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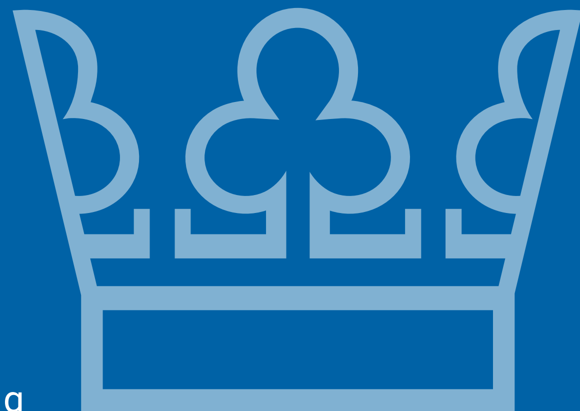
Focus Report

Lessons from the banking problems in the US and Switzerland in 2023



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Preface

The Swedish National Debt Office is the central government's financial manager, with a key role in the Swedish economy. The Debt Office's assignments include acting as the central government's internal bank, raising loans and managing the government debt, issuing state guarantees and credits, and securing the financing of nuclear waste management. As part of the agency's mandate to safeguard financial stability, the Debt Office collaborates with the Ministry of Finance, the Riksbank, and Finansinspektionen (the Swedish Financial Supervisory Authority). Among the Debt Office's responsibilities are managing banks in crisis and ensuring that there are well-functioning deposit insurance and investor protection schemes.

The Debt Office's Focus Reports present analyses and reviews of a number of various topics within the agency's areas of operation. Their purpose is to illuminate and share in-depth information about core issues with both the agency's regular target groups and broader audiences. The report series also gives Debt Office employees the opportunity to publish analyses externally and thereby receive valuable feedback from outside the organisation.

The ambition is to increase understanding of what the agency specialises in and contribute to further discussion. It is important that the Debt Office's issues are discussed, not just for us as an agency but for the economic discourse in Sweden.

Karolina Ekholm
Director General of the Debt Office

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Summary

In the spring of 2023, a few US banks and one Swiss bank encountered severe problems that forced the respective countries' financial stability authorities to intervene. The causes and courses of events differed in several respects, but a common feature was that the authorities' crisis management in part relied on solutions that were not planned in advance. Nevertheless, these government agencies achieved the primary objective of preserving financial stability.

A number of lessons can be learned from these events. One is that digitalisation and social media have made banks more vulnerable to bank runs, i.e. when many depositors rush to withdraw their funds all at once. This has made the role of deposit insurance schemes all the more important.

Another lesson concerns the crisis management itself. The ways in which the banks in the US and Switzerland were managed in the spring of 2023 show that authorities responsible for financial stability must plan for various outcomes and thus be better prepared to manage crises in a more flexible manner than they are today.

Most experts agree that the problems these banks encountered were mainly attributable to insufficient supervision and requirements for the banks, as well as to business models that proved unsustainable in a high interest-rate environment. However, there is also cause to reflect on whether the banking crisis management regulations designed after the 2007–2008 global financial crisis are effective. The potential need for reform is currently under discussion in EU and international forums. The premise of this discourse remains that crisis management procedures should be financed by the banks' shareholders and lenders, not by taxpayers.

Introduction

In the spring of 2023, a few US banks and one Swiss bank encountered severe problems. The banks in question were three American banks which were small by US standards, and Credit Suisse (CS), a global systemically important bank headquartered in Switzerland. US and Swiss authorities were forced to intervene and manage these banks in order to prevent major disturbances to the financial system.

Although the banking crises initially caused turbulence in financial markets, there were no lasting adverse effects on the financial system. Nevertheless, the events put the crisis management regulations and the strategies of the authorities to the test.

In this Focus Report, we begin by describing the global framework for managing banks in crisis developed in response to the 2007–2008 global financial crisis. We then cover the events that took place regarding the problem-afflicted banks in the US and Switzerland and the actions taken. We conclude by presenting some important lessons to be learned about banking crisis management from the events of that spring.[1]

[1] The authors would like to thank Tom Andersson, Marieke Bos, Fredrik Bystedt, Karolina Ekholm, Peter Englund, Johan Fogel, Erika Färnstrand Damsgaard, Nils Gottfries, Anna Larsson Seim, Anna Lidberg, Rebecka Rothstein, Henrik Smedberg, and Roine Vestman for their valuable input in preparing this report.

Background to current framework for crisis management

The biggest challenge of financial crisis management has long been that certain banks and other financial institutions[2] are systemically important, meaning that they are either too big or too important to be allowed to fail. The harm to the financial system and economy as a whole from an uncontrolled failure (default)[3] of a systemically important bank would be so significant that it must be prevented. Historically, this risk has often been managed by using taxpayers' money to assume control of, or provide financial aid to, banks in crisis. This method of handling crisis-stricken banks is called a bailout.[4] In some cases, the ultimate costs to taxpayers have been relatively limited, as with the management of the Swedish crisis of the 1990s[5]. Other incidents have been very costly for taxpayers, such as in Ireland after the financial crisis of 2008.[6]

After the 2007–2008 global financial crisis, a major effort was initiated to develop global standards for banking crisis management. The aim was to be able to maintain financial stability without taxpayers having to bear the direct costs of the crisis management. Developed by the Financial Stability Board (FSB), the standards are called the Key Attributes of Effective Resolution Regimes.[7] These have since been adopted as special crisis management regulations in the EU and the majority of the world's major economies.

A cornerstone of these regulations is that systemically important banks are to be managed in a certain way: through resolution. Systemically important banks are those that are so large or important that their failure would pose a threat to the financial system or for other reasons be exceedingly costly.[8] A key component of

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[2] Henceforth in this report, the term bank will be used collectively for banks and other financial institutions that conduct banking-related activities, i.e. those that involve both lending and deposits from the general public. Other financial firms that have their own regulations are not addressed in this report.

[3] When we refer to a failure or that a bank fails, we mean that the bank is no longer viable, i.e. that it is not expected to be able to continue operating on its own without some form of support or intervention.

[4] Bailout refers to managing a bank in crisis by using *state funds* in some way to get the bank operating again or wind it up in an orderly manner.

[5] The Swedish government's net costs for the 1990s crisis are estimated to have been SEK 21.5 billion, corresponding to 1.5 per cent of GDP for 1991 (Barr and Pierrou 2015).

[6] According to calculations, the net cost of the Irish government's management of the financial crisis amounted to approximately EUR 45 billion at the end of 2021 (Office of the Comptroller and Auditor General, 2022), corresponding to approximately 10 per cent GDP for 2021 (Central Statistics Office (2022)).

[7] The Financial Stability Board (FSB) is an international organisation that works with evaluating the global financial system and providing recommendations for its development. The Key Attributes are published here: FSB Key Attributes – Executive Summary (bis.org)

[8] More specifically, this involves banks that conduct operations deemed critical to the basic functioning of the financial system or for which management through normal insolvency proceedings or other procedure would pose problems for the financial system.

the EU regulations is that the designated resolution authority is to plan for a potential crisis by among other things identifying which banks are systemically important, how these should be managed through resolution if they were to fail, and what demands must be placed on them for the resolution measures to be effective.

The US and Swiss crisis management regulations are also based on global standards developed after the financial crisis. Hence, there are similarities in how the regulations in the US and Europe stipulate managing banks that are failing or close to failing. Nevertheless, there are also important differences in how the regulations are formed and the ways in which crisis management is intended to be carried out (see the Facts section below).

FACTS

The basics of crisis management through resolution

In essence, there are two primary strategies for implementing resolution. The failing bank is either restructured or its functions are completely or partially transferred to another actor. A transfer can be done either by a sale to another bank or a transition to a newly created company called a bridge institution, which is controlled by the central government.

A fundamental tenet of resolution is that the failing bank's losses and recapitalisation costs are to be borne by the bank's owners and creditors in what is called a bail-in. To do this, the resolution authority can decide to write down the bank's own funds and liabilities or convert its liabilities to shares (called the bail-in tool). The same result can also be achieved by leaving the failed bank's share capital and part of its liabilities in the bank as its operations are being transferred to another actor.

The EU's crisis management regulations are predicated on the idea that only systemically important banks should be managed through resolution. For Swedish and European systemically important banks, the most common strategy is a restructuring of the failed bank during which it is kept open (called an open bank bail-in). In the US, many bank failures have instead been managed by the banks being closed down and all or parts of their operations transferred to another actor. The US authority is also able to implement special crisis management procedures for a broader category of banks beyond the systemically important ones.

Regardless of the strategy used, it is crucial for the bank to have resources (own funds and certain liabilities) that are sufficient for absorbing losses and recapitalising it during resolution. For crisis management to be successful, at least parts of the bank's liabilities must be suitable for being written down in resolution. The banks for which the authorities make resolution plans are therefore subject to special requirements for having sufficient own funds and labilities of this type. The

names of these requirements vary by country (MREL in the EU, TLAC in the US).[9] In this Focus Report, we refer to the Minimum Requirements for Own Funds and Eligible Liabilities (MREL). An example of a type of lability that can be used to meet this requirement are non-priority bonds with a residual maturity that does not exceed one year.

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[9] MREL stands for Minimum Requirement for Own Funds and Eligible Liabilities, and TLAC for Total Loss Absorbing Capacity.

The incidents and how they were managed

The banks in the US

In the spring of 2023, three relatively smaller American banks – Silicon Valley Bank (SVB), Signature Bank (SB), and First Republic Bank (FRB)[10] – were afflicted with financial problems and subsequently taken over by US agency the Federal Deposit Insurance Corporation (FDIC).[11] None of these banks had previously been classified as systemically important. At the time of the crisis, however, the US authorities determined that both SVB and SB were so, i.e. that their failure posed a significant threat to depositors and the financial system. Both banks had seen rapid growth of their balance sheets from a substantial influx of deposits in recent years (Figure 1).

SVB was the first and largest bank to fail during the spring.[12] This had contagion effects on other banks in the US. But there was also an indirect effect on confidence in the Swiss bank CS, which is why we have chosen to focus on the course of events at SVB.

SVB's deposits came mostly from companies in California's growing technology sector. Those companies had garnered a large amount of risk capital in a low-interest-rate environment and placed the funds in bank accounts for the time being. Much of these funds were not covered by the US deposit insurance scheme.[13] As the deposits grew, the bank invested the funds primarily in US securities with primarily long maturities and fixed interest. The banks intended to hold these securities to maturity.[14]

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[10] Several banks in the US experienced problems and defaulted, but these three were the largest and most important.

[11] The Federal Deposit Insurance Corporation (FDIC) is a US government agency whose main assignment is administering the deposit insurance scheme. The FDIC is also responsible for managing American banks that have failed.

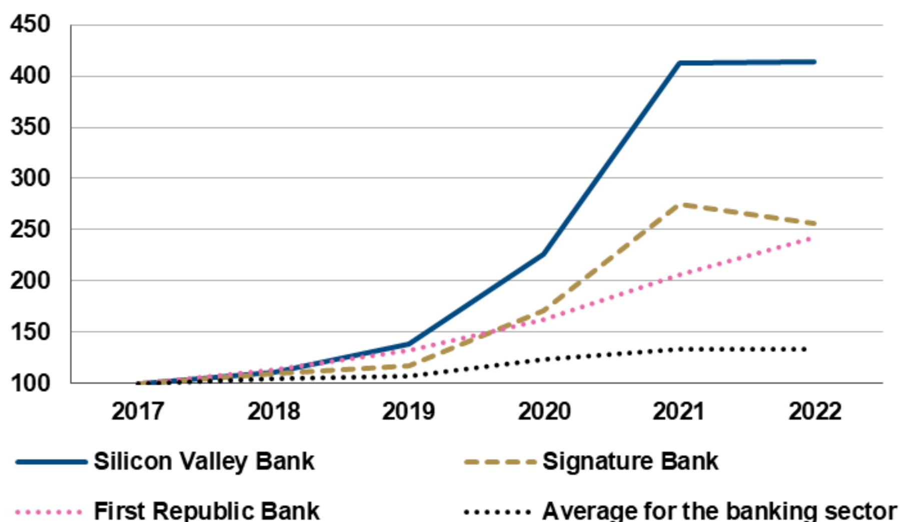
[12] At the turn of the year for 2022/2023, SVB was the 16th largest bank in the US in terms of total assets.

[13] The US deposit insurance scheme covers up to USD 250,000.

[14] If a bank purchases assets with the intent and capacity to hold them until maturity, it can use the historical acquisition value in its accounting. If, however, a bank is forced to sell such assets prior to maturity and the market value of the assets has decreased since they were acquired, the bank must realise and record the losses.

Figure 1 Total assets in the failing banks and the US banking sector

Index 2017 = 100, annual data



Source: The banks' annual reports and the Board of Governors of the Federal Reserve System (2023a).

As inflation and interest rates rose in 2022, access to risk capital became more limited. When the influx of risk capital decreased, more of the bank's customers needed to withdraw and use their funds.[15] This trend accelerated in the beginning of 2023, and the bank needed to obtain liquid funds to accommodate the withdrawals. At the same time, the higher interest rates caused the value of SVB's assets with a long maturity and fixed interest to drop sharply.[16]

To obtain the liquid funds needed for covering the withdrawals, the bank was forced to sell securities that it had planned to hold to maturity, causing it to realise losses. On 8 March, SVB announced that it intended to restructure its balance sheet and carry out a share issue of SEK 2.25 billion to cover the losses. The share issue failed, which further worsened confidence in the bank.

The day after the failed share issue, withdrawals from SVB amounted to SEK 40 billion, and withdrawals of approximately 110 billion were expected on the following day.[17] These volumes can be compared with withdrawals of USD 5–10 billion over the course of approximately two weeks in connection with a number of bank failures during the financial crisis of 2008.[18] The bank run on SVB in the final

[15] SVB Financial Group. (2023a).

[16] The value of a bond negatively correlates with fluctuations in the market interest rate. The size of a bond's value sensitivity is mainly due to whether the bond has a long or short maturity.

[17] Board of Governors of the Federal Reserve System (2023a).

[18] The Federal Reserve Bank of St. Louis (2023). The examples refer to Washington Mutual and Wachovia Bank. In 2008, these were the fourth- and sixth-largest banks respectively in the US. They may, however, have had more diversified financing than SVB.

days was mainly caused by withdrawals of uncovered deposits; only 6 per cent of the bank's depositors were covered by the deposit insurance scheme.[19]

Crisis management

On Friday 10 March, US authorities announced that the FDIC had assumed control of SVB as a result of the bank's insufficient liquidity and its insolvency.[20] Since the FDIC had deemed SVB to be non-systemically important, the initial plan during the weekend after the default (the resolution weekend) was to prepare to pay out the deposits protected by deposit insurance (covered deposits) as of Monday 13 March and simultaneously initiate the sale and/or winding up of the bank's assets and other liabilities.

Those customers who had covered deposits would quickly receive all their money from the bank. However, this was not the case for the bank's substantial uncovered deposits. Since the bank was considered non-systemically important and would therefore have been placed in bankruptcy or liquidation proceedings, uninsured depositors would have risked a significant delay before recovering all their money and perhaps even losing some of it. They would, however, most likely have gotten back part of the money relatively quickly since the FDIC often sees to it that some of the uncovered deposits are paid out promptly after it assumes control.[21]

During the weekend of 11–12 March, the US authorities changed their assessment and classified SVB as systemically important. Upon recommendation of the boards of the Federal Reserve (FED) and the FDIC, and after consultation with the President of the United States, the US Secretary of the Treasury announced the decision to make what is called a systemic risk exception. This was intended to bolster the general public's confidence in the US banking system and ensure that the system's critical functions could be maintained.[22] The systemic risk exception made it possible for the FDIC to protect all deposits in SVB. That same day, SB was taken over by the FDIC and classified as systemically important too. The approach became to transfer SVB's and SB's respective assets and liabilities on Monday morning to a newly established bridge institution for each bank under custody of the FDIC. That created time to find buyers for the banks or for their liabilities and assets. In the subsequent weeks, the majority of the assets were sold to other banks. Some assets and liabilities were kept in the original banks under custody of the FDIC and were still in the process of being wound up one year later.

In order to avoid contagion effects to other banks, the Federal Reserve set up a special marginal lending facility for banks with significant volumes of deposits.[23] The purpose of the facility was to ensure that those banks had the capacity to manage any outflows of deposits that could arise as a result of the unease surrounding the problem-stricken banks. With the facility – the Bank Term Funding

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[19] SVB Financial Group (2023b) and Federal Reserve Bank of St. Louis (2023).

[20] The Department of Financial Protection and Innovation (2023).

[21] FDIC (2023a).

[22] The US Department of the Treasury (2023).

[23] Board of Governors of the Federal Reserve System (2023b).

Program (BTFP) – the banks could borrow for up to a year against high-quality collateral in the form of US government securities and certain other eligible assets. The loans were issued on the basis of the securities' *nominal* value. This counteracted the effect described above, whereby rising interest rates caused the market value of various assets to drop. The BTFP was highly utilised even after the immediate unease in connection with the banking problems had subsided.[24]

Despite the swift actions of the FDIC and the Federal Reserve, the declining confidence in SVB spread to other US banks with a similar business model. This caused First Republic Bank (FRB) to fail as well. In this case, though, it was possible for the FDIC to find a buyer that took over all deposits and the majority of the assets in the bank on the same day that it shut down. Accordingly, the systemic risk exception did not need to be implemented to protect FRB's uninsured depositors.

As a consequence of the problems at SVB and SB, significant losses arose that needed to somehow be absorbed. After the banks' shareholders lost their capital, certain creditors also had their liabilities written down. The remaining losses were covered by the US deposit insurance fund since the FDIC had used the systemic-risk exception. The total cost to the US deposit insurance fund amounted to approximately USD 38 billion.[25] This cost is borne by companies with covered deposits, through a special withdrawal fee.[26] It should be noted, however, that although the bank collective pays the fees, these are likely transferred to bank customers in the end.

Causes of the defaults

Loss of confidence from customers and investors was what triggered the failures of the American banks. An important underlying aspect was the inability of these banks to manage the interest risks that arose in their asset portfolios due to rapidly rising inflation and higher interest rates. The rapid digitalisation of banking services and the proliferation of social media in recent years was another key driver. Social media was a source of rumours and the spread of information about the banks, which swiftly led to the outflow of deposits from the general public. This created a shortage of liquid funds at the banks. Another contributing factor was that the prudential requirements, that SVB and other banks with assets of less than SEK 100 billion were subject to, had been lowered a few years earlier, including for capital adequacy and liquidity coverage.

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[24] There are indicators that the facility was used as a more general lending facility thanks to its relatively favourable interest terms compared with the Federal Reserve's standing facility. Between 31 May and 31 December 2023, the volume of outstanding lending increased from SEK 107 billion to SEK 129 billion (the Federal Reserve Board of Governors (2023c) and 2024a). At the end of January 2024, the Federal Reserve announced that it would cease to issue new loans within the framework of the BFTP in March 2024.

[25] FDIC (2023b) and FDIC (2023c).

[26] The US deposit insurance fund is financed, as is the case with the Swedish deposit guarantee fund, through annual fees that are paid by companies with the right to accept deposits that are covered by the deposit insurance scheme.

Credit Suisse

In March 2023, Switzerland's next largest bank, CS, defaulted and was taken over by the country's largest bank, UBS. The takeover occurred shortly after the failure of SVB and the ensuing unease in the US financial markets.

In contrast to the American banks, Swiss authorities had previously classified CS as a systemically important bank. CS was so large that it was part of the group of 30 banks considered by the FSB to be globally systemically important. This meant that it would not be put into liquidation or bankruptcy proceedings but managed through resolution in an open bank bail-in (see the Facts section above). In accordance with the planned strategy, the bank had also issued eligible liabilities. Because CS operated in several countries, there was also a crisis management group in which the authorities in the countries concerned could exchange information and conduct the cross-border collaboration required for carrying out resolution. In this context, preparations for managing the bank through resolution had been made since Autumn 2022, as fears of its potential failure arose already around this time.

Course of events

During the last six months before UBS assumed control, CS had major outflows of customer funds. These were particularly large on two occasions: in October 2022 and March 2023. The first major outflow followed the bank's announcement at the end of summer 2022 that it would conduct a strategic review of its operations, which led to rumours of its impending failure.[27] The second major outflow was after the defaults of SVB and SB. The unease in the wake of the bank failures in the US was exacerbated when CS shortly thereafter announced that publication of its annual report for 2022 would be delayed.[28] When it was subsequently published on 14 March, the bank admitted that it had identified material weaknesses upon closer inspection of its financial reporting. At that time, the bank's largest owner also publicly announced that it did not plan to inject additional capital into the bank. These events taken together further worsened confidence in CS, and outflows of customer funds grew.

In light of the renewed wave of funds leaving the bank, on the evening of 15 March 2023, CS strengthened its liquidity by borrowing CHF 50 billion from the Swiss central bank.[29] The Swiss regulatory authority – the Swiss Financial Market Supervisory Authority (FINMA) – published a press release the same day claiming that the problems in certain American banks did not pose an imminent risk of spreading to Swiss financial markets. FINMA also stated that CS met its capital and liquidity requirements and that the central bank of Switzerland was ready to

[27] The net outflow in October 2022 amounted to just over CHF 70 billion. The outflows continued during the first quarter of 2023, and according to one source they amounted to around CHF 61 billion for the quarter (CNBC, 2023).

[28] Credit Suisse (2023b).

[29] The Guardian (2023). The bank also took some other measures in an attempt to win back the market's confidence.

provide CS with additional liquidity.[30] These measures nevertheless failed to restore confidence in the bank, and the withdrawals continued.[31] CS was taken over by UBS the following weekend.

Crisis management

The takeover of CS by UBS, communicated on Sunday 19 March 2023, was formally a merger between the two banks. In practice, though, it was a transaction instigated by the Swiss authorities.[32]

Shareholders in CS received shares in UBS at a value that was significantly lower than the market cap of CS had been prior to the deal. It is not clear exactly what UBS demanded in order to take over CS. Nonetheless, it can be concluded that the Swiss authorities took a number of measures intended to enable the takeover and ensure that the banks could fulfil their commitments:

- Hybrid capital in the form of AT1 instruments[33] corresponding to a nominal value of approximately CHF 16 billion was written down in full, meaning that the holders of the instruments lost their entire claim on CS. This can be seen as a capitalisation measure, which, else being equal, caused the value of the bank to increase thereby making the merger more attractive for UBS.
- The Swiss government issued a guarantee for losses of up to CHF 9 billion that UBS could suffer due to certain CS assets. However, the guarantee was only for losses in excess of CHF 5 billion.
- The Swiss central bank provided liquidity support. This assistance was provided to both banks and partially guaranteed by the Swiss government.

Both banks remained open and continued to provide services as usual. Since the takeover, UBS has chosen to terminate the guarantee agreement with the Swiss government. The Q2 2023 quarterly report from UBS showed a large profit for the second quarter, mainly due to revaluations of assets after the acquisition of CS.[34]

The takeover has since raised questions about the extent to which consequences for competition in the Swiss banking market were taken into consideration. FINMA’s position is that it had the authority to decide on the competition-related aspects of the merger and chose to approve the transaction.[35]

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[30] FINMA (2023a).

[31] Financial Times (2023).

[32] Financial Times (2023).

[33] AT1 instruments are part of “other Tier 1 Capital”, and are thus part of the own funds that banks need in order to meet the capital requirements imposed on them. Under certain circumstances, these instruments (i.e. the liabilities or capital they represent) may be used to absorb losses in a bank.

[34] SWI swissinfo.ch (2023).

[35] The Swiss competition authority has subsequently conducted an inquiry into the deal and submitted a statement to FINMA, but this does not seem to affect the legal status of the merger (*The Swiss Times*, 2023).

Causes of the default

The fundamental reason that CS failed was that its customers and investors lost confidence in the bank. This was the result of repeated incidents that led to profitability problems. For several years, CS had experienced trouble in the form of bad investments, insufficient efforts to counteract money laundering, tax evasion, significant turnover of upper management, and the bank's involvement in the Archegos and Greensill scandals.[36] Those scandals forced several senior executives to leave the bank and assets under management to be drained, and caused the bank to record a loss for the full year 2022.[37]

[36] Archegos was an investment fund that failed, which resulted in major losses for CS. Greensill was a company whose operations included factoring and which became insolvent. Customers of CS lost large amounts in investments connected to Greensill.

[37] According to Credit Suisse's annual report for 2022, (Credit Suisse, 2023a), assets under management dropped from CHF 1,600 billion at the end of 2021 to CHF 1,300 billion at the end of 2022, at the same time as the bank's revenue went down by 34 per cent. The loss for the full year 2022 amounted to CHF 7.3 billion and resulted in the bank taking in CHF billion in new capital from its owners at the end of 2022.

Lessons from the crisis management

Extensive international discourse

The banking problems in the US and Switzerland created short-term turbulence but did not lead to a sustained disruption of the financial system. It can therefore be concluded that the primary purpose of the financial crisis management in the US and Switzerland was achieved. Nevertheless, several aspects of the ways in which this was carried out in both countries have given rise to extensive international discourse about whether the framework for banking crisis management is appropriately designed or if reforms are needed. In the following section, we present some of the lessons learned.

Difficult but important to identify contagion effects

The events of this spring are a reminder that the risk of contagion in the financial system can be difficult to identify in advance. This mainly pertains to *indirect* contagion effects, i.e. those not resulting from banks having direct exposures to each other or because a bank provides critical functions on which other banks' operations depend.

Over the course of only a few days, the US banking unease that began with the SVB crisis spread to several American banks, which suffered bank runs – despite the fact that SVB was small by US standards. The worries in the US aggravated the crisis at CS.

It was difficult to foresee that the crises at the American banks would affect the developments for CS, since the problems for the former differed from the latter. Nor was there any concrete *direct* risk of contagion between a default of, for instance, SVB and a crisis at CS, which did not have any significant direct credit exposures to SVB.[38] The banks were also of different sizes and business models. For example, CS did not have the same large proportion of uncovered deposits. Nevertheless, because of its history and already tarnished reputation, CS proved to be vulnerable to general financial unease.

Identifying the contagion effects and how the different events of the spring of 2023 were interrelated is not an easy task to do in hindsight. This difficulty has received little attention in the international discourse on the banking problems in the US and Switzerland. At the same time, it is important for crisis-management authorities to try to identify both direct and indirect contagion risks. Doing so is part of the planning that the authorities conduct to prevent serious disturbances to the financial system and prepare an appropriate crisis management strategy.

[38] Balezou (2023).

The stabilising role of deposit insurance – more important than ever in the digital age

If a Swedish bank defaults and enters bankruptcy proceedings, the Swedish deposit guarantee protects up to SEK 1,050,000 in deposited funds per person and bank irrespective of how the bank's failure is managed.[39] Other European countries have equivalent deposit insurance schemes. In the US, deposit insurance covers up to USD 250,000. Besides protecting depositors, deposit insurance has an important stabilising role by serving to prevent bank runs when signals arise of problems at a bank – regardless of whether that information is accurate. Customers covered by deposit insurance need not worry about losing their money if their bank fails.

Technological developments have made it possible for bank runs to occur much more quickly than before. Information can spread rapidly through social media, and digital banking services enable that to manifest into large withdrawals. This became apparent in conjunction with the problems at the American banks. The size of the withdrawals and the speed at which they took place caused the crisis at SVB to unfold very fast towards the end.

The majority of the funds deposited in the American banks that failed were not covered by deposit insurance.[40] According to the FDIC, withdrawals of these uncovered deposits were ultimately what led to the failure of SVB and SB.[41] As a result, the US experiences have given rise to an international discourse on the consequences of the speed with which withdrawals are made and the potential need for reforming deposit insurance schemes. As early as May 2023, the FDIC presented an analysis of possible reforms of the US deposit insurance scheme that would enable it to fulfil its stabilising role in the prevailing environment of large volumes of uncovered deposits. Three alternatives were evaluated: continued limited coverage with a raised ceiling for all depositors, unlimited coverage, and targeted coverage as a complement to the existing coverage. Targeted coverage would entail a variable compensation level depending on the type of deposit and could be set higher for business payment accounts that are used for paying wages and suppliers' invoices.[42] If such disbursements were prevented from occurring, the adverse impact on individual households and businesses as well as the real economy as a whole could be severe.

The FDIC also emphasised that any reforms for increasing the scope of the deposit insurance scheme should, however, also take into account both the advantages and disadvantages that coverage brings. Higher deposit insurance coverage could reduce the chances of bank runs but also lead to an accumulation of risks in the financial system. If a greater portion of creditors are covered by deposit insurance

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[39] Deposit insurance applies for all depositors except financial institutions and regional, local, or central government agencies.

[40] At the end of 2022, only 6 per cent of SVB's deposits were covered by deposit insurance (Board of Governors of the Federal Reserve System (2023a).

[41] FDIC (2023d).

[42] FDIC (2023d).

acting as a financial safety net, their incentives decrease for placing their deposits in banks that avoid excessive risks.

The FDIC ascertained that targeted coverage would have significantly positive effects on financial stability without the adverse impact on depositors' incentives that a general increase in coverage would. The challenges of targeted coverage lie in identifying which accounts should be provided higher coverage and in mitigating the possibilities for depositors and banks to avoid complying with the associated regulations.

In Sweden, the proportion of covered deposits in the banking system does not differ drastically from that in the US, but there are large differences between banks and between different types of banks.[43] No Swedish bank comes close to SVB, which had around 95 per cent of its deposits unprotected. Moreover, a substantial portion of depositors in Sweden have deposits that are fully covered by the Swedish deposit guarantee (approximately 97 per cent of all natural persons and legal persons).[44] When it comes to natural persons, only about 2 per cent of Swedish banking customers – mainly large corporations – have deposits that exceed the level of the deposit guarantee. But these deposits are so large that an increased ceiling for the deposit guarantee of, for instance, 100 per cent would not make a significant difference. The bulk of the deposits currently unprotected would still not be covered under that higher ceiling. Moreover, any reform of the Swedish deposit guarantee scheme would have to be made within the framework of EU collaboration. The guarantee level and other central components of the guarantee scheme are determined by an EU directive, i.e. harmonised within the EU.

It can also be noted that the uncovered deposits in Sweden are primarily held by systemically important banks. These are subject to special supervision and requirements to reduce the risk of their failure. Since the Debt Office plans for managing systemically important banks through resolution if they were to fail after all, the banks are also required to have a certain amount of liabilities that can be written down.[45] The holders of these liabilities will bear losses before uncovered deposits.[46] This reduces the incentive for depositors to withdraw their uncovered deposits if they are worried that the bank might fail.

Contingencies for different strategies in resolution planning

In both the US and Switzerland, the crisis management partly consisted of solutions that were not planned in advance. That is to say that the authorities responsible made decisions deviating from the plans in place for each bank. In Switzerland, the crisis management proceeded without CS being put in resolution

[43] Own calculations and the FDIC (2023d).

[44] Source: The Debt Office.

[45] The Swedish National Debt Office (2023).

[46] Uncovered deposits are here taken to mean deposits made by private individuals and small to medium-sized enterprises that are not covered by the deposit insurance scheme.

as planned and, among others, by utilising government loss guarantees. Avoiding the use of state funds to manage systemically important banks in crisis was a central aim of the resolution framework when it was introduced after the financial crisis of 2008.[47]

The measures chosen have given rise to international discourse about why the option of resolution was rejected in Switzerland, as well as the need for flexibility in crisis management.[48] According to the Swiss authorities themselves, they had thoroughly developed plans to put CS in resolution and implement an open bank bail-in.[49] The authorities had closely monitored the developments at CS for a long time[50] and were in close collaboration with the relevant foreign authorities through a crisis management group for the bank. FINMA had also determined that it would be possible to carry out a resolution procedure if the bank were to fail.[51]

In the expert report commissioned by the Swiss government, several reasons were presented for why the authorities nevertheless chose not to put CS in resolution and implement the planned strategy.[52] FINMA refers to uncertainty as to whether confidence in CS could be restored quickly enough, even though a write-down or conversion of liabilities could have achieved a very high level of capital adequacy. The authorities had also identified certain operational and legal problems associated with the conversion of shares to liabilities that were held by US investors. According to the expert report, FINMA, which was in close collaboration with the US Securities and Exchange Commission[53], remained hopeful that these problems could be resolved. An additional reason presented by Switzerland's central bank and the Swiss finance minister was concern that implementation of the planned strategy would have posed significant risks to the financial system, given the volatile market conditions in the wake of the problems with the American banks. However, the majority of people interviewed by the expert group, which consisted of representatives from foreign government agencies and private institutions, considered that risk to be less significant.

As described above, the chosen method of crisis management involved a substantial write-down of claims on CS (around CHF 16 billion in nominal amounts), which is not considered to have had a lasting impact on the pricing of AT1 instruments.[54] The write-down that could have occurred with an open bank bail-in would however have been much larger, at around CHF 73 billion. It remains

[47] UBS voluntarily terminates guarantee agreement with Swiss government - SWI swissinfo.ch

[48] See, for instance, the Expert Group on Banking Stability (2023) and FINMA (2023b).

[49] FINMA (2023b).

[50] FINMA (2023c).

[51] The Expert Group on Banking Stability (2023) and FINMA (2023d).

[52] The Expert Group on Banking Stability (2023).

[53] The Securities and Exchange Commission (SEC).

[54] The price for AT1 instruments, initially increased drastically but soon stabilised to price levels comparable with those prior to the bail-in. Source: Bloomberg.

uncertain how this might have affected the pricing of AT1 instruments and other eligible liabilities for other, viable banks.

The FSB has noted that another resolution strategy, such as the transfer of assets and liabilities to another bank, might have involved a smaller need for write-down and conversion.[55] As is the case with other resolution authorities responsible for global systemically important institutions, however, the Swiss authorities had not actively planned for any such strategy.

A general lesson, which was also pointed out by the FSB, is the importance of planning well in advance in order to be able to apply more than one resolution tool (bail-in). Doing so increases the room for manoeuvre in resolution and the potential to choose a resolution strategy based on the conditions at the time.

Possibility of resolution improves government's options for taking action

Although the resolution framework was not employed for CS, this is not to say that the method of crisis management employed was insignificant. The resolution regulations provide authorities with clear mandates for assuming control of banks if they were to fail. The Swiss authorities thus had a clear mandate to put CS in resolution and perform a write-down of liabilities, thereby affecting the bank's shareholders and creditors. In other words, had the owners of CS not agreed to a merger with UBS, through which they would receive some compensation, they would have risked ending up empty-handed in a resolution. Accordingly, it cannot be ruled out that the possibility of putting CS in resolution was significant for the bank's owners when they agreed to the merger with UBS.

The fact that the resolution framework clearly defines the jurisdiction of the authorities is likely a crucial aspect to crisis management, even when resolution is not utilised. Furthermore, the resolution framework ensures that the authorities conduct crisis management planning and that, for instance, requirements are made for eligible liabilities, which can be an important resource in crisis management irrespective of whether resolution is implemented.

Crucial to have sufficient financial resources in crisis management

Effectively managing a failed systemically important bank requires sufficient financial resources that can be used to absorb remaining losses and recapitalise the failing bank and its operations if it is transferred to another actor. Even a bank in resolution or a potential buyer of all or part of the bank's operations must comply with various regulations, including having sufficient own funds.

[55] FSB (2023).

There are essentially three primary ways to absorb losses that arise from a bank failure:

- letting the bank's owners and creditors absorb the losses;
- using fee-funded external resources such as a resolution fund (in Sweden called the resolution reserve) or a deposit insurance fund;
- using tax revenue.

The first of these options is preferred since it entails that the parties who accepted a bank's risk-taking by investing in the bank are the ones responsible for the costs of managing the bank if it were to fail, as opposed to other financial firms or taxpayers. This creates incentives for responsible risk exposure at banks, assuming that shareholders and creditors understand that it is feasible that they could lose their investments in the bank.

If eligible liabilities and own funds should for some reason be insufficient for funding crisis management – by absorbing losses or recapitalising the bank in resolution – external funds must be available. The US crises of the spring of 2023 made this clear. The American banks that failed were not required to issue eligible liabilities and thus did not have sufficient amounts of such liabilities on their balance sheets. Although liabilities in the form of uncovered deposits were available, the authorities deemed them unsuitable for writing down because they were associated with stability risks. Through an exception – the systemic risk exception – it became possible for the FDIC to also exempt these deposits and instead use the deposit insurance fund, i.e. external resources, to cover losses.[56]

In the US, a decision to activate an exception to the rule was required in order to free up the resources needed for effectively carrying out crisis management of the American banks without risking contagion to other banks. The EU regulations limit the possibility of using external resources through thresholds that specify how much losses the bank's shareholders and creditors must first absorb before external resources (from a resolution fund) may be used instead. These thresholds can be viewed as an insurance deductible, whereby the bank's owners and creditors must have absorbed losses corresponding to 8 per cent of the bank's

[56] In the subsequent evaluation of the US bank failures, the FDIC has suggested that banks of a certain size (those with assets exceeding USD 100 billion) should have a certain amount of eligible liabilities for ensuring resources are available for crisis management. The proposal is similar to the requirements the Debt Office has previously set for a certain proportion of the resources that the banks must have (MREL) to consist of liabilities (i.e. not capital). This type of requirement means that resources that can be utilised in resolution are protected from being used up before the bank has been put in resolution. However, the possibility of setting such requirements in Sweden was prevented by an amendment to the European regulations a couple of years ago.

total balance sheet[57] before the resolution reserve can be used for loss coverage and in certain circumstances recapitalising the bank.[58]

In the spring of 2023, the European Commission presented a proposal to reform and supplement the EU's crisis management regulations, which among other things would enable the deposit insurance scheme to be utilised to a greater extent in resolution.

In practice, the proposal entails a lower threshold for when external resources may be used to absorb losses in banks during resolution.[59] At the time of this report, it is too soon to comment on the Commission's proposals and the discussions being held about how the management of a bank in crisis can be financed. The proposal is subject to political negotiations in the EU.

Finally, it should be noted that in the EU and Sweden many more banks than in the US are subject to requirements to have resources in the form of eligible liabilities. Accordingly, the conditions for letting a bank's owners and creditors fund resolution are generally better for Swedish and European banks than they have been to date in the US banking system.

The issue of whether more banks should be managed through resolution

The events of the spring of 2023 also give cause to reflect on the international legislative differences regarding which banks should be subject to planning for resolution versus normal bankruptcy or liquidation proceedings.

The bank failures in the US were managed by the FDIC in accordance with a particular insolvency procedure created for banks as opposed to through bankruptcy and liquidation. The basic premise of the crisis management regulations in the EU is that only systemically important banks should be managed through resolution (see the Facts section on page X).[60]

There are advantages to, as is the case in the US, implementing particular crisis management procedures for a broader category of banks and not just the systemically important ones. For depositors with funds covered by deposit

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[57] There is also an alternative threshold set to 20 per cent of the bank's risk-weighted assets.

[58] In Sweden, the resolution reserve amounts to just over SEK 50 billion and has been built up through annual fees paid by the banks. As opposed to the deposit guarantee fund, the resolution reserve is not funded but constitutes a drawing right on one of the central government's accounts. If the reserve's balance is not sufficient to finance the measures decided by the Debt Office, additional resources may have to be borrowed on behalf of the reserve.

[59] To ensure that a financing gap never arises, i.e. a situation in which the thresholds cannot be reached, the ECB has recommended that the EU also introduce a systemic risk exception (ECB, 2023b). As with the US procedure, it should be possible to evoke such an exception under special strict terms and enabling the threshold for the resolution reserve to be lowered.

[60] Some countries in the EU have, however, procedures similar to resolution also for non-systemically important banks.

insurance, it does not make much difference whether a failing bank is put in resolution or put into bankruptcy – deposit insurance always applies. Nevertheless, resolution may still be of some advantage from the perspective of depositors as they are essentially given uninterrupted access to their deposited funds, whereas when the Swedish deposit guarantee scheme is activated, depositors have the right to compensation within seven business days from the time their bank enters bankruptcy or a government decision to similar effect is made.[61]

However, for depositors with funds that are not covered by deposit insurance, resolution may have significant advantages. In the event of a bankruptcy procedure, although uninsured depositors may recover some of their money from a bankruptcy estate, this could take as long as several years. During that time, they will not know how much money they will be receiving. Under the US system, authorities have the power to also manage non-systemically important banks that fail and to allocate their assets and liabilities and can often also pay out uncovered deposits relatively quickly after a default – providing that coverage for these exists in the form of assets in the bank.

Another consequence of managing also small banks that are not systemically important through resolution is that such a procedure could be more value-preserving than bankruptcy or a winding up through a standard liquidation procedure. The resolution procedure is expected to provide better conditions for getting more value out of assets that are nonetheless in a failing bank.[62] Providing that this is the case, customers with deposits that do not exceed the ceiling for deposit insurance coverage would not only be able to retrieve their money faster if a bank were to fail but also to receive a larger portion of it. However, according to current EU regulations, value-preservation alone is not a reason for putting a bank in resolution.

Nevertheless, the potential gains from managing more banks through resolution must be weighed against the increased socioeconomic costs of more comprehensive resolution planning and other requirements for the banks involved. The proposal for revised crisis management regulations presented by the European Commission contains amendments that could make it easier for the authorities to manage more banks through resolution. At the same time, it should be noted that Denmark has in principal already chosen to view all banks as resolution banks.

[61] Section 9 of the Deposit Guarantee Act (1995:1571).

[62] SOU 2014:52, page 475.

Conclusion

The crises for the banks in the US and Switzerland during the spring of 2023 put the existing regulations to the test and gave rise to an international discussion on the lessons to be learned and the need for reforms. Some of the most important lessons put forth, and which this Focus Report addresses, are:

- The digitalisation of banking services and the ability to spread information rapidly through social media has made banks more vulnerable to bank runs. This means that deposit insurance schemes have become even more important for preserving financial stability. It is also a potential argument for increasing the coverage. Higher deposit insurance coverage is, however, no substitute for robust regulation and supervision and might actually lead to increased risk-taking by banks.

- Thoroughly developed advance planning is crucial so that the authorities responsible have the capability to implement more than one resolution tool. This increases the room for manoeuvre in resolution and the potential to choose a resolution strategy after the prevailing circumstances.

- Effective crisis management requires sufficient financial resources that can be used to absorb losses and recapitalise a failed bank (or its operations if it were to be transferred to another actor). Most experts are in agreement that the tenet that the financial costs of crisis management should be borne by the banks' investors and creditors, as opposed to taxpayers, remains a solid foundation for the regulations.

- The ways in which the bank failures in the US were managed has intensified a previously ongoing discussion about whether more banks should be put in resolution. Proposals along these lines are at present the object of political negotiations in the EU.

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The Swedish National Debt Office is the central government financial manager and the national resolution and deposit insurance authority. The Debt Office thus plays an important role in the Swedish economy as well as in the financial market.

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