



The 2023 banking turmoil and deposit insurance systems

Potential implications and emerging policy issues

December 2023

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Executive Summary

The banking turmoil in March 2023 marked the largest episode of systemic stress since the 2008 global financial crisis. The bank failures, although caused by different factors, triggered a widespread crisis of confidence in banks and financial markets around the world, prompting national and international policymakers to assess the causes and draw initial lessons.

The International Association of Deposit Insurers (IADI), as the global standard-setter for deposit insurance systems, has taken stock of the actions undertaken by deposit insurers in response to recent events and has undertaken an analysis of the potential implications and emerging policy issues for deposit insurance systems resulting from the banking turmoil. Its findings are set out in this report, which is descriptive in nature and does not prejudice the review of the IADI Core Principles and Implementing Guidance that will be undertaken in 2024.

The report identifies a number of issues and challenges that merit further analysis as part of future work by IADI and that can inform the review of the IADI Core Principles in 2024. These can be grouped into four key areas:

- **Deposit insurance design.** The banking turmoil has sparked debate on the financial stability risk of uninsured deposits and on adequate deposit insurance coverage, funding, and backstop arrangements, and how continued access to deposits or faster reimbursements could be facilitated by making use of technological innovation. Further analysis of these issues in light of the lessons learnt from the banking turmoil will help to determine whether existing deposit insurance system policies remain adequate or need to be amended.
- **Bank failure resolution.** Deposit insurance and resolution mechanisms, including those involving liquidation and depositor pay-outs, need to work together smoothly in order to minimise the costs of resolution, protect depositors, and maintain financial stability. Further analysis is warranted on the interaction of deposit insurance and resolution and in particular on how the use of resolution tools that support the continuity of critical banking operations and continuity of depositors' access to their funds as well as the availability of loss-absorbing and recapitalisation capacity in the form of long-term subordinated debt affect the cost of resolution to the deposit insurance fund, whether the deposit insurer acts as a resolution authority or only contributes to the funding of resolution measures.

- **Financial safety-net coordination.** The 2023 banking turmoil has highlighted the importance of a well-functioning financial safety-net and effective interaction of all its components, including prudential regulation and supervision, resolution, deposit insurance, and the lender of last resort function. Further analysis should help determine how to implement a holistic approach that builds on the close coordination between all relevant financial safety-net authorities in determining and implementing the preferred resolution strategy. This can include assessing systemic importance and determining the preferred tool in crisis intervention and resolution measures (e.g., continuity or wind-down with deposit pay-out). IADI will also seek to strengthen its engagement and cooperation with other standard-setting bodies, including in particular the Basel Committee on Banking Supervision (BCBS) and the Financial Stability Board (FSB), with a view to ensuring the effective interplay of all safety-net components.
- **Digitalisation.** Analysis of the implications of digital innovation on both customer behaviour and the way banking services are provided is essential to understand the implications of these trends on deposit insurance systems. This includes developments in the field of social media monitoring capabilities to facilitate early action in the event of turmoil, deposit insurers' communication strategies and public awareness programmes, and emerging trends such as stablecoins and Central Bank Digital Currencies (CBDC) that may create additional uncertainty regarding depositor behaviour (e.g. accelerate the speed of withdrawal) and impact the business models of deposit-taking institutions.

1. Introduction

The banking stress earlier this year in the United States, United Kingdom, and Switzerland has prompted policymakers to review regulatory, supervisory, and resolution policies at both national and international levels. It propelled deposit insurance to the top of the international policy agenda.

The banking turmoil may have been heavily impacted by jurisdiction-specific factors, and market conditions that are not necessarily present in or relevant to other jurisdictions. At the same time however, the events have spurred discussion regarding several issues that are fundamental to deposit insurance. This includes topics such as appropriate deposit insurance coverage and funding arrangements, the interaction with prudential regulation and supervision, bank crisis management, resolution policies, and the impact of social media and new technological means on the speed with which funds can be withdrawn from bank accounts.¹ As the global standard-setter for deposit insurance systems, representing 95 deposit insurers, IADI is well positioned to analyse the implications of these events for deposit insurance systems worldwide.

This report has been prepared under the direction of the Executive Council (EXCO, Annex I) and draws on discussions held at a Roundtable on 7 September 2023 and at the IADI 2023 Annual General Meeting on 29 September 2023, and includes contributions from both EXCO and Non-EXCO IADI Members. In addition, IADI held a series of outreach sessions with academic and policy experts (Annex II) in early November 2023. Experts' comments on earlier draft versions of this paper have been considered and were instrumental in finalising this document. The report also benefitted from comments from members of the Cross-border Crisis Management Working Group for Banks of the Financial Stability Board (FSB).

The remainder of the report is structured as follows: Section 2 provides a brief background. Section 3 describes the mandates of deposit insurers and their role in the financial safety net, while Section 4 takes stock of the actions taken by deposit insurers across jurisdictions in response to the 2023 banking stress. Section 5 distills key observations on potential implications for the design of deposit insurance systems and emerging policy issues. Section 6 identifies issues for further exploration in the future that merit attention as part of the IADI work plan and the review of the IADI Core Principles for Effective Deposit Insurance Systems planned for 2024.

¹ The IADI Core Principles define banks as any entity which accepts deposits or repayable funds from the public and is classified under the jurisdiction's legal framework as a deposit-taking institution.

The report acknowledges that there are different mandates and institutional design characteristics of deposit insurance systems globally. These reflect significant variation in the powers and role of deposit insurers in supervision and resolution. Some issues identified in this report relate to matters that are of fundamental relevance to all deposit insurers, others may be more relevant to those with a broader mandate, focusing on those who directly contribute to bank failure management and/or resolution.

The term “resolution” is used, consistent with the IADI Core Principles, to refer to the disposition plan and process for a non-viable bank. As such, it covers liquidation and depositor reimbursement, transfer and/or sale of assets and liabilities, the establishment of a temporary bridge institution and the write-down of debt or conversion to equity, as well as the application of procedures under insolvency law to parts of an entity in resolution.

The report is intended to be descriptive in nature, and as such, provide a foundation for future policy work. It is not prejudging future revisions to the IADI Core Principles and/or Implementing Guidance.

The report seeks to complement the recently issued reports by the Basel Committee on Banking Supervision (BCBS) and FSB and therefore does not discuss the case-specific supervisory and crisis management measures taken by authorities in the United States, United Kingdom, and Switzerland which are comprehensively described by the BCBS² and FSB³, as well as in recent publications by authorities and independent experts in the relevant jurisdictions.⁴

² See [Report on the 2023 banking turmoil](#) issued by the Basel Committee on Banking Supervision, October 2023.

³ See [2023 Bank Failures – Preliminary lessons learnt for resolution](#), Financial Stability Board, October 2023.

⁴ For Switzerland, see the Swiss National Bank’s [Financial Stability Report](#), June 2023, and the Report of the Expert Group on Banking Stability, [The need for reform after the demise of Credit Suisse](#), September 2023. For the United States, see Board of Governors of the Federal Reserve, [Review of the Federal Reserve Supervision and Regulation of Silicon Valley Bank](#), April 2023; Federal Deposit Insurance Corporation, [FDIC’s Supervision of Signature Bank](#), April 2023. For the United Kingdom, see various references in the Bank of England’s [Financial Stability Report](#), July 2023.

2. Background

The banking turmoil in March 2023 occurred against the backdrop of a rapidly changing macroeconomic environment. Central banks worldwide started to markedly increase interest rates following inflationary pressures mainly due to post-pandemic supply chain bottlenecks and energy price hikes as a consequence of the war in Ukraine. Following multi-decade lows in interest rates in many economies, the marked hike in policy rates has led to declining valuations of bank assets.⁵ When assets are held to maturity, interest rate risk and associated losses on these assets may not materialise. However, if upon considerable deposit outflows at a bank, the bank needs to liquidate assets at market value to meet liquidity needs, these losses do materialise. If substantial, depositors may question the solvency of that bank and this may cause depositors to withdraw funds further, creating a doom loop scenario. Overall, deposit insurers did not observe significant outflows in deposit markets in response to the events. A notable exception was the US, where in the immediate aftermath of the Silicon Valley Bank (SVB) and Signature Bank failures, some depositors at other regional institutions chose to move their funds. In March 2023, US authorities made use of a systemic risk exception⁶, resulting in full coverage for all depositors at Silicon Valley Bank and Signature Bank. Also, the Federal Reserve activated an emergency bank lending programme (the Bank Term Funding Program) that provided emergency liquidity to US banks at favourable conditions.⁷ Shortly following the end of Q1 2023, deposit outflows at US banks had moderated.⁸

Banking services globally have been undergoing technological modernisation. Digitalisation has significantly improved the ease of accessing banking services and has increased competition in the sector, all of which has worked to the benefit of bank customers. Notable in the field of payment services is the availability of 24/7 instant payment solutions in both non-bank and bank environments. Although fast payment systems contribute to a better quality of service in stable times, recent bank

⁵ See FDIC Chairman Gruenberg's [remarks](#) on 1 December 2022: "Furthermore, higher market interest rates have led to continued growth in unrealized losses in the banking industry's securities portfolios. (...) The combination of a high level of longer-term asset maturities and a moderate decline in deposits underscores the risk that these unrealized losses could become actual losses should banks need to sell investments to meet liquidity needs."

⁶ See [Joint Statement](#) by the Department of the Treasury, Federal Reserve, and FDIC, Press Release from 12 March 2023.

⁷ See [Bank Term Funding Program](#) from 12 March 2023, in particular, collateral against which banks lend is valued at par value.

⁸ See FDIC Chairman Gruenberg's [remarks](#) on 31 May 2023: "The recent banking stress amplified the outflow of deposits from the banking system, causing total deposits to decline for the fourth consecutive quarter and at a faster rate than in prior quarters. However, deposit outflows have moderated since the end of the quarter."

failures have fuelled discussions about the risk they may pose to financial stability by technologically enabling bank runs at a very rapid pace and at marginal costs for depositors. The impact of digitalisation in communication (e.g., social media) and payment technology on depositor behaviour and financial stability may not yet be fully understood and therefore merits continuous close monitoring.

3. Deposit insurance mandates and the financial safety-net

The 2023 banking turmoil demonstrated the importance of the effective operation of the financial safety-net in maintaining stability and trust in the banking sector.

Maintaining financial stability and protecting depositors in a changing environment builds on the smooth interplay of all financial safety-net components. The elements of the financial safety-net that are essential to ensure resilience in the banking system and protect depositors include:

- appropriate prudential regulation covering amongst others, capital requirements, liquidity, and interest rate risks;
- an effective supervisory regime and a supervisor with the capacity and willingness to take action when necessary;
- an effective deposit insurance system;
- an efficient and effective framework for resolution;
- effective lender of last resort function, and
- a public sector liquidity backstop or similar arrangement.

The IADI Core Principles together with the Basel Core Principles for Effective Banking Supervision and the Financial Stability Board's Key Attributes of Effective Resolution Regimes for Financial Institutions provide guidance regarding the operation of those elements of effective financial safety-nets.

The deposit insurers' primary public policy objectives are to protect depositors and contribute to financial stability.⁹ In practice, legal mandates of deposit insurers vary significantly globally (Box 1). The IADI Core Principles set out a list of powers the deposit insurer should be granted formally by legislation.¹⁰ Supervision and resolution functions may or may not be included in the deposit insurer's mandate.

⁹ IADI Core Principle 1.

¹⁰IADI Core Principle 2.

Box 1: Deposit insurers' mandates

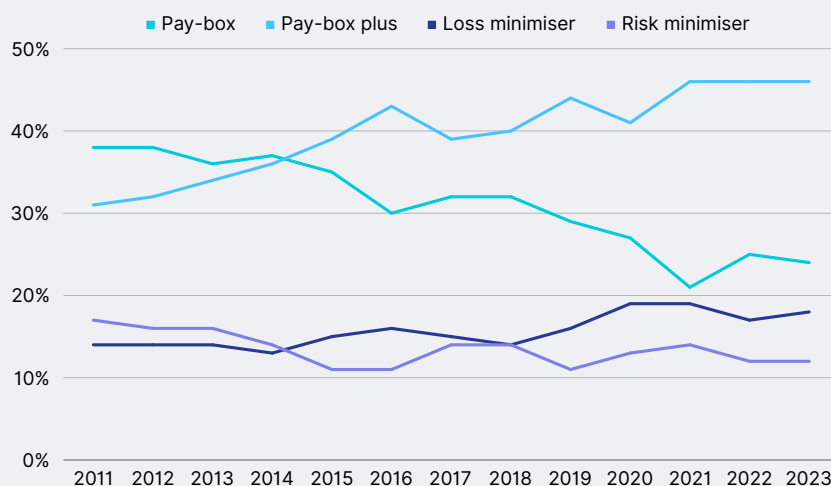
Deposit insurers' mandates can range from narrow "paybox" systems to those with extensive responsibilities, such as preventive action and loss or risk minimisation and management, with a variety of combinations in between.¹¹ These can be broadly classified into four categories:

- A "paybox" mandate, where the deposit insurer is only responsible for the reimbursement of insured deposits;
- A "paybox plus" mandate, where the deposit insurer has additional responsibilities, such as certain resolution functions (e.g., financial support);
- A "loss minimiser" mandate, where the insurer actively engages in a selection from a range of least-cost resolution strategies; and
- A "risk minimiser" mandate, where the insurer has comprehensive risk minimisation functions that include risk assessment/management, a full suite of early intervention and resolution powers, and in some cases prudential oversight responsibilities.

Over the past decade, there is a clear trend for deposit insurers' mandates to broaden to include resolution functions. Growth is particularly relevant in the paybox plus mandate.

Evolution of DI mandates over time

The sample composition changes over time, varying between 68 and 135 respondents.



Source: 2023 IADI Annual Survey

¹¹ Deposit insurer mandates focus on those activities formalised and codified in domestic legislation. This will usually include the extent of a deposit insurer's role in pre-emptive monitoring, in resolution decision-making, and the range of resolution tools available. In the event of a bank failure, any response by the deposit insurer will be conditioned on the specific financial sector circumstances, including whether there are perceived systemic implications, and a host of other considerations.

The design features of financial safety-nets vary significantly globally. The institutional set-up of financial safety-nets and the allocation of responsibilities and powers to authorities and other actors in the field of prudential regulation, supervision, resolution, and deposit insurance tend to be very jurisdiction-specific. Design options are myriad and include silo approaches, functional approaches, integrated models, as well as twin peak approaches.¹² The distinct mandates of financial safety-net participants mean that they approach solvency and liquidity issues differently. Central banks look at solvency and liquidity from a macroprudential perspective and at how these impact monetary policy and economic stability, whereas supervisors are more concerned with the safety and soundness of individual financial institutions. Deposit insurers focus on protecting depositors and maintaining confidence in the banking system. Their interest in solvency and liquidity is from the perspective of minimising the cost of bank failures and ensuring early intervention and resolution. Domestic policy choices as to the design of the financial safety-net have significant implications for the role of the deposit insurer.

¹² See Schmulow, A., [The four methods of financial system regulation: An international comparative survey](#), *Journal of Banking and Finance Law and Practice*, Vol. 26, No. 3, October 2015.

4. Overview of actions taken by deposit insurers across jurisdictions

4.1. Monitoring exposures, liquidity, and deposit flows

Many deposit insurers increased their monitoring of bank liquidity and bank deposits. Several deposit insurers conducted direct assessments of the extent of individual bank exposure to the banks in distress. In addition to direct assessments of exposures and liquidity at member banks, several deposit insurers underlined the importance of having access to supervisory information through their respective financial supervisor and/or central bank, in some cases on a daily basis and including data on the level of uninsured deposits. This allowed for close monitoring of risks relevant to the deposit insurer (Box 2).

Box 2: Timely access to reliable financial information in the IADI Core Principles

The IADI Core Principles stress the importance of timely access for financial safety-net participants, including the deposit insurer, to reliable financial information as a necessary precondition for an effective deposit insurance system.

- IADI Core Principle 2 provides that deposit insurers should have appropriate powers to obtain, directly from banks, timely, accurate and comprehensive information necessary to fulfil their mandates. In addition, or alternatively, such information can be received and shared within the financial safety-net, and with applicable safety-net participants in other jurisdictions. Deposit insurers can compel banks to comply with their legally enforceable obligations to the deposit insurer, e.g., provide access to depositor information.
- IADI Core Principle 15 stresses the need for “... access to depositors’ records at all times, which includes the authority to require banks to maintain depositor information in a format prescribed by the deposit insurer in order to expedite insured depositor reimbursement”.

The modes and extent of access by deposit insurers to data held by banks differ depending on the deposit insurers' mandates (Box 3). Notable recent developments in this area include:

- **Chinese Taipei.** The Central Deposit Insurance Corporation (CDIC) has established an Internet Transmission Surveillance System which enables the monitoring of banks' daily deposits balances. In the wake of the recent bank turmoil, the submission deadline has been shortened from two working days to one working day. In addition, CDIC has enhanced a liquidity alert mechanism for banks that triggers warnings to supervisors if the balance of its Interbank Settlement Account drops below certain levels. In addition, the supervisors have also urged banks to strengthen their monitoring mechanisms for unusually large deposit withdrawals and screen for abnormal social media information, which can be helpful in addressing the impacts of liquidity stress triggered by shifts in depositor behaviour.
- **Korea.** The Korea Deposit Insurance Corporation (KDIC) monitored deposit data of selected financial institutions on a daily basis during the banking stress in March 2023. KDIC is preparing an API-based real-time deposit monitoring system for savings banks which will start operating in 2024. This deposit monitoring system will provide deposit balance data every twenty minutes and update deposit account data two to three times a day. When predefined thresholds for total deposit balances and time deposit accounts are reached, KDIC and other participants in the financial safety-net will be notified immediately via SMS, email, and other means.
- **Québec (Canada).** The Autorité des marchés financiers (AMF) carried out an in-depth analysis on exposure and possible contagion risk to authorised deposit institutions at the time of the crisis. Requests to authorised deposit institutions intensified and were of a more granular nature. The AMF has also held more frequent meetings with financial safety-net participants to exchange relevant information and views on possible Canadian impacts.
- **United States.** The Federal Deposit Insurance Corporation (FDIC) issued a letter to banks in July 2023 reiterating reporting instructions to ensure that banks accurately report estimated uninsured deposits in quarterly regulatory reports.¹³

In several other jurisdictions, efforts are underway to enhance the monitoring capacity of deposit insurers. This includes the development of real-time liquidity monitoring systems, often in cooperation with other financial safety-net participants.

¹³ See [Estimated Uninsured Deposits Reporting Expectations](#), Federal Deposit Insurance Corporation, July 2023.

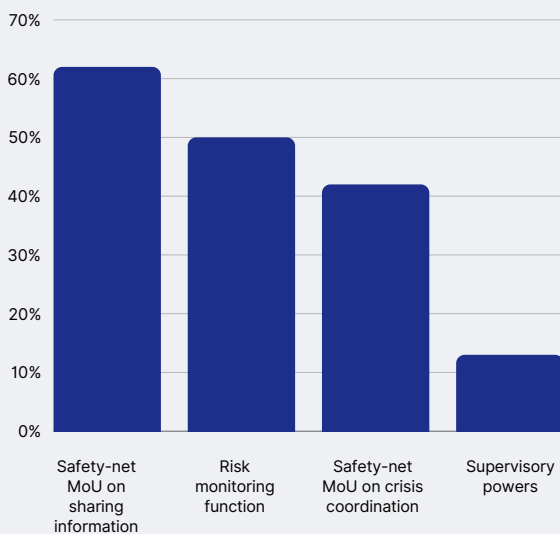
Box 3: Monitoring and data access by deposit insurers

Deposit insurers' ability to monitor direct exposures by member banks as well as liquidity and deposit flows varies significantly worldwide.

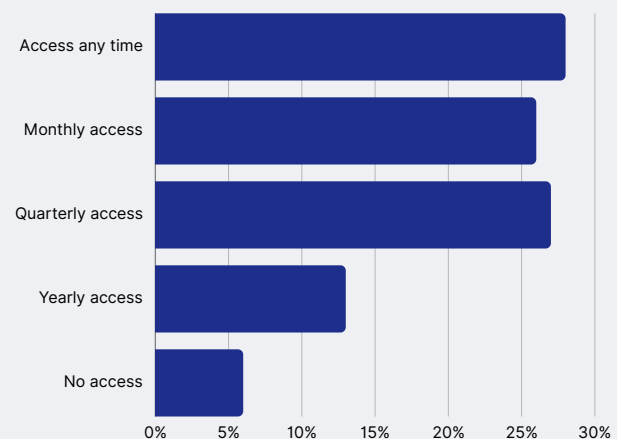
Globally, 13% of deposit insurers have explicit bank supervisory and/or regulatory powers (this share corresponds to the global share of deposit insurers with a risk minimiser mandate). Such powers regularly include extensive monitoring powers and access to a broad set of supervisory data and insights on member banks, including but not restricted to data on deposits. If deposit insurers lack these powers, they typically cooperate with other financial safety-net participants to gain access to relevant data. Access to data is particularly relevant for deposit insurers which have a risk monitoring function that involves the analysis and assessment of the risk level of member banks and institutions.

Monitoring power of deposit insurers

Share of deposit insurers with...



Access by deposit insurers to data on shares of covered deposits at individual banks



Source: 2023 IADI Annual Survey

Access by deposit insurers to individual member banks' data on deposits is widespread (94%) and deposit insurers regularly make use of this information to calculate premiums. The degree of access varies with 81% of deposit insurers receiving data on deposits on a quarterly basis or more frequently. Roughly one quarter of deposit insurers may each receive data on a monthly basis, or at very short notice, be it through their own powers or through a financial safety-net participant.

4.2. Stress testing and crisis simulations

A number of deposit insurers conducted stress tests to assess their readiness and ability to react to potential future events similar to those experienced in early 2023. Crisis preparedness is an essential mechanism for deposit insurers to prepare for periods of crisis, reinforcing confidence (both internally and to external stakeholders) in their ability to effectively respond in accordance with their mandate (Box 4).

Box 4: Crisis preparedness and management policies for deposit insurance

IADI Core Principle 6 sets out standards for deposit insurers in preparing for and managing crises. It sets out the expectation that the deposit insurer:

- has its own effective crisis management policies and procedures in place;
- develops and regularly tests its own crisis preparedness and management plans;
- is part of an institutional framework for ongoing communication and coordination involving financial safety-net participants in relation to system-wide crisis preparedness and management; and
- participates in the development of pre- and post-crisis management communication plans involving all financial safety-net participants to ensure comprehensive and consistent public awareness and communication.

Simulation exercises (or similar) that test system-wide crisis preparedness are expected to include the deposit insurer to ensure that their role is incorporated and can be fulfilled during a period of crisis. Currently, provisions applying to formal agreements between financial safety-net participants include crisis coordination arrangements, joint simulation exercises and tabletop exercises in 66%, 31% and 17% of jurisdictions respectively.¹⁴

Stress testing was conducted by these deposit insurers, at times in cooperation with other financial safety-net authorities. Scenarios tested covered severe liquidity outflows at member institutions.

¹⁴ Source: 2023 IADI Annual Survey. As an example, in the European Union, a specific framework for stress testing by deposit insurers applies. The EU Directive on Deposit Guarantee Schemes (DGSD) provides that Member States shall ensure that deposit insurers perform stress test of their systems. In 2016, the European Banking Authority (EBA) issued guidelines to specify the scope, the methodological principles, and the indicators for conducting stress tests of deposit insurers. The Guidelines were revised in 2021 to further develop the framework.

- **Canada.** In June 2023, Canada Deposit Insurance Corporation (CDIC Canada) ran two tabletop exercises, internally and with the financial safety-net authorities, rehearsing the Canadian response to an SVB-type scenario in Canada. The scenario was predicated on a two-day run on deposits and assumed similar transmission channels for contagion to those observed in March 2023. The exercise challenged participants and pre-existing playbook assumptions and led to the identification of after-action items related to measures that can be taken to reduce the risk of contagion, including with regards to communication and engagement with key stakeholders.
- **Korea.** After the recent banking stress, the Korea Deposit Insurance Corporation increased the frequency of its yearly crisis simulation exercises to quarterly. KDIC also updated its crisis scenarios. In the June 2023 exercise, KDIC assumed a financial crisis situation where the non-banking sector's crisis spreads to the banking sector. For internet-only banks with mobile deposit-taking structures, the exercise assumed a systemic risk situation caused by a digital bank run. Based on this scenario, KDIC developed action plans for resolution, funding, human resources, and communications. In August 2023, KDIC conducted a stress test jointly with the Bank of Korea (BOK). By establishing a common crisis scenario and analysing stress test results from both organisations comparatively, KDIC was able to improve the consistency of its stress test model and the predictability of market distress. The stress test assessed liquidity risks through simulating a crisis scenario in the savings bank sector. Recent cases of deposit withdrawals were considered when creating a crisis scenario.
- **Malaysia.** Perbadanan Insurans Deposit Malaysia (PIDM) recalibrated its liquidity stress testing following the recent banking turmoil. In addition, a stress test methodology is under development that considers the relationship between solvency and liquidity risks in order to model liquidity and solvency risk in a coherent framework, involving external shocks to solvency risks and endogenous liquidity shocks arising from these solvency shocks.

Deposit insurers' stress testing and crisis simulation practices vary significantly, depending also on the scope of their mandates and activities (Box 5).

Box 5: Scenario planning and simulation exercises by IADI Members

According to the 2023 IADI Annual Survey, 55% of all deposit insurers conduct scenario planning or simulation exercises. Not surprisingly, deposit insurers with a broader mandate are significantly more likely to conduct scenario planning exercises and simulations (paybox: 40%; paybox plus: 46%; loss minimiser: 71%; risk minimiser: 100%). More sophisticated systems tend to be better resourced to conduct such activities. They are also more integrated within the financial safety-net, which is likely to trigger broader interest in conducting scenario planning or resolution simulation exercises.

4.3 Social media, social networks, and communication

Deposit insurers report ongoing work to address challenges arising from the rapid transmission of information in today's social media environment. Banks may be expected to develop social media monitoring tools and to strengthen crisis preparedness and management plans accordingly. In the wake of the crisis, some deposit insurers conducting social media monitoring noticed a significant increase in traffic to their websites. Preparation in “business-as-usual” times, including at the operational and system level, allowed for the appropriate handling of this sudden increase in deposit insurance interest. Some deposit insurers increased public awareness efforts as events unfolded, focusing attention on the general public and used social media to do so, while others are planning or have already introduced several initiatives aimed at better understanding the dynamics of fast and digital communication, particularly in times of stress. In addition, plans are being considered to use artificial intelligence tools to better understand public opinion and media coverage related to banks and financial safety-net participants. A number of deposit insurers, as well as other financial safety-net participants, are reflecting on their role in social media, particularly on how active this role should be, e.g., in correcting rumours or preventing other false statements from spreading.¹⁵

In several jurisdictions, deposit insurers use social media to communicate with the general public. A limited number of deposit insurers are making use of social media influencers to share carefully curated messages with the public in both “business-as-usual” and crisis times (see Box 6). A common motivation is to intensify efforts in encouraging the general public to prioritise trustworthy sources of information about the financial safety-net.

Box 6: The case of social media use by KDIC Korea

In September 2023, the Korea Deposit Insurance Corporation (KDIC) established the KDIC Broadcasting Studio with the aim of providing correct information by directly communicating with financial consumers, while preventing the dissemination on social media platforms of baseless rumours regarding financial market instability. KDIC will consistently generate messages, during both “business-as-usual” times and financial market turmoil and post them on platforms such as YouTube so that the studio can serve as a trusted information source for financial consumers. Additionally, KDIC has appointed a social media influencer as its media ambassador. This influencer utilises popular YouTube Shorts videos to publicise KDIC's deposit insurance system and key operations in a more approachable manner. This will help financial consumers easily access and share information.

¹⁵ One particular kind of false information concerns misleading statements on deposit insurance coverage. The FDIC regularly makes use of its power to act against misrepresentations of the deposit insurance system.

4.4. Financial safety-net coordination

As the crisis events unfolded, deposit insurers, including those not directly affected by crisis events, intensified coordination with other financial safety-net participants (see Box 7). Cooperation included the exchange of data and supervisory insights, and preparation for crisis communication and stress-testing. In some jurisdictions, deposit insurers and supervisory authorities increased the frequency of information exchange, e.g., covering a more detailed monitoring of banks with a high-risk profile or with characteristics that may require in-depth analysis.

Box 7: Financial safety-net coordination in the IADI Core Principles

The IADI Core Principles provide guidance on financial safety-net coordination both directly and indirectly through the prism of crisis preparedness and cross-border and timely intervention activities and resolution:

- IADI Core Principle 4 places emphasis on the formalisation of relationships between financial safety-net participants to facilitate “close coordination of activities and information sharing, on an ongoing basis”.¹⁶ Cooperation between deposit insurers and other financial safety-net participants is formalised through Memoranda of Understanding (MoU) by 70% of deposit insurers globally. 62% of deposit insurers are part of an MoU that covers information sharing – though this may not necessarily entail sharing of data on deposits held by member banks. 42% of deposit insurers have an MoU with a financial safety-net participant in place that covers crisis coordination, which in some cases may also include data access when crisis events occur. 75% of deposit insurers currently have an MoU (or equivalent) in place to formalise such interactions with other financial safety-net participants.¹⁷ These arrangements, whether legally binding or not, can assist in pre-emptively breaking down various barriers – administrative, legal, political et al – that if left unaddressed, may hinder the deposit insurer’s capacity to deliver on its public policy objectives.

¹⁶ The IADI Handbook (Handbook for the Assessment of Compliance with the Core Principles for Effective Deposit Insurance Systems) places considerable emphasis on formality when assessing this Core Principle with “informal agreements and frequent contacts alone... not sufficient to ensure that information is received in a timely manner and that the DI perspective is considered”.

¹⁷ Source: 2023 IADI Annual Survey.

- IADI Core Principle 5 focuses on the important role of cross-border collaboration in instances where there is a “material presence of foreign banks (i.e., foreign bank subsidiaries or branches)” in a jurisdiction. Information sharing (subject to confidentiality provisions) and ex-ante clarity over which deposit insurer is responsible for reimbursement/resolution, levying premiums and public awareness, is paramount in ensuring suitable coverage of depositors.
- IADI Core Principle 13 asserts that early detection and timely intervention is, in part, contingent on the deposit insurer being part of an effective framework within the financial safety-net, with each participant having sufficient “operational independence and power to perform their respective roles”.
- IADI Core Principle 14 on resolution includes the need for clear arrangements for coordination in case multiple safety-net participants are responsible for resolution. There should be a legal framework in place that provides for a clear allocation of objectives, mandates, and powers of those participants.

The assessment of potential systemic implications of bank failures was coordinated closely among financial safety-net participants. The March 2023 decision by US authorities to invoke the systemic risk exception in response to observed banking turmoil involved the coordination of several safety-net participants. The systemic risk exception enabled the FDIC as deposit insurer to proceed with a bridge-bank resolution strategy that protected all depositors and was not required to meet the least cost test. A least-cost resolution strategy was anticipated to have serious adverse effects on economic conditions or financial stability.¹⁸ In the case of Silicon Valley Bank UK Limited (SVBUK), the Bank of England, in consultation with the other financial safety-net participants such as the Prudential Regulation Authority, HM Treasury, and the Financial Conduct Authority, initially intended to apply to the Court to place SVBUK into a bank insolvency procedure. This procedure would have meant that eligible depositors would be paid out by the Financial Services Compensation Scheme (FSCS) as quickly as possible, up to the protected limit of GBP 85,000 per individual per institution. However, this initial plan

¹⁸ “Faced with these risks, the FDIC Board voted unanimously on March 12, to recommend that the Secretary of the Treasury, in consultation with the President, make a systemic risk determination under the FDI Act with regard to the resolution of SVB and Signature Bank. That same day, the Federal Reserve Board unanimously made a similar recommendation, and the Secretary of the Treasury determined that complying with the least-cost provisions in Section 13(c)(4) of the FDI Act would have serious adverse effects on economic conditions or financial stability, and any action or assistance taken under the systemic risk exception would avoid or mitigate such adverse effects.” [Remarks by Chairman Gruenberg on Recent Bank Failures and the Federal Regulatory Response before the Committee on Banking, Housing, and Urban Affairs, United States Senate.](#)

was later revised. The Bank of England, acting as the resolution authority for failing banks in the UK instead decided, in consultation with financial safety-net participants, to exercise its resolution powers and sell SVBUK to a private buyer to maintain the continuity of banking services rather than proceeding with standard insolvency procedures.¹⁹

¹⁹ [Statement on Silicon Valley Bank](#), Bank of England, 13 March 2023.

5. Implications for deposit insurance and emerging policy issues

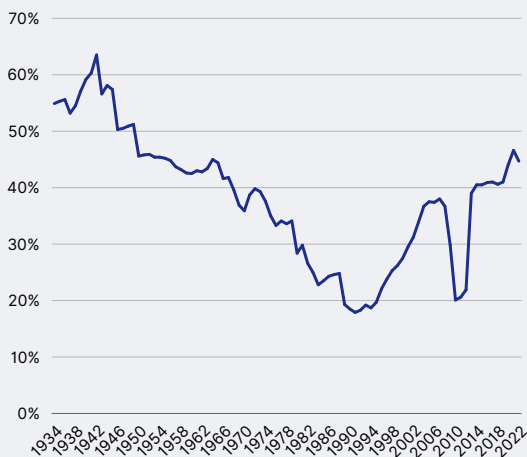
5.1. Coverage

The banking turmoil has sparked debate on the financial stability risk of uninsured deposits and on adequate deposit insurance coverage. The total share of deposits held by banks that is not insured by deposit insurance has been growing over recent years in many jurisdictions. In the US in particular, banks' reliance on uninsured deposits grew dramatically, in both absolute and relative terms (Box 8).

Box 8: Coverage ratio trends globally

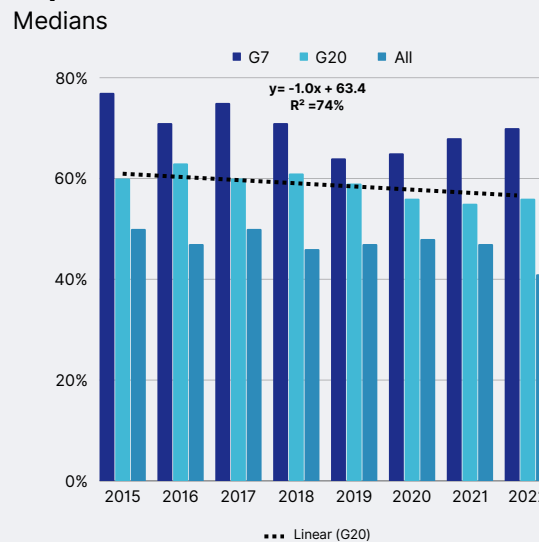
As shown below (left), the share of uninsured deposits in the United States at its peak in 2021 was at its highest level since 1949. This trend has been most pronounced among the largest banks.²⁰

Uninsured deposits as a share of domestic deposits



Source: FDIC Options for Deposit Insurance Reform Data Library

DI coverage ratio per value of eligible deposits



Source: IADI Annual Survey 2022

²⁰ Taken from Options for Deposit Insurance Reform, Federal Deposit Insurance Corporation, May 2023.

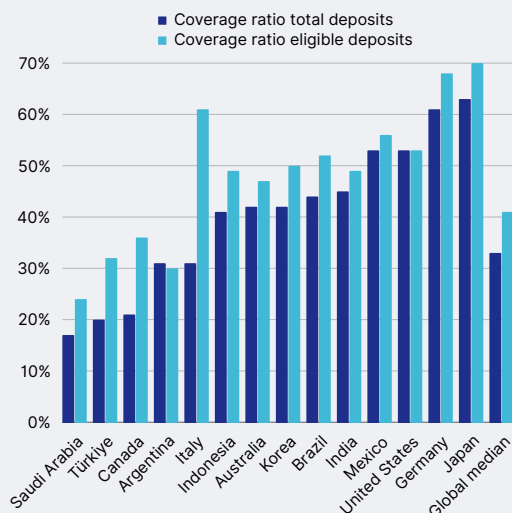
From a global perspective (right), according to IADI survey data, the median deposit insurer covers around 41% of the value of eligible deposits. This means that 59% of eligible deposits are uninsured. For G7 economies, the ratio of insured deposits has fallen from 77% to 70% over the past eight years. For all economies, the reduction is from 50% to 41%. However, neither reduction is statistically significant. G20 jurisdictions have experienced a one percentage point reduction per annum of coverage ratios over the sample window to 56% in 2022, which is statistically significant. This may be linked to COVID-19-related increases in deposit growth and broad stability in nominal coverage levels globally.²¹

Within G20 economies, the share of deposits not insured by deposit insurance varies significantly around the global median. Shares of uninsured deposits are markedly low in Italy and Japan with approximately one third of eligible deposits not insured. Conversely, Argentina, Saudi Arabia and Türkiye exhibit the highest levels of eligible deposits not insured by the deposit insurance system.

At the same time, the share of fully insured depositors (on both a by-account and by-depositor basis) is very high in almost all jurisdictions (see graph below).²² Moderate increases to coverage levels may not substantially alter these shares, as a vast majority of uninsured deposits are concentrated within a very limited number of depositors. Potential reduction in coverage limits might alternatively seek to reinforce market discipline on banks.

Coverage ratio per deposit value: total vs eligible deposits

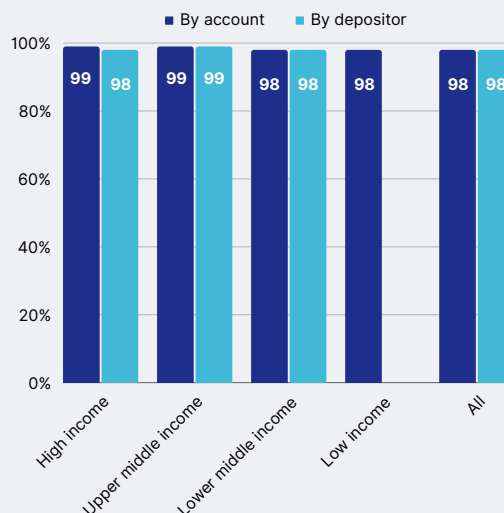
G20 economies, 2022



Coverage ratio by account and depositor

Median, 2022

World Bank Income Classification



Source: IADI Annual Survey 2022

²¹ Taken from *Uninsured Deposits – Relevance and evolutions over time*, IADI Policy Brief No. 8, June 2023.

²² Data on the coverage ratio by depositor in low-income jurisdictions are not available due to insufficient data. Some jurisdictions do not make both measures available for a variety of reasons, and hence the sample for by-account and by-depositor figures may not necessarily be identical. Nevertheless, the high-level messaging of this chart does not change – very high levels of coverage are observed globally, and this does not differ significantly by jurisdictional income.

The IADI Core Principles articulate guidelines advocating for limited but credible coverage to protect most depositors without undermining market discipline. The challenge is to balance comprehensive protection for most depositors and the need to manage financial stability risks with the need to minimise moral hazard.

A significant number of deposit insurers and authorities are re-evaluating the appropriateness of the scope and level of coverage. These considerations are at different stages among deposit insurers. In some jurisdictions, the analysis of options is advanced, whereas others are currently collecting data for further analysis and consideration. Consistent with IADI Core Principle 8 (Box 9), which calls for periodic reviews, coverage level reviews were initiated in some jurisdictions prior to the crisis.

Box 9: Coverage in the IADI Core Principles

IADI Core Principle 8 requires for a level and scope of deposit coverage that is limited and credible, so as to minimise the risk of bank runs. Deposit insurance should cover the large majority of depositors. A substantial amount of the volume of deposits should be exposed to market discipline. The level and scope of coverage should be reviewed periodically (at least every five years) to ensure that it meets the deposit insurance system's public policy objectives.

Deliberations on deposit insurance coverage are driven by reflections on the growing overall share of uninsured deposits. More specifically, factors being considered include the variations in the degree of concentration of uninsured deposits between banks, the sectoral concentration of deposits within banks, and the impact of potential losses to uninsured deposits on the real economy or on certain parts of the population. Uninsured deposits include funds held in businesses' payment accounts. Losses to these accounts or limitations regarding the access to funds held in these accounts can cause hardship to businesses and their employees, and may result in defaults, lost wages, business closures and a negative impact on employment. As employees and creditors are generally not in a position to assess the default risk of the bank where businesses hold accounts, additional protection may²³ be warranted.

- **United States.** As a direct reaction to crisis events and illustrative of ongoing coverage deliberations, in the US, the FDIC has published an analysis "Options for Deposit Insurance Reform" which sets out limited, unlimited, and targeted coverage as three predominant areas of potential coverage reform (Box 10).

²³ See [Options for Deposit Insurance Reform](#), Federal Deposit Insurance Corporation, May 2023, pp. 26–28.

Box 10: Coverage options identified in the FDIC Options analysis

Limited coverage maintains the current structure of deposit insurance by upholding a finite coverage level for deposit insurance that applies equally across depositors and types of accounts. Within this option, the current deposit insurance coverage limits of USD 250,000 may be increased but would remain limited. The paper notes that increases in deposit insurance limits may not address the run risk associated with high concentrations of uninsured deposits.

Unlimited coverage provides unlimited or blanket deposit insurance. The paper notes that this may eliminate bank run risks, but would come with increased moral hazard risks, large impacts on a bank's risk-taking behaviour and the need to significantly increase the size of the deposit insurance fund.

Targeted coverage allows for different levels of deposit insurance coverage across different types of accounts. The levels may include limited coverage for certain account types and unlimited coverage for others. Within this option, attention is devoted to potentially higher coverage for business payment accounts. The paper argues that this option may offer financial stability benefits with fewer moral hazard risks. A challenge, however, is the delineation between business payment deposits and other deposits.

- **Japan.** The Deposit Insurance Corporation of Japan (DICJ) fully covers certain transaction accounts in Japan (so-called “deposits for payment and settlement purposes”) (Box 11). Other eligible deposits (“general deposits, etc.”) are protected through limited coverage. A renewed focus on business payment account coverage has led the Japanese coverage model to attract additional attention. As a background for introducing the differential coverage, there was the recognition that it would be reasonable to treat deposits held for payment and settlement purposes differently from interest-bearing deposits held for saving purposes. Originally, deposit insurance was limited in coverage. However, full protection of deposits was introduced as a temporary measure to address the financial crisis in Japan from the late 1990s to the early 2000s. Full protection of deposits other than demand deposits (such as time deposits) was terminated first, which led to a significant shift from those deposits to fully protected demand deposits. There were growing concerns at the time that the situation would be exacerbated by removing full protection from demand deposits and shifting completely to limited coverage. The introduction of full protection of “deposits for payment and settlement purposes” as a permanent measure was determined under such a circumstance. Then, in terms of preventing an increase in moral hazard under full protection, one of the conditions for “deposits for payment and settlement purposes” was set to “bearing no interest”. In addition, the deposit insurance premium rate for “deposits for payment and settlement purposes” is set higher than that for “general deposits, etc.”

Box 11: Key elements of the targeted coverage model in Japan

The differential coverage approach applied in Japan results from the reduction from full coverage to limited coverage (JPY 10 million in principal and interest), for deposits other than demand deposits (e.g., time deposits) in 2002, and for demand deposits in 2005. Full coverage remains relevant for “deposits for payment and settlement purposes”.

“Deposits for payment and settlement purposes” must meet three conditions: they must be (1) payable on demand, (2) capable of providing payment and settlement services, and (3) bearing no interest. As a result of these definitions applied, payroll funds in those accounts, for instance, are within the scope of full protection. “Deposits for payment and settlement purposes” have accounted for about 11% of eligible deposits on average during the past 10 years.

- **Canada.** CDIC Canada initiated its Deposit Insurance Study prior to the crisis events. The study focuses on the scope and coverage of the framework, including the evolving saving and investment habits of Canadians, the inflationary impacts on the value of the deposit insurance limit, the complexity of the current framework, and on assessing the role deposit insurance can play in mitigating the contagion risk posed by large institutional depositors. A recent data call will provide a deeper understanding of the deposit sector and will enable CDIC Canada to develop appropriate policy recommendations for the Canadian Department of Finance. In addition, recent amendments to the act governing the CDIC Canada provide an authority for the government to temporarily increase the deposit insurance limit in support of financial stability. This authority will expire at the end of April 2024.
- **European Union.** The EU Commission’s legislative proposal dated 18 April 2023 on the bank crisis management and deposit insurance framework does not entail proposed changes to the existing coverage level. To ensure the relevance of the coverage level set out in existing legislation, the Commission periodically re-assesses its relevance in light of the macroeconomic circumstances. In this context, in June 2023, the Commission tasked the European Banking Authority with collecting deposits data offering insights into a scenario where coverage would be raised from EUR 100,000 respectively to EUR 150,000 and to EUR 250,000, as well as targeted coverage of EUR 1,000,000 offered to legal persons. Currently, EU law requires additional protection, above the generally applicable EUR 100,000, for at least three months and for no longer than one year – this applies to deposits (temporarily high balances, THB) that, amongst others, result from private real estate transactions, or are linked to life events (marriage, retirement, death, etc.)

- **Korea.** The Korea Deposit Insurance Corporation responded to the recent banking stress by selectively expanding deposit protection coverage. From October 2023, separate protection limits for certain pension schemes have been extended to pension savings, the retirement pension fund for small and medium-sized enterprises, and insurance benefits. KDIC intends to continue to expand the range of financial products subject to separate protection limits, taking into account the purpose of asset formation over the life cycle.
- **Nigeria.** The Nigeria Deposit Insurance Corporation (NDIC) initiated a review of its maximum deposit insurance coverage limit to account for the recent developments within both the global and domestic financial systems. The review aims at increasing the coverage limit in support of promoting depositor confidence and maintaining financial system stability.
- **Québec (Canada).** Following the 2023 crisis events, the AMF initiated a review of its deposit protection scheme to analyse its adequacy and continues to exchange views with CDIC Canada to keep both programmes harmonised. Since 2009 – in the aftermath of the global financial crisis – the Québec legislation has been changed to allow the Minister of Finance to determine, for a period not exceeding two years, to increase the deposit insurance limit and/or to fully guarantee deposits. This authority has no expiration date.
- **United Kingdom.** Prior to the recent events, the UK authorities were working to strengthen the deposit insurance system to maintain financial stability. Since the events, whilst considerations still seek to strengthen the system for financial stability, ensuring continued access to funds is a highly important consideration. Although not prompted by the banking turmoil, the UK authorities clarified policy which makes clear that safeguarded funds of E-Money Institutions (EMI) or other Payment Institutions (PI) that are authorised/registered by the Financial Conduct Authority continue to be protected, should a UK authorised credit institution, where safeguarded funds were held, fail. Ensuring that safeguarded deposits are FSCS-protected at the point of failure is consistent with the logic of safeguarding.²⁴

Coverage levels affect resolution options available to authorities and may have an impact on market discipline. Through constraints regarding the use of deposit insurance funds in non-payout bank failure measures, such as the “least cost test” or a “payout counterfactual” cap, coverage levels may have a substantial impact on the funding of non-payout resolution measures such as transfer or other strategies that maintain the continuity of banking functions. The application of the least cost test involves assessing the costs of different resolution strategies (such as payout, bail-in, sale of business, asset separation, liquidation, etc.) and choosing the option that comes at the lowest possible cost to the deposit insurer. Higher coverage levels tend to increase the costs of the payout strategy and increase the likelihood of other resolution strategies coming at a lower cost. At the same time, higher coverage levels

²⁴ See [Options for Deposit Insurance Reform](#), Federal Deposit Insurance Corporation, May 2023, pp. 26–28.

may to some extent contribute to weaker market discipline and increase the potential of moral hazard risks as depositors have less incentives to monitor banks' risk-taking, which encourages risk-taking by banks. This places a greater burden of ensuring bank prudence on uninsured depositors, unsecured creditors, supervisory policies and other safeguards.

Coverage levels may have cross-border impacts. Deposit insurers are aware of current and potential future differences in coverage levels between deposit insurers within their immediate geographic area and have indicated a desire to avoid major differences in coverage levels, as they may give rise to financial stability concerns. These could manifest in the form of sudden deposit outflows to nearby jurisdictions with higher coverage limits.²⁵

5.2. Funding and premium calculation

To remain credible, expanding deposit insurance coverage may require additional funding which comes at a cost. The IADI Core Principles state that deposit insurers should have readily available funds and all funding mechanisms necessary to ensure prompt reimbursement of depositors' claims, including assured liquidity funding arrangements (Box 12).

Box 12: Funding and differential premiums in the IADI Core Principles

IADI Core Principle 9 asserts that responsibility for paying the cost of deposit insurance should be borne by banks. Funding for the deposit insurance system is provided on an ex-ante basis. Pre-arranged and assured public sources of emergency liquidity funding arrangements should be available. If the deposit insurer uses differential premium systems:

- the system for calculating premiums should be transparent to all participating banks;
- the scoring/premium categories should be significantly differentiated; and
- the ratings and rankings resulting from the system pertaining to individual banks should be kept confidential.

Considerations on the level of coverage may have a significant impact on contributions required by member banks and, potentially, on financial stability.

²⁵ In the European Union, the same coverage limit is provided by EU legislation and applied by all deposit insurers established in the 27 member states.

- **Italy.** In Italy an increase in the coverage level of currently EUR 100,000 to EUR 150,000 has been estimated to result in a 10% increase in the deposit insurer's funding needs; an increase in the coverage level to EUR 250,000 would require a 20% increase in funding.
- **Québec (Canada).** Following the March 2023 crisis and the recent growth of deposits insured by the AMF, an analysis of the adequacy of the deposit insurance fund was carried out. To meet the fund target within the initial time horizon, the analysis revealed the need to increase the premiums payable by authorised deposit institutions. The regulation will be amended accordingly and should come into force in April 2024.

Deposit insurers' premium systems may capture some of the risks associated with high shares of uninsured deposits. The premium system of the Savings Deposit Insurance Fund (SDIF) of Türkiye already incorporates to a moderate extent the share of uninsured deposits as an element in the premium-setting (see Box 14). With PIDM Malaysia (Box 15) and the FDIC, two other deposit insurers have ongoing considerations in this area.²⁶

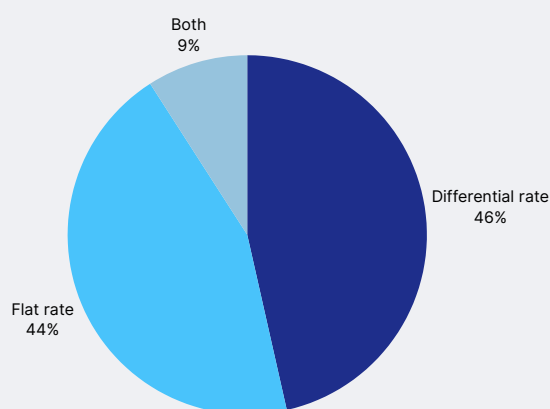
Deposit insurers charge member banks with contributions to the deposit insurance funds. They do so in different ways and at different intervals (Box 13). Deposit insurers' fund sizes vary significantly across regions. Differences in fund sizes may reflect a number of factors, such as the mandate of the deposit insurer, the costs of recent bank crises, expected future default probabilities of member banks within the deposit insurance system, and net costs which would be incurred by the deposit insurer.

²⁶ See remarks by Martin Gruenberg on [The Resolution of Large Regional Banks – Lessons Learned](#), August 2023 as well as the Federal Deposit Insurance Corporation, [Options for Deposit Insurance Reform](#), May 2023.

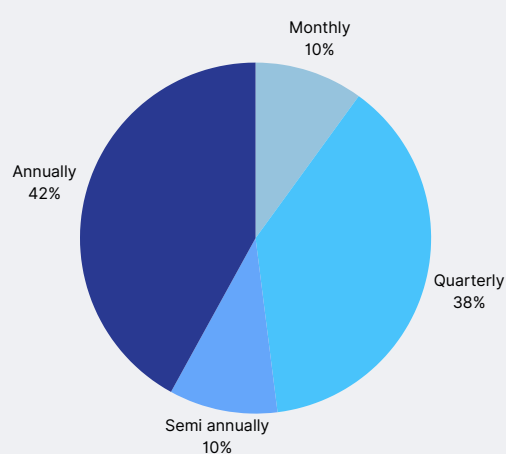
Box 13: Premium, fund size, and backstop funding

Slightly less than half (44%) of deposit insurers globally use a flat rate premium rate system only, in which the premium is assessed at a uniform rate across all member banks. Slightly more than half (55%) of deposit insurers use a differential premium system, which seeks to differentiate premiums based on criteria such as individual bank risk profiles. This includes 9% of deposit insurers who do so in combination with a flat rate system. Four out of ten deposit insurers collect premiums on an annual basis only, which may be relevant to the ability of premium policy design to impact on bank behaviour.

Method of levying premiums by deposit insurers



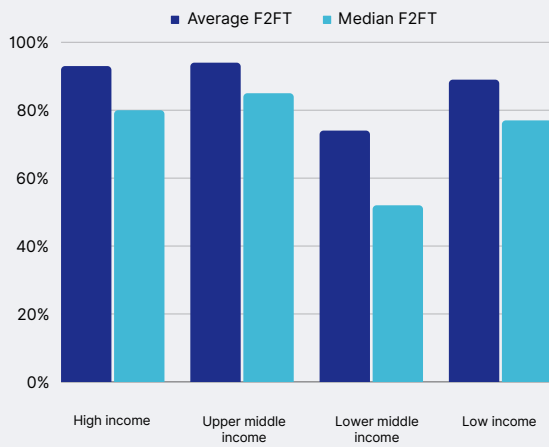
Premium collection by deposit insurers



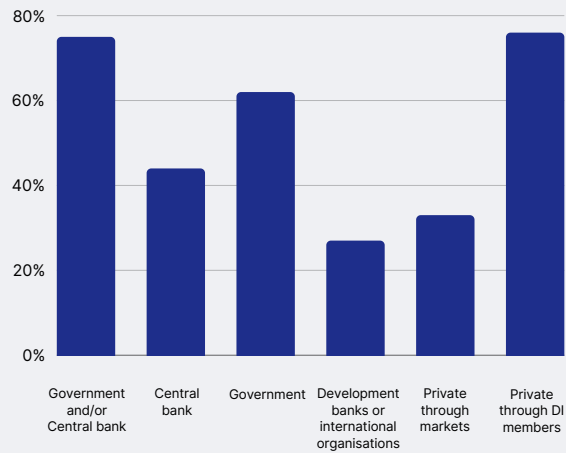
Source: IADI Annual Survey 2023

As a global median, deposit insurers hold funds that are close to 80% of their target fund levels. Ratios are considerably inferior in lower middle-income countries. One third of deposit insurers may access backup funding through private markets (e.g., through borrowing), whereas 76% may mobilise funds by members. Three out of four (75%) of deposit insurers report having access to a backup facility with the government and/or the central bank. Backup funding with governments is more widespread (62%) than with central banks (44%). One in four (27%) of deposit insurers has access to backup funding by development banks or international organisations.

Fund to fund target ratios of deposit insurers



Backup funding availability to deposit insurers



Sources: IADI Annual Survey 2023, IADI Policy Brief No. 10 (upcoming)

SDIF Türkiye has been applying a risk-based insurance premium system since 2009 (Box 14). Upon establishing this premium system, SDIF included the ratio of insured deposits to total deposits as a risk factor. Excessive dependence on large deposits was not deemed desirable as it might cause liquidity problems if several large depositors withdrew their funds at the same time. To reduce liquidity problems, deposit structures with a relatively large number of small and medium-sized deposits are treated in a preferential manner in the calculation of the risk-based deposit insurance premium.

Box 14: Uninsured deposits and the differential premium system: The case of SDIF Türkiye

The risk-based insurance premium system of SDIF Türkiye has been in place since 2009. The system includes fourteen risk factors under five categories: capital adequacy; asset quality; profitability; liquidity; and other factors.

Each risk factor is assigned a score according to certain threshold values. Credit institutions obtain a total score ranging from “0” to “100”. Higher risks profiles are reflected in lower scores; lower risks profiles in higher scores. Based on their total scores, credit institutions are assigned to one of the 4 premium categories and the premium rate for this respective premium category is applied to the credit institution. For example, a total score of 49 and less would lead a credit institution to be placed in the lowest category (4th premium category “Category D”) with the highest premium rate.

Within the liquidity category, in addition to deposit maturity, the ratio of insured deposits to total deposits is also considered. Depending on an individual bank's proportion of insured deposits, a score will be allocated. With a maximum score of 5 (out of 100 in total) assigned to this risk factor, the weight of this factor in premium calculation is moderate. Insured deposits ratios surpassing 27% lead to a maximum score of 5 for this risk factor.

PIDM Malaysia plans to introduce in 2025 an enhanced risk-based differential premium systems framework (Box 15).

Box 15: Uninsured deposits and the differential premium system: The case of PIDM Malaysia

PIDM Malaysia plans to introduce in 2025 an enhanced risk-based differential premium systems framework that – in addition to a safety and soundness component based on a supervisory rating – will also include a resolvability component that incorporates loss given failure. The latter will include three ratios:

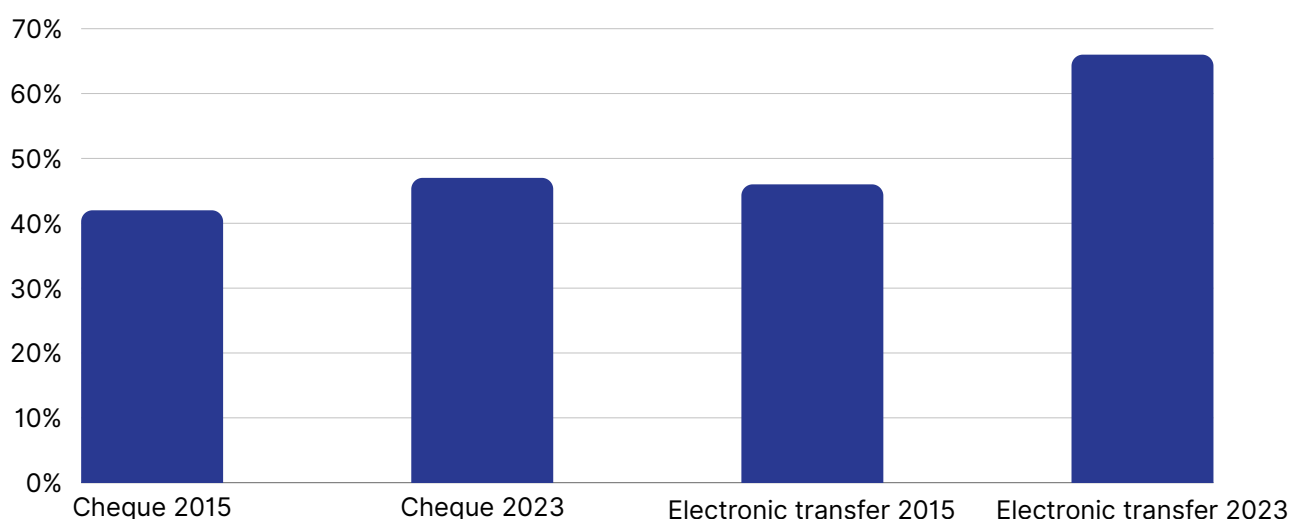
- Free tangible asset cover ratio (FTAC) – this measures the sufficiency of assets against senior unsecured liabilities;
- Net impaired asset cover ratio (NIAC) – measures the loss-absorbing capacity relative to net impaired assets;
- Composition of core funds (CCF) – measures the availability of core funding as a proportion of the bank's funding base, based on the experience that the less sticky the deposit base, the more vulnerable a bank is to a potential bank run during a crisis and potentially the more difficult it would be to broker swift private sector solutions. High shares of uninsured deposits typically lower the stickiness of the deposit base and would lead to higher premiums, hence not incentivising high proportions of uninsured deposits.

5.3. Reimbursements

A number of deposit insurers are currently investigating the potential for technological innovation in reimbursement practices. The banking industry has undergone an extensive transformation of payment systems in the past decades, with an increasing use of digitalisation of processes, including those relating to customer interaction. Similarly, a significant share of deposit insurers have also followed the same path, by increasingly replacing paper-based compensation mechanisms by more digital payout processes.

Since 2015, the share of deposit insurers using electronic transfer when reimbursing depositors has risen from 46% to 66% (Figure 1). In its legislative proposal for amending the EU Deposit Guarantee Scheme Directive (DGSD), the European Commission provides that deposit insurers must make use of credit transfers when compensating depositors with balances above EUR 10,000.²⁷

Figure 1: Method of reimbursing depositors



Sources: IADI Annual Survey 2023

Depositors may grow more sensitive to disruptions in access to funds caused by delays in reimbursement in an environment of fast payments and 24/7 online banking systems. IADI Core Principle 15 provides that deposit insurance systems should reimburse depositors' insured funds promptly in order to contribute to financial stability (Box 16). Digitalisation in reimbursement by deposit insurers offers some potential for innovation in the field of reimbursement.

²⁷ European Commission, [Proposal COM \(2023\) 228](#) for a Directive amending Directive 2014/49/EU as regards the scope of deposit protection, use of deposit guarantee schemes funds, cross-border cooperation, and transparency, 18 April 2023, new Article 8a.

Box 16: Reimbursement in the IADI Core Principles

IADI Core Principle 15 Essential Criterion 1 provides that the deposit insurer should be able to reimburse most insured depositors within seven working days. Likewise, the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions advocate that in the case of insured transaction accounts, depositors should be provided with access to their funds promptly (e.g., within seven days). To allow for this swift reimbursement, Essential Criterion 4 requires access by the deposit insurer to depositors' records at all times. This includes the authority to require banks to maintain depositor information in a format prescribed by the deposit insurer.

Technological innovations may facilitate limited but continued access to deposits or shorten the time necessary for orderly reimbursement. There may be potential for this to increase the confidence of depositors.

- **Canada.** CDIC Canada is implementing modernised insurance determination capabilities and infrastructure. Modernisation of its payout capabilities, in line with depositor expectations, remains on track for delivery by year end 2024. CDIC Canada has also adjusted its compliance programme with a view to testing member institutions' and Nominee Brokers' data production capabilities with greater frequency and depth.
- **Korea.** In response to the increased usage of mobile banking and the possibility of digital bank runs, KDIC is currently developing a mobile application for its reimbursement system, aimed to be launched early 2024. With this new mobile application, depositors of a failed bank will be able to apply for deposit insurance claims using their smartphones.
- **Switzerland.** An expert group set up by the Swiss government to examine lessons learnt from the demise of Credit Suisse found that the seven-day horizon no longer seemed adequate and would not have sufficient preventative effects. The report recommends that authorities consider strengthening the deposit insurance scheme in light of recent experience, taking international developments into account.²⁸
- **Québec (Canada).** To speed up the process for determining the amount to be repaid to each depositor, the AMF has established data and systems requirements standardising the data to be received from the authorised deposit institutions, and the rules to be followed are set out in a regulation. To validate compliance with data requirements by institutions, the AMF performs annual compliance tests aimed at improving data quality, and institutions are required to remedy any deficiencies.

²⁸ See [The need for reform after the demise of Credit Suisse](#), September 2023.

- **UK.** Authorities in the UK are working on improving depositor outcomes in bank or building society insolvency (IDOB). IDOB aims to increase the speed and efficiency of redress payments and to improve the UK authorities' ability to protect depositors following a bank or building society failure. The FSCS aims to pay out insured deposits within seven days. However, some depositors may experience a period in which they are unable to access their funds during an insolvency and therefore may be required to open another account to continue to access their funds. UK authorities are currently working through three initial areas that could support timely payout of insured balances and improve continuity of payments. These proposals are (i) an online portal for electronic transfers; (ii) utilising existing infrastructure to exchange payment information and redirection of payments made to/from the insolvent institution, enabling the transfer of certain payments such as direct debits, and standing orders; and (iii) exploring better operational support if a depositor is required to open a new bank account.²⁹

The relationship between the speed of reimbursements and the propensity for depositors to run on the bank needs further analysis. In view of the relevance of uninsured deposits, such a relationship may reinforce the need for non-payout bank crisis management measures to be in place (e.g., transfer tools) that facilitate continued access to insured deposits and related banking services. When conducting reimbursements, deposit insurers may consider making use of advance or interim payments that offer swift access to (part of) deposits if the expected reimbursement period is considered too long or to avoid hardship for depositors. Views regarding the relative weight attached to swift reimbursement for the purpose of maintaining financial stability or upholding depositors' payment abilities as well as preferences towards shortening the existing seven-day payout objective differ among IADI Members. Rather than focusing on the number of days for payout of deposits, the focus may be on upholding depositors' payment abilities and on granting uninterrupted access to part of the insured funds. Members operating in jurisdictions where transfer tools are generally available as a resolution tool may see such a tool as a functional alternative to payout in liquidation.

Achieving reimbursement of most depositors within seven working days remains challenging for many deposit insurers. One out of three deposit insurers does not initiate reimbursement within seven days.³⁰ Based on a survey of 32 payout cases³¹ occurring between 2016 and 2021, a recent Research Paper³² by the IADI Reimbursement Technical Committee offers some insight into deposit insurers' ability to reimburse most depositors within seven working days of deposits becoming

²⁹ <https://www.bankofengland.co.uk/statement/2023/improving-depositor-outcomes-in-bank-or-building-society-insolvency>

³⁰ 2023 IADI Annual Survey.

³¹ The cases displayed here exclude purchase and assumption (P&A) transactions and refer to reimbursement cases in Europe, Latin America, Asia Pacific, Africa and Eurasia.

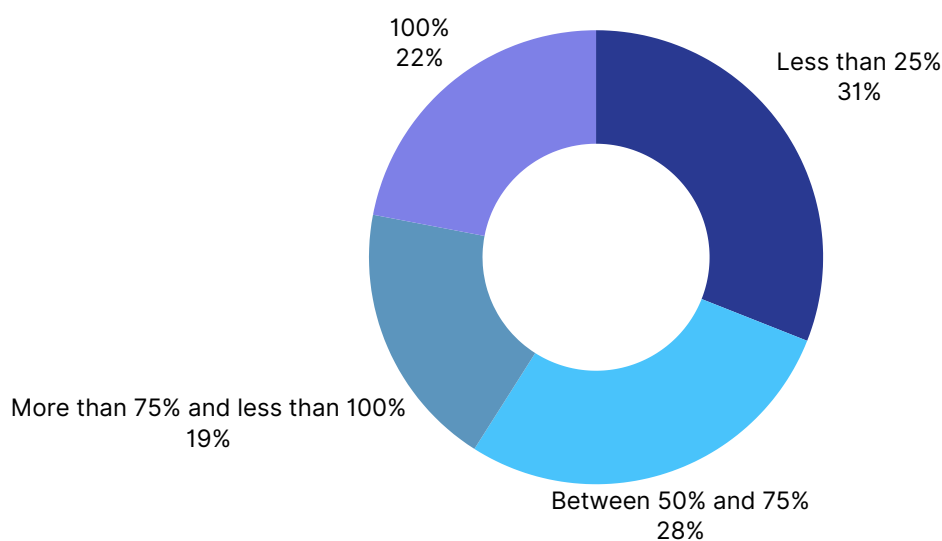
³² See [Reimbursing Depositors now and in the Future – Challenges, Remedies and Trends](#), IADI Research Paper, June 2023.

unavailable.³³ The survey results suggest that in 22% of payout cases, all insured depositors were able to access their funds within seven working days. In more than a quarter of cases (31%), less than 25% of insured depositors were able to access them within that timeframe.

The paper identifies several factors that affect the deposit insurers’ ability to reimburse insured deposits swiftly. The quality of information on depositors and a lack of sufficient notice that a payout would be triggered are amongst the most frequently cited issues. Prior and tailored access by deposit insurers to data on depositor records varies significantly globally (see Box 17). While 66% of deposit insurers can access depositors’ records prior to a reimbursement case and prescribe the format of the information to be submitted to the deposit insurer and/or request changes, 22% of deposit insurers have no prior access to such data.³⁴ Access differs considerably based on the deposit insurer mandate with 64%, 75%, 100% and 92% of paybox, paybox plus, loss minimiser and risk minimisers receiving prior access, respectively.

Figure 2: Reimbursement practice in recent cases

Percentage of insured depositors which had their funds accessible within 7 working days



Sources: IADI Reimbursement Research Paper, 2023

For a relevant share of deposit insurers, improving access to data on bank deposits, including shares of uninsured deposits, the nature of deposits and relevant liquidity movements is crucial. Lack of such data availability may suppress the deposit insurer’s ability to fully appraise sources of risk, leading to inadequate premium pricing and downstream funding implications during periods of financial sector instability.

³³The survey indicated as a reference to start counting from the day “in which deposits have become unavailable” for depositors. The survey did not investigate whether this reference was interpreted in the same way by all respondents.

³⁴Source: 2023 IADI Annual Survey.

Box 17: Access by deposit insurers to depositor records

| Mandate | DI has prior access to depositor records | | DI has no prior access to depositor records |
|----------------|--|---|---|
| | DI has power to prescribe how banks should compile and transmit data | DI has limited powers to prescribe how banks should compile and transmit data | |
| Risk Minimiser | 83% | 9% | 8% |
| Loss Minimiser | 80% | 20% | 0% |
| Paybox Plus | 64% | 11% | 25% |
| Paybox | 50% | 14% | 36% |
| All | 66% | 12% | 22% |

Sources: IADI Annual Survey 2023

5.4. Early intervention and resolution

A number of jurisdictions are considering or have taken measures to enhance early intervention and crisis management preparedness of financial safety-net participants. The speed with which recent crisis events unfolded stresses the need for early intervention and timely and effective management of bank crises, as well as for ex-ante preparations to ensure adequate crisis management preparedness. Flexibility is identified as a key element in effective crisis management. It requires a pragmatic approach and the involvement of all financial safety-net participants in the “financial stability value chain”. A number of measures have been taken or are currently being considered that are relevant to bank failure management by deposit insurers.

- **European Union.** Although not prompted by the banking turmoil earlier this year, policy discussions are ongoing on reforming the bank crisis management and deposit insurance system in the European Union. Following legislative proposals³⁵ made by the European Commission in April 2023 (see Box 18), policy discussions cover several issues related to early intervention, resolution, and the role of deposit insurers therein. Particular focus is placed on the effective resolution and orderly market exit of smaller and medium-sized banks, whose failures have been dealt with primarily by not making recourse to the resolution procedure provided for in EU legislation, but by applying other tools available in the bank crisis management regulatory framework.
- **Canada.** Amendments to the act governing CDIC Canada’s activities were passed, which include granting the government authority to temporarily increase the deposit insurance limit to support financial stability. This authority will expire at the end of April 2024.
- **Korea.** In July 2023, KDIC Korea opened a market intelligence unit in order to collect and analyse various news and big data in real time as well as to enhance direct communication with market participants. This collection of qualitative information is expected to alleviate the limitations of traditional risk monitoring which relies on quantitative data analysis and allow for more proactive detection of early signs of financial crises.
- **Switzerland.** A further strengthening of prudential measures has been proposed, including a review of liquidity requirements, the conduct of more rigorous stress tests for capital and liquidity, the broadening of prudential indicators taking into account market indicators, and mechanisms for structured early interventions even in cases where banks still meet all regulatory requirements but are losing market confidence, along with recommendations to strengthen the authorities’ resolution tools.³⁶

³⁵See the European Commission’s [legislative proposals](#) for amendment of the BRRD and DGSD Directives as well as SRM Regulation, 18 April 2023.

³⁶See [The need for reform after the demise of Credit Suisse](#), September 2023.

- **United Kingdom.** Authorities in the UK are in the process of exploring options for resolution of smaller banks. An important element of such framework would be to maintain continuity of access to deposits while minimising the risk to public funds. These proposals, aligned with discussions on “improving depositor outcomes in bank or building society insolvency” (IDOBI workstream), will play a vital role in strengthening the UK resolution framework and financial system.³⁷
- **United States.** Authorities in the United States have proposed a set of measures in supervision, early intervention, and resolution. These include more forward-leaning supervision of larger regional banks as well as a proposed requirement for these banks to maintain a layer of long-term debt to support their resolvability and resilience.

Box 18: European Union: bank crisis management and deposit insurance system reform

In April 2023, the European Commission put forward a number of legislative proposals aimed at adjusting the current EU bank Crisis Management and Deposit Insurance (CMDI) framework by widening the use of the broad range of tools to preserve financial stability, protect taxpayers and depositors, and support the real economy and its competitiveness in case of a bank crisis.

The proposals seek to ensure that all failing banks can be dealt with in the most effective way. In particular, the proposals aim at making transfer strategies with adequate funding in resolution procedures more easily and credibly accessible for handling the orderly market exit of smaller and mid-sized banks upon failure. The EU Commission asserts this will lead to a more effective use of funds from deposit guarantee schemes to finance cost-efficient measures other than the reimbursement of insured deposits in liquidation.

Referring to the Banking Union, the core elements of the proposals include:

- a revised public interest assessment to ensure that more banks are placed in resolution (as opposed to liquidation) when this best meets the resolution objectives of protecting financial stability, taxpayer money, and depositor confidence;

³⁷ See [statement by Sam Woods](#), Deputy Governor for prudential regulation and Chief Executive Officer of the Prudential Regulation Authority, 16 October 2023.

- easier access to resources of the national deposit guarantee funds (DGS) and the single resolution fund (SRF) for funding the resolution, also of smaller and mid-sized banks; this involves the use of DGS funds under the least cost test acting as a bridge to access the SRF, while ensuring that internal loss-absorbing capacity remains the first line of defence;
- harmonising the least cost test across all non-payout uses of DGS funds in order to align incentives when deciding on the best crisis management tool to use in different phases of a crisis (preventative measures, financing resolution action, alternative measures in insolvency).

To facilitate the use of DGS funds in resolution under the least cost test, the Commission proposes to change the current tiered depositor preference (“super preference”) of deposit guarantee schemes into a single-tier general depositor preference.³⁸ This causes the net costs of payout incurred by a DGS to increase, which, under the least cost test, would lead to a significant increase of DGS funds to be used in the funding of resolution procedures. In addition, a clarification of depositor preference is sought to reduce the risk of no-creditor-worse-off claims and hence facilitate the bail-in of unsecured liabilities.

The proposal aims at facilitating the transfer of the entire deposit book of failing banks to viable buyers, allowing for shielding all deposits – including uninsured deposits – from losses when preserving financial stability and depositor confidence so requires. However, this does not necessarily mean that all uninsured deposits will be protected at all times. Resolution authorities will still be able to allocate losses to uninsured depositors if financial stability is not at risk.

Effective accountability systems can act as a deterrent and help reduce the risk of moral hazard. Following a bank failure, management and other related culpable parties should be held accountable. There may be merit in strengthening existing frameworks for such redress. The IADI Core Principles prescribe that deposit insurers or other relevant authorities “should be provided with the power to seek legal redress against those parties at fault in a bank failure”.³⁹ Investigations may be pursued by the supervisor, regulator or other relevant authority depending on how responsibilities are partitioned within a given jurisdiction. Disciplinary measures, criminal prosecution and/or civil proceedings are all within the scope of these activities. One motivating factor contributing to such investigations is that the deposit

³⁸See also: European Commission (April 2023), [Impact assessment](#) accompanying the crisis management and deposit insurance review. In particular, see Chapters 2 and 6 and Annex 7.

³⁹See IADI Core Principle 12 – Dealing with Parties At Fault In A Bank Failure.

insurer, like any other creditor, should have a right to lodge a claim in the event that they incur financial losses when a bank fails. The extent of losses that may be compensated for will be subject to the creditor hierarchy established in domestic insolvency legislation (or equivalent).

5.5. Public awareness and communication

The ubiquity of social media and payment innovation may mean that bank runs are both more likely to occur and to happen more quickly when they do occur. While the causes of the stress perceived may be very diverse (e.g., poor risk management practices, weak governance, asset quality, unverified rumours on a bank's health, cyber-attacks, etc.), the low costs of spreading information through social media and within social networks may make it more likely for a bank run to occur. Innovation in payments may lead to it gaining momentum very quickly and it may be extremely difficult to stop the outflows. The sudden and rapid outflow of funds at Credit Suisse appears to have been exacerbated by solvency rumours circulating on social media.⁴⁰ Similarly, Silicon Valley Bank's demise, whilst driven by, among other factors, bond exposures, maturity mismatches, and a large proportion of uninsured deposits, was also shaped substantially by social media influence propagated amongst social networks concentrated within the Californian technology sector.⁴¹

Public awareness of deposit insurance contributes to decreasing bank run risk. A recent IADI sponsored study⁴² offered empirical evidence that public awareness of deposit insurance can decrease the propensity of depositors to run on their bank by 67%.⁴³ Just over three quarters of deposit insurers have a formal public awareness programme in place.⁴⁴ For nearly all of these, the objective is to promote public awareness on an ongoing basis, i.e., not only during periods of crisis. The IADI Core Principles underscore the importance of public awareness in the provision of effective deposit insurance systems, which is fundamental to achieving the public policy objectives of protecting depositors and contributing to financial stability (Box 19). However, given recent banking turmoil and the potential impact of digital innovation on depositor behaviour, there is merit in better understanding the relationship between public awareness of deposit insurance and bank-run risks.

⁴⁰ See [2023 Bank Failures – Preliminary lessons learnt for resolution](#), Financial Stability Board, October 2023.

⁴¹ Id., p. 24.

⁴² See [Who Will Run Their Bank?](#) IADI Sponsored Paper No. 3, March 2023.

⁴³ After controlling for jurisdiction, age, sex, household income, financial assets, and number of bank accounts.

⁴⁴ Source: 2023 IADI Annual Survey.

Box 19: Public awareness

IADI Core Principle 10 provides that the deposit insurer is “responsible for promoting public awareness of the deposit insurance system, using a variety of communication tools [this could include social media] on an ongoing basis as part of a comprehensive communication programme”. Approximately three quarters of deposit insurers currently have a public awareness programme in place.⁴⁵ The aims of such a programme should be “clearly defined and consistent with the public policy objectives”. Whilst IADI Members’ programmes vary in terms of objectives, most are focused on promoting awareness on an ongoing basis (95%), promoting corporate image/identity (80%), promoting financial stability (82%), and updating depositors about changes to deposit insurance coverage (80%).⁴⁶

There is a role for deposit insurers in actively monitoring the level of public awareness in their jurisdiction, including through periodic independent evaluations. A collaborative element also manifests in this regard: working diligently with banks, other financial safety-net participants, and (if cross-border issues are relevant) institutions beyond their jurisdiction to maximise awareness on an ongoing basis. Critically, the “ongoing basis” component cannot be over-emphasised – public awareness should not be an issue that is prioritised only periodically.⁴⁷

In addition to ongoing efforts to promote public awareness, IADI Core Principle 10 also expects prompt and clear communication by the deposit insurer in the case of bank failures. Upon such events, focus might be placed on pertinent operational information relevant to depositors, e.g., how to submit a claim with the deposit insurer and/or how payments will be issued.

More analysis is needed on the impact of technological innovation on depositor behaviour. Different types of depositors, such as (un)insured, retail or more sophisticated corporate depositors, may have different behavioural patterns and be impacted in different ways by technology and social media. Understanding these is important for the development of effective communication strategies and public awareness programmes.

⁴⁵ Source: 2023 IADI Annual Survey.

⁴⁶ Source: 2023 IADI Annual Survey.

⁴⁷ On the importance of ex-ante awareness of deposit insurance, see: [Who Will Run Their Bank?](#), IADI Sponsored Paper No. 3, March 2023.

Deposit insurers may wish to review their communication strategies and potential use of (social) media. Social media could be a relevant tool for monitoring market sentiment and serve as an early warning trigger. Deposit insurers may consider the appropriate strategy upon the spreading of information, whether true or false, and ensure they have the operational capacity to implement it. Under the guidance by deposit insurers and other financial safety-net agencies, member banks could be expected to develop social media monitoring tools.

5.6. Alternative and complementary reform proposals

The banking stress events led to a debate on wide-ranging reforms of deposit insurance systems and financial safety-nets and alternative (or complementary) approaches to protecting depositors:

- **Stricter liquidity requirements.** The fast and substantial outflow of deposits at several banks during the 2023 banking turmoil has raised questions on the design and calibration of liquidity requirements, and the practical useability of liquidity buffers. This includes the scope of risks covered by the liquidity coverage ratio as well as the assumed outflow rates of deposits.⁴⁸
- **Supervisory measures that limit the share of uninsured deposits.** This approach is very much motivated by recent failures where the level of uninsured deposits was excessive compared to peer banks. Limits to the share of uninsured deposits that bank can hold may reduce the likelihood of bank runs and thus the deposit insurer's exposure to risk.⁴⁹
- **Limits on depositors' ability to withdraw deposits ("gating").** These aim at limiting the probability and speed of bank runs and can be implemented in different ways. They are not dissimilar to mechanisms that restrict redemptions in money market funds in periods of extreme market stress. These include ex-ante approaches that may be contractually agreed upon or subject to sector-wide regulation, e.g., through a minimum balance at risk approach⁵⁰ or swing pricing⁵¹. Limits might also be set on an ad hoc basis (ex post), either for individual institutions or system-wide. To be effective, any such measures would need to be applied to corporate depositors, which are likely to hold a significant share of uninsured deposits. However, operational challenges and measures that limit the accessibility of deposits may further reinforce a lack of confidence, exacerbating liquidity concerns that could spill over to other banks.

⁴⁸ See [Report on the 2023 banking turmoil](#) issued by the Basel Committee on Banking Supervision, October 2023, pp. 24.

⁴⁹ [Written overview ahead of the exchange of views of the Chair of the Supervisory Board of the ECB with the Eurogroup on 15 May 2023](#), p. 3.

⁵⁰ Richard Berner, Marco Cipriani, Michael Holscher, Antoine Martin and Patrick E. McCabe, [Mitigating the Risk of Runs on Uninsured Deposits: the Minimum Balance at Risk](#), Federal Reserve Bank of New York Liberty Street Economics, 14 April 2023.

⁵¹ Enrico Perotti, [Learning from Silicon Valley Bank's uninsured deposit run](#), VoxEU, 5 May 2023.

- **Requirements for deposits to be collateralised** with high-quality assets at bank level or at the level of the central bank.⁵² This policy measure aims at increasing banks' ability to meet depositor withdrawals but comes at the cost of limiting their ability to intermediate. Borrowing costs to the real economy are expected to rise as a function of the degree of collateralisation that is expected to be maintained. Practical challenges of this measure relate to the valuation of collateral, the need to add collateral in times of falling asset prices, and market risks to the central bank. An extreme scenario of full collateralisation would in effect be a substitute to coverage by deposit insurance.
- **Loss-absorbing and recapitalisation capacity.** The issuance of long-term loss-absorbing debt also by non-global systemically important banks (non-G-SIBs), which is subordinated to deposits is aimed at reinforcing the confidence of both insured and uninsured depositors by providing a buffer of resources that absorbs losses before exposing depositors and the deposit insurance fund to the risk of loss. Loss-absorbing capacity (LAC) in the form of debt instruments are intended to privatise losses by facilitating a creditor-financed recapitalisation that supports the implementation of resolution measures. Losses can be absorbed while ensuring the continuity of critical functions in the short term.⁵³ Deposit insurers would need to consider the implications of such measures on funding requirements, as it would potentially reduce the magnitude of their financial contribution to resolution endeavours. It is generally assumed that smaller financial institutions may face challenges in issuing long-term debt instruments, e.g., due to lower liquidity in such instruments or given the lack of experience in tapping capital markets for funding. Similarly, in jurisdictions with less developed financial markets, or where there may be a need to issue debt in foreign currency, significant challenges may arise. As such, a "one-size-fits-all" LAC policy may not be appropriate for all deposit-taking institutions.

⁵² See [We need a new approach to bank regulation](#), Mervyn King in the Financial Times, 12 May 2023; Paul Tucker, in [Financial Times](#), 8 May 2023; Stephen G. Cecchetti, Thomas Philippon, Kermit L. Schoenholtz, and Lawrence J. White, "Revisiting the design of deposit insurance", in: [SVB and Beyond: The Banking Stress of 2023](#), Volatility & Risk Institute at NYU Stern, August 2023.

⁵³ See FSB [Principles on Loss-absorbing and Recapitalisation Capacity of G-SIBs in Resolution](#): "There must be sufficient loss-absorbing and recapitalisation capacity available in resolution to implement an orderly resolution that minimises any impact on financial stability, ensures the continuity of critical functions, and avoids exposing taxpayers (that is, public funds) to loss with a high degree of confidence."

- **Central Bank Digital Currencies (CBDC)**, if introduced and generally available, could offer a default-proof public alternative to private money bank deposits and thus offer protection similar to deposit insurance. The extent of protection offered will likely depend on the design features of the CBDC framework. To minimise disintermediation and financial stability risks, such frameworks are generally expected to include a CBDC wallet limit for the individual, which will likely be lower than the deposit insurance coverage limit (motivated largely by transaction rather than store-of-value needs). If so, the impact on depositors' bank-run behaviour may be limited.⁵⁴

5.7. Financial safety-net coordination

To be effective, the deposit insurance system must work in synergy with the frameworks for prudential regulation, supervision, and resolution, as well as the lender of last resort and public backstop function. Deposit insurance cannot be seen in isolation of prudential regulation, supervision, and resolution activities. A cohesive system design requires an understanding of the mutual interdependencies between these elements of the wider framework. Prudential regulation and supervision directly affect deposit insurance. Capital and liquidity requirements, and regulatory requirements regarding the management of other risks (such as operational and/or reputational risks), impact the probability of failure of a member bank as well as the expected costs to the deposit insurer of managing such bank failure.⁵⁵ Resolution regularly affects the costs of bank failure management, regardless of whether or not the deposit insurer acts as resolution authority. The deposit insurer will also need to have the ability to access liquidity funding which may require arrangements with the lender of last resort function and a public liquidity backstop.

The supervisor has a role in mitigating the moral hazard risk that is intrinsic to deposit insurance. In a number of jurisdictions, deposit insurers' supervisory powers may be limited (see Box 3). There may be merit in enhancing cooperation and coordination with supervisory authorities to facilitate the early detection of problems. Cooperation with the supervisor may be particularly valuable regarding issues related to monitoring of and reporting on uninsured deposits (Box 8), but may also be relevant in the area of non-financial risks (e.g. reputational risks and operational risks, including cyber risks, risks arising from the reliance on services provided by third parties and other factors magnified by digitalisation, the sustainability of business

⁵⁴ See [Central Bank Digital Currencies: The Motivation](#), IADI Fintech Brief No. 5, November 2021 and [Central Bank Digital Currencies: A Review of Operating Models and Design Issues](#), IADI Fintech Brief No. 13, December 2022.

⁵⁵ As to the significance of supervision, see the following reports: Federal Reserve (2023), [Review of the Federal Reserve Supervision and Regulation of Silicon Valley Bank](#), April 2023; FDIC (2023), [FDIC's Supervision of Signature Bank](#), April 2023.

models, and general risks such as geopolitical and climate-related physical and transitional risks). Compared to traditional risks, these risks may still be subject to less regulation and there may be a lack of data and consensus on how to measure these risks. In addition, the degree of uncertainty associated with non-financial risks may be higher than for financial risks. As a result, non-financial risks may currently not be sufficiently incorporated in deposit insurers' risk assessments and monitoring.

Box 20: Monitoring and early detection

Following the 2023 banking turmoil, the BCBS has highlighted the importance of strong and effective supervision.⁵⁶ Amongst other factors, the BCBS stresses the importance of the ability and willingness of supervisors to identify weaknesses in banks and to take and enforce prompt actions. Also, supervisors should analyse banks' business models and assess their viability and sustainability in a holistic manner as well as assess banks' governance and risk management.

Specifically for liquidity supervision, the BCBS identified that "the recent turmoil highlighted clear challenges in overseeing banks' liquidity risk".⁵⁷ These risks relate to growing shares of uninsured deposits, the ease and speed of bank runs, and banks' preparedness in relation to access to alternative liquidity sources.

The use of resolution tools aimed at maintaining the continuity of critical functions has an impact on the role of deposit insurance. The implementation of strategies such as bail-in or transfer tools (bridge banks or purchase and assumption tools) affects the costs of bank failure management to the deposit insurer, regardless of whether the deposit insurer acts as resolution authority or contributes to funding resolution measures. In addition to constraints regarding the use of the deposit insurers' funds in resolution, such as financial caps, least cost tests, and payout counterfactuals, the presence of depositor preference rules and their design will impact the role of deposit insurance and interplay with resolution tools.

The presence of loss-absorbing and recapitalisation capacity in the form of long-term subordinate debt can help strengthen market discipline and reduce the burden on deposit insurance funds, but a "one size fits all" loss absorbing capacity policy may not be appropriate. Where banks hold long-term debt subordinated to operational liabilities such as deposits, the write-down or conversion of such debt insulates the deposit insurance fund, and if available in adequate amounts, also

⁵⁶ See [Report on the 2023 banking turmoil](#) issued by the Basel Committee on Banking Supervision, October 2023.

⁵⁷ Id., p. 19–20.

uninsured depositors from loss. Such requirements have been implemented for systemically important banks.⁵⁸ It is important to consider the interplay with deposit insurance given the reduced likelihood for the failure of such banks to lead to a need to access the deposit insurance funds. Mandating smaller banks to issue long-term debt may not be practical as they may face more difficulties in accessing capital markets compared to larger banks. As a consequence, the availability of a robust deposit insurance fund is of relatively greater importance for those banks.

Public liquidity backstop arrangements can help ensure that the deposit insurer is able to fulfil its obligations to depositors, thereby maintaining confidence in the banking system. Public liquidity backstop arrangements may be relevant especially in the event of multiple bank failures that may exhaust the deposit insurer's resources and threaten financial stability. Public sector backstop funding should be subject to terms and conditions aimed at reducing the risk of moral hazard, including mechanisms to recover any losses incurred.

Cooperation, coordination, and information sharing among financial safety-net participants during "business-as-usual" times as well as in crisis need to be underpinned by an explicit framework and subject to periodic testing. The speed with which events unfolded during the crisis demonstrated the value of ongoing contingency planning and crisis preparedness. Crisis management preparations and regular testing of cooperation and coordination arrangements among financial safety-net participants during "business-as-usual" periods, underpinned by cooperation arrangements or memoranda of understanding (MoU), can help to ensure that there is clarity of roles and responsibilities among all financial safety-net participants and a tested playbook for cooperation and coordination.

5.8. Cross-border cooperation

Recent failures have reiterated the importance of cross-border cooperation also in failure management of non-G-SIB banks. Banks that are not global systemically important banks (non-G-SIBs) may also operate in a financial environment with significant international exposure. A prominent recent example was Silicon Valley Bank, which had a subsidiary in the UK. The UK and US authorities used existing relationships to ensure that their responses were not counterproductive to each other's resolution efforts. The benefits of formal information sharing and coordination arrangements between deposit insurers and with other participants in the financial safety-net where there is a significant presence of foreign banks in a jurisdiction are well established in the IADI Core Principles.

⁵⁸ See the Total Loss-Absorbing Capacity (TLAC) [Principles and Term Sheet](#) for further details.

IADI serves as an inclusive forum for financial safety-net participants to share experiences relevant to cross-border crisis management and resolution.

Engagements of this nature can assist in identifying and fully articulating areas of mutual opportunity and lay foundations for addressing common challenges. The importance of building relationships and fostering trust during periods of relative financial stability should not be underestimated, as the quality of policy outcomes tends to be closely linked to the strength and robustness of these relationships.

6. Way forward: issues for further analysis and exploration

Building on the above reflections, IADI Members identified four areas for further analysis: (i) deposit insurance design; (ii) deposit insurance and resolution interaction; (iii) financial safety-net coordination; and (iv) digitalisation. This analysis will inform the review of the IADI Core Principles and accompanying Handbook which will be undertaken in 2024. It will also be helpful when developing new or updating existing IADI guidance as appropriate. The work on individual issues within each area will be appropriately sequenced taking into account members' views on priorities and limited resources. To the extent possible, IADI will leverage work undertaken in other fora or international standard-setting bodies and seek cooperation, in particular with the BCBS and the FSB.

6.1. Deposit insurance design

(1) Level and scope of coverage. IADI will consider the continued appropriateness of its existing guidance as to the level and scope of coverage taking into consideration i) changes in the economic, social, and technological environment, prudential regulation and supervision; ii) the availability of alternative tools to manage bank failures; iii) the costs of a potential expansion of coverage for deposit insurers and the banking system and, consequently, the impact on the credit channel and the real economy; iv) existing coverage ratios and the effectiveness of changing coverage in preventing bank runs as well as potential moral hazard risks that may result from such change and that, if relevant, may affect financial stability.

(2) Funding, premiums, and backstop arrangements. IADI will review the conditions for appropriate funding of deposit insurers, including credible ex-ante funding by the industry complemented by (public) backstop arrangements. IADI will analyse the role of differential premium systems in managing moral hazard risks and look at how their design features can be incentive-consistent (considering, for example, the share of uninsured deposits at individual banks and the availability of loss-absorbing capacity).

(3) Reimbursement. IADI will conduct further work to identify and address obstacles to swift reimbursement and investigate how deposit insurers can make best use of technological innovation ('DepTech') taking into account the accelerated speed of bank runs due to, for example, social media, fast payments, and mobile banking. To respond to depositors' growing expectation of continued access to deposits, IADI will explore the possibility for reimbursement policies to facilitate limited but continued access to deposits.

6.2. Deposit insurance and resolution

(4) Interaction between deposit insurance and resolution. IADI will consider the interaction between deposit insurance and resolution⁵⁹, in particular with respect to measures that seek to maintain the continuity of depositors' access to their funds, and the role of long-term debt ranking below uninsured deposits and consider its value as well as its costs and potential risks in terms of protecting depositors and reducing moral hazard risks. IADI will also consider the interaction between deposit insurance and early intervention measures that are aimed at restoring the bank's viability.

6.3. Financial safety-net coordination

(5) Financial safety-net coordination. IADI will review pre-conditions for effective cooperation and coordination of the deposit insurer with other financial safety-net participants in "business as usual" as well as in crisis, for example in assessing systemic importance, determining the preferred tool in crisis intervention and resolution measures (e.g., continuity or wind-down with deposit pay-out), testing crisis management preparedness, and conducting joint simulation exercises. IADI will seek to strengthen its engagement and cooperation with other standard-setting bodies, including in particular the BCBS and the FSB, with a view to promoting a holistic view of the financial safety-net and ensuring the effective interplay of all safety-net components.

(6) Cross-border cooperation. IADI will consider avenues to promote cross-border information sharing and coordination between deposit insurers and other financial safety-net participants in home and host jurisdictions to support crisis management preparedness for banks with material cross-border operations. IADI will continue to serve as an inclusive forum for financial safety-net participants to share experiences relevant to cross-border crisis management and resolution to help identify and fully articulate areas of mutual opportunity and lay the groundwork for addressing common challenges.

6.4. Digitalisation

(7) Social media and communication in "business as usual" and in crisis. IADI will consider how communication strategies need to be designed in the new social media environment to help maintain or restore confidence and promote public awareness in "business-as-usual" times and in crisis.

⁵⁹ As noted in the Introduction of this report, "resolution" refers to the disposition plan and process for a non-viable bank. As such, it covers liquidation and depositor reimbursement, transfer and/or sale of assets and liabilities, the establishment of a temporary bridge institution and the write-down of debt or conversion to equity, as well as the application of procedures under insolvency law to parts of an entity in resolution.

(8) Implications of digitalisation on deposit insurance systems. Technology-driven innovation and the digitalisation of finance generally come with efficiency and convenience gains and may change both depositor behaviour and the way that banking services are provided. Emerging trends such as stablecoins and CBDC may create additional uncertainty regarding depositor behaviour and further impact deposit-taking bank business models. IADI will continue to monitor developments and analyse the potential implications of digitalisation and changing bank business models for deposit insurers.

Annexes

Annex 1 - IADI Executive Council members as of October 2023

Alejandro López
Seguro de Depósitos Sociedad
Anónima (Argentina)

Daniel Lima
Fundo Garantidor de Créditos
(Brazil)

Claudio Luis Medeiros Weber
Fundo Garantidor do Cooperativismo
de Crédito (Brazil)

Christa Walker
Canada Deposit Insurance Corporation
(Canada)

Patrick Déry
Autorité des marchés financiers
(Canada - Québec)

Yvonne Fan
Central Deposit Insurance Corporation
(Chinese Taipei)

Marija Hrebac
Croatian Deposit Insurance Agency
(Croatia)

Michel Cadelano
Fonds de Garantie des Dépôts et de
Résolution (France)

Hilmar Zettler
The Association of German Banks
(Germany)

Deepak Kumar
Deposit Insurance and Credit
Guarantee Corporation (India)

Alfredo Pallini
Interbank Deposit Protection Fund
(Italy)

Eloise Williams-Dunkley
Jamaica Deposit Insurance
Corporation (Jamaica)

Hidenori Mitsui
Deposit Insurance Corporation of
Japan (Japan)

Mu'taz Barbour
Jordan Deposit Insurance Corporation
(Jordan)

Adil Utembayev
Kazakhstan Deposit Insurance Fund
(Kazakhstan)

Helen Chepkwony
Kenya Deposit Insurance Corporation
(Kenya)

JaeHoon Yoo
Korea Deposit Insurance Corporation
(Korea)

Bello Hassan
Nigeria Deposit Insurance Corporation
(Nigeria)

Loay Hawash
Palestine Deposit Insurance
Corporation (Palestine)

José María Fernández
Fondo de Garantía de Depósitos de
Entidades de Crédito (Spain)

Fatin Rüştü Karakaş
Savings Deposit Insurance Fund
(Türkiye)

Jonathan Pallant
Financial Services Compensation
Scheme (United Kingdom)

Arthur J Murton
Federal Deposit Insurance Corporation
(United States)

Daniel Dominioni
Corporación de Protección del Ahorro
Bancario (Uruguay)

Julia Oyet
Deposit Protection Fund of Uganda
(Uganda)

Annex 2 - List of experts consulted during IADI Outreach Sessions, 6–10 November 2023

| | |
|--|---|
| Kern Alexander Zurich University, Faculty of Law | Vilma Rosa Leon-York VRLY Consultancy Services BV. Consultant on DI and Resolution, US Treasury OTA, IADB |
| Douglas Arner, University of Hong Kong, Faculty of Law | Timo Löyttyniemi, CEO State Pension Fund of Finland, Former Vice Chair, Single Resolution Board |
| Thorsten Beck European University Institute | Pascual O'Dogherty Secretary General, Association of Supervisors of Banks of the Americas |
| Marco Bodellini University of Luxembourg | Manju Puri, Fuqua School of Business at Duke University |
| Martin Boer Institute of International Finance | José María Roldán, Financial Policy Expert, former Director-General Banking Regulation and Financial Stability, Bank of Spain |
| John Bovenzi Former Deputy to the Chairman and Chief Operating Officer, FDIC | Jean Pierre Sabourin Former CEO of CDIC Canada, PIDM Malaysia and former President of IADI |
| Peter Conti-Brown, Wharton School of the University of Pennsylvania | Ilhyock Shim, Head of Economics and Financial Markets for Asia and the Pacific. BIS Representative Office for Asia and the Pacific |
| Marc Dobler, Division Chief, Financial Crisis Preparedness & Management, International Monetary Fund | His Royal Highness Muhammadu Sanusi II, The 14th Emir of Kano, Former Governor of the Central Bank of Nigeria |
| Douglas Elliott, Oliver Wyman | Dalvinder Singh University of Warwick School of Law |
| Santiago Fernandez de Lis, BBVA, formerly Bank of Spain and BIS | Tobias Tröger, Leibniz Institute for Financial Research (SAFE) / Goethe University Frankfurt |
| Jonathan Fiechter, National Academy of Public Administration, formerly IMF, World Bank, FDIC | Nicolas Veron Bruegel, and the Peterson Institute for International Economics |
| Stefan M Gannon Special Adviser to Chief Executive Hong Kong Monetary Authority | Larry Wall, Center for Financial Innovation and Stability (CenFIS), Federal Reserve Bank of Atlanta |
| Christos Gortsos National and Kapodistrian University of Athens, Law School | Eamonn White, Ardhill Advisory, formerly Bank of England and Hong Kong Monetary Authority |
| Andrew Gracie Former Executive Director for Resolution, Bank of England | Lawrence J. White, Professor of Economics at New York University's Leonard N. Stern School of Business |
| Seraina Grünewald Radboud University Nijmegen | |
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