Universal Commercial Banks
Switzerland

Credit Suisse Group AG

Update

Key Rating Drivers

UBS Acquisition: Credit Suisse Group AG's Rating Watch Evolving (RWE) status reflects the heightened likelihood that the ratings will be upgraded if the bank's merger with UBS Group AG proceeds as planned, because the resulting business combination is likely to result in improvements to Credit Suisse's franchise and business model, risk management, and funding and liquidity profiles. UBS expects the transaction to close in 2Q23. The RWE status also signals the risk of a downgrade should the transaction fail.

Liquidity Support: The Issuer Default Ratings (IDRs) of Credit Suisse and its subsidiary, Credit Suisse AG (CSAG), are above their respective Viability Ratings (VRs) to reflect the group's access to extraordinary central bank liquidity support until and following the UBS transaction, when liquidity support from UBS will also become available.

This means the default risk for senior creditors is lower than the risk reflected in the VRs. The Swiss National Bank has made CHF250 billion liquidity lines available, of which CHF200 billion does not require the bank to post collateral.

Higher Rating at Operating Company: The Long-Term IDR of CSAG, the group's main operating company, is one notch above the group's IDR to reflect the additional protection offered to its external senior creditors by existing buffers of subordinated debt issued by the holding company.

Acquisition to Improve Business Profile: Credit Suisse and CSAG's 'b' VRs are below the 'bb+' implied VRs, as the group's business profile, which Fitch Ratings believes has weakened substantially, has a strong impact on the VRs.

The RWE reflects Fitch's view that the planned acquisition by UBS should strengthen the group's business profile, and the risk of a further weakening if the transaction does not go ahead. The VRs were downgraded to 'f' before being upgraded to 'b' to reflect Fitch's view that the extraordinary support provided to Credit Suisse was required to restore its viability.

Strengthened Capitalisation: Credit Suisse reported a common equity Tier 1 ratio (CET1) of 20.3% at end-1Q23 (end-2022: 14.1%) as a result of the write-down of AT1 instruments. The increased capital provides a buffer during a period in which Fitch expects performance to remain extremely weak, as improvement is unlikely until its integration with UBS.

No Long-Term Government Support: The Government Support Ratings of Credit Suisse and CSAG reflect our view that full capital support for all senior creditors cannot be assumed in the long term after the group received extraordinary support in the form of central bank liquidity.

Ratings

Foreign Currency
Long-Term IDR BBB
Short-Term IDR F2
Viability Rating b

Sovereign Risk (Switzerland)

Government Support Rating

Long-Term Foreign-Currency IDR AAA Long-Term Local-Currency IDR AAA Country Ceiling AAA

Watches

Long-Term Foreign-Currency IDR Evolving
Short-Term Foreign-Currency
IDR
Viability Rating
Evolving
Evolving

Outlooks

Sovereign Long-Term Foreign-Currency IDR

Sovereign Long-Term Local-Currency IDR

Stable

Applicable Criteria

Non-Bank Financial Institutions Rating Criteria (May 2023)

Bank Rating Criteria (September 2022)

Related Research

Fitch Places Credit Suisse Group and Subsidiaries on Rating Watch Evolving on Merger (March 2023)

Credit Suisse Losses Highlight Challenges to Restructuring (February 2023)

Large European Banks Quarterly Credit Tracker – March 2023 (March 2023)

Western European Banking Sector Outlooks Mixed for 2023 (December 2022)

Analysts

Roderic Finn +44 20 3530 1139 roderic.finn@fitchratings.com

Patrick Rioual +33 1 44 29 91 21 patrick.rioual@fitchratings.com



Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

The IDRs and VRs are likely to be downgraded if the acquisition by UBS does not proceed. The ratings would also come under pressure if liquidity deteriorates, which we do not expect, given the group's access to central bank funding, or if there is evidence of reduced fungibility of intra-group liquidity.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

The acquisition by UBS will result in an upgrade once ordinary and extraordinary support from UBS is in place. Fitch is likely to assign group VRs to the operating companies of Credit Suisse and UBS when the groups' entities become increasingly integrated.

Other Debt and Issuer Ratings

Debt Rating Classes

Rating level	Credit Suisse	CSAG	Credit Suisse International	Credit Suisse (Deutschland) AG
Deposits				BBB+ RWE/F2 RWE
Senior unsecured debt	BBB RWE/F2 RWEa	BBB+ RWE/F2 RWE	BBB+ RWE/F2 RWE	
Tier 2 subordinated deb	t	BB+ RWE		
Additional Tier 1 debt	С			

^a Including debt issued by Credit Suisse Group Funding (Guernsey) Ltd Source: Fitch Ratings

Senior unsecured debt is rated in line with the respective issuing entities' IDRs. Senior unsecured debt issued by Credit Suisse Group Funding (Guernsey) Limited and guaranteed by Credit Suisse is rated in line with the guarantor's IDR.

CSAG's Derivative Counterparty Rating (DCR) is at the same level as its Long-Term IDR, because derivative counterparties in Switzerland have no definitive preferential status over other senior obligations in a resolution.

CSAG's subordinated Tier 2 debt is rated three notches below its Long-Term IDR (instead of the previous two notches below its VR, which is Fitch's baseline notching for this type of debt). The change in the anchor rating reflects Fitch's view that CSAG's access to extraordinary liquidity support reduces the risk of non-performance of the Tier 2 instruments as it has improved the prospects for the bank to continue operations until its acquisition by UBS. The rating is notched three times from the anchor rating to reflect poor recovery prospects in case of non-performance (two notches) and moderately higher non-performance risk relative to the risks captured in the Long-Term IDR (one notch) of support not being extended to the Tier 2 debt, given the recent precedent with the write off of AT1 instruments issued by Credit Suisse.

Credit Suisse's additional Tier 1 (AT1) debt ratings have been downgraded to 'C' following the decision by the Swiss regulator that the nominal value of these instruments should be written down to zero.

Significant Changes from Last Review

UBS has indicated that it expects the merger with Credit Suisse, announced on 19 March, to close in 2Q23, when the holding companies will merge into UBS Group AG and the combined entity will operate as a consolidated banking group. The respective businesses will continue to operate independently for the foreseeable future, with full integration expected to occur in a phased manner over the coming years. Credit Suisse has re-segmented its results from 1Q23 into its Core Unit (incorporating the Wealth Management, Swiss Bank, Asset Management and Investment Bank divisions) and its Capital Release Unit (CRU).

Fitch expects the merger to help to stabilise Credit Suisse's franchise and business model, whilst the full integration is completed. However, the group expects to report substantial losses in 2Q23 and 2023, with the scale of losses dependent on the operating performance in a challenging environment as well as the impact of asset outflows, restructuring related costs and further NCU asset disposals. We also expect further client attrition following the merger – albeit at lower levels than in 1Q23 as clients seek to maintain diversified banking and wealth-management relationships.

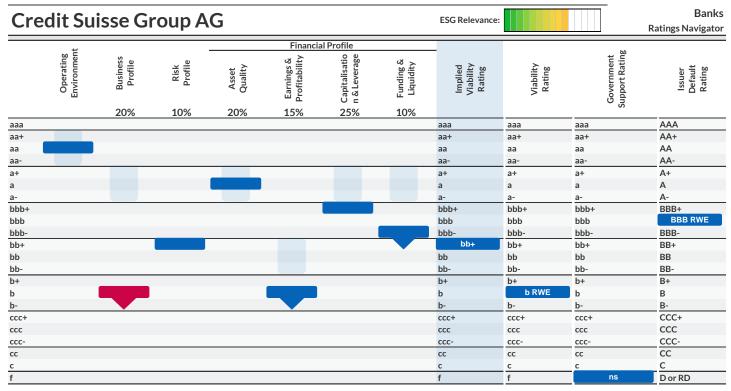


The group reported an adjusted pre-tax loss of CHF1.3 billion in 1Q23 (4Q22: CHF1 billion), which excluded a CHF15 billion gain on the write off of the Additional Tier 1 (AT1) notes and a CHF1.3 billion write off of residual goodwill in the Wealth Management business due to a reduction in fair value following asset outflows in 1Q23. Adjusted net-revenues were down 8% qoq due to negative net revenues in the CRU, which more than offset a 3% increase in Core revenues as the investment bank recovered from a very weak performance in 4Q22.

Deposit outflows accelerated in mid-March when fears around the US banking sector spread to Credit Suisse, with deposits declining by a further 29% in 1Q23 to CHF166 billion. The emergency liquidity assistance provided by the SNB helped to stabilise the group's liquidity position, with net borrowings of CHF108 billion at end-1Q23 after repayments of CHF60 billion during the quarter. The three-month average liquidity coverage ratio improved significantly to 178% (end-2022: 144%). The group will continue to benefit from access to central bank liquidity support and will also have access to liquidity support from UBS when the merger has closed.

Asset outflows accelerated in the weeks prior to the announcement of the UBS deal, reaching CHF61 billion for 1Q23, with CHF47 billion in Wealth Management, CHF6.9 billion in the Swiss Bank, and CHF11.6 billion in Asset Management – with aggregate assets under management down to CHF1.25 trillion (end-2021: CHF1.6 trillion).

Ratings Navigator



The Key Rating Driver (KRD) weightings used to determine the implied VR are shown as percentages at the top. In cases where the implied VR is adjusted upwards or downwards to arrive at the VR, the KRD associated with the adjustment reason is highlighted in red. The shaded areas indicate the benchmark-implied scores for each KRD.

VR - Adjustments to Key Rating Drivers

The 'b' VRs of Credit Suisse and CSAG are below the 'bb+' implied VRs due to the following adjustment reason: business profile (negative).

The 'b' business profile scores of Credit Suisse and CSAG are below the 'a' category implied scores due to the following reason: strategy and execution (negative).

The 'b' earnings and profitability score of Credit Suisse and CSAG are below the 'bb' category implied scores due to the following reason: historical & future metrics (negative).

The 'bbb+' capitalisation and leverage score of Credit Suisse and CSAG are below the 'a' category implied score due to the following reason: internal capital generation and growth (negative)

The 'bbb-' funding and liquidity score of Credit Suisse and CSAG are below the 'a' category implied score due to the following reason: liquidity access and ordinary support (negative).



Financials

Financial Statements

	31 Ma	r 23	31 Dec 22	31 Dec 21	31 Dec 20	31 Dec 19	
	3 months - 1st	3 months - 1st				Year end	
	quarter	quarter	Year end	Year end	Year end		
	(USDm)	(CHFm)	(CHFm)	(CHFm)	(CHFm)	(CHFm)	
	Not disclosed	Not disclosed	Audited - unqualified	Audited - unqualified	Audited - unqualified	Audited - unqualified	
Summary income statement							
Net interest and dividend income	981	900	5,341	5,811	5,948	7,017	
Net fees and commissions	1,663	1,526	7,841	11,922	10,597	9,882	
Other operating income	109	100	983	3,049	4,315	3,235	
Total operating income	2,754	2,526	14,165	20,782	20,860	20,134	
Operating costs	4,131	3,790	16,595	16,225	16,519	16,056	
Pre-impairment operating profit	-1,378	-1,264	-2,430	4,557	4,341	4,078	
Loan and other impairment charges	90	83	16	4,205	1,096	324	
Operating profit	-1,468	-1,347	-2,446	352	3,245	3,754	
Other non-operating items (net)	15,382	14,111	-812	-952	222	966	
Tax	376	345	4,048	1,026	801	1,295	
Net income	13,538	12,419	-7,306	-1,626	2,666	3,425	
Other comprehensive income	n.a.	n.a.	n.a.	1,830	-2,887	-2,222	
Fitch comprehensive income	13,538	12,419	-7,306	204	-221	1,203	
Summary balance sheet	·	<u> </u>		<u>. </u>			
Assets							
Gross loans	284,977	261,424	265,528	292,983	293,444	297,725	
- Of which impaired	n.a.	n.a.	3,424	2,767	3,197	2,126	
Loan loss allowances	n.a.	n.a.	1,363	1,297	1,536	946	
Net loans	284,977	261,424	264,165	291,686	291,908	296,779	
Interbank	475	436	455	1,323	1,298	741	
Derivatives	n.a.	n.a.	n.a.	17,771	25,662	17,914	
Other securities and earning assets	132,028	121,116	134,473	219,327	280,859	298,892	
Total earning assets	417,481	382,976	399,093	530,107	599,727	614,326	
Cash and due from banks	118,879	109,054	68,478	164,818	139,112	101,879	
Other assets	52,609	48,261	63,787	60,908	80,126	71,090	
Total assets	588,969	540,291	531,358	755,833	818,965	787,295	
Liabilities							
Customer deposits	180,921	165,968	233,235	392,819	390,921	383,783	
Interbank and other short-term funding	148,047	135,811	47,577	88,649	125,058	112,881	
Other long-term funding	164,889	151,261	157,235	151,052	145,246	138,988	
Trading liabilities and derivatives	16,349	14,998	18,338	27,545	45,916	38,234	
Total funding and derivatives	510,207	468,038	456,385	660,065	707,141	673,886	
Other liabilities	19,622	18,000	29,642	35,694	53,042	56,678	
Preference shares and hybrid capital	n.a.	n.a.	n.a.	15,844	15,841	13,017	
Total equity	59,141	54,253	45,331	44,230	42,941	43,714	
Total liabilities and equity	588,969	540,291	531,358	755,833	818,965	787,295	
Exchange rate	· · ·	USD1=	USD1 =	USD1 =	USD1 = CHF0.88985	USD1 = CHF0.97165	
Source: Fitch Ratings, Fitch Solutions		CHF0.91735	CHF0.9303	CHF0.9202	CHF0.88985	C	



Key Ratios

	31 Mar 23	31 Dec 22	31 Dec 21	31 Dec 20	31 Dec 19
Ratios (annualised as appropriate)		•	·		
Profitability					
Operating profit/risk-weighted assets	-2.2	-1.0	0.1	1.2	1.3
Net interest income/average earning assets	0.9	1.1	1.0	1.0	1.1
Non-interest expense/gross revenue	150.0	117.2	78.3	78.3	80.7
Net income/average equity	101.2	-16.3	-3.7	5.8	7.8
Asset quality					
Impaired loans ratio	n.a.	1.3	0.9	1.1	0.7
Growth in gross loans	-1.6	-9.4	-0.2	-1.4	3.2
Loan loss allowances/impaired loans	n.a.	39.8	46.9	48.1	44.5
Loan impairment charges/average gross loans	0.1	0.0	0.0	0.3	0.1
Capitalisation		·	<u> </u>	<u> </u>	
Common equity Tier 1 ratio	20.3	14.1	14.4	12.9	12.7
Tangible common equity/tangible assets	9.7	8.0	4.6	4.1	4.8
Basel leverage ratio	7.6	7.7	6.1	6.4	5.5
Net impaired loans/common equity Tier ¹	n.a.	5.8	3.8	4.7	3.2
Funding and liquidity					
Gross loans/customer deposits	157.5	113.9	74.6	75.1	77.6
Liquidity coverage ratio	178.0	144.0	203.0	190.0	198.0
Customer deposits/total non-equity funding	35.5	51.1	59.1	55.4	57.0
Net stable funding ratio	108.0	117.0	127.0	n.a.	n.a



Support Assessment

Typical D-SIB GSR for sovereign's rating level (assuming high propensity)	a+ to a-
Actual jurisdiction D-SIB GSR	ns
Government Support Rating	ns
Government ability to support D-SIBs	
Sovereign Rating	AAA/ Stable
Size of banking system	Negative
Structure of banking system	Negative
Sovereign financial flexibility (for rating level)	Neutral
Government propensity to support D-SIBs	
Resolution legislation	Negative
Support stance	Negative
Government propensity to support bank	
Systemic importance	Neutral
Liability structure	Neutral
,	

CSG's and CSAG's GSRs of 'ns' reflect our view that senior creditors of both the holding company and the operating bank can no longer rely on receiving full extraordinary support from the sovereign if the group becomes non-viable. CSG has issued material amounts of loss-absorbing capital, including senior debt issued by the holding company, and Swiss legislation and regulation includes provisions to bail in senior creditors in case of bank failure.



Subsidiaries and Affiliates

Ratings of Main Legal Entities

	Credit					
Rating level	Suisse	CSAG	CS Schweiz	CSI	CSBE	CSD
Long-Term IDR	BBB RWE	BBB+ RWE	A- RWE	BBB+ RWE	BBB+ RWE	BBB+ RWE
Short-Term IDR	F2 RWE	F2 RWE	F1 RWE	F2 RWE	F2 RWE	F2 RWE
Viability Rating	b RWE	b RWE	bb RWE	-	-	-
Government Support	ns	ns	-	-	-	-
Shareholder Support	-	-	bbb+ RWE	bbb+ RWE	bbb+ RWE	bbb+ RWE
Derivative Counterparty Rating	-	BBB+(dcr) RWE	A-(dcr) RWE	BBB+(dcr) RWE	BBB+(dcr) RWE	-

Source: Fitch Ratings

Credit Suisse (Schweiz) AG (CS Schweiz)

This subsidiary of CSAG houses the group's domestic retail- and commercial-banking and wealth-management activities. CS Schweiz's 'bb' VR is below its 'bbb' implied VR, as the bank's business profile, which Fitch views as linked to that of its parent, has a strong impact on the VR.

The RWE reflects Fitch's view that the planned acquisition by UBS should strengthen the business profile, and the risk of a further weakening if the transaction does not go ahead. The VR was downgraded to 'f' before being upgraded to 'bb' to reflect Fitch's view that the extraordinary support provided to the group was required to restore its viability.

IDR Above VR

Credit Suisse (Schweiz) AG's (CS Schweiz) Long-Term IDR is above its VR to reflect access to extraordinary central bank liquidity support. The Long-Term IDR also reflects significant buffers of junior and internal bail-in debt that offer protection to senior creditors in case of the bank's failure. The DCR is at the same level as the Long-Term IDR, because derivative counterparties in Switzerland have no definitive preferential status over other senior obligations in a resolution.

Strong Support from Parent

CS Schweiz's Shareholder Support Rating (SSR) is equalised with CSAG's Long-Term IDR. This reflects our view of support from the parent based on the entity being an integral part of CSAG.

Other Subsidiaries

Credit Suisse International (CSI, based in the UK), Credit Suisse (Deutschland) AG (CSD, based in Germany), and Credit Suisse Bank (Europe) S.A. (CSBE, based in Spain), are wholly-owned subsidiaries of CSAG. Credit Suisse (USA), Inc. (CSUSA) is a US holding company directly held by Credit Suisse Holdings (USA), Inc., the group's US intermediate holding company, which is in turn owned by CSAG.

Their SSRs and IDRs are equalised with CSAG's IDRs and reflect our view that the entities are extremely likely to be supported by the parent in case of need. We view these entities as integral to the group's business and a failure of these subsidiaries would hamper CSAG's ability to operate.

Credit Suisse NY (New York Branch)

The IDRs are at the same level as those of CSAG, because the branch is part of the same legal entity and in our view, there are no country risk restrictions. The alignment of the IDRs reflects our view that senior creditors of the branch would be treated identically to senior creditors of CSAG.

5

issues

Banks



Criteria Variations

FitchRatings

Fitch has determined that a criteria variation is applicable, because the Bank Rating Criteria does not explicitly contemplate assigning bank IDRs more than one notch above a bank's VR unless the VR is at very low levels. However, Fitch believes Credit Suisse will have access to extraordinary central bank liquidity support up to, and following, the UBS transaction, at which point liquidity support from UBS will also become available. This means the default risk for Credit Suisse's senior creditors is lower than the risk captured in the VR. This results in the group's Long-Term IDRs being assigned above the VRs.

Environmental, Social and Governance Considerations

Credit Suisse Group AG

Ratings Navigator Credit-Relevant ESG Derivation Overall ESG Scale Credit Suisse Group AG has 2 ESG rating drivers and 3 ESG potential rating drivers redit Suisse Group AG has exposure to operational implementation of strategy which, in combination with other factors, impacts the rating Credit Suisse Group AG has exposure to board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance 2 driver issues risks; business continuity, key person risk; related party transactions which, in combination with other factors, impacts the rating. Credit Suisse Group AG has exposure to compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) but this has very low impact on the rating. Credit Suisse Group AG has exposure to organizational structure; appropriateness relative to business model; opacity, intra-group dynamics; ownership but this has potential driver issues Credit Suisse Group AG has exposure to quality and frequency of financial reporting and auditing processes but this has very low impact on the rating.

Environmental (E)					
General Issues	E Score	e Sector-Specific Issues	Reference	E Scale	
GHG Emissions & Air Quality	1	n.a.	n.a.	5	How to Read This Page ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.
Energy Management	1	n.a.	n.a.	4	The Environmental (E), Social (S) and Governance (G) tables break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a
Water & Wastewater Management	1	n.a.	n.a.	3	particular industry group. Scores are assigned to each sector- specific issue. These scores signify the redit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.
Waste & Hazardous Materials Management; Ecological Impacts	1	n.a.	n.a.	2	The Credit-Relevant ESG Derivation table shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the
Exposure to Environmental Impacts	2	Impact of extreme weather events on assets and/or operations and corresponding risk appetite & management; catastrophe risk; credit concentrations	Business Profile (incl. Management & governance); Risk Profile; Asset Quality	1	left of the overall ESG score summarize the issuing entity's sub- component ESG scores. The box on the far left identifies some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5)
Social (S)					and provides a brief explanation for the score.
General Issues	S Score	e Sector-Specific Issues	Reference	S Scale	Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific
Human Rights, Community Relations, Access & Affordability	2	Services for underbanked and underserved communities: SME and community development programs; financial literacy programs	Business Profile (incl. Management & governance); Risk Profile	5	Section failings of iterial. The General issues and Section-specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI) and the Sustainability Accounting Standards Board (SASB).
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security)	Operating Environment; Business Profile (incl. Management & governance); Risk Profile	4	Sector references in the scale definitions below refer to Sector as displayed in the Sector Details box on page 1 of the navigator.
Labor Relations & Practices	2	Impact of labor negotiations, including board/employee compensation and composition	Business Profile (incl. Management & governance)	3	
Employee Wellbeing	1	n.a.	n.a.	2	
Exposure to Social Impacts	2	Shift in social or consumer preferences as a result of an institution's social positions, or social and/or political disapproval of core banking practices	Business Profile (incl. Management & governance); Financial Profile	1	
Governance (G)					CREDIT-RELEVANT ESG SCALE
General Issues	G Scor	e Sector-Specific Issues	Reference	G Scale	How relevant are E, S and G issues to the overall credit rating?
Management Strategy	4	Operational implementation of strategy	Business Profile (incl. Management & governance)	5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual

							overall credit rating?	
Management Strategy	4	Operational implementation of strategy	Business Profile (incl. Management & governance)	5		5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.	
Governance Structure	4		Business Profile (incl. Management & governance); Earnings & Profitability; Capitalisation & Leverage	4		4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.	
Group Structure	3	Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership	Business Profile (incl. Management & governance)	3		3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.	
Financial Transparency	3	Quality and frequency of financial reporting and auditing processes	Business Profile (incl. Management & governance)	2		2	Irrelevant to the entity rating but relevant to the sector.	
				1		1	Irrelevant to the entity rating and irrelevant to the sector.	



Credit Suisse and its subsidiaries have ESG Relevance Scores of '4' for governance structure and for management strategy due to the group's governance issues and challenges to the implementation of its strategy, which has a negative impact on the credit profile, and is relevant to the ratings in conjunction with other factors.

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.



For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA-or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information hey provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$1,500,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary fro

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2023 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.