# A Probe into the Underlying Causes of AT1 Bond Write-down Event of Credit Suisse

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**Abstract.** The Credit Suisse AT1 bond write-down has had a significant impact on the global bond market. Credit Suisse's own internal risks and external public pressure are the reasons for this incident. Investors should learn from this episode and consider more comprehensively when buying AT1 bonds.

**Keywords:** AT1 bond, Credit Suisse, Internal control risk

## 1. Introduction

On 19 March 2023, promoted by the Swiss Federal Government, UBS AG agreed to acquire Credit Suisse for 3 billion. In addition, Swiss National Bank and the federal government pledged to provide 100 billion Swiss francs in liquidity assistance and 9 billion Swiss francs in potential loss guarantees for the deal. Surprisingly, Swiss Financial Markets Supervisory Authority (FINMA) announced a full write-down of Credit Suisse surviving value of 16 billion Swiss francs and other tier-1 capital bonds (hereinafter referred to as the "AT1" bonds) to supplement the core capital. The move was at odds with the expectations of the market for equity "before bond write-down", causing a dump trend in the AT1 bond market. After the appeasement of some regulators, although the market sentiment had recovered, discussions centering around the AT1 bond write-down and such characteristics of bond risk continued. This article mainly discusses the reasons for the occurrence of this incident from the two aspects of Credit Suisse's internal risk and external public opinion pressure, and explains the aspects that investors and the market should pay attention to when buying AT1 bonds through analysis.

## 2. Introduction to AT1 bonds

### 2.1 Nature of AT1 bonds

AT1 bonds, as or having a form of contingent convertible bonds, can be used to absorb losses by banking regulation and supervision capital when a bank has a crisis. The liquidation order of AT1 bonds is generally after deposits, bank ordinary bonds and subordinated bonds before the common stock.

AT1 bonds are generated from banks' demand to replenish their capital. According to the Basel Accord, bank regulatory capital can be divided into core Tier-1 capital, other Tier-1 capital and Tier-2 capital, and banks should meet the capital adequacy ratio requirements at different levels. Among them, the lower core Tier -1 capital adequacy ratio is 4.5%, the lower Tier-1 capital adequacy ratio is 6%, and the lower capital adequacy ratio is 8%. Core Tier-1 capital mainly includes equity items such as ordinary shares, retained earnings and other interests. In order to meet the requirements of the Tier-1 capital adequacy ratio and Tier-2 capital adequacy ratio, banks can issue other Tier-1 capital instruments and Tier-2 capital instruments to supplement the amount of regulatory capital at the corresponding level. AT1 bonds are mainly used to supplement other Tier-1 capital and enhance the banks' ability to absorb losses.

### 2.2 Major characteristics of AT1 bonds

AT1 bonds have the following four characteristics. Firstly, they can be used for loss absorption. AT1 bonds are a capital instrument, and their important function is to absorb losses when the bank faces operating difficulties, mainly including bond write-down or equity conversion. In the AT1 bond clause, the loss absorption trigger event will be specified. When a loss absorption event is triggered (generally the issuer's capital adequacy ratio is below a certain threshold or an unviability event occurs), under the terms, the AT1 bond will be converted into the issuer's equity or written down in full. Secondly, it has perpetuity, that is, there is no fixed term, and there is no redemption incentive clause such as the interest rate jump. The bond issuer can choose whether to redeem or hold the AT1 bonds at maturity or continue according to the actual demand, but the choice of redemption needs to be subject to the approval of the relevant regulatory authorities. Thirdly, inferior quality. Inferior quality means that when the bank is liquidated, the order of repayment of the AT1 bonds lies after the junior debts of the depositor, the general creditors and the bank, and before the stock. Last but not least, it is non-cumulative. The issuer of AT1 bonds is free to decide to cancel the dividend in part or in full. The interest cancelled in the current period cannot be compensated in the future interest payment period and does not constitute a default.

This AT1 bonds write-down event was fermented precisely because investors lacked an understanding of the loss absorption characteristics and inferior quality of AT1 bonds. In fact, the loss absorption order of AT1 bonds is not the same as the repayment order in the bankruptcy liquidation stage. According to the prospectus for Credit Suisse's AT1 bonds (taking the $1.65 billion AT1 bond with a 9.75% coupon in 2022 as an example), the Write-down clause has two scenarios, and when either scenario is triggered, the AT1 bond will be automatically and permanently written down to zero.

The first scenario is a Contingency Event, which means that Credit Suisse's core tier 1 capital ratio is below the specified threshold. The second scenario, a Viability Event, would consist of two types: (1) when the regulator informs Credit Suisse that it has determined that the customary measures to enhance Credit Suisse's capital adequacy are inadequate or impracticable, and the bond write-down is to prevent Credit Suisse from becoming insolvent, bankrupt, unable to pay a substantial portion of its debt as it matures, or ceasing to carry on its business; Or (2) it is not sufficient or feasible to increase Credit Suisse's capital adequacy by customary measures, and Credit Suisse has received irrevocable commitments of Extraordinary Support from the public sector (beyond customary transactions and arrangements in the ordinary course) that have had or are about to have the effect of increasing Credit Suisse's capital adequacy, Without that promise of support, regulators would have deemed Credit Suisse insolvent, bankrupt, unable to pay most of its maturing debt or unable to conduct business. According to FINMA, in order to facilitate the completion of the UBS and Credit Suisse merger, the Swiss National Bank provided 100 billion francs in liquidity assistance and 9 billion francs in potential loss guarantees for the acquisition. It was this "exceptional support" that triggered the write-down clause on Credit Suisse's AT1 bonds[1].

# 3. The Reasons for Credit Suisse’s AT1 bond full write-down

## 3.1 Credit Suisse’s internal risk

As a comprehensive financial group, Credit Suisse has opened branches in more than 50 countries and regions around the world, providing a full range of financial services for the government, enterprises and individuals. Its business scope mainly includes investment banking, private banking, wealth management, asset management, etc. Balance sheet indicators and risk indicators in recent years show that Credit Suisse meets relevant regulatory requirements in terms of capital adequacy ratio, liquidity, and additional regulatory indicators of global systemically important banks (Credit Suisse's core Tier 1 capital adequacy ratio was 14.1% at the end of 2022). Nevertheless, there are substantial problems in corporate governance, and internal control and business models create huge risks.

### 3.1.1 Internal control risk

First and foremost, there were serious loopholes in the internal control system of Credit Suisse, leading to repeated mistakes in investment and operation. As a comprehensive financial institution with business around the world, Credit Suisse's aggressive investment strategy made it not only achieve a balance between risk and benefit, but even "unable to effectively detect and evaluate major risks", and caused continuous heavy losses in high-risk investment banking business. On March 14, at a sensitive time when the collapse of Silicon Valley banks continued to unfold, Credit Suisse revealed that it had found "significant defects" in its reporting procedures for fiscal 2022 and 2021 and was taking remedial measures. PWC, the auditor, "denied" the "effectiveness of internal control" of Credit Suisse's financial reporting process. In fact, as early as 2020, Credit Suisse had been involved in various scandals and operating losses constantly. In 2021, the supply chain company Greensill Capital which closely cooperated with Credit Suisse went bankrupt, causing the customers of Credit Suisse to lose $2.3 billion. Then in March, the hedge fund Archegos managed by Bill Hwang, known for "the largest one-day loss" from South Korea, crashed, losing more than $200 billion in 2 days. Previously, Bill Hwang and Credit Suisse conducted huge derivatives deals, and Credit Suisse offered him high but far beyond reasonable leverage, which was very risky. Credit Suisse did reap huge gains by trading with Bill Hwang until 2021, but it also led to a $5.5 billion loss when the market fell slightly in 2021. In 2022, Credit Suisse lost the trust of its customers and their funds continued to flee, losing about $140 billion in deposits in the fourth quarter alone. By the end of 2022, its credit spread soared to more than 300.

### 3.1.2 Data security crisis

Secondly, Credit Suisse neglected data security, ignoring the law and failing in its duty to protect customer information. As a bank known for its extremely secure confidentiality provisions after World War II, and has been engaged in the wealth management of high net worth individuals for a long time, Credit Suisse violated the strict Swiss banking confidentiality law and legal operation bottom line, and had repeated customer information leakage and money laundering incidents. In February 2022, information on more than 18,000 Credit Suisse accounts was leaked by an anonymous source to Sueddeutsche Zeitung and spread to 46 mainstream Western media outlets, followed by an investigation coordinated by the Organized Crime and Corruption Reporting Project (OCCRP), an international anti-graft organization, culminating in a series of reports called "Credit Suisse Secrets." Pointing to evidence that Credit Suisse account clients were involved in serious crimes. The accounts involved a total of 30,000 individuals and corporate entities (some accounts were jointly controlled by multiple customers), with some dating back to the 1940s and the most recent breakdown dating back to the mid-2010s; The hidden wealth involved was more than CHF 100 billion, with an average of CHF 7.5 million held in each account, nearly 200 accounts worth more than CHF 100 million, and a dozen accounts worth billions. These accounts were held by convicted or sanctioned criminals with open bank accounts, corrupt officials from many countries and drug smugglers who had been clients of Switzerland's second-largest bank.

Since the conflict between Russia and Ukraine, Credit Suisse has arbitrarily launched financial sanctions on Russia, which is alleged to have interfered in the internal affairs of other countries, contrary to Switzerland's position as a neutral country. In the fourth quarter of 2022 alone, Credit Suisse lost more than a third of its savings, or about $140 billion, according to the data.

### 3.1.3 Poor Response to changes in the economic environment

Finally, Since the subprime crisis in 2008, the economic environment, such as monetary policy, has changed greatly, but financial supervision was weak. In the bond market, the higher the interest rates, the lower the bond prices. After the 2008 financial crisis, many countries, led by the US Federal Reserve, cut interest rates to zero or even negative levels. This was good news for financial institutions, because the cost of capital was lower so that financial institutions had a lot of principal to expand their business, which was equivalent to the global financial institutions enjoying an ultralow interest rate environment for more than 10 years. However, in recent years, the international situation has been in turmoil. Due to multiple factors such as COVID-19 and geopolitical conflicts, the global supply chain is unbalanced, major economies in Europe and the US have serious inflation, economic downward pressure is increasing, and monetary policy has shifted from years of super easing to a sharp contraction. In the wake of the COVID-19 outbreak, the loose monetary and regulatory policies of the US and Europe have led to the expansion of banks' balance sheets, abundant liquidity and increased market competition, driving banks to become more enthusiastic about high-risk financial activities. However, in 2022, in order to curb the sharply rising inflation, the US Federal Reserve started the process of continuously raising interest rates and European central banks soon followed suit. Interest rates have risen from 0.25% in 2021 amid the COVID-19 pandemic to 5.25% today, significantly changed the liquidity of the financial market, and had a huge impact on the value revaluation of financial risky assets. Many financial institutions did not fully assess the influence of monetary policy to their own business activities.

The regulatory authorities are also blindly optimistic about the regulatory reform since the subprime crisis. The regulatory focus has always been on the areas of credit activities such as capital adequacy ratio requirements. After the subprime crisis in 2008, Europe and the United States launched a multi-directional financial regulatory reform. "Basel III" in many aspects such as capital, non-risk-weighted leverage ratio, liquidity has made new requirements. Require a common equity capital ratio of 4.5%; The non-risk-weighted leverage ratio shall not exceed 3%: The liquidity coverage ratio (LCR) is proposed, which requires banks to have enough high-quality liquid assets to meet the liquidity demand for at least 30 days, and the available stable funds must cover the required stable funds. However, there is a lack of effective supervision on the diversified business of large financial holding groups, especially the shadow banking business, and the protection of investors has not been substantially improved. Credit Suisse has suffered huge losses in investment banks and off-balance-sheet businesses such as wealth management, in addition to its own decision mistakes and regulatory oversight.

### 3.2 External pressure and public opinion

UBS and Credit Suisse were the two largest Swiss banks and among the largest international investment banks with shareholders around the world. Most of them were not Swiss, but organizations with huge financial influence, such as the National Bank of Saudi Arabia, Qatar, as well as many American and German funds. When asked in an interview on March 15th whether Credit Suisse's biggest shareholder, The chairman of Saudi-owned Bank of Saudi Arabia, would have bailed out its liquidity crunch, he replied: ‘The answer is absolutely not.’ The market reacted so badly that Credit Suisse's shares fell by 20% that day. It can be seen that the appeal and influence of major shareholders on the market is huge. Therefore, when the Swiss government hosted the merger of two investment banks, once the price is too high or too low, harming the interests of one shareholder, the global financial market is likely to have some aversion to other Swiss companies, leading to some resistance or hesitation of investors when investing in Swiss companies. Thus the Swiss government intended to protect shareholders as much as possible, but in the development of Credit Suisse, in consideration, the merger of the two investment banks was imperative.

However, the holders of Credit Suisse's $17 billion AT1 bonds are basically a few professional financial institutions, with a much stronger risk-bearing capacity and a relatively small impact scope, which can greatly reduce the risk of public opinion. For this reason, Credit Suisse's AT1 bond was fully devalued. The move has angered AT1 bondholders, who have now filed a formal complaint against the Swiss regulator for violating their property rights. At the same time, the full write-down of Credit Suisse's AT1 bonds caused a huge blow to the European Cos bond market, including AT1 bonds, and quickly affected the stock prices of major European financial institutions and the global bank capital instruments market, and the credit default swap (CDS) index of eurozone financial subordinated bonds soared. From the Bloomberg European Banks AT1 bond benchmark index, which fell more than 22% from its periodic high in early February 2023 to its low on March 20, 2023, with the Bank of England's announcement that AT1 bonds are repaid in order of precedence over common Equity Tier 1 capital (CET1), Overseas AT1 bond markets calmed after the European Central Bank, the European Banking Authority (EBA) and others issued statements reaffirming that common equity will be the first to absorb losses as core tier 1 capital and suggesting that Credit Suisse is a special case. The Bloomberg European Banks AT1 bond benchmark index rebounded in recent months, but it will be some time before trust is re-established in the AT1 bond market and the wider market for bank capital instruments[2].

## 4. Reflections and suggestions

The Credit Suisse AT1 bond write-down is worth thinking deeply by the market.

To begin with, establish an objective understanding of the essential properties of AT1 bonds. AT1 bonds is the main function of the bank problems to absorb losses. This attribute determines the possibility of being written-down or equity conversion. Investors may suffer losses, especially in the background of the current global monetary policy tightening, financial institutions such as bank liquidity risk rise, which makes the AT1 bond investment in the greater risk. Therefore, while pursuing high returns, investors should establish an objective cognition of their essential attributes and comprehensively evaluate their potential risks[2].

Next, focus on the judicial requirements and regulatory requirements of different regions. For the market main body, what lied behind the Credit Suisse'sAT1 bonds full write-down event was that the Swiss regulatory definition of core Tier-1 capital was inconsistent with the Basel Accord requirement that core Tier-1 capital should precede other Tier-1 capital absorption losses, which provides institutional support for FIDNMA to reduce the full write-down of AT1 bonds in the case that Credit Suisse's equity value has not yet fallen to zero. Similar bank capital instruments may be issued in different jurisdictions under different laws and this Credit Suisse AT1 bond is governed by Swiss law rather than UK and US law. And financial regulators may have different preferences when it comes to risk events. Therefore, when buying bank capital instruments, investors should establish a comprehensive understanding of the financial regulatory framework in the region where the issuer is located, and pay close attention to the changes in the regulatory regulations of the regulator, so as to correctly measure the risks that may be brought by bank capital instruments.

In the end, the global financial system is highly interconnected and financial risks are transmitted quickly. The collapse of Silicon Valley Bank in the United States made market sentiment sensitive, resulting in Credit Suisse lost a large number of clients in a short time. In this context, the Swiss government promoted UBS's acquisition of Credit Suisse in order to avoid its collapse. Therefore, investors should pay close attention to the changes in the global financial market, take precautions in time when risk events occur, and protect their own interests.

## References

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