Insuring deposits, ensuring stability: A critical evaluation of six decades of deposit insurance in the Indian banking sector

Received (in revised form): 20th November, 2023

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Abstract The deposit insurance system in India is one of the oldest in the world. Though deposit insurance is a well-researched area across the globe, it is relatively unexplored in India. This paper aims to critically evaluate some of the core aspects of the Indian deposit insurer, explicate the strengths and weaknesses of the system, highlight the risks that accrue to the system due to its features and the lessons learned from its 60 years of experience. The study suggests that the Indian deposit insurance system is marred by certain issues, such as irregular revisions of coverage limits, cross-subsidisation, delays in the recovery of settled claims, the restricted role of the insurer and the non-availability of a benchmark for the insurance fund. It further provides policy recommendations for practitioners to overcome these shortcomings and enhance the robustness of the deposit insurer by allowing better risk management under the scheme.

Keywords: *deposit insurance, Indian banking, bank risks, risk management, DICGC, bank policies*

INTRODUCTION

A deposit insurance system (DIS) is a part of the bank safety net, aimed at promoting banking stability.[1,2] By strengthening the confidence of depositors, it reduces the possibility of a panic-stricken run on banks.[3] It aims to protect small depositors, who do not have the expertise to differentiate between good and bad banks and hence are more vulnerable to the consequences of bank risks.[4] Indirectly, a DIS can promote savings, higher

intermediation and boost the growth of an economy, provided that the economy is equipped with a stable regulatory environment.[5]

However, a DIS also brings about certain negative externalities. Adoption of a scheme of deposit insurance has been found to increase the probability of banks taking more than proportionate risks due to moral hazard.[6,7] Moreover, research suggests that it reduces the depositors' incentives to monitor the activities of their banks, thus undermining the market-disciplining mechanism.[8,9] These two concerns can actually push the banks towards highly risky behaviour, aggravating the bank credit risk as well as operational risk. Additionally, if bank runs lead to a decline in the value of assets, extending deposit insurance can be very expensive for the banking sector and could put the sovereign solvency at risk as well.[10]

In India, the failure of two of the largest South Indian banks — the Travancore National Bank and the Quilon Bank — brought forward the idea of deposit insurance as early as 1938. The post-war years, since 1946, saw the failure of multiple banks, which highlighted the need for deposit insurance in India. However, the time was not felt to be appropriate for its introduction, since the Banking Act was still in the making. The sudden failure of Palai Central Bank (the biggest commercial bank of Kerala) and Laxmi Bank in 1961 was a shock to the banking industry, as these banks showed no publicly visible signs of distress. Moreover, the corporate governance aspects, such as board compositions, played a stabilising role in the perceived performance of these banks.[11] These failures acted as a catalyst for the Reserve Bank of India (RBI) to reconsider the idea of deposit insurance since the banking sector acts as the backbone of the country's economy.[12] Subsequently, the Deposit Insurance Corporation Bill was passed in 1961 and the Deposit Insurance Corporation was established under the Deposit Insurance Act, 1961.

Since its inception, the deposit insurance law in India has been subject to multiple changes (Figure 1). The DIS in India, being one of the oldest in the world, should be one of the most researched areas in the field of deposit insurance. Surprisingly, this is not the case.

This paper, therefore, aims to critically evaluate some of the core aspects and performance of the Indian deposit insurer, explicate the strengths and weaknesses of the system and highlight the risks that accrue to the system due to its features. It also provides policy recommendations, which are in line with the 'IADI [International Association of Deposit Insurers] Core Principles for Effective Deposit Insurance Systems',[13] to allow better risk management under the scheme.[14]

DESIGN FEATURES OF INDIAN DEPOSIT INSURER

Studies of and surveys on the deposit insurance features adopted across countries have taken centre stage.[15,16] This section provides a critical overview of the design features of the Indian deposit insurance, in order to understand the system in its entirety.

Membership of the scheme

Membership of the scheme of Indian deposit insurance is compulsory. Mandatory membership helps to keep tabs on adverse selection[17] as well as moral hazard on the part of member banks.[18] It also increases the pool of funds with the insurer and ensures that the overall risk of the system is in check.[19] All the countries, except one (Angola), responding to the IADI survey[20] have a system of compulsory membership.

Scope of insurance

The insurance facility of the Deposit Insurance and Credit Guarantee Corporation (DICGC) extends to all commercial banks and all eligible cooperative banks[21] in India. Figure 2 provides a visual representation of the different bank types covered under the scheme.

Unlike some countries, India has only one deposit insurer for both commercial and cooperative banks. About 9 per cent of the countries surveyed by IADI[22] have more than one deposit insurer to cater to groups of institutions with diverse characteristics, in order to minimise the issue of cross-subsidisation,[23] something which the Indian banking sector is suffering from.[24]

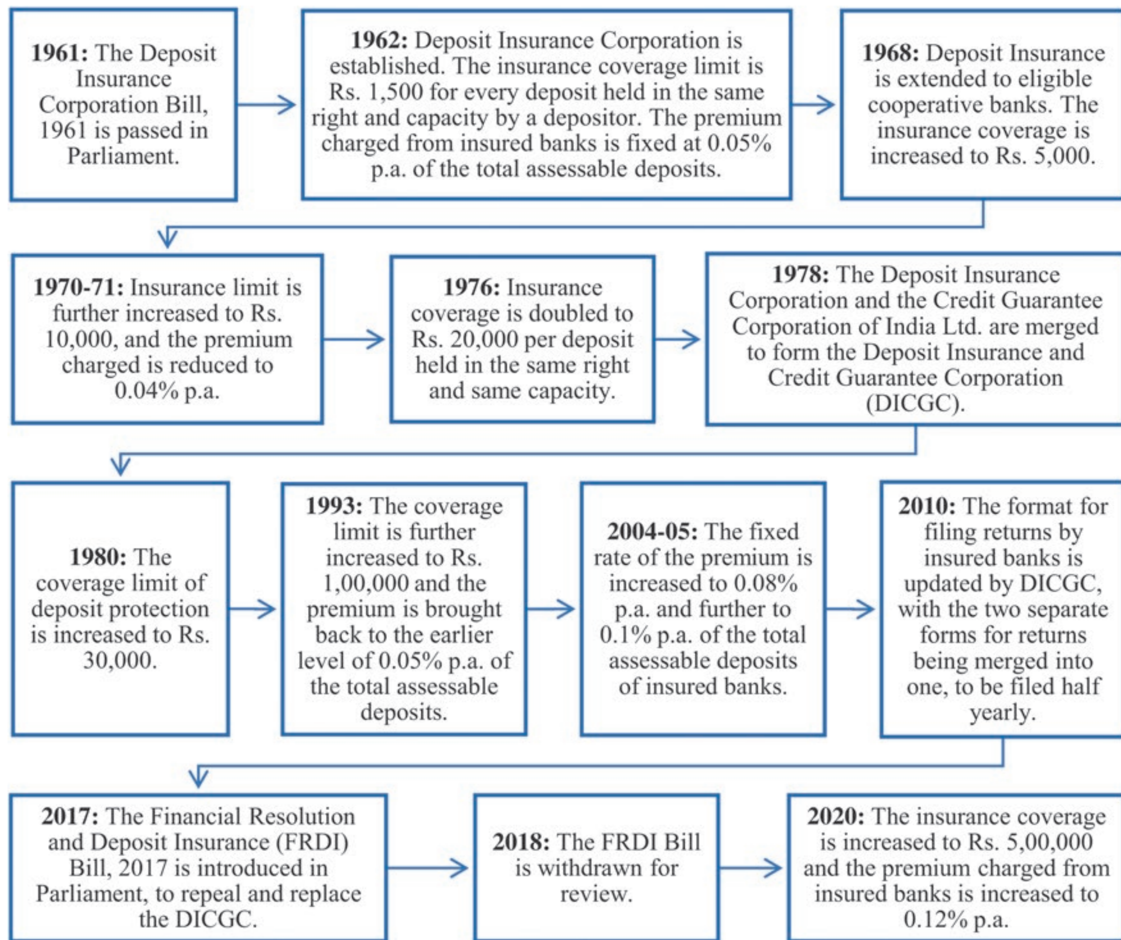

Figure 1: Major regulatory modifications in the deposit insurance law in India
Source: Authors' creation based on DICGC circulars and amendments

Coverage of deposits

Since 2020, every depositor in India has been insured up to the sum of Indian National Rupee (INR) 500,000 of deposits held at all branches of a bank. This system of providing coverage per depositor per bank curbs the banks' risk-taking behaviour *vis-à-vis* the provision of coverage solely per depositor or per depositor account.[25]

Like India, about 96 per cent of surveyed countries have a limited coverage scheme.[26] Although limited coverage is an essential feature of deposit insurance for mitigating moral hazard,[27,28] the same must be adequate to provide any substantial protection to depositors. A low limit of coverage may incentivise depositors to split their accounts within as well as among the banks to take the maximum benefit of insurance coverage,[29] which may ultimately increase the cost borne by depositors. The DICGC has increased the coverage limit six times since its inception. Though such arbitrary increments in the coverage amount place India among the countries with the highest level of coverage *vis-à-vis* domestic GDP per capita, over a period, the real coverage erodes dramatically.[30] For instance, a deposit insurance coverage which had a value of INR1 lakh in 1993–94 deteriorated to a real value of approximately INR17,800 in 2019–20, indicating a fall of 82.2 per cent in inflation-adjusted coverage. Not only this, but the deposit insurance coverage limit as a ratio of GDP per capita has also fallen from 10.9 in 1993–94 to 0.69 in 2019–20 (just before the increase in the coverage limit to INR5,00,000 per

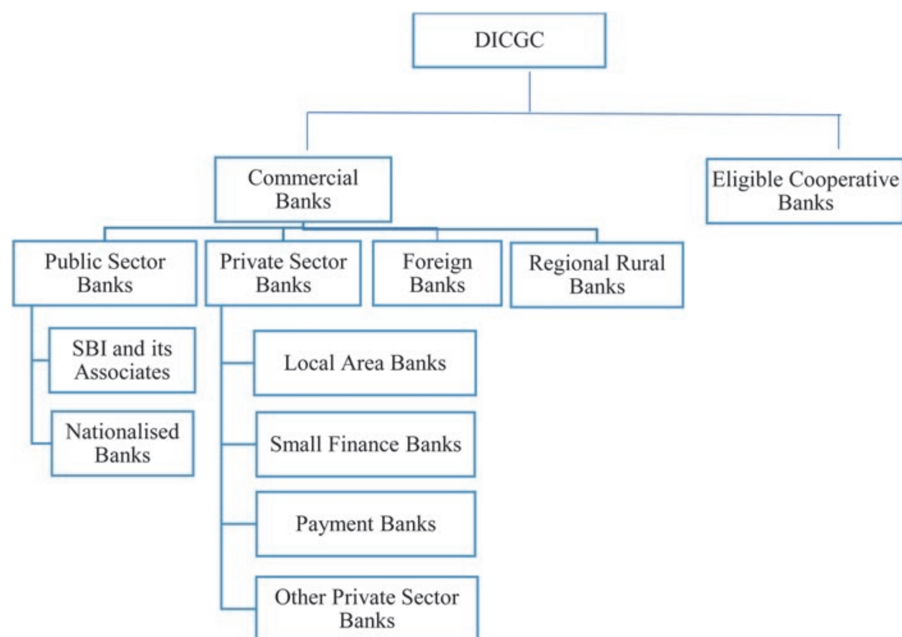

Figure 2: Types of banks covered by DICGC
Source: Authors' creation based on DICGC Act, 1961 and its amendments

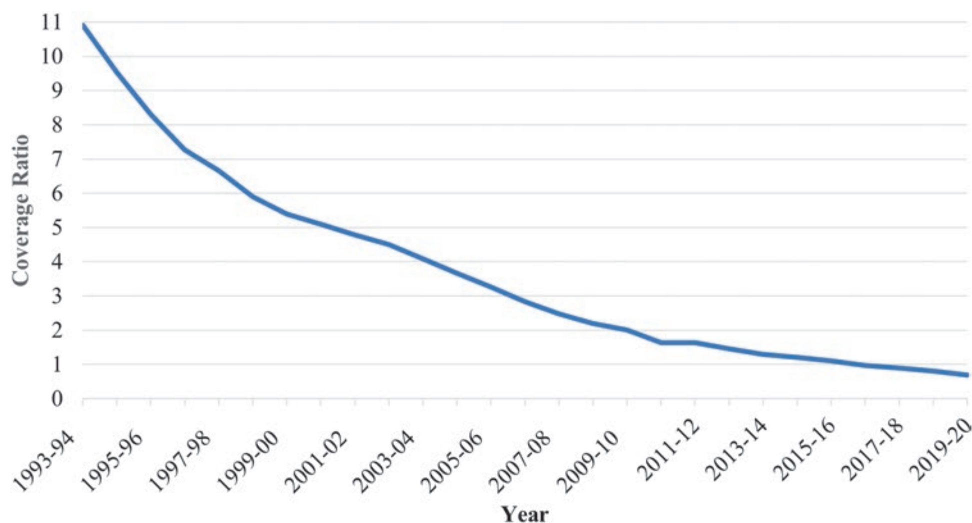

Figure 3: Deposit insurance coverage as a ratio of GDP per capita (1993–94 to 2019–20)
Source: Based on DICGC annual reports and RBI database

depositor) (Figure 3). Hence, instead of episodic increases in the coverage limit, there is a need to devise a policy framework that updates the insurance coverage as per the changes in the macroeconomic conditions and banking sector.[31,32]

Administration of deposit insurance

The DICGC is a wholly owned subsidiary of RBI and is a government-administered scheme. Government administration ensures credibility, authority and control over banks, the ability to

solicit information through disclosure norms and economies of scale through compulsory membership.[33,34] However, unlike a privately administered scheme, this system may lack flexibility and efficiency and negate the effect of risk monitoring by market agents.[35,36] As per the IADI survey, about 50 per cent of countries have a government-legislated and government-administered DIS, about 28 per cent have a government-legislated and privately administered system, 12 per cent have a system administered by the central bank and only 10 per cent have a privately established and administered system of deposit insurance.

Funding of deposit insurer

The DICGC fund is *ex-ante* — that is, the fund is built up in advance through premium collection from the member banks. Such funding ensures that all the participating institutions, including the failed ones, contribute to the fund.[37] It also enables the insurer to accumulate the funds well before the requirement, thereby avoiding pro-cyclicality,[38] reducing the liquidity risk and boosting the depositors' confidence. In contrast to this, an *ex-post* fund relies on contributions from the surviving insured banks to build a fund after a bank failure occurs. In practice, about 84 per cent of the deposit insurers depend purely on *ex-ante* funding, 3 per cent follow *ex-post* funding and the rest depend on a hybrid method.[39] The fund also has a line of credit extended by the RBI to the extent of INR5 crores, which is now a paltry figure. Though the International Monetary Fund through its 'Financial System Stability Assessment'[40] recommended a more robust backup funding for the Indian deposit insurer, the same has not yet been achieved, thereby pointing towards a need to revisit the DIS.

Until now, the fund has been able to handle the failures of insured banks in normal times. In the past 25 years alone, almost 60 per cent of the premium received from cooperative banks into the fund has been used up in settling the claims of depositors relating to failed cooperative banks. However, its adequacy during failures of large banks or multiple medium-sized banks remains to be tested. Also, unlike other deposit insurers around the world, the entire net surplus of the DICGC is subject to tax. As pointed out before, the fund has backing from the RBI up to INR5 crores, which may arguably merit tax contributions from the DICGC. However, since the DICGC performs the social obligation of protecting the interests of small depositors, it should be exempt from tax, thereby allowing it to build a better fund for contingency and pass the benefits onto the banks in the form of lower premiums.[41]

Insurance premium

The DIS in India follows a flat-rate system of premium with a rate of 0.12 per cent per annum paid by insured banks. There is no dearth of academicians pointing towards the problem of moral hazard being amplified by the flat-rate premium structure.[42–44] Such a uniform premium charged to the various categories of banks that are covered under the same insurance scheme also exacerbates the issue of cross-subsidisation between the cooperative banks and commercial banks.[45]

A risk-based premium structure may serve to reduce the problem of moral hazard by the insured institutions,[46,47] but poses challenges as far as risk identification, opacity in bank financial statements, premium calculations, disclosure requirements and continuous supervision are concerned. Moreover, if the risk assessments of individual banks are made publicly available, it could potentially trigger deposit outflows from the more vulnerable banks, leading to additional risks.[48] Despite the challenges, about 39 per cent of the member countries of IADI have adopted different forms of variable risk-based premium systems,[49] thereby pointing towards its possible long-term benefits of such systems in curbing excessive risk-shifting onto the deposit insurer, whereas the majority of 61 per cent have adopted a flat-rate premium due to its ease of calculations and other perceived benefits.

Mandate of insurer

A mandate, in the context of deposit insurance, describes the extent of the authority of the insurer as well as the scope of its responsibilities. The DIS in India is a 'pay-box system' that affords the DICGC a very limited set of powers, which for the most part include building a corpus for the fund through

premium collections and paying the claims of the deposit holders at deregistered insured banks. Such a mandate puts severe restrictions on the role of the DICGC. As a result, only about 20 per cent of the deposit insurers in the member countries of IADI follow a 'pay-box mandate'; approximately 45 per cent have a 'pay-box plus' mandate, with the right to take part in the resolution mechanism of the failed bank; about 20 per cent have a 'loss-minimiser mandate', which allows them to engage in the selection from a variety of resolution alternatives; and the rest follow the 'risk-minimiser mandate' that gives the insurer extensive authority, not only in terms of reimbursement and resolution strategies, but also in terms of the supervision and prudential oversight of the insured institutions.[50]

Experience from other countries, having a DIS with extended mandates, has shown that greater autonomy in operations, ability to resolve bank distress, bank liquidation powers and greater control not only reduces the insurer's costs,[51] but also increases its ability to deal with banking risks and crises.[52]

INDIA'S EXPERIENCE WITH DEPOSIT INSURANCE

Insured banks in India are required to report the total number of accounts, the number of fully protected accounts (accounts having deposits within or equal to the coverage limit), the amount of total assessable deposits and the amount of total insured deposits to the DICGC each year.

As Figure 4 shows, the number of fully protected accounts as a proportion of the total number of accounts has been relatively stable, lying in the range of 90 per cent and 100 per cent, for the past 50 years (from 1970 onwards). The series has been witnessing a sluggish downturn since 1995–96, indicating a gradual increase in the number of total accounts with large-value deposits (deposits exceeding the coverage limit). The insured deposits as a percentage of total assessable deposits have also portrayed stability, ranging from 60 per cent to 75 per cent, for about 37 years, with a declining trend since 1998–99, and a sharper fall after the global financial crisis (Figure 4).

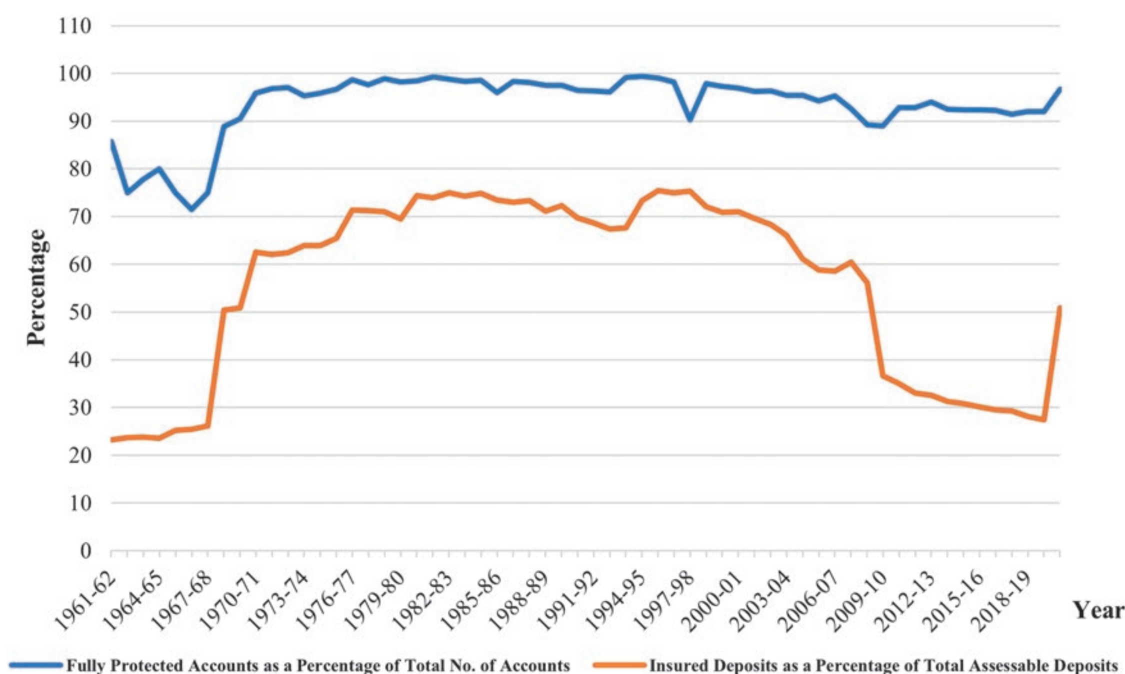

Figure 4: Volume and value of protection under deposit insurance (1961–62 to 2020–21)
Source: Based on DICGC annual reports and RBI database
Note: Data for the period 2021–22 has been excluded due to the effect of the COVID-19 pandemic on data reporting as well as availability

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Digging deeper, the peaks and troughs in the proportion of fully protected accounts before 1970 can be attributed to the irregularities in reporting by the insured banks, who were still adjusting to the DIS. Minor fluctuations ensued in 1997–98, when about 47 per cent of the insured banks did not furnish data on the size of deposits, and during the global financial crisis (2007–10), when several new accounts with large deposits were opened with commercial banks, thereby leading to a visible dip in the proportion. As of 2020–21, 96.72 per cent of the total eligible accounts are fully protected, an increase of 5 per cent from the previous year. The proportion of insured deposits exhibits multiple peaks, corresponding to the increases in coverage limits in the years 1968, 1970, 1976, 1980, 1993 and 2020. With effect from April 2007, the interpretation of the term 'deposits held in the same right and same capacity' has been modified to include 'deposits held in the same nomenclature and same sequence of names', hence the peak in the proportion in 2007–08. The percentage of insured deposits has halved from 2008–09 to 2019–20 because of the stagnation of the coverage limit to INR100,000 per depositor, on the one hand, and a sustained inflow of large deposits to banks, on the other. However, with the fivefold increase in coverage limit, the proportion has rebounded to previous levels and touched 50.92 per cent in 2020–21.

Figure 5 further breaks down the trend of insured deposits as a percentage of total deposits, for the three main categories of commercial banks. Since 1998–99, all three bank groups have faced a secular decline in the percentage because the total assessable deposits rose at a higher rate than insured deposits. In simple terms, while more and more depositors parked their savings at commercial banks, a substantial portion of them were large-value depositors, with the total deposit amount in their accounts exceeding the coverage limit. Table 1 exhibits the changes in these proportions over the past 24 years for these three categories of banks.

The decline in the proportion of insured deposits has been much sharper for foreign banks. Table 1 is also indicative of the kinds of clientele at these three categories of banks, with the public sector banks (PSBs) having the highest volume of small deposits (30.4 per cent) and the foreign banks catering to less

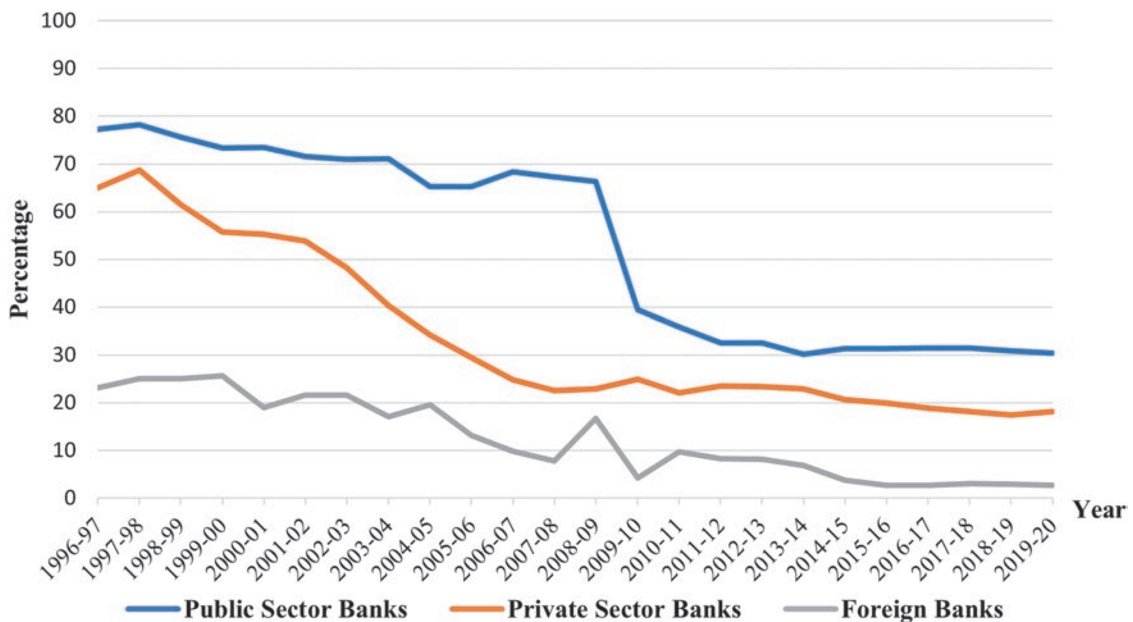

Figure 5: Bank-wise insured deposits as a percentage of total deposits (1996–97 to 2019–20)
Source: Based on RBI database
Note: Disaggregated bank-wise data for the various categories of Indian commercial banks is available only for the period 1996–97 to 2019–20

Table 1: Percentage change in the proportion of insured deposits to total deposits over 24 years (1996–97 to 2019–20)

Type of bank	Insured deposits as a % of total assessable deposits in 1996–97	Insured deposits as a % of total assessable deposits in 2019–20	Percentage change in 24 years
Public sector banks	77.3%	30.4%	–60.7%
Private sector banks	65%	18.2%	–72%
Foreign banks	23.1%	2.7%	–88.3%

Source: Calculations based on RBI database

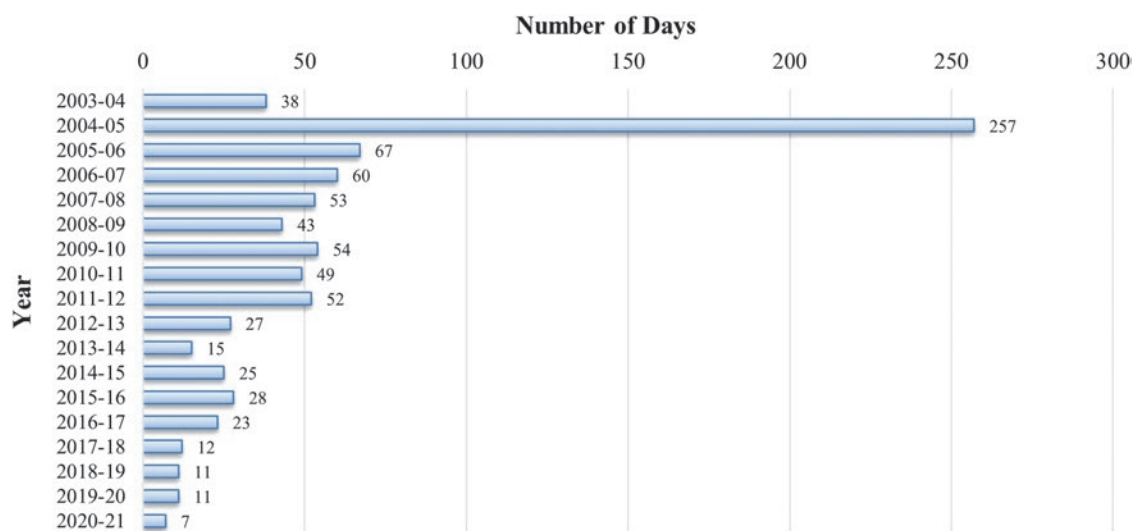

Figure 6: Average number of days between receipt of claim list and claim settlement by DICGC (2003–04 to 2020–21)
Source: Based on DICGC Annual Reports

than 3 per cent of small deposits as of the year ended 2020.

According to the DICGC Act, 1961, in case of liquidation of an insured bank, the liquidator is required to furnish a claim list to the DICGC, specifying the amount to be reimbursed to each depositor, within three months. The DICGC is then required to settle the claims within two months of receiving such a list.[53] In practice, there are delays to the submission of the claim lists in the case of cooperative banks, due to the non-availability of depositor records, delays in the audit of accounts, and incapability of liquidator.[54]

Figure 6 shows that except for the year 2004–05, the DICGC has been able to settle the depositors' claims within or very close to the stipulated period of two months. The year 2004–05 witnessed huge claim payouts specifically to two cooperative banks — Charotar Nagrik Sahakari Bank Ltd. and Visnagar Nagrik Sahakari Bank Ltd., both situated in Gujarat — leading to a drastic increase in the average number of days for claim settlements in that year.

The operating cost of the deposit insurer as a percentage of premium income has been following an overall downward trend over the previous 18 years, with a few hiccups in between (Figure 7), indicating a marginal improvement in the cost-effectiveness of the insurer. The movement in both of the above metrics suggests that the DICGC has been fulfilling its responsibilities in a time-bound manner, striving towards both effectiveness and efficiency.

As far as the stream of inflows and outflows managed by the DICGC is concerned, Figure 8 makes it clear that there has been a continuous rise in the absolute amount of premium received by the DICGC from the insured banks, while the claims

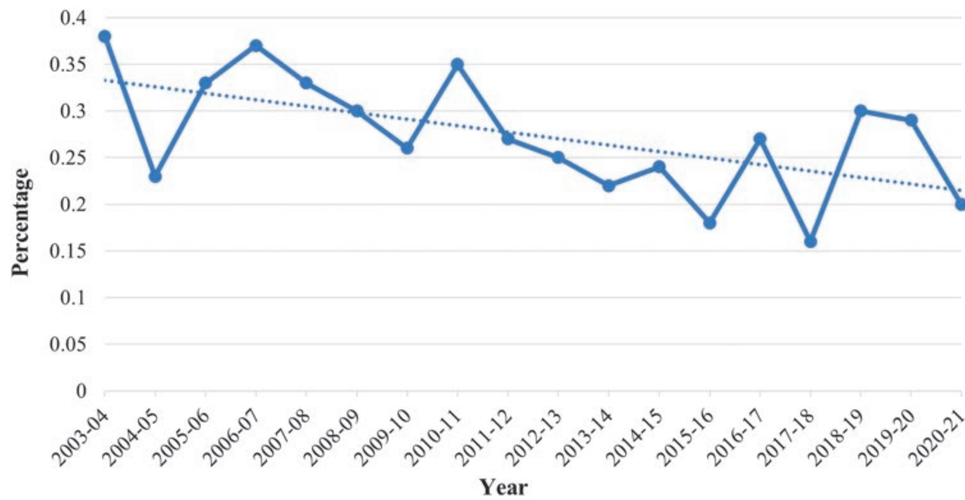

Figure 7: Operating cost as a percentage of premium income of DICGC (2003–04 to 2020–21)
Source: Based on DICGC Annual Reports

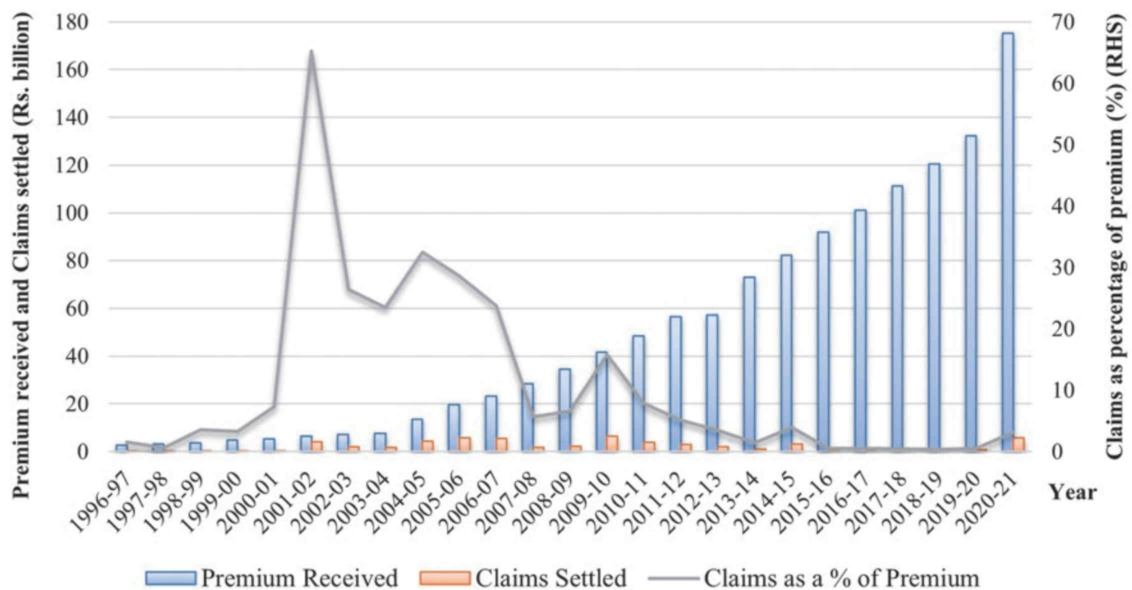

Figure 8: Premium received and claims settled by DICGC; claims as a percentage of premium (1996–97 to 2020–21)
Source: Based on DICGC annual reports

settled by the DICGC have not exceeded the inflows in any year. This has ensured the ability of the DICGC to handle the bank failures and the resultant claim payouts over the past 25 years, without having to rely on any other source of income or borrowings. In relative terms as well, the claims as a proportion of premium have a downward trend since 2005–06, with 2001–02 facing a high proportion of about 65 per cent, due to the failure of Madhavpura Mercantile Cooperative Bank Ltd, which experienced massive losses and deposit erosion due to its involvement in the Ketan Parekh scam.

But this overall figure may be misleading since it hides one of the major issues plaguing Indian deposit insurance, that is, cross-subsidisation. To understand this issue, Figures 9 and 10 break down

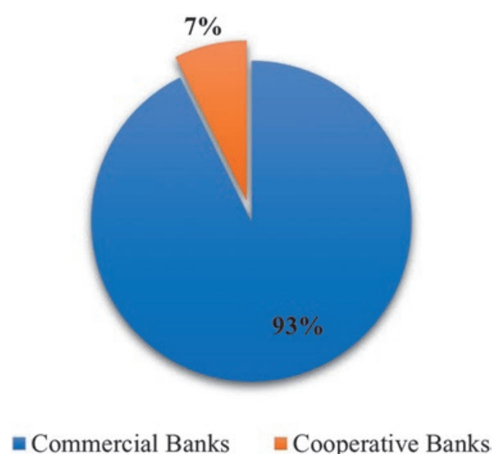

Figure 9: Bank group-wise premium as a percentage of total premium received by DICGC (1996–97 to 2020–21)
Source: Based on DICGC annual reports

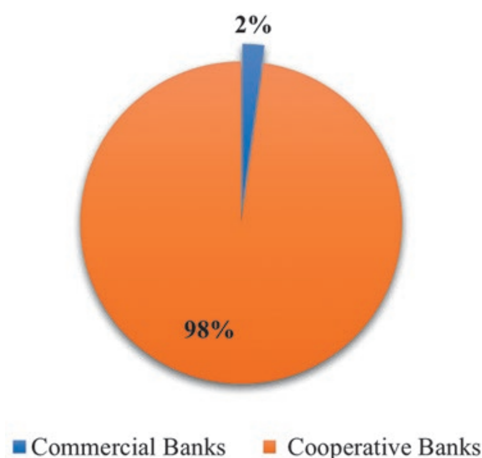

Figure 10: Bank group-wise claims as a percentage of total claims settled by DICGC (1996–97 to 2020–21)
Source: Based on DICGC annual reports

the total premium received and total claims settled by the DICGC from 1996–97 to 2020–21, divided between commercial banks and cooperative banks.

Over the past 25 years, spanning 1996–97 to 2020–21, almost 98 per cent of the total claims settled by the DICGC have been on account of cooperative banks, whereas their contribution in terms of premium has only been about 7 per cent. In 19 out of the past 25 years, commercial banks have witnessed zero payouts of claims, and all payouts have been due to cooperative banks. In India, the instances of failure of commercial banks are rare and the failures of cooperative banks are quite common. This is because of the challenges in capital mobilisation,[55] soft regulatory provisions, relatively low capital requirements and lack of corporate governance in cooperative banks *vis-à-vis* commercial banks.[56] The general tools used for cooperative banks in cases of distress are liquidation and reimbursement of the depositors using the deposit insurance fund (DIF). Considering this, the DICGC has a scope of recovering claims from the liquidated assets of cooperatives. However, for commercial banks, the most common resolution tools are restructuring or mergers with strong banks. Since the route of asset liquidation is hardly taken for commercial banks, the scope of recovery is less, leading to greater write-offs. As a result, the DICGC has written off claims worth INR62.6 crores for commercial banks *vis-à-vis* INR0.55 crore claims written off for cooperative banks (Table 2).

Given the huge depositor base of commercial banks, one may assume that the average claim payout per commercial bank would be way higher than that of a cooperative bank. But the opposite is true. The takeover of depositor liability of a distressed commercial bank by an acquirer bank, along with the presence of relatively large-value depositors, restrains the liability of the deposit insurer towards the commercial banks. Since there are hardly any buyers for troubled cooperative banks, and their clientele mainly consists of small depositors, the average claim payout on their failure is relatively higher (Table 2). Moreover, although the DICGC has the first right over the amount realised by the liquidated bank, the rate of recovery is low, mainly because the liquidators do not have the requisite skills in the realisation of bank assets.[57] The delay in realisation further leads to the deterioration of the quality of assets and increases the disposition costs.

The DIF, which is a reflection of the corpus available to the DICGC for settling depositors' claims, has been witnessing a rise over the years. As of 31st March, 2021, it stands at INR1,299 billion (Figure 11).

The two major revenue sources for the DIF are premium income and investment income. Premium income is collected from the insured banks on their assessable deposits and the investment income is

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Table 2: Summary statistics for commercial and cooperative banks (1961–62 to 2020–21)

Particulars	Cooperative banks	Commercial banks	Ratio of cooperative to commercial banks
I. Counts of banks			
No. of banks insured	1919	139	13.8
No. of banks for which claims have been settled	365	27	13.52
II. Claims (INR Crore)			
Total claims settled	5466.9	295.85	18.47
Claims written off	0.55	62.59	0.008
Average claim payout per bank since the inception of DICGC	14.97	10.96	1.36
III. Recovery			
Claims recovered by DICGC (INR Crore)	3282.1	153	21.45
Balance to be recovered (INR Crore)	2183.45	79.41	27.5
Recoveries as a percentage of claims settled (%)	60.03%	51.71%	1.16

Source: Calculations based on DICGC annual reports

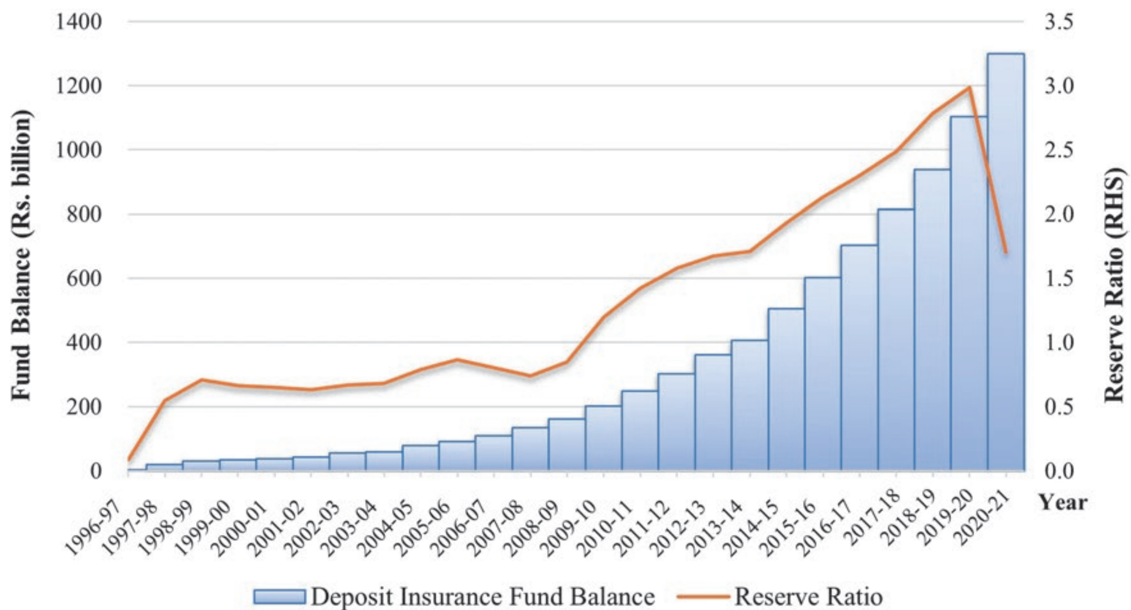

Figure 11: DIF balance and reserve ratio (1996–97 to 2020–21)
Source: Based on DICGC annual reports and RBI data

earned from the investment of surplus fund money into the government securities. With a noticeable surge in total assessable deposits held by banks over the years, the premium income of the DICGC, charged at a flat rate on the assessable deposits, has also seen tremendous growth. The same is the case with the return from government securities, which is low but steady. The addition to the funds has been greater than the payouts, resulting in the soaring of the DIF balance year after year.

However, just measuring the amount of DIF is not enough. The reserve ratio, calculated as the percentage of the DIF to the total insured deposits, measures the sufficiency of the fund and is indicative

of its solvency risk. The reserve ratio of Indian deposit insurance touched a high of 3 per cent in 2019–20 and has mirrored the upward movement of the DIF (Figure 11), simply because the DIF surplus has been building up at a higher rate compared to the growth in the volume of insured deposits. The reserve ratio has taken a dip when the reported insured deposits have increased at a higher rate than the DIF, such as in 2007–08 (following the increase in the scope of insured deposits due to the change in the interpretation of the term 'deposits held in the same right and same capacity') and in 2020–21 (following the increase in the coverage limit to INR5 lakh). Net claims out of the DIF have been lowest in the years from 1997 to 1999, leading to a sharp rise in the DIF surplus as well as the reserve ratio in those years. Along the same lines, the increase in the rate of the premium in 2004 and 2005 has led to a growth in the fund and reserve ratio. The steep rise in this ratio after the global financial crisis is attributable to the increase in total deposits, leading to higher premium contributions to the fund and, hence, a higher reserve ratio.

Although India's DIS has been able to handle distress in multiple banks, the fund has not been put to a severe test up till now. A major chunk of the banks that have failed are small cooperative banks, and hence the ability of the DICGC to deal with the failures of large banks or even a banking crisis is still not clear. Nonetheless, the DIF has remained solvent since the inception of the DICGC.

LESSONS AND POLICY RECOMMENDATIONS FOR PRACTITIONERS

India has been a pioneer in the adoption of good deposit insurance practices, acting as a guide for countries looking forward to establishing or modifying their own bank safety nets.[58,59] Features such as compulsory membership to the scheme, the extension of insurance coverage to cooperative banks, government administration of the system and the presence of an *ex-ante* fund have played crucial roles in managing the risks of the banking sector, boosting depositor confidence, encouraging savings as well as financial inclusion, protecting small depositors and ensuring financial stability. Risk management is an essential component of insurance[60] as well as banking stability,[61] and this is what a scheme of deposit insurance should aim for. Though the DICGC has been able to fulfil its objectives since its establishment, certain deficiencies have kept it from achieving its full potential and may hamper its ability to maintain banking stability in the future.

Undoubtedly, an increase in the per-depositor coverage in India is applaudable. However, the approach that has been adopted for the past two such increases has been far from apt. While the coverage enhancement in 1993 was undertaken in the wake of the degradation of seven commercial banks from 1990 to 1993, the increase in 2020 was necessitated by the Punjab and Maharashtra Cooperative bank crisis. Such reactive increases in insurance may hardly make a difference in the depositors' faith in the system.[62] In fact, the five-times enhancement in the coverage limit only came after 27 years, when the real value of insurance had deteriorated to about 17.8 per cent of its nominal value, the coverage ratio had fallen below 1 and India's position among its peers had plunged from the top in the 1990s to the bottom in recent years.[63] Although the proportion of fully protected accounts has been above 90 per cent, indicating the commitment towards the protection of small depositors, the proportion of insured deposits tumbled drastically beyond 2008–09. In the decade following 2008–09, no attempt was made to revisit the coverage limit, leaving about 70 per cent of deposits uninsured. There had been a secular decline in the proportion of insured deposits across PSBs and private sector banks, as well as foreign banks, making the banking system vulnerable to liquidity risks due to runs by depositors. Additionally, recent evidence from the run on Silicon Valley Bank in the US suggests that since technological advancements allow depositors (especially large ones) to rapidly move their deposits out of a bank, leading to banking illiquidity and instability, policymakers need to review and reconsider the coverage limits to ensure that they remain effective in achieving their objectives. All this taken together serves as a lesson for adopting a systematic approach for the revision of the coverage limit. The development of a framework for the periodic review of the insurance coverage (consistent with Principle 8 of the IADI Core Principles[64]) in light of the country's banking

dynamics, GDP per capita, inflation rates and deposit insurance policy variables, such as the DIF balance and premium, would make the system proactive. Linking the coverage limit to GDP or inflation, as is done in certain countries, like the USA or Japan,[65] can also be a way forward.

As noted before, the DIF has been solvent since its establishment and has handled the depositors' claims of about 400 insured banks. Nonetheless, the strength of the fund has not been tested in the face of a banking crisis or systemic banking shock. The reserve ratio in India may have gone as high as 3 per cent, but without a benchmark of the fund balance or the reserve ratio, these are mere numbers. What can be termed as an 'adequate fund size' remains unanswered in the Indian context, but setting a long-term contingent target for the fund or reserve ratio (in line with Principle 9 of the IADI Core Principles) can act as a first step to modelling the credit risk of the fund and ensuring its future viability. Such risk modelling would also require additional efforts for continuous monitoring.[66]

Cross-subsidisation seems to be an incessant issue in the Indian DIS. Though all risks cannot be accurately measured and priced in any insurance contract, thereby making cross-subsidisation inevitable, attempts must be made to reduce it. In India, the extension of the deposit guarantee, by the same insurer, to two heterogeneous categories of banks has escalated the problem. The need of the hour is to work on the operational risks and deficiencies in the cooperative banking sector to reduce the failure rate and encourage them to adopt digital technologies.[67] This will have a positive outcome for the DIS and the banking system. Additionally, a recommendation that has been emphasised multiple times in different contexts and countries is the switch to a risk-weighted premium structure or a combination of flat and variable-rate premiums, which can curtail cross-subsidisation as well as moral hazard. However, while deliberating on this recommendation, policymakers need to contemplate the challenges of such a system, as mentioned before. Also, the viability of the additional burden of risk-weighted premium on cooperative banks, which play a vital role in financial inclusion in rural areas,[68] needs to be considered.

The DICGC exercises a mandate with the least powers. The 60-year-strong experience of the DICGC, along with the improved efficiency in disbursing funds and managing its operating costs, has left no doubt about its capability. The delays in the Indian DIS are either due to the preparation of the claim lists by liquidators or the recovery from failed banks after they have been wound up. Hence, it is high time that the mandate is expanded from pay-box to at least pay-box plus, enabling the DICGC to take part in the resolution mechanism of the ailing banks (as also recommended under Principle 14 of the IADI Core Principles), such as restructuring or mergers, and appoint its own competent auditors, accountants and liquidators for them.

All these measures and suggestions will enhance the robustness of the deposit insurance scheme by allowing better management of the attached risks. A continuous evolution of policies and risk management strategies is essential in the banking and insurance sector.[69] This will support the fast-paced growth of the banking industry[70] and a move towards banking stability.

References and notes

1 Calomiris, C. W. (1999) 'Building an Incentive-compatible Safety Net', *Journal of Banking and Finance*, Vol. 23, No. 10, pp. 1499–519.

2 Gatti, M. and Oliviero, T. (2019) 'Deposit Insurance and Banks' Deposit Rates: Evidence from the 2009 EU Policy', University of Milan Bicocca Department of Economics, Management and Statistics Working Paper No. 419, University of Milan Bicocca.

3 Cecchetti, S. G. (2008) 'Deposit Insurance', in Durlauf, S. N. and Blume, L. (eds) 'The New Palgrave Dictionary of Economics' (2nd ed.), Palgrave Macmillan, London.

4 Calomiris, C. W. (1990) 'Is Deposit Insurance Necessary? A Historical Perspective', *The Journal of Economic History,* Vol. 50, No. 2, pp. 283–95.

5 Cull, R., Senbet, L. W. and Sorge, M. (2002) 'The Effect of Deposit Insurance on Financial Depth: A Cross-Country Analysis', *The Quarterly Review of Economics and Finance,* Vol. 42, No. 4, pp. 673–94.

6 Zhang, Z. and Wu, F. (2020) 'Moral Hazard, External Governance and Risk-taking: Evidence from Commercial Banks in China', *Finance Research Letters*, Vol. 37, 101383.
7 Chi, P. T. and Binh, D. T. (2020) 'Deposit Insurance and Bank Risks in Vietnam', *Business and Economic Research*, Vol. 10, No. 2, pp. 46–63.
8 Demirgüç-Kunt, A. and Huizinga, H. (2004) 'Market Discipline and Deposit Insurance', *Journal of Monetary Economics*, Vol. 51, No. 2, pp. 375–99.
9 Vernikov, A. (2020) 'Deposit Protection in a Paternalistic State: The Russian Case', *Terra Economicus*, Vol. 18, No. 1, pp. 28–42.
10 Allen, F., Carletti, E. and Leonello, A. (2011) 'Deposit Insurance and Risk Taking', *Oxford Review of Economic Policy*, Vol. 27, No. 3, pp. 464–78.
11 Singh, A. K., Sardana, V., Singhania, S., Vikram, A. and Attree, A. K. (2022) 'Impact of Board Composition on Bank Performance: Evidence from the Indian Banking Sector', *Prabandhan: Indian Journal of Management*, Vol. 15, No. 11, pp. 8–23.
12 Chavali, K., Prasad, C. and Rao, K. S. (2019) 'Demonetisation and Its Impact on Digitisation in India', *Management Dynamics*, Vol. 19, No. 1, pp. 19–34.
13 International Association of Deposit Insurers, (2014) 'IADI Core Principles for Effective Deposit Insurance Systems', available at https://www.iadi.org/en/assets/File/Core%20Principles/cprevised2014nov.pdf (accessed 18th October, 2021).
14 It is outside the scope of this paper to conduct a formal assessment of the 'IADI Core Principles for Effective Deposit Insurance Systems'.
15 Demirgüç-Kunt, A. and Kane, E. J. (2002) 'Deposit Insurance around the Globe: Where Does It Work?', *Journal of Economic Perspectives*, Vol. 16, No. 2, pp. 175–95.
16 Kim, I., Kim, I. and Han, Y. (2014) 'Deposit Insurance, Banks' Moral Hazard, and Regulation: Evidence from the ASEAN Countries and Korea', *Emerging Markets Finance and Trade,* Vol. 50, No. 6, pp. 56–71.
17 Lee, W. S. and Kwok, C. C. (2000) 'Domestic and International Practice of Deposit Insurance: A Survey', *Journal of Multinational Financial Management,* Vol. 10, No. 1, pp. 29–62.
18 Wheelock, D. C. and Kumbhakar, S. C. (1995) 'Which Banks Choose Deposit Insurance? Evidence of Adverse Selection and Moral Hazard in a Voluntary Insurance System', *Journal of Money, Credit and Banking,* Vol. 27, No. 1, pp. 186–201.
19 Demirgüç-Kunt and Kane, ref 15 above.
20 International Association of Deposit Insurers (2021) 'IADI Annual Survey', available at https://www.iadi.org/ (accessed 25th November, 2021).
21 Eligible cooperative banks, as defined under Section 2(gg) of the DICGC Act, are those cooperative banks whose states or union territories have amended their Cooperative Societies Act to empower the RBI to take certain actions superseding the Registrar of Cooperative Societies of the respective state/union territories.
22 International Association of Deposit Insurers, ref 20 above.
23 Garcia, G. (1996) 'Deposit Insurance: Obtaining the Benefits and Avoiding the Pitfalls', IMF Working Paper No. 96/83, International Monetary Fund.
24 Sardana, V., Singhania, S., Mohapatra, A. K. and Chakrabarti, D. (in press) 'The Hidden Costs of Deposit Insurance: Evidence from India's Cross-Subsidization Model', *International Journal of Sustainable Economy.*
25 Chang, Y., Zhao, S. and Hu, F. (2019) 'The Payouts Choice for Deposit Insurance System', *Journal of Systems Science and Complexity*, Vol. 32, No. 5, pp. 1404–25.
26 International Association of Deposit Insurers, ref 20 above.
27 Demirgüç-Kunt, A. and Detragiache, E. (2002) 'Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation', *Journal of Monetary Economics,* Vol. 49, No. 7, pp. 1373–406.
28 Kim *et al.*, ref 16 above.
29 Shy, O., Stenbacka, R. and Yankov, V. (2016) 'Limited Deposit Insurance Coverage and Bank Competition', *Journal of Banking and Finance,* Vol. 71, pp. 95–108.
30 Sardana, V. and Shukla, A. (2020) 'Deposit Insurance Coverage Limit: How Much Is

Enough? Evidence From India', *Indian Journal of Finance and Banking*, Vol. 4, No. 4, pp. 66–83.

31 International Association of Deposit Insurers (2013) 'Enhanced Guidance for Effective Deposit Insurance Systems: Deposit Insurance Coverage', available at https://www.iadi.org/en/assets/File/Papers/Approved%20Guidance%20Papers/IADI_Coverage_Enhanced_Guidance_Paper.pdf (accessed 8th September, 2021).

32 Sardana and Shukla, ref 30 above.

33 Diamond, D. W. and Dybvig, P. H. (1983) 'Bank Runs, Deposit Insurance and Liquidity', *Journal of Political Economy*', Vol. 91, No. 3, pp. 401–19.

34 Lee and Kwok, ref 17 above.

35 England, C. (1985) 'Private Deposit Insurance: Stabilizing the Banking System', Policy Analysis No. 54, Cato Institute, Washington, DC.

36 Demirgüç-Kunt and Huizinga, ref 8 above.

37 Bernet, B. and Walter, S. (2009) 'Design, Structure and Implementation of a Modern Deposit Insurance Scheme', *SUERF Studies*, 2009/5, available at https://www.suerf.org/studies/2437/design-structure-and-implementation-of-a-modern-deposit-insurance-scheme (accessed 15th January, 2024).

38 Campbell, A., LaBrosse, J. R., Mayes, D. G. and Singh, D. (2009) 'A New Standard for Deposit Insurance and Government Guarantees After the Crisis', *Journal of Financial Regulation and Compliance*, Vol. 17, No. 3, pp. 210–39.

39 International Association of Deposit Insurers, ref 20 above.

40 International Monetary Fund (2017) 'Financial System Stability Assessment — Press Release and Statement by the Executive Director for India', IMF Country Report No. 17/390, available at https://www.imf.org/en/Publications/CR/Issues/2017/12/21/India-Financial-System-Stability-Assessment-Press-Release-and-Statement-by-the-Executive-45497 (accessed 17th November, 2023).

41 While it may be argued that mandatory insurance for certain other risks (such as health insurance) also serves a 'social obligation', deposit insurance is unique due to its systemic importance in maintaining financial stability, as well as public confidence, and the distinct characteristics of the risks involved. The nature of deposit insurance thus warrants a tax exemption that may not be applicable to other types of insurance funds.

42 Buser, S. A., Chen, A. H. and Kane, E. J. (1981) 'Federal Deposit Insurance, Regulatory Policy, and Optimal Bank Capital', *The Journal of Finance,* Vol. 36, No. 1, pp. 51–60.

43 Kane, E. J. (1986) 'Appearance and Reality in Deposit Insurance: The Case for Reform', *Journal of Banking and Finance,* Vol. 10, No. 2, pp. 175–88.

44 Keeley, M. C. (1990) 'Deposit Insurance, Risk, and Market Power in Banking', *The American Economic Review*, Vol. 80, No. 5, pp. 1183–200.

45 Das, M. R. (2020) 'Cooperative Banks and Deposit Insurance', *Prajnan: Journal of Social and Management Sciences*, Vol. 49. No. 2, pp. 185–200.

46 Garcia, ref 23 above.

47 Chang, C. C. and Ho, R. J. (2017) 'Risk Shifting Behaviour at Commercial Banks with Different Deposit Insurance Assessments: Further Evidence from US Market', *Journal of Financial Research*, Vol. 40, No. 1, pp. 55–80.

48 It is pertinent to note that larger banks have better opportunities and the potential to diversify risks and would thus be able to reap the benefits of lower-risk-based deposit insurance premiums, to the disadvantage of smaller, more vulnerable banks. Hence, risk-based premiums may be balanced with an increased capital charge for systemically important banks. Such practices can, however, counteract one another, thereby raising a question about the efforts involved in exercising risk-based premium systems. Additionally, developing and adopting a fair risk-based premium structure (that covers different types of banking institutions with different regulatory requirements) shall come with its own set of administrative complexities.

49 International Association of Deposit Insurers, ref 20 above.

50 *Ibid*.

51 Chen, W., Zhang, Z., Hamori, S. and Kinkyo, T. (2021) 'Not All Bank Systemic Risks Are Alike: Deposit Insurance and Bank Risk Revisited', *International Review of Financial Analysis*, Vol. 77, 101855.

52 The European Union (EU) has been reviewing its deposit insurance framework and mandate, including its resolution authority and fund utilisation. To get an insight into the lessons from the still evolving EU approach, please refer to: Arda, A. and Dobler, M. C. (2022) 'The Role for Deposit Insurance Funds in Dealing with Failing Banks in the European Union', IMF Working Paper WP/22/2, International Monetary Fund.

53 On the other hand, certain countries have even shorter payout period requirements. For example, the Council of the European Union requires faster payouts of verified deposits within 20 working days, recently reduced to 10 working days as per Directive 2009/14/EC, available at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:068:0003:0007:EN:PDF (accessed 10th January, 2024).

54 Thorat, U. (2007) 'Deposit Insurance – The Indian System', speech transcript, available at https://www.dicgc.org.in/PUB_Spe_DepositInsurence.html (accessed 5th September, 2021).

55 Srivastava, D. A., Upadhyay, A. and Saxena, N. (2021) 'Mobilization and Management of Capital by Primary (Urban) Co-operative Banks in India', *Prajnan: Journal of Social and Management Sciences*, Vol. 50, No. 1, pp. 9–30.

56 Hajra, S. (2002) 'Deposit Insurance for Cooperative Banks: Is There a Road Ahead?', *Economic and Political Weekly,* Vol. 37. No. 48, pp. 4800–06.

57 Thorat, ref 54 above.

58 Gupta, J. and Sardana, V. (2021) 'Deposit Insurance and Banking Risk in India: Empirical Evidence on the Role of Moral Hazard', *Mudra: Journal of Finance and Accounting*, Vol. 8, No. 2, pp. 79–94.

59 Sardana, V. and Singhania, S. (2022) 'Fifty Years of Research in Deposit Insurance: A Bibliometric Analysis and Review', *FIIB Business Review*, 23197145221116455.

60 Sardana, V., Mohapatra, A. K., Singh, A. K. and Singhania, S. (2023) 'Unveiling Insurance and Risk Management Insights through Bibliometric and Cluster Analysis', *Prabandhan: Indian Journal of Management*, Vol. 16, No. 11, pp. 1–24.

61 Singhania, S., Singh, R. K., Singh, A. K. and Sardana, V. (2022) 'Corporate Governance and Risk Management: A Bibliometric Mapping for Future Research Agenda', *Indian Journal of Corporate Governance*, Vol. 15, No. 2, pp. 223–55.

62 Boyle, G., Stover, R., Tiwana, A. and Zhylyevskyy, O. (2015) 'The Impact of Deposit Insurance on Depositor Behavior During a Crisis: A Conjoint Analysis Approach', *Journal of Financial Intermediation*, Vol. 24, No. 4, pp. 590–601.

63 Sardana and Shukla, ref 30 above.

64 International Association of Deposit Insurers, ref 13 above.

65 International Association of Deposit Insurers, ref 31 above.

66 Belloni, M., Jarmuzek, M. and Mylonas, D. (2022) 'From Modelling to Forecasting Bank Profitability: Evidence from Euro Area Banks', *Journal of Risk Management in Financial Institutions*, Vol. 15, No. 4, pp. 314–37.

67 Sardana, V. and Singhania, S. (2018) 'Digital Technology in the Realm of Banking: A Review of Literature', *International Journal of Research in Finance and Management*, Vol. 1, No. 2, pp. 28–32.

68 Rosario, S. and Mazumdar, C. S. (2021) 'A Study of Value-Added Efficiency in the Indian Banks', *Management Dynamics*, Vol. 21, No. 2, pp. 42–56.

69 Kumar, S. and Rao, P. (2023) 'Failure of Strategic Risk Management in a Life Insurance Company in India', *Journal of Risk Management in Financial Institutions*, Vol. 16, No. 1, pp. 21–33.

70 Sha, N., Mohammed, S. and Kumar, P. S. (2018) 'Value of Due Diligence Exhibited by Customer in a Banking Institution', *Management Dynamics*, Vol. 18, No. 2, pp. 26–49.

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