FSB FINANCIAL STABILITY BOARD

2023 Bank Failures

Preliminary lessons learnt for resolution

10 October 2023

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Table of Contents

Executive summary 1

Introduction 4

1. Preliminary lessons learnt from the Credit Suisse case for G-SIB resolution and resolution planning 5
   - 1.1. Background on the Credit Suisse case 5
   - 1.2. Implications of the Credit Suisse episode for the FSB Resolution Framework 10
   - 1.3. Strengths of the existing framework 11
   - 1.4. Challenges of the Credit Suisse case 13
2. Preliminary lessons learnt from the US bank failures for deposit insurance and systemic importance of non-G-SIBs 18
   - 2.1. Background on the US bank failures 18
   - 2.2. Implications of the US episode 21
   - 2.3. Strengths of the existing framework 23
   - 2.4. Challenges of the US cases 23
3. Issues to be further explored 27
   - 3.1. Effective public sector backstop funding mechanisms to support resolution and restore market confidence 28
   - 3.2. Choice of resolution strategies and optionality of resolution tools 28
   - 3.3. Communications, coordination, and speed of bank runs 29
   - 3.4. Operationalisation of bail-in 30
   - 3.5. Post-stabilisation restructuring 31
   - 3.6. Resolution of banks that could be systemic in failure 31
   - 3.7. Uninsured deposits and the role of deposit insurance in resolution 31

Annex: Overview of the Key Attributes 33

Abbreviations 34

Executive summary

The bank failures of the first quarter of 2023 constitute the first real test at a larger scale of the international resolution framework established by the Key Attributes of Effective Resolution Regimes for Financial Institutions ("Key Attributes") in the aftermath of the Global Financial Crisis.

The Financial Stability Board (FSB) announced publicly that it would review the lessons to be learnt from the recent actions taken by the authorities to resolve financial institutions for the operation of the international resolution framework. Over the period between March and September 2023, the FSB has reviewed the recent events in Switzerland, the United States (US), and the United Kingdom (UK) and assessed potential implications for the FSB's resolution framework as set out in the FSB Key Attributes.

This report identifies preliminary lessons learnt regarding the FSB Key Attributes' framework for (i) resolving a global systemically important bank (G-SIB), drawing on an analysis of the Credit Suisse case; and (ii) the resolution of systemically important banks more broadly, drawing on the recent bank failure episodes in the US.

G-SIB resolution and the Credit Suisse case

Following long-standing difficulties and extreme episodes of liquidity stress in October 2022 and March 2023, Credit Suisse was acquired by UBS, supported by ample liquidity facilities including a public liquidity backstop, a second-loss guarantee from the Swiss government, and a write-down of Additional Tier 1 (AT1) bonds. The actions by the Swiss authorities to facilitate a commercial transaction outside of resolution supported financial stability and the global operations of Credit Suisse. At the same time, it raises the question why resolution was not the chosen path despite it being an executable alternative at that time in light of preparations made. The Swiss authorities had concerns about the ability of the prepared resolution strategy to address the crisis of confidence at Credit Suisse. This report seeks to set out a clear understanding of the Swiss authorities' actions with a view to drawing lessons for the international resolution framework.

Since the summer of 2022, the Swiss Financial Market Supervisory Authority (FINMA) had initiated intensive meetings of the Crisis Management Group (CMG), which included home and key host authorities of Credit Suisse. In collaboration with the CMG, FINMA had conducted two valuations for the purpose of bail-in resolution (in November 2022 and March 2023), suggesting that if FINMA had pursued a full bail-in, Credit Suisse would have reopened with a consolidated Common Equity Tier 1 (CET1) ratio of about 44% of risk weighted assets (RWAs). It was also established that Credit Suisse did not have any known retail Total Loss-Absorbing Capacity (TLAC) bond holders. FINMA had addressed, in good cooperation with the Bank of England (BoE), Federal Reserve Board (FRB), Federal Deposit Insurance Corporation (FDIC) and Securities and Exchange Commission (SEC), several technical issues to prepare for resolution. CMG members worked on recognition aspects, as applicable, and the near-final draft documents were distributed to the CMG members.

Based on the review conducted by the FSB, it appears that the resolution planning work of the past decade, the availability of loss-absorbing resources, the collaboration that took place within

the CMG in the months leading up to the failure of Credit Suisse, and the efforts of Swiss and host authorities to address remaining obstacles had put authorities in a position to conduct a single point-of-entry (SPE) resolution, if desired. Indeed, the host authorities involved confirmed their readiness to support the execution of the SPE resolution and their confidence that resolution could be undertaken.

At the same time, the Credit Suisse case highlighted a number of important issues for the effective implementation of the international resolution framework that merit further attention as part of the future work of the FSB. Among these are the need for an effective public sector liquidity backstop and operational readiness of banks to access it as a last resort. In addition, firms and authorities need to (i) address the legal issues identified in the execution of bail-in across borders in the course of resolution planning, (ii) better operationalise a range of resolution options such as transfer and sale of business tools alone or in combination with bail-in, and (iii) understand the impact of bail-in on financial markets. Additionally, the Credit Suisse case shows that authorities should continue to prioritise testing and simulating effective decision making and execution at domestic and international levels. They should also extend their communication and coordination efforts outside of the core CMG.

This review reaches the conclusion that recent events demonstrate the soundness of the international resolution framework in that it provided the Swiss authorities with an executable alternative to the solution that they deemed preferable in this particular case. While the report identifies several areas for further analysis and improvements in the operationalisation and implementation of the G-SIB resolution framework, this review upholds the appropriateness and feasibility of the framework, rather than presenting issues that would question the substance of the Key Attributes themselves.

Non-G-SIB resolution and the US bank failures

The failures of Silicon Valley Bank (SVB), Signature Bank and First Republic Bank showed that banks not identified as G-SIBs can still be systemically significant or critical upon failure. For instance, the failure of such institutions could give rise to customer and counterparty behaviour that adversely impacts other institutions perceived by the market as peers. The three US regional banks were effectively resolved without bailing out shareholders and unsecured creditors. This was done using existing powers and tools such as the set-up of bridge banks and use of the systemic risk exception (the latter tool only for SVB and Signature Bank) as well as the set-up of a new, temporary bank term funding program by the Federal Reserve.[1] The use of the systemic risk exception was deemed necessary in order to stem contagion effects to the rest of the banking sector through uninsured deposits and was driven more by the similarity of business models or funding models with other banks than by the size of the failing banks.

Nevertheless, there was relatively limited resolution planning information available and very limited time to develop and implement firm-specific plans to resolve these banks. The events demonstrated that resolution-related capabilities, such as the ability to quickly produce

[1] Federal Reserve (2023), *Terms and Conditions Bank Term Funding Program of 12 March 2023*. The new Bank Term Funding Program was created to provide liquidity to US depository institutions. Each Federal Reserve Bank would make advances to eligible borrowers, taking as collateral certain types of securities.

information needed to market an institution or to operationalise key staff retention plans, are of critical importance, and when such capabilities lack maturity, it can be a hindrance to an efficient resolution process. In addition, SVB, Signature Bank and First Republic Bank would have benefited from having in place loss absorbing capacity in the form of long-term debt, which is an area of work that was already underway before the bank failures and is now the subject of a proposal by the US agencies.

The US bank failures raise a number of issues that deserve attention as part of future work of the FSB. These include the need to explore whether the scope of resolution planning requirements and loss-absorbing capacity requirements needs to be expanded; how resolution authorities can be better prepared for the increased speed of bank runs due to, e.g., 24/7 payments, mobile banking and the use of social media; and the implications of recent events for the role of deposit insurance in resolution arrangements.

Introduction

The events that occurred in the banking sector in the first quarter of 2023 constituted the first real test at a large scale of the international resolution framework established by the Key Attributes of Effective Resolution Regimes for Financial Institutions ("Key Attributes")[2] in the aftermath of the Global Financial Crisis. There had been several cases since 2008 where the resolution framework proved to be an effective safeguard for both depositors and financial stability. The recent bank turmoil included the failure of a global systemically important bank (G-SIB), the most significant failure since 2008.

Box 1: What is resolution?

Resolution is the process of managing a financial institution in failure, with the purpose to minimise the impact on the financial system and the public purse. The objective of an effective resolution regime is to make the resolution of financial institutions feasible without severe systemic disruption and without exposing taxpayers to loss. A resolution must maintain vital economic functions through mechanisms which make it possible for shareholders and unsecured and uninsured creditors to absorb losses in a manner that respects the hierarchy of claims in liquidation.

The FSB announced publicly that it would review the lessons to be learnt from the recent actions taken by the authorities to resolve financial institutions for the operation of the international resolution framework.[3] The FSB Plenary mandated the Resolution Steering Group (ReSG)[4] and its working group on Cross-Border Crisis Management for banks (bankCBCM) to develop this report reviewing the recent events in Switzerland, the United States (US), and the United Kingdom (UK), the handling of distressed banks, and the potential implications for the Key Attributes.[5]

Box 2: What are the FSB Key Attributes?

The **Key Attributes** are the international standard for resolution regimes. They are part of the set of policy measures to address systemically important financial institutions that was endorsed by the G20 in November 2011 to address the problem of firms that are "too big to fail".

The Key Attributes set out the responsibilities, instruments and powers that resolution authorities should have at their disposal for firms that could have a systemic impact if they fail. They also set out recovery and resolution planning requirements, as well as resolvability assessments, for such firms. Further information is included in the Annex 1.

This report provides a description of the recent bank distress cases and the approaches taken by authorities to address that distress. It identifies reflections as regards the FSB Key Attributes framework for:

- resolving a G-SIB drawing on an analysis of the Credit Suisse case; and

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[2] FSB (2014), *Key Attributes of Effective Resolution Regimes for Financial Institutions*, October.

[3] FSB (2023), FSB Plenary statement, March.

[4] ReSG is the primary global forum for the development of standards and guidance for resolution regimes, planning, and execution for systemically important financial institutions.

[5] The drafting was led by Sebastiano Laviola (Single Resolution Board), the bankCBCM Chair.

- the resolution of systemically important banks more broadly drawing on the recent bank failures in the US.

The report focuses exclusively on issues related to resolvability and the resolution framework and does not discuss issues on prudential regulation or ongoing supervision.[6]

This report has been prepared in consultation with the member authorities closely involved in the bank failures. It is informed by discussions at meetings of ReSG, bankCBCM, as well as the Standing Committee on Regulatory and Supervisory Policies, taking place between March and July 2023. It also includes contributions from the International Association of Deposit Insurers (IADI), which are based on discussions at a joint ReSG-IADI meeting held in June 2023 in Basel. Finally, the report reflects findings from meetings held by the bankCBCM Chair with senior decision-makers at various authorities[7] and with market participants in July 2023. The report has been reviewed and approved by the FSB Plenary.

1. Preliminary lessons learnt from the Credit Suisse case for G-SIB resolution and resolution planning

Credit Suisse was acquired by UBS, supported by ample liquidity facilities including a public liquidity backstop, a second-loss guarantee from the Swiss government, a dilution of its shareholders, and a write-down of Additional Tier 1 (AT1) bonds. The actions by the Swiss authorities to facilitate a commercial transaction outside of resolution supported financial stability and the global operations of Credit Suisse. In this report, such actions are considered in the context of the available alternatives, with a view to drawing lessons for the international resolution framework. This review did not identify any material remaining obstacles to resolution, which suggests a close consideration of how outcomes might have differed if Credit Suisse had undergone the Single Point of Entry (SPE) resolution prepared by home and host authority members of the Crisis Management Group (CMG). This section therefore discusses the Credit Suisse case and looks at the benefits that resolution preparedness yielded for the specific case, followed by a discussion of challenges observed and preliminary lessons for the international resolution framework.

1.1. Background on the Credit Suisse case

Following long-standing difficulties, Credit Suisse experienced extreme episodes of liquidity stress in October 2022 and March 2023. The firm had been working to address operating challenges and issues with its business, which had led the institution in mid-2022 to announce the appointment of new executive management, including a new Chief Executive Officer (CEO) and Chief Finance Officer (CFO), who were engaged to lead a strategic review to develop

6 BCBS (2023), *Report on the 2023 banking turmoil*, October.

7 The bankCBCM Chair, supported by the FSB Secretariat, met with senior officials from Switzerland (Marlene Amstad, Alain Girard (FINMA), Thomas Jordan (Swiss National Bank), Federal Department of Finance (Michael Manz)), US (Martin Gruenberg (Federal Deposit Insurance Corporation), Michael Barr (Federal Reserve Board), Nellie Liang and Jay Shambaugh (US Treasury)), UK (Dave Ramsden (Bank of England) and Lowri Khan (HM Treasury)), the European Union (Andrea Enria (European Central Bank)), and with the Chair of the 2021 FSB Evaluation of the effects of too-big-to-fail reforms (Claudia Buch, Bundesbank)).

proposals to reorganise and restructure the business.[8] Notwithstanding these initiatives, credit rating agencies announced downgrades in August 2022 and further ones in November 2022. Credit Suisse in turn started to experience significant outflows of funds from international counterparties and wealth management clients (up to CHF 12-15bn per day in the first half of October), after concerns over the firm's franchise, which were exacerbated by solvency rumours circulating on social media. That said, Credit Suisse maintained a large liquidity buffer (180% Liquidity Coverage Ratio (LCR) as of September 2022) with CHF 230bn of high-quality liquid assets (HQLA) on its books. It was therefore able to manage the October liquidity shock without resorting to central bank liquidity facilities and without breaching its LCR requirement.

After stabilising over the following months, Credit Suisse continued to pursue the plans announced as part of its strategic review and improved its liquidity situation gradually between November 2022 and early March 2023. However, the firm's situation reversed in the week following the failure of SVB in the US. In the context of stress in the banking sector, the delayed publication of Credit Suisse's full financial statements[9] and a widely publicised statement by a large Credit Suisse shareholder[10] created additional concerns about the bank's franchise. This triggered another decline of its share price and a second round of liquidity outflows from Wednesday 15 March. Liquidity resources were further depleted by the need to post HQLA to meet payment and CCP requirements.[11]

The deterioration of the bank's liquidity position during the course of Wednesday 15 March prompted it to ask the Swiss National Bank (SNB) to provide emergency liquidity assistance (ELA) and to activate short-term liquidity facilities of a total of CHF 50bn.[13] The SNB determines what collateral is sufficient for ELA, eligible collateral being Swiss residential mortgages and securities (both subject to specific eligibility criteria).[14] In a joint statement issued that evening, the SNB and FINMA confirmed that Credit Suisse met its capital and liquidity requirements and that the SNB was ready to provide liquidity to the bank if necessary.[15] According to FINMA, while Credit Suisse's regulatory capital ratios remained above its prudential requirements, the firm was at the point of non-viability (PONV) on liquidity grounds on Sunday 19 March and FINMA would have enforced resolution measures under the SPE bail-in strategy, had the merger agreement not been reached on that day.

Box 3: What is single point of entry?

A **single point of entry (SPE)**[12] resolution strategy involves the application of resolution powers, like bail-in and/or transfer tools, at the top parent or holding company level or at a single institution by a single resolution authority. The application of resolution most probably takes place in the "home" jurisdiction, responsible for the global consolidated supervision of a group.

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8 See, for example, the media releases issued by CS over this time period, for example: press release issued on 27 July 2022; and Ad hoc announcement pursuant to Art. 53 LR.

9 See Credit Suisse announces technical delay of publication of 2022 Annual Report.

10 Bloomberg, Credit Suisse Reels After Top Shareholder Rules Out Raising Stake, 15 March.

11 SNB (2023), *Financial Stability Report*, June.

12 FSB (2013), *Guidance on Developing Effective Resolution Strategies*, July.

13 See Credit Suisse Group takes decisive action to pre-emptively strengthen liquidity and announces public tender offers for debt securities.

14 SNB (23 March 2023*), Einleitende Bemerkungen des Direktoriums*, p. 5. See also IMF (2019), Financial Sector Assessment Program Technical Note—Financial Safety Net And Crisis Management Arrangements, point 45 at p. 24.

15 SNB and FINMA (2023), *Statement on market uncertainty*, 15 March.

Box 4: What is bail-in?

Bail-in[16] is a resolution tool set out in the Key Attributes to achieve an orderly resolution that minimises any impact on financial stability and ensures the continuity of critical functions, without exposing taxpayers to loss. It allows the resolution authority to stabilise a firm and to facilitate an orderly creditor-financed reorganisation of all or part of a firm in resolution. It is designed based on the principle that investors in a firm should bear the losses in failure. In other words, when applying bail-in, equity holders and unsecured and uninsured creditors are written down to absorb losses. For the purpose of recapitalising the institution, the debtholders whose debt was written down are issued new equity and become shareholders of the institution post bail-in. A period of restructuring of the institution should follow to ensure that the trust in the business model and the market is restored. The Key Attributes contemplate two distinct approaches to bail-in: an open firm bail-in and a closed-firm bail-in. (For a brief description of these two approaches, see Box 8.)

On 19 March, Credit Suisse and UBS reached agreement on a merger transaction. The transaction involved Credit Suisse shareholders receiving CHF 3bn of UBS shares as compensation. UBS was granted a CHF 9bn second-loss government guarantee in respect of potential losses arising from certain Credit Suisse assets after UBS will have incurred the first CHF 5bn of losses.[17] The announcement of the merger and the accompanying measures stabilised Credit Suisse.

A merger transaction or share sale via resolution was not contemplated by the Swiss authorities and was not part of the list of options discussed. The transfer of a failing G-SIB in its entirety to a private buyer in resolution was not actively planned for, due to size and complexity considerations.

The merger transaction was supported by an emergency decree of the Swiss government, which suspended UBS and Credit Suisse shareholders' rights to approve or reject the merger. The decree was considered necessary for the immediate stabilisation of Credit Suisse, as Swiss authorities were of the view that it was important to achieve certainty quickly. Like all authorities, FINMA does not possess pre-existing resolution powers to override the rights of the shareholders of an acquiring bank and such powers are not envisaged in the Key Attributes. In Switzerland, in the case of a share sale via resolution, an emergency decree would also have been required had it been deemed necessary to override the rights of UBS shareholders. However, the transaction was subject to the support of UBS' other main governance bodies, who remained responsible to shareholders, and took three months to close, during which financial support from the Swiss authorities was made available to maintain confidence.

The transaction also benefitted from new liquidity backstops: (i) a CHF 100bn facility to UBS and Credit Suisse by the SNB, uncollateralised but with privileged creditor status in bankruptcy for SNB (referred to by the Swiss authorities as "ELA+");[18] and (ii) a second facility by the SNB to Credit Suisse of up to CHF 100bn through a public sector backstop, both established by

[16] FSB (2021), *Bail-in Execution Practices Paper*, December; FSB (2018), *Principles on Bail-in Execution*, June.

[17] According to the press release by UBS of 11 August 2023, UBS has definitively terminated the agreement regarding the federal loss protection guarantee in the amount of CHF 9 billion.

[18] SNB (23 March 2023), *Mediengespräch: Einleitende Bemerkungen des Direktoriums*, p. 5.

emergency legislation.[19] The public sector support triggered the full write-down of all AT1 instruments issued by Credit Suisse under the contractual terms governing those instruments. FINMA therefore instructed Credit Suisse to write down its AT1 instruments, amounting to roughly CHF 16bn in total in nominal value (roughly CHF 5bn in market value on 17 March prior to write off).

FINMA had started intensive crisis management in summer 2022 in response to Credit Suisse's situation and had worked closely together with its counterparts domestically and internationally through the CMG. From the summer of 2022 through early 2023, the CMG focused on recovery measures and an SPE bail-in resolution strategy as a contingency should recovery prove unsuccessful.

Box 5: What are Crisis Management Groups?

For all G-SIBs, the Key Attributes expect the establishment of **Crisis Management Groups (CMGs)** with the objective of enhancing preparedness for, and facilitating the management and resolution of, a cross-border financial crisis affecting the firm. The Key Attributes also call for home and relevant host authority members of CMGs to put in place institution-specific cooperation agreements that define the roles and responsibilities of participating authorities and establish processes for coordination and information-sharing in developing recovery and resolution plans and carrying out resolvability assessments, and for coordination both in the run up to and in a resolution.

The Swiss authorities had considered three options: (i) a commercial merger, (ii) restructuring via resolution, and (iii) a bailout/nationalisation. The bailout option had been rejected early on, as the other options were deemed much better for stabilising the firm and the market in the immediate and longer term, as well as less burdensome for taxpayers.

In the specific situation of the crisis faced by Credit Suisse, the going-concern acquisition of Credit Suisse by UBS was deemed by the Swiss authorities to have the best chances to stabilise the situation in that particular market environment.[20]

The Securities and Exchange Commission (SEC) and the New York State Department of Financial Services (NYDFS) were invited to join the Credit Suisse CMG in November 2022. The SEC joined the CMG in light of the likely applicability of the US securities laws to any eventual transaction involving investors (e.g., merger, bail-in, etc.) that would be undertaken in relation to Credit Suisse, as well as the materiality of the firm's two US broker-dealers to the firm's US operations. The NYDFS joined the CMG in connection with Credit Suisse's New York branch. The SEC's accession to the CMG took some time, as it required agreement by the Commission itself to the terms of existing Cooperation Agreements governing the CMG.

As part of its preparations for resolution and restructuring over the course of the months, FINMA had done two valuations for the purpose of bail-in resolution (in November 2022 and in March 2023). This indicates that, in the event of resolution, FINMA would have pursued a full bail-in of the firm's TLAC instruments. It is noteworthy that Credit Suisse did not have any known retail

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[19] See Swiss Federal Council (2023), *Safeguarding financial market stability: Federal Council welcomes and supports UBS takeover of Credit Suisse*, 19 March; SNB (2023), *Swiss National Bank provides substantial liquidity assistance to support UBS takeover of Credit Suisse*, 19 March

[20] Federal Council, 'Botschaft über den Nachtrag Ia zum Voranschlag 2023' (dispatch on addendum Ia to the 2023 budget) of 29 March 2023, pp. 17-18.

TLAC bond holders. Whereas a partial bail-in of the TLAC instruments might have been sufficient to reopen the bank on Day One after resolution, there could have been a risk that the capital generated was going to be depleted if the firm were unable to rebuild its brand and business model, leaving only bankruptcy as a fallback.

Box 6: What is TLAC?

In November 2015, the FSB issued the Total Loss-Absorbing Capacity (TLAC) standard for G-SIBs.[21] The TLAC standard is designed so that a failing G-SIB has sufficient loss-absorbing and recapitalisation capacity available for authorities to implement an orderly resolution that minimises impacts on financial stability, maintains the continuity of critical functions, and avoids exposing public funds to loss.

A resolution was ready to be implemented on Sunday 19 March if so decided. Over several months, FINMA had addressed a number of technical issues to prepare for resolution thanks to the cooperation with the BoE, FRB, FDIC and SEC in particular. CMG members worked on recognition aspects, as applicable, and the near-final draft documents were distributed to CMG members on Saturday morning 18 March 2023. A resolution would have wiped out Credit Suisse's shareholders, as well as AT1 bondholders and other capital instruments, and would have converted the full amount of all of its bail-in bonds into new shares. The resolved bank would have had new management appointed and would have benefited from a CHF 100bn liquidity facility from the SNB (guaranteed by the Swiss Confederation) established by emergency legislation and based on the draft amendments to the Swiss Banking Act establishing a public liquidity backstop for banks in resolution. Credit Suisse would have reopened on Monday 20 March with a consolidated CET1 ratio of circa 44% of RWA.

The resolution was finally not activated. Parallel discussions between UBS and Credit Suisse had led to a merger being agreed, which the Swiss authorities considered to be the solution having the best prospects for stabilising the firm. In their assessment, it provided immediate certainty to the Swiss financial sector, international financial markets, clients, creditors and, indirectly, Swiss taxpayers. The Swiss authorities considered that undertaking the merger in an agreed private contractual transaction, facilitated by the government's emergency decrees, liquidity facilities, second-loss guarantee and the write-down of AT1 bonds, would be more effective in stabilising the market, rather than a resolution involving the conversion of over CHF 50bn of TLAC into capital. As mentioned above, the resolution option that had been considered and prepared for was an SPE bail-in strategy, and the use of the transfer tool in resolution had not been contemplated as an option.

The transaction closed on 12 June[22], almost 3 months after its announcement, and will be followed by a restructuring and integration period taking several years. Closing of the transaction was contingent on UBS complying with the requirements of US securities laws. This included publication of a registration statement and prospectus filed with the SEC by UBS in respect of the new shares UBS will issue to Credit Suisse shareholders, some of whom are US investors.[23]

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[21] FSB (2015), *Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution and Total Loss absorbing Capacity (TLAC) Term Sheet*, November.

[22] UBS (2023), *UBS completes Credit Suisse acquisition*, 12 June.

[23] The registration statement and prospectus can be found on the SEC website here.

On 11 August, UBS announced it had voluntarily terminated the second-loss guarantee agreement with the Swiss Confederation, after reviewing all assets covered by the agreement since the closing in June and taking the appropriate fair value adjustments. Moreover, as all loans under the public liquidity backstop had been fully repaid by Credit Suisse as of end-May 2023, UBS also announced terminating the public liquidity backstop agreement with the SNB.[24]

1.2. Implications of the Credit Suisse episode for the FSB Resolution Framework

The handling of Credit Suisse had several important positive aspects. The first is that it supported financial stability, as financial markets were not disrupted, and customers continued to do business with the bank. Second, the Swiss authorities chose a path that supported global operations and non-Swiss entities. This has been an important goal of the resolution framework and international coordination over the past decade or so. Thirdly, shareholders and AT1 creditors experienced significant losses, although not with the same result as in a resolution scenario.

The FSB's international resolution framework developed and endorsed by key jurisdictions, was designed to handle the failure of G-SIBs, among other financial institutions. Resolution regimes provide powers and options to authorities to resolve a firm that is no longer viable and has no reasonable prospect of becoming so.[25] In this context, the Credit Suisse case raises the question why resolution was not the chosen path and what lessons can be drawn for the international resolution framework.

The international resolution framework envisages shareholders losing their investments and debtholders being bailed in in case of a systemic bank failure. It seeks to achieve such outcomes in a manner that does not expose taxpayers to loss and that allocates losses to shareholders and creditors while respecting the hierarchy of claims in liquidation.[26] Since the Global Financial Crisis, key authorities, including central banks, prudential supervisors, and resolution authorities, have planned and collaborated extensively around this framework. Though execution risks and uncertainties about market impact remained, a successful resolution of Credit Suisse could have provided clear confirmation to market participants that the Key Attributes objectives could be achieved.

In the Credit Suisse case, the second-loss guarantee provided by the Swiss government remained a potential cost to taxpayers until the termination of the guarantee in early August. Since the actions were taken outside resolution, the absorption of losses by shareholders and bondholders did not follow the hierarchy of claims that is established for liquidation or resolution.

Several factors have been suggested as to why resolution was not chosen. These include possible knock-on effects from imposing losses on shareholders and bailing in bondholders; uncertainty about the market and customer acceptance of a stand-alone recapitalised entity; and

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[24] UBS (2023), *UBS Group AG voluntarily terminates Loss Protection Agreement and Public Liquidity Backstop guaranteed by Swiss government and Credit Suisse AG fully repaid ELA+ loan*, 11 August.

[25] FSB (2014), *Key Attributes of Effective Resolution Regimes for Financial Institutions*, October.

[26] FSB (2014)

certain execution risks, including the mechanics of bail-in. These factors are further analysed in section 1.4. On the other hand, FINMA has indicated it was ready to implement the prepared resolution if merger negotiations would not have led to an agreement in time. FINMA expressed the view that resolution measures should always be considered measures of last resort, i.e., subsidiary to other measures that are deemed to provide the same stabilising effect.

Some have suggested that this episode demonstrates that the resolution framework is not workable. However, the FSB's review does not support that conclusion. As indicated above, a resolution was ready to be implemented that weekend. While the choice of resolution would have presented some uncertainties, as would any solution to a banking crisis, the Swiss authorities considered that an alternative option was preferable in this particular case.[27] [28]

The FSB will identify and propose possible enhancements to the implementation of the international resolution framework in jurisdictions that would reduce uncertainty related to choosing resolution.

1.3. Strengths of the existing framework

Total Loss-Absorbing Capacity (TLAC)

Although resolution was not used in the case of Credit Suisse, the TLAC standard and its full implementation, along with the resolution package that FINMA had prepared for the firm, provided a credible alternative path. The availability of sufficient bail-inable debt would have supported the bank's post-stabilisation restructuring, which would have been capital intensive.

Resolution planning for G-SIBs

The resolution planning work conducted by authorities over the past 15 years and the resolution capabilities put in place at the firm proved useful in the actions taken by the Swiss authorities to restore market confidence. These relate to legal entity rationalisation, reporting on liquidity and on valuation, stays, continuity of access to FMI services, and operational continuity generally. The work on the resolvability of Credit Suisse was based on a home authority-led SPE strategy involving TLAC at the holding company and internal TLAC at material legal entities, technical aspects of bail-in execution planning and the development of funding, valuation and post-bail-in restructuring capabilities. This work enabled FINMA to prepare a resolution decree for the bank in distress, which would legally approve the measures taken in the resolution plan and enforce resolution actions. The bank's valuation capabilities as required by FINMA allowed the preparation of intra-month financial statements on a T+5 basis. The valuation information was discussed in detail with the CMG. This allowed FINMA to achieve a level of preparedness for implementation of a resolution within a 7 to 10-day period, which ultimately was reduced to 5 days.

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[27] Swiss Federal Department of Finance (2023), *UBS takeover of Credit Suisse, Frequently Asked Questions*.

[28] Federal Council, 'Botschaft über den Nachtrag Ia zum Voranschlag 2023' (dispatch on addendum Ia to the 2023 budget) of 29 March 2023, pp. 17-18.

Cross-border cooperation and ex ante contingency planning

CMGs have been a core part of the post global financial crisis coordination infrastructure for G-SIBs since their inception almost 15 years ago, and the experience with Credit Suisse reinforced their importance in facilitating timely engagement and information sharing between the home and key host authorities in both business-as-usual and crisis times. Early in October 2022, FINMA involved not only Credit Suisse's Core Supervisory College but also the CMG in its crisis management. It also decided to temporarily extend the CMG's participating authorities to include the SEC in the planning for bail-in execution and the NYDFS, which has jurisdiction over the firm's New York branch and had the ability to access the FRB's discount window facility. In cases involving a US broker-dealer subsidiary or TLAC securities issued through US markets, CMGs would benefit from the participation of the SEC. The same applies to the participation of NYDFS for a G-SIB's New York branch.[29]

Ex ante work on contingency planning and exercises supported authorities' ability to act speedily, especially on home-host co-ordination and crisis preparedness.[30] This recognises the importance of working together on an ongoing basis to further operationalise the international resolution framework. The intensive phase of contingency planning work started in October 2022 and involved the development by FINMA of a resolution plan and resolution decree, as well as a timeline of operational steps to be taken in coordination with CMG authorities. Host authorities benefitted from the robust communication and heightened frequency of CMG interactions.

FINMA staff faced competing priorities, yet they were able to keep CMG members abreast of Credit Suisse's evolving situation. The CMG was used to provide updates regarding the condition of the institution, possible outcomes, and the possible resolution strategy and to prepare CMG members to coordinate with Swiss authorities to conduct the resolution strategy if needed. This included going through the content of the resolution order that FINMA prepared as part of its contingency and resolution planning, as well as to discuss multiple valuation runs and the post-bail-in restructuring plan of the firm. The CMG established specific timelines and operational steps for executing the SPE resolution strategy should it be needed, with authorities prepared to coordinate on the deployment of the SPE resolution on short notice. The early involvement of the CMG, and transparency about the situation and FINMA's contingency and resolution planning, facilitated close cooperation, as well as a good understanding and support for the proposed resolution measures by the host CMG members and their respective senior policymakers. This also facilitated the preparation of the recognition process by certain host authorities. In addition, the concurrent option of a merger ("merger alternative") was also presented to the CMG.

FINMA involved CMG members in the preparation of the resolution decree, based on English translations of – work-in-progress – German-language legal documents in order to assist preparations for the recognition of FINMA's decision. This complexity arose from the cross-border nature of a resolution of Credit Suisse, such as FINMA's bail-in of the firm's TLAC instruments governed by English law. From a host authority perspective, communications and recognition of foreign resolution actions were highlighted as two aspects that required particular

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[29] *See* Key Attributes, section 8.1.

[30] As per section 4 of the *FSB's Good Practices for Crisis Management Groups.*

attention when preparing for the resolution of Credit Suisse, consistent with the Key Attributes. This warranted early involvement of host authorities in the drafting of FINMA's resolution decree.

Beyond CMG members, FINMA also engaged with member authorities of the Credit Suisse Asia Pacific supervisory college in the run-up to 19 March, which facilitated coordinated messaging to the market. Timely engagement with Asia Pacific authorities, where markets open first, is further discussed in section 1.4.

1.4. Challenges of the Credit Suisse case

Strategic optionality of resolution tools

The objective of an effective resolution regime is to make feasible the resolution of financial institutions without severe systemic disruption and without exposing taxpayers to loss, while protecting vital economic functions. This is to be achieved through mechanisms by which shareholders and unsecured and uninsured creditors absorb losses in a manner that respects the hierarchy of claims in liquidation.[31] Authorities are expected, when choosing the resolution strategy for a particular firm, to have assessed its systemic impact considering a scenario with potential adverse market conditions, in line with Annex I-3, section 5 of the Key Attributes, which refers to the assessment of systemic impact. At the time of the failure of Credit Suisse, the Swiss authorities had concerns that the application of the bail-in tool in the volatile market conditions following the failures of several US banks in mid-March 2023 could give rise to financial stability issues and could be accompanied by several knock-on effects in Switzerland and globally.[32]

The concerns raised by the Swiss authorities indicate why they opted for an alternative solution outside resolution. The extent of a potential impact of a bail-in of Credit Suisse's bondholders on financial markets is difficult to assess ex post.[33,34] The measures by Swiss authorities undoubtedly stabilised the situation and ensured financial stability. In resolution, a transfer of Credit Suisse to a merger partner could have involved a partial bail-in, i.e., writing down shareholders' equity and AT1 and Tier 2 regulatory capital in full, and imposing some losses to bail-in bondholders following the creditor hierarchy in resolution. According to the Swiss authorities, the emergency legislation to facilitate the acquirer's purchase without shareholder consent would also have been needed alongside FINMA's exercise of its resolution powers. The temporary liquidity support through a public liquidity backstop provided by the SNB would have likely been needed anyway to cover the liquidity outflows and to re-establish confidence of

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31 Key Attributes, preamble.

32 SNB (2023), *Financial Stability Report 2023*, June.

33 Based on the view from the representatives from 13 large global investors interviewed in July 2023, the prevailing market expectation was that Credit Suisse would have been placed in resolution and that shareholders and TLAC bondholders would have borne losses according to the hierarchy of claims in a bail- in. From the perspective of these market participants, the distress experienced by Credit Suisse – which suffered from long standing difficulties in its business model – and its subsequent failure were perceived as an idiosyncratic event.

34 The Report of the Expert Group on Banking Stability (2023), *The need for reform after the demise of Credit Suisse* expresses a similar view that "Whether these upheavals have the potential to trigger a global financial crisis cannot be reliably predicted and may therefore be assessed differently by different decision-makers. The SNB and the FDF have emphasised the risk of a financial crisis. Most persons interviewed by the expert group (representatives of foreign authorities and private institutions) consider this risk to be considerably less serious."

markets and counterparties. However, the transfer of a failing G-SIB in resolution to a private buyer was not actively planned for, due to size and complexity considerations.

A lesson learnt is therefore that, in preparing for resolution, it may be useful for authorities to gain greater visibility into the potential impact of bail-in on financial markets, in line with the systemic assessment described in Annex I-3 section 5 of the Key Attributes. It is also worthwhile being ready to use more than one resolution tool, or a combination of tools, so as to increase optionality in execution, while respecting the objectives of the resolution framework.

Box 7: What is the toolkit for resolving banks in distress?

The Key Attributes set out the **powers that national resolution authorities should have** at their disposal for firms that could have a systemic impact if they fail. These include powers, for example:

- to take control of and operate a firm, or to conduct resolution through an administrator;
- to remove and replace senior management and directors and recover monies from responsible persons;
- to ensure continuity of services and functions in resolution;
- to transfer assets and liabilities, and establish and operate temporary bridge banks and asset management vehicles;
- to impose temporary stays on the exercise of early termination rights; and
- to write down and convert liabilities (bail-in).

These powers should be available under the jurisdiction's legal framework for the purposes of resolution and exercisable without the consent of shareholders, creditors, debtors or the firm in resolution.

Importance of effective public sector backstop funding mechanisms to restore market confidence

The Credit Suisse case, as well as the US cases discussed in section 2, highlighted lessons learnt for situations where market and depositor confidence is lost. It is an important reminder that recapitalisation of a bank in resolution is not, by itself, sufficient to ensure the continuity of a firm's critical functions if the firm cannot maintain access to liquidity to refinance its liabilities as they fall due. In the period following commencement of a resolution process, even a recapitalised bank is likely to experience heightened liquidity needs generated by market volatility.[35] Authorities need to have credible liquidity backstops and other frameworks in place that are overt and easily understood by market participants and depositors in order to restore market confidence when a bank is resolved. They also need to consider how to most effectively communicate about that, in general terms and/or in the specific case, in order to restore confidence. The backstop also needs to be credible enough in scale and availability to provide meaningful support to a bank in resolution.

In the contingency planning conducted for Credit Suisse, one remaining issue was the provision and amount of a resolution liquidity backstop in addition to the ELA provided by the SNB. Due

[35] FSB (2016), *Guiding principles on the temporary funding needed to support the orderly resolution of a global systemically important bank ("G-SIB")*, August.

to considerable preparatory work that had resulted in a draft amendment of the Swiss Banking Act to introduce a public resolution liquidity backstop, FINMA was able to indicate to the CMG a high probability that the liquidity necessary to support the execution of the resolution plan would be available. The Swiss government was able to quickly introduce the backstop through emergency legislation, because the scope and mechanics of the public liquidity backstop facility had been duly prepared during the months preceding the merger announcement for possible use in and outside resolution.

Having a public liquidity backstop in place for temporary use does not necessarily mean that it will incur losses.[36] Rather, the fact that it exists and is publicly announced contributes to restoring market confidence and helps a resolved bank regain access to markets. However, should the liquidity backstop be provided by public funds, it should come with sufficient conditions to protect taxpayers' money, avoid moral hazard and abusive risk taking by market participants, and include provisions to recover any losses incurred.[37] In the Credit Suisse case, the central bank took less collateral protection than would have been customary under the framework and normal international practice for ELA,[38] with one tranche of the facility protected by taking a preferred creditor ranking in insolvency and one of them additionally protected by a government guarantee.

Post-stabilisation restructuring

The spring 2023 bank failures also raised the question of what magnitude of restructuring action, beyond access to ample liquidity, was needed to restore public trust and confidence to stem the rapid outflow of customer funds. In some of the recent resolution cases, the takeover of operations by a large financial institution that was perceived as strong by market participants appeared to be an important factor, as well as the industry-funded safety nets. Yet the approach, if consistently applied, could lead to continued consolidation and large banks becoming even larger, potentially exacerbating the too-big-to-fail problem. For G-SIBs in particular a (larger) purchaser may not be available. It also raises questions about competition policy. Thus, the question is whether and under what circumstances a creditor-financed recapitalisation followed by a restructuring and development of a credible business plan can be successful in restoring trust in the long-term viability of the bank, in particular with depositors, creditors, clients and counterparties, but also with authorities.

A key concern for the Swiss authorities was to communicate, on the Monday morning after the events, a clear message to the public about the future of Credit Suisse in order to restore market confidence based on the prepared restructuring plan. This has highlighted the importance of considering possibilities for post-stabilisation restructuring in advance, during resolution planning, in order to quickly result in a credible restructuring plan and to be able to announce a credible plan on the Monday morning after the resolution weekend. Authorities should also plan for how they would oversee such a restructuring. The reorganisation and partial wind-downs of bank operations following recent take-overs, in particular in the Credit Suisse case, may yield some useful lessons, which in practice may take some time to observe as plans to effectuate

[36] Reuters (2023), Credit Suisse has paid back government-backed liquidity, Swiss finance minister says | Reuters, 1 June.

[37] See FSB (2016), Guiding principles on the temporary funding needed to support the orderly resolution of a global systemically important bank ("G-SIB").

[38] See for example the discussion in "The Lender of Last Resort Function after the Global Financial Crisis", IMF 2016

the UBS- Credit Suisse merger and post-merger reorganisation are implemented over the following months or years.

Communications and cross-border cooperation

The Credit Suisse experience has shown that crisis communications by home and host authorities, as well as by the firm, are crucial to restore market confidence. The above reflections on public liquidity backstops and post-stabilisation restructuring illustrate the need for clear communications. Having a communication strategy that is coordinated and effective can often be challenging in a crisis. Preparing communications plans in advance and testing them through exercises are an essential part of crisis management preparedness.

Regarding cross-border cooperation, while FINMA utilised the established structure of the CMG and Asia-Pacific Crisis Management College to share information and coordinate actions with its main foreign counterparts, the Credit Suisse case has shown that some outreach to foreign supervisory and resolution authorities beyond those of CMG jurisdictions may be desirable, even if the cross-border impact in those jurisdictions is indirect.[39] For G-SIBs in particular, the impact of a failure may be broader in non-CMG jurisdictions than in the jurisdictions where the firm has its main operations. It is therefore important that all the main jurisdictions where even indirect effects may materialise are kept informed, as necessary and appropriate, when preparing for crisis execution measures. In addition, different time zones may be involved, in which case it is important that home authorities engage sufficiently in advance with counterparts in jurisdictions where financial markets will open first, to communicate any potential resolution action and clarify any implications for host jurisdictions.

The recent events also point to how important it is for authorities to have clear communications during business-as-usual on resolution and the actions that they expect to take in resolution. Since the Global Financial Crisis, jurisdictions have taken various steps to educate the market on the resolution framework. However, there is still a need to ensure that the objectives and desired outcomes of resolution are well understood by the market and the wider public in order to increase the credibility of resolution in the future.

Legal issues in executing a bail-in across borders

The Credit Suisse case was the first instance where authorities came as close to resolving a G-SIB. In the months preceding Credit Suisse's failure, FINMA, together with its domestic and foreign counterparts, prepared a resolution plan that was ready to be executed if so decided. FINMA noted from its experience with Credit Suisse that even with as much preparatory work as possible, some legal and operational issues are likely to remain and would need to be dealt with after enforcing the resolution measures.

The SEC and FINMA engaged in discussions with Credit Suisse and its US counsel during the months preceding the firm's failure. FINMA established an approach to accomplish the bail-in of

[39] For example, the announcement that Credit Suisse's AT1 holders would be fully written off prompted several authorities, including the Bank of England, Hong Kong Monetary Authority and Single Resolution Board, to make policy statements to reassure the market for AT1 instruments.

securities issued in the US in a manner expected to be in compliance with Swiss and US securities law. CMG authorities were presented with this solution and understood that it was prepared to be carried out in a timely and effective manner. Credit Suisse bore the burden of establishing whether an exemption applied to the conversion of its TLAC instruments; the SEC cannot confirm or grant exemptions on an ex ante basis. Instead, the firm had to rely on the advice of US counsel when planning for the application of bail-in. In these situations, the US counsel typically provides the issuer with a legal opinion confirming that the conditions for an exemption are met.

According to the SEC staff, there would have been legal challenges relating to US securities laws in executing a bail-in; they noted that banks need to prepare sufficiently to comply with US securities laws after an open bank bail-in. US investors held bail-in bonds issued by Credit Suisse representing a significant portion of the firm's TLAC. US securities laws apply to any TLAC instruments held by US investors, irrespective of the currency or governing law of that TLAC instrument.

Box 8: What is the difference between open-bank and closed-bank bail in?

The Key Attributes contemplate two distinct approaches to bail-in: 'closed firm bail-in' and 'open firm bail-in'. The economic effect is largely the same in both approaches. In an open firm bail-in, the failed firm is recapitalised through the direct issuance of equity to TLAC holders and other creditors of the firm in resolution. Losses are absorbed by the direct write-down of equity and debt within the existing legal entity structure. In a closed firm bail-in, one or more successor entities are capitalised through the issuance of equity in the successor entity or entities to TLAC holders and other creditors of the firm in resolution. While the entity in resolution would be wound down, the majority of assets and some of the liabilities of the firm in resolution would be transferred to the successor entity (e.g. a bridge institution), leaving behind shareholders' equity and liabilities to absorb losses.

Under US law,[40] all offers and sales of securities need to be either registered[41] or exempt[42] from registration. The conversion of Credit Suisse's bail-in-bonds to equity would have constituted a sale, thus requiring registration or an exemption.

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40 Section 5 of the Securities Act 1933.

41 Registration requires an issuer to file of a registration statement (*prospectus*) with the SEC and would be subject to review by the SEC staff. The statement is to include robust and comprehensive disclosures about the bail-in and be accompanied by updated and audited financial statements reflecting the effects of the bail-in.

42 Under the Securities Act 1933, the issuer has the burden of establishing that an exemption is available. The SEC does not grant/confirm/approve the use of any exemption. In the case of European open-bank bail-in, the SEC has confirmed that the most likely available exemption is the Section 3(a)(9) exemption. That exemption is subject to the following conditions: (1) the issuer of the relevant debt securities (e.g. CS's bail-in-bonds) and the new equity securities (e.g. CS's new shares) must be the same; (2) the new equity securities must be issued *exclusively* to the existing holders of the debt securities; and (3) no commission or remuneration is paid in order to solicit investors' participation in the exchange of the debt securities for the new equity securities. In addition, US anti-fraud laws and regulations apply to all sales of securities meaning that, although investors may not receive the benefits of registration in a transaction exempt under Section 3(a)(9), some level of information is typically provided to investors. In addition to the information provided to investors, the anti-fraud rules require the disclosure of any further material information, as may be necessary to make the statements provided, in the light of the circumstances under which they are made, not misleading. In addition, the SEC noted that registration under the Securities Exchange Act of 1934 would be required for any issuer that has any class of securities listed on a U.S. National Securities Exchange, has a class of equity securities with a certain number of U.S. holders of record or for any issuer that seeks to raise money in the United States through a registered offering of securities. The SEC also noted that issuers need to comply with anti-fraud disclosure rules under the Securities Exchange Act 1934 if the issuer had any securities that would remain listed on US trading venues. These disclosures need to explain to investors the effects of the issuer's resolution and included updated financial information (such as a *pro forma* balance sheet) taking into account the effect of the issuer's resolution.

In the view of the SEC staff, among the challenges involved in executing open-bank bail-in in compliance with US federal securities laws is that it would require detailed preparation, including possibly adapting the bank's systems to enable prompt provision to the market of current and accurate (pro-forma) financial statements. In an open-bank bail-in, the SEC staff considered that it would be difficult for an issuer to compile the disclosures required by securities regulations and anti-fraud laws over a resolution weekend and that ex ante preparations would be necessary to mitigate these challenges. In order to ensure confidence in the execution of bail-in, it is essential for authorities to cooperate among themselves and work together with the firms, as part of resolution planning, to reduce legal uncertainties. Further work will be planned with the SEC to explain potential legal challenges to effective bail-in of TLAC instruments and to describe how firms can undertake actions to comply with the US federal securities laws and thereby enhance the legal certainty of bail-in.

Not all jurisdictions provide resolution-specific exemptions to prospectus and disclosure obligations, for instance for the issuance of new equity securities during bail-in. While there may be certain exemptions in some jurisdictions that could benefit an issuer in resolution, their availability is typically fact-and-circumstance dependent. The conditional nature of these exemptions is sufficiently material for bail-in execution that banks, working with authorities, should engage well in advance and consider strategic plans to ensure a smooth and orderly bail-in for issuers with cross-border TLAC issuances held by non-domestic investors; the expectation to do so already forms part of the FSB Principles on Bail-in Execution.[43]

2. Preliminary lessons learnt from the US bank failures for deposit insurance and systemic importance of non-G-SIBs

The recent US bank failure cases (Silicon Valley Bank (SVB), Signature Bank and First Republic Bank showed that banks not designated as G-SIBs may still be systemically significant or critical upon failure. The events brought to the fore questions about business models that rely heavily on uninsured deposits and possible considerations for authorities on different outcomes for uninsured depositors at smaller or less complex banks.

2.1. Background on the US bank failures

In the United States, unrealised losses from concentrated bond exposures and liquidity and maturity mismatches during a time of significant monetary tightening, combined with a large proportion of concentrated and uninsured deposits and social media influence, led to the deposit run on SVB.

SVB was based in Santa Clara, California, and focused on providing private and commercial banking services to the venture capital industry. It had approximately USD 209bn in total assets and USD 192bn in deposit liabilities at year-end 2022. This followed very rapid balance sheet growth over the previous three years. As a result, SVB had only recently been transferred to the supervisory team responsible for larger banks and become subject to US resolution planning requirements for insured depository institutions. On 8 March, SVB announced it had completed

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[43] FSB (2018), *Principles on bail-in execution*, June.

the sale of substantially all its available-for-sale securities portfolio (approximately USD 21bn of securities), which would result in an after-tax loss of approximately USD 1.8bn in the first quarter of 2023, and announced a new capital raise that same day. That news led depositors to react negatively and SVB's share price to fall 60% the following day.

By the end of the day on 9 March, over USD 40bn of deposits (almost 30%) had left the bank and another USD 100bn were set to leave the next morning. This run on deposits at SVB appears to have been fuelled by social media and SVB's concentrated network of venture capital investors and technology firms that withdrew their deposits in a coordinated manner with unprecedented speed.[44] SVB did not impose any daily withdrawal limits on its customers, nor any automated fraud or unusual-activity blocks on large customer withdrawals. SVB customers typically had alternative accounts with other institutions, which were immediately available to receive deposits they had withdrawn from SVB. On 10 March, the California Department of Financial Protection and Innovation (CADFPI) closed SVB and appointed the FDIC as receiver. During the final days before its failure, SVB's operational weaknesses became apparent as it struggled to execute on its contingency funding plan. For example, SVB had not tested its capacity to borrow at the Federal Reserve's discount window in 2022 and did not have appropriate collateral and operational arrangements in place to obtain liquidity.[45]

Upon the failure of SVB, the FDIC created a Deposit Insurance National Bank (DINB), as part of the resolution strategy at the least cost to the Deposit Insurance Fund (DIF). As receiver, the FDIC immediately transferred all insured deposits to the DINB and announced that uninsured depositors would receive an advance dividend within a week, with a receivership certificate for remaining uninsured funds. Given the speed of the deposit run, there was no time to market the institution pre-failure to potential buyers.

Over the weekend of 11 March, other stresses were identified, and on Sunday, the NYDFS closed Signature Bank (USD 110bn total assets) and appointed the FDIC as receiver. Signature Bank was more diversified than SVB, but it also had a high concentration of uninsured deposits[46], was experiencing a run on deposits, and would have been unable to meet those obligations if it opened on Monday morning.

On Sunday 12 March, the Boards of the FDIC and the FRB each voted to recommend to the Secretary of the Treasury, in consultation with the President, to adopt systemic risk determinations under the Federal Deposit Insurance Act with regard to the resolutions of SVB and Signature Bank. The systemic risk determinations that were adopted enabled the FDIC to extend deposit insurance protection to all depositors of both banks and to create two bridge banks that could be used to facilitate the orderly wind-down of both institutions.[47] The FDIC ran its resolution playbooks for both bridge banks, dissolved the boards of both failed institutions, and appointed new management and directors for the bridge banks. The FDIC ran a sale process for both banks, selling substantially all deposits and certain loan portfolios of Signature Bank in one week and all deposits and loans of SVB in two weeks. In both cases, the institutions were allowed to fail: shareholders lost their investments, unsecured creditors (excluding

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[44] Federal Reserve (2023), *Review of the Federal Reserve Supervision and Regulation of Silicon Valley Bank*, April.

[45] *Ibid.*

[46] FDIC (2023). *FDIC's Supervision of Signature Bank*, April.

[47] US Department of Treasury (2023), *Joint Statement by the Department of the Treasury, Federal Reserve, and FDIC*, 12 March.

depositors) took losses,[48] the boards and most senior executives of both institutions were removed, and investigations are in process to hold directors and officers accountable for losses or misconduct. The FDIC as receiver has retained about USD 60bn in loans of Signature Bank and about USD 90bn in securities and other assets of SVB for later disposition. The FDIC, as receiver, and the purchaser of SVB (First–Citizens Bank & Trust Company) have entered into a loss–share agreement and will thus share in the losses and potential recoveries on loan portfolios covered by the agreement.[49] Ultimately, any losses to the DIF from the two failures will be borne by the industry.[50]

In addition, on 12 March the FRB announced it would make available additional funding to eligible depository institutions to help assure that the banks have the ability to meet the needs of all their depositors.[51] The Federal Reserve's Bank Term Funding Program aimed to ease the liquidity pressures on banks, by providing loans with maturities up to one year to banks against the par value of high-quality securities.

Problems at SVB in the US also led to loss of confidence in its subsidiary in the UK, Silicon Valley Bank UK (SVB UK), which was resolved by the BoE as a consequence. The bank, which had been operating in the UK for about ten years, converted from a branch of the US bank to a subsidiary in 2022 as a result of Prudential Regulation Authority's (PRA) policy[52] and the bank's growth plans. SVB UK was a relatively small bank with total assets amounting to approximately GBP 11.6bn as of 9 March 2023 and had no critical functions supporting the UK financial system. Therefore, the preferred resolution strategy for SVB UK was a bank insolvency procedure, rather than the use of the BoE's stabilisation powers. However, each resolution is different, and the BoE retains discretion when deciding how best to resolve a bank in pursuit of the UK special resolution objectives, based on the circumstances at the time and whether the statutory resolution conditions which apply to implement a particular resolution strategy are met in a given case.

With the failure of the US parent bank, SVB UK would not have been viable on a stand-alone basis, as it relied on its US parent for technology and systems. On Friday 10 March 2023, SVB UK experienced a very rapid deposit run of about 30% of its total deposit base over 5-6 hours, accelerated by 24/7 payments and social media enabling rapid communication of information. The BoE made a public announcement[53] on the same day that SVB UK would go into bank insolvency procedure unless material new information came to light.

Whilst the public announcement provided greater clarity on an end-point that the BoE was confident could be delivered, senior decision-makers were keen to explore other options that

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[48] Most subordinated and general unsecured creditors will have claims against the receivership estates. Ultimately their loss will be determined by the level of recoveries on remaining receivership assets. Given that the (preferred) depositor class and thereby the DIF is estimated to suffer losses, current FDIC staff projections are that recoveries will be insufficient to allow proceeds to general and subordinated creditors.

[49] FDIC (2023), *Subsidiary of New York Community Bancorp, Inc., to Assume Deposits of Signature Bridge Bank, N.A., From the FDIC*, 19 March; and FDIC (2023), *First–Citizens Bank & Trust Company, Raleigh, NC, to Assume All Deposits and Loans of Silicon Valley Bridge Bank, N.A., From the FDIC*, 26 March.

[50] 12 U.S. Code Section 1817(b)(2); 12 U.S. Code Section 1823(c)(4)(G)(ii).

[51] Federal Reserve (2023), *Federal Reserve Board announces it will make available additional funding to eligible depository institutions to help assure banks have the ability to meet the needs of all their depositors*, March.

[52] The PRA policy is set out in *SS5/21 'International banks: The PRA's approach to branch and subsidiary supervision'*

[53] Bank of England (2023), *Bank of England Statement: Silicon Valley Bank UK*, 10 March.

would provide continuity of access to banking services to SVB UK's customers and that would better promote public confidence in the UK financial system. Considerations were given to the fact that SVB UK provided loans to and took deposits from the same relatively concentrated client base in the UK innovation sector.

In light of the rapid turn of events, the BoE prepared for multiple options in parallel, including a bank insolvency procedure and a transfer to a private sector purchaser. The public announcement had the effect of triggering a de facto sale process during which SVB UK and the BoE received strong interest from potential buyers. SVB UK established a sale process throughout the weekend, which enabled the BoE to act quickly when this firm-led process was not successful. Once the going concern sale was unsuccessful, HSBC provided the most credible offer to the BoE to ensure the continuity of SVB UK's deposits through using the BoE's resolution powers to effect a sale. As the BoE pursued the transaction, it also coordinated with the FDIC on certain aspects, such as continuity of operations. On Monday 13 March, the BoE announced a transfer of all SVB UK shares in issue to HSBC for GBP 1 (thereby extinguishing all claims and rights of the previous shareholder) and the simultaneous write-down of SVB UK's AT1 and Tier 2 capital instruments (as required under the Banking Act), which were held by its US parent.[54]

At the time of the failure of SVB, contagion effects began to spread to other US regional banks including First Republic Bank, a San Francisco based bank of about USD 230bn balance sheet (USD 104bn deposits, of which 68% were uninsured) focused on bank services to high-net-worth individuals. While First Republic Bank was initially able to manage liquidity to meet withdrawal requests, management's strategic decision to retain a long-standing business model with a significant asset/liability mismatch during a period of rising interest rates contributed to a loss of confidence in the bank on the part of depositors and ultimately constrained the options for the bank to either restructure its balance sheet, sell assets, or raise capital. On 1 May 2023, First Republic Bank was closed by the CADFPI, which simultaneously appointed the FDIC as receiver. No systemic risk determination was made for First Republic Bank and the FDIC entered into a purchase and assumption agreement with JPMorgan Chase (JPMC) to assume all deposits and substantially all assets of First Republic for USD 10.6bn at an estimated cost to the FDIC of USD 13bn. The FDIC, as receiver, and JPMC entered into a five-year burden sharing agreement on certain loan portfolios, as well as a five-year fixed-term financing agreement.[55] As part of the transaction, First Republic Bank's operations reopened that same morning on 1 May 2023 as branches of JPMC. All depositors of First Republic Bank became depositors of JPMC.[56]

2.2. Implications of the US episode

The three US regional banks were resolved without bailing out shareholders and unsecured creditors. This was done using longstanding powers and tools such as bridge banks and the systemic risk exception. The costs were borne entirely by the banking industry and not the

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[54] Bank of England (2023), *Statement on Silicon Valley Bank*, 13 March; Bank of England (2023), *Letter to Treasury Select Committee*, March.

[55] FDIC (2023), *JPMorgan Chase Bank, National Association, Columbus, Ohio Assumes All the Deposits of First Republic Bank, San Francisco, California*, 1 May.

[56] FDIC (2023), *Remarks by Chairman Martin J. Gruenberg on "Oversight of Prudential Regulators" before the Committee on Financial Services, United States House of Representatives*, 16 May.

taxpayer, with losses being absorbed by shareholders and unsecured and uninsured creditors of the failed banks. The costs to the DIF arising from the protection of uninsured deposits permitted by the systemic risk exception will be recovered by the FDIC from the industry via a special assessment, as required by law.[57]

Getting to such an outcome relied on the availability of substantial resources. For example, the FDIC estimates costs attributable to the protection of uninsured deposits of Signature Bank and SVB of USD 15.8bn in the aggregate (of which, an estimated USD 1.6bn attributable to Signature and an estimated USD 14.2bn attributable to SVB).[58] In addition, significant funding was made available to the US banking system at large. Funding was made available under the Federal Reserve's ordinary discount window lending authority (under Section 10B of the Federal Reserve Act) and under a new facility established by the Federal Reserve, the Bank Term Funding Program (BTFP)[59], as an additional source of funding to help assure that banks had the ability to meet the needs of all their depositors. With respect to the firms that entered resolution, discount window loans were extended to SVB, Signature, and First Republic, and BTFP loans were extended to First Republic, in each case, before the banks were placed into receivership. The Signature discount window loans that were outstanding when it was placed into receivership were assumed by Signature Bridge Bank, N.A.[60] In addition, new 10B discount window loans were extended to Signature Bridge Bank, N.A. and Silicon Valley Bridge Bank, N.A.,[61] which were eligible discount window borrowers under the Federal Reserve Act.[62]

With this background in mind, this episode raises several important questions. Beyond some supervisory reflections[63], the first resolution aspect concerns the framework for addressing the resolution of non-G-SIBs that may be systemic in failure. The FSB and a number of jurisdictions have done work in this area in recent years, and this episode will further that work. Second, this episode demonstrated that banks that rely heavily on uninsured deposits may be extremely vulnerable to stress and steps should be taken to address this. Third, while invoking the systemic risk exception ensured financial stability, its use raises concerns about moral hazard and the possibility of different outcomes for uninsured depositors at smaller or less complex banks, as compared to the way in which such depositors were protected in the cases of SVB and Signature Bank.

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57 See 12 U.S.C. 1823(c)(4)(G) which describes use of the Systemic Risk Exception (SRE) and requires concurrence by two-thirds of the Federal Reserve Board, two-thirds of the FDIC Board, and the Secretary of Treasury in consultation with the President that conformance with least-cost resolution would "have serious adverse effects on economic conditions or financial activity" before the FDIC is allowed to "take other action or provide assistance [to a failed bank] as necessary to avoid or mitigate such effects." In addition, if the SRE is used, the law requires that any losses to the Deposit Insurance Fund (DIF) arising from use of the SRE, by law, must be recovered through special assessments on all depository institutions that are members of the DIF. On 11 May 2023, the FDIC issued a notice of *proposed* rulemaking to charge a special assessment related to the failures of Signature Bank and Silicon Valley Bank. The special assessment rate charged by the FDIC is subject to change prior to any final rule depending on any adjustments to the loss estimate, mergers or failures, or amendments to reported estimates of uninsured deposits.

58 FDIC (2023), *Notice of Proposed Rulemaking, Special Assessments Pursuant to Systemic Risk Determination, 88 Fed. Reg. 32,693*, May.

59 Established under section 13(3) of the Federal Reserve Act

60 A depository institution chartered by the Office of the Comptroller of the Currency (OCC).

61 Each was a depository institution chartered by the OCC.

62 The Federal Reserve expects that these loans will be repaid in full before the end of 2023. *See Additional Information on Other Credit Extensions; Board of Governors of the Federal Reserve System*.

63 Supervisory reflections are set out in Federal Reserve (2023), Review of the Federal Reserve Supervision and Regulation of Silicon Valley Bank, April. In addition, the US agencies put out a *request for comment on proposed rules to strengthen capital requirements for large banks* in July 2023.

2.3. Strengths of the existing framework

Ex ante contingency planning and exercises by authorities

The FDIC, acting in its receivership capacity, was able to rapidly set up and operate a bridge bank for a larger non-G-SIB bank thanks to several factors. These included ex ante planning, with a particular focus on bridge banks in the resolution planning process, and staff-level exercises, focusing on hypothetical failure scenarios and identification of actual resolution and operational challenges at individual institutions. FDIC staff had well defined roles and other regulatory agencies understood the bridge bank process.

Cross-border cooperation

For SVB, Signature Bank and First Republic, the FDIC was able to leverage CMG and FSB contacts for outreach purposes, despite these banks not having CMGs themselves. The BoE also noted that it benefitted from a longstanding and deep relationship with the relevant authorities. This helped because authorities knew who to contact and also understood roles and responsibilities. The FDIC initiated outreach with host authorities, making them aware of the situation, answering questions they had, and continuing to have touchpoints as needed. This was particularly relevant for SVB because it was internationally active as part of a much larger corporate group providing financial services to clients globally. The FDIC maintained close cross-border cooperation, including through the use of CMGs. Understanding each other's decisions and actions was central to being able to progress and act with speed in the recent cases.

2.4. Challenges of the US cases

Concept of systemic significance

The Key Attributes apply to all financial institutions that could be systemically significant or critical in failure. The failures of the US regional banks have shown that banks that have not been designated as G-SIBs or D-SIBs[64] could be systemic in failure. For instance, the failure of institutions without a SIB designation could also give rise to customer and counterparty behaviour that adversely impacts institutions perceived by the market as peers or equivalents of those failing institutions. The case of SVB and SVB UK illustrates that assessing the impact of failure may require a better understanding of a firm's geographic and sectoral concentration, nature of deposits, potential contagion risk by association of similar business models, impact on the real economy, and broader international environment.

Business models relying heavily on uninsured deposits

Firms whose business models or funding models rely heavily on highly concentrated and uninsured deposits, especially if these deposits are mainly sight deposits, are more vulnerable

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[64] The US does not have a separate D-SIB list. See BCBS (2016), *Regulatory Consistency Programme (RCAP). Assessment of Basel III G-SI framework and review of D-SIB frameworks – United States*, June.

to rapid deposit flight. Such rapid deposit flights can matter for confidence in the overall system, domestically and internationally. This issue may even be more acute for banks that do not issue loss-absorbing capacity debt instruments, as uninsured deposits would be more vulnerable to losses. Heavy reliance on uninsured deposits gives rise to liquidity risks that are difficult to manage, particularly in today's environment where money can flow out of institutions with incredible speed in response to information or misinformation amplified through social media channels. The concentration of business in a particular industry combined with concentration of uninsured depositor base (small number of large accounts) and fast growth also played a role in the US bank distress cases. This issue is also relevant for supervisory authorities and should form part of the supervisory scrutiny of the business model of a bank.

Adequate resolution planning arrangements and loss-absorbing capacity

In the US, insured depository institutions (IDIs) with USD 100bn or more in total consolidated assets are currently subject to IDI resolution plan requirements but are not subject to loss-absorbing capacity requirements. SVB had exceeded USD 100bn in total assets in 2021 and, as a result, filed its first IDI resolution plan with the FDIC in December 2022. Around the same time, First Republic filed its third IDI resolution plan with the FDIC, with its previous plan having been filed in July 2018. Signature Bank did not have a resolution plan on file but was required to file a resolution plan in June 2023 due to its total assets having increased above USD 100bn. Overall, the FDIC had relatively limited resolution planning information and very limited time to develop and implement firm-specific plans to resolve these banks.

The submitted plans were under review when the stresses emerged. While having key information on hand in the plans was a helpful starting point to better understand the firms' footprint, source of value, and operational challenges that would be encountered in resolution, more time would have been needed to conduct a meaningful assessment and to determine the credibility and reliability of the plans. The bank failures also demonstrated that resolution-related capabilities – such as the ability to quickly produce information needed to market an institution or to operationalise key staff retention plans – are of critical importance, and that when such capabilities lack maturity it can be a hindrance to an efficient resolution process.[65]

SVB, Signature Bank and First Republic Bank would have benefited from having in place loss-absorbing capacity in the form of long-term debt, which is an area of work that was already underway by the FDIC and Federal Reserve before the recent events.[66] The US bank failures illustrated that the availability of sufficient loss-absorbing capacity, ranking below uninsured deposits and thus providing an additional layer to absorb losses before uninsured deposits,[67] could have forestalled, or largely reduced, deposit runs on these banks or the need for using the systemic risk exception.[68]

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65 In August 2023, the US agencies published a request for public comment on *proposed guidance to enhance resolution planning at large banks*.

66 FDIC, FRB, OCC (2023), *Agencies Request Comment on Proposed Rule to Require Large Banks to Maintain Long-Term Debt to Improve Financial Stability and Resolution*, August.

67 The availability of loss absorbing capacity ranking below unsecured depositors reduces the loss given default for these unsecured depositors.

68 See, for example, FDIC (2023), *Remarks by Martin J. Gruenberg, Chairman, FDIC, on The Resolution of Large Regional Banks — Lessons Learned*, August.

Speed of bank runs accelerated by digital innovation

The speed of recent runs is a major observation and challenge to emerge from some of the recent cases. The ubiquity of social media and mobile banking may mean that bank runs (which are more likely in cases of high concentration of uninsured deposits), when they happen, happen faster. Whilst the core problems of the banks themselves may be different (e.g., poor management practices, asset quality, etc.), once a bank run has gathered pace, it becomes extremely challenging to halt outflows. Considering how firms (and authorities) can maintain credibility in the face of such a run should be a key consideration going forward.

The role of social media in the SVB depositor run illustrates the dynamics that can arise. Social media posts advised depositors to withdraw funds from SVB, and many uninsured depositors did so all at once. The concentration of these large deposits in technology firms and individuals who appear to have been part of closely overlapping virtual communities may have contributed to the synchronised nature of the deposit outflows. Furthermore, the brevity of the runway period for both SVB and Signature Bank challenged the FDIC's abilities to complete all pre-failure marketing preparations, which are meant to prevent contagion and preserve franchise value. Authorities may experience similar challenges in the future, especially with the continued innovation of payment systems and information sharing technologies. Similar observations were made with regard to Credit Suisse's most severe liquidity outflow periods in October 2022 and March 2023. The ease of using 24/7 available digital banking applications allowed depositors to withdraw funds even during weekends. The associated dynamics made predictions of liquidity movements more difficult and allowed for very large deposit withdrawals within hours.

Restoring market and depositor confidence when a bank enters resolution

With the failure of SVB and the impending failure of Signature Bank, concerns began to emerge among US authorities that a least-cost resolution of the banks, absent more immediate assistance for uninsured depositors, could have negative knock-on consequences for depositors and the financial system more broadly. With uninsured depositors at the two banks likely to face an undetermined amount of losses, depositors at other banks began to move some or all of their deposits to other banks to diversify their exposures and increase their deposit insurance coverage. US authorities also began having concerns that investors could begin to doubt the financial strength of similarly situated institutions, making it difficult and more expensive for these banks to obtain needed capital and wholesale funding.

These factors led to the invocation of the systemic risk exception to the least-cost test, protecting all depositors (insured and uninsured), and to the establishment of bridge banks to continue the operations of both institutions. Continued access to ordinary liquidity facilities and support provided by the FDIC, as receiver, for both bridge banks ensured the adequacy of liquidity to meet necessary funding in resolution. US authorities ensured that banks were able to obtain as much liquidity as they needed. Triggered by the situation at SVB, the Federal Reserve more specifically established the BTFP, which provides loans with maturities up to one year to banks against the par value of high-quality securities, rather than at a marked-to-market value of that collateral.

When the SVB and Signature bridge banks opened, the FDIC, as receiver, appointed their boards of directors, which in turn appointed new CEOs for both bridge banks. The CEOs then

took immediate steps to retain key staff in order to provide for operational continuity and preserve value. Both CEOs had strong records in the financial services industry, are well known and well-regarded leaders, and were able to effectively manage the operations of the bridge banks and bolster FDIC messaging. Given the market's relative unfamiliarity with bridge banks, certain counterparties were initially reluctant to transact with the bridge banks. The FDIC took immediate steps to conduct outreach to individual counterparties to mitigate concerns, joined several industry conferences, and published a letter to all financial institutions explaining the bridge bank and the obligation of counterparties to honour their pre-existing commitments, given that all contracts had transferred from the failed banks to the bridge banks. These actions helped assuage concerns about the bridge banks' abilities to operate.

Need for flexibility in implementation

While authorities prepared a preferred resolution strategy as a baseline, recent events support the benefits of being prepared to act according to different pathways to resolve a bank that is not a G-SIB, but nonetheless could be systemic in failure. In the case of SVB UK, authorities entered the preparations for the weekend with a preferred strategy but eventually ran several strategies in parallel, which was only achievable because of the ex ante work on contingency planning and exercising. Although the BoE's initial resolution strategy was a bank insolvency procedure, securing continuity of services immediately after the resolution weekend was a very important consideration for the UK authorities. The resolution of SVB UK was executed with limited firm-specific pre-planning, in the space of less than 72 hours. The BoE had to consider several options and potential outcomes at the same time, until the final outcome was determined. The BoE had well established documentation to support preparation for resolution across all strategies available that supported rapid preparation and onboarding of staff unfamiliar with a specific firm to deliver resolution readiness. These were crucial in enabling the outcome achieved.

Role of deposit insurance

A primary objective of deposit insurance is to promote financial stability. The shared financial stability objective of deposit insurance and effective resolution is the nexus for the work to consider lessons learnt from the recent bank failures.[69] Deposit insurance protects depositors and decreases the likelihood of bank runs. However, as noted above, large concentrations of uninsured depositors combined with digital innovation increase the exposure of the banking system to bank runs and can threaten financial stability (specifically, where the failed bank's uninsured deposit portfolio includes accounts maintained by businesses for making payments, i.e. business payment accounts). A loss of funds or timely access to funds in business payment accounts is most likely to result in spillovers to the real economy, as the business's ability to pay salaries, vendors and other business operations are affected.

Deposit insurance is closely intertwined with other prudential and regulatory aspects, including liquidity rules and access to effective public liquidity backstops, loss-absorbing capacity requirements that provide an additional buffer that protects deposits, risk-based premia and

[69] A joint ReSG-IADI meeting discussion held in June 2023 in Basel focused on this.

other funding arrangements for deposit insurers, and the structure of the deposit base (e.g., percentage of uninsured vs. insured, sight deposits vs. term deposits).

In its report published on 1 May 2023, the FDIC sets out its reflections from the failures of SVB and Signature Bank and identifies options for deposit insurance reform, including approaches to increasing deposit insurance coverage. It points to the balance between effectiveness of deposit insurance and mitigation of bank risk-taking and moral hazard. Minimising losses on business payment accounts may have relatively large financial stability benefits, with fewer costs to moral hazard. However, there is a significant challenge in defining "business payment accounts" in a manner that does not allow depositors to circumvent deposit insurance limits. Full coverage for certain payment accounts is in place in Japan. The Deposit Insurance Corporation of Japan (DICJ) fully covers deposits for the purpose of paying salaries and operating expenses, in addition to a limited coverage of other general deposits.[70]

The longer it takes for insured depositors to regain access to their deposits, the more likely depositor confidence will be impacted. Maintaining continuity of depositors' access to their deposits has become more important in a digitalised world and means that authorities need to explore further how continuity can be achieved and how reimbursement can be accelerated further (e.g., leveraging technology to make prompt payments).

3. Issues to be further explored

Ensuring bank resolvability remains the most efficient way to tackle the problem of the implicit 'too big to fail' subsidy for big banks and to avoid a taxpayer bail-out. The preliminary lessons discussed in the previous sections demonstrate that considerable efforts have been made by banks and authorities over the past 15 years to make resolution feasible. Recent cases highlighted a number of important issues for the effective implementation of the international resolution framework that merit further attention as part of the future work of the FSB.[71]

The FSB will conduct work to further explore the lessons from the recent bank failures. This will include considering (i) effective designs for public sector backstop funding mechanisms to support resolution, (ii) the choice of resolution strategies and optionality of resolution tools; (iii) communications, coordination, and ways for resolution authorities to respond to the speed of bank runs, (iv) the operationalisation of bail-in and enhancements to cross-border recognition processes; (v) enhancements to post-stabilisation restructuring planning, and (vi) aspects of particular relevance for resolution of systemic non-G-SIBs, including the assessment of systemic significance, resolution planning, loss-absorbing capacity, and the interaction between resolution and deposit insurance.

Where appropriate, the FSB will continue to coordinate closely with the other standard-setting bodies, as they pursue work on lessons learnt from their perspectives.

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[70] Deposits for payment and settlement purposes must meet three conditions: they must be (i) payable on demand, (ii) capable of providing payment and settlement services, and (ii) bear no interest. As a result of applicable definitions, payroll funds are typically within the scope of payment and settlement accounts.

[71] The recent cases also provide lessons for prudential supervisors and other stakeholders. For instance, work is already ongoing by prudential authorities concerning their approach on liquidity supervision and liquidity standards. See also BCBS (2023), *Report on the 2023 banking turmoil*, October.

3.1. Effective public sector backstop funding mechanisms to support resolution and restore market confidence

Key relevant FSB policies

The Key Attributes (6.1 to 6.5) provide the architecture for the provision of funding to support an orderly resolution. In addition, Guiding principle 2 on the temporary funding needed to support the orderly resolution of a G-SIB[72] states that "*an effective public sector backstop funding mechanism should be available for use when necessary and appropriate in order to promote market confidence and to encourage private sector counterparties to provide or to continue to provide funding to the material operating entities of a G-SIB in resolution*." The FSB guidance on funding strategy elements[73] sets out expectations for firms' capabilities on funding in resolution. It states that "a *recapitalised firm's internal liquidity sources should be used to meet funding needs to the extent possible and private markets should be the preferred source of funding in resolution and public sector backstop mechanisms should only provide temporary funding to the extent that market access funding is temporarily not available and such funding is necessary to foster financial stability and enable successful implementation of the resolution plan*."

In light of this guiding principle and the recent bank failures, it is important to explore whether, given the range and availability of different public sector backstops across jurisdictions (e.g., central bank, deposit insurance funds, resolution funds, fiscal lending), existing public sector backstops are adequate for the range of potential failure scenarios. In that context, the FSB will conduct analysis on whether there are design features (e.g., size, acceptable collateral, foreign currencies, duration, safeguards) that present barriers to resolution in some jurisdictions and on the extent to which the lack of an adequate and explicit public liquidity backstop arrangement could still be perceived as making resolution less credible in some jurisdictions. Also, operational readiness of banks to access the backstop facility is important to consider. The analysis will also consider the interaction and possible sequencing of public sector funding backstops in the run up to and during resolution.

3.2. Choice of resolution strategies and optionality of resolution tools

Key relevant FSB policies

The Key Attributes set out the range of resolution powers and tools that resolution authorities should have at their disposal. In particular, KA 3.3 covers the transfer of assets and liabilities and KA 3.5 covers bail-in. In addition, KA 3.6 states that the resolution regime should make it possible to apply bail-in within resolution in conjunction with other resolution powers (for example, removal of problem assets, replacement of senior management and adoption of a new business plan) to ensure the viability of the firm or newly established entity following the implementation of bail-in. The Guidance on Developing Effective Resolution Strategies[74] also covers resolution strategies and tools that authorities may use.

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[72] FSB (2016), Guiding principles on the temporary funding needed to support the orderly resolution of a global systemically important bank ("G-SIB"), August.

[73] FSB (2018), Funding strategy elements of an implementable resolution plan, June.

[74] FSB (2013), Guidance on Developing Effective Resolution Strategies, July.

The recent bank failures raise questions to be further explored with regard to the implementation of existing FSB policies in relation to:

- **Choice of resolution strategies**. The FSB will further investigate the choice and feasibility of resolution strategies and discuss the use of the bail-in tool in various failure scenarios, including liquidity-driven failures. As part of this, it is relevant to discuss whether other strategies (transfers/business sales), or a combination of strategies, could be more appropriate in those situations. It is also relevant to consider to what extent a bail-in can support resolution in liquidity-driven failures (e.g. to help cover future restructuring costs) and what could be the associated challenges. Furthermore, in case of transfers/business sales, the risk of large systemic banks becoming more systemic should also be considered.

- **Retaining flexibility while preparing to deal with a failing bank**. Retaining flexibility is important as jurisdictions carry out their resolution planning activities in respect to several possible scenarios (planning of several resolution strategies). Preparing for a preferred resolution strategy requires substantial resources from both authorities and the firm. Retaining optionality of resolution tools should not come at the expense of maintaining an adequate level of preparedness to execute the preferred resolution strategy. It is relevant to discuss ex ante considerations for resolvability and resolution preparedness to preserve optionality in resolution tools to cater for different failure scenarios. Discussions could also cover strategic, tactical and operational approaches in order to preserve flexibility when preparing to deal with a failing bank, including the possibility to apply an alternative resolution strategy while maintaining an adequate level of preparedness through operationalisation and testing.

3.3. Communications, coordination, and speed of bank runs

Key relevant FSB policies

Appendix I, Annex 4 of the Key Attributes, on the essential elements of recovery and resolution plans provides that "proper communication strategies and processes to coordinate communication with foreign authorities should be identified." The FSB Guidance on cooperation and information sharing with non-CMG host authorities sets expectations on how to engage with host authorities of jurisdictions where a G-SIB has a systemic presence and that are outside of the CMG.

The recent experience with loss of market confidence and speedy bank runs raises issues related to:

- **Crisis communications and confidence.** It is relevant to consider what communications by home and host authorities and firms could support restoring confidence of markets and depositors (general/specific communications, both business-as-usual and pre- and post-resolution, including by central banks in relation to liquidity provision), so as to reduce market uncertainty and litigation risks, and how authorities should prepare and coordinate for these.

- **Coordination with foreign authorities outside the CMG.** Some outreach to foreign supervisory and resolution authorities beyond those of CMG jurisdictions may be a relevant consideration even if the cross-border impact in those jurisdictions is not immediately visible.

- **Ex ante communications.** It is also relevant to explore how authorities, in business as usual, can improve the market and wider public's awareness and understanding of resolution.

The FSB will discuss efforts that could be made to communicate on what steps and actions authorities would expect to take in resolution.

- **Speed of bank runs accelerated by digital innovation.** The accelerated speed of bank runs due to, e.g., social media, fast payments and mobile banking is likely to affect resolution execution. It is therefore important to discuss how resolution authorities can prepare for such situations, increase the speed of their actions and have adequate communication strategies.

3.4. Operationalisation of bail-in

Key relevant FSB policies

The Key Attributes (3 and 11), the TLAC Term Sheet and the Principles on Bail-in Execution set out guidance for the effective execution of the bail-in tool for G-SIBs. In particular, Principles 11 and 12 refer to potential securities law and securities exchange requirements, together with disclosure and listing requirements, during the bail-in period.

Drawing from the case of Credit Suisse, further work is needed to arrive at a mutual understanding of jurisdictions' legal frameworks, resolution strategies and bail-in mechanics as per the Key Attributes and the Principles on Bail-in Execution. The open bank bail-in approach available in many G-SIB jurisdictions can create challenges in a cross-border context where TLAC instruments are issued to non-domestic investors. Compliance with applicable securities laws, such as US federal securities laws, requires detailed preparation, including possibly adapting the bank's reporting capabilities to enable prompt provision to the market of current and accurate (pro-forma) financial statements in the event of resolution.

The FSB will support its members to explore, together with the SEC, options available to address these legal challenges and to ensure effective cross-border coordination and cooperation on this issue.

Matters to be further explored by authorities include:

- ensuring bail-in powers are effective and enforceable under all laws applicable to a G-SIB's TLAC instruments and the holders of those instruments, including through recognition mechanisms;

- identifying applicable securities laws and exchange requirements and potential associated legal challenges;

- preparing for compliance with applicable securities laws and exchange requirements;

- confirming the availability of exemptions from any of those requirements;

- identifying concrete solutions with relevant authorities to address potential legal challenges to effective bail-in of TLAC instruments, and undertaking actions to enhance the legal certainty of bail-in; and

- understanding the consequences of non-compliance with applicable requirements and the impacts of non-compliance on the effectiveness of bail-in and investor/depositor confidence in the resolved bank.

3.5. Post-stabilisation restructuring

Key relevant FSB policies

The Key Attributes are not explicit about the need to plan for the restructuring of a bank after the application of resolution tools. The FSB has however published a discussion paper in 2019 on the solvent wind-down of derivatives and trading portfolios.

■ The FSB plans to discuss the challenges and practices in preparing a credible restructuring plan that can restore market confidence in the business model of a resolved bank. Recent cases confirmed that it is important, as part of resolution planning, to prepare not only for the application of resolution tools to stabilise the firm but also the subsequent restructuring phase. It is also relevant to discuss what ex ante preparations authorities can carry out to deliver a clear message to the market on Day 1 after resolution on the restructuring of the resolved bank, as well as to oversee the restructuring over the following months or years.

3.6. Resolution of banks that could be systemic in failure

Key relevant FSB policies

The Key Attributes apply to all financial institutions that could be systemically significant or critical in failure. Some existing FSB policies and guidance on bank resolution (e.g. in relation to funding and TLAC) are specifically targeted at G-SIBs, although some jurisdictions have implemented them for a wider set of banks.

■ **Assessing systemic significance or criticality.** It is important to discuss how, and at what point in time, to assess what is considered systemic or critical in failure and therefore may point to the need to resolve a bank in a manner that addresses systemic effects. This may involve whether authorities, when deciding upon the preferred strategy (resolution vs. bank insolvency), need to consider further characteristics of banks' business that may impact financial stability and/or the social/real economy, for example uninsured deposits of small and medium-sized enterprises, wage pay-outs, or affiliation/network of banks with the same business model.

■ **Adequate resolution planning and loss-absorbing capacity.** It is important to discuss what level of resolution preparedness is needed for banks that are considered systemic or critical in failure, and whether proportionality plays a role in determining the required level of preparedness. In relation to loss-absorbing capacity, it will be important to discuss the costs and benefits of non-G-SIBs being required to issue loss-absorbing capacity instruments and any interaction with deposit insurance as per 3.7 below.

3.7. Uninsured deposits and the role of deposit insurance in resolution

Key relevant FSB policies

The Key Attributes' preamble sets out that *"the objective of an effective resolution regime is to make feasible the resolution of financial institutions without severe systemic disruption and without exposing taxpayers to loss, while protecting vital economic functions through mechanisms which make it possible for shareholders and unsecured and uninsured creditors to absorb losses in a manner that respects the hierarchy of claims in liquidation*." It also states that an effective resolution regime should, interacting

with applicable schemes and arrangements for the protection of depositors, protect depositors covered by such schemes and arrangements.

The IADI Core Principles for Effective Deposit Insurance Systems include expectations in terms of coverage and the role of deposit insurers in crisis preparedness and management.[75] They set out that coverage should be limited, credible and cover the large majority of depositors. The level and scope of protection should not undermine market discipline.

At aggregate levels, deposit insurers fully cover deposits of a very high share of depositors and this ratio has been consistently very high since 2015.[76] Even though coverage levels appear adequate overall, the liquidity stress caused by a loss in depositor confidence observed in the regional US banks has led senior policymakers to consider whether deposit insurance coverage is adequately calibrated.[77] Some authorities may review, taking account of moral hazard considerations, the effectiveness of the current deposit insurance coverage levels and treatment of uninsured depositors, as well as interaction of their deposit protection regime with their prudential and resolution regimes.

There is a need to review the interaction of deposit insurance and resolution, in particular the interaction with TLAC requirements. The US cases illustrated that the availability of sufficient loss-absorbing capacity, ranking below uninsured deposits and thus providing them with protection from loss, could have forestalled, or largely reduced, deposit runs on these banks. It is therefore important to discuss the respective role of deposit insurance and loss-absorbing capacity in maintaining depositor confidence in resolution.

Other key considerations include the impact of high levels of uninsured deposits on resolvability and resolution strategies, the relevance of prompt reimbursement and continuity of access to banking services for the credibility of deposit insurance, and considerations in determining appropriate coverage levels for deposit insurance. The International Association of Deposit Insurers (IADI) will conduct a review of its Core Principles for Effective Deposit Insurance Systems in 2024, which may cover related issues.[78] The FSB will cooperate with IADI on these questions.

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[75] IADI (2014), *IADI Core Principles for Effective Deposit Insurance Systems*, November.

[76] According to IADI data, coverage by deposit insurance of the value of eligible deposits, as a global median, is at around 41%. Conversely, 59% of eligible deposits are uninsured. G20 jurisdictions have experienced a one percentage point reduction per annum of coverage ratios in the past eight years.

[77] See FDIC (2023), Options for deposit insurance reform, April; Andrew Bailey (2023), Monetary and financial stability – lessons from recent times, April.

[78] IADI will publish a report by end-2023 on the implications for deposit insurance systems of the recent banking stress. See IADI (2023), "IADI strengthens its role as global standard-setter and reflects on lessons learnt from the recent banking turmoil".

Annex: Overview of the Key Attributes

The Key Attributes of Effective Resolution Regimes for Financial Institutions ("Key Attributes")[79] set out the core elements that the FSB considers to be necessary for an effective resolution regime. Their implementation should allow authorities to resolve financial institutions in an orderly manner without taxpayer exposure to loss from solvency support, while maintaining continuity of their vital economic functions.

The FSB adopted the Key Attributes at its Plenary meeting in October 2011. The G20 Heads of State and Government subsequently endorsed the Key Attributes at the Cannes Summit in November 2011 as "a new international standards for resolution regimes".

The Key Attributes set out twelve essential features that should be part of the resolution regimes of all jurisdictions on:

1. Scope
2. Resolution authority
3. Resolution powers
4. Set-off, netting, collateralisation, segregation of client assets
5. Safeguards
6. Funding of firms in resolution
7. Legal framework conditions for cross-border cooperation
8. Crisis Management Groups (CMGs)
9. Institution-specific cross-border cooperation agreements
10. Resolvability assessments
11. Recovery and resolution planning
12. Access to information and information sharing

The Annexes to the Key Attributes provide guidance on implementing and interpreting the Key Attributes. They do not form part of the Key Attributes standard.

In 2014, the FSB adopted additional guidance that elaborates on specific Key Attributes relating to information sharing for resolution purposes and sector-specific guidance that sets out how the Key Attributes should be applied for insurers, financial market infrastructures (FMIs) and the protection of client assets in resolution. The then adopted guidance documents were incorporated as annexes into the 2014 version of the Key Attributes document. The twelve Key Attributes remain the umbrella standard for resolution regimes covering financial institutions of all types that could be systemic in failure.

[79] FSB (2014), *Key Attributes of Effective Resolution Regimes for Financial Institutions*, October.

Abbreviations

AT1	Additional Tier 1
bankCBCM	FSB Cross-Border Crisis Management Group for banks
BoE	Bank of England
CCPs	Central Counterparties
CET1	Common Equity Tier 1
CMG	Crisis Management Group
CoAgs	Cross-border Cooperation Agreements
DIF	Deposit Insurance Fund
DINB	Deposit Insurance National Bank
D-SIBs	Domestic Systemically Important Banks
ELA	Emergency Liquidity Assistance
EU	European Union
FDIC	Federal Deposit Insurance Corporation
FINMA	Swiss Financial Market Supervisory Authority
FMIs	Financial Market Infrastructures
FRB	Federal Reserve Board
FSB	Financial Stability Board
G-SIBs	Global Systemically Important Banks
HQLA	High-Quality Liquid Assets
IADI	International Association of Deposit Insurers
IDI	Insured Depository Institutions
LAC	Loss Absorbing Capacity
NYDFS	New York State Department of Financial Services
PONV	Point of Non-Viability
ReSG	FSB Resolution Steering Group

RWA	Risk-Weighted Assets
SIBs	Systemically Important Banks
SEC	Securities Exchange Commission
SNB	Swiss National Bank
SPE	Single Point of Entry
SVB	Silicon Valley Bank
TBTF	Too Big To Fail
TLAC	Total Loss-Absorbing Capacity