

# Nidwalden and Schwyz overtake Aargau

Locational quality 2022 | August 2022



# **Imprint**

# Publisher: Credit Suisse AG, Investment Solutions & Sustainability

Dr. Nannette Hechler-Fayd'herbe Chief Investment Officer EMEA and Global Head Economics & Research +41 44 333 17 06 nannette.hechler-fayd'herbe@credit-suisse.com

Dr. Sara Carnazzi Weber Head of Policy & Thematic Economics +41 44 333 58 82 sara.carnazzi@credit-suisse.com

# Press date

August 5, 2022

# **Orders**

Electronic copies via credit-suisse.com/locationalquality

# Copyright

The publication may be quoted providing the source is indicated. Copyright © 2022 Credit Suisse Group AG and/or its affiliated companies. All rights reserved.

# Source details

Credit Suisse unless specified

# **Author**

Dr. Jan Schüpbach +41 44 333 77 36 jan.schuepbach@credit-suisse.com

# Input

Fabian Diergardt Thomas Mendelin Aleksandra Paprota Flurina Krähenbühl

# Contents

LOCATIONAL QUALITY 2022	5
Aargau drops two places, Schaffhausen competing with Lucerne	5
Monitor   Fiscal attractiveness	11
Monitor   Availability of qualified labor	12
Monitor   Accessibility	13
Results for selected company types	15
APPENDIX: LQI 2022 RESULTS IN DETAIL	18
Factors of locational quality at cantonal level	18
Locational quality of Swiss economic regions	19



# Aargau drops two places, Schaffhausen competing with Lucerne

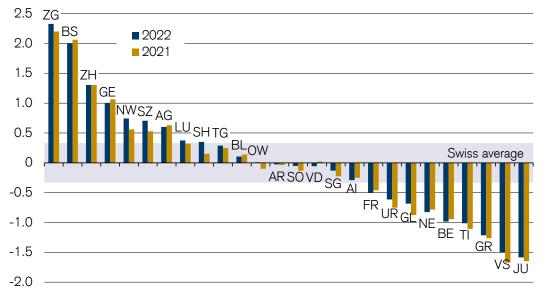
After years of flux following Switzerland's corporate tax reform, the locational quality rankings have again proved stable in 2022. Canton Zug is at the top of the rankings ahead of Basel-City, Zurich and Geneva. Canton Aargau has suffered the biggest ranking loss, dropping two places to lie just behind Nidwalden and Schwyz in 7th place. The cantons of Schaffhausen and Valais in particular have become more attractive, each climbing one place. The reform of global corporate taxation could lead to renewed upheaval in the coming years.

The Locational Quality Indicator by Credit Suisse The Credit Suisse Locational Quality Indicator (LQI) measures the attractiveness of the Swiss cantons and regions to business compared to the Swiss average. The LQI is based on seven quantitative sub-indicators, which evaluate the tax burden, the availability of qualified labor and the accessibility of a location (cf. box on page 7). Higher figures signify above-average appeal and lower figures less appeal. 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.

Nidwalden and Schwyz overtake Canton Aargau; Valais no longer in last place In the cantonal rankings 2022, the top spots remain unchanged: Zug is in first place followed by Canton Basel-City (see. Fig.). Both cantons offer a very favorable combination of appeal factors. Cantons Zurich and Geneva come next but are some way behind. There have been some changes among the other cantons with clearly above-average results: Nidwalden and Schwyz have improved, relegating Canton Aargau to 7th place. In the mid-table positions headed by Canton Lucerne, Canton Schaffhausen has moved into 9th place, overtaking Canton Thurgau. This is the result of a tax reduction for private individuals as well as slight improvements in the accessibility indicators. Canton Obwalden has improved in terms of both education indicators and accessibility,

# Locational quality of Swiss cantons

Locational Quality Indicator (LQI), synthetic index, Swiss average = 0



recording the biggest gain of two places. After two years, there has been a change at the bottom of the rankings: Canton Valais has reduced its corporate tax rate slightly more than Canton Jura, relegating the latter to last place after a period of two years.

2013 to 2022: Geneva, Basel-City and Vaud have become more attractive, whereas Obwalden and Bern have fallen back Globally speaking, the ranking has remained stable – the fundamental parameters typically change only gradually: In most cases, cantonal positions in the ranking have changed only slightly between 2013 and 2022 (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 Geneva and Valais have climbed an impressive eleven and five places respectively. Canton Freiburg has improved by four places. Relative to other cantons, Bern and Obwalden have lost the most appeal over the observation period in question, as is reflected in a fall of four places.

## LQI 2013 to 2022: Corporate tax reform drives movement in locational rankings

Locational Quality Indicator (LQI), Ranking of Swiss cantons (1 = highest locational quality, 26 = lowest locational quality), 2013 - 2022

ZG	1	1	1	1	1	1	2	1	1	1
BS	3	3	3	4	4	4	1	2	2	2
ZH	2	2	2	2	2	2	3	3	3	3
GE	15	16	16	13	13	13	14	4	4	4
NW		5	6	5	5	5	5	7		5
SZ	4	4	4	7	6	6	6	6	7	6
AG	5	6	5	3	3	3	4	5	5	7
LU	7	7	7	6	7	7	7	8	8	8
SH	11	12		12	12	12	13	11	10	9
TG	12	11	11	9		9		10		10
BL		10	12	11	11	11	11		11	11
OW	8	8	8	8	9	10	12	14	14	12
AR		9		10	8	8	9	13	13	13
SO	14	14	15	16	16	16	17	15	15	14
VD	20	20	19	17	17	17	8	12	12	15
SG	13	15	14	15	15	15	15	16	16	16
Al	16	13	13	14	14	14	16	17	17	17
FR	22	22	23	22	22	23	23	18	18	18
UR	19	18	20	20	20	20	20	19	19	19
GL	17	19	17	21	21	21	21	21	21	20
NE	24	23	21	19	19	18	19	20	20	21
BE	18	17	18	18	18	19	18	22	22	22
TI	21	21	22	23	23	22	22	23	23	23
GR	23	24	24	24	24	24	24	24	24	24
VS	25	25	25	25	25	25	25	26	26	25
JU	26	26	26	26	26	26	26	25	25	26
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022

### The Credit Suisse Locational Quality Indicator (LQI)

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.

Quantitative analysis of the locational quality of Switzerland's cantons and regions has been part of the Credit Suisse research offering since 1997. The annual Credit Suisse Locational Quality Indicator (LQI) measures the attractiveness of the Swiss cantons and regions to business compared the Swiss average. Figures between -0.3 and +0.3 can be considered midfield territory, with higher figures signifying above-average appeal and lower figures less appeal. The LQI is based on the following seven quantitative sub-indicators: tax burden on legal entities and private individuals, availability of specialist labor and highly qualified personnel, population and employee accessibility, and access to airports. The methodology is largely unchanged since the last major revision in 2013. Small adjustments were made this year in calculating the tax burden and with regard to the accessibility indicators, making comparisons with previous years somewhat more difficult.

The **tax burden** is assessed using the Credit Suisse tax indices for legal entities and private individual (cf. credit-suisse.com/taxmonitor). These provide a quick, overall assessment of fiscal attractiveness at cantonal and municipal level. Corporate taxes on profit and capital as well as taxes on income and wealth for private individuals are taken into consideration. The tax burden is also calculated for different levels of profit/capital and income/wealth, taking account of the normal deductions. The information is drawn from TaxWare (data as per June 17, 2022). Special tax systems such as the lump-sum taxation of private individuals or the TRAF 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 2016-2020 structural survey conducted by the Swiss census. The level of education of cross-border commuters is estimated based on the 2018 wage structure survey of the Swiss Federal Statistical Office.

Population accessibility, employee accessibility, and access to airports have been recalculated in 2022 for every one of the over 21,000 square kilometers in Switzerland that are inhabited. The three sub-indicators measure the total of reachable persons and employees in the domestic and foreign catchment area and the passenger numbers at the larger airports. As the distance to be covered is associated with time and other costs, the reachable potential is less strongly weighted as travel time increases. The weighting functions used for this purpose are derived from empirical data on commuter and business traffic and differ according to the method of transport and the reachable potential. Travel times are based on the effective travel times using motorized private transport (MPT) at rush hour and public transport (PT) in 2022. The airports examined now also include St. Gallen-Altenrhein and Sion.

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

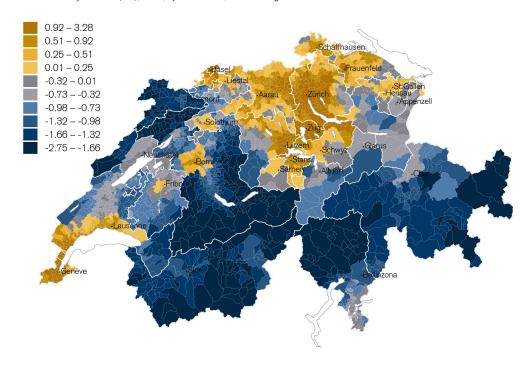
Regional locational quality: Clients of Credit Suisse can order **fact sheets on individual economic regions** from their client advisor.

Regional view: Significant differences within the cantons For the larger, heterogeneous cantons in particular – notably Bern, Vaud, Ticino, and Graubünden – an analysis of locational quality solely at cantonal level is too superficial. We therefore also analyze locational quality at municipal level and at the level of Switzerland's 110 economic regions. The illustration below shows the results for the LQI 2022 at municipal level. 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 19. 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. 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.

Climbing 11 places to 83rd, the region of Brig displays the greatest improvement compared to the previous year. The other Valais regions have also improved, in particular Martigny and Monthey/St-Maurice which have risen to 93rd place (+7) and 90th place (+6) respectively. Other climbers include the Graubünden regions of Davos (72nd place, +6) and Prättigau (77th place, +5). In Ticino, above all the region of Bellinzona (73rd place, +8) has risen, particularly due to improved accessibility. Mendrisio and Lugano, the two regions of Ticino with the highest locational quality (50th and 58th place), also continued to improve.

### Locational quality of the Swiss municipalities

Locational Quality Indicator (LQI), 2022, synthetic index, Swiss average = 0



Source: Credit Suisse, Geostat

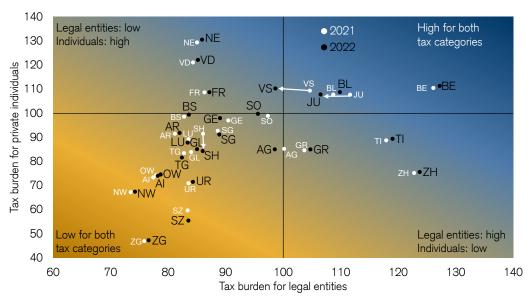
Tax burden: Valais, Jura and Schaffhausen fiscally more attractive Tax policy is much quicker to adjust than the availability of sufficiently qualified personnel and the accessibility of a location. Once again, the key changes in this year's locational quality rankings are attributable to tax policy. Canton Schaffhausen has reduced taxes significantly for private individuals, climbing six places in the Credit Suisse tax index for private individuals (cf. Fig. on the next page). Also worthy of note is Canton Schwyz, which has also become more attractive for private individuals by reducing the cantonal tax multiple considerably from 150 to 120, closing the gap to first-placed Canton Zug. As part of Switzerland's corporate tax reform (Federal Act on Tax Reform and OASI Funding [TRAF]), a small number of cantons have once again reduced their corporate tax rates this year. The largest reductions have been observed in the cantons of Valais and Jura, each climbing one place to 20th and 22nd respectively in the tax index for legal entities, which is based on the tax burden faced by companies with varying profit situations in all Swiss municipalities.

<sup>&</sup>lt;sup>1</sup> 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.

However, a number of other cantons remain more fiscally attractive: The top places remain unchanged with Canton Nidwalden leading the way, just in front of Zug and Appenzell Innerrhoden (cf. Fig.). However, the differences between the cantons have narrowed in recent years – hence so too has the relative benefit of lower corporate tax rates. Some cantons reduce their corporate taxes gradually over several years. By 2025, further reductions are expected, in particular in the cantons of Basel-Country and Ticino. 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 high-revenue companies would partially restrict or even eliminate tax competition. 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. You can find more details on the tax burden on page 11 and in our publication "Tax Monitor Switzerland" (cf. box on the next page).

### Valais and Jura have reduced corporate taxes, Schaffhausen taxes for private individuals

Evolution of tax burden from 2022 to 2021, tax burden according to Credit Suisse tax indices for private individuals (income and wealth taxes) and legal entities (profit and capital taxes), average of Swiss municipalities = 100



Source: TaxWare, Credit Suisse

Proportion of highly qualified personnel increases most significantly in German-speaking Switzerland Production-related or commercial companies rely on labor with vocational training. In knowledge-intensive economic sectors, highly qualified employees are a key production factor. A positive development can be observed in all cantons regarding the availability indicators of both specialist labor and highly qualified personnel. The proportion of individuals with at least a qualification at secondary level II has increased the most compared to the previous year in the cantons of Schwyz, Obwalden, Nidwalden, Glarus, Freiburg, Valais and Jura, climbing two percentage points. Zug, Nidwalden and Zurich come out best with values around 90%. The proportion of persons with a tertiary-level qualification has also increased in all cantons. It should be noted that the increase is somewhat smaller in Western Switzerland and in Ticino than in German-speaking Switzerland. The highest availability of highly qualified personnel can be seen in Canton Zug, with 53%, followed by Zurich, Basel-City and Geneva, each recording 48%. More details on the availability of qualified labor can be found on page 12.

### Tax Monitor Switzerland

In Switzerland, the authority to raise taxes is shared between the federal government, the cantons and the municipalities. The tax burden may therefore also differ depending on the municipality. With its new study series "Tax Monitor Switzerland", Credit Suisse is now providing a comprehensive yet concise overview of the **tax burden for legal entities and private indi-**

**viduals in Switzerland** at the cantonal and municipal level on an annual basis.

The Credit Suisse tax indices for individual taxable entities permit a quick holistic assessment of the fiscal attractiveness at the cantonal and municipal level. Corporate income tax and tax on capital are taken into account for companies, and income and wealth taxes are taken into account for private individuals. In addition, the tax burden is calculated for different levels of corporate income/capital or income/wealth, respectively. The locational quality indicator incorporates the Credit Suisse tax rankings for legal entities and private individuals as two out of seven quantitative partial indicators.

The latest study can be found at **credit-suisse.com/taxmonitor**.



Major update of the accessibility indicators

In addition to the local parameters, the quality of a location is also largely determined by its interaction with neighboring locations. Even the most fiscally attractive location with specialist labor may be unsuitable for a company if the appropriate business environment is not available. In the case of production, most companies are dependent on suppliers, business partners and subsidiary service providers. Moreover, close geographical proximity to other enterprises, especially to ones active in the same industry or related sectors, facilitates the exchange and accumulation of knowledge. These factors are represented in the locational quality indicator by means of the "employee accessibility" dimension. On the sales side, companies rely on the relevant sales markets. The "population accessibility" score takes this point into account.

Transport accessibility can only change with costly and protracted investments in road and rail. Quicker connections with other regions increase accessibility, and larger catchment areas can be reached in a given time frame. The distances and population densities nevertheless remain unchanged. New motorways, road and rail tunnels and new rail connections have a larger impact on accessibility when they are close to densely populated areas. To this extent, accessibility values are, for the most part, inherent and can only be changed to a limited extent.

This year, for the first time since 2016, we have completely updated the three accessibility indicators, which are calculated per square kilometer. First, the travel time matrix for public transport and motorized private transport has been updated. The construction of new roads and railway lines can affect the accessibility values. In Ticino in particular, accessibility has improved with the opening of the New Railway Link through the Alps (NRLA) and the Monte-Ceneri tunnel. Finally, the calculation also incorporates population and employment data, as well as the number of flight connections.

Location with good access as an advantage

Unsurprisingly, the major Swiss urban centers display the highest accessibility values, followed by their suburban areas. Areas located along the main transport links are also attractive. Accessibility is poorer in rural and mountainous areas, a fact that can be attributed to lower population and employment densities as well as the longer distances to the main centers resulting from their topography. Border regions such as Mendrisio, Geneva, Basel and St. Galler Rheintal also benefit from the potential on the other side of the border. More details on the accessibility indicators can be found on page 13.

# Monitor | Fiscal attractiveness

# Tax burden for legal entities by municipality

In about one third of the cantons, companies are taxed equally in all municipalities. In the other cantons, the tax burden for legal entities varies according to the municipality, sometimes quite significantly. An analysis solely at cantonal level is therefore often too superficial: At municipal level, the four most attractive municipalities in the ranking in the cantons of Schwyz (Wollerau, Freienbach and Feusisberg) and Lucerne (Meggen) – are slightly ahead of the Nidwalden municipalities. More information on intercantonal variations of the tax burden can be found in the current "Tax Monitor".

# Profit taxes per profit class

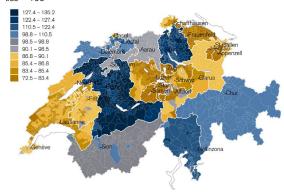
The vast majority of the cantons tax companies with a single proportional tax rate of the profit generated. Certain cantons nevertheless operate a system with a two-tier or three-tier rate, in which the profit tax rate is dependent on the amount of profit generated. Canton Valais, for example, is much more attractive for a company recording a profit of CHF 200,000 than for a company generating a higher profit.

### Tax burden for private individuals by municipality

For private individuals, the tax burden varies according to the municipality in all cantons. Canton Zug remains the unchallenged leader ahead of Schwyz. The three Canton Schwyz municipalities of Wollerau, Freienbach and Feusisberg nevertheless lead the municipal ranking. The "Tax Monitor" provides more details of the intercantonal tax burden variations and fiscal attractiveness for specific types of household (single persons, married couples with and without children) and incomes classes.

## Lowest corporate taxes in Nidwalden, Zug and Appenzell Innerrhoden

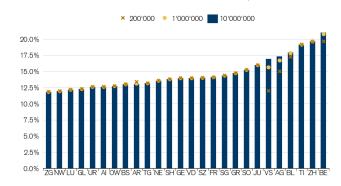
Burden of taxes on profit and capital (federal government/canton/municipality/church), 2022, Credit Suisse tax index for legal entities, average of Swiss municipalities = 100



Source: TaxWare, Credit Suisse, Geostat

# In certain cantons, the profit tax rate depends on the amount of profit

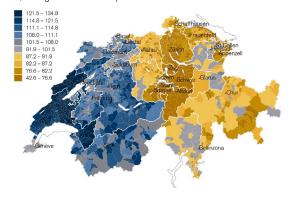
Profit tax rate before taxes (Confederation/canton/municipality/church) for profits of CHF 200,000, CHF 1 million and CHF 10 million, cantonal capitals, 2022



Source: TaxWare, Credit Suisse

# Central Switzerland most fiscally attractive for private individuals

Burden of income and wealth taxes, 2022, Credit Suisse tax index for private individuals, average of Swiss municipalities = 100



Source: TaxWare, Credit Suisse, Geostat

# Monitor | Availability of qualified labor

# Availability of specialist labor

On average, 85% of the available labor in Switzerland have a qualification at secondary level II (e.g. apprenticeship, grammar school, vocational secondary school). Figures for the urban centers are generally above average. The picture is nevertheless heterogeneous: The proportion in Geneva is clearly below average while certain rural areas of the cantons of Bern and Graubünden and in central Switzerland stand out with a high proportion of specialist labor. The language boundaries appear to play a role in this: In the regions of western Switzerland and in Canton Ticino, specialist labor is relatively rare.

# Availability of highly qualified personnel

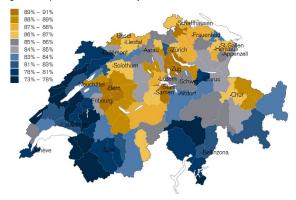
The level of education of the Swiss population has improved considerably in recent decades. At present, about 42% of the population has a tertiary-level qualification. Significant regional differences nevertheless remain: In urban regions, more than 40% of people have a degree from a university of applied sciences, a university or a technical/vocational school, with this figure reaching 60% in the City of Zurich. In rural regions, the proportion falls below 25%. The local industry structure, which is strongly geared towards knowledge-intensive activities in the urban centers, plays a key role in this situation. The universities have an additional impact.

# Level of education of commuters and cross-border commuters

Generally speaking, employees commuting from other regions or from abroad are more likely to have a higher level of education than local residents. In large parts of Switzerland, for example, the rate of commuters with a tertiary level qualification is more than 10 percentage points higher than that of local residents. In peripheral regions in particular, companies fall back on better-qualified commuters. In Ticino, however, the proportion of highly qualified personnel among commuters and cross-border commuters in the regions of Mendrisio and Lugano, which are located close to the border, is 8 respectively 11 percentage points lower than among the local population.

# Production-related or commercial companies rely on labor with vocational training

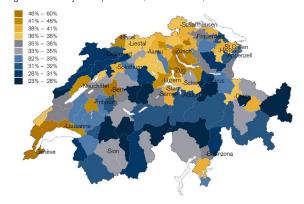
Proportion of people (residents, commuters and cross-border commuters) of working age with a qualification at secondary level II, 2016 to 2020, as %



Source: Swiss Federal Statistical Office, Credit Suisse, Geostat

# Highly qualified personnel the key production factor in knowledge-intensive economic sectors

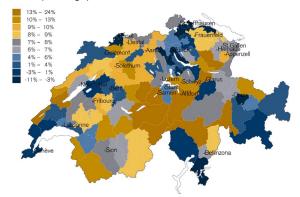
Proportion of people (residents, commuters and cross-border commuters) of working age with a tertiary-level qualification, 2016 to 2020, as %



Source: Swiss Federal Statistical Office, Credit Suisse, Geostat

# Peripheral regions often fall back on more highly qualified commuters

Difference in the proportion of people of working age with a tertiary-level qualification between commuters/cross-border commuters and residents, 2016 to 2020, in percentage points



Source: Swiss Federal Statistical Office, Credit Suisse, Geostat

# Monitor | Accessibility

# Population accessibility

The center of the City of Zurich achieves the highest value here, as Zurich benefits from a densely-populated surrounding area in addition to its own very high potential. Densely-populated areas of central Switzerland, Aargau and eastern Switzerland can be reached quickly from Zurich, with the result that the entire region has achieved a high level. Basel benefits not least from a significant impact from abroad. The accessibility values in southern Ticino are comparable to those of urban centers in the Swiss Plateau region due to the proximity of the Greater Milan area. The highest accessibility values in western Switzerland can be observed on the shores of Lake Geneva.

# **Employee accessibility**

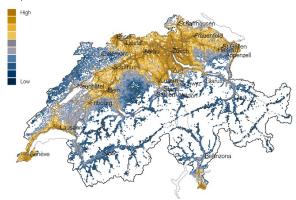
Employees are more densely clustered in and around urban centers, whereas the population is distributed over a wider area. Employment potential further afield is weighted somewhat higher than among the population, because greater distances are accepted for business traffic than for commuter traffic. Furthermore, the weighting varies according to the method of transport: In the case of employees, MPT is given a higher weighting than in population accessibility.

# Access to airports

Access to airports plays a key role for companies with an international focus. This allows for efficient travel to customers and facilitates logistics. The regions around the major airports in Zurich, Geneva and Basel, which boast numerous scheduled flights and correspondingly high passenger numbers, enjoy the most favorable locations. In international comparison, travel times to the major airports are nevertheless competitive in many locations, and there are also the smaller airports to complement them.

# Larger catchment areas and more efficient infrastructures create proximity to end customers and labor

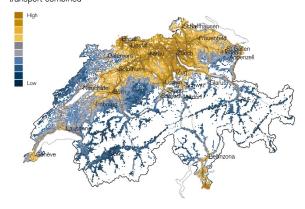
Population accessibility, results per populated square kilometer, public and private transport combined



Source: Credit Suisse, SBB, TomTom, Geostat

# Proximity to other companies simplifies cross-company cooperation, the division of labor and trade

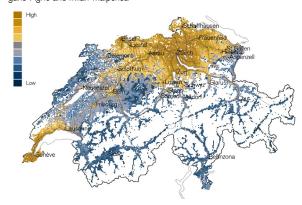
Employee accessibility, results per populated square kilometer, public and private transport combined



Source: Credit Suisse, SBB, TomTom, Geostat

# Efficient connections to airports is an advantage for internationally active companies

Access to airports based on public and private travel times to the airports Zurich-Kloten, Basel-Mulhouse, Bern-Belp, St. Gallen-Altenrhein, Geneva-Cointrin, Sion, Lugano-Agno and Milan-Malpensa



Source: Credit Suisse, SBB, TomTom, Geostat



# Results for selected company types

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 2022 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 the standard LQI 2022.

Company type 1: Capital-intensive, with highly qualified personnel We define company type 1 company that has a high level of taxable capital (assumption as in standard LQI: CHF 2 million). 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 2022.

# Locational quality indicators for selected company types

Calculation basis and weighting of Locational Quality Indicator 2022 together with alternative LQI indicators for two selected company types

		Fiscal attractiveness for private individuals	Fiscal attractiveness for legal entities	Availability of specialist labor	Availability of highly qualified personnel	Population accessibility	Employee accessibility	Access to airports
Locational quality in- dicator (LOI) 2022 (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	Corporation with capital of CHF 2 million and net profit of between CHF 100,000 and CHF 1 million.	muters, and cross who have at least of	ents, inbound com- border commuters completed education vel  Tertiary level	ment area, whereby weighted as trav		
	Weighting in the LQI 2022	CHF 1 million.	x. 1/3	арргох. 1/3		арргох. 1/3		
LQI 2022 for com-	Calculation basis	The same, but only income between CHF 180,000 and CHF 300,000	as above	as above	as above	as above	as above	as above
pany type 1	Weighting compared LQI 2022	higher	identical	identical		lower	lower	identical
LQI 2022 for com- pany type 2	Calculation basis	The same, but only income between CHF 50,000 and CHF 150,000	Corporation with capital of CHF 200,000 and net profit of between CHF 100,000 and CHF 500,000	as above	as above	as above	as above	as above
	Weighting compared to LQI 2022	identical	identical	higher	lower	higher	higher	lower

Company type 2: lower profit potential and capital, reliant on specialist labor We define company type 2 as a company with lower capital (assumption: CHF 200,000) and annual net profit of between CHF 100,000 and CHF 500,000. 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 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.

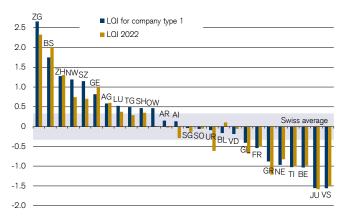
Company type 1: Fiscally attractive cantons become even more attractive The Locational Quality Indicator for company type 1 shows that cantons that are attractive from a tax perspective compared the standard LQI 2022 become even more attractive (cf. Fig.). Canton Zug has extended its lead over Canton Basel-City significantly, although the latter retains second place. Zurich remains in third place. Nidwalden and Schwyz have overtaken 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 have improved their appeal, including Canton Appenzell Innerrhoden, which is the biggest gainer climbing four places. Basel-Country and Vaud have both fallen back six places.

Company type 2: Graubünden and Obwalden the big ranking improvers In the locational quality ranking for company type 2 (cf. Fig.), Graubünden, Obwalden and Glarus are the biggest improvers, each rising three places. The cantons of Nidwalden, Valais, St. Gallen, Solothurn, Uri and Bern have improved compared the standard LQI 2022, each climbing two places. Also striking is the significantly worse performance of the cantons of Geneva and Vaud, falling eleven and seven places respectively. Compared 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. This would suggest that the standard LQI is a good indicator for a wide range of companies. Obviously, companies looking for a base will have to analyze several additional 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.

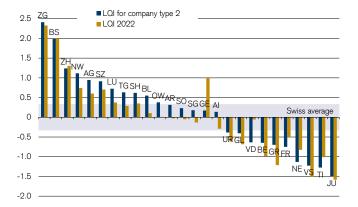
# Locational Quality Indicator for company type 1

Locational Quality Indicator (LQI), 2022, synthetic index, Swiss average = 0



# Locational Quality Indicator for company type 2

Locational Quality Indicator (LQI), 2022, synthetic index, Swiss average = 0



Source: Credit Suisse



# LQI 2022 results in detail

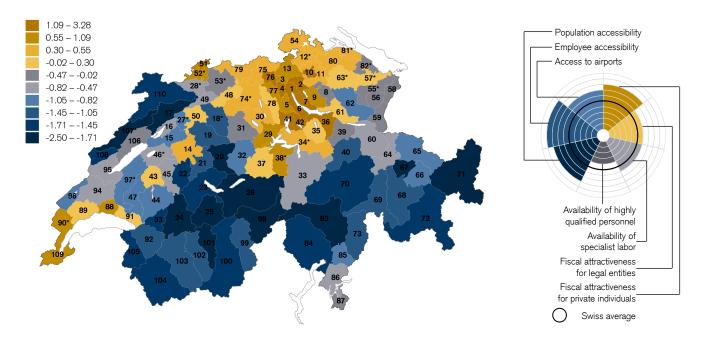
# Factors of locational quality at cantonal level

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

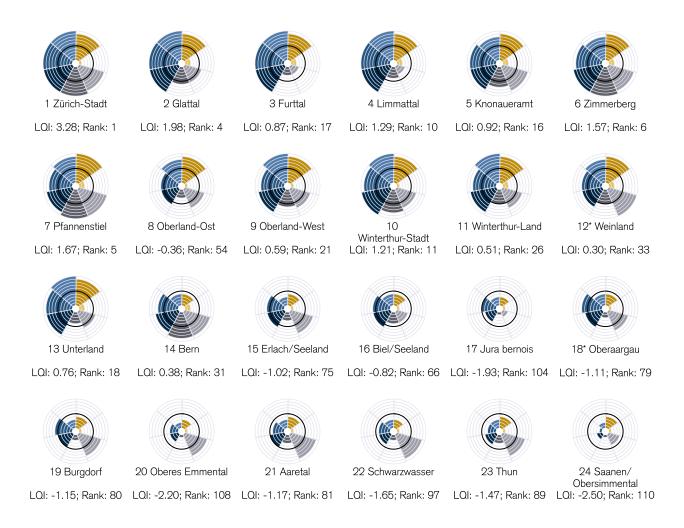
	Fiscal attractiveness		Availability		Accessibility			Locational quality 2022		
Canton	Private individuals	Legal entities	Specialist labor	Highly qualified personnel	Population	Employees	Airports	LQI 2022		Rank 2022 (vs. 2021)
ZG	++	++	++	++	+	+	+	2.33	++	1 (=)
BS	=	+	+	+	++	++	+	2.00	++	2 (=)
ZH	++		+	+	++	++	++	1.30	++	3 (=)
GE	=	+		+	+	=	++	1.00	+	4 (=)
NW	++	++	++	=	-	=	-	0.74	+	5 (+1)
SZ	++	+	+	=	=	=	=	0.71	+	6 (+1)
AG	+	=	=	-	+	++	+	0.60	+	7 (-2)
_U	+	+	+	-	=	=	=	0.38	+	8 (=)
SH	+	+	=	-	=	+	=	0.35	+	9 (+1)
TG	+	++	=	-	=	=	=	0.29	=	10 (–1)
3L	-	-	+	=	+	+	=	0.10	=	11 (=)
WC	++	++	+	-	-	-	-	0.01	=	12 (+2)
AR	+	++	+	-	=	-	=	-0.03	=	13 (=)
SO	=	=	=	-	+	+	=	-0.05	=	14 (+1)
VD		+	-	+	=	-	=	-0.06	=	15 (–3)
SG	+	+	=	-	=	=	=	-0.13	=	16 (=)
ΔI	++	++	=		-	-	-	-0.29	=	17 (=)
FR	-	+		-	=	-	-	-0.51	-	18 (=)
JR	++	+	-		-	-	-	-0.61	-	19 (=)
GL	+	+	-		-	-	-	-0.68	-	20 (+1)
NE		+		-	-	-	-	-0.83	-	21 (–1)
3E	-		+	-	=	=	-	-0.98	-	22 (=)
ГІ	+			-	-	=	-	-1.01		23 (=)
GR	+	=	=				-	-1.21		24 (=)
VS	-	=			-		-	-1.51		25 (+1)
JU	-	-			-	_	_	-1.58		26 (-1)

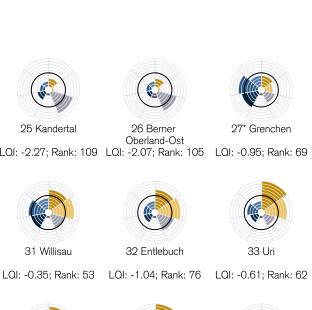
# Locational quality of Swiss economic regions

Locational Quality Indicator (SQI), 2022, synthetic index, Swiss average = 0; use the identification number to view the detailed profile (see chart at right) of each economic region\*



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 are designated by an asterisk.







26 Berner Oberland-Ost



27\* Grenchen LQI: -2.27; Rank: 109 LQI: -2.07; Rank: 105 LQI: -0.95; Rank: 69 LQI: -0.81; Rank: 65 LQI: 0.99; Rank: 14



28\* Laufental



29 Luzern



30 Sursee/Seetal LQI: 0.51; Rank: 25





32 Entlebuch



33 Uri



34\* Innerschwyz LQI: 0.40; Rank: 30



35 Einsiedeln LOI: -0.01; Rank: 44



36 March/Höfe LQI: 1.35; Rank: 9



37 Sarneraatal LQI: 0.00; Rank: 42



38\* Nidwalden/ Engelberg LQI: 0.66; Rank: 19



39 Glarner Mittelund Unterland LQI: -0.45; Rank: 55



40 Glarner Hinterland LQI: -1.07; Rank: 78



41 Lorzenebene/ Ennetsee LQI: 2.67; Rank: 2



42 Zuger Berggemeinden LQI: 1.40; Rank: 8



43 La Sarine



44 La Gruyère



45 Sense LQI: -0.00; Rank: 43 LQI: -0.97; Rank: 70 LQI: -0.52; Rank: 57 LQI: -0.54; Rank: 60 LQI: -0.83; Rank: 68



46\* Murten



47 Glâne/Veveyse



48 Olten/Gösgen/ LQI: 0.12; Rank: 39



49 Thal LQI: -0.72; Rank: 63



50 Solothurn LQI: 0.17; Rank: 38



51 Basel-Stadt LQI: 2.00; Rank: 3



52\* Unteres Baselbiet LQI: 0.63; Rank: 20



53\* Oberes Baselbiet LQI: -0.14; Rank: 46



54 Schaffhausen LQI: 0.33; Rank: 32



55\* Appenzell A.Rh.

LOI: -0.02; Rank: 45 LOI: -0.34; Rank: 52

LQI: -1.74; Rank: 100 LQI: -1.29; Rank: 84



56 Appenzell I.Rh.



57\* St.Gallen/ Rorschach LQI: 0.22; Rank: 35



58 St. Galler Rheintal LQI: -0.22; Rank: 48 LQI: -0.23; Rank: 49 LQI: -0.48; Rank: 56



59 Werdenberg



60 Sarganserland



61 Linthgebiet LQI: 0.05; Rank: 41



62 Toggenburg LQI: -0.82: Rank: 67



63\* Wil LQI: 0.08; Rank: 40



64 Bündner Rheintal LQI: -0.54; Rank: 59 LQI: -1.05; Rank: 77 LQI: -0.98; Rank: 72



65 Prättigau



66 Davos



67 Schanfigg



68 Mittelbünden



69 Domleschg/ Hinterrhein LQI: -1.37; Rank: 86 LQI: -1.54; Rank: 91 LQI: -1.91; Rank: 103 LQI: -1.63; Rank: 96



70 Surselva



71 Engiadina bassa



72 Oberengadin



LQI: 1.00; Rank: 13 LQI: -1.58; Rank: 94

110 Jura

# Important Information

This report represents the views of Credit Suisse (CS) Investment Solutions & Sustainability and has not been prepared in accordance with the legal requirements designed to promote the independence of investment research. It is not a product of the CS Research Department even if it references published research recommendations. CS has policies in place to manage conflicts of interest including policies relating to dealing ahead of the dissemination of investment research. These policies do not apply to the views of Investment Solutions & Sustainability contained in this report. Please find further important information at the end of this material. Singapore: For accredited investors only. Hong Kong: For professional investors only. Australia: For wholesale clients only.

### **Risk Warning**

Every investment involves risk, especially with regard to fluctuations in value and return. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income.

This document may include information on investments that involve special risks. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this document or for any necessary explanation of its contents. Further information is also available in the information brochure "Risks Involved in Trading Financial Instruments" available from the Swiss Bankers Association.

Past performance is not an indicator of future performance. Performance can be affected by commissions, fees or other charges as well as exchange rate fluctuations.

# Financial market risks

Historical returns and financial market scenarios are no reliable indicators of future performance. The price and value of investments mentioned and any income that might accrue could fall or rise or fluctuate. You should consult with such advisor(s) as you consider necessary to assist you in making these determinations.

Investments may have no public market or only a restricted secondary market. Where a secondary market exists, it is not possible to predict the price at which investments will trade in the market or whether such market will be liquid or illiquid.

## **Emerging markets**

Where this document relates to emerging markets, you should be aware that there are uncertainties and risks associated with investments and transactions in various types of investments of, or related or linked to, issuers and obligors incorporated, based or principally engaged in business in emerging markets countries. Investments related to emerging markets countries may be considered speculative, and their prices will be much more volatile than those in the more developed countries of the world. Investments in emerging markets investments should be made only by sophisticated investors or experienced professionals who have independent knowledge of the relevant markets, are able to consider and weigh the various risks presented by such investments, and have the financial resources necessary to bear the substantial risk of loss of investment in such investments. It is your re-

sponsibility to manage the risks which arise as a result of investing in emerging markets investments and the allocation of assets in your portfolio. You should seek advice from your own advisers with regard to the various risks and factors to be considered when investing in an emerging markets investment.

### Alternative investments

Hedge funds are not subject to the numerous investor protection regulations that apply to regulated authorized collective investments and hedge fund managers are largely unregulated. Hedge funds are not limited to any particular investment discipline or trading strategy, and seek to profit in all kinds of markets by using leverage, derivatives, and complex speculative investment strategies that may increase the risk of investment loss.

Commodity transactions carry a high degree of risk, including the loss of the entire investment, and may not be suitable for many private investors. The performance of such investments depends on unpredictable factors such as natural catastrophes, climate influences, hauling capacities, political unrest, seasonal fluctuations and strong influences of rolling-forward, particularly in futures and indices.

Investors in real estate are exposed to liquidity, foreign currency and other risks, including cyclical risk, rental and local market risk as well as environmental risk, and changes to the legal situation.

### **Private Equity**

Private Equity (hereafter "PE") means private equity capital investment in companies that are not traded publicly (i.e. are not listed on a stock exchange), they are complex, usually illiquid and long-lasting. Investments in a PE fund generally involve a significant degree of financial and/or business risk. Investments in private equity funds are not principal-protected nor guaranteed. Investors will be required to meet capital calls of investments over an extended period of time. Failure to do so may traditionally result in the forfeiture of a portion or the entirety of the capital account, forego any future income or gains on investments made prior to such default and among other things, lose any rights to participate in future investments or forced to sell their investments at a very low price, much lower than secondary market valuations. Companies or funds may be highly leveraged and therefore may be more sensitive to adverse business and/or financial developments or economic factors. Such investments may face intense competition, changing business or economic conditions or other developments that may adversely affect their performance.

# Interest rate and credit risks

The retention of value of a bond is dependent on the credit-worthiness of the Issuer and/or Guarantor (as applicable), which may change over the term of the bond. In the event of default by the Issuer and/or Guarantor of the bond, the bond or any income derived from it is not guaranteed and you may get back none of, or less than, what was originally invested.

# Investment Solutions & Sustainability

Investment Solutions & Sustainability is responsible for multiasset class strategy formation and subsequent implementation in Credit Suisse's (CS) discretionary and advisory businesses. If shown, Model Portfolios are provided for illustrative purposes only. Your asset allocation, portfolio weightings and performance may look significantly different based on your particular circumstances and risk tolerance. Opinions and views of Investment Solutions & Sustainability may be different from those expressed by other Departments at CS. Investment Solutions & Sustainability views may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention.

From time to time, Investment Solutions & Sustainability may reference previously published Research articles, including recommendations and rating changes collated in the form of lists. The recommendations contained herein are extracts and/or references to previously published recommendations by CS Research. For equities, this relates to the respective Company Note or Company Summary of the issuer. Recommendations for bonds can be found within the respective Research Alert (bonds) publication or Institutional Research Flash/Alert— Credit Update Switzerland. These items are available on request or via online banking.

Disclosures are available from: <a href="https://www.credit-suisse.com/disclosure">https://www.credit-suisse.com/disclosure</a>

### Global disclaimer / Important information

The information provided herein constitutes marketing material; it is not investment research. This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject CS to any registration or licensing requirement within such jurisdiction.

References in this report to CS include Credit Suisse AG, the Swiss bank, its subsidiaries and affiliates. For more information on our structure, please use the following link: <a href="https://www.credit-suisse.com">https://www.credit-suisse.com</a>

NO DISTRIBUTION, SOLICITATION, OR ADVICE: This document is provided for information and illustrative purposes and is intended for your use only. It is not a solicitation, offer or recommendation to buy or sell any security or other financial instrument. Any information including facts, opinions or quotations, may be condensed or summarized and is expressed as of the date of writing. The information contained in this document has been provided as a general market commentary only and does not constitute any form of regulated investment research financial advice, legal, tax or other regulated service. It does not take into account the financial objectives, situation or needs of any persons, which are necessary considerations before making any investment decision. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this document or for any necessary explanation of its contents. This document is intended only to provide observations and views of CS at the date of writing, regardless of the date on which you receive or access the information. Observations and views contained in this document may be different from those expressed by other Departments at CS and may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention. FORE-CASTS & ESTIMATES: Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. To the extent that this report contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Unless indicated to the contrary, all figures are unaudited. All valuations mentioned herein are subject to CS valuation policies and procedures. CONFLICTS: CS reserves the right to remedy any errors that may be present in this report. CS, its affiliates and/or their employees may have a position or holding, or other material interest or effect transactions in any securities mentioned or options thereon, or other investments related thereto and from time to time may add to or dispose of such investments. CS may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investments listed in this report or a related investment to any company or issuer mentioned. Some investments

referred to in this report will be offered by a single entity or an associate of CS or CS may be the only market maker in such investments. CS is involved in many businesses that relate to companies mentioned in this report. These businesses include specialized trading, risk arbitrage, market making, and other proprietary trading. TAX: Nothing in this report constitutes investment, legal, accounting or tax advice. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax advisor. The levels and basis of taxation are dependent on individual circumstances and are subject to change. SOURCES: Information and opinions presented in this report have been obtained or derived from sources which in the opinion of CS are reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for a loss arising from the use of this report. WEBSITES: This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed the linked site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this report. Accessing such a website or following such a link through this report or CS's website shall be at your own risk. DATA PRIVACY: Your Personal Data will be processed in accordance with the Credit Suisse privacy statement accessible at your domicile through the official Credit Suisse website: https://www.credit-suisse.com/

In order to provide you with marketing materials concerning our products and services, Credit Suisse Group AG and its subsidiaries may process your basic Personal Data (i.e. contact details such as name, e-mail address) until you notify us that you no longer wish to receive them. You can opt out from receiving these materials at any time by informing your Relationship Manager.

### Distributing entities

Except otherwise specified herein, this report is distributed by Credit Suisse AG, a Swiss bank, authorized and regulated by the Swiss Financial Market Supervisory Authority Bahrain: This report is distributed by Credit Suisse AG, Bahrain Branch, a branch of Credit Suisse AG, Zurich/Switzerland, duly authorized and regulated by the Central Bank of Bahrain (CBB) as an Investment Business Firm Category 2. Related financial services or products are only made available to Accredited Investors, as defined by the CBB, and are not intended for any other persons. The Central Bank of Bahrain has not reviewed, nor has it approved, this document or the marketing of any investment vehicle referred to herein in the Kingdom of Bahrain and is not responsible for the performance of any such investment vehicle. Credit Suisse AG, Bahrain Branch is located at Level 21, East Tower, Bahrain World Trade Centre, Manama, Kingdom of Bahrain. Brazil: This report is distributed in Brazil by Credit Suisse (Brasil) S.A. Corretora de Títulos e Valores Mobiliários or its affiliates. Chile: This report is distributed by Credit Suisse Agencia de Valores (Chile) Limitada, a branch of Credit Suisse AG (incorporated in the Canton of Zurich), regulated by the Chilean Financial Market Commission. Neither the issuer nor the securities have been registered with the Financial Market Commission of Chile (Comisión para el Mercado Financiero) pursuant to Law no. 18.045, the Ley de Mercado de Valores, and regulations thereunder, so they may not be offered or sold publicly in Chile. This document does not constitute an offer of, or an invitation to subscribe for or purchase, the securities in the Republic of Chile, other than to individually identified investors pursuant to a private offering within the meaning of article 4 of the Ley de Mercado de Valores (an offer that is not "addressed to the public in general or to a certain sector or specific group of the public"). DIFC: This information is being distributed by Credit Suisse AG (DIFC Branch). Credit Suisse AG (DIFC Branch) is licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates. France: This report is distributed by Credit Suisse (Luxembourg) S.A. Succursale en France (the "France branch"), which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The France branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the French supervisory authorities, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and the Autorité des Marchés Financiers (AMF). Germany: This report is distributed by Credit Suisse (Deutschland) Aktiengesellschaft regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"). Guernsey: This report is distributed by Credit Suisse AG Guernsey Branch, a branch of Credit Suisse AG (incorporated in the Canton of Zurich), with its place of business at Helvetia Court, Les Echelons, South Esplanade, St Peter Port, Guernsey. Credit Suisse AG Guernsey Branch is wholly owned by Credit Suisse AG and regulated by the Guernsey Financial Services Commission. Copies of the latest audited accounts of Credit Suisse AG are available on request. India: This report is distributed by Credit Suisse Securities (India) Private Limited (CIN no.

U67120MH1996PTC104392), regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030), as Portfolio Manager (registration no. INP000002478) and as Stock Broker (registration no. INZ000248233), having registered address at 9th Floor, Ceejay House, Dr. Annie Besant Road, Worli, Mumbai - 400 018, India, T-+91-22 6777 3777. Israel: If distributed by Credit Suisse Financial Services (Israel) Ltd. in Israel: This document is distributed by Credit Suisse Financial Services (Israel) Ltd. Credit Suisse AG, including the services offered in Israel, is not supervised by the Supervisor of Banks at the Bank of Israel, but by the competent banking supervision authority in Switzerland. Credit Suisse Financial Services (Israel) Ltd. is a licensed investment marketer in Israel and thus, its investment marketing activities are supervised by the Israel Securities Authority. Italy: This report is distributed in Italy by Credit Suisse (Italy) S.p.A., a bank incorporated and registered under Italian law subject to the supervision and control of Banca d'Italia and CONSOB. Lebanon: This report is distributed by Credit Suisse (Lebanon) Finance SAL ("CSLF"), a financial institution incorporated in Lebanon and regulated by the Central Bank of Lebanon ("CBL") and having a financial institution license number 42. Credit Suisse (Lebanon) Finance SAL is subject to the CBL's laws and circulars as well as the laws and regulations of the Capital Markets Authority of Lebanon ("CMA"). CSLF is a subsidiary of Credit Suisse AG and part of the Credit Suisse Group (CS). The CMA does not accept any responsibility for the content of the information included in this report, including the accuracy or completeness of such information. The liability for the content of this report lies with the issuer, its directors and other persons, such as experts, whose opinions are included in the report with their consent. The CMA has also not assessed the suitability of the investment for any particular investor or type of investor. It is hereby expressly understood and acknowledged that investments in financial markets may involve a high degree of complexity and risk of loss in value and may not be suitable to all investors. The suitability assessment performed by CSLF with respect to this investment will be undertaken based on information that the investor would have provided to CSLF as at the date of such assessment and in accordance with Credit Suisse internal policies and processes. It is understood that the English language will be used in all communication and documentation provided by CS and/or CSLF. By accepting to invest in the product, the investor expressly and irrevocably confirms that he fully understands, and has no objection to the use of the English language. Luxembourg: This report is distributed by Credit Suisse (Luxembourg) S.A., a duly autho- rized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. Credit Suisse (Luxembourg) S.A. is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF). Mexico: This document represents the view of the person who provides his/her services to C. Suisse Asesoría México, S.A. de C.V. ("C. Suisse As-esoría") and/or Banco Credit Suisse (México), S.A., Institución de Banca Múltiple, Grupo Financiero Credit Suisse (México) ("Banco CS") so that both C. Suisse Asesoría and Banco CS reserve the right to change their mind at any time not assuming any liability in this regard. This document is distributed for informational purposes only and does not imply a personal recommendation or suggestion, nor the invitation to celebrate any operation and does not replace the communication you have with your executive in relation to C. Suisse Asesoría and/or Banco CS prior to taking any investment decision. C. Suisse Asesoría and/or Banco CS does not assume any responsibility for investment decisions based on information contained in the document sent, as the same may not take into account the context of the investment strategy and objectives of particular clients. Prospectus, brochures, investment regimes of investment funds, annual reports or periodic financial information contain all additional useful information for investors. These documents can be obtained free of charge directly from issuers, operators of investment funds, in the Internet page of the stock exchange in which they are listed or through its executive in C. Suisse Asesoría and/or Banco CS. Past performance and the various scenarios of existing markets do not guarantee present or future yields. In the event that the information contained in this document is incomplete, incorrect or unclear, please contact your Executive of C. Suisse Asesoría and/or Banco CS as soon as possible. It is possible that this document may suffer modifications without any responsibility for C. Suisse Asesoría and/or Banco CS. This document is distributed for informational purposes only and is not a substitute for the Operations Reports and/or Account Statements you receive from C. Suisse Asesoría and/or Banco CS in terms of the General Provisions Applicable to Financial Institutions and other Legal Entities that Provide Investment Services issued by the Mexican Banking and Securities Commission ("CNBV"). Given the nature of this document, C. Suisse Asesoría and/or Banco CS does not assume any responsibility derived from the information contained therein. Without prejudice to the fact that the information was obtained from or based on sources believed to be reliable by C. Suisse Asesoría and/or Banco CS, there is no guarantee that the information is either accurate or complete. Banco CS and/or C. Suisse Asesoría does not accept any liability arising from any loss arising from the use of the information contained in the document sent to you. It is recommended that the investor make sure that the information provided is in accordance to his/her personal circumstances and investment profile, in relation to any particular legal, regulatory or fiscal situation, or to obtain independent professional advice. C. Suisse Asesoría México, S.A. de C.V. is an investment adviser created in accordance with the Mexican Securities Market Law ("LMV"), registered with the CNBV under the folio number 30070. C. Suisse Asesoría México, S.A. de C.V. is not part of Grupo Financiero Credit Suisse (México), S.A. de C.V., or any other financial group in Mexico. C. Suisse Asesoría México, S.A. de C.V. is not an independent investment adviser as provided by LMV and other applicable regulations due to its direct relationship with Credit Suisse AG, a foreign financial institution, and its indirect relationship with the entities that make up Grupo Financiero Credit Suisse (México), S.A. de C.V. Netherlands: This report is distributed by Credit Suisse (Luxembourg) S.A., Netherlands Branch (the "Netherlands branch"), which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Netherlands branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the Dutch supervisory authority, De Nederlansche Bank (DNB), and of the Dutch market supervisor, the Autoriteit Financiële Markten (AFM). Portugal: This report is distributed by Credit Suisse (Luxembourg) S.A., Sucursal em Portugal (the "Portugal branch"), which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Portugal branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the Portuguese supervisory authorities, the Banco de Portugal (BdP) and the Comissão do Mercado dos Valores Mobiliários (CMVM). Qatar: This information has been distributed by Credit Suisse (Qatar) L.L.C., which is duly authorized and regulated by the Qatar Financial Centre Regulatory Authority (QFCRA) under QFC License No. 00005. All related financial products or services will only be available to Eligible Counterparties (as defined by the QFCRA) or Business Customers (as defined by the QFCRA), including individuals, who have opted to be classified as a Business Customer, with net assets in excess of QR 4 million, and who have sufficient financial knowledge, experience and understanding to participate in such products and/or services. Therefore, this information must not be delivered to, or relied on by, any other type of individual. Saudi Arabia: This document is distributed by Credit Suisse Saudi Arabia (CR Number 1010228645), duly licensed and regulated by the Saudi Arabian Capital Market Authority pursuant to License Number 08104-37 dated 23/03/1429H corresponding to 21/03/2008AD. Credit Suisse Saudi Arabia's principal place of business is at King Fahad Road, Hay Al Mhamadiya, 12361- 6858 Riyadh, Saudi Arabia. Website: https://www.creditsuisse.com/sa.

Under the Rules on the Offer of Securities and Continuing Obligations, this document may not be distributed in the Kingdom except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial advisor. Under the Investment Fund Regulations, this document may not be distributed in the Kingdom except to such persons as are permitted under the Investment Fund Regulations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective subscribers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document you should consult an authorized financial adviser. South Africa: This information is being distributed by Credit Suisse AG which is registered as a financial services provider with the Financial Sector Conduct Authority in South Africa with FSP number 9788 and / or by Credit Suisse (UK) Limited, which is registered as a financial

services provider with the Financial Sector Conduct Authority in South Africa with FSP number 48779. Spain: This document is a marketing material and is provided by Credit Suisse AG, Sucursal en España, legal entity registered at the Comisión Nacional del Mercado de Valores for information purposes. It is exclusively addressed to the recipient for personal use only and, according to current regulations in force, by no means can it be considered as a security offer, personal investment advice or any general or specific recommendation of products or investment strategies with the aim that you perform any operation. The client shall be deemed responsible, in all cases, for taking whatever decisions on investments or disinvestments, and therefore the client takes all responsibility for the benefits or losses resulting from the operations that the client decides to perform based on the information and opinions included in this document. This document is not the result of a financial analysis or research and therefore, neither it is subject to the current regulations that apply to the production and distribution of financial research, nor its content complies with the legal requirements of independence of financial research. Turkey: The investment information, comments and recommendations contained herein are not within the scope of investment advisory activity. The investment advisory services are provided by the authorized institutions to the persons in a customized manner taking into account the risk and return preferences of the persons. Whereas, the comments and advices included herein are of general nature. Therefore recommendations may not be suitable for your finan-cial status or risk and yield preferences. For this reason, making an investment decision only by relying on the information given herein may not give rise to results that fit your expectations. This report is distributed by Credit Suisse Istanbul Menkul Degerler Anonim Sirketi, regulated by the Capital Markets Board of Turkey, with its registered address at Levazim Mahallesi, Koru Sokak No. 2 Zorlu Center Terasevler No. 61 34340 Besiktas/Istanbul-Turkey. United Kingdom: This material is distributed by Credit Suisse (UK) Limited. Credit Suisse (UK) Limited, is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Where this material is distributed into the United Kingdom by an offshore entity not exempted under the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 the following will apply: To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited, which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future.

# Important regional disclosure information

Pursuant to CVM Resolution No. 20/2021, of February 25, 2021, the author(s) of the report hereby certify(ies) that the views expressed in this report solely and exclusively reflect the personal opinions of the author(s) and have been prepared independently, including with respect to Credit Suisse. Part of the author(s)'s compensation is based on various factors, including the total revenues of Credit Suisse, but no part of the compensation has been, is, or will be related to the specific recommendations or views expressed in this report. In addition, Credit Suisse declares that: Credit Suisse has provided, and/or may in the future provide investment banking, brokerage, asset management, commercial banking and other financial services to the subject company/companies or its affiliates, for which they have received or may receive customary fees and commissions, and which constituted or may constitute relevant financial or commercial interests in relation to the subject company/companies or the subject securities.

UNITED STATES: NEITHER THIS REPORT NOR ANY COPY THEREOF MAY BE SENT, TAKEN INTO OR DISTRIBUTED IN THE UNITED STATES OR TO ANY US PERSON (within the meaning of Regulation S under the US Securities Act of 1933, as amended).

# **APAC - IMPORTANT NOTICE**

The information provided herein constitutes marketing material; it is not investment research. For all, except accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: This material has been prepared by Credit Suisse AG ("Credit Suisse") as general information only. This material is not and does not purport to provide substantive research or analysis and, accordingly, is not investment research or a research recommendation for regulatory purposes. It does not take into account the financial objectives, situation or needs of

any person, which are necessary considerations before making any investment decision. The information provided is not intended to provide a sufficient basis on which to make an investment decision and is not a personal recommendation or investment advice. Credit Suisse makes no representation as to the suitability of the products or services specified in this material for any particular investor. It does not constitute an invitation or an offer to any person to subscribe for or purchase any of the products or services specified in this material or to participate in any other transactions. The only legally binding terms are to be found in the applicable product documentation or specific contracts and confirmations prepared by Credit Suisse. For accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: This material has been prepared by Credit Suisse AG ("Credit Suisse") as general information only. This material is not and does not purport to provide substantive research or analysis and, accordingly, is not investment research for regulatory purposes. It does not take into account the financial objectives, situation or needs of any person, which are necessary considerations before making any investment decision. Credit Suisse makes no representation as to the appropriateness of the products or services specified in this material for any particular investor. It does not constitute an invitation or an offer to any person to subscribe for or purchase any of the products or services specified in this material or to participate in any other transactions. The only legally binding terms are to be found in the applicable product documentation or specific contracts and confirmations prepared by Credit Suisse. For all: In connection with the products specified in this material, Credit Suisse and/or its affiliates may:

- have had a previous role in arranging or providing financing to the subject entities;
- be a counterparty in any subsequent transaction in connection with the subject entities; or
- (iii) pay, or may have paid, or receive, or may have received, onetime or recurring remuneration from the entities specified in this material, as part of its/their compensation. These payments may be paid to or received from third parties.

Credit Suisse and/or its affiliates (including their respective officers, directors and employees) may be, or may have been, involved in other transactions with the subject entities specified in this material or other parties specified in this material which are not disclosed in this material. Credit Suisse, for itself and on behalf of each of its affiliates, reserves the right to, provide and continue to provide services, and deal and continue to deal with the subject entities of the products specified in this material or other parties in connection with any product specified in this material. Credit Suisse or its affiliates may also hold, or may be holding, trading positions in the share capital of any of the subject entities specified in this material.

For all, except accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: A Credit Suisse affiliate may have acted upon the information and analysis contained in this material before being made available to the recipient. A Credit Suisse affiliate may, to the extent permitted by law, participate or invest in other financing transactions with the issuer of any securities referred to herein, perform services or solicit business from such issuers, or have a position or effect transactions in the securities or options thereof. To the fullest extent permitted by law, Credit Suisse and its affiliates and each of their respective directors, employees and consultants do not accept any liability arising from an error or omission in this material or for any direct, indirect, incidental, specific or consequential loss and/or damage suffered by the recipient of this material or any other person from the use of or reliance on the information set out in this material. None of Credit Suisse or its affiliates (or their respective directors, officers, employees or advisers) makes any warranty or representation as to the accuracy, reliability and/or completeness of the information set out in this material. The information contained in this material has been provided as a general market commentary only and does not constitute any form of regulated financial advice, legal, tax or other regulated service. Observations and views contained in this material may be different from, or inconsistent with, the observations and views of Credit Suisse's Research analysts, other divisions or the proprietary positions of Credit Suisse. Credit Suisse is under no obligation to update, notify or provide any additional information to any person if Credit Suisse becomes aware of any inaccuracy, incompleteness or change in the information contained in the material. To the extent that this material contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Past performance is not a reliable indicator of future performance.

For accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: A Credit Suisse affiliate

may have acted upon the information and analysis contained in this material before being made available to the recipient. A Credit Suisse affiliate may, to the extent permitted by law, participate or invest in other financing transactions with the issuer of any securities referred to herein, perform services or solicit business from such issuers, or have a position or effect transactions in the securities or options thereof. To the fullest extent permitted by law, Credit Suisse and its affiliates and each of their respective directors, employees and consultants do not accept any liability arising from an error or omission in this material or for any direct, indirect, incidental, specific or consequential loss and/or damage suffered by the recipient of this material or any other person from the use of or reliance on the information set out in this material. None of Credit Suisse or its affiliates (or their respective directors, officers, employees or advisers) makes any warranty or representation as to the accuracy, reliability and/ or completeness of the information set out in this material. The information contained in this material has been provided as a general market commentary only and does not constitute any form of legal, tax or other regulated service. Observations and views contained in this material may be different from, or inconsistent with, the observations and views of Credit Suisse's Research analysts, other divisions or the proprietary positions of Credit Suisse. Credit Suisse is under no obligation to update, notify or provide any additional information to any person if Credit Suisse becomes aware of any inaccuracy, incompleteness or change in the information contained in the material. To the extent that this material contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Past performance is not a reliable indicator of future performance. For all: This material is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of, or is located in, any jurisdiction where such distribution, publication, availability or use would be contrary to applicable law or regulation, or which would subject Credit Suisse and/or its subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction. Materials have been furnished to the recipient and should not be redistributed without the express prior written consent of Credit Suisse. For further information, please contact your Relationship Manager. To the extent that this material contains an appendix comprising research reports, the following additional notice applies to such appendix.

### ADDITIONAL IMPORTANT NOTICE FOR APPENDIX

The reports in the Appendix ("Reports") have been authored by members of the Credit Suisse Research department, and the information and opinions expressed therein were as of the date of writing and are subject to change without notice. Views expressed in respect of a particular security in the Reports may be different from, or inconsistent with, the observations and views of the Credit Suisse Research department of the Investment Banking division due to the differences in evaluation criteria. These Reports have been previously published by Credit Suisse Research on the web:

Credit Suisse does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Credit Suisse may have a conflict of interest that could affect the objectivity of these Reports.

For all, except accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: Credit Suisse may not have taken any steps to ensure that the securities referred to in these Reports are suitable for any particular investor. Credit Suisse will not treat recipients of the Reports as its customers by virtue of their receiving the Reports. For accounts managed by relationship managers and/or investment consultants of Credit Suisse AG, Hong Kong Branch: Credit Suisse may not have taken any steps to ensure that the securities referred to in these Reports are appropriate for any particular investor. Credit Suisse will not treat recipients of the Reports as its customers by virtue of their receiving the Reports. For all: For a discussion of the risks of investing in the securities mentioned in the Reports, please refer to the following Internet link: <a href="https://investment.credit-suisse.com/re/riskdisclosure/">https://investment.credit-suisse.com/re/riskdisclosure/</a>

For information regarding disclosure information on Credit Suisse Investment Banking rated companies mentioned in this report, please refer to the Investment Banking division disclosure site at: https://rave.credit-suisse.com/disclosures/

For further information, including disclosures with respect to any other issuers, please refer to the Credit Suisse Global Research Disclosure site at: <a href="https://www.credit-suisse.com/disclosure/">https://www.credit-suisse.com/disclosure/</a>

AUSTRALIA This material is distributed in Australia by Credit Suisse AG, Sydney Branch solely for information purposes only to persons who are

"wholesale clients" (as defined by section 761G(7) of the Corporations Act). Credit Suisse AG, Sydney Branch does not guarantee the performance of, nor make any assurances with respect to the performance of any financial product referred herein. In Australia, Credit Suisse Group entities, other than Credit Suisse AG, Sydney Branch, are not authorized deposit-taking institutions for the purposes of the Banking Act 1959 (Cth.) and their obligations do not represent deposits or other liabilities of Credit Suisse AG, Sydney Branch. Credit Suisse AG, Sydney Branch does not guarantee or otherwise provide assurance in respect of the obligations of such Credit Suisse entities or the funds. HONG KONG: This material is distributed in Hong Kong by Credit Suisse AG, Hong Kong Branch, an Authorized Institution regulated by the Hong Kong Monetary Authority and a Registered Institution regulated by the Securities and Futures Commission, and was prepared in compliance with section 16 of the "Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission." The contents of this material have not been reviewed by any regulatory authority in Hong Kong. You are advised to exercise caution in relation to any offer. If you are in any doubt about any of the contents of this material, you should obtain independent professional advice. No one may have issued or had in its possession for the purposes of issue, or issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or material relating to this product, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than where this product is or is intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong and any rules made thereunder. SINGAPORE: This material is distributed in Singapore by Credit Suisse AG, Singapore Branch, which is licensed by the Monetary Authority of Singapore under the Banking Act (Cap. 19) to carry on banking business. This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations ("FAR")) only. Credit Suisse AG, Singapore Branch may distribute reports produced by its foreign entities or affiliates pursuant to an arrangement under Regulation 32C of the FAR. Singapore recipients should contact Credit Suisse AG, Singapore Branch at +65-6212-2000 for matters arising from, or in connection with, this report. By virtue of your status as an institutional investor, accredited investor or expert investor, Credit Suisse AG, Singapore Branch is exempted from complying with certain requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the FAR and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore branch may provide to you. These include exemptions from complying with:

- (i) Section 25 of the FAA (pursuant to Regulation 33(1) of the FAR
- Section 27 of the FAA (pursuant to Regulation 34(1) of the FAR); and
- (iii) Section 36 of the FAA (pursuant to Regulation 35(1) of the FAR).

Singapore recipients should contact Credit Suisse AG, Singapore Branch for any matters arising from, or in connection with, this material. If you have any queries/objections relating to the receipt of marketing materials from us, please contact our Data Protection Officer at <a href="mailto:dataprotectionof-ficer.pb@credit-suisse.com">dataprotectionof-ficer.pb@credit-suisse.com</a> (for Credit Suisse AG, HK Branch) or <a href="mailto:PDPO.SGD@credit-suisse.com">PDPO.SGD@credit-suisse.com</a> (for Credit Suisse AG, SG Branch) or <a href="mailto:csau.privacyofficer@credit-suisse.com">csau.privacyofficer@credit-suisse.com</a> (for Credit Suisse AG, Sydney Branch).

The entire contents of this document are protected by copyright law (all rights reserved). This document or any part thereof may not be reproduced, transmitted (electronically or otherwise), altered or used for public or commercial purposes, without the prior written permission of Credit Suisse. © 2022, Credit Suisse Group AG and/or its affiliates. All rights reserved. Credit Suisse AG (Unique Entity Number in Singapore: S73FC2261L) is incorporated in Switzerland with limited liability.

22C014A\_IS

# Other publications from Credit Suisse

# Residential appeal from a financial perspective: the most affordable places to live

Life in Switzerland does not cost the same everywhere. Based on more than 120,000 sample households covering every municipality in Switzerland, the study analyzes freely disposable income – i.e. the amount of household income left over for discretionary spending or saving after subtracting non-discretionary expenses and fixed costs. (credit-suisse.com/rdi)

May 25, 2021

# Tax Monitor Switzerland 2022: Tax burden of legal entities and private individuals

The Tax Monitor Switzerland measures the tax appeal of locations for legal entities and private individuals, analyzing not just the capitals of the cantons but all Swiss municipalities. Tax on capital is taken into account in addition to corporate income tax; for private individuals, wealth tax is considered in addition to income tax.

(credit-suisse.com/taxmonitor)

June 30, 2022

# Monitor Switzerland Q3 2022

The Monitor Switzerland contains analysis and forecasts for the Swiss economy.

(credit-suisse.com/monitorswitzerland)

September 13, 2022

# Swiss Real Estate Monitor Q3 2022

The Real Estate Monitor provides an update on all market developments related to the real estate sector three times a year, thereby supplementing the fundamental analyses and special topics addressed in the annual Credit Suisse Real Estate Study.

(credit-suisse.com/realestatemonitor)

September 29, 2022



# **CREDIT SUISSE**

Investment Solutions & Sustainability PO box 300 CH-8070 Zurich

credit-suisse.com