Uninsured Deposits: Relevance and Evolutions Over Time

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UNINSURED DEPOSITS
RELEVANCE AND EVOLUTIONS OVER TIME

Executive summary

Coverage levels

- Deposit insurance coverage levels vary significantly across G20 economies, both in nominal size and when expressed as a percentage of per capita GDP. Given variances in the distribution of deposits, nominal coverage may not be an optimal metric when investigating the relevance of uninsured deposits.

Coverage ratio by depositors

- Globally, deposit insurers fully cover the deposits of a very high share of depositors. On a global scale, this ratio is 98% of depositors and has been consistently high since 2015. In most G20 economies, the share of depositors fully covered by deposit insurance exceeds or is equal to the global median. Data collected by IADI suggest that deposit insurers with a pay-box mandate demonstrate the lowest median coverage ratio per depositor.

Coverage ratio by value of deposits

- Deposit insurers cover approximately 41% of total eligible deposits globally. Conversely, 59% of deposits are uninsured. Generally speaking, the more advanced an economy, the higher the coverage ratio of total deposits covered by deposit insurance.
- Coverage ratios per deposit value vary significantly between regions, both globally and within G20 economies. The highest coverage ratios are found in Europe and North America when applying IADI regional affiliations. IADI data also suggests that deposit insurers with a narrow pay-box mandate demonstrate a lower median coverage ratio per value of deposits compared to broader mandates.
- Due to the prevalence of deposits not eligible for deposit insurance within a number of regions, coverage ratios of eligible deposits may overestimate deposit insurance coverage. Coverage ratios of total deposits are markedly below coverage ratios for eligible deposits in these regions.
- Deposit insurers cover approximately 33% of total deposits globally. Regional observations on coverage ratios for total deposit values mirror those on eligible deposits, but the delta between both is relevant to regions in varying degrees.

Outlook

This global stock-taking of deposit insurance coverage ratios may offer a good first proxy for estimating the relevance of uninsured deposits. However, it is important to realise that the IADI Core Principles for Effective Deposit Insurance Systems (Core Principles) as global standards for deposit insurance focus on aggregated coverage ratios. Despite overall compliance with these standards by a jurisdiction, the share of deposits not covered by deposit insurance at a number of individual banks within this jurisdiction may be very high, which may give rise to increased bank-run risks. Deposit insurance standards currently do not explicitly account for this risk, which is implicitly assumed to be dealt with by prudential regulation and/or supervision. Ongoing research may offer further insights.

Building on this stock-taking exercise, ongoing research will look into measures applied across the globe by deposit insurers that may help manage the risk of sudden and massive withdrawals by uninsured depositors. These will include the use of differentiated coverage levels, including temporary high balances, high and/or blanket coverage for payment and settlement accounts and voluntary top-up coverage levels.

1 Introduction

Recent turmoil in financial markets has fuelled discussions about the role of deposit insurance and appropriateness of prevailing coverage. The March 2023 failures of Silicon Valley Bank and Signature Bank were especially subject to fast and large-scale deposit withdrawals. Digital payment innovation and highly concentrated depositor structures within these banks are likely to have contributed to this. Moreover, at both banks, a very high share of deposits surpassed the Federal Deposit Insurance Corporation (FDIC) coverage limit of USD 250,000 and were thus uninsured.[1]

Even if unlikely to suffer a full write-down in case of bank failure, uninsured depositors may have a rational incentive to withdraw deposits and run on the bank when failure is imminent. By withdrawing funds, "first-runners" aim at securing immediate and full access to their deposits. Recent research by Weinstein & Muradoglu (2023) in seven jurisdictions offers empirical evidence suggesting that awareness of deposit protection reduces the odds of a bank run by about 65%. However, the literature also suggests that during periods of financial stress, the likelihood of a bank run by uninsured depositors is higher compared to insured depositors.[2]

This IADI Policy Brief aims at informing discussions by presenting global data on the prevalence of uninsured depositors as well as deposits. Making use of IADI's multi-year data repository on deposit insurance, we present trends on uninsured depositors and total deposits based on DI mandates, regions, and levels of economic advancement.

2 Empirical insights on deposit insurance coverage

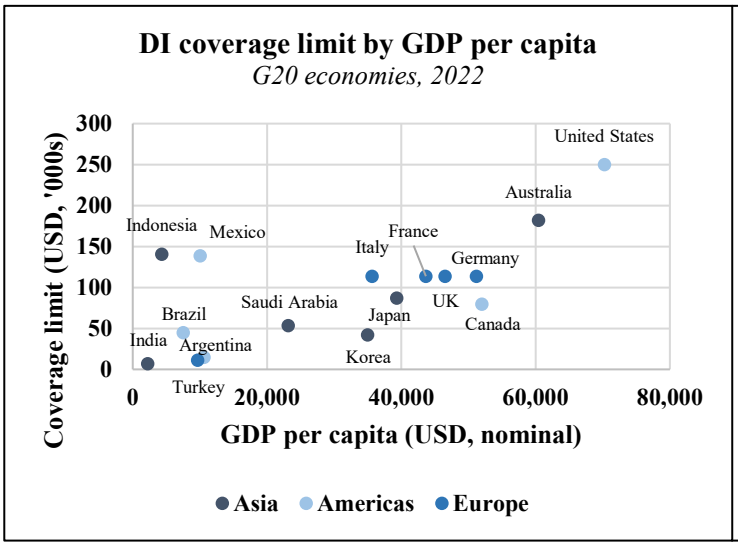
Deposit insurance (DI) coverage can be analysed across jurisdictions through numerous well-established metrics. Each of these has been collected via the IADI Annual Survey for over a decade now.[3] The various coverage ratios each offer a sense of the relative size of DI coverage after taking the banking sector's size into account. We will make extensive use of these throughout the paper. They include:

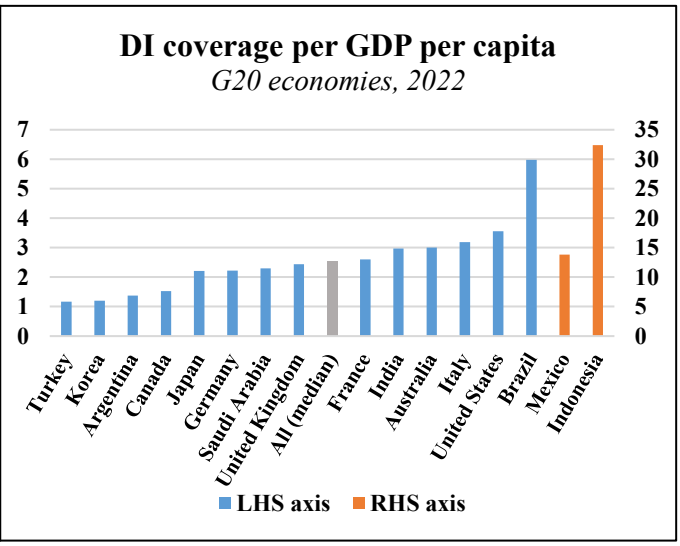
- **Coverage level** (or 'limit'): The maximum level of deposit insurance coverage legislated. Usually, this level is specified per depositor per deposit taking institution. Account balances exceeding this limit only receive coverage up until the limit. Whilst specified in domestic currency in almost all instances, conversion to a common currency (EUR, USD or other major currency) can assist in enabling comparisons. Differences in economic prosperity and the related volume of deposits significantly lowers the usefulness of comparing nominal coverage levels globally. For this reason, coverage levels are often put in relation to GDP per capita.
- **Coverage ratio** (by *account or depositor*): The number of fully covered accounts/depositors divided by the total number of eligible accounts/depositors. This measure is useful in measuring the impact on low balance depositors in the event of a given bank failure. Coverage levels are typically selected such that the coverage ratio (by depositor) is very high, usually exceeding 90%.
- **Coverage ratio** (by *value*): An aggregate measure that expresses the total stock of deposits fully covered by deposit insurance as a share of total deposits at member institutions that are eligible for deposit insurance. A common alternative compares against total deposits – including deposits that are non-eligible, i.e. that fall outside of the scope of DI coverage. This measure is useful in assessing whether broader financial stability implications may be incurred in the event of a given bank failure.

[1] According to Hayes (2023), the share of uninsured deposits at Silicon Valley Bank was 93.8% and at Signature Bank 89.3%.
[2] Davenport and McDill (2006); Iyer, Puri & Ryan (2016); Iyer, Jensen, Johannesen & Sheridan (2016); Martin, Puri & Ufier (2018)
[3] These metrics are also included in the IADI VIDA dashboards. Access to members is available through the IADI Data Warehouse (login credentials required).

2.1 Coverage levels

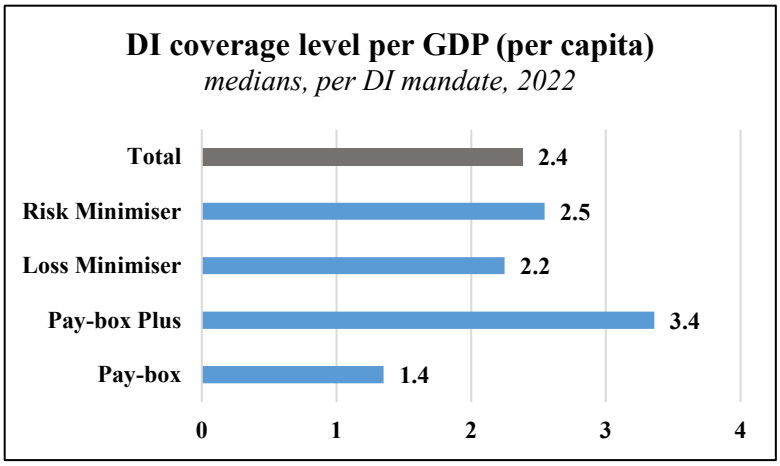
Deposit insurance coverage levels vary significantly across G20 economies, both in nominal size and when expressed as a share of domestic GDP per capita[4]. G20 median coverage is 2.5 times per capita GDP, which is in line with earlier findings by IADI.[5] The highest such coverage levels are found in Indonesia (32.4%) and Mexico (13.8%).





Earlier IADI work[6] found that across deposit insurers from 53 jurisdictions, coverage levels per GDP per capita were highest in Latin America (median: 5.2), followed by Europe (2.8), Africa (2.3), North America and Caribbean (1.6) and Asia-Pacific (1.4).

Over all deposit insurers, and confirming earlier IADI data[7], those with a pay-box mandate tend to offer the lowest coverage as GDP per capita (1.4). Pay-box plus deposit insurers offer a markedly higher coverage (3.4) and risk minimisers as well as loss minisers are comparable in coverage offered.

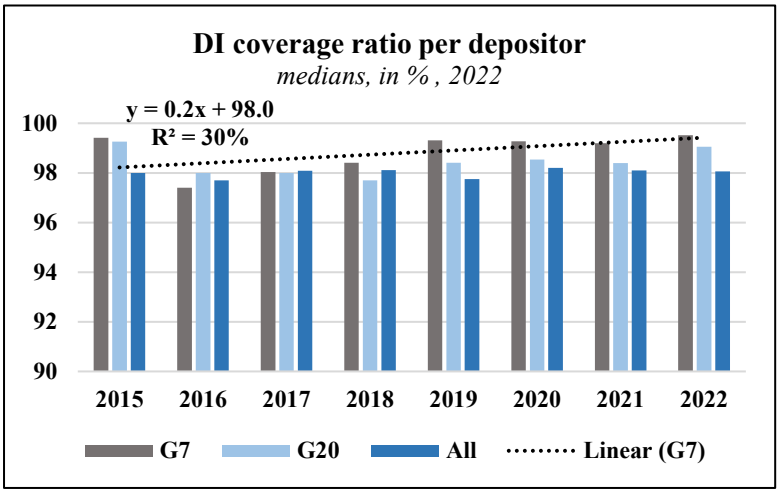


Distributional effects limit the meaningfulness of using coverage expressed as a percentage of per capita GDP as a metric for the share of deposits uninsured by deposit insurance.[8, 9] For these reasons, in the following, we will focus on the coverage ratios offered by deposit insurance. The coverage ratio per depositor as well as per value of

[4] GDP per capita figures sourced from publicly available World Bank databases.
[5] IADI (2021) found – for a broader sample of deposit insurers – median values of 2.3 times GDP/capita and average values of 3.6 times GDP/capita (and 2.66 times GDP/capita when excluding outliers).
[6] IADI (2021), p. 13
[7] Id.
[8] Unless stated otherwise, data displayed in this paper was supplied by and refers to the following deposit insurers: SEDESA (Argentina), APRA (Australia), FGC (Brazil), CDIC (Canada), FGDR (France), EDB (Germany), DICGC (India), IDIC (Indonesia), FITD (Italy), DICJ (Japan), KDIC (Korea), IPAB (Mexico), SAMA (Saudi Arabia), TMSF (Turkey), FSCS (UK), FDIC (USA). Data is taken from the IADI Annual Survey, and the years mentioned refer to the year in which the survey was conducted. Data is as of 31 December of the preceding year.
[9] These graphs do not include a number of domestic peculiarities. Most European Union members offer additional coverage beyond the coverage limit for "temporary high balances", e.g. when high deposits relate to a real estate transaction. This will often lead to fivefold increase of coverage for a limited period of time but is relevant to small share of depositors only. Also not included is the full coverage offered by DICJ (Japan) for deposits for payment and settlement purposes, in addition to the coverage level of JPY 10 million for other deposits. The same goes for additional coverage offered beyond legislation coverage levels by voluntary schemes, e.g. in Germany. Other jurisdictions also protect deposits based on multiple ownership categories e.g. at the federal level in Canada.

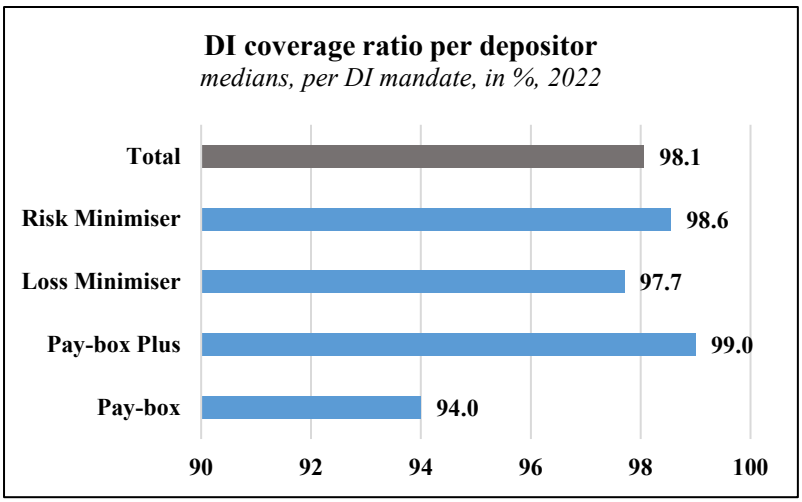
deposits offer a more adequate picture of the size and scope of actual deposits on balance sheets that are not covered by deposit insurance.

2.2 Coverage ratios by depositors



Globally, deposit insurers fully cover deposits of a very high share of depositors. On a global scale, this ratio has been consistently very high since 2015.[10] This is consistent with the "cover the large majority of depositors" requirement in the IADI Core Principles (CP8). In 2022, the median global coverage ratio (by depositor) was 98%. Variation between more and less advanced economies is limited, but coverage ratios seem to increase with the state of advancement of economies. G7 coverage ratios tend to exceed those in G20 economies, which again exceed the global median. Although the last four years show a cumulative increase in coverage ratios by depositor within G7 and G20 jurisdictions, amounting to just over one percentage point, this change is statistically insignificant.[11]

In most G20 economies, the share of depositors fully covered by deposit insurance exceeds or is equal to the global median. The United States, Brazil, Mexico and Indonesia fully cover more than 99% of depositors or accounts. Turkey forms the lower bound of the G20, but still fully covers 92% of accounts. For deposit insurers in numerous jurisdictions (including Argentina, Korea, France, Germany and UK), data on this coverage ratio is not available.

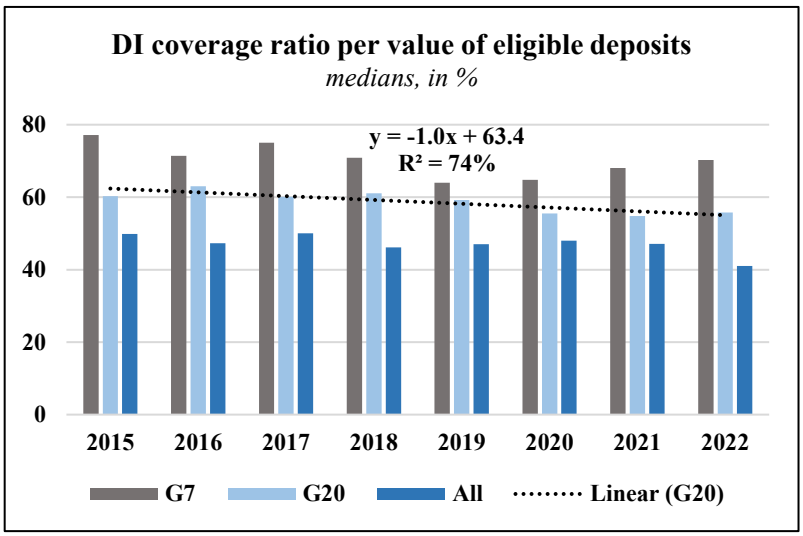


Data collected by IADI[12] suggest that deposit insurers with a pay-box mandate demonstrate a lower median coverage ratio per depositor. Coverage ratios of deposit insurers with a pay-box plus, loss minimiser or risk minimiser mandate are all very similar to the global median. It remains to be investigated whether this picture is biased, e.g. by a lack of data availability on this particular issue for pay-box deposit insurers. In addition, a number of deposit insurers with broader mandates may function within the context of financial cooperatives. In these instances, institutional protection schemes in a number of jurisdictions may report a 100% coverage ratio.

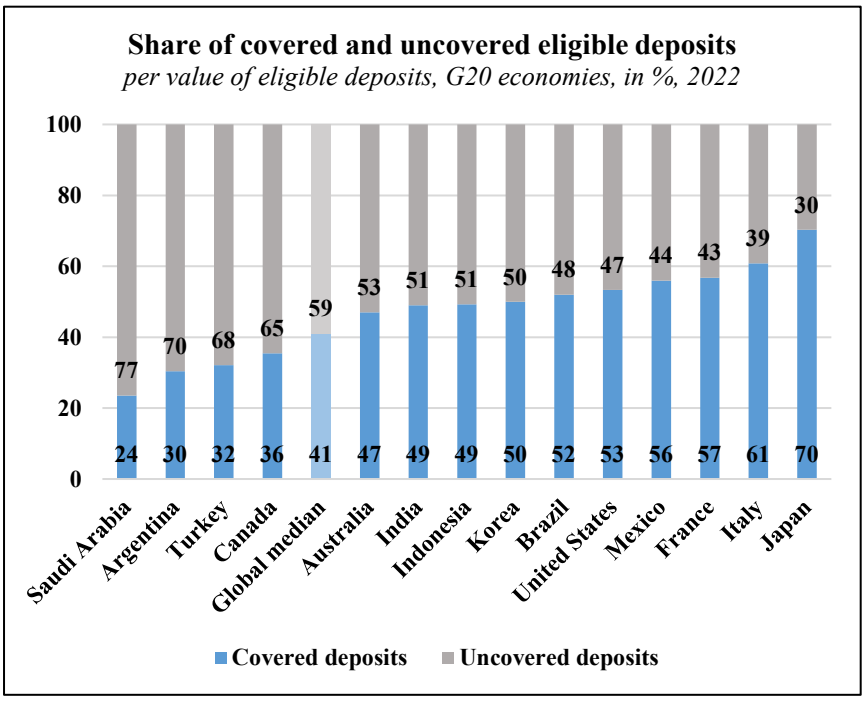
[10] Coverage ratios are best analysed within the context of the broader deposit insurance system.
[11] Regression for G7 coverage ratios presented in the chart does not infer a statistically significant linear trend – the p value of 17% is not significant at the 5% Type I error rate. Similar findings hold for G20 coverage ratios.
[12] These metrics are also included in the IADI VIDA dashboards, which build upon IADI Annual Survey data. Access to members is available through the IADI Data Warehouse (login credentials required).

2.3 Coverage ratios by value of deposits

Expressed as a global median, deposit insurers cover around 41% of the value of deposits. Conversely, 59% of deposits are uninsured. For G7 economies, this ratio of covered deposits has fallen from 77% to 70% over the past eight years. For all economies the reduction is from 50% to 41%. However, neither reduction is statistically significant.[13]. G20 jurisdictions have experienced a one percentage point reduction per annum of coverage ratios over the sample window to 56% in 2022, which is statistically significant.[14] This may be linked to the COVID-19 related increase in deposit growth[15] and the general lack of changes in coverage levels globally.[16]



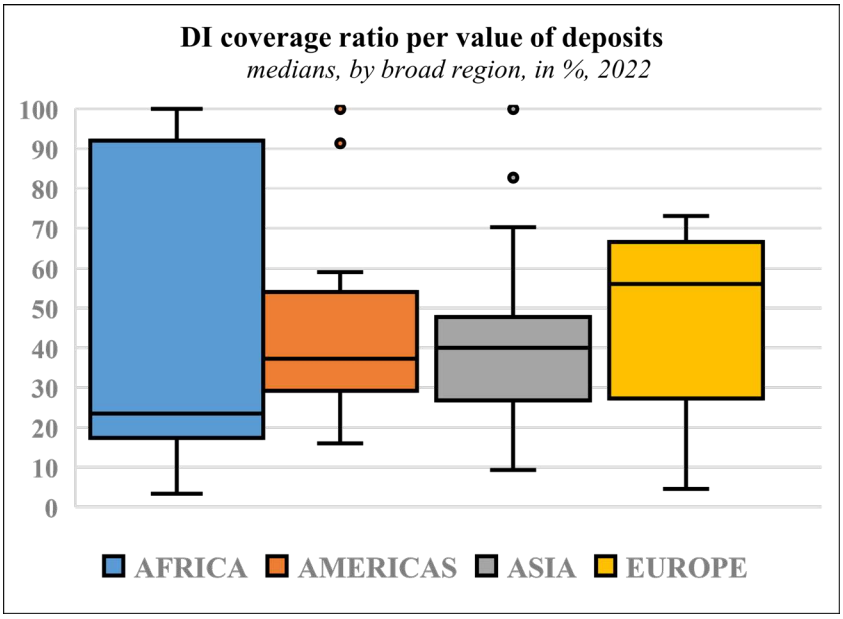
Generally speaking, the more advanced an economy, the higher the coverage ratio per value of deposits covered by deposit insurance. Median coverage ratios (by value) in G7 jurisdictions exceed that of G20 jurisdictions which subsequently tend to exceed coverage ratios in all jurisdictions.

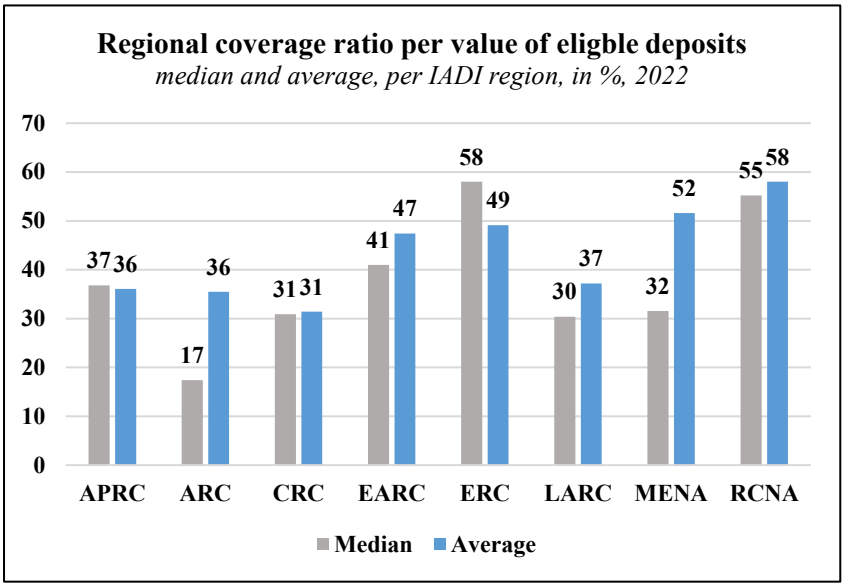


However, also within G20 economies, the share of deposits not covered by deposit insurance varies significantly around the global median.[17] Shares of uninsured deposits are markedly low in Italy and Japan with approximately one third of deposits not covered. Conversely, Saudi Arabia, Argentina and Turkey exhibit the highest levels of deposits not covered by the deposit insurance framework.

[13] For G7 jurisdictions: The slope (year) coefficient has a p value of 8% which is not significant at the 5% Type I error rate. For all jurisdictions: The slope (year) coefficient has a p value of 9% which is not significant at the 5% Type I error rate.
[14] For G20 jurisdictions: The slope (year) coefficient has a p value < 0.1% which is significant at the 5% Type I error rate.
[15] Defina and Van Roosebeke (2022) find evidence that quarterly growth of covered deposits has shifted upwards by 1.5 %-points during the six quarters of the pandemic.
[16] Van Roosebeke & Defina IADI (2023), p. 10-11
[17] A number of jurisdictions exhibit multiple deposit insurers. Figures from the United States include the Federal Deposit Insurance Corporation only, in Canada the Canada Deposit Insurance Corporation only, in Japan the Deposit Insurance Corporation of Japan only, in Italy the Fondo Interbancario di Tutela dei Depositi only, in Mexico the Instituto para la Protección al Ahorro Bancario. French coverage ratios are estimates by the authors. They relate data on covered deposits by the Fonds de Garantie des Dépôts et de Résolution (FGDR) to Banque de France data on overall bank deposits. The latter were reduced by the proportion of state guarantied saving products (Livrets A, Livrets de développement durable et solidaire and Livrets d'Épargne Populaire) that were not held on bank balance sheets.

Globally, coverage ratios for total deposits vary significantly between regions. Using 2022 IADI Annual Survey data, median coverage ratios by broad regions suggest[18] that the highest DI coverage ratio, expressed as a share of total and eligible deposits, tends to occur in Europe (around 60%). The per value coverage ratios in North America and Asia are in the vicinity of 40%. The lowest are observed in Africa, around the 25% mark. Also, the distribution of coverage ratios (as a share of total deposits) is more diverse in Africa than elsewhere. Combined with the fact that Africa has the lowest median coverage ratio, it's clear that a small number of jurisdictions with high coverage ratios are causing this wide distribution.





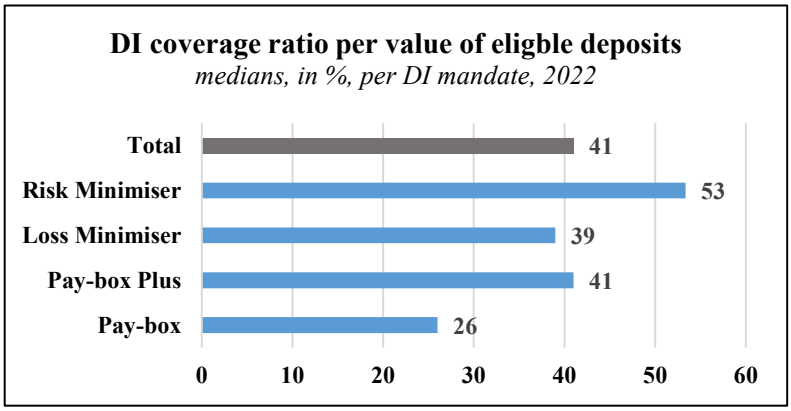
When applying IADI regional affiliation and differentiating between median and average coverage ratios, a more nuanced picture appears, with the highest coverage ratios found in Europe and North America. [19] European (ERC) and North American (RCNA) coverage ratios are at similar levels. [20] The Asian regional coverage ratio of 40% (mentioned earlier) is roughly confirmed by Asia-Pacific (APRC) and Eurasian (EARC) coverage ratios. North American coverage ratios are markedly higher than those in the Latin-American (LARC) and Caribbean (CRC) region. Low African coverage ratios are confirmed, as is the diversity within the region. Ratios differ significantly between both African (ARC) and Middle East North African (MENA), with the latter exhibiting a significantly higher median ratio. Average values generally surpass median values, pointing to individual jurisdictions with a substantially higher coverage ratio.

[18] Boxes in the graphic adjacent represent the interquartile range (data points between the 25th and 75th percentile) of the coverage ratio distribution. Bold lines within the boxes represent the median coverage ratio for each respective broad region.

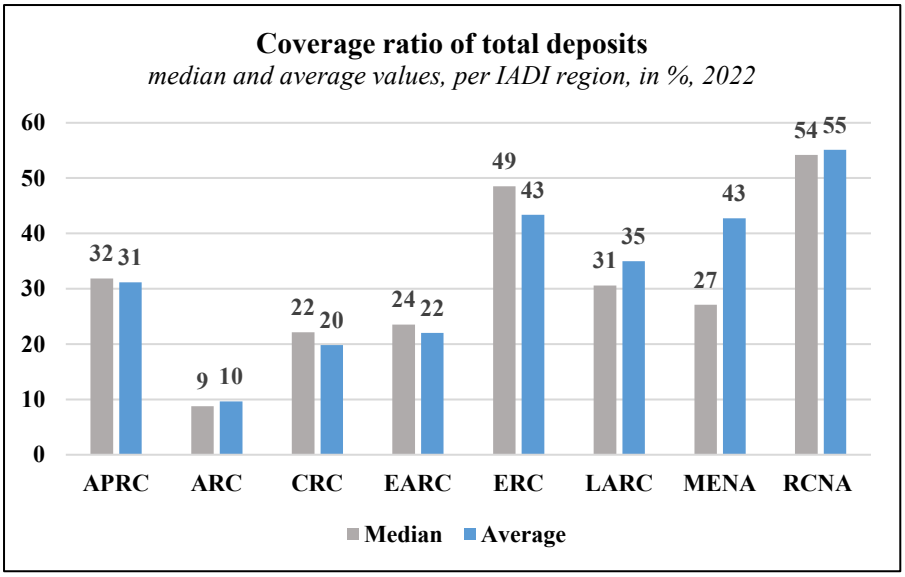
[19] In the adjacent graph, abbreviations refer to IADI Regional Committee (RC) representation: APRC (Asia Pacific RC); ARC (Africa RC); CRC (Caribbean RC); EARC (Eurasia RC); ERC (Europe RC); LARC (Latin America RC); MENA (Middle East-North Africa RC); RCNA (North America RC). In the small RCNA sample, two small credit union deposit insurers reported a 100% coverage rate through their blanket coverage. To avoid a bias, the RCNA figure presented here excludes these two cases. When including them, the median RCNA coverage ratio increases to 57% and the average to 70%.

[20] Four small European jurisdictions display single digit coverage ratios. Without these data points, The average ERC coverage ratio is 59%, and very close to the median value.

In line with findings above, **IADI data suggest that deposit insurers with a pay-box mandate demonstrate a lower median coverage ratio per value of deposits.** Risk minimisers report coverage ratios well above medians. The reasons therefore may relate to the fact that risk minimisers tend to be more prevalent in advanced economies with a track-record of deposit insurance, and where coverage ratios are higher on average. However, this requires further analysis.



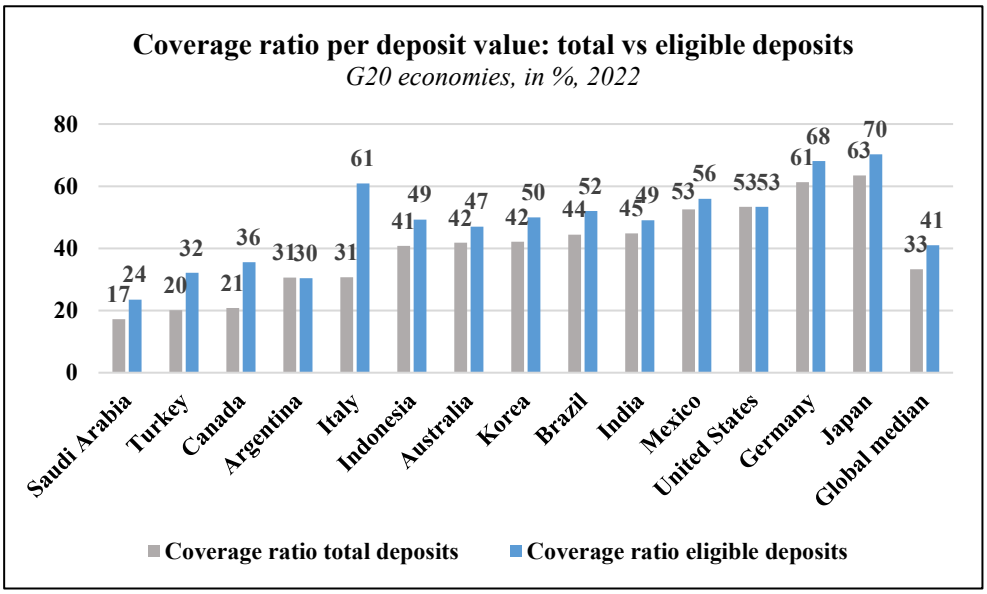
2.4 Coverage ratio of total vs eligible deposits



In a number of regions, coverage ratios of total deposits are markedly below coverage ratios for eligible deposits. Displayed coverage ratios per value of eligible deposits may overestimate coverage by deposit insurance in these regions. This requires further research but suggests that a significant share of deposits may fall outside the scope of deposit insurance, and may hence be more susceptible to a bank run, depending on the nature of relevant depositors.[21]

These disparities are relevant particularly in the Caribbean, African and Eurasian region where coverage ratios for total deposits are more than 30% below eligible deposits coverage ratios. European and Asian coverage ratios fall by slightly more than 10%; leading to overall median coverage ratios of 49% (ERC) and 32% (APRC). In the Americas, differences between coverage ratios for eligible and total deposits hardly differ.

When referring to total deposits, the median global coverage ratio is 33%, clearly below levels for eligible deposits. Regional observations on coverage ratios for total deposit values mirror those on eligible deposits. On an individual level for G20 economies, and where data is available, the most significant relative deviations between both coverage ratios were found in Italy, Canada and Turkey.[22] The highest coverage ratio of total deposits is reported by Japan (63%), with the US coverage rate



[21] As an example, European legislation excludes a set of deposits from deposit insurance, e.g. deposits made by credit institutions or certain public authorities. This may offer an explanation for difference in coverage ratios of eligible and total deposits.

[22] In the adjacent graph, German data refers to coverage in the cooperative banking sector only and includes the statutory coverage level of EUR 100 000 only. Additional arrangements through institutional protection schemes are not considered.

at 53%. The latter is a value nearly identical to both the median and unweighted average value of coverage ratios accross European Union member states (for those member states where data is available).

3 Conclusion and further research

As deposit insurance reduces the risk of bank runs, deposits not covered by deposit insurance are more likely to cause a bank run. Coverage ratios offer a good first proxy for estimating the relevance of such uninsured deposits.

Within the group of deposits eligible for deposit insurance, the ratio of coverage for depositors is generally well above 98%. This is in alignment with the IADI Core Principles, prescribing coverage of "the large majority of depositors". The median coverage of those deposits' value is globally around 41% of the value of deposits. Conversely, 59% of eligible deposits are not covered. The IADI Core Principles expect that a "substantial amount of deposits [should be] exposed to market discipline". The highest coverage ratios for eligible deposits are found in Europe and North America. Our data suggest that deposit insurers with a narrow pay-box mandate demonstrate a lower median coverage ratio per value of eligible deposits.

When incorporating deposit classes not eligible for protection, coverage ratios in a number of regions are considerably lower. Whether or not this decrease is relevant for bank-run risks and financial stability, will likely depend on the nature of these deposits and requires analysis of individual jurisdictions.

Despite the informative value of coverage ratios presented, any analysis as to the financial stability risks associated with uninsured deposits should take into consideration the following caveats:

- Both data presented and the IADI Core Principles (as global standards for deposit insurance) focus on aggregated coverage ratios. Nominal coverage levels should thus be set to cover the large majority of depositors and leave a substantial number of deposits exposed to market discipline. While this may be the case for the banking sector of a given jurisdiction on an aggregated level, some bank-individual coverage levels may be very low and may give rise to bank-run risks. Deposit insurance standards currently do not explicitly account for this risk, which is implicitly assumed to be dealt with by prudential regulation and/or supervision.

- To effectively lower bank-run risks and increase financial stability, coverage ratios must be credible. Any upwards modification of the coverage ratio by increasing coverage levels should not only account for higher moral hazard risks, but must also be accompanied by adequate increases in deposit insurers' financial means, which may require time to build up. An increase in coverage ratio that is not accompanied with adequate funding may lead to a situation where the activation of the deposit insurer's public backstop arrangements overburdens the sovereign.

- Coverage ratios are not always well suited to depict differentiated coverage levels, including for example, "temporary high balances" that are relevant to Europe, but may not be captured by coverage ratios. Other measures such as the full coverage for certain payment and settlement accounts that is offered in Japan may be incorporated in the coverage ratio. This may complicate cross-border comparison. As such, the coverage ratio forms somewhat of a lower bound in representing the extent of coverage. Subsequent conclusions should therefore acknowledge this.

- Depositors may enjoy protection from factors beyond deposit insurance, including bank failure management or depositor preference arrangements. Bank failure management may include the use of purchase and assumption ("P&A") as a resolution tool. This includes the transfer of all deposits from the failing to the acquiring bank, which in effect offers protection to depositors at a rate well above the deposit insurance coverage ratio. Whether or not this renders the coverage ratio less relevant in estimating financial stability and bank-run risks will heavily depend on depositors' expectations in regard to likely resolution tools and their success. Rules on preference given to depositors in liquidation impacts on net recoveries uninsured depositors can expect. A preference granted to insured depositors above uninsured depositors, will – ceteris paribus – increase the likelihood for uninsured depositors to withdraw funds. Any interpretation of coverage ratios should hence consider this in the design of relevant depositor preference rules.

Building on this stock-taking exercise, ongoing research will look into measures applied across the globe by deposit insurers that may help manage the risk of sudden and massive withdrawals by uninsured depositors. These will include experiences with differentiated coverage levels, such as temporary high balances, high and/or blanket coverage for payment and settlement accounts and voluntary top-up coverage levels.

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