Case Study #1: Credit Suisse and the Long Goodbye

Carolyn A. Wilkins, Griswold Center for Economic Policy Studies, Princeton University

"It's shocking to lose 167-year old bank in 72 hours."
- Oswald Gruebel, former Chief executor of both Credit Suisse and UBS

Credit Suisse, a global banking giant founded in 1856, collapsed in March 2023 following several years of scandals and underperformance. It was purchased by Swiss rival UBS for CHF 3 billion in a deal approved by Swiss regulators. The purpose of this case study is to better understand what led to the downfall, the rational for purchase versus resolution, and what needs to be done to reduce the risk of too big to fail in the future.

1) The rise of a prestigious giant

Credit Suisse was founded in 1856 by Alfred Escher, a Swiss industrialist and politician who wanted to use the bank to modernize the Swiss economy, including by issuing loans to fund the development of Switzerland's rail system and electrical grid.[1] Private railroad construction and other similar investments in industrialization were risky business at the time, which meant the bank had serious concentrations of risks and frequent losses in the early years. Still, it grew to become a highly-respected pillar of Switzerland's global financial center.

Over a century and a half later, Credit Suisse (CS) came out of the Global Financial Crisis (GFC) with minimal losses and its capital position intact.[2] This was unlike its Swiss rival and ultimate purchaser, Union Bank of Switzerland (UBS), which distinguished itself by being the most exposed non-US bank to real estate funds and derivatives markets. Net losses to UBS shareholders amounted to around CHF 20 billion in 2008, leading to the Swiss National Bank (SNB) stepping in to de-risk UBS's balance sheet and the Swiss Confederation to inject capital injection.[3]

Some former CS executives would claim that the very different fortunes of these two banks today may be in part the result of their post-crisis actions; UBS was forced to take actions to restore its balance sheet to health, while CS was willing to take more risks and put off dealing with any legacy issues (Financial Times 2023). Others felt the seeds of trouble were sown many years before when CS partnered with First Boston in 1978 and entered the world of global investment banking.

---

[1] It was originally called the "Schweizerische Kreditanstalt" (or SKA).
[2] CS had begun to pare back its exposures to the US subprime market in 2006 (see Luca Froelicher, "Credit Suisse began with a successful bet and ended with one that failed." March 28, 2023).
[3] For more information see https://www.ubs.com/global/en/our-firm/our-history/ubs-in-the-world/2008-2015.html

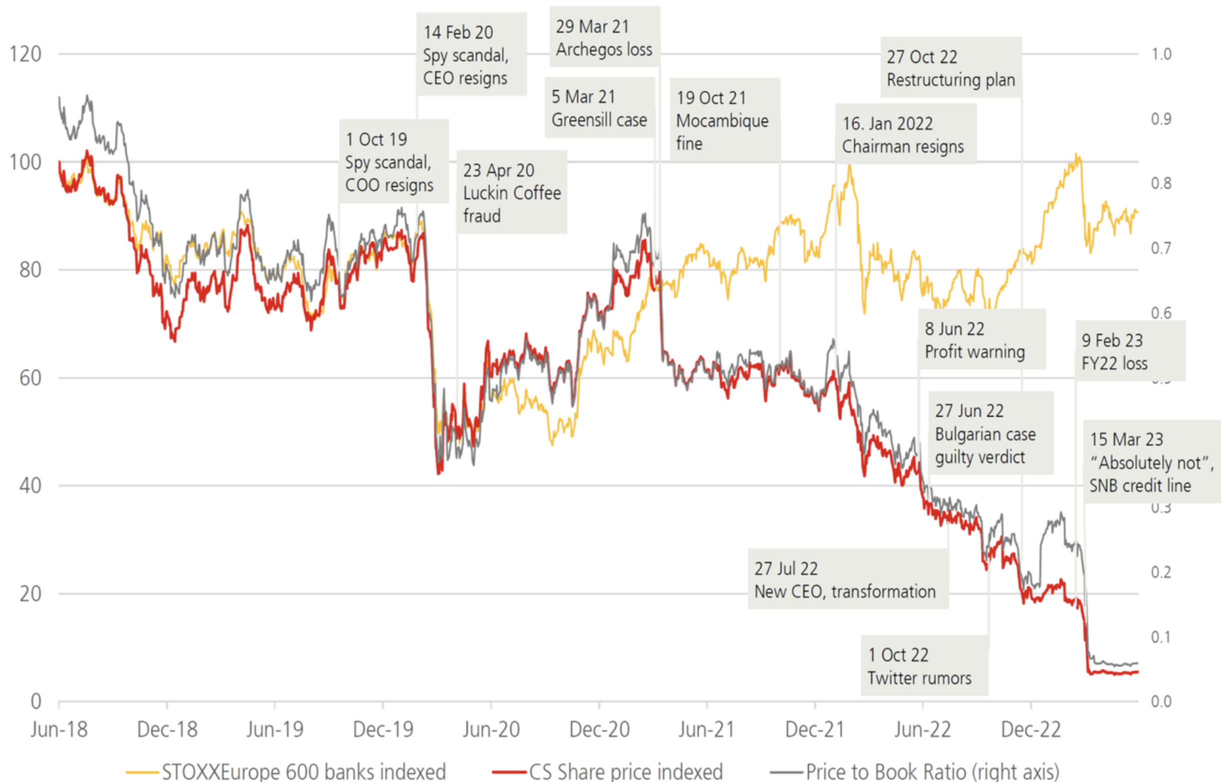
2) The crisis of confidence

Benjamin Franklin is quoted as having said "It takes many good deeds to build a good reputation, and only one bad one to lose it." While in the case of CS it's impossible to point to a single bad deed, a series of scandals and failures in risk management was clearly determinant to a total loss of investor confidence in their leadership and business model.

One misstep after another

Following the financial crisis, CS faced multiple, self-inflicted wounds including fines for helping customers evade taxes and money laundering, and revelations that a CS banker had forged client signatures in order to make investments without their consent. By 2019, CS executives were found to have organized and paid for services to spy on former employees and members of their own Board of Directors. FINMA, the main regulator of CS, published a report in 2021 that revealed this kind of activity breached supervisory law, and was not the product of only a few rogue employees, but rather serious failures of risk management and governance (FINMA 2021). This led CS CEO, Tidjane Thiam, to resign after 5 years at the helm.

Figure 1: Timeline of events that eroded confidence in Credit Suisse



Source: Lengwiler et al. "Global lessons from the demise of Credit Suisse, VOXEU and CEPR, 4 September 2023

This, unfortunately, was not the end of scandals, as shown in the timeline in Figure 1. In early 2021, the failure of finance firm Greensill Capital forced CS to close billions in group funds in which it had persuaded 1,000 of its wealthiest clients to invest.[4] Only a few weeks later, Archegos Capital, one of CS's prime brokerage clients, collapsed.[5] CS was left with a CHF 4.4 billion loss, and yet another shakeup in senior management. Even an *internal* report into the bank's failings later identified a fundamental failure of management and controls.

The new CEO, Thomas Gottstein, made a number of moves to strengthen CS, including exiting the prime brokerage business and merging its investment banking and trading units. These efforts turned out to be too little too late, and Gottstein resigned after a little more than 2 years as CEO. Following years of subpar performance and a falling stock price, CS posted a spectacularly negative return on equity in 2022 (-16.2%).

Serious outflows start in late 2023, with run in March 2024

Gottstein's replacement, Ulrich Korner, came out of the gate with his own restructuring plans and attempts to reassure investors that CS was in a strong financial position. His plan involved selling off much of the investment bank, and raising capital from mainly Middle Eastern investors. Before the plan could be executed, social media rumors arose regarding the financial health of CS that prompted clients to withdraw around CHF110 billion in the last quarter of 2022.[6]

Table 1: Credit Suisse's regulatory capital and liquidity positions were strong

	Q12023	Q42022	Reg. Min.
CET1	14.7%	14.6%	10%
CET1 + AT1 (going concern)	20.3%	19.9%	14.3%
TLAC (Going and gone concern)	40.2%	39.5%	28.6%
Liquidity Coverage Ratio	178%	144%	100%

Source: Lengwiler et al. "Global lessons from the demise of Credit Suisse, VOXEU and CEPR, 4 September 2023

CS wasn't able to successfully demonstrate the strength of its financial position because of yet more false steps. Early 2023, FINMA questioned the veracity of public comments made by the Chairman of the CS Board of Directors that the outflows had stopped.[7] The bank also announced a delay publication of its annual report (a day before it was set to be published!) after their external auditors (PwC) had spotted material weakness in its internal controls, and the US Securities and Exchange Commission had demanded more information. In the end, when the report was

[4] Greensill Capital was involved in "supply chain finance," in which supplier invoices are turned into short-term securities and put into funds (similar to MMFs) that are sold to investors. Reminiscent to asset-backed securitization, this structure was complex such that problems on Greensill's balance sheet were not easy to detect until they were forced to file for bankruptcy (New York Times 2021).
[5] Prime brokerage provides financing, custody, clearing and advisory services to hedge funds and institutional clients.
[6] Net asset outflows.
[7] The Chairman had told the Financial Times in an interview streamed online on Dec. 1 that after strong outflows in October, they had "completely flattened out" and "partially reversed".

published on 14 March, the actual withdrawals reported had exceeded expectations and it was clear that they continued into December (contrary to what the Board Chair had said). The bank also had to disclose it had "material weaknesses in internal controls over financial reporting" in 2021 and 2022.

It's therefore unsurprising that net asset outflows continued in Q12023 (-CHF 61.2 billion), with the unease amplified by the collapse of three US banks in the first half of March. The pace of outflows accelerated further following a statement on 15 March 2023 by the chair of the Saudi National Bank, Credit Suisse's single largest shareholder, that ruled out investing more in the group. CS stock fell another 30% on that day, while CDS spreads rose above 1,000 basis points.

…but didn't CS meet capital and liquidity requirements?

We can see from regulatory data that CS did indeed have sufficient regulatory capital and liquidity despite the turmoil, at least on paper (Table 1). For instance, CET1 was stable at almost 15% and going concern loss absorbency (CET1 + AT1) was around 20%, well above regulatory minimums. Similarly, liquidity ratios were way above the requirements, despite the dip in the fourth quarter 2022.

Nonetheless, by this point investors appeared to have lost faith that the strong liquidity and capital positions were real or would last. This worry was not totally unfounded, since for many years CS had not naturally accumulated capital through retentions. In contrast, since 2011 they had been compelled to raise capital on the market six times to manage events such as extraordinary losses, fines and costs of restructuring (FINMA 2023). That may have been in part why the Saudi National Bank Chair's statement was so consequential.

The regulator, FINMA, had also "observed the scandals, market price collapse, ratings erosion, soaring default risk premia, frequent management changes and unsustainable strategy" (Expert Group 2023). As a consequence, FINMA had imposed capital "add-ons." While capital was strong at the holding company level, but there were still worries about capital levels at the bank-group level.[8] Moreover, FINMA had difficulty getting any traction on many other supervisory expectations during the final months as CS management had a more optimistic view of their own future.

In a bid to assuage concerns, FINMA and the Swiss National Bank (SNB) issued a joint press release on 15 March in which FINMA confirmed that CS currently met their capital and liquidity requirements. The SNB also announced that it stood ready to provide emergency lending assistance (ELA) to any G-SIB (there were only two in Switzerland) needing assistance. This did not reassure investors and, with outflows continuing at an accelerating pace, the SNB would end up providing a total of CHF 168 billion over the next few days (Jordan 2023). Without this support, CS would have failed by noon Friday 18 March (FINMA 2023).

It's clear from reviews of what happened that FINMA should have better powers of regulation and supervision, including to impose early protective measures to help avoid a bank reaching the

[8] See FINMA 2023 for more on the issue of where capital is held and how it can flow in large banking conglomerates.

point of non-viability even if bank management and their board disagree. In their own post mortem, FINMA calls for a stronger legal basis for regulation and supervisions (FINMA 2023). This includes specific instruments such as the Senior Managers Regime (e.g., senior managers would need to be approved by FINMA before commencing work), the power to impose fines, publish completed enforcement proceedings, and more stringent rules regarding corporate governance. These powers and related instruments are available to authorities in other jurisdictions, such as the United Kingdom. FINMA also recognized the need to strengthen its supervisory approach in certain areas, and will step up its review of whether stabilization measures are ready to implement (FINMA 2023).

As discussed below, a review of the framework for liquidity assistance (lender of last resort) is also in order, particularly given the speed with which runs can occur in a digitalized financial system.

3) The marriage of convenience rather than resolution

The options to deal with the CS situation were limited to temporary public ownership, resolution or acquisition, particularly given the risks of bankruptcy of a G-SIB to the Swiss and global financial systems. In the end, on 19 March, it was announced that UBS had agreed to buy CS.

The deal

The transaction was structured as an all-share merger, where CS shareholders received UBS shares at a rate of 22.48 to 1. While this was a 60% haircut on the closing price for CS shares on the Friday before the deal was announced, many were surprised that CS shareholders were not written down completely, particularly given that the Swiss authorities had waived the need for CS board approval of the deal. There are nonetheless several reasons to leave shareholders some consideration in this type of transaction: avoid the risk of legal disputes, and foster shareholder support for the combined bank and cooperation of employees of the acquired firm (often also shareholders).

Box 1: Key terms of transaction

Transaction structure	All-share merger
Considerations	CHF 3 billion, which equaled CHF 0.75 per share Equates to 22.48 CS shares for 1 UBS share
Approvals	No shareholder approval needed (waived by Swiss authorities) Subject to regulatory approval outside of Switzerland
Governance	Combined group chairman: Colm Kelleher Combined group CEO: Ralph Hamers FINMA supervisor

Source: UBS 2023

UBS also received some protections in the deal. In particular, the Swiss government provided some loss protection whereby it would cover up to CHF 9 billion of losses on some assets after UBS had taken CHF 5 billion in. The SNB also provided liquidity to UBS to facilitate the takeover of CS operations. Finally, FINMA ordered the complete write down of all CS AT1 securities, amounting to CHF 16 billion, which was a significant boost to CS net worth.

This last move was considered to be very controversial, in most part because CS shareholders had not been written down completely. This generated considerable turbulence in AT1 markets globally, with fears that these markets would be damaged permanently although markets have since resumed "normal" functioning (Experts Group 2023).[9] A strict view of the terms and conditions of the CS AT1 securities suggests that FINMA was acting under its legal authorities and the fact that the AT1s could be subordinate to equity should have been clear (see Box 2). That said, this has led to legal challenges on behalf of some ATl investors.[10]

Box 2: What is AT1 and how does it work?

Additional Tier 1 capital securities were introduced after the 2008 crisis as a mechanism to help restore a stressed bank to financial health and thus avoid failure without public sector intervention (see FSB 2019 for more). It is a bond, with a fixed face amount that pays regular interest and so it looks rather familiar to investors. However, it differs from traditional bonds in two dimensions.

First, it is a perpetual, so the issuing band never has to pay it back, although they can if they so choose after 5 years (and they typically do).

Second, it can be written down to zero (just disappears), if the issuing bank's CET1 capital falls below a trigger point (7% in the case of Credit Suisse). Sometimes AT1s can be converted to equity or just stop paying interest until the bank restores its capital position, but this was not the case for Credit Suisse's AT1s). Some AT1s have clauses that allow the regulator to use discretion in the time of writing down an entity's AT1 securities. In the case of CSs AT1 securities, FINMA could use its discretion to zero out CSs AT1s if it was viewed as an "essential requirement to prevent CS from becoming insolvent."

This structure explicitly means that AT1 securities are junior to equity, by construction, and can take losses even though equity holders have not been wiped out (i.e., the trigger point is not zero equity). The figure below shows a stylized example of how writing down AT1 securities work to restore capital. The size of the AT1 market globally was around $260 billion at the time of the Credit Suisse failure.

Balance Sheet before AT1 write down

(millions of dollars)

Assets	Liabilities
1, 000	850 senior debt 50 AT1 100 equity (10% of assets)

Balance sheet after $50 million loss, and AT1 write down (millions of dollars)

Assets	Liabilities
950	850 senior debt 0 AT1 100 equity (10.5% of assets instead of 5% with no write down)

[9] The ECB and the Bank of England issued separate press releases to make it clear that this type of action would not occur in their jurisdictions.

[10] For instance, Pallas Partners LLP is currently coordinating proceedings that were issued on behalf of two large groups of Credit Suisse AT1 holders in Switzerland, executed as part of a broader litigation filed against the Swiss regulator FINMA (Pallas 2023)

Why not resolution?

This deal was brokered by Swiss authorities, who obviously had ultimately decided that resolution was very risky to execute (public ownership was even riskier).[11] CS was the first GSIB to face the prospect of resolution, which meant that there was no precedent despite the fact that resolution plans had been developed and rehearsed. While there hasn't yet been a detailed disclosure of the specifics of the risks with resolution that FINMA and other authorities weighed most highly in their decision, these are examples of some that have been mentioned:[12]

- *There wasn't enough time to execute.* The working assumption was that authorities would realize that the PONV was imminent two to four weeks ahead. This provided comfort that FINMA would have time to finalize resolution documents, and undertake the necessary coordination with foreign authorities. Given CS reached the PONV only days after alarm bells really started ringing, this obviously raised considerable execution risks. Clearly these working assumptions need to be revised in any new resolution plans.
- *Organizing the liquidity backstops injected uncertainty in the market*, and ate up valuable time that might have been used more productively. Given the size of the outflows in the last days, the SNB escalated from usual emergency lending (ELA, backed by regular collateral), to emergency lending backed by preferential rights in any bankruptcy proceeding (ELA+), and then to a Public Liquidity Backstop (PLA, backed by a government guarantee that required emergency legislation). This suggests that the lender of last resort framework should be reviewed with the objective of providing a more reliable backstop in times of escalating difficulty. This could include pre-positioning of collateral, more seamless transition from central bank liquidity that is collateralized and that with is backed my government guarantees (G30, 2024). It also suggests thinking through liquidity requirements for banks given how quickly runs can materialize, particularly given digitalization (Jordan, 2023).
- *Risks to the public purse were viewed as being high if the resolution did not restore the bank to health, but rather resulted in large losses.* This is despite the fact that CS would have had as much as CHF 73 billion in loss absorbing capacity coming from a combination of AT1 and bail-in bonds, giving room to maneuver during resolution (Experts Group 2023). FINMA's ultimate decision to prefer a merger gone-concern capital raises the question as to whether gone-concern capital is set at a high enough level.

As a result, a main pillar of the reforms following the Global Financial Crisis (GFC) to safely resolve financial institutions that are "too big to fail" has *not* been tested. Furthermore, it raises significant doubts as to whether an orderly resolution of a G-SIB is possible without significant public support. Reviewing resolution regimes is understandably now a major focus for not only Swiss authorities, but also international authorities (BCBS 2023 and FSB 2023).

[11] Bank resolution is the restructuring of a bank by a resolution authority (in this case, FINMA). The goal is to safeguard public interests (including costs to taxpayers) by ensuring continued functioning of the bank's critical functions (e.g., clients still have access to their deposits and banking services) and safeguarding financial stability.
[12] See FINMA (2023) and Experts Group (2023) for more discussion.

4) Discussion questions:

i. *What factors led to CSs failure even as it had adequate capital and liquidity (according to its regulator FINMA) as late as 15 March 2023?*

ii. *What could the Board of Directors and management of CS have done to avoid the collapse?*

iii. *What factors about the structure of regulation and supervision of CS might have contributed to the problems with CS remaining unmitigated? How could it be strengthened?*

iv. *Why did the Swiss authorities opt for sale to UBS instead of using the resolution regime? Was this a good choice or not, and why?*

v. *Did UBS get a good deal and what do they need to do to make it successful?*

vi. *How might the decision to not completely write down CS shareholders before converting AT1 bonds affect the market for these instruments in the future? Are AT1 bonds suitable as a going-concern buffer?*

vii. *To what extent do you think it's possible to resolve a G-SIB, and what changes to the regime are needed?*

References:

Axhelm, Min. "Credit Suisse: A crisis of confidence," Endowus: Insights, March 2023 https://endowus.com/insights/credit-suisse-ubs

BCBS. "Report on the 2023 Banking Turmoil," October 2023

Expert Group on Banking Stability. " The need for reform after the demise of Credit Suisse, " 1 September 2023, https://too-big-to-fail.ch/wp-content/uploads/2023/09/Reformbedarf_EN_20230907.pdf

Financial Stability Board, "Review of the Technical Implantation of the Total Loss-Absorbing Capacity (TLAC) Standard, 2 July 2019

Financial Stability Board, "2023 Bank Failures," https://www.fsb.org/wp-content/uploads/P101023.pdf

Financial Times, "Credit Suisse: the rise and fall of the bank that built model Switzerland," March 24, 2023.

FINMA. "Lessons learned from the CS Crisis," https://www.finma.ch/en/~/media/finma/dokumente/dokumentencenter/myfinma/finma-publikationen/cs-bericht/20231219-finma-bericht-cs.pdf?sc_lang=en&hash=3F13A6D9398F2F55B90347A64E269F44 December 2023.

FINMA. " Credit Suisse observation activities: FINMA identifies serious breaches of supervisory law," Press Release, 20 October 2021.

G30. "Bank Failures and Contagion: Lender of Last Resort, Liquidity and Risk Management," January 2024, https://group30.org/images/uploads/publications/G30_Lessons-23-Crisis_RPT_Final.pdf

Jordan, Thomas, "The Swiss National Bank's role as lender of last resort in the crisis at Credit Swiss," November 2023, https://www.bis.org/review/r231102a.htm

Lengwiler et al. "Global lessons from the demise of Credit Suisse, VOXEU and CEPR, 4 September 2023

New York Times. "The Swift Collapse of a Company Built on Debt," 28 March 2021.

Pallas. https://pallasllp.com/journal/credit-suisse-at1-groups-represented-by-pallas-issue-proceedings-in-switzerland May 2023

UBS, "UBS history 2008-2015" **https://www.ubs.com/global/en/our-firm/our-history/ubs-in-the-world/2008-2015.html**

UBS, "UBS acquisition of Credit Suisse," 19 March 2023 file:///C:/Users/cw9142/Downloads/ubs-cs-presentation.pdf