano region and in particular Mendrisio exhibit a higher locational quality than their neighboring regions. The regions of the Alpine and Jura arcs are clearly less attractive from the perspective of companies, which can be explained by their topography and the often significant travel time involved to reach the main centers. These different regional characteristics make it difficult for the cantons in question to gear their locational policy optimally around their individual strengths and weaknesses. For example, an above-average tax burden in an urban center is less disadvantageous from a corporate perspective than an equivalent burden in a peripheral region. Why? Because state services and infrastructures are typically more widely available in urban centers, which outweighs the higher tax burden from a cost/benefit perspective. An overview of the locational quality of Switzerland’s 110 economic regions and the individual location factors can be found in the Appendix starting on page 11.

Locational quality of Swiss economic regions 2021

Locational Quality Indicator (LQI), synthetic index, CH = 0



Source: Credit Suisse, Geostat

The Credit Suisse Locational Quality Indicator (LQI)

Quantitative analysis of the locational quality of Switzerland's cantons and regions has been part of the Credit Suisse research offering since 1997. The LQI is calculated on the basis of current data. The methodology is largely unchanged since the last major revision in 2013.

The tax burden on private individuals is calculated on the basis of taxes on income and wealth at federal, cantonal and municipal level and also takes account of the normal deductions. The tax burden on legal entities examines taxes on profit and capital. The calculations are provided for each Swiss municipality, and are based – where available – on the statutory tax rates as well as on the municipal and cantonal tax coefficients for 2021. The information is drawn from TaxWare (data as per July 29, 2021). Special tax systems such as the lump-sum taxation of private individuals or the new tax instruments for companies (license box, additional deductions for research and development, etc.) are not taken into account.

The availability of specialist labor and highly qualified personnel is based on the level of education of the residents, inbound commuters, and cross-border commuters of a region. Specialist labor is the term used to describe persons with at least one qualification at secondary level II (academic school-leaving certificate, vocational or higher education). Highly qualified personnel have a tertiary-level qualification from a technical/vocational school, university, or university of applied sciences. The basis for the data is the 2015–2019 structural survey conducted by the Swiss census. The level of education of cross-border commuters is estimated on the basis of the 2018 wage structure survey of the Swiss Federal Statistical Office.

Population accessibility, employee accessibility, and access to airports are based on data for 2016. The indicators are calculated for each populated square kilometer and based on the entire road network and all public transportation connections. The start of operations of the Gotthard base tunnel at the end of 2016 is likely to have improved the accessibility of the Gotthard region slightly (Ticino and Uri, plus 0.04 and 0.01 LQI index points). However, according to our analysis on the opening of the New Railway Link through the Alps (NRLA), Ticino in particular has become even more attractive following the opening of the Monte Ceneri tunnel at the end of 2020. We are planning an update of our accessibility calculation in 2022.

For more detailed information on methodology, see: "Locational quality: Basel-City set to overtake Canton Zurich", Credit Suisse, September 2016.

Regional locational quality: Clients of Credit Suisse can order **fact sheets on individual economic regions** from their client advisor.

LQI robust – even with varying parameters

Credit Suisse's Locational Quality Indicator serves as an indicator for the evaluation of locational factors from the perspective of a wide range of companies. The significance of individual factors may vary from company to company, however. An observation from the viewpoint of companies with different characteristics and needs allows for an even more differentiated appraisal of regional locational quality.

Analysis for two selected company types

In our analysis, we calculate an alternative Locational Quality Indicator for the 2021 year for two selected company types. The table below summarizes the key differences with respect to the calculation basis and the weighting of the seven sub-indicators compared to the standard LQI 2021.

Company type A: capital-intensive, with highly qualified personnel

We define company type A as a company that has a high level of taxable capital (assumption as in standard LQI: CHF 2 mn). These companies are active in a very knowledge-intensive sector of the economy, and are typically reliant on highly qualified and commensurately well-paid personnel. Compared to the standard LQI, the "Tax burden for private individuals" factor is therefore more heavily weighted. In addition, a tax index is calculated for private individuals that only includes higher income categories – between CHF 180,000 and CHF 300,000, depending on the type of household. A significant proportion of the services offered by these companies can be provided off-site, which is why the accessibility of the population and employees is weighted somewhat lower than in the standard LQI 2021.

Locational quality indicators for selected company types

Calculation basis and weighting of Locational Quality Indicator 2021 together with alternative LQI indicators for two selected company types

		Fiscal attractiveness for private individuals	Fiscal attractiveness for legal entities	Availability of specialized labor	Availability of highly qualified personnel	Population accessibility	Employee accessibility	Access to airports
Locational Quality Indicator (LQI) 2021 (standard)	Calculation basis	Depending on the household type (single person, married couple without children, married couple with two children, retired couple), income between CHF 50,000 and CHF 300,000, assets of between CHF 100,000 and CHF 1 mn	Corporation with capital of CHF 2 mn and net profit of between CHF 80,000 and CHF 1,040,000	Proportion of residents, inbound commuters, and cross-border commuters who have at least completed education at level...		Total of reachable persons in domestic and foreign catchment area, whereby the reachable potential is less strongly weighted as travel time increases (private and public transport). Basis for potential:		
	Weighting in the LQI 2021	approx. 1/3		approx. 1/3		Population	Employees	Passenger numbers at airports
LQI 2021 for company type A	Calculation basis	The same, except income between CHF 180,000 and CHF 300,000	as above	as above	as above	as above	as above	as above
	Weighting compared to LQI 2021	higher	identical	identical	identical	lower	lower	identical
LQI 2021 for company type B	Calculation basis	The same, except income between CHF 50,000 and CHF 130,000	Corporation with capital of CHF 200,000 and net profit of between CHF 80,000 and CHF 480,000	as above	as above	as above	as above	as above
	Weighting compared to LQI 2021	identical	identical	higher	lower	higher	higher	lower

Source: Credit Suisse

Company type B: lower profit potential and capital, reliant on specialized labor

We define company type B as a company with lower capital (assumption: CHF 200,000) and annual net profit of between CHF 80,000 and CHF 480,000. The tax index of legal entities accordingly encompasses only companies from these profit and capital categories. It is assumed that these businesses are primarily Swiss-focused, which is why access to airports is less heavily weighted than in the standard LQI, whereas accessibility for the population and for employees is rather more heavily weighted. Finally, we assume that specialized employees with secondary-level education (vocational training) are much more important for this company type than employees with tertiary-level education, which is why the former are much more strongly weighted compared to highly qualified personnel than in the standard LQI. In this example, salaries are in the low to medium range, which is why the tax index of private individuals only includes the corresponding income categories.

Fiscal attractiveness of a canton for private individuals varies according to income category

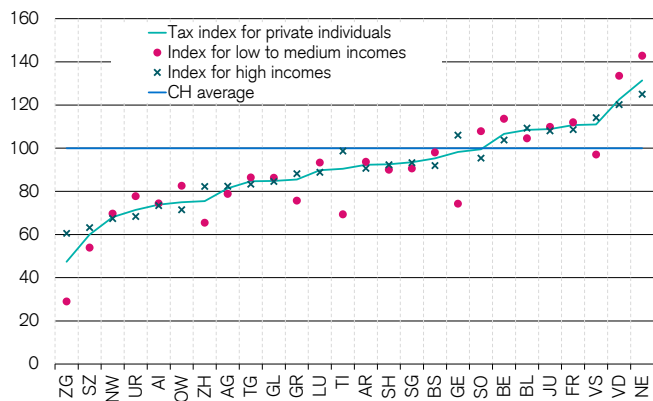
The tax indices calculated for this analysis for higher incomes (company type A) and for low to medium incomes (company type B) show the differences with respect to fiscal attractiveness for private individuals, depending on their income category (cf. Fig.). Canton Zug is the most attractive from a tax standpoint for lower income categories too. However, a number of other cantons become relatively more attractive for lower incomes, e.g. Geneva, Ticino, and Graubünden. There are a number of shifts in the higher-income area too. However, what is particularly striking here is that the cantonal differences in respect of the tax burden are much less for higher incomes than they are for lower incomes.

Valais and Graubünden much more attractive to companies with low capital

The tax index for legal entities, which is a contributory element in both the standard LQI and the LQI for company type A, is based on the calculation of the actual tax burden for a wide range of companies with very different assumptions in respect of the level of net profit (CHF 80,000 to CHF 1,040,000). Where capital is concerned, a figure of CHF 2 mn is calculated. However, compared to profit taxes, capital taxes are much less significant for the overall tax burden faced by companies. The tax index for companies with lower profit and capital, which is used to calculate the LQI for company type B, reveals – just as it does in the case of private individuals – differences in the cantonal ranking of fiscal attractiveness. The figure below right shows that the cantons of Graubünden and in particular Valais become much more attractive to these companies from a tax standpoint.

Fiscal attractiveness of a canton can sometimes vary greatly, depending on income levels

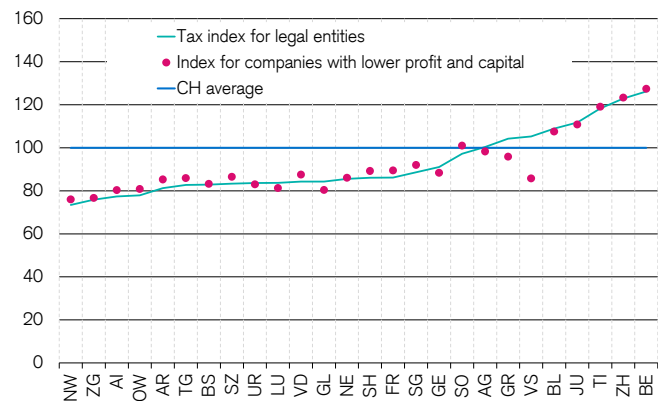
Tax burden for private individuals (income and wealth taxes), tax index for standard LQI and indices by income class, 2021, CH = 100



Source: TaxWare, Credit Suisse

Valais and Graubünden become more attractive for companies with lower profit and capital

Tax burden for legal entities (profit and capital taxes), tax index for standard LQI and index for companies with lower profit and capital, 2021, CH = 100



Source: TaxWare, Credit Suisse

**Company type A:
Fiscally attractive
cantons become
even more attractive**

The Locational Quality Indicator for company type A shows that cantons that are attractive from a tax perspective compared to the standard LQI 2021 become even more attractive (cf. Fig.). Indeed, here Canton Zug actually extends its lead over Canton Basel-City significantly, although the latter retains second place. Zurich remains in third place. Nidwalden and Schwyz overtake Aargau and Geneva to occupy fourth and fifth place respectively. In the middle of the pack, a number of rather less centrally located cantons with a similarly attractive tax burden improve their appeal – including the cantons of Appenzell Innerrhoden (+5) and Obwalden (+4), which are the biggest gainers. Basel-Country and Vaud both fall back five places.

**Company type B:
Basel-Country,
Graubünden, and
Bern the big ranking
improvers**

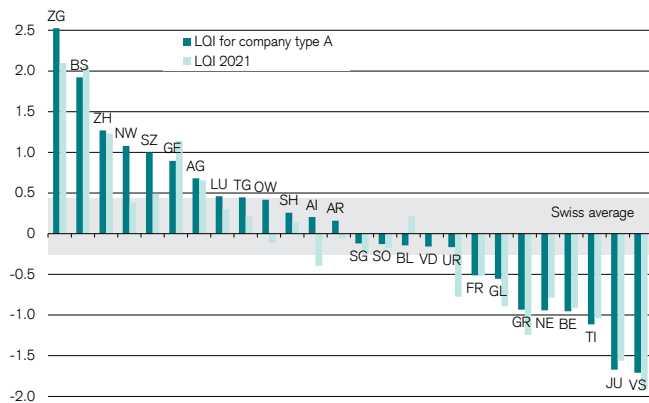
In the locational quality ranking for company type B (cf. Fig.), Basel-Country is the biggest improver, rising four places to 7th, just behind Aargau (+1), Nidwalden (+1), and Lucerne (+2), all of which also improve their placing compared to the standard LQI. A striking development here is the much worse performance of cantons Geneva and Vaud, which fall back seven and five places respectively. In the bottom third, Bern and Graubünden both rise three places. There are also a number of changes at the bottom of the rankings: Canton Valais improves by two positions, relegating Ticino and Jura to the bottom of the league for this company type. Compared to the cantonal ranking in the standard LQI, the cantons that come out best are above all those that are more attractive from a tax standpoint for low- and medium-income categories, as well as for companies with a lower profit and capital. Furthermore, even rather peripheral locations become more attractive, as these often fare better in terms of the availability of specialist labor than for availability of highly qualified personnel. In addition, the distance to the nearest airport becomes less important.

**Locational Quality
Indicator also robust
when focusing on
different company
types**

For this analysis, we deliberately selected examples with strongly diverging parameters in order to test the stability and meaningfulness of the cantonal ranking. Although there are a number of changes in the locational quality indicators for both company types compared to the standard LQI, the fundamental location evaluation proves to be relatively robust overall: The top positions in the rankings remain unaltered, and there is also considerable stability in the middle and bottom of the rankings. This would suggest that the standard LQI is a good indicator for a wide range of companies. The indicator is based on seven quantitative factors in three areas (taxes, labor, and accessibility), on which companies are typically reliant in one form or another. Obviously, companies looking for a base will have to analyze a number of further criteria in detail as a further step – be it the availability of suitable business premises, the proximity to relevant sector clusters and suppliers, and indeed the personal preferences of the entrepreneur in question.

Locational Quality Indicator for company type A

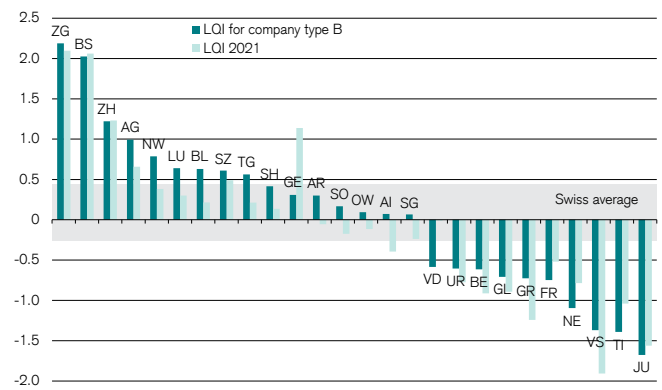
Locational Quality Indicator (LQI), synthetic index, CH = 0



Source: Credit Suisse

Locational Quality Indicator for company type B

Locational Quality Indicator (LQI), synthetic index, CH = 0



Source: Credit Suisse

LQI 2021 results in detail

Factors of locational quality at cantonal level

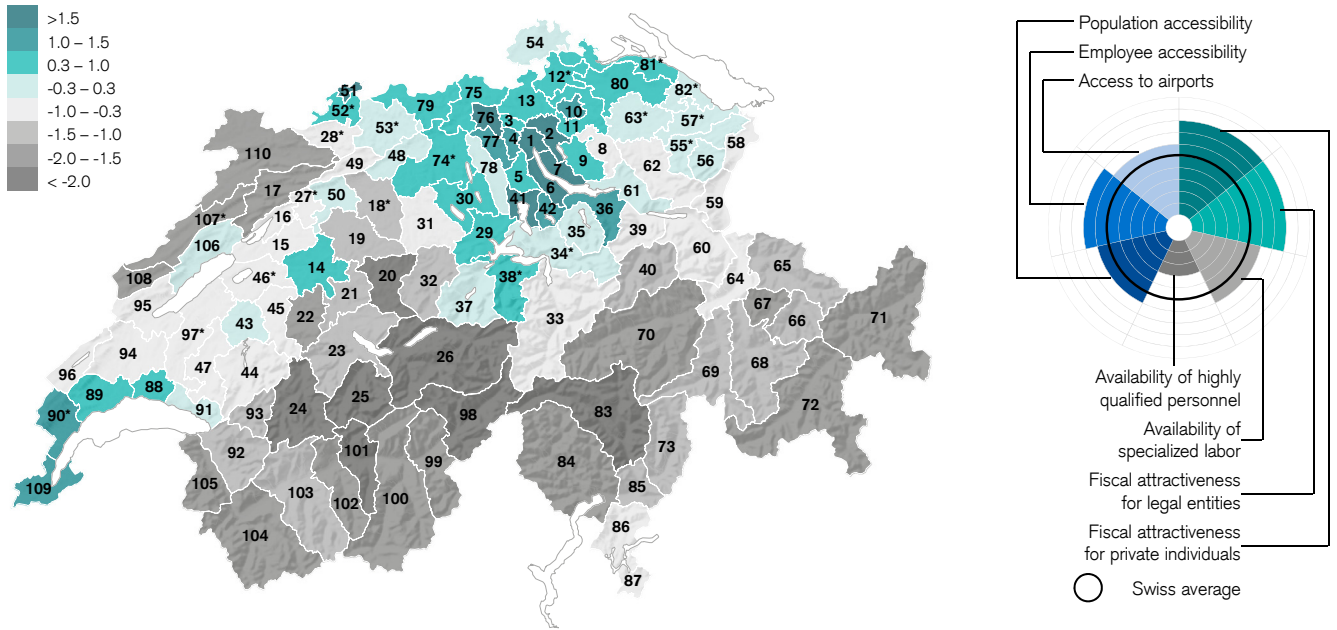
Ordered by rank, + / ++ more attractive than the Swiss average; - / -- less attractive than the Swiss average; = Swiss average

Canton	Fiscal attractiveness		Availability		Accessibility			Locational quality 2021		
	Private individuals	Legal entities	Specialized labor	Highly qualified personnel	Population	Employees	Airports	LQI 2021		Rank 2021 (vs. 2020)
ZG	++	++	++	++	+	+	+	2.20	++	1 (=)
BS	=	++	+	++	++	++	+	2.06	++	2 (=)
ZH	++	--	+	+	++	++	++	1.31	++	3 (=)
GE	=	+	--	++	+	=	++	1.06	++	4 (=)
AG	++	=	+	-	+	++	+	0.63	+	5 (=)
NW	++	++	+	=	-	=	-	0.56	+	6 (+1)
SZ	++	++	=	-	=	=	=	0.53	+	7 (-1)
LU	+	+	+	-	=	=	=	0.32	+	8 (=)
TG	+	++	=	--	=	+	=	0.25	=	9 (+1)
SH	+	+	+	-	=	=	=	0.15	=	10 (+1)
BL	-	-	+	-	+	+	=	0.14	=	11 (-2)
VD	--	+	-	+	=	-	=	0.02	=	12 (=)
AR	+	++	+	-	-	-	-	-0.04	=	13 (=)
OW	++	++	=	-	-	-	-	-0.10	=	14 (=)
SO	=	=	=	--	+	+	=	-0.13	=	15 (=)
SG	+	+	=	-	=	=	=	-0.23	=	16 (=)
AI	++	++	=	--	-	-	-	-0.25	=	17 (=)
FR	-	+	--	-	=	-	-	-0.46	-	18 (=)
UR	++	+	-	--	--	-	-	-0.75	-	19 (=)
NE	--	+	--	-	-	-	-	-0.78	-	20 (=)
GL	+	+	--	--	-	-	-	-0.87	-	21 (=)
BE	-	--	+	-	=	=	-	-0.94	-	22 (=)
TI	+	--	--	-	-	-	-	-1.11	--	23 (=)
GR	+	=	=	--	--	--	-	-1.26	--	24 (=)
JU	-	-	--	--	-	-	-	-1.65	--	25 (=)
VS	-	-	--	--	--	--	-	-1.67	--	26 (=)

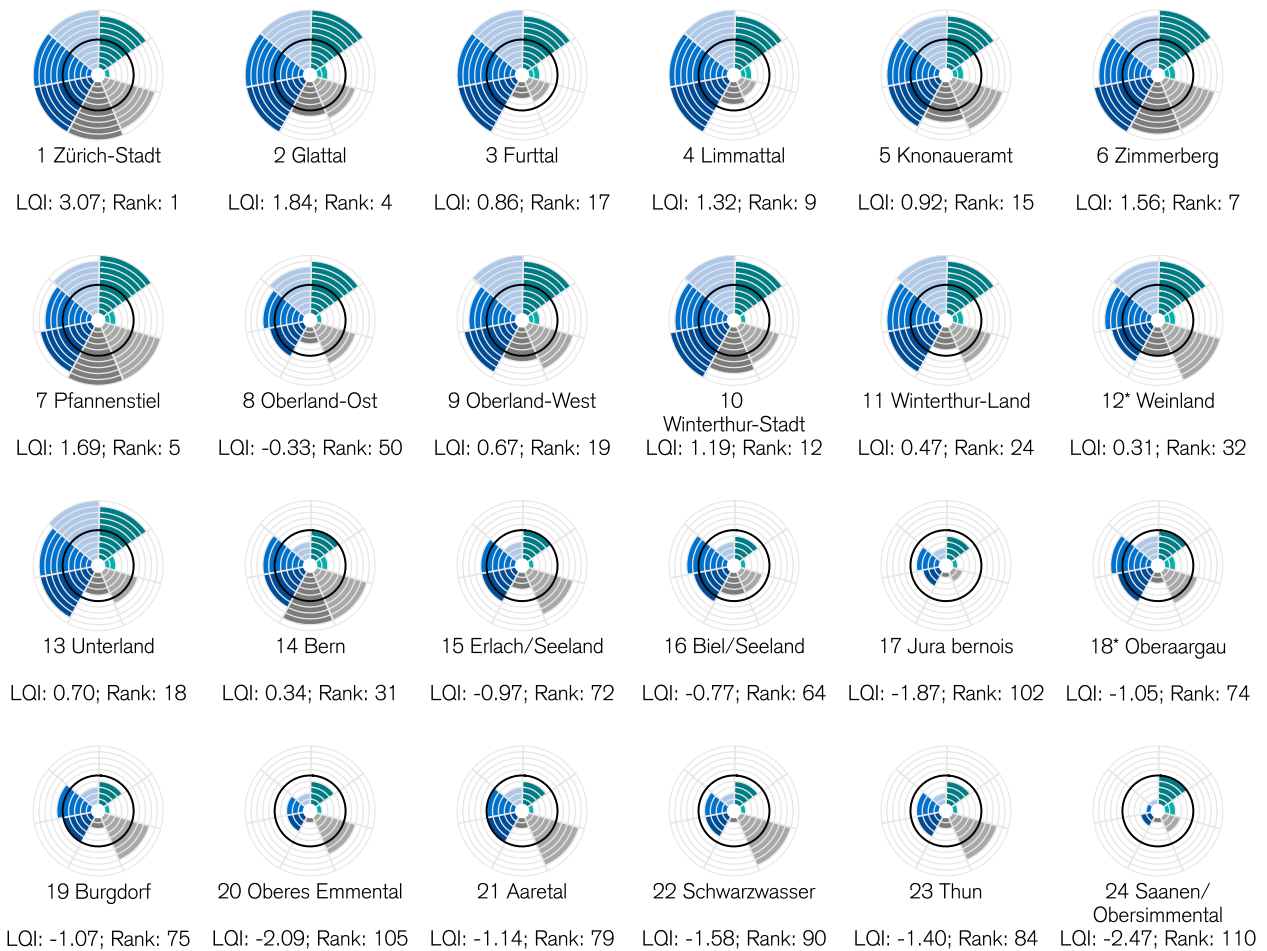
Source: Credit Suisse

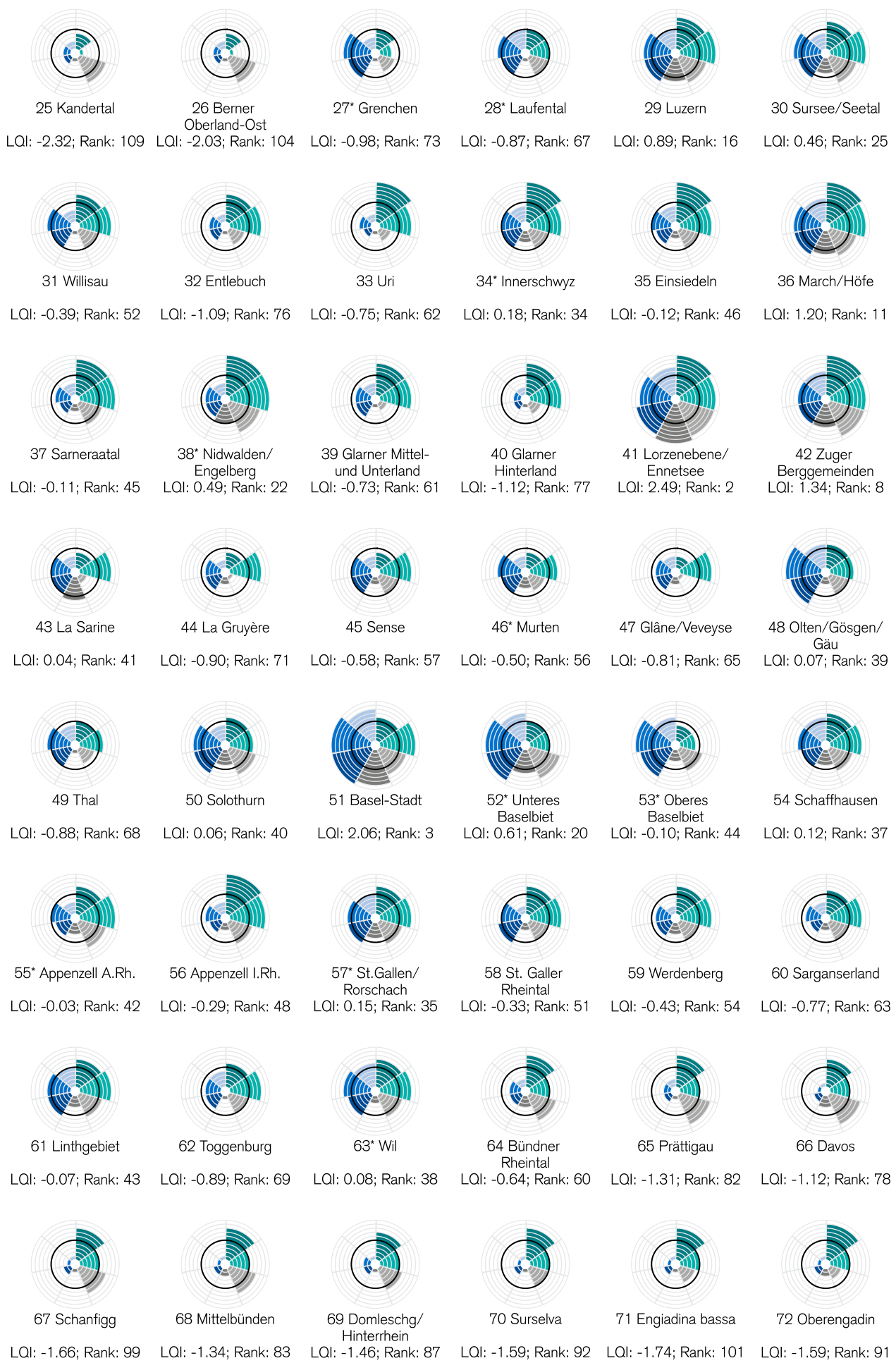
Locational quality of Swiss economic regions*, 2021

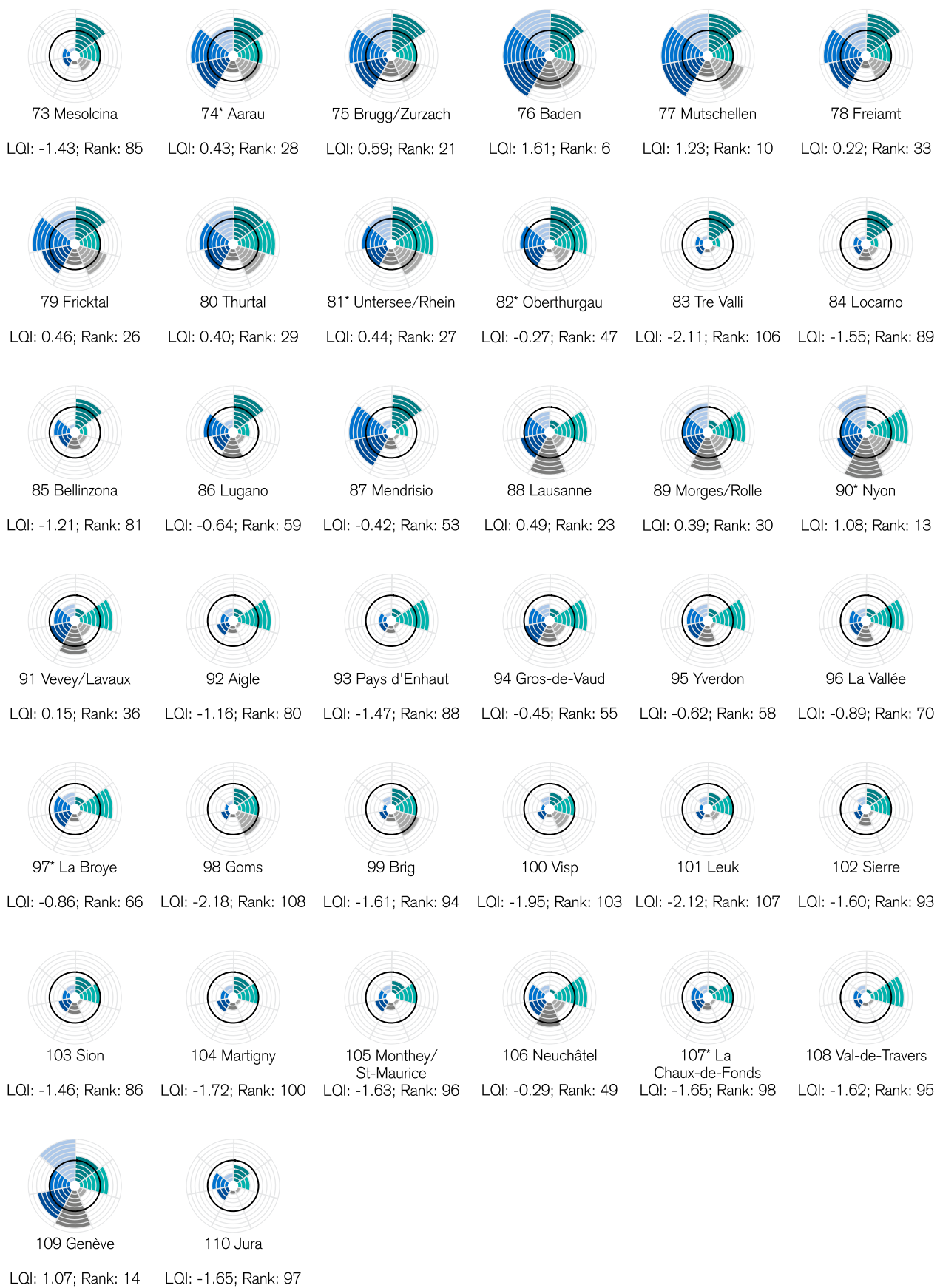
Locational Quality Indicator (LQI), synthetic index, CH = 0; use the identification number to view the detailed profile (see chart at right) of each economic region below



Source: Credit Suisse, Geostat. * The 110 Swiss economic regions reflect the economic conditions in the best possible way and do not always follow political borders. Cross-cantonal economic regions designated by an asterisk.







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