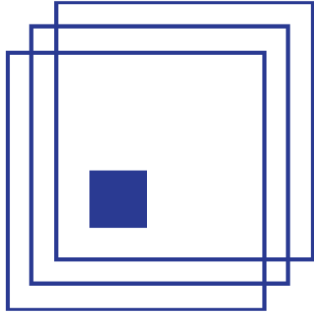




IADI Research
Papers report on in-
depth investigations
on topics of relevance
to deposit insurers.



RESEARCH PAPER

REIMBURSING DEPOSITORS
NOW AND IN THE FUTURE
CHALLENGES, REMEDIES AND TRENDS

PREPARED BY THE
REIMBURSEMENT TECHNICAL COMMITTEE OF THE
CORE PRINCIPLES AND RESEARCH COUNCIL COMMITTEE

June 2023

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Abbreviations

AML	Anti-money Laundering
ATM	Automated Teller Machine
CBDC	Central Bank Digital Currency
CP	Core Principle
DBP	Deposit Brokerage Platform
DI	Deposit Insurer
EC	Essential Criteria
FSB	Financial Stability Board
IADI	International Association of Deposit Insurers
IMF	International Monetary Fund
NGO	Non-governmental organisation
P&A	Purchase and Assumption Transaction
RTC	Reimbursement Technical Committee
SCV	Single Customer View
THB	Temporary High Balance

Key Terms

The following are key terms for the paper:¹

Bank: 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, as defined in the IADI Glossary.

Core Principles: The IADI Core Principles for Effective Deposit Insurance Systems promote best international standards in deposit insurance and support the stability and soundness of financial systems. They are reflective of and adaptable to a broad range of jurisdictional circumstances, settings and structures. They have been included in the FSB’s Compendium of Key Standards for Sound Financial Systems and are the basis for the IMF/World Bank assessments.

¹ Key terms in this section were taken from IADI’s glossary <https://www.iadi.org/en/core-principles-and-research/publications/glossary/>

Coverage Limit: The maximum amount which a depositor can claim from or be reimbursed by a Deposit Insurer in the event of a bank failure.

Deposit: Any credit balance which derives from normal banking transactions and which a Bank must repay at par under the legal and contractual conditions applicable; any debt evidenced by a certificate issued by a Bank; and any other funds or obligations defined or recognised as Deposits by the law establishing the deposit insurance system.

Deposit Insurer: A specific legal entity responsible for providing deposit insurance, deposit guarantees or similar deposit protection arrangements.

Deposit Reimbursement: A resolution method that involves the reimbursement of Deposits to Insured Depositors.

Eligible Deposits: Deposits that fall within the scope of coverage of a deposit insurance system (i.e., they meet the requirements for coverage under a deposit insurance system, and are based typically on the type(s) of depositor and/or Deposit).

E-money: An electronic store of monetary value on a technical device that may be widely used for making payments to entities other than the e-money issuer. The device acts as a prepaid bearer instrument which does not necessarily involve bank accounts in transactions.

Ex ante Funding: The regular collection of Premiums, with the aim of accumulating a fund to meet future obligations (e.g., reimbursing depositors) and cover the operational and related costs of the Deposit Insurer.

Insured Depositors: Holders of Eligible Deposits that do not exceed the maximum coverage level provided by a deposit insurance system.

Insured Deposits: Eligible Deposits that do not exceed the maximum coverage level provided by a deposit insurance system.

Mandate: A set of official instructions describing the Deposit Insurer's roles and responsibilities. There is no single Mandate or set of Mandates suitable for all Deposit Insurers. When assigning a Mandate to a Deposit Insurer, jurisdiction-specific circumstances must be taken into account. Mandates can range from narrow "pay-box" systems to those with extensive responsibilities, such as preventive action and loss or risk minimisation/management, with a variety of combinations in between. These can be broadly classified into four categories: Pay-box, Pay-box Plus, Loss Minimiser and Risk Minimiser.

Payment Agent: Entities (e.g., Banks, postal banks) authorised by a Deposit Insurer to reimburse Insured Depositors on its behalf.

Premium: The amount that a member institution pays to the Deposit Insurer in the manner and timeframes prescribed by legislation.

Purchase and Assumption Transaction (P&A): A resolution method in which a healthy Bank or a group of investors assume some or all of the obligations, and purchase some or all of the assets of the failed Bank.

Set-off Arrangement: An arrangement in which the claim of a creditor against an insolvent Bank is to be deducted from a claim of that Bank against the same creditor.

Subrogation: The substitution of one party (e.g., the Deposit Insurer) for another (e.g., the Insured Depositor) with reference to a lawful claim, demand or right, so that the party which substitutes succeeds to the rights of the other in relation to the debt or claim, and its rights and remedies.

Executive Summary

One of the key functions and objectives of deposit insurers (DIs) is to reimburse depositors promptly and efficiently, as highlighted by IADI Core Principle (CP) 15. In particular, Essential Criterion (EC) 1 of that CP states that DIs should be able to reimburse most insured depositors within seven working days.

However, our findings, based on a survey which was responded to by 56% of the IADI membership, indicate that between 2016-2021 fulfilling the fundamental goal of effective reimbursement was a challenge for some DIs. The survey explored various topics, including the reimbursement process, and discovered that in 51% of analysed reimbursement cases, less than 75% of depositors had been reimbursed within seven working days.²

According to the input submitted by DIs, the poor quality of files containing depositor information is clearly at the top of the most significant challenges and has been universally encountered, regardless of the regional origins or other characteristics of DIs (e.g., mandate). This challenge is followed by issues in the DI's information technology (IT) systems and the lack of access to or preparatory examinations of the reliability of depositors' records. In addition, data received from DIs show that some of the EC of CP15 are met in different ways by DIs.

Consistent with these findings, responses to the survey indicate that the key attribute most frequently considered essential for a prompt and effective reimbursement is the full capacity of the DI to access, examine, prescribe the format and require changes to depositors' records, DI's IT systems and infrastructure is a close runner-up, followed by the availability of ex-ante funding.

The potential impact of the challenges detected calls for the adoption of measures to address them, and DIs report that they have been active (and generally successful) in this regard. The paper contains a brief summary of measures put in place, and presents in more detail particular case studies on this and other topics.

DIs have also identified challenges which may hinder their ability to reimburse depositors efficiently in the near future. The recent impact on their activities of measures adopted by authorities to address the Covid-19 pandemic could explain why business continuity challenges are the most frequently identified challenge, followed by inadequate regulation, electronic money (e-money) and beneficiary accounts. As another issue, although less frequently pointed out, a number of DIs highlighted that the operations of failed banks with deposit brokerage could be the "near-future challenge" with the most serious impact on a reimbursement process.

Finally, the efforts of DIs to address the identified challenges are enhancing their capabilities, in particular in terms of capacity building and development of IT systems. One of the clearest examples is the rise of electronic channels and e-money, which are opportunities for DIs to explore (and implement) new payment methods which can speed up reimbursement and increase the awareness and confidence of depositors when digital means are used in the payout process.

² This includes P&A cases – excluding those, the percentage would rise to 59% of analysed cases. The analysed sample for which detailed information was made available covers a subset of 37 reimbursement cases by 13 IADI members of 6 different Regional Committees, out of a total population of 448 cases by 18 members.

1 Introduction

The IADI Core Principles for Effective Deposit Insurance Systems (CPs) are intended to serve as a framework to support effective deposit insurance practices and as a benchmark for assessing the quality of deposit insurance systems across different jurisdictions.

In particular, **CP 15 states that the deposit insurance system should reimburse depositors' insured funds promptly, in order to contribute to financial stability.** However, this is not always achieved, due to a number of reasons.

This research paper intends to capture **what challenges have been identified by deposit insurers (DIs)** as affecting (or potentially affecting) their capacity to fulfil their mission of reimbursing insured depositors promptly and efficiently, accompanied with an investigation into corrective measures that have been implemented and into the expectations of DIs for the (near) future with respect to challenges.

The research paper also intends to offer input for IADI's analysis and potential review of the CPs (more precisely of CP 15), and gathers certain information on whether and how some of the Essential Criteria (EC) linked to that CP may have been met by DIs, having regard to recent real cases and to their practices. The paper could also serve as a source of information for the potential development of subsequent in-depth specific analyses or guidance by IADI.

The paper is organised as follows: Section 2 presents the methodology used which included a dedicated survey and literature review; Section 3 offers a review of a number of reimbursement cases between 2016 and 2021; Section 4 details the challenges for a prompt and effective reimbursement that have been identified by DIs as well as the attributes which responding DIs consider key; Section 5 elaborates on the measures adopted to address those challenges; Section 6 focuses on challenges that DIs report could affect them in the near future; and Section 7 offers some potential conclusions. The Appendices show the content of the survey (Appendix A), the list of responding DIs (Appendix B) and literature (Appendix C) used by the Reimbursement Technical Committee (RTC), present additional analysis from the survey responses (Appendix D), and list the members of the RTC (Appendix E).

2 Methodology

The methodology followed by the RTC has an eminently practical approach, using a comprehensive survey distributed to IADI members to investigate real reimbursement cases, the performance of DIs and the challenges that have been detected, either on those cases or while performing simulations, stress tests or other types of self-assessment. The survey also gathered information on the challenges that may be faced in the near future and whether DIs are anticipating and addressing them already today.

Information obtained through the survey was analysed and complemented with ad-hoc requests to members and the development of brief case studies on some of the findings, taking into consideration literature relevant for the purpose of the research, both from IADI and from other authors.

2.1 Survey and information on responding DIs

The survey on reimbursement practices and challenges was carried out by means of an online questionnaire³ consisting of five building blocks. It aimed at investigating IADI members' experiences in conducting their reimbursement cases in recent years and the challenges they faced in the course of those cases or in any simulations, stress tests or other self-assessments that may have been carried out. The survey also identifies what challenges impacting the ability of DIs to reimburse depositors promptly and efficiently could arise in

³ See Appendix A for the detail of the content of the questionnaire.

the short/medium term. In addition, it also intends to serve as a basis for understanding if and how (some of) the EC to assess compliance with the IADI CP 15 have been met.

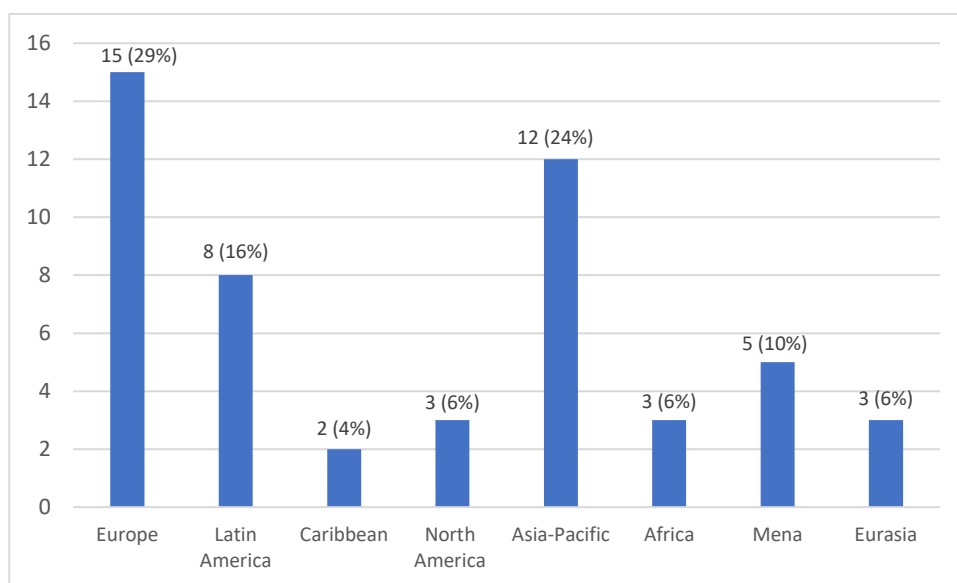
On 18 March 2022, the RTC survey was formally launched by the IADI Research Unit. **Altogether, 51 IADI members (56% of the membership⁴) submitted their responses**, although some of them did not answer all questions. Once these responses were received and analysed, the RTC asked some of the respondents for clarification and/or additional information, which led to minor amendments to the initial answers.

The survey was designed to gather data and information related to the following issues:

- a) fundamental information about DIs;
- b) description of reimbursement cases from 2016 to 2021 and DI-related performance for up to a maximum of five cases (if the DI had more reimbursement cases in that period);
- c) challenges detected in reimbursement cases and simulations, stress tests or other self-assessments;
- d) corrective measures adopted by the DIs; and
- e) future challenges.

The Regional Committees which offered the highest number of responses were Europe (15, 29% of respondents) and Asia-Pacific (12, 24%), followed by the Latin American Regional Committee 8, 16%).

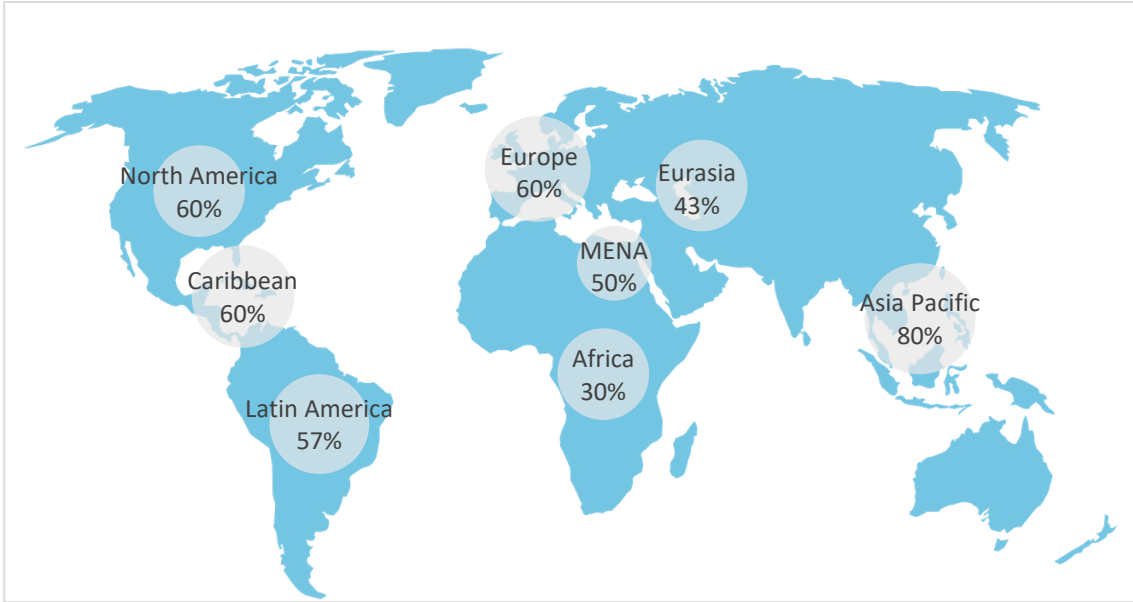
FIGURE 1: REGIONAL COMMITTEE OF RESPONDING DI



However, the Regional Committee with the highest rate of response was Asia-Pacific, as 80% of its members answered the survey.

⁴ As of 30 April 2022, IADI had 91 members.

FIGURE 2: RESPONSE RATE AS PERCENTAGE OF IADI MEMBERS OF INDIVIDUAL REGIONAL COMMITTEE

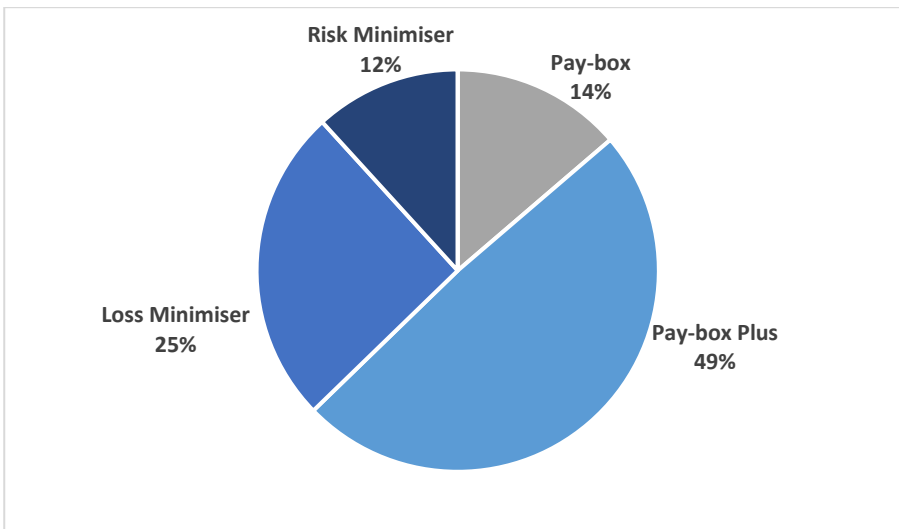


A summary of the fundamental information received from responding DIs is provided below (expanded information on other data obtained from the survey is available in Appendix D).

2.1.1 Mandate of responding DIs

According to the information about responding DIs contained in the IADI 2021 Annual Survey,⁵ a **significant proportion of respondents (49%) has a pay-box plus mandate,**⁶ and 14% would only perform the reimbursement function (pay-box). DIs with a broader mandate represent 37% of respondents (25% of them are loss minimisers and 12% are risk minimisers).

FIGURE 3: MANDATE OF RESPONDING DIS



The weights of mandates in the RTC survey are quite similar to those observed in the IADI 2021 Annual Survey, which was responded to by 108 DIs.⁷

⁵ The mandate of DIs was not specifically explored in the RTC survey. Three of the respondents to the Annual Survey chose the option “other”, while two respondents to the RTC survey did not participate in the IADI 2021 Annual Survey (their mandate was obtained from other sources).

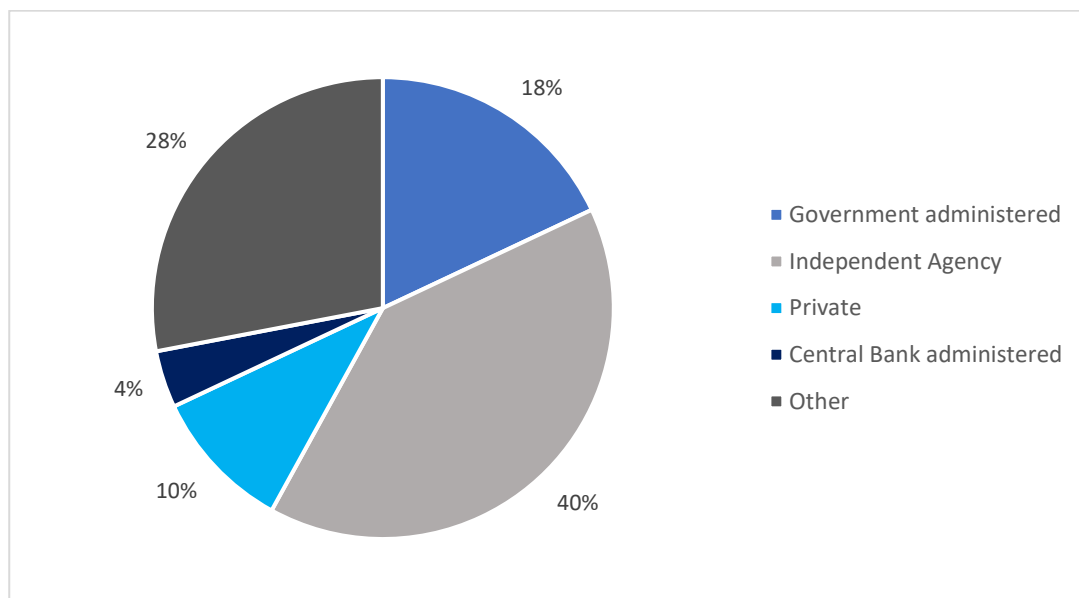
⁶ A mandate in which the DI has additional responsibilities, such as certain resolution functions (e.g., financial support).

⁷ In the Annual Survey, DIs which reported to be pay-box or pay-box plus accounted jointly for 64% of the total (63% in the RTC survey), while loss minimisers and risk minimisers represented 33% of respondents (37% in the RTC survey).

2.1.2 Types and legal status of responding DIs

A significant proportion of responding DIs (40%) are independent agencies, while 18% are government administered and only 10% state that they are private DIs. A further 28% of respondents indicated having “other”⁸ legal status.

FIGURE 4: TYPES AND LEGAL STATUS OF RESPONDING DEPOSIT INSURANCE SYSTEMS

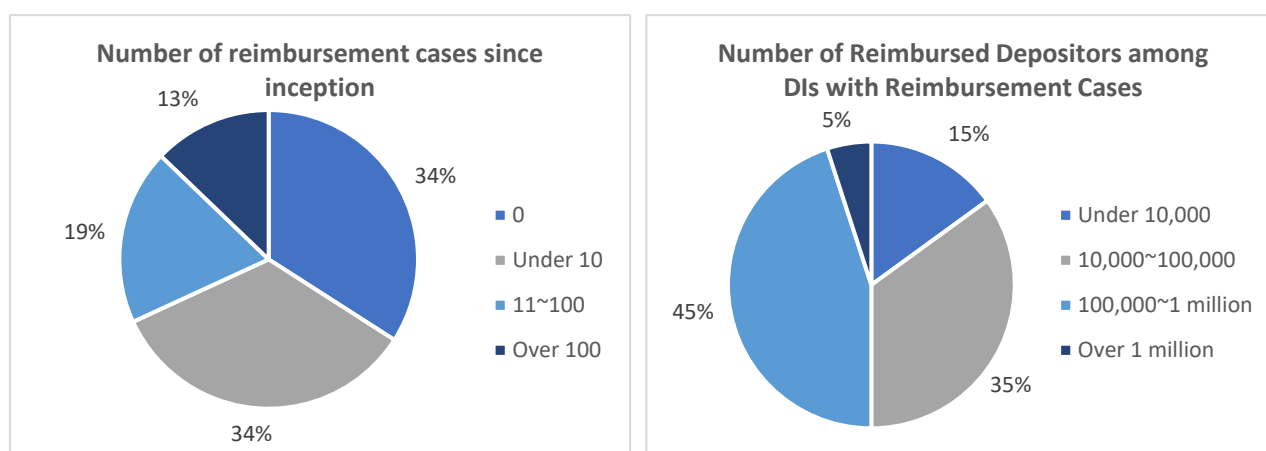


2.1.3 Number of reimbursement cases and reimbursed depositors since inception

This paper explores the challenges faced by DIs to reimburse depositors promptly and efficiently, both in real cases and following simulations, stress tests or other self-assessments, so it is relevant to review the real experience of respondents. **Most respondents (32, or 67% of the 48 respondents which answered this question) report having faced real payout cases since inception**, and detail the number of real events. This relevant experience offers an added value to the quality of the information they provided to this research.

Of those 32 respondents which have faced real payouts, 20 offered additional information on the number of depositors reimbursed since inception, which is shown in Figure 5.

FIGURE 5: REIMBURSEMENT CASES AND REIMBURSED DEPOSITORS SINCE DI INCEPTION



⁸ A number of DIs do not belong exactly to one category (e.g., DIs can be private but at the same time have a substantial presence of the central bank or the government in their decision-making bodies).

One half of the DIs with real experience (50%) have a pay-box plus mandate, which is comparable to the proportion of pay-box plus DIs in the population of respondents to the survey (49%). However, only 6% of DIs which faced real events are pure pay-boxes. The percentage of loss minimisers reaches 31% (higher than their presence among the total number of respondents), which may be a sign that, although these DIs are entitled to perform other measures different to reimbursement, reimbursement still seems to be an important part of their functions.⁹

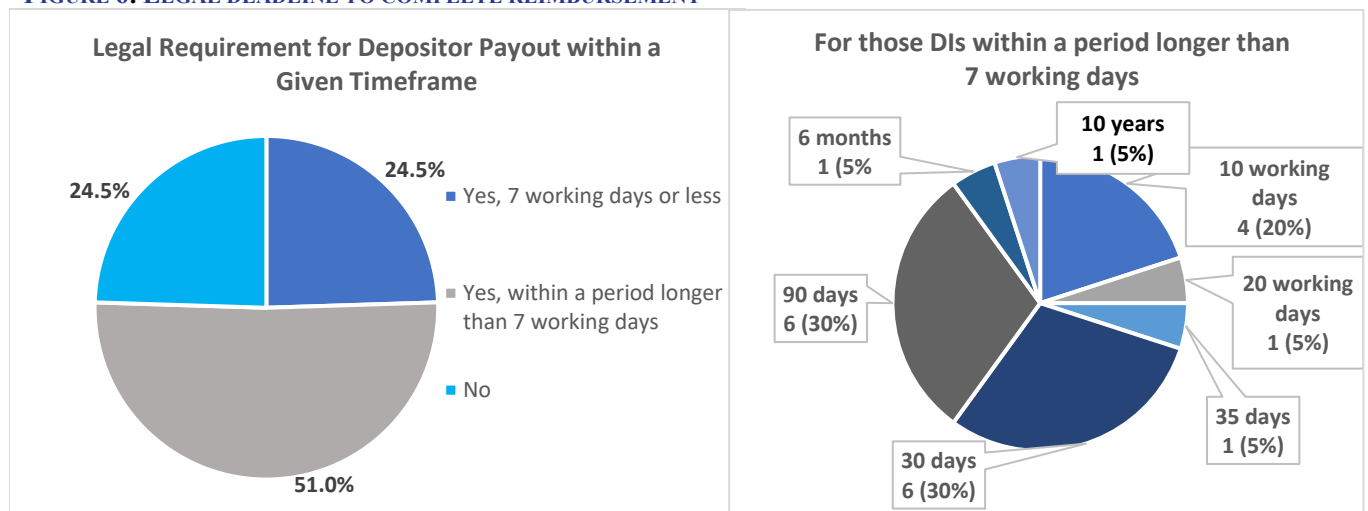
2.1.4 Legal requirement for DIs to grant insured depositors access to their funds within a certain deadline

EC1 of CP 15 provides that the DI is able to reimburse most insured depositors within seven working days. If the DI cannot currently meet this target, it has a credible plan in place to do so.

One of the features that may be seen as having an impact on the time within which DIs perform reimbursements, and which will be assessed later in Section 3 taking as a reference the reported reimbursement cases, may be the existence of a legal deadline to complete them.

A total of 76% of the 49 DIs that responded to this question are legally required to grant insured depositors access to their funds within a given timeframe after deposits have become unavailable;¹⁰ the deadline is seven working days or less for 24.5% of DIs (a percentage which can be seen as low according to the terms of EC1 of CP15), while 51% have a longer period (among them, 30 days and 90 days are the most frequent, following responses of 20 DIs which provided these data, and noting that almost 60% of those DIs are required to reimburse depositors within 30 days). The remaining 24.5% do not have a legal timeframe to complete reimbursement.

FIGURE 6: LEGAL DEADLINE TO COMPLETE REIMBURSEMENT



2.1.5 Access to depositors' records ahead of a reimbursement case

As the research shows later in this paper, the quality of depositor data is a key issue for DIs, and having access to that information is a differential aspect that helps them reimburse depositors promptly and efficiently and meet EC1. **The majority of respondents (69%) have direct access to depositors' records ahead of a**

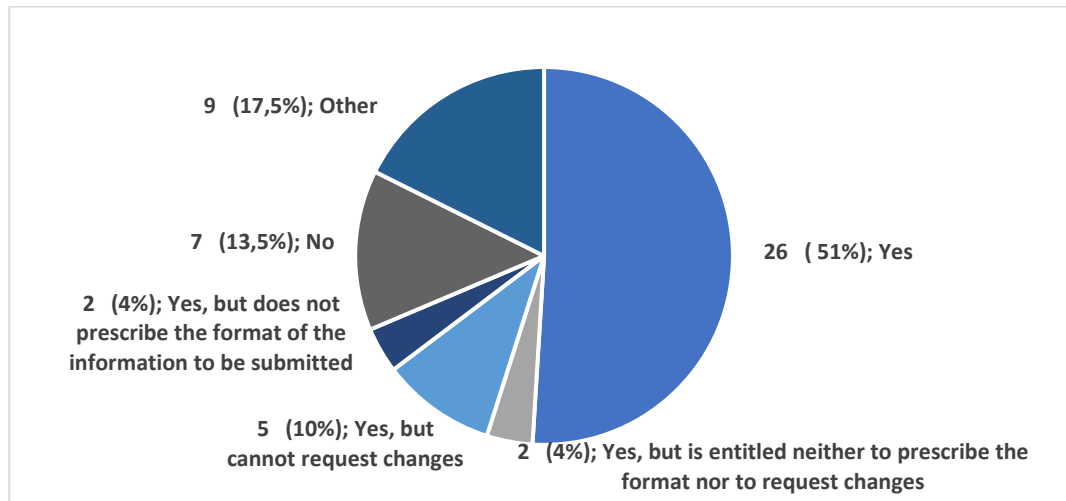
⁹ The dedicated survey did not investigate whether DIs with a loss minimiser mandate have used pure reimbursement more or less frequently than other non-payout actions, so the research paper does not intend to make any statement on this topic.

¹⁰ The applicable regulation may foresee that the general legal deadline may not apply, or be extended, to certain specific types of deposits.

reimbursement case, and in most cases (51%) they are entitled both to prescribe to the member institutions the format of the information and to request changes.

However, **31% of DIs either do not have access to this information (13.5%) or have restrictions in place (17.5%)**, which in general refers to their having partial access or needing to request access through an authority. Some responding DIs report that issues on banking confidentiality are among the reasons why DIs in certain jurisdictions are prevented from accessing this information. This lack of access can be a relevant challenge and impact the ability of a DI to reimburse insured depositors promptly.

FIGURE 7: ACCESS TO DEPOSITORS’ RECORDS AHEAD OF A REIMBURSEMENT CASE



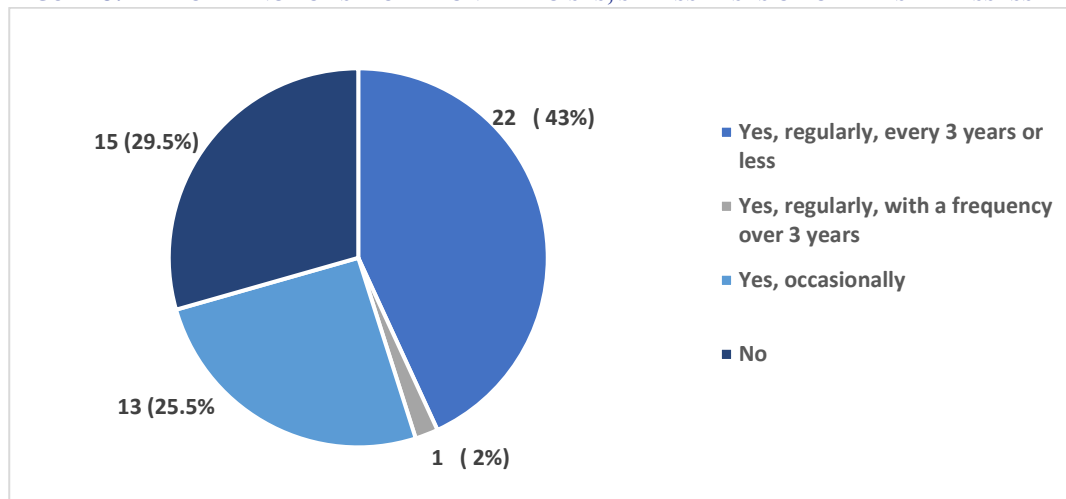
2.1.6 Simulation exercises and/or tests on payment systems and processes (stress tests)

Another issue that is explored later in Section 3 is the potential correlation between the performance of DIs in real cases and the performance of simulations or stress test exercises. In this respect, EC5(d) states that the DI should have the capacity and capability to promptly carry out the reimbursement process, including scenario planning and simulations, and including simulations on bank closings with supervisory and resolution authorities.

Responding **DIs report generally performing simulation exercises and/or tests** on their payment systems and processes (71%), although only 43% carry them out with a high frequency (at least every three years).

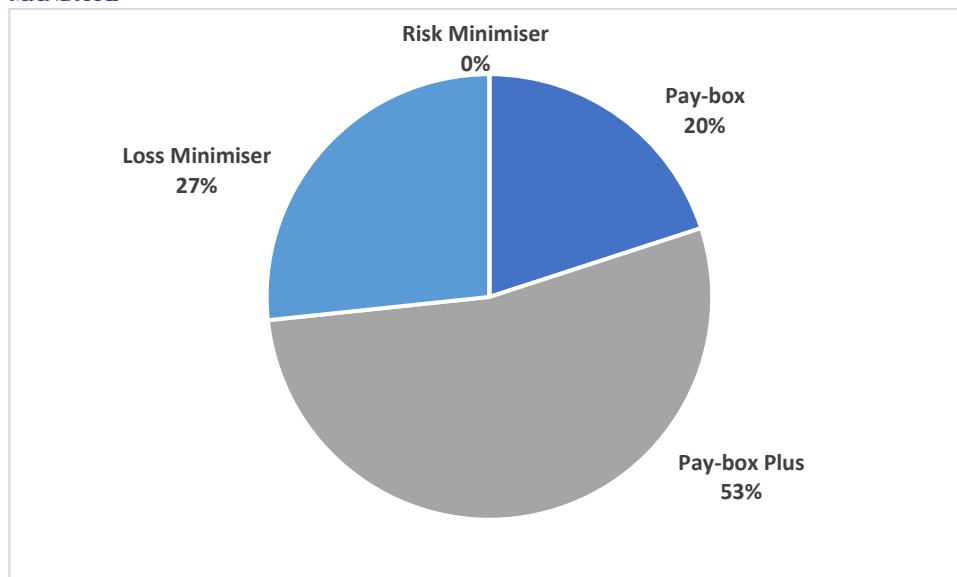
Quite significantly, **15 out of the 51 responding DIs (29%) responded that they do not conduct simulation exercises and/or tests** on their payment systems and processes at all, which could be a hurdle for a prompt and effective compensation (and could lead to not complying with one of the EC of IADI CP 15).

FIGURE 8: PERFORMANCE OF SIMULATION EXERCISES, STRESS TESTS OR OTHER SELF-ASSESSMENTS



It may be worth highlighting that a significant proportion (73%, as shown in figure 9) of those DIs which do not perform simulations have a pay-box or pay-box plus mandate (a proportion which is higher than their weight in the population of respondents (64%)). This information is highly relevant since reimbursing depositors is the core part of their mandate, more so than in the case of loss minimisers and risk minimisers. It contrasts with all risk minimisers that responded to the survey do carry out simulations (and usually on a regular basis).

FIGURE 9: DISTRIBUTION OF DIs WHICH DO NOT CARRY OUT SIMULATION EXERCISES ACCORDING TO THEIR MANDATE



Out of the 15 DIs which have not carried out simulations, two respondents reported that the implementation of this type of exercise is a part of their business plan and will be put into practice in the near future.

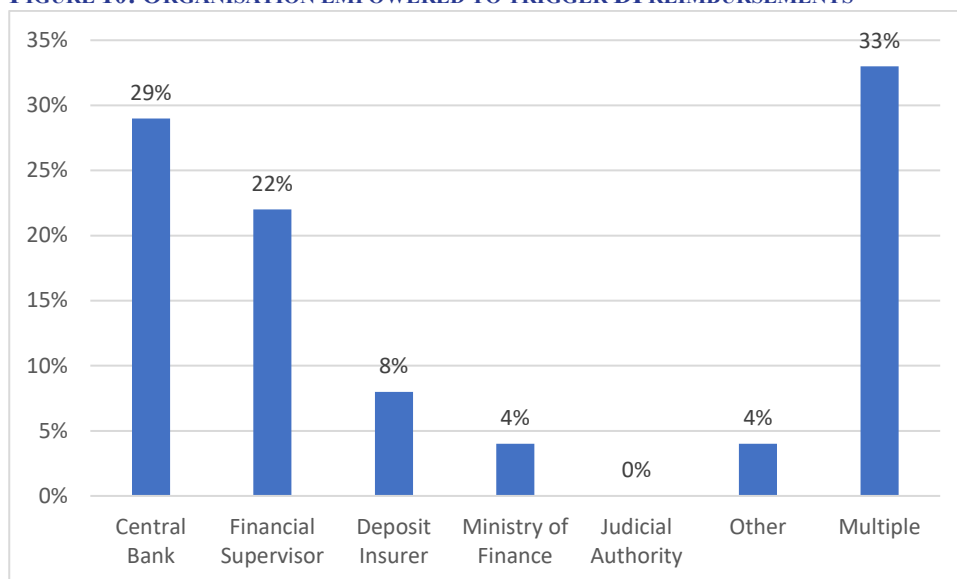
From the responses to the survey, there does not seem to be a unique reason why those DIs do not perform simulations (lack of resources, recent establishment of the DI, and a high number of real reimbursement cases may be possible explanations for some respondents, but none of them can be seen as a general cause for all or most of the DIs which do not perform simulations).¹¹

2.1.7 Authority with power to trigger DI reimbursement

In most of the jurisdictions, the central bank or the financial supervisor is empowered to trigger the reimbursement process; in half of the total cases only the central bank (29%) or the supervisor (22%) can initiate it, and in most of the jurisdictions where multiple organisations can trigger the payout (33%, or 17 respondents), the central bank and/or the supervisor are almost always among them (there is just one exception).

¹¹ As for the relationship between the number of reimbursement cases of DIs and the absence of simulations, if we exclude from the calculation those DIs with two or more reimbursement cases in 2016-2021, the percentage of DIs which do not perform them and have had no reimbursement cases or only one case would still reach 22% of respondents.

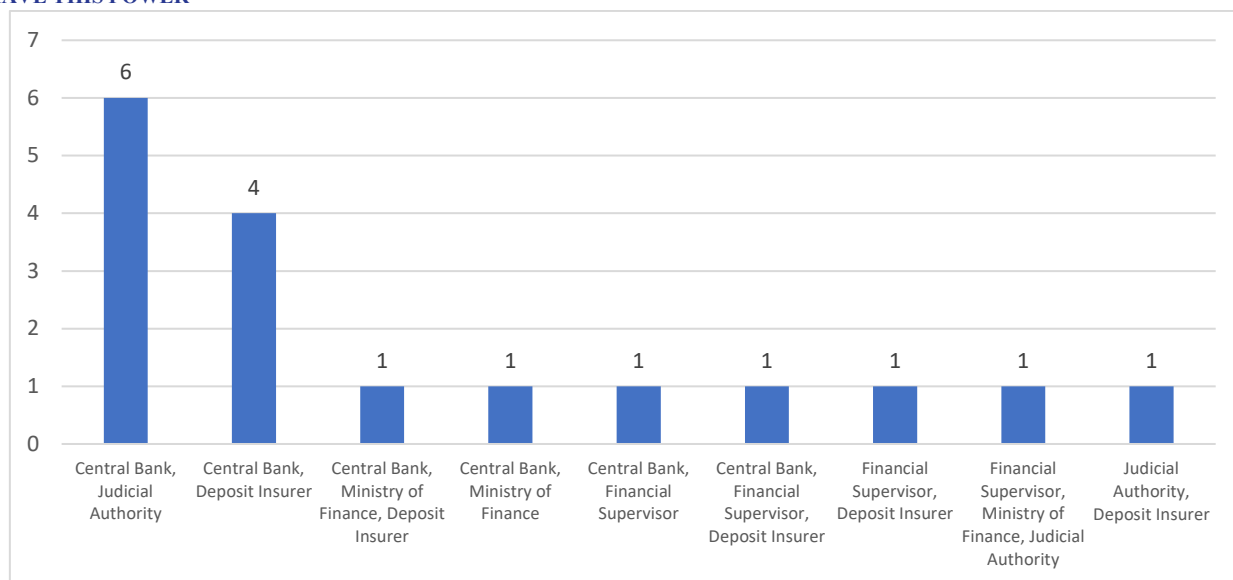
FIGURE 10: ORGANISATION EMPOWERED TO TRIGGER DI REIMBURSEMENTS



Regarding the powers of DIs to trigger the payout, it is relevant that in four jurisdictions (8% of respondents), the DI has the sole authority to trigger the process, those being Indonesia Deposit Insurance Corporation (IDIC, Indonesia), Institute for the Protection of Bank Savings (IPAB, Mexico), Deposit Insurance Corporation of Mongolia (DICOM, Mongolia) and Korea Deposit Insurance Corporation (KDIC, South Korea).

Another eight DIs (16% of respondents) are among the organisations in their respective jurisdictions which can declare the payout. Therefore, **DIs are involved in the decision which triggers the reimbursement in a total of 24% of cases.**

FIGURE 11: ORGANISATIONS EMPOWERED TO TRIGGER DI REIMBURSEMENTS WHERE MULTIPLE ORGANISATIONS HAVE THIS POWER



2.2 Literature review

The analysis of responses obtained from the survey described above was complemented with literature covering challenges for DIs. The review encompasses existing guidelines and recent policy papers produced by IADI on reimbursement procedures and emerging issues and existing guidance, but also includes analysis performed by other authors/organisations.

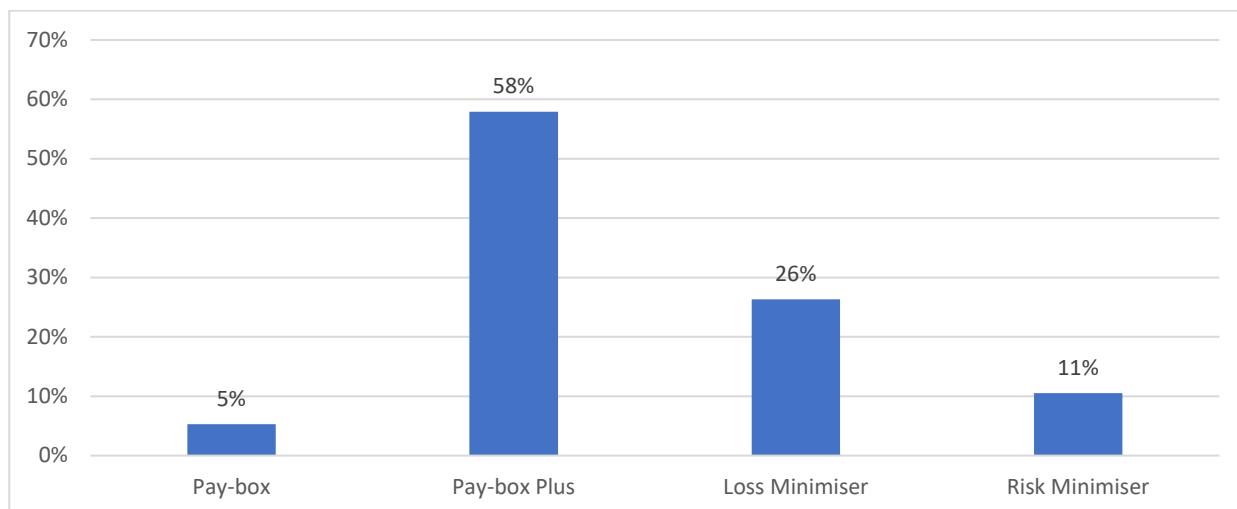
Details of the literature reviewed can be found in Appendix C.

3 Reported Reimbursement Cases 2016-2021

3.1 General overview of reported cases and DIs

As detailed in the previous section, 32 of the 51 DIs that participated in the RTC survey reported having faced real reimbursement cases since inception. Of those, **19 DIs experienced payout events in the period between 2016 and 2021**, most of which (two thirds) were DIs with a pay-box and (especially) pay-box plus mandate:

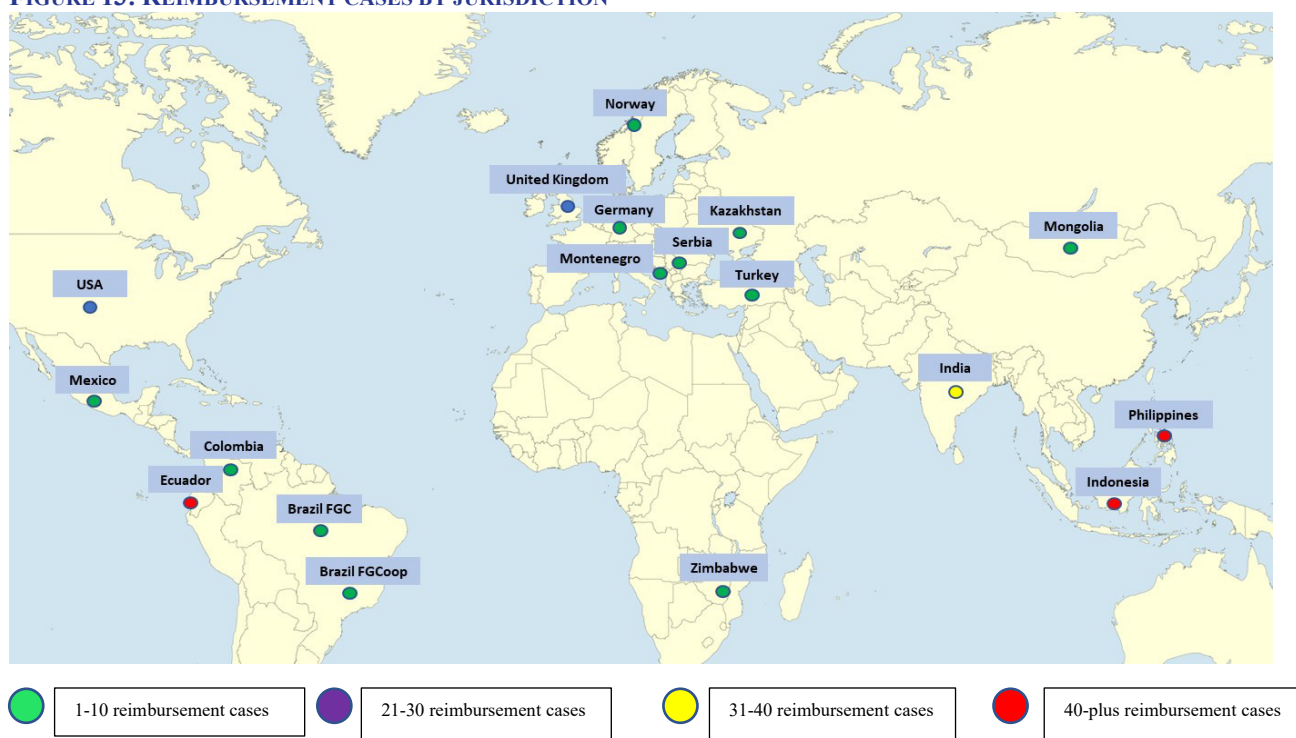
FIGURE 12: DIs WITH REIMBURSEMENT CASES BETWEEN 2016 AND 2021, PER MANDATE



The RTC survey asked DIs with reimbursement cases in 2016-2021 to provide certain information on those cases (up to a maximum of five if the DI had more cases), as an additional input on relatively recent events, and considering (for the setting of the starting point) that the revised IADI CPs had been published in 2014.

One of those DIs did not submit any other information on the number of cases or other features, while the remaining 18 reported having faced 448 reimbursements and submitted information on certain individual cases. Although the average would be 25 reimbursements per DI, this figure is distorted by the high number of cases in Ecuador (206 in the period), clearly ahead of the next DIs (Philippines, Indonesia and India, with 70, 51 and 34 cases respectively). This makes Latin America the region with the highest number of cases (217, which represents 48% of the total reported cases). In terms of the number of DIs having reimbursed depositors in the period, however, Europe offers a similar level of activity.

FIGURE 13: REIMBURSEMENT CASES BY JURISDICTION



Accordingly, the analysis in this Section takes into consideration the information on the real experience of DIs from most IADI Regional Committees (all but the Caribbean and Middle East & North Africa Regional Committees, as no respondent from these regions reported having faced a payout in 2016-2021).

The survey asked respondents with reimbursement cases to report on the number of depositors and the amount reimbursed in the period, which reached globally for all above-mentioned 448 cases 4.4 million depositors¹² and USD 16.7 billion respectively.

Ecuador, with the highest number of cases, represents a comparably low proportion in these figures (7.1% of depositors and only 0.03% of the total reimbursement amount). India and USA report the highest volume of insured deposits (USD 13.2 billion in total, 79.0% of total reimbursements), while Turkey reports the highest number of insured depositors, with 1.16 million (26.4% of the total, although the average amount reimbursed per insured depositor is one of the lowest).

The survey also asked respondents to report on individual cases (as mentioned, up to a maximum of five), receiving information on 56 cases, although in some of them only partial data were obtained.

3.2 Payment channels

The DIs mentioned above use the following channels to provide reimbursement: i.) Via the DI, ii.) Via a reimbursing bank, iii.) Via other agents, iv.) Via the liquidated institution, v.) Via a bridge bank, vi.) Via the bank that is receiving assets and liabilities for the cases of purchase and assumption (P&A) and vii) via another channel.

In the majority of the reported cases, DIs chose to provide reimbursement through a reimbursing bank or other payment agents (62% in total), while 22% chose to provide reimbursement themselves (two DIs combine both possibilities). One DI (USA Federal Deposit Insurance Corporation (FDIC)) reported that P&As were used in all of its five reported cases (7% of the analysed events). DIs stated that other options were chosen

¹² One DI reported the number of bank accounts reimbursed instead of depositors (although not equal, for these purposes the research paper uses the number of bank accounts reported by that DI as a proxy for the number of reimbursed depositors).

for the rest of the cases (from the explanations received they were a combination of previous alternatives or, in one case, the development of a dedicated mobile application).

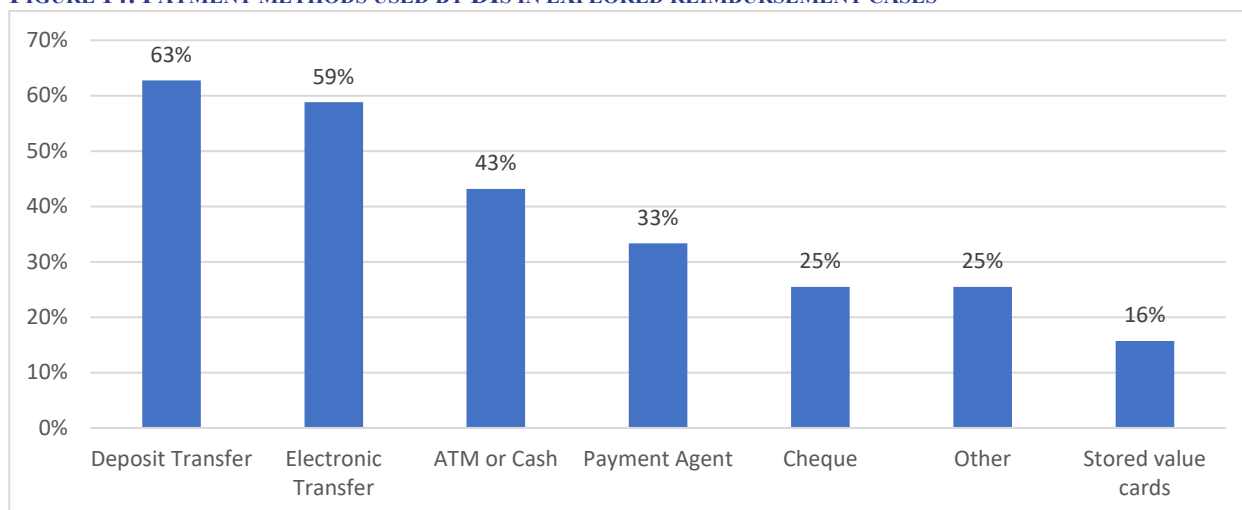
3.3 Payment methods used in reimbursement processes

Electronic transfer and deposit transfer to another bank dominate as the payment methods of choice across the 17 DIs which provided information on this topic (one or both were used in 69% of all reported cases), and only three of those DIs report that they have not used at least one of these methods. Two of the DIs which mention this payment method state that they use mobile banking for that purpose.

The next most widely used payment method is the withdrawal from automated teller machines (ATMs) or cash (43% of the cases). Cheques were used by four DIs in 25% of the reimbursement events, and stored value cards were used by three DIs in 16% of cases.

Respondents also reported that other payment methods had been used in 25% of the cases (payment orders, cash over the counter letters, and in some cases explanations related to adaptations of other payment methods to better reimburse depositors in special situations). DIs also referred to the use of payment agents in 33% of the cases, but did not provide sufficient specification about the method followed by those agents to actually deliver the compensation to depositors.

FIGURE 14: PAYMENT METHODS USED BY DIs IN EXPLORED REIMBURSEMENT CASES



As can be seen from these figures, DIs very often use several methods.

This links to CP 15 EC4 (c), which states that in order to provide depositors with prompt access to their funds, the DI should have a range of reimbursement options. Around 71% of DIs that provided data on this topic reported the use of more than one payment method, the primary payment method in those situations being the electronic/deposit transfer of funds. This indicates, for the sample of reported cases, that **a high proportion of DIs meet EC4 (c)**. This trend seems to be particularly clear in Latin America, where four of the five DIs which had reimbursement cases in 2016-2021 report that they used more than one payment method (the remaining DI states only that it used a payment agent but does not specify whether this agent offered different payment methods to depositors).

In addition, the remaining 29% of respondents report that they only used one payment method in the reported events, but this does not preclude that some of those DIs could also have at their disposal alternative methods to the one actually used.

3.4 Emergency partial payments in case of extended delays in reimbursement processes

IADI CP15 EC3 states that the DI may make partial payments in case of extended delays in the reimbursement process once the reimbursement is triggered.

Based on the submitted data provided by 18 out of the 19 respondents which had reimbursement cases in 2016-2021, **emergency partial payments were made by only one DI (Philippines), or 6%**; while 50% of DIs reported that they did not experience extended delays (and therefore did not proceed with partial payments). **None of the remaining 44% used this option, even though they confirm that delays took place in those payout processes.**

3.5 Who initiates the reimbursement process?

Common international practice is that, after the reimbursement has been triggered by the appropriate organisation/authority, **the DI, and not the depositor, is the one who initiates the compensation process** (Brazil FGCoop, Colombia, Ecuador, Germany, Indonesia, Mexico, Montenegro, Norway, Turkey, UK Financial Services Compensation Scheme (FSCS), USA FDIC). However, in some cases it is the depositor who must initiate it, e.g., by presenting a request to the DI (Brazil FGC, Kazakhstan, Mongolia, Philippines,¹³ Serbia).

When it comes to actions that depositors should take in order to be compensated, 18 DIs provided data for at least one reimbursement case (no differences among cases were noted for DIs which reported on more than one). Only the UK FSCS and USA FDIC report that they did not require any action at all from depositors,¹⁴ while all other DIs requested at least proof of identity, and more than one third requested also that depositors communicated a bank account to which the reimbursement amount was to be transferred.

TABLE 1: ACTIONS REQUIRED FROM DEPOSITORS TO RECEIVE REIMBURSEMENT

Action required	Number of respondents	% of respondents
Provide proof of identity	16	89%
Communicate another bank account to transfer the insured deposit to	7	39%
Certify account ownership	5	28%
Confirm the amount of insured deposit to be reimbursed	4	22%
No action from the depositor required	2	11%
Provide proof of not being an excluded depositor	1	6%
Other ¹⁵	3	16%

3.6 Set-off or netting principle

According to EC 8 of IADI CP15, if set-off of insured deposits against past due claims (e.g., debt service and arrears) or matured loans is applied, such application should be timely and should not delay prompt reimbursement of insured depositors' claims or undermine financial stability.

All DIs which were allowed to use set-off under their regulations (61% of respondents) reported the application of set-off in a timely manner which did not delay the reimbursement. No DI answered that there was a legal possibility of set-off but they decided not to use it in the reimbursement process.

¹³ PDIC states that individual depositors with small balances qualify for outright payment. These depositors are not required to file a claim in order to receive reimbursement.

¹⁴ FSCS reports that, under certain circumstances, depositors might be required to present proof of identity or additional information on the reimbursement amount.

¹⁵ In one jurisdiction, the depositor is obliged to register online to verify their identity.

3.7 Communication with depositors

During the reimbursement processes different communication methods were used among DI jurisdictions. **All respondents but one provide relevant information on the DI’s website and most of them provide it also on the failed bank’s website.** Some DIs also inform depositors on the website of other relevant authorities. More details and options used are provided in the following table.

TABLE 2: METHODS USED TO COMMUNICATE WITH DEPOSITORS IN REIMBURSEMENT

Communication methods	Number of respondents	% of total respondents
Information on DI’s website	17	94%
Information on failed bank’s website	10	56%
Post	10	56%
Email	10	56%
Phone	9	50%
Information on the websites of authorities involved	7	39%
Newspapers	7	39%
Messaging tools on cell phone	6	33%
Other (social media, TV, radio)	4	22%

3.8 Percentage of insured deposits accessible / insured depositors being able to access their funds within seven working days

A key metric for successful reimbursement is set out in EC1 of IADI CP15, which stipulates that the DI is able to reimburse most insured depositors within seven working days.

In this regard, the survey investigated what percentage of insured deposits became accessible and what percentage of insured depositors were able to access their funds within seven working days after deposits had become unavailable.¹⁶

The survey results suggest that, **in nearly half of the 29 cases (48%) about which DIs reported on accessibility to insured deposits, the total volume of insured deposits became accessible** within seven working days after they had become unavailable, whereas **in about 30% of total cases less than 25% of insured deposits had become accessible** (more detail is provided in figure 15 below).

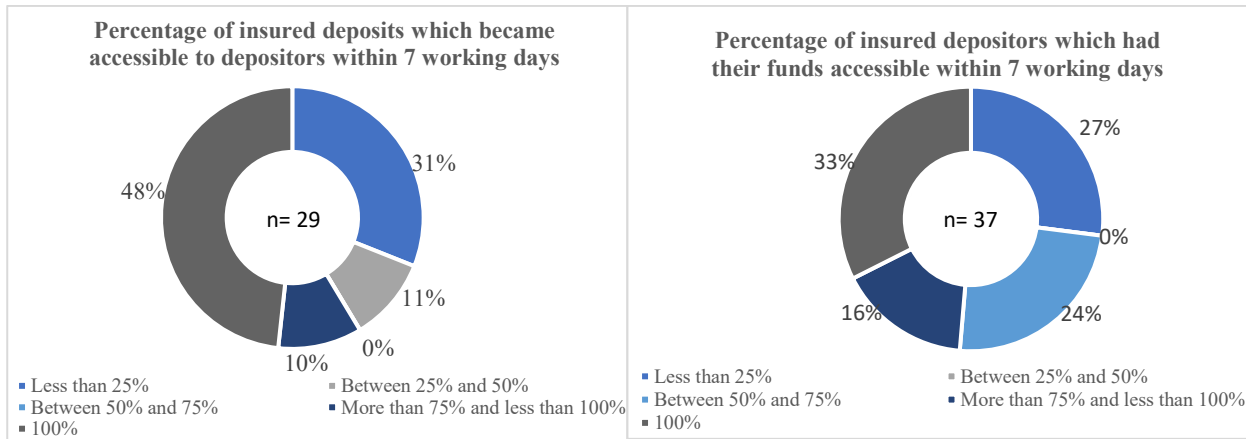
Regarding the percentage of reimbursed depositors, according to information on 37 cases from 13 DIs belonging to 6 Regional Committees,¹⁷ in 33% of them all insured depositors were able to access their funds within seven working days, whereas in more than a quarter (27%), less than 25% of insured depositors were able to access them¹⁸ in that timeframe.

¹⁶ The 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.

¹⁷ Those DIs belong to the Regional Committees of Europe (5), Latin America (3), Asia Pacific (2), North America (1), Africa (1) and Eurasia (1).

¹⁸ The main reasons for the different result to these questions come basically from (i) in several cases the percentage of deposits having been made accessible reported by DIs is different from the percentage of depositors with accessible deposits, including one DI which reported that in two cases, 100% of deposits had been made available within seven working days, but reported for those same cases that the percentage of depositors who had their insured deposits available was “more than 75% but less than 100%”, and (ii) some DIs responded “data not available” to the question regarding the percentage of reimbursed deposits for eight cases but chose one of the alternatives other than “data not available” in the question regarding the percentage of insured depositors (and in all those eight cases the percentage of insured depositors with their deposits available within seven working days was less than 100%).

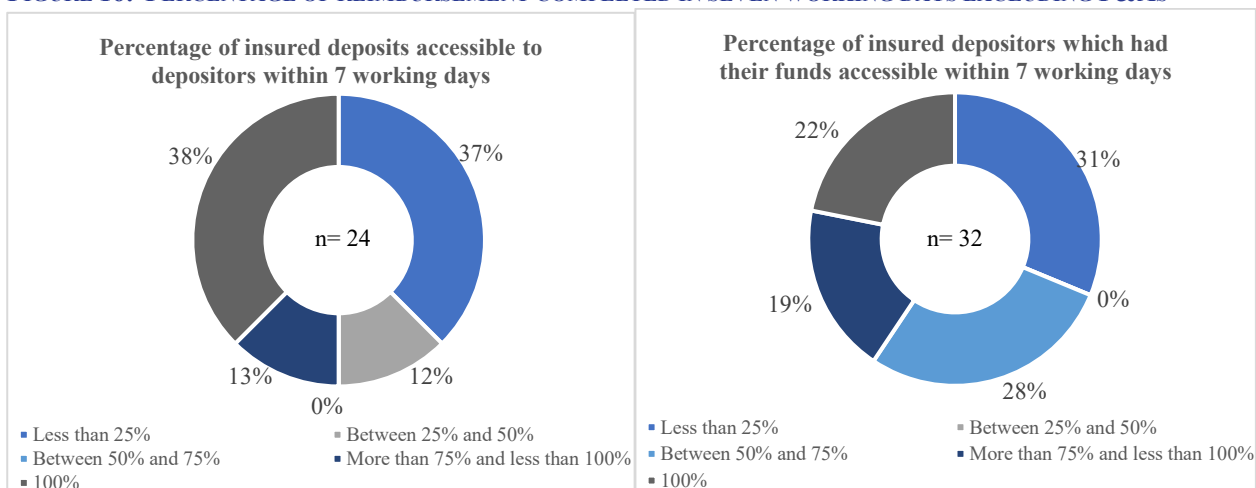
FIGURE 15: PERCENTAGE OF REIMBURSEMENT COMPLETED WITHIN SEVEN WORKING DAYS



There is a clear discrepancy among DIs in terms of how quickly they are able to initiate the reimbursement following a payout trigger, which could explain the significant variation as described above. While some DIs are able to initiate the process almost immediately, others need quite a significant time to begin the process due to various issues (in some examples, DIs mentioned as reasons issues with the quality of information on insured depositors and a lack of sufficient notice that a payout would be triggered).

It may be worth distinguishing “direct” reimbursements from the use of P&As. CP15 includes P&As as a form of reimbursement, but the procedure has characteristics which in general could be seen as different from the compensation to depositors by the DI (or a payment agent on behalf of the DI). The reimbursement cases covered in the charts above (figure 15) include five reimbursements in the form of P&As, all of them performed by the FDIC (USA). The FDIC informs that, in the five cases that were reported in detail, 100% of depositors were compensated within seven working days, which can be seen as the normal practice for this type of transaction. If P&As were excluded from the analysis, the proportion of cases in which all depositors were reimbursed in the timeframe specified in CP15 would be lower.

FIGURE 16: PERCENTAGE OF REIMBURSEMENT COMPLETED IN SEVEN WORKING DAYS EXCLUDING P&As



Following responses to the survey, we will explore whether certain factors (e.g., frequency of conducting simulations, existence of a legal deadline to reimburse depositors, type of bank insolvency proceedings in a jurisdiction, and DI mandate) could affect a DI’s capability to reimburse insured deposits swiftly and smoothly. Later in this section, analyses¹⁹ are made of certain elements which could promote prompt reimbursement,

¹⁹ The analyses are conducted using responses to the question about the percentage of insured depositors who were able to access their funds within seven working days, as more DIs responded to that question than to the question about the volume of deposits accessible in that timeframe (11 DIs vs 8 DIs).

based on cases reported in the survey. These analyses should be considered merely indicative, given the limited number of responding DIs which had real reimbursement cases in 2016-2021 and also provided sufficient information.

Frequency of Conducting Simulations or Tests

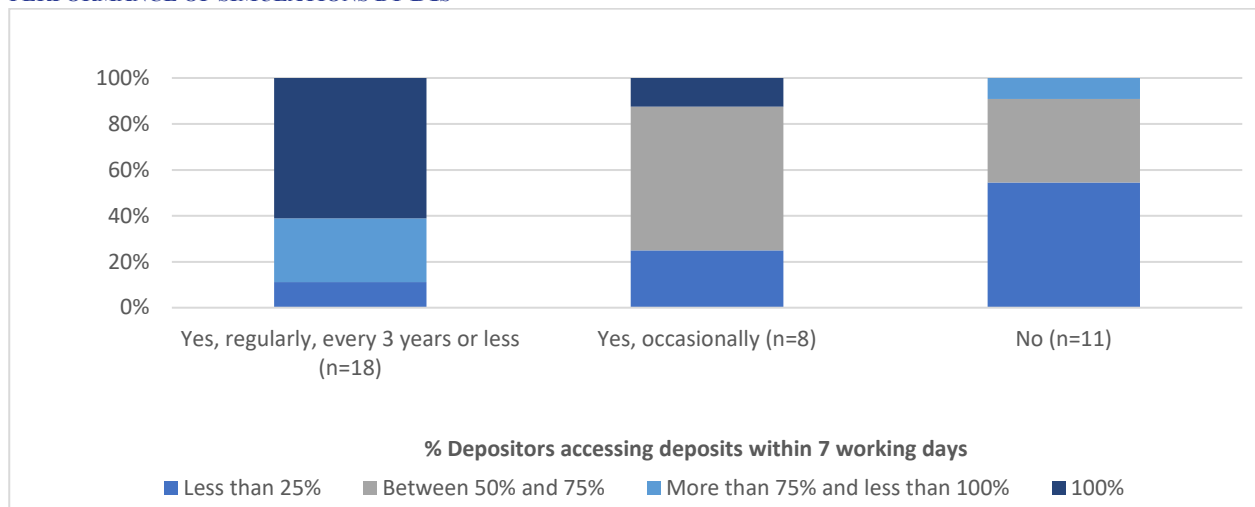
Regular simulations, exercises, or tests on payment systems and processes can help ensure DIs’ capacity and capability to promptly carry out the reimbursement process.²⁰

The survey results suggest that a higher percentage of insured depositors were able to access their funds within seven working days after deposits had become unavailable where DIs have conducted simulations, exercises, or tests on payment systems and processes every three years or less.

Based on 37 cases reported by 13 DIs (including the FDIC, which in all reported cases performed P&As), at least 75% of depositors were able to access their funds within seven working days in 89% of the cases (80% of DIs) where DIs conduct regular simulations, exercises, or tests (every three years or less). On the other hand, less than 25% of depositors were able to access their funds within seven working days in the majority of cases where DIs do not conduct simulations at all.

Although the number of reporting DIs is limited, **the results highlight the importance of regular simulations, exercises, or tests on payment systems and processes.**

FIGURE 17: PERCENTAGE OF DEPOSITORS ACCESSING FUNDS IN SEVEN WORKING DAYS DEPENDING ON THE PERFORMANCE OF SIMULATIONS BY DIs



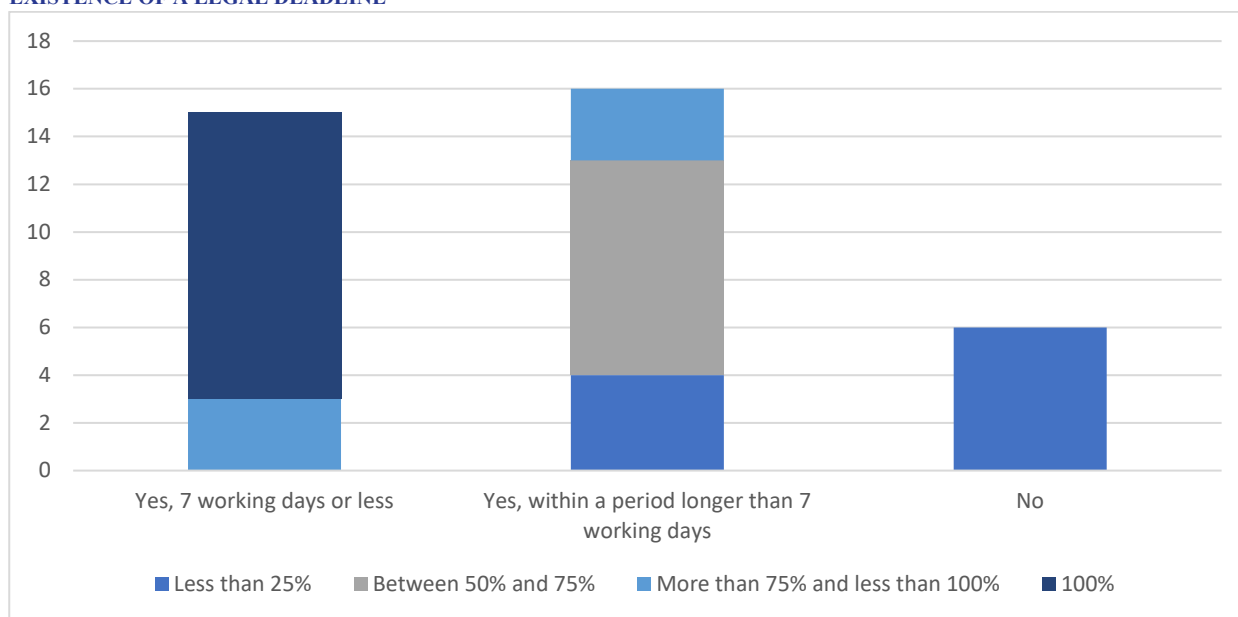
Existence of a legal deadline to reimburse depositors

Following the information submitted by 13 DIs on 37 reimbursement cases, there seems to be a correlation between the existence of a legal deadline to reimburse depositors and the performance of the DIs.

All five DIs which had in total 15 real cases and report being legally obliged to complete reimbursement within seven working days reimbursed at least 75% of depositors in each of those cases, while none of the two DIs without any legal requirement had started compensating depositors within that timeframe.

²⁰ CP15 EC5 stipulates DIs’ capacity and capability to promptly carry out the reimbursement process, including (a) adequate resources and trained personnel (in-house or contractors) dedicated to the reimbursement function and supported with reimbursement documentation or manuals; (b) information systems to process depositor information in a systematic and accurate manner; (c) pre- and post-closing activities specified in closing documentation or manuals; and (d) scenario planning and simulations, including simulations on bank closings with supervisory and resolution authorities.

FIGURE 18: PERCENTAGE OF DEPOSITORS ACCESSING FUNDS IN SEVEN WORKING DAYS DEPENDING ON THE EXISTENCE OF A LEGAL DEADLINE



Most of the DIs which have the above-mentioned legal requirement to reimburse depositors also perform simulations/stress tests regularly (although it is not always the case), so the direct impact of each feature is not clear. However, there is a logic in a DI making greater efforts to reimburse depositors promptly and efficiently if the applicable regulation requires it to do so.

Notwithstanding that, **the existence of a legal framework and the speed of reimbursement might not have a direct cause-and-effect relationship.** On its own, setting a tight deadline might not solve all challenges that a DI might face. Furthermore, when setting the legal deadline, regulators may consider the feasibility of whether the DI could meet it, depending on the intrinsic characteristics of the DI and/or the banking sector, and could decide not to impose a deadline that is unrealistic and too strict (which may not actually be accomplished and, in this case, could create reputational risks for the DI).

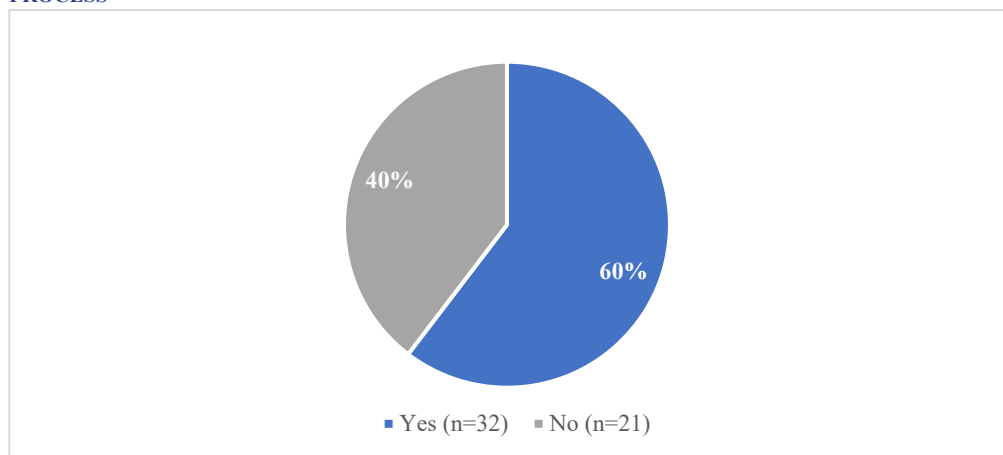
Type of Bank Insolvency Proceedings / Institution which depositors received their funds from / Authority/Organisation which has the power to trigger reimbursement process

An analysis was conducted to assess whether these elements seemed to somehow have an impact on the time required by DIs to reimburse depositors. However, from the information obtained through the survey, **no relevant correlation was observed** in this regard (please see Appendix D for detailed information).

3.9 Review following the reimbursement process

IADI CP15 EC6 stipulates that a review (e.g., post mortem) following a bank failure is performed to determine and analyse elements of the reimbursement process (including the resolution procedures where applicable) which were successful or unsuccessful. The survey results suggest that in the majority of the reported cases such a review was conducted. Nevertheless, **40% of cases reported were not subject to a review**, an observation which seems to contradict the above-mentioned EC.

FIGURE 19: PERCENTAGE OF REPORTED CASES IN WHICH DIs PERFORMED A REVIEW AFTER THE REIMBURSEMENT PROCESS



DIs offered consistent answers, in the sense that when they had more than one case, they responded either “Yes” or “No” to all the reimbursement events,²¹ which could indicate that the performance of a review is a policy item of DIs. In this regard, if instead of the reported cases we considered the number of responding DIs, the survey would show that 11 DIs out of 17 (65%) conducted reviews following a bank failure, while 6 (35%) did not.

3.10 Challenges faced in the reported reimbursement cases

The paper explores in more detail the challenges identified by DIs associated with performing a prompt and efficient reimbursement in the next section.

However, the survey included a question on what challenges DIs had faced in the specific reimbursement cases reported in 2016-2021 (which do not encompass all of the reimbursement processes faced during the period in question, as respondents with more payouts were asked to provide specific information on five cases only).

The results show that the two most frequently named challenges are the poor quality of files containing information on insured deposits/depositors, and the lack of advance access to depositor data or preparatory examinations on the reliability of depositor records and tests on member institutions’ IT systems and data. In any case, a detailed list of challenges and a related analysis of the challenges generally identified by DIs, both in real cases (not only for a sample) and in simulations is given in the next section.

²¹ There is one exception where a DI reported four cases: “Yes” in three cases and “No” in one. That DI reports performing a review and completing a feedback document for the appointed Insolvency Practitioner (IP) and shares any issues as well as areas where the staff have done well. It also shares the document with the regulator. However, in the exceptional case where no review was conducted, no IP was appointed because the failed Credit Union did not have enough funds, and no review was necessary as there were no issues with the bank failure.

4 Challenges identified by Deposit Insurers in Reimbursement Cases and Simulations

One key area of the survey focused on the challenges identified by DIs in the process of reimbursing depositors, be it in real-life cases or simulations. The challenges researched by the survey encompassed a broad range of aspects related to all phases of the depositor reimbursement process:

- No advance notification on the possibility of triggering the reimbursement
- No advance access to depositor data or preparatory examinations on the reliability of depositor records and tests on member institutions' IT systems and data to ensure capability to produce such records; including the lack of ability for the deposit insurer to prescribe the format of the information to be received and/or to request changes to that information
- Poor quality of files containing deposit/depositor information
- Inadequate human resources of deposit insurer
- Deposit insurer's IT systems and infrastructure
- Deposit insurer unable to determine the insurability of certain deposit products
- Inadequate engagement with / performance of third-party providers
- Issues with the identification of depositors
- Depositor lacking an alternative bank account
- Inadequate channels of communication with depositors
- Inadequate payment methods
- Insufficient financial resources of deposit insurer
- Delays in the liquidation of financial investments by the deposit insurer
- Coordination between authorities involved
- Fraud
- Inadequate regulation for the depositor insurer's needs and purposes
- Lack of public awareness
- Pandemic (e.g., Covid-19)
- Failed bank operations with deposit brokerage platforms
- Cases of special coverage (e.g., THBs, beneficiary accounts)

Apart from identifying the challenges encountered by DIs both in reimbursement cases and in simulations and stress test exercises on their payment systems, the survey also aimed to assess the frequency of occurrence and the impact of each particular challenge. Moreover, considering the identified challenges, DIs were asked to specify and rank the key attributes to making a prompt and effective reimbursement.

There was broad participation with a high proportion of the 51 responding DIs providing input to all or parts of this section, covering all IADI Regional Committees.

Answers received were mostly based on experiences from simulations. In this regard, 38 DIs from all IADI Regional Committees provided input, and 29 DIs reported having faced one or more challenges. Answers based on real payout experiences were received from 19 DIs (all of those responding DIs which had real cases in 2016-2021) representing 5 Regional Committees, with 16 DIs reporting having faced one or more

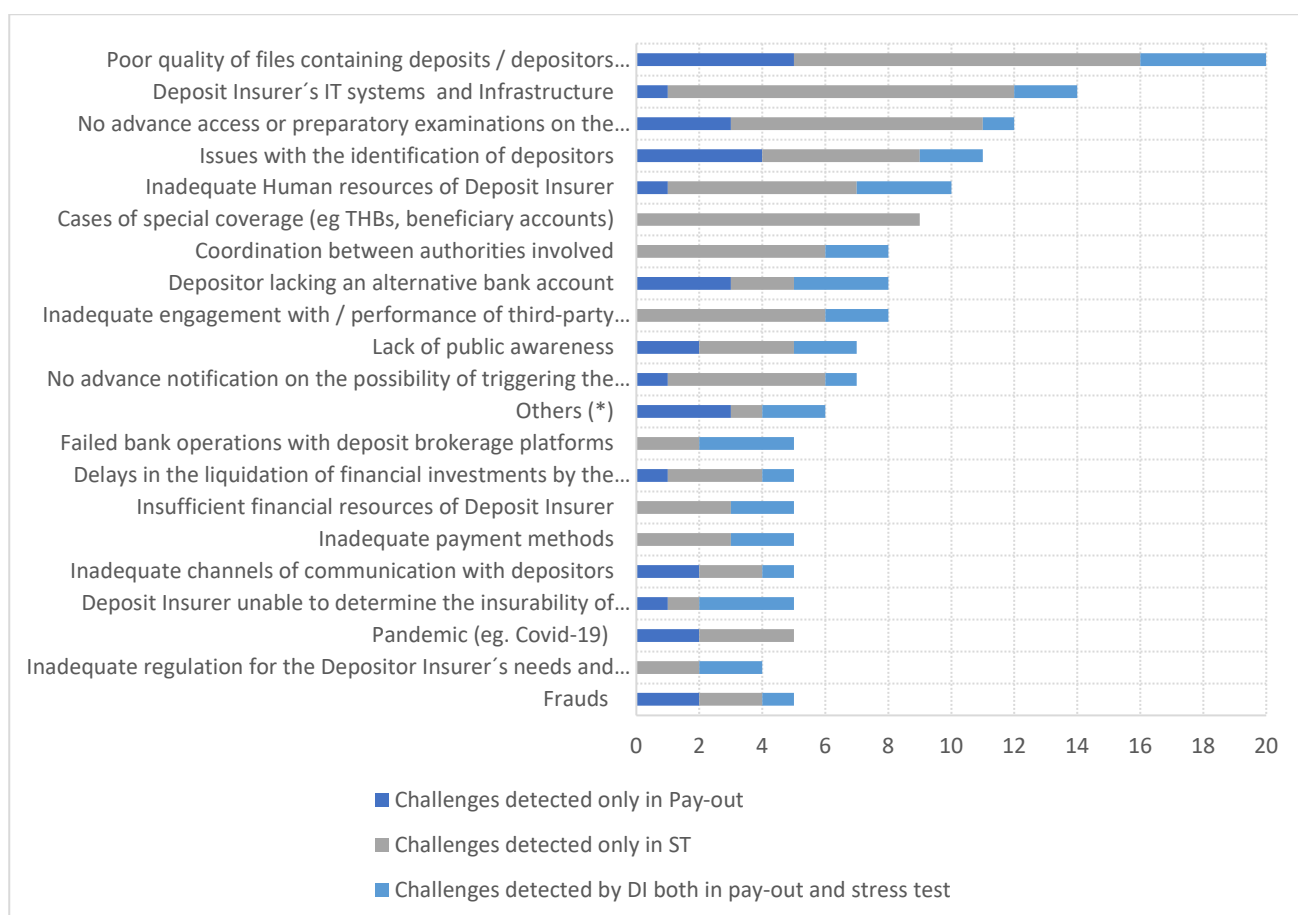
challenges. Replies to follow-up questions on the occurrence and frequency of challenges were often lower, limiting the explanatory value of the data.

Notwithstanding this, in some cases the number of responses about specific details on challenges was lower, in particular those focusing on real-life cases (among the reasons for lower responses on real payout experience is certainly the fact that between 2016 and 2021 relatively few DIs – 19 out of 51 respondents – experienced a payout event).

Globally, 37 DIs out of 51 respondents reported having identified challenges in reimbursement cases and/or simulations. There was limited overlap of respondents in both categories, with 41% of respondents (21) providing input on challenges detected in stress tests and simulations only, compared to 18% (9) providing information on challenges in real payouts only, and around 14% (7) identifying challenges in both categories. A total of 27% of respondents (14) did not reply to the questions posed on this topic or did not identify any challenge.

Overall, one challenge emerged to be almost universally encountered by responding DIs regardless of the nature of the experience, the regional origin, or other characteristics of the DI. This relates to the **quality of Single Customer View (SCV) files** and was identified by 20 DIs out of 37 respondents that noted challenges. Other challenges pointed out by respondents (although less frequently) were the deposit insurer’s IT systems and infrastructure (14 DIs), and the lack of advance access to depositor data or preparatory examinations on the reliability of depositor records (12 DIs).

FIGURE 20: CHALLENGES DETECTED BY DIs, BOTH IN REAL REIMBURSEMENT CASES AND SIMULATIONS/STRESS TESTS, AFFECTING THEIR ABILITY TO COMPENSATE DEPOSITORS PROMPTLY AND EFFICIENTLY



(*): “Others” include the lack of cooperation of employees of the failed institution, long period between the failure and the start of the payout process due to a number of issues (including the delay in the submission of information by the liquidator or the need for a judicial decision), lack of online channels for depositors to request reimbursement, procedures required when an alternative payment method is used by the DI, issues related to suspense accounts.

Failure to have adequate information on depositors is, following the input given by DIs themselves, the most relevant challenge encountered by respondents. This should encourage DIs that have the powers to access and review that information ahead of reimbursement to improve the procedures followed to verify the accuracy of data provided, as well as to define a concrete format for the submission of deposit/depositor data which ensures swift processing by their internal systems.

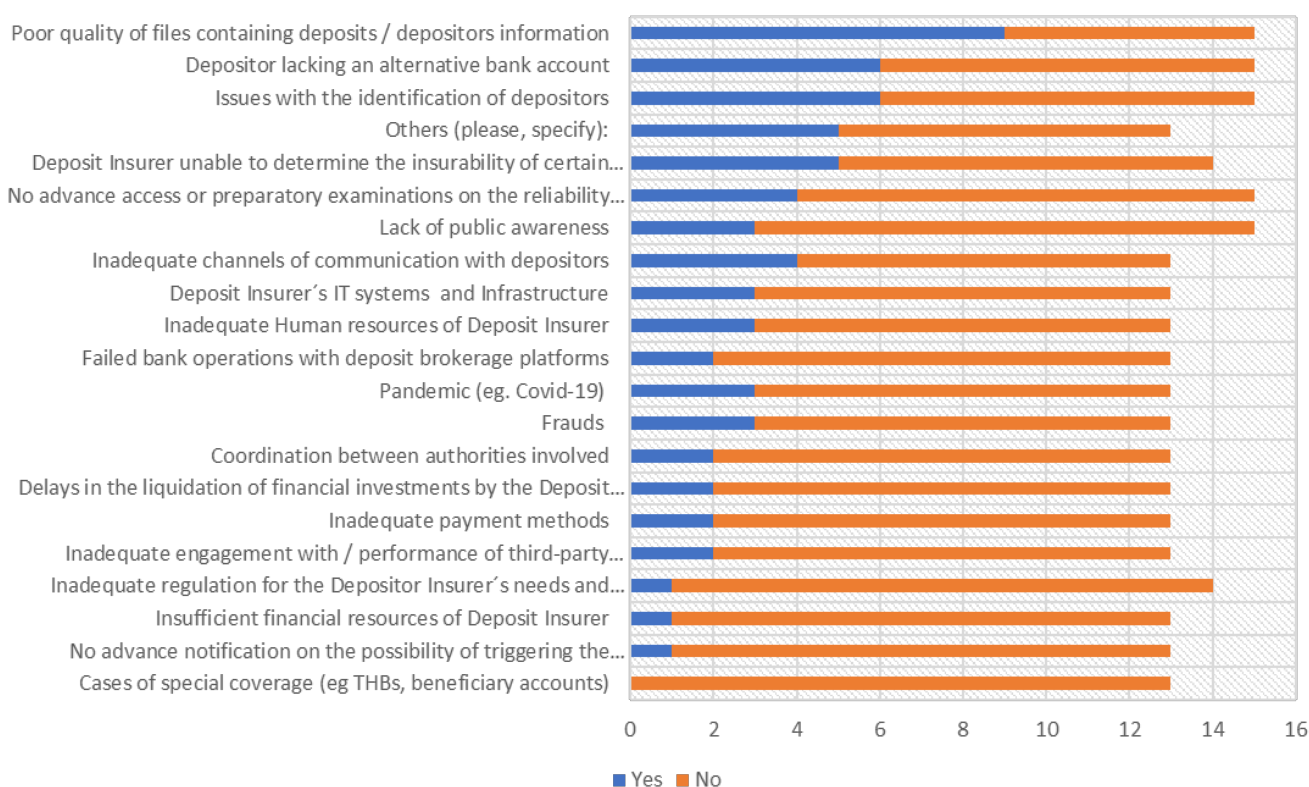
In the case of DIs without those powers, they may consider approaching the appropriate authorities in order to gain access to such data. In any event, authorities should be informed about this challenge and adopt the required measures to address it (e.g., by requiring the body which is in charge of the review of that information to implement a plan to improve the quality of data, or to establish such a procedure if no review of depositor information is being carried out in their jurisdiction).

Apart from the poor quality of depositor information, the assessment of challenges shows a variation depending on the framework on which challenges were detected (real cases or simulations/stress tests), as well as on other features of the DIs looked at, which is analysed in detail in the following sections.

4.1 Challenges in real reimbursement cases

With regard to the type of **challenges identified in real reimbursement cases, the most commonly named challenges relate to the availability and quality of the information deposit insurers need to carry out a reimbursement** (see figure 21). The poor quality of files containing deposit and depositor information was the most common (and universally encountered) challenge, with affirmative feedback from four regions, particularly from Latin American DIs. The second most commonly named challenge was the issue of depositors lacking an alternative bank account, followed by issues with depositor identification.

FIGURE 21: CHALLENGES DETECTED BY DIs IN REAL REIMBURSEMENT CASES AFFECTING THEIR ABILITY TO COMPENSATE DEPOSITORS PROMPTLY AND EFFICIENTLY



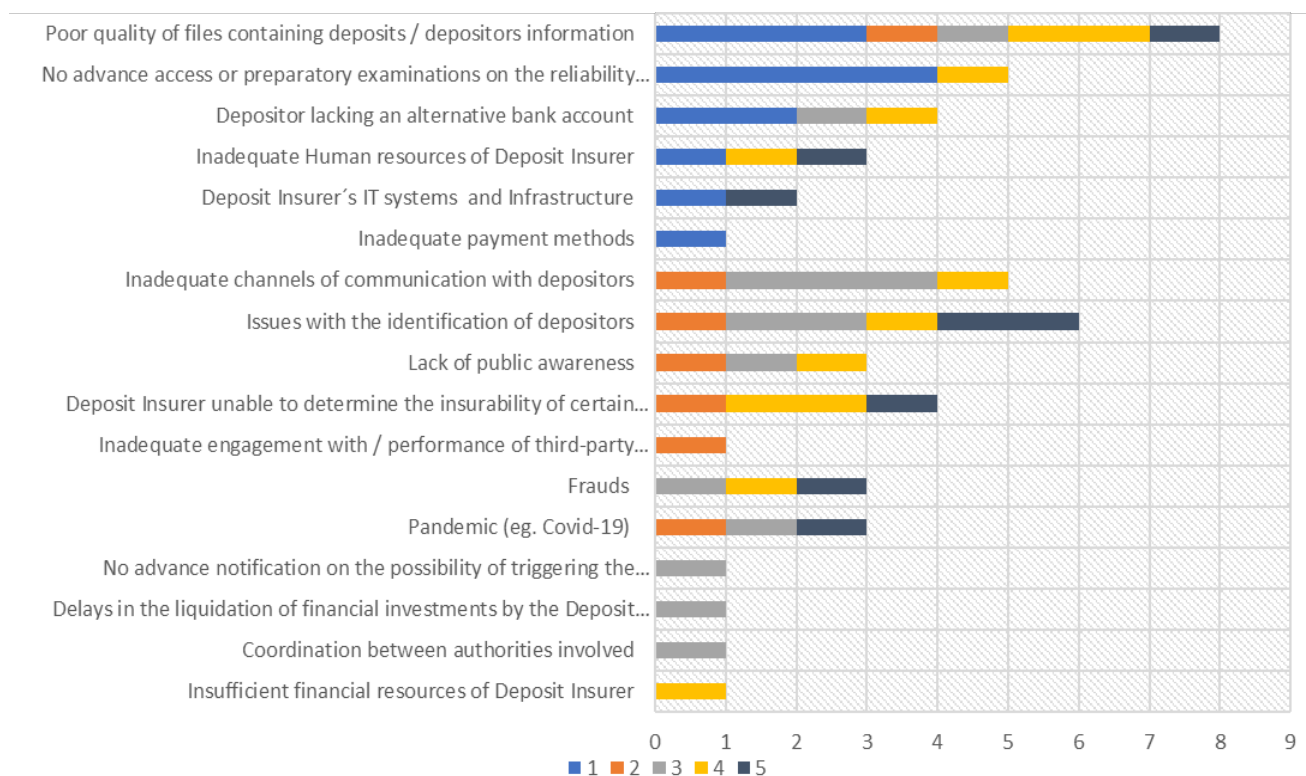
As a regional specificity, one of the most common challenges in Europe was the DI's inability to determine the insurability of certain deposit products, named by four DIs, a challenge which was highlighted only once by DIs from other regions.

On the other hand, deficiencies, such as inadequate regulation or insufficient financial resources, rarely proved to be a challenge for DIs during a payout (one DI in each case).

The handling of special coverage cases such as temporary high balances (THBs) or beneficiary accounts was not considered a challenge by the responding DIs, probably because they are not common situations in real life, affecting only a minority of depositors. As will be discussed later, this contrasted with findings from simulations and stress test exercises.

As far as the frequency (figure 22) of the challenges identified in real reimbursement cases is concerned (though not all DIs which identify challenges have assessed their frequency, and such assessment is made on a subjective basis), the poor quality of files containing deposit and depositor information and the lack of advance access to depositor records were considered the most frequent challenges. Cases where depositors lacked an alternative bank account, issues with the deposit insurer’s IT systems and infrastructure as well as human resources (such as number and training of staff) were named as frequently occurring challenges by other DIs. Other challenges were perceived to occur less frequently, but the limited number of responses prevents further interpretation.

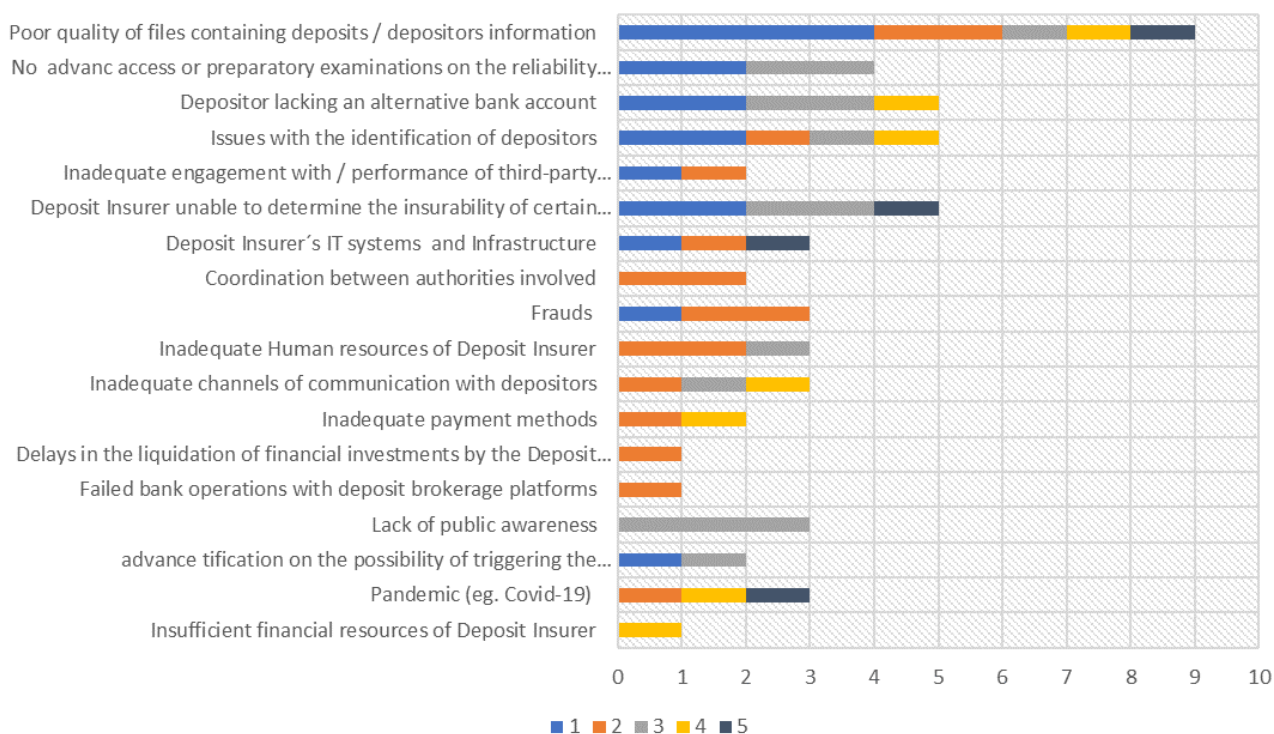
FIGURE 22: FREQUENCY OF THE CHALLENGES IDENTIFIED IN REAL REIMBURSEMENT CASES FROM 1 (VERY HIGH) TO 5 (VERY SMALL)



With respect to the impact of the challenges identified in payout cases (figure 23), the highest impact is expected from the poor quality of files containing deposit and depositor information, which is consistent with the previous observations. The lack of alternative bank accounts by depositors and the lack of advance access to depositor records are also mentioned as having a significant impact.

With regard to the other challenges, at least one DI found most of the explored challenges to have a high or very high impact on their capability to reimburse depositors promptly. This might underline the fact that ultimately all compensation processes and systems potentially harbour risks that may materialise in individual payout cases and that need to be addressed ahead of time.

FIGURE 23: IMPACT OF THE CHALLENGES IDENTIFIED IN REAL REIMBURSEMENT CASES FROM 1 (VERY HIGH) TO 5 (VERY SMALL)



Reimbursing depositors during the Pandemic: IPAB Case study

The Institute for the Protection of Bank Savings (IPAB or Institute) guarantees bank deposits in Mexico with a coverage limit that is updated every day, according to domestic inflation (approximately USD 150,000 at the date of preparation of the case study, in November 2022). This allows IPAB to fully cover 99.9% of eligible accounts in the banking system.

In 2020, under the Covid-19 pandemic, the banking supervisor revoked the licence of Banco Ahorro FAMSA (BAF). In 14 years, it had built a network of 354 branches all over the country, with a customer base of 1.3 million depositors, of which 634,000 maintained a positive account balance.

Challenges to the implementation of a swift payout of insured deposits

Situation	Challenge
Covid-19 pandemic	The pandemic induced suspension of economic activities, restricted people congregating and kept people at home. IPAB's main objective was to reimburse depositors as soon as possible, without jeopardising their health.
Banking Services	Commercial banks kept only 50% of their branches open, with half of the teller windows operating, and restrictions on working hours and on the number of customers who could enter. This resulted in an estimated branch operating factor of 35%.
Courier Services	Delivery courier companies significantly decreased their operations due to contagion among their employees, working at 70% capacity.
IPAB was downsizing and slightly understaffed	Due to austerity measures by the Federal Government since 2019, IPAB had reduced its budget and lost key personnel.
IPAB was notified of BAF's possible licence revocation a few weeks in advance	Although time was short, IPAB was able to conduct a brief on-site inspection visit before BAF's licence was revoked by the bank supervisor, which helped to produce a reliable depositor database.
BAF's operations were deeply integrated with its economic group	BAF's branches were located inside department stores, part of its economic group. BAF's personnel also performed store activities, and its windows and tellers received payments for store purchases.

Adjustments to IPAB's IT systems and infrastructure	An in-house developed web platform, serving as an interface between IPAB and depositors, was undergoing changes that had not been completed. A second payout management system, which manages the depositor database, required adjustments to reflect transfers of certain special operations (collective accounts, deposit balance compensations with past-due loans, and identification of related credits, among others).
Large number of account holders	Since 634,000 depositors held a positive account balance, the risk that a significant proportion of them could demand the payout of their deposits at the same time could cause IPAB's and the agent bank's systems and infrastructure to collapse.
Use of an Agent Bank	IPAB had spent previous years preparing for working with an agent bank, ensuring that the hired financial institution had sufficient resources, infrastructure, processes and experience to control, operate and adjust to a payout process successfully.

The payout strategy for covered deposits was planned by IPAB in this context, resulting in an innovative payout process through an automatic system, which took advantage of digital, mobile and contactless technologies through an effective agent bank. Depositors would have the following options to collect their money:

1. **ATM Cash withdrawal without a card:** after successful identification in IPAB's web platform, a numeric code was sent by SMS to the depositor's mobile number.
Applicable to depositors with accrued insured balances below and up to USD 450. 559,000 eligible depositors with an accumulated total balance of USD 9.5 million.
2. **Inactivated bank cheque sent to home address:** a nominative and inactive cheque, sent to the address registered in BAF's database, non-negotiable and non-transferable.
Applicable to depositors with accrued insured balances over USD 450. 74,000 eligible depositors with an accumulated total balance of USD 1.26 billion.
3. **Wire transfer to Agent Bank's account:** regardless of their insured balance, depositors who had opened an account with the Agent Bank before BAF's failure had the option to authorise a wire transfer to their account, after being contacted by phone.

From the first minute (00:01 hours) of the day after BAF was notified of its licence being revoked, IPAB took control of its management information systems to guarantee a timely payout of insured deposits.

A special team from IPAB was appointed to set up 1,099 service kiosks at BAF's branches, in order to provide personalised guidance to depositors regarding:

- i) information on the terms and conditions of the payout process;
- ii) special assistance to depositors with difficulties in using the web platform designed to monitor payment status, such as delivery and activation of cheques;
- iii) obtaining a financial statement of accounts held at BAF;
- iv) support to depositors who did not agree with balances obtained from BAF's database, and guidance on filing a claim request.

As alternative payout schemes, IPAB also used *payment orders* and *wire transfers to accounts in other banks* in special cases when clients were not able to use other options.

In addition to releasing public messages on TV, radio and digital media, IPAB worked with personnel from BAF's call centre during the liquidation process to set up an active search campaign for depositors who had not collected their money, successfully reaching a third of them.

Within the one-year period granted by the law for depositors to claim payout, IPAB paid over 99% of the total amount of insured deposits (72% after the first month). After this legal term, depositors which had not collected their reimbursement were recognised as creditors able to make claims for recoveries in BAF's liquidation.

Reimbursing depositors during the pandemic: PDIC Case study

A rural bank was ordered to close by the Monetary Board on 10 September 2020. PDIC was directed, as receiver, to take over the bank and proceed with its liquidation. The bank was a single-unit rural bank located in Laguna, a province south of Metro Manila. Based on the latest available data as of 30 June 2020, the bank had 2,079 deposit accounts with total deposit liabilities of PHP 84.8 million, of which 94.9% or PHP 80.5 million were insured deposits.

To facilitate better handling of inquiries from clients of the bank, PDIC opened a dedicated email address for the bank. The practice of having a dedicated email address for a closed bank was adopted for the payout operations of two banks ordered to close earlier at the onset of the pandemic.

Getting inside the vicinity of the town was already a challenge in itself. One of the concerns of the Project Management Team (PMT) was the possibility of being denied entry to the town by the local government unit (LGU) as part of its safety protocols. Fortunately, the PMT was eventually allowed entry. The takeover operations went smoothly, thanks to the cooperation of everyone involved – the PMT, employees of the closed bank, the LGU, and even the clients who complied with PDIC’s directives.

The PMT disclosed that the new normal systems for field operations that were piloted for this closure included the “Pack and Leave” operations as a mode of takeover and inventory of records, the “Receive-Process-Mail (RPM)” scheme for payout of insured deposits, the “No Contact Policy” for bank clients to ensure the safety of both PDIC personnel and the clients, the conduct of the first-ever virtual Depositors-Borrowers Forum (DBF), and the continued strict compliance with the minimum health and safety protocols to prevent the transmission of Covid-19.

The “Pack and Leave” operations pertain to the mode of gathering the bank’s primary records, such as deposit- and loan-related documents, and transporting them to the PDIC premises. Once they have arrived at the PDIC office, these documents will undergo disinfection before the assigned PDIC personnel can go over the records to help prepare the bank’s Masterlist of Deposit Liabilities (MODL) and Masterlist of Offset Items (MOI), which are prerequisites for the conduct of payout operations.

Another new normal approach was to conduct virtual meetings via Microsoft Teams to ensure close coordination between PDIC personnel in the field and those working from home, as well as among PDIC personnel onsite and their counterpart employees from the closed bank, especially during the inventory-taking period.

The RPM approach, meanwhile, requires all depositors, who are not eligible for the outright payment through postal money order, to file their deposit insurance claims with PDIC by either email, post or courier, or personally at the Public Assistance Center. For safety reasons, PDIC did not conduct a field operations claims settlement in order to minimise possible exposure to Covid-19. Deposit insurance payments would be mailed to depositors after PDIC’s examination and processing of claims. The PDIC started accepting claims from bank depositors on 13 October 2020.

One of the biggest challenges under the new normal was communicating with clients while complying with the No Contact Policy. Mindful that bank clients may be hesitant to communicate with PDIC personnel coming from Metro Manila, where more Covid-19 cases had been reported, the Public Assistance Department (PAD) initiated a No Contact Policy to ensure mutual safety. As a new normal measure, PAD placed dropboxes in front of the bank premises where clients could submit their inquiries together with their contact information. This would enable PAD personnel to reach out to them by phone and email. There was also a separate dropbox for submission of Mailing Address Update Forms (MAUF) for clients who needed to update their addresses in the bank’s records. Flyers containing PDIC’s contact details were likewise placed beside the dropboxes for clients’ reference. To promote social distancing, bank clients were not allowed to enter the bank premises. Their inquiries were received via the Client Information Sheet dropboxes. PAD also prepared a public address system that would allow them to reach a large audience while still maintaining physical distancing.

The first-ever virtual DBF was also scheduled in October 2020 via a private Facebook group to explain the procedures for claims settlement, loan payments, and other transactions with the bank, without the need for face-to-face interaction.

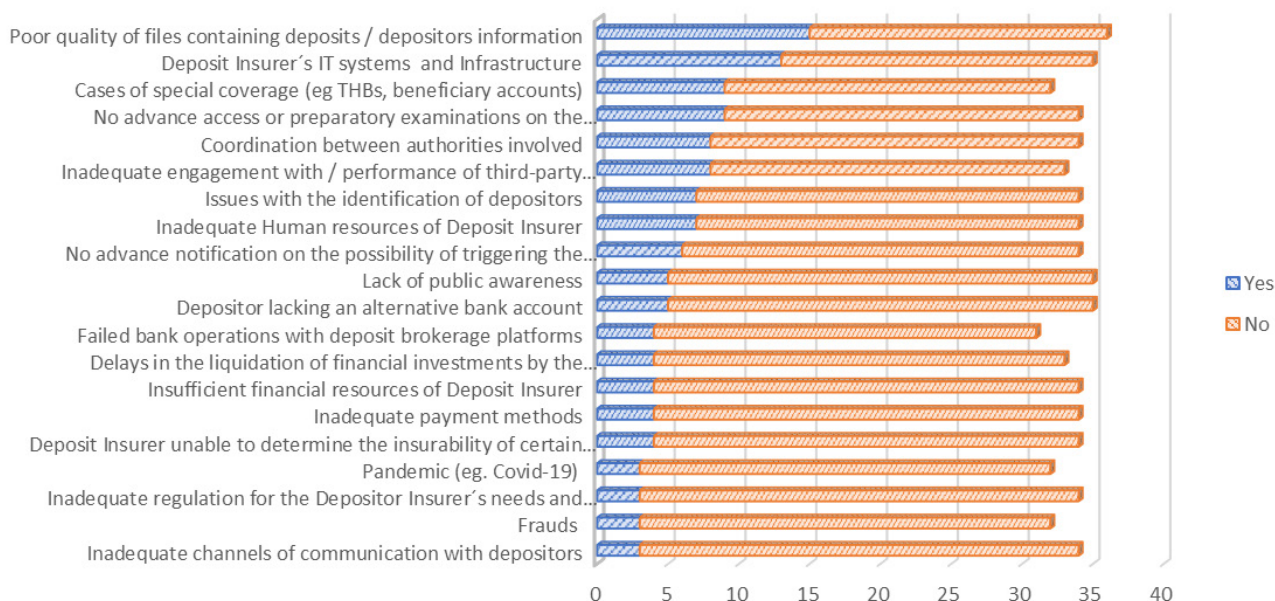
As in the PDIC premises, health and safety protocols were also strictly implemented during the field operations. The PDIC Clinic provided kits containing face masks, face shields, hand sanitisers and vitamins to all field personnel. Field personnel were required to undergo thermal scanning before entering the bank premises and to wear their personal protective equipment at all times.

At the end of the day, health and safety is of paramount concern under the new normal. Thankfully, the PDIC Team stayed strong, remaining virus-free and service oriented, rising above the challenges and embracing the new normal.

4.2 Challenges identified in simulations, stress tests and other self-assessments

With regard to the type of **challenges identified in the course of simulations, stress tests and other self-assessments**, the availability of data was significantly higher, covering a broader range of DIs and geographical regions, thus allowing for more detailed insights into the nature of the challenges. The challenge most often encountered in simulations and stress tests – by 15 DIs – is the **poor quality of files containing deposit and depositor information**, mirroring the findings from real payout cases (figure 24).

FIGURE 24: CHALLENGES DETECTED BY DIs IN SIMULATIONS AND STRESS TESTS

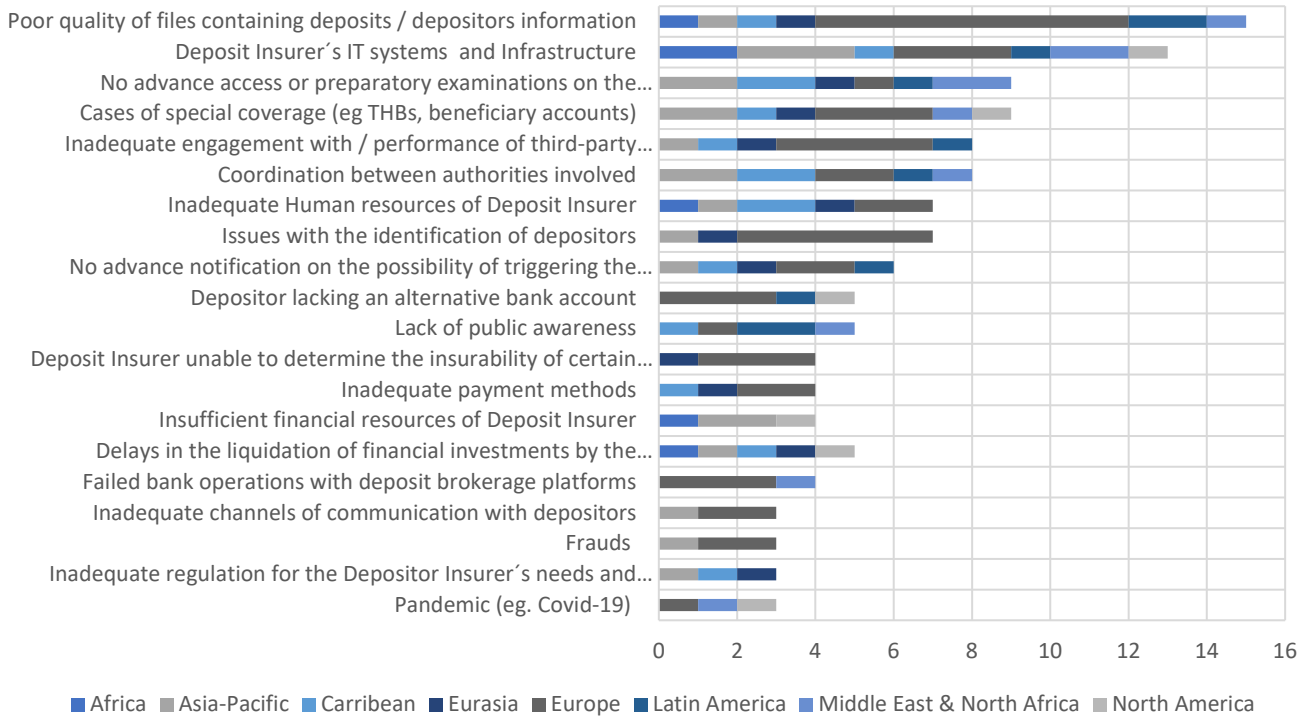


Interestingly, the ranking then deviates significantly. **The second most common challenge cited by 13 DIs relates to IT systems and infrastructure**, followed by cases of special coverage (e.g., THBs and beneficiary accounts), and the lack of advance access to depositor data or preparatory examinations on the reliability of depositor records, which 9 DIs respectively had encountered as a challenge.

The reasons for the differences in perceived challenges are difficult to assess. Depending on the focus of simulations and stress tests, certain aspects might get more attention during a simulation than in real-life situations (e.g., for THBs to be identified as a challenge, the payout case would have to feature them, which may not be the case, while DIs may more frequently test their ability to reimburse them). Moreover, DIs with payout experience might choose the focus area of a simulation differently in light of the lessons learnt during a previous payout. This was further substantiated by the fact that the challenges perceived by DIs providing feedback for both scenarios (real reimbursement and simulations) were mostly aligned. However, due to the limited data available relating to real payout, we must be cautious in this interpretation.

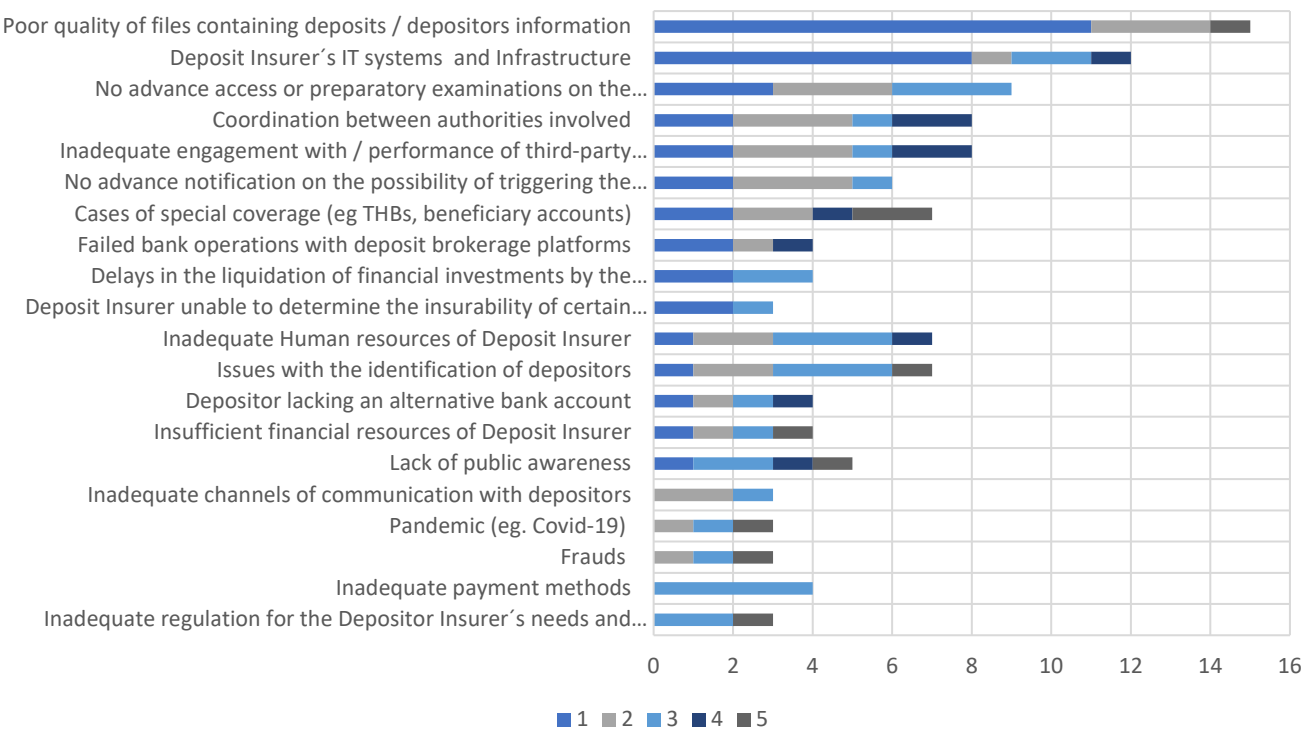
As far as the regional distribution of challenges is concerned, the poor quality of deposit/depositor information, and IT issues, were also those that were almost universally encountered, in seven out of eight regions (figure 25).

FIGURE 25: REGIONAL BREAKDOWN OF CHALLENGES IDENTIFIED BY DIs IN SIMULATIONS AND STRESS TESTS



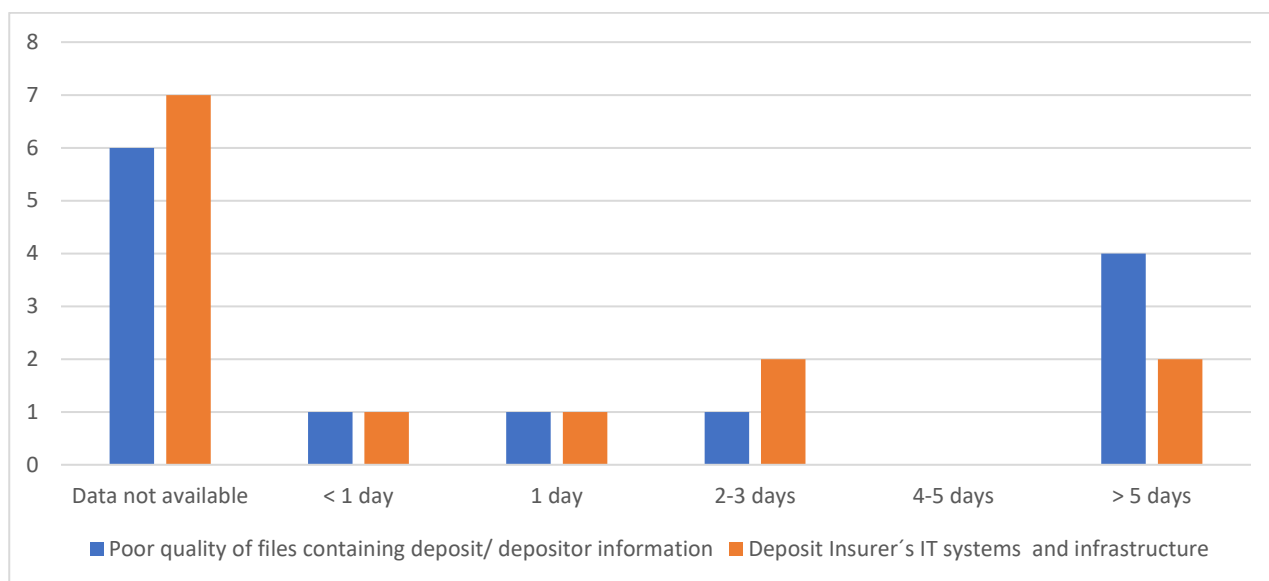
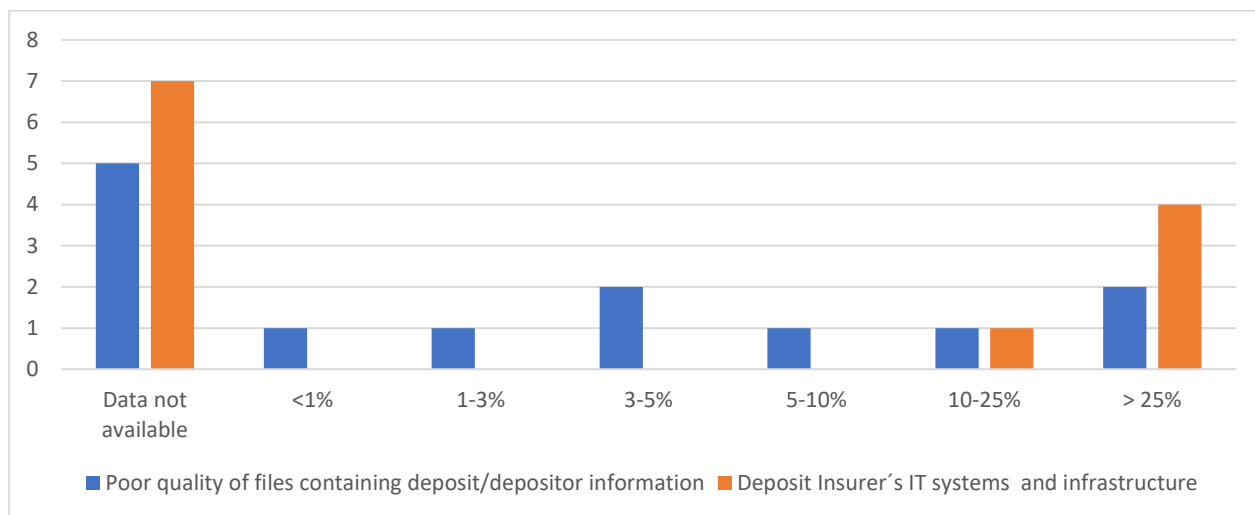
When asked about the impact (figure 26) that the encountered challenges had on the capability of DIs to compensate depositors promptly and quickly, three of the four most common challenges identified above were also considered to have the highest impact (the exception being the special cases of coverage). Notably, 11 out of 15 respondents categorised the poor quality of files containing deposit and depositor information to be of very high impact, and 8 out of 12 responding DIs attributed a very high impact to the deposit insurer's systems and infrastructure. The assessment for other aspects was less clear.

FIGURE 26: IMPACT OF CHALLENGES IDENTIFIED IN SIMULATIONS AND STRESS TESTS ON ABILITY OF THE DI TO CARRY OUT A PROMPT AND EFFICIENT REIMBURSEMENT FROM 1 (VERY HIGH) TO 5 (VERY SMALL)



The survey asked respondents to quantify the impact both in terms of the delay caused in the reimbursement process and in terms of the percentage of depositors affected by the respective challenge. Although not many respondents had enough data to provide precise details, based on the input received at least for the two high-impact challenges, it appears that such impact can be potentially severe for both aspects, with poor data quality generally causing longer delays in the payout procedure, while shortcomings in IT systems and infrastructure tend to affect more depositors (figure 27).

FIGURE 27: DELAY CAUSED IN THE TIME TO COMPLETE REIMBURSEMENT (NUMBER OF DAYS) AND PERCENTAGE OF AFFECTED DEPOSITORS FOR THE TWO MAIN CHALLENGES

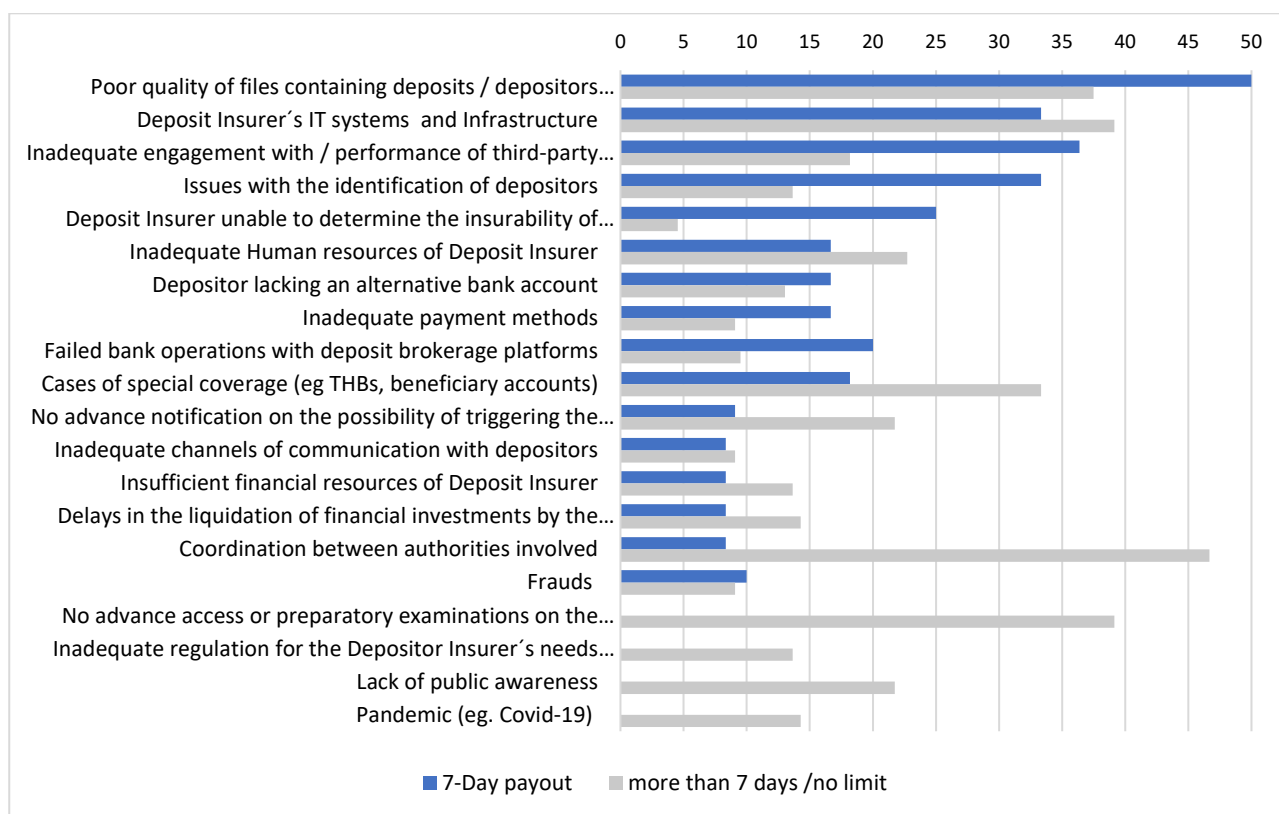


Challenges were furthermore differently assessed depending on the respective payout deadline of a DI (figure 28).

Among the responding DIs, around one third have a payout deadline of up to seven days, while two thirds had a deadline of more than seven days or no limit. The graph below shows the percentage of each group of DIs that identified a certain challenge (e.g., 50% of all DIs with a seven-day deadline identified the poor quality of files containing deposit and depositor information as a challenge, a percentage that falls to 37% for DIs with payout deadlines of more than seven days or no limit.)²²

²² Percentage based on the actual number of respondents to the individual question (“yes” or “no” to a certain challenge).

FIGURE 28: PERCENTAGE OF DIs IDENTIFYING CHALLENGES ACCORDING TO THEIR PAYOUT DEADLINE



What can be inferred from the data is that the perception of challenges might vary depending on the time available to complete the payout. Certain challenges seem to be significantly more relevant for DIs with a seven-day deadline (e.g., inability to determine insurability of deposits, issues with depositor identification, poor quality of files containing deposit and depositor information, or inadequate engagement with third-party providers).

On the other hand, some aspects were identified as challenges exclusively by DIs with longer payout deadlines or no limits, such as the pandemic, lack of public awareness, no advance access to depositor data or preparatory examinations on the reliability of depositor records, or inadequate regulation. Interestingly, coordination with authorities is considered a challenge by nearly half of the DIs with longer or no legal payout deadlines compared to only 8% of DIs with a seven-day payout requirement. This might be interpreted to signify that in jurisdictions with shorter payout deadlines these aspects could already have been addressed and do not pose an obstacle to timely compensation, or that the payment procedures do not depend as strongly on such aspects being in place and working. Ultimately, the sample size of DIs with up to seven-day payout, however, limits the informative value.

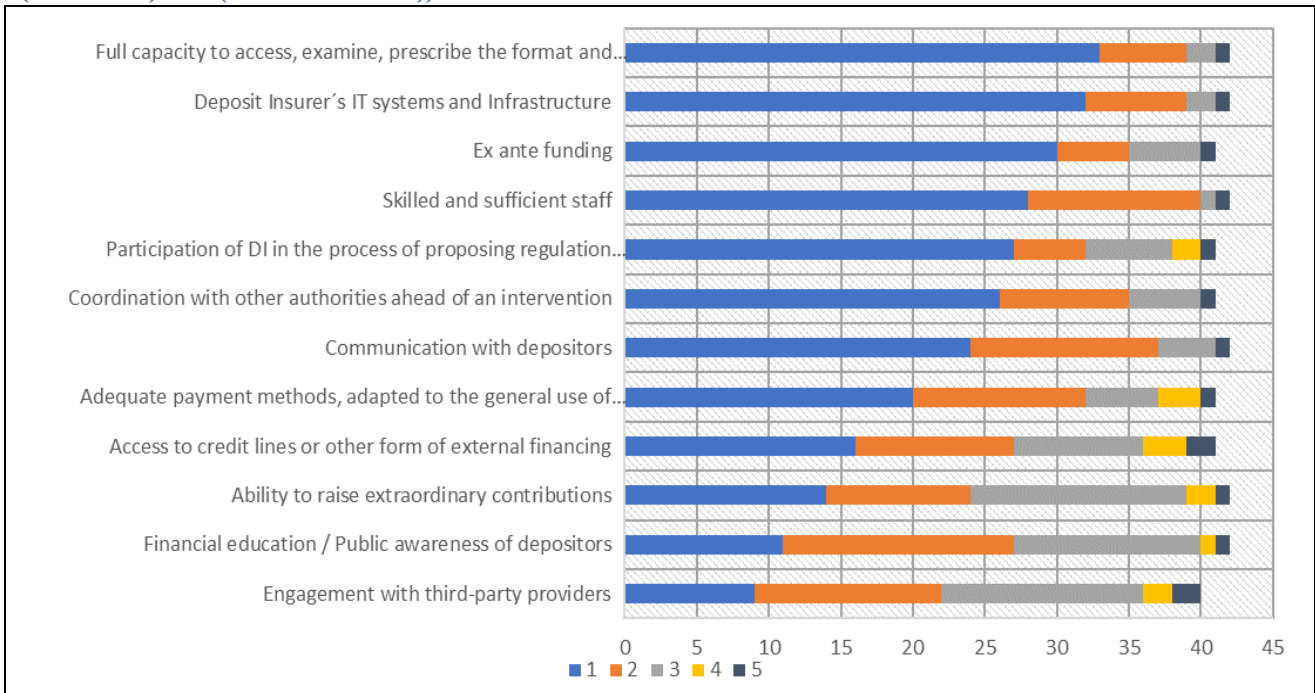
4.3 Key attributes for a prompt and effective reimbursement

Looking at the findings so far, it is only consistent that the key attribute most frequently considered essential for a prompt and effective reimbursement (34 out of 42 responding DIs gave it the highest relevance, see figure 29) is the full capacity to access, examine, and prescribe the format of, and require changes to, depositors' records, with IT systems and infrastructure coming a close second (33 out of 42 DIs gave it the highest relevance grade 1).

The availability of ex ante funding and of skilled and sufficient staff is considered essential by a high number of DIs (29 and 28 respectively), which on the one hand could be surprising considering that the issues were less visible among the challenges identified, but on the other hand may only be proof of the fact that, while being key attributes, they are not considered difficult to achieve by the majority of respondents.

The Asia-Pacific region showed a clear focus on the availability of ex ante funding, which was considered essential for almost all its DIs which answered this question (10 out of 11).

FIGURE 29: KEY ATTRIBUTES TO MAKE A PROMPT AND EFFECTIVE REIMBURSEMENT (GRADES FROM 1 (ESSENTIAL) TO 5 (LESS IMPORTANT))

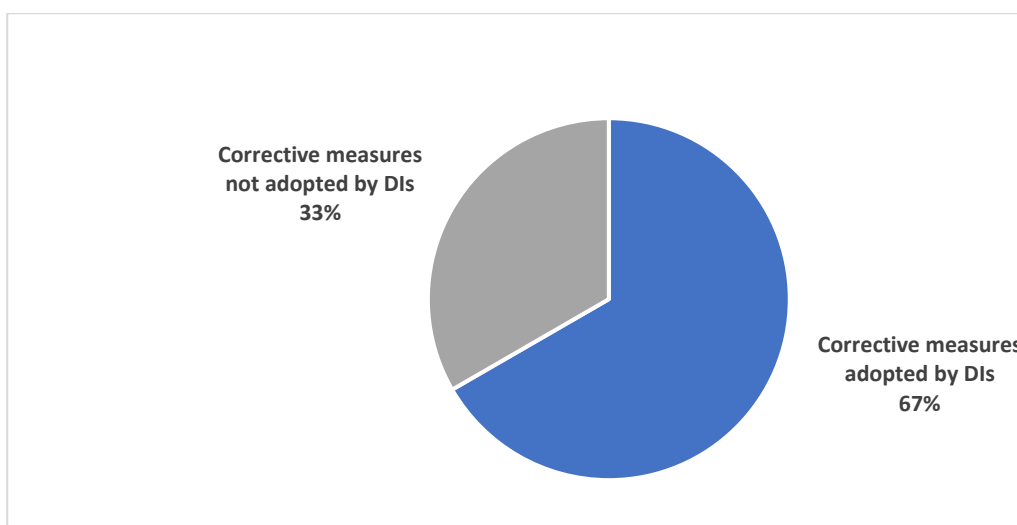


5 Corrective Measures Adopted

Following the identification of challenges, it is worth analysing whether DIs are taking any measures to address them and whether such measures (if adopted) have been successful.

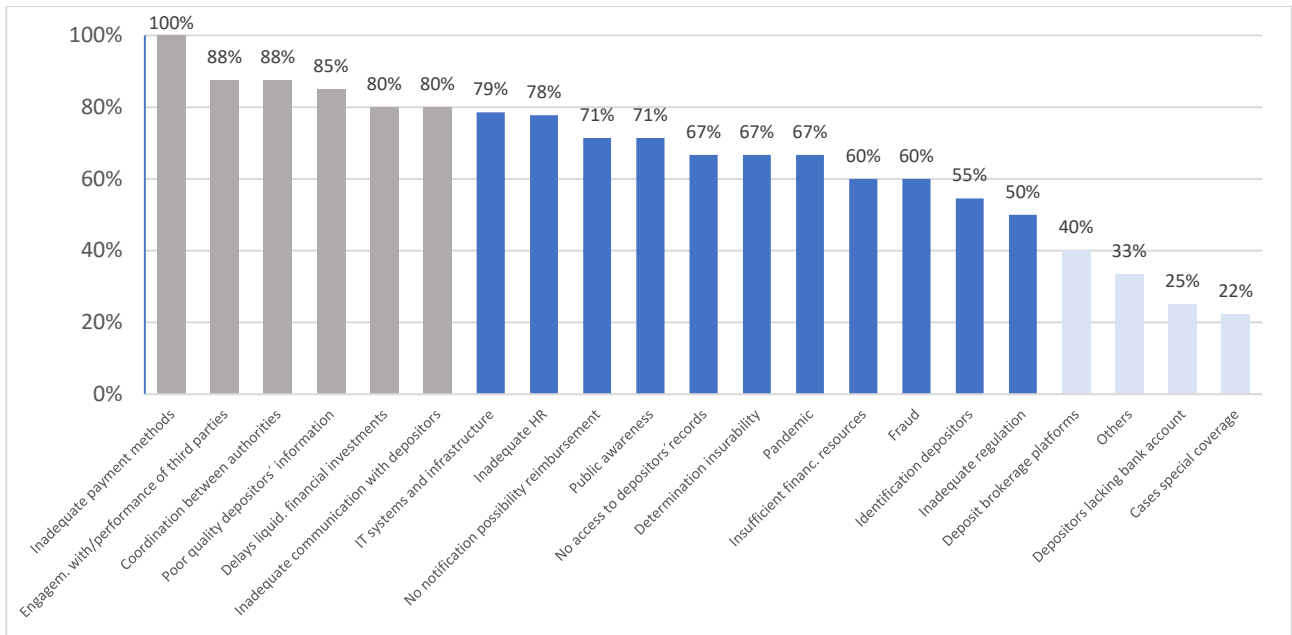
Although, as mentioned above, not all DIs perform a post-mortem review after a reimbursement process, in general, the respondents to the survey reported being active in the adoption of such measures. Following the answers received, respondents identified 165 challenges in reimbursement cases and/or simulations (average of 3.2 challenges per respondent of those identifying one or more challenges). According to the responses, DIs have implemented corrective actions in relation to 110 challenges (67%).

FIGURE 30: IMPLEMENTATION OF CORRECTIVE MEASURES TO ADDRESS AN IDENTIFIED CHALLENGE



However, the rate of adoption of measures is not homogeneous among the types of challenges, as shown below.

FIGURE 31: IMPLEMENTATION OF CORRECTIVE MEASURES PER TYPE OF CHALLENGE

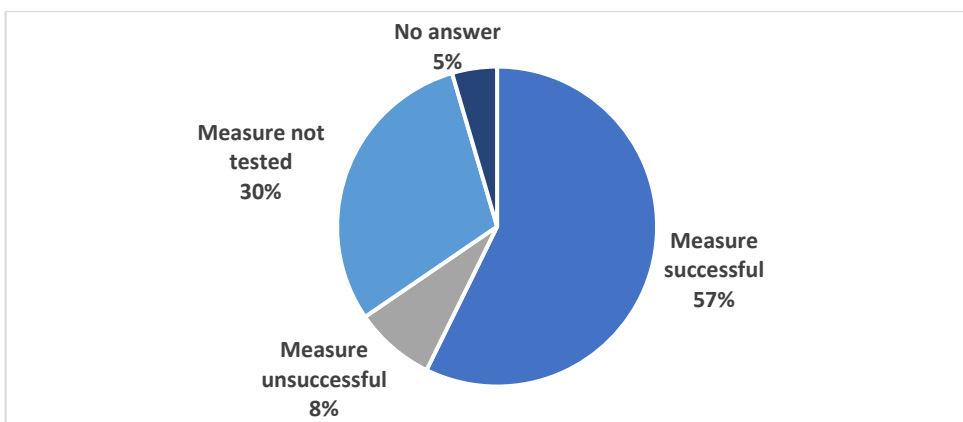


As mentioned earlier in this paper, the two most frequent challenges identified by the respondents were the poor quality of files containing deposit/depositor information and issues with the IT systems and infrastructure. Both these challenges were common over a wide geographical area and were assessed as potentially having a high impact among members when reimbursing depositors.

It is important to highlight, as shown in Figure 31, that DIs have reacted to the identification and impact of those challenges, as 85% and 79% respectively indicated that corrective measures had been implemented in that regard.

In terms of the success of the corrective actions implemented, respondents noted that the corrective measures were considered to be successful in 63 out of the 110 cases (57%), as shown by improvements noted in subsequent reimbursement cases and/or simulations performed by the DI.

FIGURE 32: RATE OF SUCCESS OF CORRECTIVE MEASURES AS ASSESSED BY DIs



The classification of a measure as successful follows its evaluation in subsequent real cases (25% of measures considered successful), simulations (44%), or both (30%). Although the number of respondents able to provide relevant quantitative data on the impact of the success of the measures was not sufficient to allow us to draw

definitive conclusions, some of them explicitly stated that the implemented measures allowed a smoother management of reimbursement and a reduction in the time required to complete the process.

While 30% of the measures implemented have not been tested, the corrective actions are the response to the internal analysis of the DI which experienced the corresponding challenge and, as such, should be valued as initiatives which potentially will allow improvements when reimbursing depositors.

In the following, we take a closer look at the measures implemented to address each of the challenges:

Poor quality of files containing deposit/depositor information is being dealt with by the implementation by DIs of data requirements, including issuing a regulation on record keeping for the member institutions, which can include an SCV. In addition, more frequent and exhaustive reviews which check the data integrity, accuracy and format are conducted at regular intervals (also on site) to verify that the data requirements are being followed by all member institutions. Those that do not comply with the set requirements must adopt and implement the appropriate measures to address that situation.

The above actions are also being used to handle another challenge related to depositors' records, which is the lack of *advance access to depositor data or preparatory examinations on the reliability of depositor records and tests on member institutions' IT systems and data to ensure capability to produce such records; including the lack of ability for the deposit insurer to prescribe the format of the information to be received and/or to request changes to that information*, in combination with the engagement with authorities so that DIs can legally access the information on deposits/depositors. Additionally, it was stated that once the DI has the legal remit it can require member institutions to periodically submit reports containing prescribed information which would allow for a closer monitoring.

The Netherlands DNB: best practices for setting up the SCV standard

De Nederlandsche Bank (DNB), in its role as DI, has set up a framework that describes the SCV standard for banks. The framework is composed of different elements that set out the SCV standard from a legal, business and technical perspective. In addition, it also includes an assessment framework.

The SCV framework

DNB has laid down the requirements for SCVs in the Single Customer View Policy Rule (*Beleidsregel Individueel Klantbeeld Wft 2017*). The policy rule describes how banks can set up their administration, procedures and measures to ensure a timely, accurate and correct SCV. As such, the SCV file enables a DGS payout within seven working days. The legal basis for the SCV Policy Rule is the implementation of the Directive on Deposit Guarantee Schemes (DGSD) in national legislation. Since its publication in 2017, the Policy Rule has been updated regularly, in response to questions by banks and in order to include new insights and developments. Each amendment round included a public consultation.

Further to the SCV Policy Rule, DNB has drafted the Policy Rule on the Scope and Execution of the DGS, which sets rules on aspects for which the national rules give DNB discretionary room or which require further clarification. In addition, DNB published a DGS Data Delivery Manual, a Data Delivery Agreement (DDA) and an Assessment Framework. The DGS Data Delivery Manual provides a practical explanation of the rules. The DDA sets out all the formal logical and technical aspects of the data and file exchanges. Finally, DNB has adopted an Assessment Framework to supervise compliance with the requirements of the SCV Policy Rule.

Figure 1 Legal framework



Content of the SCV file

The SCV Policy Rule states that “a bank must create an SCV file that contains all the information necessary to administer the DGS, according to a data model prescribed by DNB, and designed in such a manner as to link the deposit information to the details of the depositors and, if applicable, their representatives”. To this end, the SCV Policy Rule sets out all the information that should be included in the SCV; on the level of the depositor, and if applicable its representative, and of the deposit(s). The SCV standard also contains specific markings related to exclusions, deferrals and resolution. Banks need to organise their systems and processes (SCV system) to this end. In addition to periodic submission of the SCV file, banks must also commission annual audits of their SCV system.

Assessment of the SCV requirements

DNB supervises compliance with the requirements set out in the SCV Policy Rule. Banks annually submit SCV files to DNB, for the assessment of the timeliness and quality of the files. In addition, banks must instruct their internal and external auditors to assess whether the requirements set out in the policy rule have been met. Assessments by internal auditors must be based on ISAE 3402. Elements of the Assessment Framework include:

- Several indicators that clarify the extent to which banks comply with the requirements;
- The role of the audit of a bank’s SCV system, conducted by the internal audit department and the external auditor;
- A growth path for the period 2020-2023 specifying deadlines by which expected improvements are to be realised by the banks;
- The measures DNB can take if targets are not met (on time).

Progress of the compliance with the SCV requirements (as per 30 November 2022)

DNB performs a yearly stress test with all banks. During this test, banks are required to submit an accepted SCV file within three working days. Looking at the figures of 2021, DNB saw that most banks (95%) met this deadline. A quarter of the banks needed more than one delivery to submit an accepted SCV file, but still did so within the deadline. While the assessment for 2022 is still in progress, DNB is continuing to see that some banks are struggling to meet the submission deadlines.

The DNB Assessment Framework states that in 2021, 80% of the banks’ SCV files should pass the automated controls and there should be a 20% reduction in errors compared to the year before. Despite this ambitious growth path, in 2021 most banks (85%) were able to meet the first requirement. And more than half (58%) showed an improvement of 20% or more in the reduction of errors in 2021.

Note that it can be observed that while banks strive to be technically compliant to meet the expectations of the Assessment Framework, the focus of the supervision by DNB will shift towards a more in-depth look at data quality.

Documents mentioned in this case study can be found at [Single Customer View - De Nederlandsche Bank \(dnb.nl\)](#).

Deposit insurer's IT systems and infrastructure was identified as the second most common challenge. Responding DIs almost systematically indicated that the corresponding action was to acquire or to improve automated systems for reimbursement, and a few specified that their organisation had increased the budget allocation for this critical element. Respondents also stated that stress tests are conducted regularly on their IT systems, with upgrades occurring as needed. A specific action mentioned by a few DIs is the development of a payout system to perform mobile payments.

Inadequate payment methods resulted in DIs conducting research to broaden the payment methods at their disposal and determine feasible alternative payment channels. These identified include the use of mobile banking and e-wallets, as well as an agent bank's ATM systems (also in connection with the pandemic situation, with the purpose of limiting physical contact and preventing health issues), in conjunction with the methods used traditionally by the DI.

Inadequate engagement with / performance of third-party providers is being addressed by developing a listing of service providers which include agent banks, accounting and legal firms which may establish formal arrangements with the DI in "peace time". Some DIs which identified this challenge also report that the tasks that the provider must perform in a payout are now described in more detail, and that the third parties (in particular, agent banks) participate in simulations and are given briefings to better understand their tasks in the context of a reimbursement process.

Coordination between authorities involved is being enhanced in non-crisis times with the holding of regular meetings or the setting up of joint units among members of the jurisdiction's safety net to improve the exchange of information, a process which may be governed by Memoranda of Understanding (MOUs) especially with the regulator and supervisor. Additionally, a few DIs can provide feedback to the regulator on their member institutions, while others can request a special audit from authorities of a member institution, should the situation so warrant. Interestingly, a few respondents specify that authorities participate with the DI in exercises simulating the deterioration of a deposit-taking institution (which can help to better synchronise crisis management actions).

These actions also apply in general to address the issue of '*No advance notification on the possibility of triggering the reimbursement*'.

Delays in the liquidation of financial investments by the deposit insurer are being tackled by the DI establishing (or engaging in negotiations to establish) emergency back-up funding to be activated in a crisis as needed.

Similar actions are also being taken to deal with '*Insufficient financial resources of the deposit insurer*' but in this case corrective actions can include increasing the premium rate too.

Market and public borrowing options for DIs are in certain cases covered in the applicable regulation.

Inadequate channels of communication with depositors are being addressed by responding DIs with an increase in the use of online channels of communication for claiming deposits, as well as the setting up of hidden websites which can be activated in case of a reimbursement process. Call centres and telephone communications (SMS) are other tools used by respondents to address this issue. Some members have also identified the establishment of a communication plan to facilitate a common message from all safety-net participants as a useful tool.

Inadequate human resources of deposit insurer is being addressed mostly by respondents building capacity (e.g., by developing formal procedures to guide the reimbursement, with staff receiving the required training). Other respondents stated that in their case this challenge also encompassed an insufficient number of staff, which was addressed by the hiring of experts or by the use of identified external service providers.

Lack of public awareness has resulted in annual public awareness campaigns being launched by DIs using a wide range of media tools, as well as regular enhancements to the information provided on the DI's website.

Deposit insurer unable to determine the insurability of certain deposit products has caused guidance to continuously be provided by some DIs, and all contentious products to be analysed to ensure that their insurability is properly classified. One DI has also conducted an investigation of the deposit accounts to establish the validity of deposits and entitlement to deposit insurance coverage.

Pandemic (e.g., Covid-19) caused the focus to be on crisis management processes being conducted remotely (which required corresponding effort in terms of resources) and promoting online communication with depositors. However, some DIs still have processes which cannot be carried out remotely (e.g., printing of cheques for those which use this payment method).

Fraud is being addressed by the conduct of enhanced on-site and off-site monitoring, supervisory efforts and regular internal audit reviews. Another reported approach to address fraud was to have forensic investigations followed by summons being issued against parties at fault. Some respondents also noted that there was difficulty in determining the impact of the internal audit reviews and that the forensic investigations were not always considered effective.

Inadequate regulation for the depositor insurer's needs and purposes has resulted in some respondents indicating that they are at different stages of progress with legislative amendments aimed at enhancing the powers of the DI, which include broadening coverage and streamlining reimbursement, including the removal of the depositors' claims stage. The proposal of regulatory changes is also linked to other challenges, such as those related to inaccurate or insufficient information on deposits/depositors, which in some cases are addressed by the DI by these means (e.g., obliging deposit takers by law to provide the information requested by the DI or to grant the DI access to it).

Issues with the identification of depositors is being addressed by the majority of DIs with additional data requirements on depositors for the member institutions. This can include regulation on the registered owner/holder entitled to the insured deposit payable.

Depositor lacking an alternative bank account is being addressed by using alternative payment methods, such as cheques or by electronic means.

Cases of special coverage (e.g., THBs, beneficiary accounts) are being tackled by giving the depositor additional information on coverage and facilitating the submission of the necessary documentation to request compensation. In the case of beneficiary accounts, DIs are trying to ensure that trustees / account holders have updated information on the ultimate beneficiary and that the banks or the DI receive it.

Failed bank operations with deposit brokerage platforms was treated with ad-hoc solutions to address specific issues when they arose. In general, the challenges posed by deposit brokerage platforms (DBPs) are not very different from those of beneficiary accounts (the identification of final depositors), although in many cases customers of DBPs are not very aware of the process, which causes concerns in case of a reimbursement process. DIs which have identified this challenge are engaging directly with DBPs and/or promoting regulatory changes to solve the issue of the lack of information on depositors.

Non-cooperation or resistance of closed bank personnel (one of the challenges covered under "Other" challenges) was handled through seeking assistance from local government officials. In the long-term, legal cases were filed against the bank personnel concerned for non-cooperation which caused delay in the preparations for reimbursement.

Case studies: Two examples of corrective measures

Thailand Deposit Protection Agency (DPA): construction of an IT reimbursement system

DPA has constructed an IT reimbursement system consisting of two parts: the Depositor Reimbursement System (DRS) and the Depositor Reimbursement Operating System (DROS). The DRS is designed to aggregate the data in the SCV file sent by banks and calculate the final amount to be paid out to depositors after setting off all debts as required by national law. The DROS is the payout platform, which utilises the information obtained by the DRS to reimburse depositors. Both systems allow the DI to speed up a payout.

Kazakhstan Deposit Insurance Fund (KDIF): addressing challenges through regulatory proposals

KDIF identified the following challenges in its reimbursement processes:

1. Long waiting time for the start of payout, since it began only after a court decision on the forced liquidation of the bank had entered into legal force;
2. Due to incorrect interpretation of the law, there have been cases of banks refusing to provide KDIF with information about depositors, on the grounds of the information affecting banking secrecy;
3. Lack of online channels for depositors to apply for payout;
4. Low level of application for payout by depositors with small account balances.

To handle these challenges, amendments to the legislation of Kazakhstan²³ were developed and adopted, providing for:

1. Shortening the term for start of payout by changing the insurance case basis from the start of the bank's liquidation to the withdrawal of the bank's licence;
2. The wording of the law has been revised to clarify KDIF's legislative right to receive information constituting bank secrecy;
3. Allowing depositors to submit an application in electronic form (while maintaining the traditional method of applying at a bank office);
4. Transferring unclaimed amounts to depositors' pension accounts after the payout period.

Details on each item are given below:

1. Shortening the term for start of payout: before 2020, payout processes began within 14 business days from the date of entry into force of the court decision on the forced liquidation of the bank. Considering the time required for legal procedures as well as possible counterappeals against the court's decision by the bank and its clients, payouts began in a range between 80 to 107 business days after the banking licence had been revoked. Since the beginning of 2020, in accordance with the amended legislation, depositors no longer have to wait for the court decision, and the period for starting the payout has been shortened to a maximum of 35 working days after the withdrawal of the bank's licence. In practice, for all insured events occurring since 2020, the payout process began within 6-8 working days from the date of revocation of the bank's licence.
2. KDIF's legislative right to receive information constituting bank secrecy: since 2019, legislative changes came into force to allow KDIF to request from a deposit taker classified as a bank and from branches of non-resident Kazakhstan banks with an unstable financial situation that threatens the interests of their depositors and creditors and/or the stability of the financial system and/or the solvency of a bank, information on individuals' deposits, as well as information on their liabilities, if a creditor and debtor are identical, including a combination of the two. In this case such a bank is obliged to provide the information requested by KDIF.

In addition, since 2020 the law has been amended:

- To provide KDIF with the right to obtain information from the National Bank and the authorised body, including information on the financial condition of banks, necessary to ensure the functioning of the DI.
 - To specify the obligation of member banks to provide and the right of KDIF to request any (other) information necessary to ensure the functioning of the mandatory deposit insurance system, including information constituting banking secrecy and other secrets protected by law, defining the procedure for its storage and protection by KDIF.
3. To allow depositors to submit an electronic application for reimbursement while maintaining their option to apply through agent banks' offices. In 2021, the additional option of applying for a guarantee online was provided for by law. In September 2021, KDIF piloted a system for the electronic submission of the guarantee application for testing. To address the low level of application for small amounts, any quantity can be

²³ "On Mandatory Guaranteeing of Deposits, placed in the second-tier banks of the Republic of Kazakhstan", "On Banks and Banking Activities in the Republic of Kazakhstan".

claimed online (including less than KZT 5, USD 0.01). KDIF continues to work towards the goal of establishing a reliable functioning of the online application channel.

4. Transferring unclaimed amounts to depositors' pension accounts after the end of the payout period. Legislative changes have made this transfer possible, addressing the low level of application for small reimbursement amounts and also the issue relating to the term for applying for payout. Under the previous regulation, payouts were made until the bank was completely liquidated, but regulatory changes provide that after one year unclaimed amounts are transferred to the pension account if the depositor data match the identification of a pension account, and most of the insured amount is reimbursed in the first months. At the same time, depositors who missed the payout deadline for a good reason still have the right to apply for reimbursement even if their amount was already transferred to the pension account. This right can be exercised until the liquidation of the bank is completed or until the depositor is entitled to receive the transferred amount from the pension fund.

6 Challenges for the Near Future

The survey explored a number of potential challenges which could affect in the short/medium term the ability of DIs to reimburse insured depositors promptly and efficiently. The topics specifically explored were:

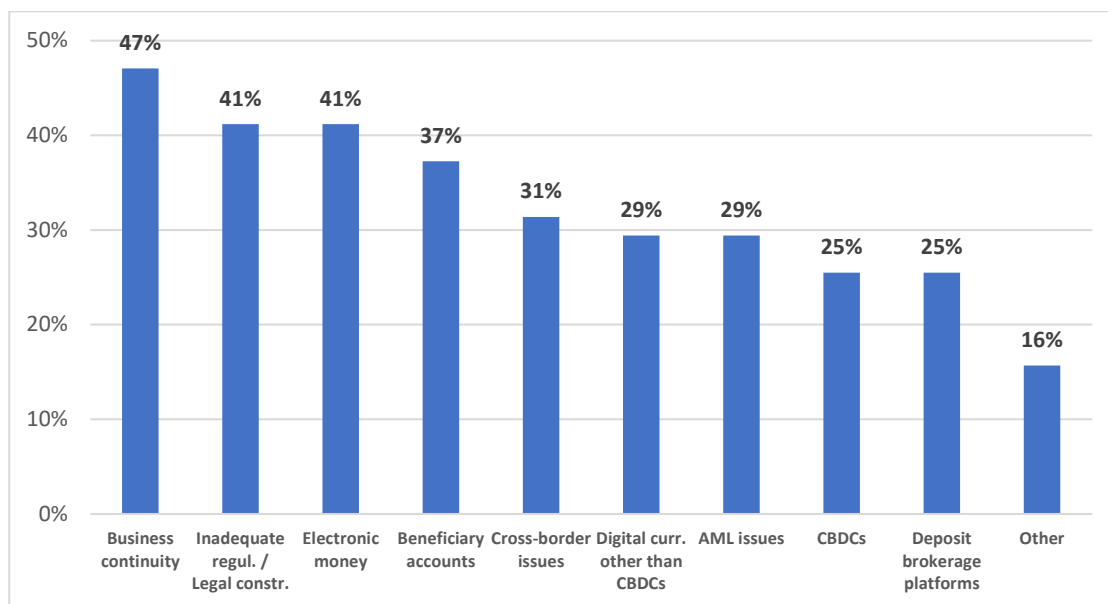
- Inadequate regulation / Legal constraints on DIs' needs and purposes
- Cross-border issues
- Beneficiary accounts
- Electronic money (e-money)
- Central Bank Digital Currencies (CBDCs)
- Digital currencies other than CBDCs
- Anti-money laundering (AML) issues
- Business continuity challenges (e.g., pandemic)
- Failed bank operations with deposit brokerage platforms (DBPs)
- Other challenges to be added by respondents which have detected them

It is worth clarifying that some of the explored topics are not necessarily linked to newly developed products or practices among deposit-taking institutions, but to challenges which have been existing for some time but have not yet been fully (or successfully) addressed. This could occur in issues in relation to which the power of DIs to implement the appropriate measures is limited (e.g., inadequate regulation). Although not specifically explored, some of the challenges identified by DIs in real cases and/or simulations can realistically be expected to be an issue also in the near future for a significant proportion of DIs (e.g., the poor quality of deposit/depositor information, given the significant percentage of respondents which consider it an important challenge).

The survey asked respondents not only to identify the challenges they have observed, but also to (i) report the expected impact they could have on their performance, (ii) state whether the identified challenges would already affect them now, and (iii) indicate whether they are addressing them or not.

Identified challenges: Out of the 51 DIs which responded to the survey, 44 (86% of respondents) identified one or more of the explored issues as challenges for the near future. The challenge named by the highest number of respondents was related to business continuity (47% of respondents), which may come as no surprise, given the effect that the measures adopted by the authorities to tackle Covid-19 had on DIs (some of which actually had to deal with reimbursement events while such measures were in place). Other potential challenges that were identified quite frequently are e-money and inadequate regulation / legal constraints on DIs' needs and purposes (interestingly, the latter was not among the challenges more frequently identified by respondents in real cases or simulations), with 41% of respondents citing e-money, and 37% beneficiary accounts.

FIGURE 33: PERCENTAGE OF RESPONDENTS IDENTIFYING EACH OF THE EXPLORED CHALLENGES



We note that, while CBDCs and other digital currencies are well-known topics, frequently discussed in the financial sector in general and in the DI community in particular, they did not rank among the challenges most frequently identified by respondents as potentially impacting them.

Following the explanations provided by a number of respondents, this may be prompted by a lack of clarity on the precise design that CBDCs and other digital currencies could have, and whether they would be eligible for DIs’ guarantees.

We have the examples of two responding DIs, Ecuador and Jamaica, which have direct experience with a CBDC having been launched in their respective countries. In the first case, the CBDC was launched in 2014 but was cancelled in 2018, while the Central Bank of Jamaica recently initiated a phased national roll-out of a CBDC. In neither of those countries has the CBDC been considered a deposit and, therefore, it has not been deemed to be eligible for DI coverage.

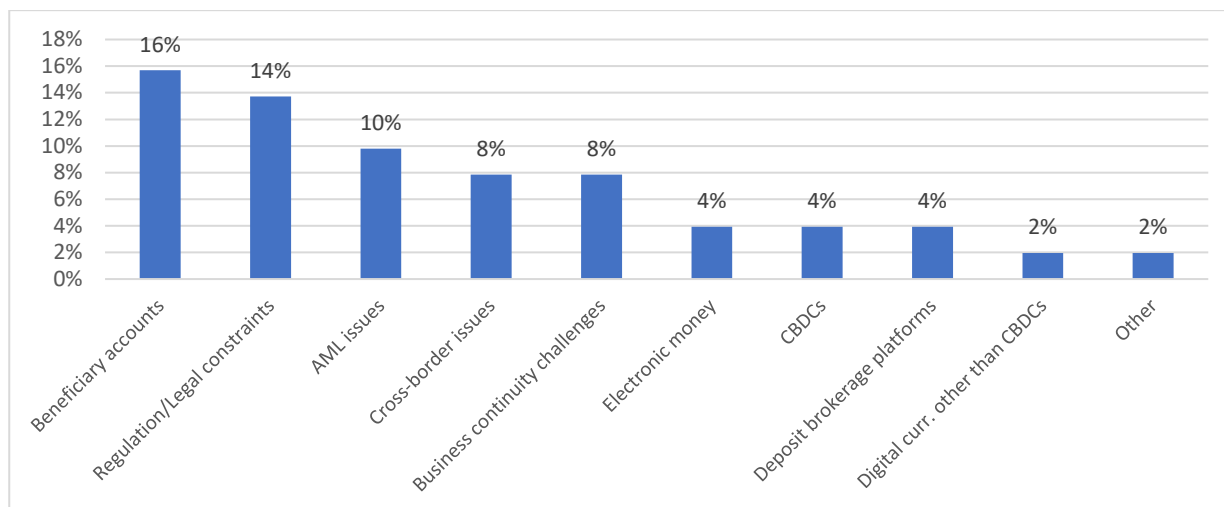
In Jamaica, the CBDC is issued to licensed deposit-taking institutions (all of which are members of the DI) and to authorised payment service providers (PSPs), which in turn distribute the CBDC in the retail market. However, the CBDC is a digital form of holding or storing cash in a digital wallet which is obtainable at the deposit takers or PSPs, but does not fall into the category of deposits and, therefore, is not covered by the DI.

DIs were also asked to indicate whether those challenges were already affecting them as of today, since different business models and practices among deposit takers can lead to some DIs having already encountered challenges that have not yet been faced by others.

The respondents identifying as a potential challenge beneficiary accounts, an inadequate regulation / legal constraints, and AML issues are the ones which more frequently state that these are already elements of concern today; more than 33% of the respondents that have identified them state that they are already a challenge for their DI. In particular, beneficiary accounts are currently an issue for 42% of such respondents, which in many cases state that the main difficulty lies in the lack of information from the DI about the underlying beneficiaries of the deposits. The need to authenticate the ultimate beneficiary and the need to rely on third parties (the trustee / account holder) complicates and delays the reimbursement of deposits held in these accounts.

Challenges already affecting DIs: Characteristics and practices of banking sectors vary across the different regions, with some of the challenges “for the near future” already having been encountered by a number of DIs. Among them, beneficiary accounts, inadequate regulation and AML issues are already a challenge today for at least 10% of all respondents to the survey.

FIGURE 34: PERCENTAGE OF ALL RESPONDENTS IDENTIFYING EXPLORED CHALLENGES AS ALREADY AFFECTING THEM



The relevance of beneficiary accounts is growing among a number of jurisdictions and DIs seem to be aware of the difficulties they may pose for the reimbursement process. This could be the reason why, although they have not been generally identified by respondents as a challenge in real reimbursement cases, a number of DIs consider the reimbursement of beneficiary accounts to be already a serious issue.

Impact of identified challenges: While business continuity issues are the explored element most frequently identified by respondents as a potential challenge, the ones which could have the highest impact, according to the assessment of DIs which have selected them, are inadequate regulation / legal constraints and failed bank operations with DBPs, followed by e-money.

TABLE 3: EXPECTED IMPACT OF IDENTIFIED FUTURE CHALLENGES

Challenge	Impact (1 highest – 5 lowest)	DIs identifying challenge
Inadequate regulation / Legal constraints	2.32	21
Bank operations w/deposit brok. platforms	2.36	13
Electronic money	2.5	21
Business continuity challenges	2.5	24
Beneficiary accounts	2.5	19
Digital currencies other than CBDCs	2.8	15
AML issues	2.8	15
Cross-border issues	2.9	16
CBDCs	3.2	13
Other	3.5	8

In the case of DBPs, the business model and procedures for closing the contractual deposit arrangements with the credit institutions in which funds are placed can differ among DBPs, and in some cases the direct account holder is an intermediate entity on behalf of the customers of the DBP (e.g., another bank which has an agreement in that regard with the DBP).

As proved in real reimbursement cases, if the deposit taker fails, the information it submits to the DI may not include data on the customers of DBPs, who are ultimately the parties that are entitled to those funds and (if

eligible) to deposit insurance. Furthermore, real experience has shown that some of these customers may not be aware that their funds were placed with the failed bank (even though they actually selected it), as they may understand that their commercial relationship is with the DBP and not with the failed bank. On the whole, the problem with the failed bank operations with DBPs could be seen, to some extent, as comparable to that of beneficiary accounts (in both cases, and depending on the practices and legal requirements on information that the DBP is required to submit to the banks they use, the DI may not know the identity of ultimate beneficiaries and, thus, its ability to reimburse these depositors swiftly is compromised).

EdB Germany Case Study: Dealing with deposit brokerage platforms in a payout

1. Reimbursement event

The compensation case of Greensill Bank AG in March 2021 hit the German private banks' statutory (EdB) and voluntary (ESF) deposit protection schemes after three years without a compensation case. Greensill Bank AG was a subsidiary of the British-Australian financial group Greensill Capital, its main purpose being to finance and hedge the firm's investments. In the wake of the insolvency of the parent company, Greensill Bank plunged into financial difficulties, too. The BaFin swiftly imposed a moratorium on 3 March 2021 and established the compensation case within a fortnight.

Compared to most of the previous compensation cases, Greensill was of quite another magnitude. Unusually high interest rates on overnight and fixed-term deposits had caused Greensill's balance sheet to inflate significantly over the past few years, up to EUR 4.5 billion at the time of its failure. Considering the existence of a voluntary deposit protection fund (ESF) in the Association of German Banks, additional to the statutory one (EdB), the case meant compensation volume of EUR 3 billion, EUR 1 billion of which was to be covered by EdB, and over 22,000 eligible depositors.

2. Detection of DBP operations and related challenges

Already upon imposition of the moratorium, EdB ordered that the bank deliver all data related to accounts and customers in the agreed machine-readable format (Single Customer View, SCV) by noon the following day, with which the bank complied. Based on the SCV file received, a first overview of the insured and covered deposits for both the statutory and the voluntary scheme was prepared.

The analysis of the composition of customers revealed that a substantial number of depositors had made their deposits via several external deposit brokerage platforms (DBPs). There were various combinations of how depositors had deposited money, i.e., via not only one but all involved platforms or via one or more platforms and additionally individual accounts at the bank itself. To make things more complicated, the DBPs in question used different contractual structures vis-à-vis depositors. One platform worked with a model of trust accounts, while another opened accounts for depositors directly at the bank.

The various forms of contractual arrangement between depositors and DBPs had to be reflected in the reimbursement process. This resulted in several challenges:

a) Depositor information: In order to reflect the different categories of depositors, they were grouped into different customer classes depending on the channel(s) used to make a deposit, and the depositor letters routinely distributed to depositors in case of a reimbursement event had to be adapted to each class. Instead of the usual two, it was necessary to develop nine variations of depositor information letter templates as well as five depositor reply templates.

b) Calculation of covered amounts: The different contractual arrangements in combination with the fact that there were depositors who had deposited money with the bank via different channels further complicated the calculation of the covered amount per depositor.

c) Determination of claim to compensation: In particular in connection with the trust accounts used by one of the DBPs involved, an issue of legal uncertainty arose with regard to correctly attributing the claim to compensation.

d) Data protection: There were data protection issues regarding depositor data. On the other hand, for clients of at least one DBP, alternative account numbers already existed, which could be entered in the depositor information letters, and, subject to the consent of the depositor concerned, were used for reimbursement. That way, possible errors due to misspelling or illegibility could be minimised.

e) Depositor communication: During the reimbursement process it became clear that, for many depositors who had used DBPs, it was not entirely clear at which bank the money was eventually deposited. Consequently, the actual extent of deposit protection afforded to their deposits was also not known. On the other hand, many depositors

directed their calls and written enquiries to the DBPs in question and thus reduced the respective workload at EdB. In order to ensure the provision of consistent and coordinated information across all channels, EdB cooperated closely with the DBPs during the payout.

3. Impact on reimbursement process and lessons learnt

Overall, the Greensill case revealed a number of legal and operational issues that needed to be dealt with ad hoc under extreme time pressure. Despite the fact that the EdB considers itself well prepared in general, thanks to regular stress testing, comprehensive annual SCV file tests, and occasional real reimbursement cases, it was once more confirmed that each case brings about its own unique challenges and novelties that had hitherto not been tackled. What proved to be essential to success was the moratorium, which afforded the EdB a sufficiently long timeframe to prepare for the compensation case, and equally important the capacity to access the bank already during the moratorium in order to analyse the SCV file in depth, identify related legal questions and address them in a timely manner. Not least thanks to dedicated and highly qualified staff members, it was possible to resolve all potential pitfalls before the actual compensation case was determined by the supervisory authority and to carry out a smooth and successful reimbursement procedure. By 25 March 2021, when the seven-day deadline had passed, 82% customers had replied to the initial information letter, and 99.5% of those had received the compensation payment. By the end of July, the case could be considered to have been concluded successfully, with more than 99% of depositors having received compensation.

4. Insights into depositor behaviour

The case of Greensill Bank AG also offered valuable insights into the behaviour of depositors, customers of DBPs in particular, and the effect of moral hazard.

- a) There were numerous depositors who wanted to open accounts even after the bank had been closed.
- b) In the run-up to the closure of the bank, when the crisis was already unfolding, it could be observed that depositors withdrew funds, but left amounts up to the coverage level, thus deliberately taking the risk of a reimbursement case.
- c) In the course of the reimbursement process, it could be observed that the funds thus obtained by depositors were immediately reinvested via DBPs.

This behaviour is consistent with the fact that about 790 depositors at Sberbank Europe (see below) were also depositors at Greensill Bank.

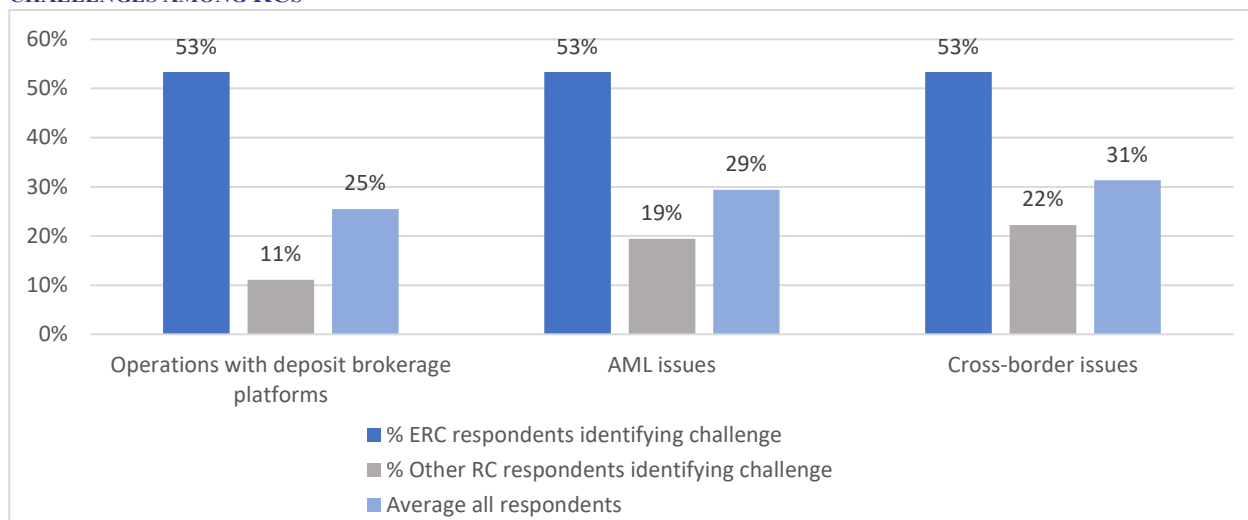
To conclude, EdB notes that a high degree of trust in the DI has a positive impact on financial stability. At the same time, the DI can become more prone to moral hazard. This is particularly true for those depositors with a low sensitivity to risk whose focus is on achieving the highest interest rates.

Regional specificities: It can be seen as normal that different market situations and business practices mean that the focus of attention (or concern) among DIs of diverse geographies varies somewhat. There is, however, a highly significant divergence regarding three of the potential challenges explored in the survey when comparing the responses of DIs belonging to IADI's European Regional Committee (ERC) with those provided by responding DIs from other Regional Committees (RCs).

The potential challenges in which this divergence is observed are the operations with DBPs, AML issues and cross-border issues, items which are highly relevant for European DIs (the majority of European respondents consider them a challenge for the near future)²⁴ but are not among the priorities of other DIs, as observed in figure 35.

²⁴ Curiously, in all three cases the percentage of responding EU DIs identifying the challenge is the same (53%), although the individual DIs vary depending on the topic.

FIGURE 35: IDENTIFICATION OF OPERATIONS WITH DBPs, AML ISSUES AND CROSS-BORDER ISSUES AS FUTURE CHALLENGES AMONG RCs



Obviously, EU regulation is only applicable in EU member states, but it also has an influence in other European non-member states. It is therefore understandable that topics of interest / concerns are to a certain extent shared among DIs in the region.

Following the provisions of the EU Directive 2014/49 on deposit guarantee schemes (“DGSD”), if a reimbursement event for an EU bank with branches in another EU member state is triggered, the DI of the latter jurisdiction (“Host DI”) must collaborate with the EU DI of which the failed bank is a member (“Home DI”). In fact, the DGSD states that depositors at branches in the host member state must be reimbursed by the Host DI on behalf of the Home DI. The Host DI is required to perform this function once it receives the funds from the Home DI. Accordingly, cross-border issues are a key focus of interest for those DIs that have member institutions with branches in other EU countries (or that have in their countries branches of deposit takers based in other EU member states). Real cases have shown the importance of cross-border coordination in the EU, the most relevant having been the payout of the Austrian subsidiary of Sberbank (Sberbank Europe AG), as more than 99% of insured deposits and depositors were at the German branch of the bank and, thus, deposits were reimbursed by one of the German DIs (EdB), on behalf of the Austrian DI which insured such funds. Also, this case has increased the focus on the reimbursement procedures with regard to depositors which have their funds in domestic branches of the failed bank but live abroad.

By contrast, non-European respondents generally do not insure funds placed in non-domestic branches of their member institutions, which may justify why this topic is not at the core of their concerns.

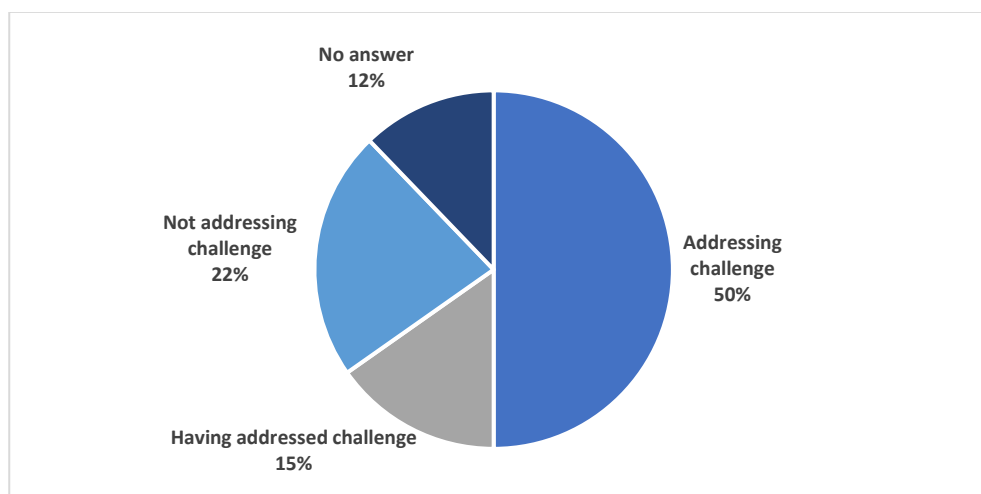
AML issues have been the cause (or one of the causes) of the failure of some EU deposit takers and, more recently, operations with DBPs (which have registered rapid growth in recent years) have been an issue in a number of real events for EU DIs. This has prompted regulatory authorities to examine the subject. Their review encompasses aspects which are broader than the impact on DIs of AML and DBP issues, but these issues are in the focus of authorities²⁵ and their actions will affect EU DIs. These elements could justify the feedback provided by DIs belonging to the European RC.

²⁵ As an example, this has been tackled by the European Banking Authority (EBA) in two Opinions addressed to the EU Commission:

- “Opinion of the EBA on the interplay between the EU Anti-Money Laundering Directive and the EU Deposit Guarantee Schemes Directive” ([EBA Opinion AMLD-DGSD](#)), in which the EBA makes a number of proposals to the EU Commission on how to change the EU framework in the fields of AML and deposit insurance, which fall under 3 areas: (1) cooperation and collecting and sharing of information between DIs, DI authorities and AML authorities, (2) improving the reimbursement process as regards AML issues and (3) depositor information.
- “Opinion of the EBA on the treatment of client funds under the DGSD” ([Opinion EBA Client funds](#)), in which the EBA contemplates the issues that beneficiary accounts (including those used by some DBPs for their customers’ funds) may pose in a payout.

Are DIs addressing these challenges? Respondents in general report that the identification of a challenge is followed by action taking, as in almost two thirds of the cases DIs state that they are addressing the challenge (50%) or have already addressed it (15%).

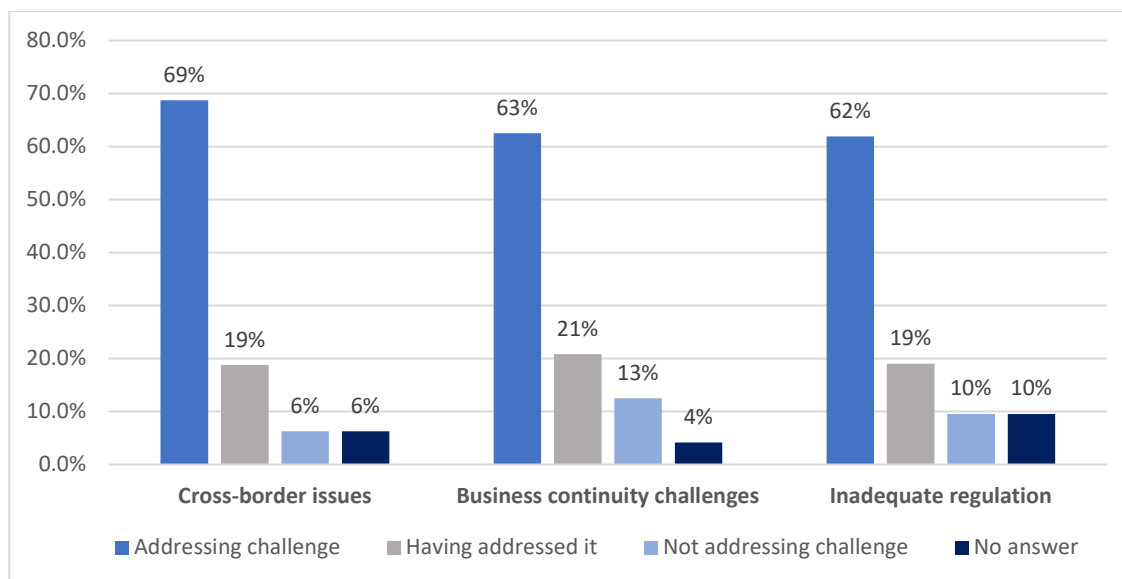
FIGURE 36: DIs’ ANSWERS ON WHETHER THEY ARE ADDRESSING FUTURE CHALLENGES



However, there are relevant discrepancies when analysing the answers provided for each challenge, as not all of them are receiving the same “attention” by DIs.

The topics of cross-border issues, business continuity challenges and inadequate regulation are being, or have been, addressed by more than 80% of those respondents which have identified them as a potential challenge for the near future, very closely followed by beneficiary accounts (79%). DIs which report having already addressed the latter include Ecuador, El Salvador, Hong Kong, Kazakhstan, Malaysia, Mexico, Mongolia, Norway, Switzerland and Uruguay.

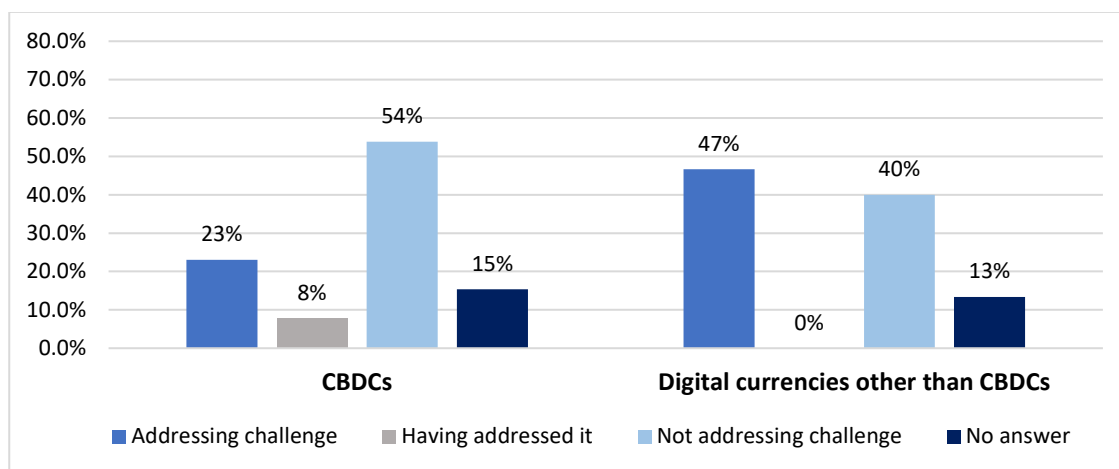
FIGURE 37: FUTURE CHALLENGES MORE FREQUENTLY ADDRESSED BY DIs



This could be explained by the fact that DIs have been aware of the challenges of cross-border issues and inadequate regulation for some time now, and that the relevance of business continuity challenges has been made very clear for DIs in recent times, either because they had to directly face the consequences of measures adopted by public authorities against the spread of Covid-19 (in some cases they even had to deal with reimbursement cases during that time) or because they have seen such impact on other DIs.

By contrast, CBDCs and digital currencies other than CBDCs have not yet been addressed by a substantial percentage of DIs, probably a consequence (as stated earlier in this paper) of a lack of clarity on their design, insurability and potential effect on DIs' ability to reimburse depositors promptly and efficiently.

FIGURE 38: FUTURE CHALLENGES LESS FREQUENTLY ADDRESSED BY DIs



Case study: Addressing beneficiary accounts (PIDM Malaysia)

Beneficiary accounts are one of the most frequently mentioned challenges for the near future of DIs, according to the results of the RTC survey. The main issue for DIs lies in the lack of sufficient information on the ultimate beneficiaries of such accounts.

One of the DIs which reported to have already addressed this issue is Perbadanan Insurans Deposit Malaysia (PIDM). PIDM provides protection to each of the beneficiaries in a trust account up to the coverage limit. Delays by trustees in providing beneficiaries' details will affect the beneficiaries deposit reimbursement entitlement and, to address this, PIDM issued *Guidelines on Deposit Information System and Submission (DISS)*, which require deposit-taking members (DTMs) to have the capabilities to maintain and update beneficiary information for trust accounts.

In operationalising the submission of beneficiaries' data for readiness testing and/or in an actual reimbursement, the following is envisaged:

- 1) PIDM requests the trust beneficiaries' data from the DTM;
- 2) The DTM in turn requests the information from the trustee; and
- 3) The trustee submits the information to the DTM for onward submission to PIDM in the mode of submission as set out in the DISS Guidelines.

Trustees, although not members of the DI, are obliged to submit beneficiaries' details at any date specified by PIDM, as provided for in the PIDM *Regulations on Disclosure requirements for Trust accounts and Joint accounts* issued in 2020.

PIDM is currently enhancing its reimbursement system to enable trustees to submit and provide the beneficiary details directly to the DI via the system, hence improving the efficiency and speed of reimbursement to the beneficiaries.

In an actual reimbursement, the trustee will be required to submit a Statutory Declaration (SD), signed by a duly authorised representative, to certify the accuracy of the information provided. PIDM will rely on the SD as a supporting document for processing the payout and will transfer the amount to the trust account holder for its onward payment to the beneficiaries.

Challenges are also opportunities: DIs have to deal with challenges in order to fulfil their mission and mandate. The need to address those challenges requires time and resources, but that effort might also have benefits in terms of improving the capacities and capabilities of DIs, should a reimbursement event occur, which is confirmed by responses to the survey.

TABLE 4: CHALLENGES WHICH ARE ALSO CONSIDERED AS OPPORTUNITIES FOR DIs

Identified challenge	% DIs identifying challenge that consider it an opportunity
Inadequate regulation / Legal constraints	81%
Electronic money	76%
Business continuity challenges	71%
Cross-border issues	69%
Average	64%
CBDCs	62%
Digital currencies other than CBDCs	60%
AML issues	60%
Beneficiary accounts	47%
Bank operation w/ deposit brokerage platforms	46%
Other	38%

In the information submitted, respondents highlight, in particular, the benefits of addressing some of the challenges.

DIs believe that addressing the aspects of applicable regulation that currently pose a burden on them could allow them to improve the framework and range of available actions to fulfil their mandate, and to adapt (or expand) the latter to better protect depositors.

Also, the efforts that have been (and still will be) made to face operational and business continuity challenges are enhancing DIs’ capabilities, in particular in terms of capacity building and development of IT systems, this being an area in relation to which some DIs specifically state to have increased their efforts in monetary terms.

Quite interestingly, respondents deem the rise of electronic channels and e-money to be an opportunity to (i) explore new payment methods which could speed up the reimbursement process and (ii) increase the awareness and confidence of depositors when the DI makes use of digital means in the course of reimbursements, both in communication and payment. An example of this is the development of mobile applications to perform reimbursement (such as the mobile app launched by Brazil FGC described below).

Case study – Challenges becoming opportunities

Brazil Fundo Garantidor de Créditos (FGC) - Development of a mobile app for the reimbursement of deposits

In October 2020, FGC launched its mobile app. Through it, individual depositors and investors of institutions that have undergone intervention or liquidation decreed by the Central Bank of Brazil can request payment of the guarantee directly via the app, receiving the corresponding amount in a bank account of their ownership and preference.

The development of the app took one year, and the process followed to reimburse depositors is summarised below:

- 1) Collect personal information from the depositor;
- 2) Collect and validate documents and face match: a business partner proceeds with background check, document validation with OCR (Optical Character Recognition) and face-match solutions, connected with the app;
- 3) Collect bank information from depositor for payment and check personal information with database provided by the liquidator;
- 4) The depositor accepts the subrogation terms;
- 5) Payment made by FGC through electronic transfer.

The app is suitable for both iOS and Android, and a tool (JMeter) is used to perform stress tests on its functionality and to monitor the progress of payouts. As of today, 34 versions of the app have been launched for iOS and 13 for Android.

The app has been used in a real reimbursement process. Although it was a small event (2,100 depositors), it was relevant that almost 98% of payments to depositors were made through the app, and that FGC could start the reimbursements two days after it received the list of creditors from the liquidator, as compared to an average of ten days in prior cases.

FGC is now in the process of increasing the scalability of the app for simultaneous access: at the beginning it could cope with 100 simultaneous payment requests through the app, which was sufficient for the last case, but the DI's plans include the performance of load tests with large volumes (over 10,000) and a possible migration of the application to a cloud environment with autoscaling.

7 Conclusions

One of the main missions of DIs as members of the financial safety net is to proceed with a swift reimbursement, should a reimbursement event take place. IADI CP 15 captures this goal, stating that the DI should be able to reimburse depositors promptly and efficiently, in order to contribute to financial stability.

DIs, however, have faced, and will face in the near future, challenges which pose obstacles to the fulfilment of that goal. Actually, for real events in the recent past (and this should be taken with caution, as the number of DIs who experienced real cases is limited), **a proportion of DIs, and maybe higher than could have been initially expected, report not to have been able to meet EC 1**, which states that they should reimburse most depositors within seven working days.

Following responses to the dedicated survey, **the challenge which has been more widely identified** among DIs as hindering their ability to perform a prompt and efficient reimbursement, **is the poor quality of the files containing depositor information (SCV files)**. Other relevant challenges come from DIs' IT systems and from the lack of access to and preparatory examinations of the reliability of depositor information and the ability of deposit takers to adequately produce those records (the latter being a challenge that can reasonably be linked to the quality of depositor data).

Deposit insurers have been active in the adoption of corrective measures and, for those measures which have been tested after implementation in simulations and/or subsequent real cases, DIs report that they have had a positive impact, in terms of allowing speedier and smoother reimbursements.

In the case of the poor quality of SCVs and considering the paramount importance of the accuracy of depositor data, an increase in the frequency or exhaustiveness of data reviews might prove useful to addressing this challenge, as well as the definition of a prescriptive format for smooth processing of that information by DIs' internal systems. However, some DIs do not have access to SCVs in "peace time". These DIs may consider approaching the appropriate authorities in order to gain access to such data and, in any case, authorities should be informed about this challenge and adopt the required measures to address it (e.g., by requiring the body which is in charge of the review of that information to implement a plan to improve the quality of data, or to establish such a procedure if no review of depositor information is being carried out in their jurisdiction).

The input given by respondents to the survey launched by the RTC also shows that **DIs are meeting other EC of IADI CP15 in different manners**.

In this vein, responses suggest that, in general, DIs have access to depositor information ahead of a reimbursement and offer a broad range of reimbursement options (EC 4 (a) and (c)). They also report applying the set-off principle in a timely manner where the applicable regulation allows (EC 8). A majority of DIs carry out an internal review of their performance once the reimbursement of deposits concludes (as provided for by EC 6), although a significant minority seems not to carry it out.

By contrast, DIs in general do not seem to make use of emergency/partial payments when there are delays in the reimbursement process (EC 3), and there is a relatively high proportion of DIs which do not perform simulations on a regular basis (EC 5(d)). **DIs should promote the performance of simulations**, a key element for testing their ability to compensate depositors and for identifying weaknesses and addressing them ahead of a real case. In fact, real data for payouts in recent years suggest a direct correlation between the performance of simulations and the ability of DIs to proceed with a swift reimbursement.

DIs are conscious about the future and are already considering in their internal preparations market developments and the **challenges they may face in the near future**. Business continuity challenges, e-money, and issues in the applicable regulation are those challenges for the near future which have been more widely identified by DIs, and responses indicate that the operations of the failed bank with DBPs might also have a serious impact on the reimbursement process. One of the main challenges of the DBPs comes from the risk that the DI does not have information about the depositors who are really entitled to the compensation. This issue is to some extent comparable to the case of beneficiary accounts, which have also been frequently

identified as one of the challenges for the near future but, in fact, are already posing challenges for some DIs today.

On the whole, a diversity of challenges has affected and will be affecting DIs in the future, putting pressure on their ability to reimburse insured depositors promptly and efficiently, one of their key missions. DIs are not passive to those challenges, and they are not only enhancing their capabilities as a response to them but are also considering market developments which may pose a risk for the future in their preparations for an effective reimbursement. There is, in any case, room for improvement, as real cases and reports from DIs themselves indicate that some of the actions/EC set out in CP15 are still met unequally by the DI community.

Appendix A – Survey Instrument

<https://www.ebis.org/rooms/IADI/reptool/survey/SitePages/Home.aspx>

Appendix B – List of Respondents to the Survey

Respondent	Country
Albanian Deposit Insurance Agency	Albania
Armenian Deposit Guarantee Fund	Armenia
Fundo Garantidor de Créditos – FGC	Brazil
The Cooperative Credit Guarantee Fund - FGCoop	Brazil
Bulgarian Deposit Insurance Fund (BDIF)	Bulgaria
Canada Deposit Insurance Corporation	Canada
Central Deposit Insurance Corporation (CDIC)	Chinese Taipei
FOGACCOOP	Colombia
Fondo de Garantías de Instituciones Financieras (FOGAFIN)	Colombia
Deposit Insurance, Liquidity Fund and Private Insurance Fund Corporation - COSEDE	Ecuador
Instituto de Garantía de Depósitos	El Salvador
Fonds de Garantie des Dépôts et de Résolution (FGDR)	France
Compensation Scheme of German Private Banks (EdB)	Germany
Hellenic Deposit and Investment Guarantee Fund (TEKE)	Greece
Hong Kong Deposit Protection Board	Hong Kong
Deposit Insurance and Credit Guarantee Corporation	India
Indonesia Deposit Insurance Corporation	Indonesia
Fondo Interbancario di Tutela dei Depositi - FITD	Italy
Jamaica Deposit Insurance Corporation	Jamaica
Deposit Insurance Corporation of Japan	Japan
Jordan Deposit Insurance Corporation	Jordan
Kazakhstan Deposit Insurance Fund (KDIF)	Kazakhstan
Deposit Insurance Fund of Kosovo (DIFK)	Kosovo
Deposit Protection Agency of the Kyrgyz Republic	Kyrgyz Republic
Malaysia Deposit Insurance Corporation (PIDM)	Malaysia
Institute for the Protection of Bank Savings (IPAB)	Mexico
Baatarsuren Sukhbaatar	Mongolia
Deposit Protection Fund Montenegro	Montenegro
Société Marocaine de Gestion des Fonds de Garantie des Dépôts Bancaires	Morocco
Norwegian Banks' Guarantee Fund	Norway
Bank Deposits Insurance Scheme	Oman
Deposit Protection Corporation (DPC)	Pakistan
Palestine Deposit Insurance Corporation (PDIC)	Palestine
Philippines Deposit Insurance Corporation (PDIC)	Philippines
Autorité des marchés financiers	Québec (Canada)
Fondul de garantare a depozitelor bancare (FGDB) Bank Deposit Guarantee Fund	Romania
Depositors Protection Fund	Saudi Arabia
Deposit Insurance Agency	Serbia
Korea Deposit Insurance Corporation	South Korea
Fondo de Garantía de Depósitos de Entidades de Crédito (FGD)	Spain
esisuisse - deposit insurance of Switzerland	Switzerland
Deposit Protection Agency (DPA)	Thailand
Deposit Insurance Corporation Trinidad and Tobago	Trinidad and Tobago
Savings Deposit Insurance Fund	Turkey
Deposit Protection Fund of Uganda	Uganda
Financial Services Compensation Scheme	United Kingdom
COPAB	Uruguay
Federal Deposit Insurance Corporation	USA
Deposit Insurance of Vietnam	Vietnam
Deposit Protection Corporation Zimbabwe	Zimbabwe
West African Monetary Union Deposit Insurance Fund	

Appendix C – Literature Reviewed

IADI publications

RTC members used the following IADI publications, among others, as a relevant source of information and analysis:

- 1) Defina, R. (2021). Effective Reimbursement Systems and Processes, IADI [Policy Note](#) No.1, International Association of Deposit Insurers, June 2021
- 2) IADI [General Guidance](#) for Developing Effective Reimbursement Systems and Processes, International Association of Deposit Insurers, October 2012
- 3) IADI [Enhanced Guidance](#) for Effective Deposit Insurance Systems: Reimbursement Systems and Processes, International Association of Deposit Insurers, November 2012
- 4) Van Roosebeke, B. and Defina, R. (2022). [Deposit Insurance in 2022, Global Trends and Key Emerging Issues. IADI Deposit Insurance Report](#), International Association of Deposit Insurers, February 2022
- 5) Defina, R. (2021). The Geographic Dynamics of Deposit Insurance, IADI [Policy Brief No. 2](#), International Association of Deposit Insurers, April 2021

Other publications

- 1) Blair, C.E., Carns, F. and Kushmeider, R. (2006). Instituting a deposit insurance system: Why? How? *Journal of Banking Regulation* 8(1):4-19.
- 2) Hillrichs, D. (2014). [Deposit Insurance: Reimbursement of Depositors](#). CESifo DICE Report.
- 3) Nolte, J. and Khan, I. (ed.) (2017). [Deposit Insurance Systems: Addressing Emerging Challenges in Funding, Investment, Risk-Based Contributions and Stress Testing](#). World Bank Group.
- 4) Nolte, J., Rawlins, M. (2017). [Challenges in Building Effective Deposit Insurance Systems in Developing Countries](#). World Bank Group.
- 5) FDIC, [Reimbursing Depositors](#). Guidance for Developing Effective Deposit Insurance Systems.

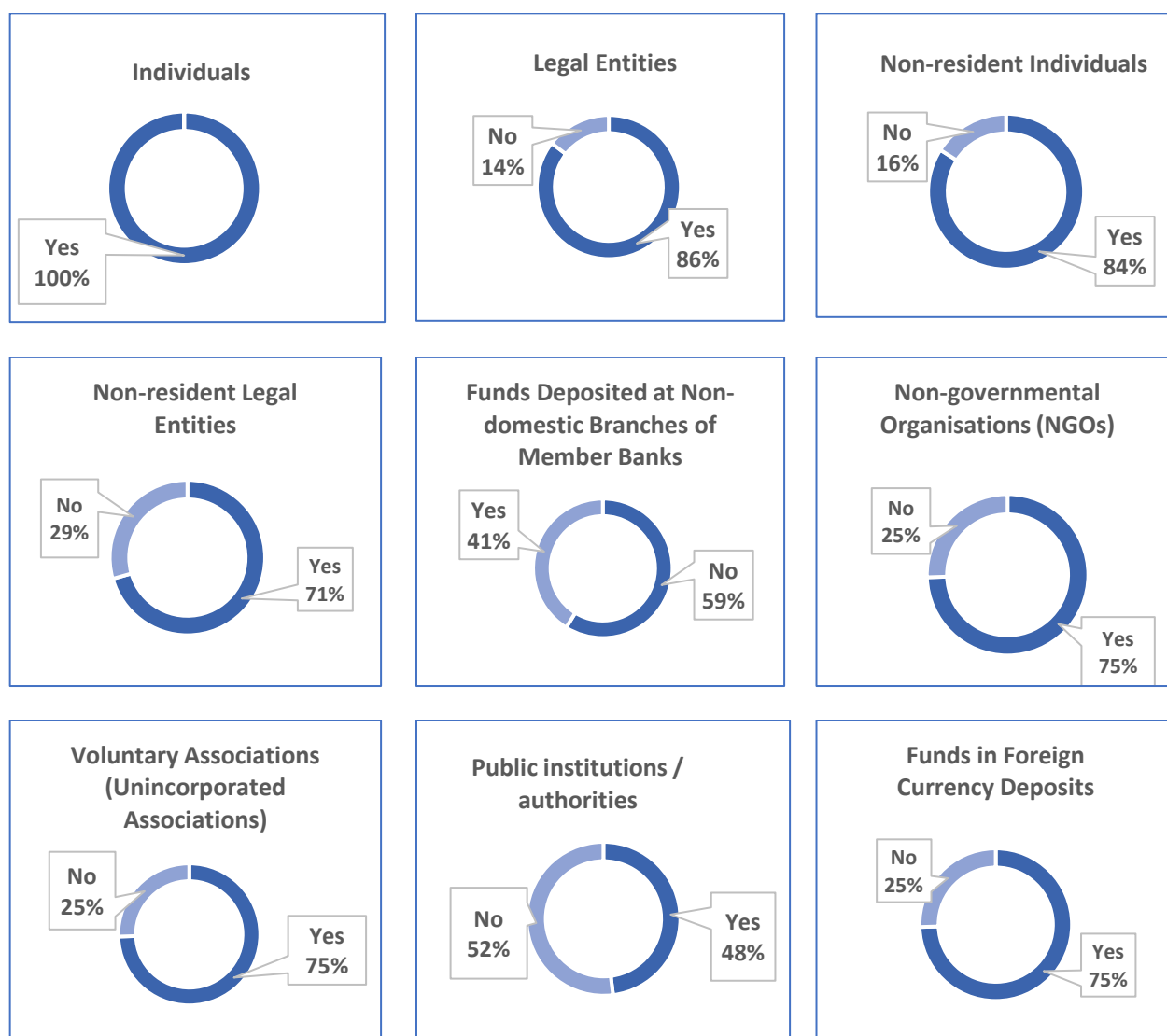
Appendix D – Additional Information obtained from Responses to the Survey

1. Types of eligible deposits

All responding DIs cover deposits made by natural persons, and the coverage offered by 86% of them additionally includes deposits made by legal entities. Also, 16% do not cover non-resident natural persons, while the proportion of DIs which do not insure non-resident legal entities is higher, reaching 29%. In general, deposits made by banks and financial institutions are not covered by respondents, with exceptions (e.g., in Ecuador, the legislation provides coverage for all types of depositors as long as the financial institution is legally constituted in Ecuador and controlled by the respective superintendence).

Coverage of public institutions / authorities, non-governmental organisations (NGOs) and voluntary associations (unincorporated associations) among responding DIs is 48%, 75% and 75% respectively, with certain specificities, for example, in the case of public authorities (in Spain, UK and other European countries which cover public authorities, the DIs only insure public institutions / authorities with annual budgets not exceeding EUR 500,000).

FIGURE 39: TYPES OF ELIGIBLE DEPOSITORS



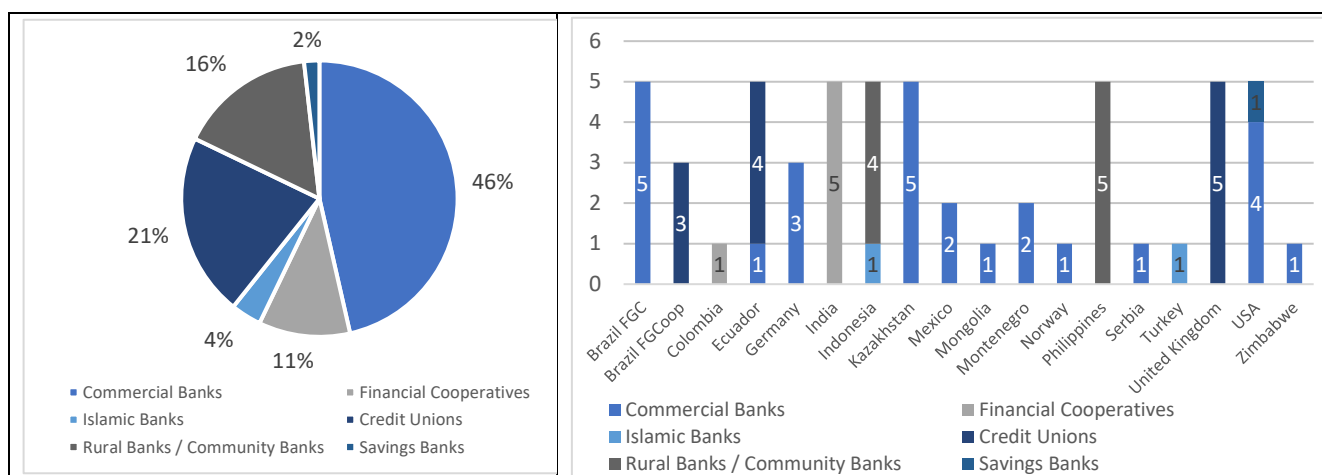
A majority of responding DIs do not cover deposits which are placed with non-domestic branches of member institutions (59%), while the remaining 41%, mostly European, protect funds of eligible depositors deposited at non-domestic branches of member banks (in the EU, most DIs which protect funds at non-domestic branches

only do so if they are placed with EU branches of member deposit takers). Finally, DIs which grant coverage to deposits in foreign currency represent 75% of total respondents.

2. Legal form of deposit takers in reported reimbursement cases in 2016-2021

A significant proportion of the 56 reimbursement cases on which information on the legal form of deposit takers was reported refer to commercial banks (46%), with credit unions reaching 21% and rural/community banks representing 16%. The remaining institutions belong to financial cooperatives, Islamic banks and savings banks.

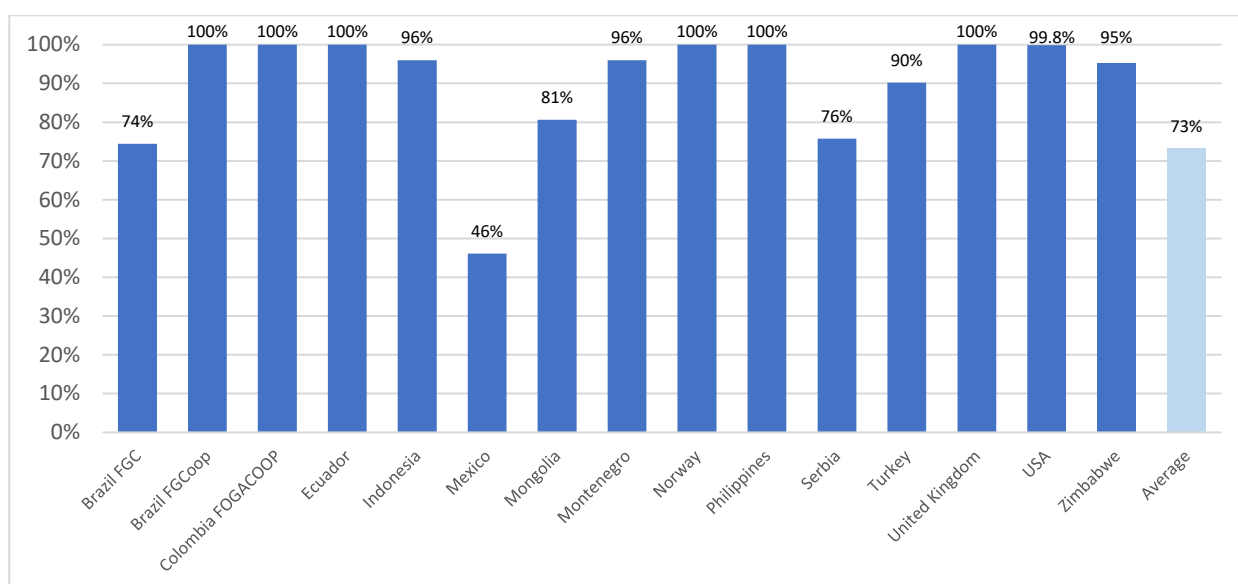
FIGURE 40: LEGAL FORM OF DEPOSIT TAKERS IN EXPLORED REIMBURSEMENT CASES



3. Eligibility of depositors of banks with reimbursement cases in 2016-2021

According to the information available from 15 DIs on 43 cases with a total of 2.7 million insured depositors which took place between 2016 and 2021, an average of 73% of all depositors of affected institutions were insured. In most cases, this percentage is higher, although one DI which had two cases which comprised 24% of the insured depositors of the analysed events reduces the global average:

FIGURE 41: PERCENTAGE OF INSURED DEPOSITORS IN EXPLORED REIMBURSEMENT CASES

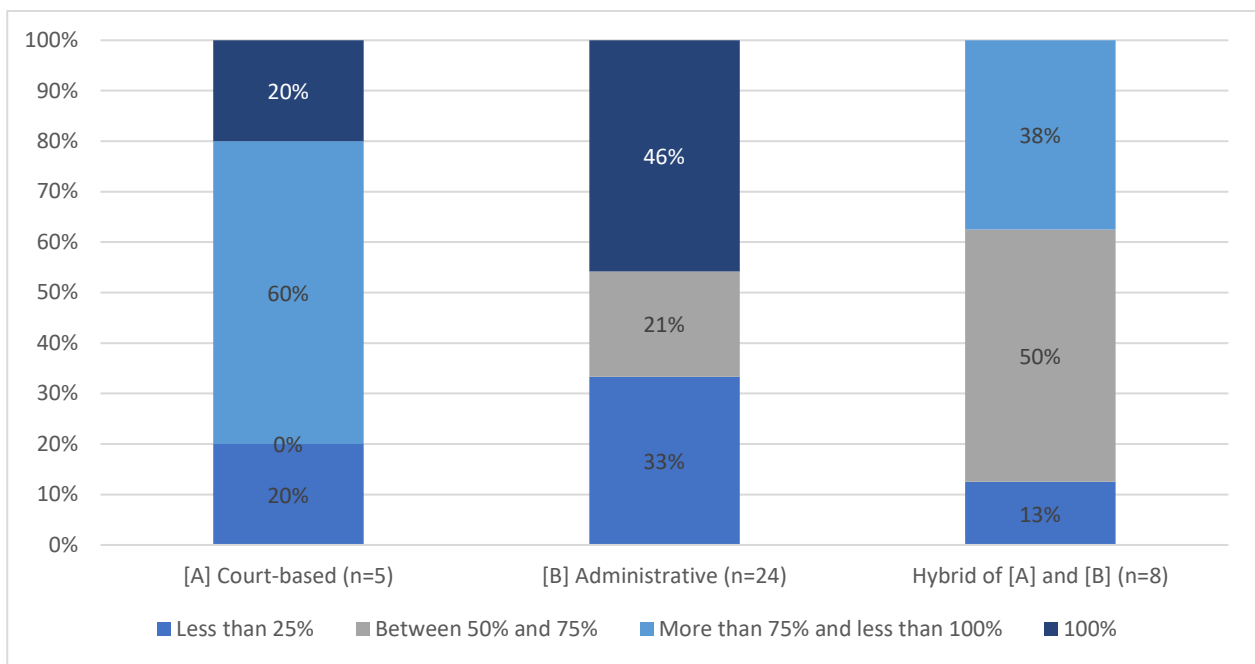


4. Correlation between other elements and the time required to reimburse depositors in real cases 2016-2021

The RTC explored the potential correlation between other elements from those shown in Section 3 and the speed of DIs in completing reimbursement. As mentioned in that Section, findings obtained must be interpreted with caution, given the limited number of real cases in relation to which sufficient information is available.

One of the elements explored is the **type of bank insolvency proceedings**, with the purpose of verifying whether a court-based, administrative, or hybrid insolvency procedure might impact the swiftness of a DI’s reimbursement procedure. However, the survey results²⁶ do not show a clear relationship between the type of bank insolvency proceedings and the swiftness of the DI reimbursement.

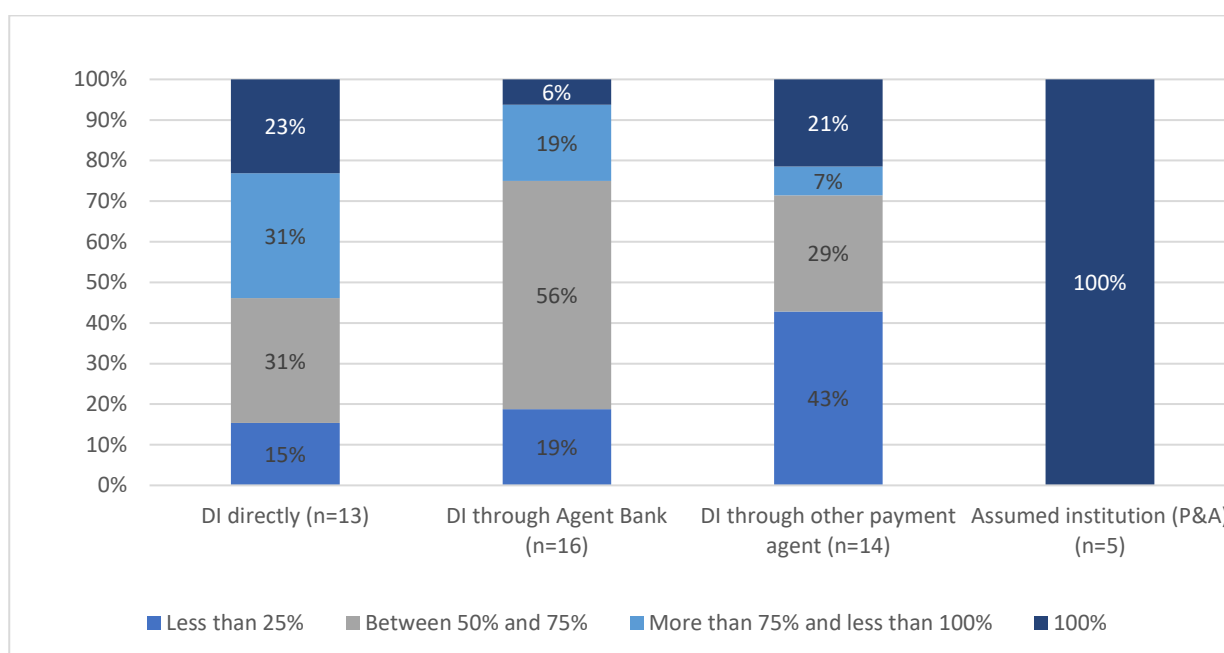
FIGURE 42: PERCENTAGE OF INSURED DEPOSITORS HAVING ACCESS TO THEIR FUNDS WITHIN SEVEN WORKING DAYS DEPENDING ON THE TYPE OF INSOLVENCY PROCEDURE



Another element that was explored to investigate its potential correlation with the speed of reimbursement was the **institution which depositors accessed / received their funds from**.

²⁶ Results based on 37 reimbursements performed by 13 DIs (3 DIs reported having “court-based”, 7 “administrative”, and 3 “hybrid of court-based and administrative” insolvency procedures).

FIGURE 43: PERCENTAGE OF INSURED DEPOSITORS HAVING ACCESS TO THEIR FUNDS WITHIN SEVEN WORKING DAYS DEPENDING ON PAYING INSTITUTION



Excluding P&As (which have distinct characteristics from those of reimbursements to depositors), the survey results²⁷ suggest no clear relationship between the institution from which depositors received their funds and the percentage of depositors being able to access their funds within seven working days. Though at first sight the graph summarising results could seem to suggest that compensation by the DI itself may lead to a faster reimbursement than the use of an agent bank or other payment agents, a detailed analysis of the answers reveals that the payment institutions may not be the explaining factor.

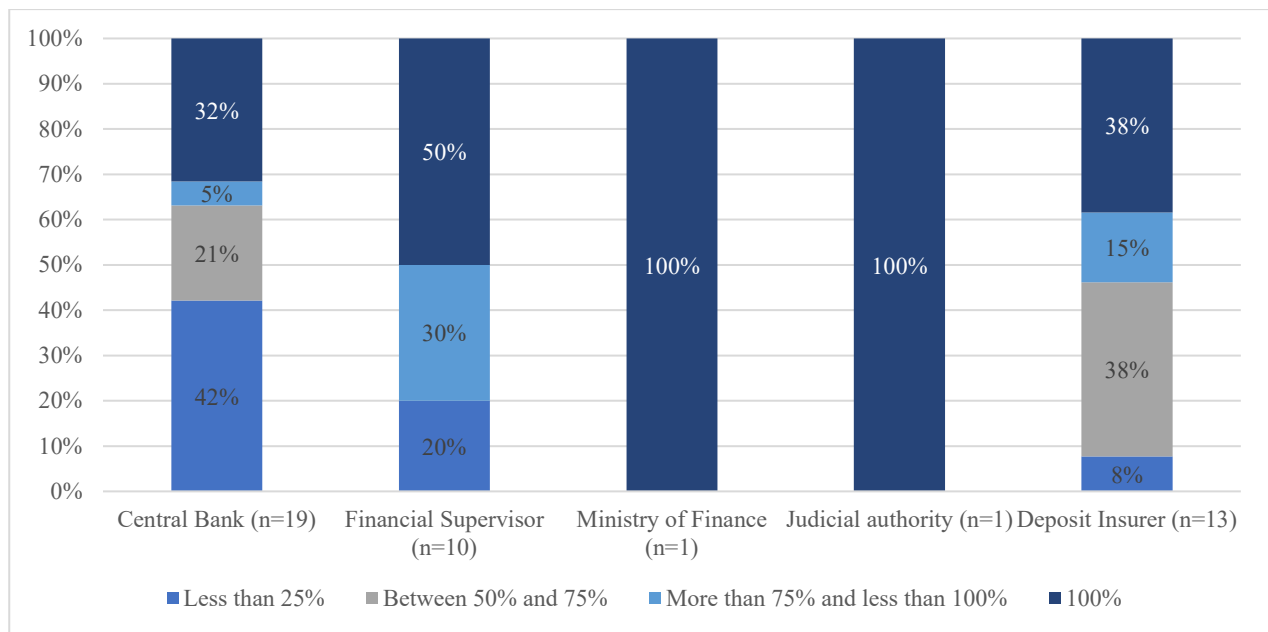
As an example, with one exception, in all cases where the DI reports that less than 25% of insured depositors had access to their funds within seven working days, the DI had not started the payout process at all within that timeframe. On the other hand, in all cases in which DIs report that the payout process was initiated within four days, they state that all insured depositors had their funds available on the seventh working day, regardless of whether the payment was made by the DI itself or by an agent.

The RTC also reviewed the potential correlation between the **authority/organisation which is empowered to trigger the reimbursement** and the time required by the DI to make funds available to insured depositors. This authority or organisation varies across jurisdictions. The survey results²⁸ do not suggest any clear correlation in this sense. We note that where a DI itself has the power to trigger reimbursement, in the cases analysed this does not seem to have an impact on the speed of the reimbursement process.

²⁷ Responses obtained on 37 cases from 13 DIs; 4 of them responded “DI directly”, 5 responded “DI through Agent Bank”, 3 responded “DI through other payment agent”, and 1 responded “Assumed institution (in P&A)”. One DI reported in one case both “DI directly” and “DI through Agent Bank”, and another DI reported in 5 cases “DI directly”, “DI through Agent Bank” and “DI through another payment agent”. Therefore, the sample size is 39 in this graph.

²⁸ Results based on 32 cases reported by 12 DIs. Of those, 4 responded that the authority entitled to trigger the reimbursement is the Financial Supervisor, while another 3 DIs reported that the Central Bank is the authority in charge of triggering reimbursement. In 2 cases the DI itself is the organisation which makes that decision. The remaining 3 respondents indicated that more than one organisation is entitled to trigger the reimbursement in their jurisdictions. As the latter had several cases, for the purposes of the analysis the total number of elements used is 44 (cases where more than one organisation is entitled to trigger reimbursement are repeated).

FIGURE 44: PERCENTAGE OF INSURED DEPOSITORS HAVING ACCESS TO THEIR FUNDS WITHIN SEVEN WORKING DAYS DEPENDING ON ORGANISATION TRIGGERING THE REIMBURSEMENT



Appendix E – Reimbursement Technical Committee Members

Name	Organisation
Borja Peletero (Chairperson)	Fondo de Garantía de Depósitos de Entidades de Crédito (FGD)
Adalzon Banogon	Philippine Deposit Insurance Corporation
Baasandulam Dorjderem	Deposit Insurance Corporation Mongolia
Bert Van Roosebeke	IADI Secretariat
Catherine Chou	Central Deposit Insurance Corporation, Chinese Taipei
Emma McAllister	Financial Services Compensation Scheme (FSCS)
Esther McCarthy Mills	Deposit Insurance Corporation, Trinidad Tobago
Martin Boegl	The Association of German Banks
Masahiro Ogawa	Deposit Insurance Corporation of Japan
Mohamed Mahraoui	Moroccan Deposit Insurance Corporation
Ramadhian Moetomo	Indonesia Deposit Insurance Corporation
Tormod Skjærpe	Norwegian Banks' Guarantee Fund
Vladimir Medan	Deposit Insurance Agency of Serbia