

## **Executive Summary**

### **The Backdrop**

Traditionally, India has been a savings-oriented economy, which is widely acknowledged too. The household sector has been the largest contributor to gross domestic savings. It is also true that the highest chunk of savings is channelled through banks. As far as the household sector is concerned, in 2014-15 (Preliminary Estimates), while (change in) bank deposits constituted the highest share in (change in) gross financial assets at 46.9%, the share of (change in) bank loans in (change in) gross financial liabilities was as high as 93.3%. As proportion of GDP (at current market prices), bank deposits and loans are estimated to be 69.1% and 53.6% respectively in 2015-16. Thus, being the spinal cord of the economy and the financial sector alike, the banking sector, if disturbed, can transmit tremors through a significant part of the financial sector as also economic superstructure of India.

A typical bank depositor in India is small, unsophisticated and worried more about the safety of her/his deposits than return on those. Depositors prefer public sector banks (PSBs) to other banks as the former is predominantly owned by the central government and hence perceived as fail-safe. Even otherwise, in general, the commercial banks are considered 'too-important-to-fail' (TITF). However, the cooperative banking sector is considered and observed to be fragile.

In view of the above, Deposit Insurance (DI) is a logical necessity of any banking system. The logic derives from basically two factors: (a) It instils a sense of confidence in the teeming millions of lower and middle income group citizens who form the backbone of the banking system and thereby protects depositor runs at the time of banking crises that ultimately ensures systemic safety and soundness ('crisis prevention' function) and (b) It ensures quick resolution of failed banks and therefore guarantees smooth functioning of the banking system, post-crisis ('crisis management' function).

The Indian DIS is the second oldest in the world having been set up in 1962 after FDIC was established in 1933. DICGC, India's Deposit Insurance Agency (DIA), is a fully-owned subsidiary of RBI and its operations are of low profile nature, unlike the DIAs in many advanced economies. However, conditions are changing.

### **Motivation**

It is the interplay of the following 3 factors that has motivated the researcher to choose this topic for his doctoral research. First, he has long-standing association with the subject of

deposit insurance dating back to 1994 not only as a researcher but also as a practical policy maker. Secondly, deposit insurance *per se* being an unimportant banking activity, the subject has also remained grossly under-researched. Therefore, with his above-mentioned background on the subject, he wants to fill up the gap to some extent. Finally, at a personal level, the researcher is concerned about the safety of the deposits of the bank depositor, especially those of the small depositors to whom the post-tax return (both nominal and real) is not so rewarding.

### **Objectives of Research**

In this research, it is argued that the transformations that are taking place in the Indian economy in general and financial services industry in particular will make imperative changes in the Deposit Insurance System (DIS) too. The paper focuses on these emerging scenarios and works out an agenda for reforming the DIS in India. It does not argue for abolishing deposit insurance but emphasizes on bolstering the existing system. Working towards this, the following specific objectives have been explored:

- i. To review the role of DI in the financial sector and economic development
- ii. To conduct a detailed survey of the nature of deposit taking activity in India – depositors, instruments, institutions and regulatory framework
- iii. To explore the origin and history of DI in India
- iv. To critically examine the various functions of the existing DIS in India
- v. To recommend changes in the existing system
- vi. To redefine the role of DIA

### **Methodology and Database**

This is a descriptive but practical policy-oriented work – policies which *can* be implemented for the common good and thereby enhancing the utility of the research work in the real situation. It is an argumentative paper which combines theoretical concepts of both banking and insurance with insight, experience and judgement sourcing from practical experience with a view to arriving at policy conclusions which will be in consonance with contemporary real operating environment. In this effort, theoretical and empirical evidences have been greatly sourced. While making policy recommendations, the latest global benchmarks and/or best practices which have been issued by FSB, BIS and IADI have been kept in view.

## **Scope**

The focus is on bank deposits. Insurance for non-bank deposits does not fall in the purview of the work.

## **Quantitative Techniques**

Simple statistical techniques, such as, measures of central tendency, measures of dispersion and trend analysis have been used. Besides, graphs have been extensively used.

## **Structure of the Thesis**

Besides the Executive Summary which is presented in the beginning, the rest of the research document is organized as follows:

Chapter I deals with the introduction, objectives and methodology, etc.

Chapters II to IV dwell on a literature survey relating to (a) the link between financial development, economic growth and banks, (b) bank risks, and bank and depositor runs and (c) theories of deposit insurance and evidences, respectively.

Chapter V analyzes the various facets of the DISs all over the world.

Chapter VI briefly introduces the Indian banking sector and its segmental vulnerability. It also provides a glimpse of the history of bank failures in India.

Chapter VII gives a detailed account of the deposit-taking activities by the Indian banks and analyzes in greater detail the characteristic features of a typical Indian bank depositor.

Chapter VIII carries a detailed critical assessment of the DIS in India.

Chapter IX elaborates the efforts made hitherto to bring in reforms in the prevalent DIS.

Chapter X argues why Deposit Insurance will become important in future and how imminent the same is.

Chapters XI to XV deal with our recommendations relating respectively to (a) monetary coverage limit, (b) risk-based premium pricing, (c) Deposit Insurance Fund, (d) Resolution Mechanism and (e) Organizational matters.

Chapter XVI concludes.

## **Limitations**

- i. Scarcity of literature on DI in India leading to reliance on foreign literature, most of which originate from the US

- ii. Another limitation perhaps could be the extent of purity and integrity of secondary databases.

### **Part – A: The Underpinnings**

#### **Financial Development, Economic Growth and Banks**

- There is wide and deep theoretical and empirical evidence that financial development contributes to economic growth.
- Although financial development enhances growth, the dark side is finance *per se* is vulnerable to shocks or fragility.
- Although there have been debates as to whether banks, as financial infrastructure, are better than the market, the consensus, by and large, is that they are complementary to each other.
- Banks have been conceptualized as:
  - information collector, analyst and disseminator
  - a balance sheet with “synergies” between the assets and liabilities sides
  - liquidity creators
  - providers of transformation service
  - ‘special’ business units
  - “agents” of socio-economic change
  - fragile business units
  - financial superstores

#### **Bank Risks, Deposit Run, Bank Panic and Bank Contagion**

- Banks have to manage several risks of which credit risk, interest risk, liquidity risk and operational risk are the most important. Many banks in the recent past have waded into troubled waters owing to inappropriate management of these risks
- Trade-off of risks is possible either through *ex ante* or *ex post* mechanisms of which the former is more effective and economical.
- Depositor runs are susceptible to become a self-sustaining process, and when these become so, a typical bank run ensues.

- Bank runs result in depositors running to safer banks, and taking flight to quality (i.e., investing in safer securities) as well as to currency. Flight to currency is most pernicious.
- Runs on large banks produce only “churning” among the banks or securities or both - larger the bank, more serious is the churning.
- Bank contagion:
  - occurs faster
  - spreads more broadly within the industry
  - results in a large number of failures
  - results in large losses to creditors (depositors) although such losses are smaller than in non-bank industries
  - spreads more beyond the banking industry and causes substantial damage to the financial system as a whole and the macro economy
- By and large, it is widely acknowledged that bank runs impose heavy socio-economic cost on the society through various channels, besides dampening investors’ confidence.

### **Deposit Insurance: Theory and Evidence**

- According to monetary authorities, deposit insurance can substantially reduce the external diseconomies - both micro and macro - arising out of bank failures.
- Both deposit insurance and ordinary insurance contracts are founded on the same insurance principles; nevertheless, all the existing deposits insurance systems are not proper insurance. Mostly structured on the model of insurance contract, they are rather financial guarantees for depositors' accounts.
- There are fundamental differences between deposit insurance and LLr.
- Deposit insurance aims at
  - Protecting small depositors
  - Preventing bank runs and
  - Preventing cost of bank runs via precluding
    - ❖ Contractionary effect on money supply

- ❖ Disruption of the payment system
  - ❖ Interference with financial intermediation and
  - ❖ Systemic effects of runs on individual large banks.
- Failure of banks in the US in the 1990s brought to the fore some of the negative facets of deposit insurance. These include concerns about
    - Moral hazard
    - Coverage and pricing
    - Bank supervision and
    - Competitiveness of banking industry.
  - Rajan, one of the vociferous critics of deposit insurance, calls it as an “anachronistic subsidy” for banks.

### **Part – B: Deposit Insurance Systems – A Global Phenomenon**

#### **World Deposit Insurance Systems**

- Although the system of insuring bank depositors started in 1933 pioneered by USA in the post-Depression period, most of the DISs were established in 1990s, followed by the 7-year period 2000-07 and in the post-2007-08 crisis.
- Explicit DISs are predominant.
- Most of the Explicit systems have separate legal arrangements and are publicly administered.
- Both ‘Pay-box Plus’ and ‘Pay-box only’ roles are common.
- In all the countries, DIS is compulsory for the domestic banks as well as local subsidiaries of foreign banks. However, in several countries, the local branches of foreign banks participate.
- Apart from domestic deposits, foreign currency deposits are covered by several countries. Almost a third of the countries cover inter-bank deposits too. Co-insurance is very limited; it lost its appeal during the 2007-08 crisis.
- Majority of the DISs follow *ex ante* funding and are funded privately.
- About four-tenth of the countries report backstop facility.

- A little below one-third of the DISs follow the risk-adjusted premium system.
- Both total deposits and covered deposits are predominant as the assessment base.
- ‘Per depositor per bank’ is the predominant form of pay-out.
- The number of Explicit schemes is more in the relatively high income group countries than in the relatively low income group countries.
- In the aftermath of the 2007-08 financial crisis, many countries had increased their deposit insurance coverage levels in terms of their local currencies, most of which belonging to the advanced economies which were hit the hardest by the crisis.
- After the impact of the financial crisis dissipated, most of the countries kept their deposit insurance coverage unchanged at the 2010 level.
- However, in terms of the coverage/GDP ratios, maximum number of countries reported initial increase during 2003-10 but decrease during 2010-13.
- In the post 2007-08 crisis period, while 12 countries were added to the DIS space, all over the world, as many as 58 increased their DIS coverage levels.
- Post 2007-09 crisis, co-insurance declined.

### **Part – C: The World of Indian Banks and Bank Depositors**

#### **Banking System and Bank Failures in India**

- The Indian commercial banking sector predominantly comprises: (a) Public Sector Banks - State Bank Group and Nationalized Banks, (b) Private Sector Banks - Old, New and ‘new’ New Banks, (c) Foreign Banks and (d) Regional Rural Banks.
- The cooperative banking sector is dominated by the Urban Cooperative Banks. There also exists a distinct rural cooperative banks segment.
- The commercial banking sector is perceived and evidenced to be more safe and sound than its cooperative counterpart.
- Within the commercial banking sector, PSBs are regarded as fail-safe due to government ownership.
- Historically, bank crises and failures in India date back to the 18<sup>th</sup>, 19<sup>th</sup> and the early 20<sup>th</sup> century.

- Banking turbulence is historically observed to have been linked to political and economic disturbances, although instances of mismanagement cannot possibly be ruled out entirely.

### **Deposit Taking Activities by Banks and Indian Bank Depositors**

- Deposits of the banks in India are basically classified into: (i) Demand Deposits, (ii) Savings Bank Deposits and (iii) Term Deposits. Except (ii), the other two are composed of: (i) inter-bank deposits and (ii) public deposits.
- As at March-end 2015, two-third of the total deposits of SCBs (excluding RRBs) were term deposits and the remaining one-third CASA deposits, comprising 9% Demand Deposits and 24% Savings Deposits.
- Banks mobilize deposits from both Resident and Non-Resident Indians.
- For banks to carry out their deposit taking activities in India they must fulfil 3 basic regulatory requirements. These are meeting the: (a) Cash Reserve Ratio (CRR) requirements, (b) Statutory Liquidity Ratio (SLR) requirements and (c) Deposit Insurance requirements.
- Currently, banks enjoy full freedom in determining their deposit rates.
- As at March-end 2015:
  - There were 1,440 million deposit accounts (135 million in 1980) with a balance of INR 89,221 billion (INR 84 billion in 1972). Out of the total 1,440 million accounts, 1,115 million (90%) were individual deposit accounts which had INR 50,601 billion as balance, constituting 56.7% of the total.
  - The average balance per individual depositor account was a little over INR 39,000, which highlights that they were 'small' depositors.
  - A predominant 89% of individual depositors banked with PSBs (including RRBs). In terms of amount, they held 78% of deposits.
  - Over four-fifth of total number of accounts were Savings Bank accounts which are normally maintained for transaction purposes and small savings.
  - Individual depositors preferred short-maturity deposits which highlights their need for liquidity as also risk averseness. Frequent changes in interest rates by banks do also play a role in recent times.



- Sixty-eight per cent of individual deposit accounts were ‘small’ with deposit sizes below INR 0.1 million, i.e., the current threshold for deposit insurance cover
  - Sixty-two per cent of total number of individual accounts belonged to rural and semi-urban centres, whereas the rest belonged to urban and metro centres. However, amount-wise, the share of the latter was much higher at 66% than the former at 35%.
  - In terms of number of individual accounts, Savings Bank accounts were, in general, concentrated in rural and semi-urban areas, varying in the range of 57% to 67% during 1980 to 2015. In contrast, in urban and metro areas, current accounts were predominant because of crowding of industry and business there.
  - Gender disparity among bank depositors is diminishing fast.
- In a word, characteristically, an Indian individual depositor is small, unsophisticated (a large part belonging to rural and semi-urban areas where the literacy rate is lower than that in urban and metro areas) and risk-averse and hence, s/he throngs to PSBs which are perceived by her/him as safe and secure.

#### **Part - D: Enter the Deposit Insurance System in India**

- The Deposit Insurance Corporation (DIC), and with it the insurance of bank deposits came into existence in 1962, directly as a consequence of the crash of the Laxmi Bank and Palai Central Bank (Kerala) in 1960.
- DIS is compulsory for all banks except cooperative banks in those States which are yet to pass the required legislation.
- In July 1978, DIC assumed also the function of credit guarantee, and hence, was renamed as Deposit Insurance and Credit Guarantee Corporation (DICGC). At present, no credit institution is participating in any of the credit guarantee schemes administered by it.
- The authorised capital of DICGC is INR 500 million which is entirely subscribed by RBI.
- DIS covers all commercial banks (including RRBs and LABs) and all cooperative banks, except a few designated ones. As at March-end 2015, 2,129 banks were registered comprising 92 commercial banks, 56 RRBs, 4 LABs and 1,977 cooperative banks.

- The scheme covers, by and large, the entire deposits of the household sector. Simultaneously, the scheme covers high-value deposits, such as, CDs and FCNR (B) deposits.
- DIS, with effect from May 1, 1993, protects INR 100,000 of deposits held by the depositor at all the branches of a bank put together in the same capacity and right, increased in stages from the original INR 1,500.
- As at March-end 2015, 92.4% of the total deposit accounts were fully protected. Amount-wise, 30.8% were 'insured' deposits.
- Although the DICGC Act, 1961 allows for a variable premium system, DICGC follows a flat rate premium system which currently stands at INR 0.10 per INR 100 of 'assessable' deposits per annum (statutory cap - INR 0.15 per INR 100).
- Premium received from the cooperative banks constituted a small proportion of the total premium which moreover declined over time.
- Both DIF and the Reserve Ratio reflected continuous upward movement from 1992-93 onwards. Although there is no mandate to maintain the Reserve Ratio at a specific level, DICGC aims at maintaining the ratio at not below 2%. The Reserve Ratio at March-end 2015 stood at 1.9%.
- As at March-end 2015, the amount of claims settled cumulatively stood at a tad below INR 50 billion, registering an EGR over 21% per annum between March-end 1997 and March-end 2015.
- The average amount of claims settled per year turned out to be INR 2.63 billion with a high of INR 6.54 billion and low of INR 0.02 billion. In general, the amount moved up over the years.
- As far as claims settlement and their repayment by banks are concerned, cooperative banks reflected an extremely poor show vis-à-vis commercial banks.
- The average period for settlement of claims came down substantially over time and was 25 days in 2014-15.
- As on March 31, 2015, the number of legal suits relating to deposit insurance activity of DICGC pending in various courts stood at 196 - almost 3 times that in 2003.

- DICGC is vested with powers to (a) cancel the registration of an insured bank under various conditions (in 2014-15 21 banks – all cooperative – were deregistered), (b) have free access to the records of an insured bank and call for copies of such records and (c) request RBI to undertake/cause examination/investigation of an insured bank.
- All officials of DICGC, except CFO, are on deputation from RBI. The staff strength showed a declining trend over time.
- DICGC has been on a path of becoming an officer-oriented organization, which is a healthy feature, besides being in consonance with the recommendation of the RBI Deposit Insurance Reforms Report, 1999 in regard to HR.
- The financial indicators and efficiency parameters portray a healthy picture of DICGC.
- The Indian DIS is in a ‘Good’ position vis-à-vis the IADI-BIS 16 Core Principles for Effective Deposit Insurance Systems, as it operates in the desired way specified by the “Principles” to various extent.

### **Deposit Insurance Reform Endeavours in India**

- Reforming the deposit insurance system emerged as one of the major items of the second phase of financial sector reforms in India. The Narasimham Committee Report on the Banking Sector Reforms (1998), while focusing on the structural issues, observed: (a) No need to increase the insurance limit (i.e., INR 100,000) further. And (b) Need to shift from the ‘flat’ rate premiums to ‘risk based’ or ‘variable rate’ premiums.
- The RBI Report on Deposit Insurance Reforms (1999), the first serious attempt to reform DIS, made wide-ranging reform proposals including coverage of DIS, premium system, DIF, structure of DICGC, etc. However, many are not yet acted upon.
- The then Finance Minister in his Union Budget speech for 2002-03 announced that DICGC would be converted into the Bank Deposits Insurance Corporation (BDIC) to make it an effective instrument for dealing with distressed banks, and appropriate legislative changes would be brought in for this purpose.
- Following the Budget announcement, a High-Powered Committee of the Ministry of Finance, RBI and DICGC visited US to study the FDIC system and submitted a report to MOF.

- Subsequently, based on a DICGC presentation on the salient features of the Bill to MoF, the following two suggestions were confirmed by the latter: (a) BDIC should have powers to initiate remedial/rehabilitation measures for failing banks if the regulatory/supervisory authorities do not act promptly and (b) RBI should have a senior officer nominee dealing with regulation and supervision issues on the Board of BDIC to facilitate exchange of information.
- Further, the RBI Governor indicated that DICGC should work on a new law taking into consideration the latest international best practices, but tailored to Indian financial conditions.
- In 2008, the Committee on Financial Sector Assessment stressed the need for maintaining an adequate and solvent DIF for ensuring public confidence in DIS. It also recommended grant of exemption to DICGC from paying income tax.
- The Committee on Financial Sector Reforms (2008) made several recommendations which, inter alia, included: (a) strengthening the capacity of DICGC to both monitor risk and resolve a failing bank, (b) instilling a more explicit system of prompt corrective action and making Deposit Insurance premiums more risk-based, (c) making DICGC independent of RBI and (d) maintaining *status quo* on monetary coverage of deposit insurance.

### **Part – E: Policies towards Comprehensive Reforms**

#### **Emerging Significance of Deposit Insurance: An Assessment**

- The following emerging factors in the economic and banking sphere would necessitate a robust Deposit Insurance System:
  - Increasing participation by retail customers both on assets and liabilities side of banks.
  - Continued high level of stressed assets of PSBs
  - Emerging compulsion to phase out the ‘tradition’ of government recapitalization of PSBs
  - Imminent changes in the mind-set of decision makers at political and bureaucracy level

- Need to annul cross-subsidization between commercial banks and cooperative banks as far as payment from DIF is concerned.
  - Reforming DIS is overdue
  - Need to institute a functionally sound resolution process for the troubled financial institutions
  - Continuously increasing interconnectedness among the various segments of the financial sector leading to increasing contagion
- The ‘velocity’ of the changes will be limited by:
- The speed with which political and bureaucratic consensus is built, the necessary Bills are passed by the Parliament and the consequent regulatory changes are brought about.
  - Likely trade union problems that may jam the banking activities.
  - HR-related issues in banks in case mergers/acquisitions take place in the banking arena.
  - The government is trying to mitigate the debt issue which may bring some relief to banks in the medium-term, if not short-run.
  - Banks are well capitalized.
  - RBI’s armour has adequate weapons to forestall any system-wide crisis.
- Thus, although there are grounds for reforming the DIS, the factors may not materialize within a span of 3 to 5 years. However, the intervening period may be utilized to refurbish the DIS in a phased manner so that it is ready for the new regime, when it ushers in, and fulfils the ‘IADI-BIS Core Principles’ for a sound and globally benchmarked DIS.

### **Deposit Insurance Coverage**

- Institutional coverage of deposit insurance should exclude the 2 RBI-recognized TBTF banks and the nationalized banks. In other words, in the commercial banking sphere, deposit insurance coverage should be made available to the
- Associate Banks of SBI
  - Old private banks

- Remaining 6 new private banks
  - 2 ‘new’ private banks which have started operations recently
  - RRBs and
  - LABs
- Moreover, in future, as the insured banks expand and become either TBTF or are nationalized, they should automatically be excluded from enjoying deposit insurance coverage.
- Conversely, when the government shareholding in any nationalized bank falls below 50%, deposit insurance should be extended to that bank.
- The last hike – a bullet one - in the monetary limit of deposit insurance coverage from INR 30,000 to INR 1,00,00 which was effected in 1993 in the wake of the failure of Bank of Karad as an emergency measure still remains in force even after over 2 decades.
- At this level, 92.4% of the depositors and 30.8% of the deposit amount were fully covered as at March-end 2015 vis-à-vis the internationally favoured of 80% and 20% respectively.
- During 2014-15, the coverage limit was 1% and 12.3% higher than the per capita GDP and the per capita NNP respectively.
- Internationally speaking, India is positioned 95/111 from the top in terms of the coverage limit to per capita GDP ratio, though the ratio has been declining since 2003.
- There are 2 ‘thumb rules’ for setting the coverage level. Going by the first rule, i.e., on an average, the coverage levels should amount to 2 times per capita GDP, there is a case for increasing the ‘per depositor’ insurance limit at least by 50%. The *RBI Report of the Committee on Customer Service in Banks (2011)* recommended for a drastic hike in the coverage limit.
- However, if one goes by the second rule, i.e., fully cover 80% of the number of depositors but only 20-30% of the value of deposits, the present corresponding coverages at over 90% and over 31% are, to some extent, in excess.
- Further, a hike in the coverage limit, especially in the present scenario when PSBs are beleaguered by huge NPA problem may send a wrong message or be misinterpreted that the banking sector is facing some crisis.

- In view of the above 2 reasons, it is recommended to maintain status quo in coverage limit till such time the NPA issue eases and the actual coverage limit climbs down.
- In order to avoid frequent changes in the coverage limit, every revision should remain valid for next 3 years, unless otherwise warranted by possible bank crises.
- The female depositors may be provided an extra 10% to 20% coverage over and above the prevalent monetary coverage limit (i.e., at present, INR 1,00,000 + 10% to 20%)

### **Risk-based Premium System**

- The methods for determining the risk-based deposit insurance premium system, whether based on market or non-market information and *ex ante* or *ex post*, are fraught with some limitations or the other. The epicentre of the problems lies in ‘information’: availability, quality, cost, ease, adaptability, confidentiality, transparency, comprehensiveness, integrity and reliability. All these have a bearing on developing a simple, durable, intelligible and verifiable system of explicit deposit insurance premium.
- In India, officially, the voices to have a variable system of deposit insurance premium have been making rounds since 1998 when the Narasimham Committee-II mentioned about it in its Report.
- Finally, in September 2015, DICGC put the *Report of the Committee on Differential Premium System for Banks in India* on its Web Site for public comments/suggestions. The Report combines risk measures and supervisory ratings as the basis for computing differential premium system.
- Alternatively, we have mooted for using GNPA as the basis for risk-based premium system because the GNPA figure reflects the root of vulnerability of a bank in the Indian setting.
- In India, the existence of the moral hazard problem in banking is not well-established. According to the SNI value for India computed in the IMF Survey, it could be very low.
- Nevertheless, there are many other issues, such as, bifurcating DIF between commercial and cooperative banks, depositors’ literacy about deposit insurance, the extent to which depositors exercise discipline on their banks and overwhelming control of the government in banking business which need to be fixed before implementing a risk-based premium system.

- If a variable premium system comes, there should also be a system of rebate. When DIF achieves its required reserve ratio, there should be premium holidays for banks and/or when a bank is in the 'zero-risk' cell in the matrix, it should pay zero premium until its rating deteriorates.
- DICGC should base the premium not on 'assessable' but on 'insured' deposits.
- DICGC may consider conducting a survey of bankers and depositors before implementing the new system.

### **Deposit Insurance Fund**

- A scientific determination of the optimal size of DIF, either in terms of an absolute amount or in relation to some measure of exposure, is not possible because bank failures and insurance losses are cyclical in nature, and therefore, difficult to predict.
- Simply and objectively speaking, DIF should have money enough to cover losses and meet cash needs first.
- Such a system necessitates insurance assessments on banks to be high enough to keep the reserve ratio of DIF at a desired level always.
- As at March-end 2015, DICGC's DIF stood at INR 504.5 billion with the Reserve Ratio at 1.9% which was a tad below the 'desired' level of 2.0% in the absence of any mandate to maintain the Reserve Ratio at a specific level.
- DICGC protects equally the insured deposits of both commercial banks and cooperative banks. Despite the latter being highly fragile, DICGC doesn't maintain a separate DIF for them.
- The practice has been demonstrated to be inappropriate.
- Internationally, the median Fund size to covered deposits ratio stood at 0.37% with high-low values at 6.2%-0.12%.
- Pursuing the recommendations of the *RBI Report on Deposit Insurance Reform (1999)* DICGC should institute 2 deposit insurance funds, one for the commercial banks and the other for the cooperative banks.
- In case the DIF (Cooperative Banks) falls short of fund, the DIF (Commercial Banks) may lend stipulated amount at stipulated rate of interest to the former, maybe at the prevailing Bank Rate.



- As a rule of thumb, three-year moving averages of the cooperative bank failures can be taken to predict the next year's expected failure and accordingly DIF (Cooperative Banks) may be capitalized.
- Capitalization of DIF through a line of credit or collateralized borrowing from the government at the times of crises may be facilitated, which the RBI Report on Deposit Insurance Reform had recommended.
- Another alternative to guarantee a minimum fund size could be some sort of capitalization of DIF through the banking industry deposits or capital contributions.

### **Resolution Mechanism**

- At present, India lacks a special resolution regime or comprehensive policy or law on bankruptcy exclusively for the financial institutions as a whole. However, there are some provisions contained in various Acts which empower the respective regulator/supervisor and/or the Central government to resolve different types of problems of financial institutions in India.
- RBI, assisted by DICGC, carries out the resolution of troubled or failed banks. The typical resolution methods used in India are assisting the troubled bank in restructuring or merging it with a strong institution or closure.
- DICGC assists in mergers by meeting the shortfalls in depositors' claims up to the coverage limit, when the acquiring bank is unable to meet this liability.
- One of the imperatives to reform DICGC is to establish a well-defined, well-structured and seamlessly integrated resolution mechanism for financial institutions in trouble. The urgent need for this has been felt globally as also in India in the aftermath of 2007-09 financial crisis.
- Following the FSB's announcement of *Key Attributes of Effective Resolution Regimes for Financial Institutions* (the 'Key Attributes') in 2011, the Indian government set up the Financial Sector Legislative Reforms Commission which recommended in 2013 for a single Resolution Corporation for financial institutions.
- It also recommended that DICGC should be subsumed by the Resolution Corporation.
- However, we have argued that a separate Resolution Corporation for banks in India at this stage is not called for. The present arrangement of separate segment regulators

along with FSDC is adequate. However, DICGC may be designated as the Resolution Corporation for the banking sector when the situations warrant such a body.

### **Organizational Matters**

- DICGC may continue as a 100% subsidiary of RBI, but it should be accorded complete independence in its working and functions. Besides, both RBI and DICGC should act in tandem without any ‘complex’ on either side.
- The authorized capital of DICGC may be hiked to at least INR 5 billion and contributed fully by RBI in tranches. In addition, it should have a lender of last resort facility or collateralized liquidity support from the central bank as well as government support to meet any contingencies.
- There should be a department exclusively devoted to regular coordination and exchange of information with the Department of Banking Regulation, Department of Banking Supervision, Department of Co-operative Bank Regulation and Department of Co-operative Bank Supervision. The same department may also hold periodic meetings with the Financial Stability Unit.
- If DICGC is to be made an independent organization, it has to have its own staff.
- There should be an overall expert on Deposit Insurance in the Board of DICGC. Alternatively, an exclusive advisor on the subject should be appointed in the senior executive cadre either on regular or consultation basis.
- A case may be made out to the government to tax the investment income, not the deposit insurance premium.

### **Part F: Concluding Remarks**

#### **The Changed Role of DIC**

- If our proposals as to institutional coverage, monetary coverage limits, shifting the assessment base to ‘insured’ deposits from ‘assessable’ deposits and risk-based premium system are implemented, the required size of DIF will lower and hence the premium rates for the insured banks.
- Ultimately, DICGC should aim at moving towards becoming a full-fledged resolution institution for the banking sector with increasing powers for regulation and supervision.

- DICGC, in its new avatar, may be named as the Bank Deposit Insurance Corporation (BDIC), as was proposed by Yashwant Sinha in his Budget in 2001-03.
- Its metamorphic role should be as follows:
  - Insurer of bank deposits
  - Guardian of DIFs
  - Administrator of risk-based deposit insurance premium
  - Monitor of riskiness and health of banks
  - Resolution authority
  - Reimbursing the dues of depositors of failed banks in time
  - Accomplishing independence in working and function
- It has a big role to play in spreading awareness about Deposit Insurance among the public directly as well as indirectly through bank branches, besides making it part and parcel of the Financial Literacy Programme.

## Chapter I

### Introduction

Traditionally, India has been a savings-oriented economy, which is widely acknowledged too. As per the World Bank data, during 2006-11, the Gross Domestic Savings (GDS)/GDP ratio in India stayed consistently above 30% with the median at 31.69% and a peak of 34.02%. During 2012-14, the ratio came down sequentially to 29.92% in 2014. In 2014, India was the 36<sup>th</sup> top country (out of 155 countries for which the World Bank had the statistics) and 2<sup>nd</sup> among the BRICS economies in terms of GDS/GDP ratio. Among 9 neighbouring Asian economies,<sup>1</sup> India's GDS/GDP ratio was the 6<sup>th</sup> highest.

According to the first revised estimates of Central Statistics Office, in 2014-15, India's GDS/GDP (at current market prices) ratio stood at 33.0%.<sup>2</sup> The household sector has been the largest contributor to GDS (19.1% in 2014-15).

It is also true that the highest chunk of savings is channelled through banks. This continues to be so despite various other segments of the financial sector, such as, the stock and commodity markets, insurance companies, mutual funds, long-term financial institutions and non-banking financial companies acquiring enhanced width and depth. As far as the household sector is concerned, in 2014-15 (Preliminary Estimates), while (change in) bank deposits constituted the highest share in (change in) gross financial assets at 46.9%, the share of (change in) bank loans in (change in) gross financial liabilities was as high as 93.3%. Chart 1.1 presents the historical trend. As proportion of GDP (at current market prices), bank deposits and loans are estimated to be 69.1% and 53.6% respectively in 2015-16.<sup>3</sup> Chart 1.2 presents the historical trend. Thus, being the spinal cord of the economy and the financial sector alike, the banking sector, if disturbed, can transmit tremors through a significant part of the financial sector as also economic superstructure of India.

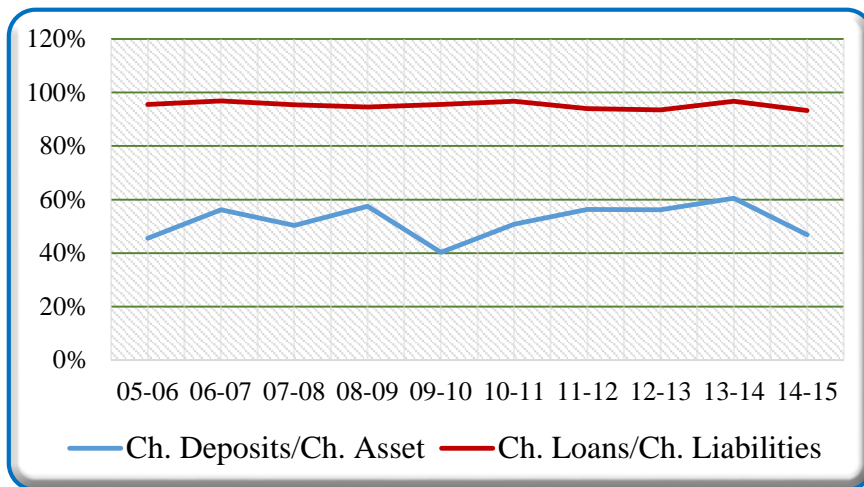
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<sup>1</sup> Malaysia, Indonesia, Thailand, Vietnam, Mongolia, India, Bangladesh, Philippines and Nepal.

<sup>2</sup> As per the new 2011-12 national accounts series introduced in 2015.

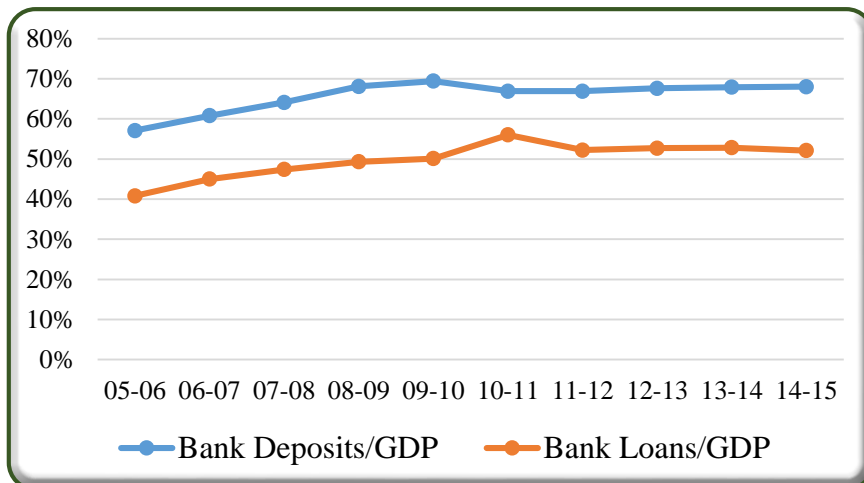
<sup>3</sup> Our estimates.

**Chart 1.1: (Change in) Bank Deposits/Gross Financial Assets and (Change in) Bank Loans/Gross Financial Liabilities**



Source: Based on RBI data.

**Chart 1.2: Ratios of Bank Deposits and Bank Loans to GDP**



Source: Based on RBI data.

At the same time, it may be noted that a large section of households is financially excluded. According to the World Bank's *Global Findex Database* (2014), only 53% of the adults in India had an account with a formal financial institution (up from 35% in 2011), thereby indicating that the extent of financial exclusion is diminishing, especially owing to the dedicated Financial Inclusion programmes.

A typical bank depositor in India is small, unsophisticated and worried more about the safety of her/his deposits than return on those. Depositors prefer public sector banks (PSBs) to other banks as the former is predominantly owned by the central government and hence perceived as fail-safe. Even otherwise, in general, the commercial banks are considered 'too-important-to-fail' (TITF). However, the cooperative banking sector is considered and observed to be fragile.

In view of the above, Deposit Insurance (DI) is a logical necessity of any banking system. The logic derives from basically two factors: (a) It instils a sense of confidence in the teeming millions of lower and middle income group citizens who form the backbone of the banking system and thereby protects depositor runs at the time of banking crises that ultimately ensures systemic safety and soundness ('crisis prevention' function) and (b) It ensures quick resolution of failed banks and therefore guarantees smooth functioning of the banking system, post-crisis ('crisis management' function).

The Indian DIS is the second oldest in the world having been set up in 1962 after FDIC was established in 1933. DICGC, India's Deposit Insurance Agency (DIA), is a fully-owned subsidiary of RBI and its operations are of low profile nature, unlike the DIAs in many advanced economies. However, conditions are changing.

### **Motivation**

It is the interplay of the following 3 factors that has motivated the researcher to choose this topic for his doctoral research.

First, the researcher has been associated with the work of Deposit Insurance since 1994 when he received a Fellowship from the erstwhile Indian Institute of Bankers (now Indian Institute of Banking and Finance) and went to USA to study the subject of bank failures and the role of deposit insurance there. In the US, he engaged with the officials of, *inter alia*, FDIC, Federal Reserve and American Bankers' Association. Thereafter, looking at his project report, presentations in conferences and published works on the subject, he was taken as a member in various committees of RBI on deposit insurance including one joint committee of RBI, DICGC and Ministry of Finance which visited FDIC in order to understand their system. For this purpose, he was on deputation to DICGC for nearly a year. He has published the first book on Deposit Insurance in India. In addition, last year, one of his papers on the subject was internationally recognized when it was circulated to the Research and Guidance Committee as well as Advisory Panel of International Association of Deposit Insurers at Bank for International Settlements, Switzerland.

Thus, the researcher has been pursuing the subject passionately with a lot of zeal and determination to arrive at innovative ideas on deposit insurance and related areas and therefore, has decided to contribute in much more serious ways to the existing literature on the subject. It may here be noted that in India, there is hardly any research done on the subject of deposit

insurance and related issues in banking. However, things are changing and the researcher feels that the need for revamping the deposit insurance system is round the corner.

Secondly, deposit insurance *per se* being an unimportant banking activity, the subject has also remained grossly under-researched. Therefore, with his above-mentioned background on the subject, he wants to fill up the gap to some extent.

At another level, after his voluntary retirement from banking service, he is concerned about the well-being of the common man, especially the salaried, self-employed and retired people who, owing to lack of sufficient risk appetite and financial literacy, save predominantly in bank deposits, on which the post-tax real return is not adequately remunerative. Therefore, in such a situation, additionally, if their deposits are not safe or to be more specific, unavailable on demand due to some imbroglios in their banks, the situation will be disastrous for them as well as the economy.

The above-mentioned 3 factors have whetted the researcher to take up the topic for his Ph. D. research. Finally, he has gathered a lot of resources on the subject over time.

### **Objectives of Research**

In this research, it is argued that the transformations that are taking place in the Indian economy in general and financial services industry in particular will make imperative changes in the Deposit Insurance System (DIS) too. The paper focuses on these emerging scenarios and works out an agenda for reforming the DIS in India. It does not argue for abolishing deposit insurance but emphasizes on bolstering the existing system. Working towards this, the following specific objectives have been explored:

- i. To review the role of DI in the financial sector and economic development
- ii. To conduct a detailed survey of the nature of deposit taking activity in India – depositors, instruments, institutions and regulatory framework
- iii. To explore the origin and history of DI in India
- iv. To critically examine the various functions of the existing DIS in India
- v. To recommend changes in the existing system
- vi. To redefine the role of DIA

## **Methodology and Database**

This is a descriptive but practical policy-oriented work – policies which *can* be implemented for the common good and thereby enhancing the utility of the research work in the real situation. It is an argumentative paper which combines theoretical concepts of both banking and insurance with insight, experience and judgement sourcing from practical experience with a view to arriving at policy conclusions which will be in consonance with contemporary real operating environment. In this effort, theoretical and empirical evidences have been greatly sourced. While making policy recommendations, the latest global benchmarks and/or best practices which have been issued by FSB, BIS and IADI have been kept in view.

The work is based on secondary data only.

## **Scope**

The focus is on bank deposits. Insurance for non-bank deposits does not fall in the purview of the work.

## **Quantitative Techniques**

Simple statistical techniques, such as, measures of central tendency, measures of dispersion and trend analysis have been used. Besides, graphs have been extensively used.

## **Structure of the Thesis**

Besides the Executive Summary which is presented in the beginning, the rest of the research document is organized as follows:

Chapter I deals with the introduction, objectives and methodology, etc.

Chapters II to IV dwell on a literature survey relating to (a) the link between financial development, economic growth and banks, (b) bank risks, and bank and depositor runs and (c) theories of deposit insurance and evidences, respectively.

Chapter V analyzes the various facets of the DISs all over the world.

Chapter VI briefly introduces the Indian banking sector and its segmental vulnerability. It also provides a glimpse of the history of bank failures in India.

Chapter VII gives a detailed account of the deposit-taking activities by the Indian banks and analyzes in greater detail the characteristic features of a typical Indian bank depositor.

Chapter VIII carries a detailed critical assessment of the DIS in India.



Chapter IX elaborates the efforts made hitherto to bring in reforms in the prevalent DIS.

Chapter X argues why Deposit Insurance will become important in future and how imminent the same is.

Chapters XI to XV deal with our recommendations relating respectively to (a) monetary coverage limit, (b) risk-based premium pricing, (c) Deposit Insurance Fund, (d) Resolution Mechanism and (e) Organizational matters.

Chapter XVI concludes.

### **Limitations**

- i. Scarcity of literature on DI in India leading to reliance on foreign literature, most of which originate from the US
- ii. Another limitation perhaps could be the extent of purity and integrity of secondary databases.

*Key Words:* Bank Failure, Depositor, Deposit Insurance, DICGC, DIS, DIA

*JEL Codes:* G 01, G 21, G 22 and G 28

## Part – A: The Underpinnings

**This Part comprising 3 Chapters focuses on a review of the theoretical and empirical literature on (a) the relationship between financial development and economic growth (Chapter 2), (b) how depositors' runs transform into bank panics, and finally bank contagion and failures imposing tremendous socio-economic cost on the society (Chapter 3) and (c) the advantages and disadvantages of deposits insurance (Chapter 4).**

**This lays the foundation stone for proceeding further in the research work. However, it may be underscored that the rich and voluminous literature is dominated to a very large extent by the research originating from the US and done on the US financial and deposit insurance systems alike.**

**Our contribution in this part is to arrange this voluminous literature, which is available in the form of several papers ranging from early 20<sup>th</sup> century till date and from a lot of sources, in a systematic manner insomuch as it becomes relevant for the policy analysis in the Indian context, which is the ultimate goal of our research.**

**However, the striking thing is that 'customer' as a part of the financial system is nowhere mentioned in the literature, which, however, we have highlighted in the Chapter 1.**

## Chapter II

### Financial Development, Economic Growth and Banks

This Chapter is divided into 4 Sections: Section 1 is devoted to a review of some important theoretical literature on the linkage between financial development and economic growth; Section 2 presents some of the empirical works done to examine the existence of the above-mentioned nexus; Section 3 focuses on the debate of the relative efficiency of banking infrastructure versus market infrastructure in the financial system; and Section 4 discusses the various views on what a bank does.

#### Section 1: Financial Development and Economic Growth – Theoretical Views

A financial system comprises financial instruments, markets, intermediaries and last but not least customers,<sup>4</sup> both individuals and non-individuals. A sound financial system leads to sound financial development which ultimately results in good economic growth. The financial history literature is replete with serious theoretical and empirical research on various facets of the symbiotic relationship between the financial system, financial development and economic growth. However, the recognition of the relationship has come after several disagreements about it in academia.

Meier and Seers (1984) mention that finance was not even discussed in a collection of essays by the “pioneers of development economics”, including three Nobel Prize winners. Joan Robinson (1952) famously argued that “where enterprise leads finance follows”. Robert Lucas (1988) says that economists “badly overstress” the role of finance in economic growth. Nicholas Stern’s (1989) survey of development economics does not even mention finance, not even in a section that lists ‘omitted topics’. Viewed thus, finance does not cause growth; finance responds to changing demands from the “real sector”.

According to Rousseau (2002), the link between financial development and economic growth is not a recent discovery. And though Bagheot (1873), Schumpeter (1911), and Gurley and Shaw (1955) motivated this relationship decades, and indeed, over a century ago, it remained for economic historians, such as, Davis (1965), Cameron (1967), Sylla (1969), Goldsmith (1969) and McKinnon (1973) to give empirical content to the idea. These scholars primarily used the historical experiences of England and the US to illustrate the role of the financial system in the paving the way to market leadership. Since then, macro and development

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<sup>4</sup> The existing literature does not distinctively mention consumers or customers as an integral part of the financial system.

economists have studied the link more formally with theoretical models in which countries achieve rapid growth through well-developed financial systems that reduce credit market frictions [Greenwood and Jovanovic (1990), Greenwood and Smith (1997) and Rousseau (1998), and with cross-country and time-series statistical studies that uncover significant effects of financial sector size on macroeconomic outcomes [King and Levine (1993) and Rousseau and Wachtel (1998)]. Nobel Laureate Merton Miller (1998) opines that the correlation between financial markets and economic growth is too natural to warrant any serious discussion. Considered thus, the role of finance in economic growth process – in theory as well as in practice - cannot just be wished away.

Sylla (2006) while commenting on Raghuram G. Rajan and Luigi Zingales's *Saving Capitalism from the Capitalists* observes: “So is financial development worth the candle? Yes, Rajan and Zingales answer emphatically. They survey growing bodies of evidence, recent and historical, concluding that better financial arrangements cause economic growth”.<sup>5</sup>

Demirgüç-Kunt and Levine (2008) identify 5 significant ways through which the financial system facilitates smooth functioning of economic activities: (i) producing *ex ante* information about possible investments and allocating capital, (ii) monitoring investments and providing corporate governance after providing finance, (iii) facilitating the trading, diversification and management of risk, (iv) mobilizing and pooling savings and (v) easing the exchange of goods and services.

### **Producing *ex ante* Information**

The relationship begins with the financial intermediaries mobilizing savings from a multitude of savers and making those available for a number of profitable investments. In the process, they build a bridge between the two sets of economic players – savers and investors - who otherwise would find it impossible to contact each other. For both the parties, the fundamental problem lies in collecting reliable information about each other, processing this information and making the most profitable choice. All these have to be accomplished with the least cost and in time, which the savers and investors cannot do individually. Financial intermediaries, by providing this information ‘highway’, ultimately help in optimal resource allocation [Ramakrishnan and Thakor (1984), Bhattacharya and Pfleiderer (1985), Boyd and Prescott (1986), Allen (1990), Greenwood and Jovanovic (1990) and King and Levine (1993a)]. As

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<sup>5</sup> Rajan and Zingales had observed as follows: “few would now doubt that there exists a causal link between the development of the financial sector and the growth of the economy.”

Janet Yellen (2015) observes: “Access to capital is important for all firms, but it is particularly vital for start-ups and young firms, which often lack a sufficient stream of earnings to increase employment and internally finance capital spending. Indeed, research shows that more highly developed financial systems disproportionately benefit entrepreneurship... Expanded credit access has helped households maintain living standards when suffering job loss, illness, or other unexpected contingencies.” [See also Krueger and Perri (2006)]

It is also argued that as growth leads to rise in incomes of individuals and therefore their savings capabilities, financial intermediaries expand their function, which, in turn, generates production and dissemination of improved information with positive implications for growth. Thus, the two-way interaction between finance and growth occurs.

As financial markets grow, production of information grows and the same can be traded by agents or research firms for profit. This happens more in stock markets which are larger and more liquid than banks. The competition for supplying more and better information leads to better resource allocation [Grossman and Stiglitz (1980), Kyle (1984), Holmstrom and Tirole (1993) and Merton (1987)].

### **Monitoring Investments and Providing Corporate Governance**

Corporate governance has emerged as a pivot to understanding the finance-growth nexus. If the shareholders and creditors can monitor and influence the decisions of the firm managers to utilize their resources in a better way, firms will be prudent in directing resources more efficiently and innovatively. This will attract more savings to the firms which, in turn, will lead to better resource allocation and ultimately ensure higher macro growth [Stiglitz and Weiss (1983)].

Financial intermediaries, instead of individual suppliers of funds to firms, also improve corporate governance that lead to higher growth. According to Diamond (1984), financial intermediaries, by virtue of having “delegated authority” from savers to monitor utilization of funds by firms, reduce aggregate monitoring costs if monitoring was otherwise done individually by the providers of capital. It also eliminates the ‘free rider’ problem. Moreover, as the relationship between firms and financial intermediaries tend to mature over a period of time, the informational cost decreases. Further, financial intermediaries that improve corporate governance by economizing on monitoring costs reduce credit rationing and thereby boost productivity, capital accumulation and growth [Bencivenga and Smith (1993)].

Boyd and Smith (1992) analyze the cross-country differences in the quality of monitoring by financial intermediaries and show that even a capital-abundant country will attract investors if the financial intermediaries there exercise more effective control over corporates. Thus, the physical product of capital may be higher in a capital-scarce country, but investors recognize that their actual returns depend crucially on the effectiveness of monitoring by the intermediaries. Thus, poor financial intermediation will thwart optimal capital allocation.

Furthermore, talking in respect of powerful banks, Rajan and Zingales (1999) emphasize that financial intermediaries with close relation with firms may be effective at persuading the latter to repay their debts.

### **Diversification and Risk Mitigation**

The financial system helps pooling and diversifying the risks which results in better allocation of resources and ultimately higher growth. Normally, individuals are risk-averse, whereas high-risk ventures yield high returns. By pooling and diversifying the savings of the innumerable risk-averse individuals, financial intermediaries can direct capital to high-risk, high-return and thereby highly productive projects [Gurley and Shaw (1955), Patrick (1966), Greenwood and Jovanovic (1990), Saint-Paul (1992), Devereux and Smith (1994), Obstfeld (1994) and Acemoglu and Zilibotti (1997)]. Allen and Gale (1997) even talk about “intergenerational” risk sharing by long-standing financial intermediaries.

Financial markets and intermediaries, for instance, ameliorate one of the most critical risks firms or individuals encounter, i.e., liquidity risk. Highly liquid markets, such as, stock markets, bond markets and government securities markets transform the relative financial instruments into investments in high-return and long-term projects [Bencivenga and Smith (1991) and Bencivenga, Smith and Starr (1995)].

As a corollary to risk diversification, financial intermediaries also positively impact technological innovation. Technological innovations have increased the ease and convenience with which individuals make and receive payments [Yellen (2015)]. Ample evidences exist in favour of financial intermediaries promoting technological innovation [King and Levine (1993b), Galetovic (1996), Blackburn and Hung (1998), Morales (2003), Acemoglu, Aghion and Zilibotti (2003)]. Logically speaking, this happens because financial intermediaries ensure that investments are made in firms which are technologically advanced. This lies at the core of Joseph Schumpeter’s (1912) view of finance in the process of economic development:

“The banker, therefore, is not so much primarily a middleman ... He authorizes people in the name of society ... (to innovate).” (pp.74)

Focusing on innovation, de la Fuente and Marin (1996) develop a model in which some intermediaries elect to monitor innovation which is relatively a costly process. However, by doing so, they improve credit allocation among competing technology providers which has a salubrious effect on growth.

### **Savings Mobilization**

Financial intermediaries – banks or non-banks - collect billions of savings from millions of households and channel these to various projects including the gigantic ones. The financial sector also helps households save for retirement, purchase homes and cars, and weather unexpected developments. Many financial innovations, such as, the increased availability of low-cost mutual funds, have improved opportunities for households to participate in asset markets and diversify their holdings [Yellen (2015)]. [See also Greenwood and Scharfstein (2013) and Malkiel (2013)]. Thus, aggregate investment and capital accumulation receive boost and so also economic growth. This has been especially so in the Asian countries which have demonstrated high savings and investment rates [Gemma Estrada, Donghyun Park and Arief Ramayandi. (2010)].

### **Facilitating Exchange of Goods and Services**

Money is known for its 3 classical functions: means of payment, unit of account and store of value. These characteristics helped the transition from barter system to monetary economy and in turn led to accomplishment of substantial gains in economic efficiency and welfare the world over. Financial systems dealing with money or near-money not only reduce transaction costs but also eliminate several other angularities associated with barter system. Continuous aim at lowering transaction costs, aided by technological progress, has resulted in several financial innovations. In fact, today, transactions done through cards and electronic media are considered be highly cost-effective, fast, efficient, secured and convenient and have spurred economic activities at individual and corporate levels.

A case in point is remittances. There is a growing body of literature that find positive link between external remittances, financial development and economic growth. Recent studies by Chowdhury (2011), Gupto et al, (2009), Aggarwal et al (2006) and Olufemi Oke et al. (2011). (2010) indicate positive and significant association between remittance and financial development. Several studies show the linkages between remittances flow and growth with the

interaction of financial development [Chami et al. (2003), Barajas et al., (2009), Guliano and Ruiz-Arranz, (2009)].

Dermirguc-Kunt et al. (2011) believe that the remittances may lead to the opening of new commercial bank branches and greater use of financial services by its population. Noman and Uddin (2011) found causal relationship between remittances inflow and banking sector. Cooray (2012) found similar relationship in the case of government-owned banks.

Apart from the function as promoting growth, several studies reveal that remittances play an importance role in poverty reduction (Adam and Page, 2005; Taylor et al., 2005; Acosta et al., 2007; Gupto et al., 2009). According to Ratha (2007), besides providing direct financial aid to the poor, remittances flow in fact will affect poverty and welfare through indirect effects and macroeconomic multiplier effects.

Equally voluminous are the arguments against the positive linkage. Aggarwal et al (2011) and Dermirguc-Kunt et al (2011) demonstrate that increase in remittances flow can reduce the household financial constraint which might lead to decrease in the credit demand due to the household relying much on remittances as the financial support. Chami et al. (2003) found a negative relationship between remittances and economic growth as was found by Rajan and Subramaniam (2005). In another study, Catrinescu et al. (2009) found neither positive nor negative relationship between remittances and growth.

The literature on remittances is yet to reach a consensus about the impacts of remittance on the economy. Thus, the conclusion remains anomalous as to whether remittances through the financial instruments and intermediaries have facilitated financial development and economic growth.

So far, internal remittances sent between regions of countries have been paid very little attention by researchers and policy makers. One reason is lack of data and estimates on the volume of remittance flows occurring within countries. Similarly, the characteristics and effects of internal remittances are understudied. However, investigating the development impact of internal remittances is important considering that receiving internal remittances tends to be much more prevalent among the households in developing countries, such as, India and Bangladesh than international remittances [Adams (2007)].

Apart from fostering economic growth *per se*, financial development acts as a check against volatility of the growth process via facilitating liquidity shortage that hampers investments [Aghion et al., (2010)]. Aghion et al. (2009) also demonstrate that robust financial systems are



better able to smoothen exchange rate volatilities too and their adverse impact on investments and growth. The issue of exchange rate volatilities is especially significant in respect of many developing countries which depend on raw material exports.

Finally, as observed by IMF (2012), financial development increases the effectiveness of monetary policy, widens the fiscal policy space and allows a greater choice of exchange rate regimes.

### **Human Capital**

Financial systems can also promote accumulation of human capital and the latter is incontrovertibly a big contributor to economic growth [Jacoby (1994), De Gregorio (1996), and Galor and Zeira (1993)].

## **Section 2: Financial Development and Economic Growth – Empirical Evidences**

Table 2.1 summarizes some of the empirical results pertaining to financial development and growth linkage.

**Table 2.1: Financial Development and Growth – Some Empirical Findings**

<b>Research by</b>	<b>Dimensions</b>	<b>Findings</b>
<b>Cross-country Studies</b>		
<b>Goldsmith (1969)</b> Pioneering study to assess whether finance exerts a causal influence on growth	35 countries (1860 – 1963) Value of financial intermediary assets divided by GNP	Financial intermediary size relative to the size of the economy rises as countries develop  Positive correlation between financial development and economic development
<b>King and Levine (1993a)</b>	77 countries (1960 – 89) 3 growth indicators (averaged over 1960-89): (a) real per capita GDP growth, (b) growth in capital stock per person and (c) total productivity growth.  Additional measures of the level of financial development: (a) DEPTH: liquid liabilities of financial system divided by GDP, (b) BANK: bank credit divided by bank credit plus central	A strong positive relationship between each of the financial development indicators and the 3 growth indicators

Research by	Dimensions	Findings
	bank domestic assets and (c) PRIVY: credit to private enterprises divided by GDP	
<b>King and Levine (1993b)</b>		Confirms the above findings using alternative econometric methods and robustness checks
<b>Levine and Zervos (1998):</b> Stock Markets	42 countries (1976 - 93) Several measures of stock market development	Initial levels of stock market liquidity and banking development are positively and significantly correlated with future rates of economic growth  Strong link between stock markets, banks and growth through productivity growth rather than physical capital accumulation  Stock market size (market capitalization/GDP) is <i>not</i> strongly correlated with growth, capital accumulation and productivity improvements, implying that simply listing on the stock exchange does not necessarily foster resource allocation
<b>Levine, Loyaza and Beck (2000)</b>	71 countries (1960 - 95)	Strong link between financial development and growth
<b>Industry-level Studies</b>		
<b>Rajan and Zingales (1998)</b>	36 industries and 42 countries (1980-90)	Increase in financial development disproportionately boosts the growth of industries that are “naturally heavy users” of external finance
<b>Wurgler (2000)</b>	65 countries (1963-95)	Countries with higher levels of financial development (a) increase investment more in growing industries and (b) decrease investment more in declining industries than financially underdeveloped economies
<b>Firm-level Studies</b>		
<b>Demirguc-Kunt and Maksimovic (1998)</b>	26 countries (1980-91)	Both banking system development and stock market liquidity are positively associated with the excess growth of firms  As in Levine and Zervos (1998), size of the stock market is <i>not</i> related to firm growth

<b>Research by</b>	<b>Dimensions</b>	<b>Findings</b>
<b>Love (2003)</b>	40 countries	Greater financial development reduces the link between availability of internal funds and investment  Financial development is particularly effective at easing the constraints of small firms
<b>Country Case Studies</b>		
<b>Jayaratne and Strahan (1996)</b>	The States of USA  Estimates the change in economic growth rates in 35 US states that relaxed impediments on intra-state branching for banks relative to a control group of states that did not reform	Branch reform accelerated real per capita growth rates by improving the quality of bank loans and the efficiency of capital allocation
<b>Guiso, Sapienza and Zingales (2002)</b>	Regions of Italy	Local financial development (a) enhances the probability that an individual starts a business, (b) increases industrial competition and (c) promotes the growth of firms
<b>Haber (1991 and 1997)</b>	Brazil & Mexico (1830 - 1930)	Brazil: The 1889 financial liberalization gave more firms easier access to external finance resulting in falling industrial concentration and rising production  Mexico: Mild financial liberalization under the Diaz dictatorship (1877 - 1911) relying on the “political support of a small in-group of powerful financial capitalists” resulted in milder decline in concentration and weaker increase in economic growth compared to those in Brazil
<b>Cameron, Crisp, Patrick and Tilly (1967)</b>	Studying the historical relationships between banking development at early stages of industrialization for England (1750 - 1844), Scotland (1750 - 1845), France (1800 - 70), Belgium (1800 - 75), Germany (1815 - 70), Russia	Document critical interactions among financial intermediaries, financial markets, government policies and the financing of industrialization  Evidences gathered point to direct correlation between better functioning financial systems and faster economic growth

Research by	Dimensions	Findings
	(1860 - 1914) and Japan (1868 - 1914)	
<b>McKinnon (1973)</b>	Studies the relationship between financial system and economic development in Argentina, Brazil, Chile, Germany, Korea, Indonesia and Taiwan	

In spite of the above-mentioned attempts at empirically measuring the link between financial development and economic growth through various econometric techniques, the question remains: To what extent the variables used for representing ‘financial development’ *per se* are close to the ground realities or capture the imperfections in the financial systems (e.g., information asymmetry). The answer to the question would ultimately determine the robustness of the linkage. Unfortunately, no such realistic measure has so far surfaced [Rajan and Zingales (1998), Levine and Zervos (1998), Demirgüç-Kunt and Levine (2008) and Gemma Estrada, Donghyun Park and Arief Ramayandi. (2010)].

There have been discordant views stating that all forms of financial development do not necessarily promote growth. Besides some financial history literature, some recent research demonstrates this. For example, based upon data from 36 countries, Kroszner, Laeven and Klingebiel (2005) show significant negative effects of financial development on growth, varying as the degrees of financial development in the countries. Further, based upon a panel of 41 countries, Dell’Ariccia, Detragiache and Rajan (2005) show that financially dependent industries experience slower growth during banking crises than less financially dependent industries. In addition, the US experience of the Savings and Loan crisis and East Asia crisis corroborate this [Dehejia and Lleras-Muney (2005)].

Further, although financial development contributes to growth, but finance itself is vulnerable to shocks. For instance, assets-liability maturity mismatch (i.e., financing long-term assets with short-term liabilities) is an important origin of fragility. Information asymmetry problems coupled with agency problem between savers and creditors of a bank is another source. Banks’ accounts statements are more opaque than those for the real sector companies. Large creditors can also influence bank managers to take excessive risks that may precipitate problems for the bank (Carletti, 2008). Thus, the lubricant itself becomes a hindrance.

### **Section 3: Banks vs Market – Which is Better?**

#### **Case for Banks**

Proponents of bank-based systems argue that there are fundamental reasons for believing that market-based systems will not do a good job of acquiring information about firms and overseeing managers. In terms of acquiring information about firms, Stiglitz (1985) emphasizes the ‘free rider’ problem inherent in atomistic markets. Since well-developed markets quickly reveal information to investors at large, this dissuades individual investors from devoting resources toward researching firms. Thus, greater market development, in lieu of bank development, may actually impede incentives for identifying innovative projects that foster growth. Banks can mitigate the potential disincentives from efficient markets by privatizing the information they acquire and by forming long-run relationships with firms [Gerschenkron (1962), Boot, Greenbaum and Thakor (1993)]. Banks can make investments without revealing their decisions immediately in public markets and this creates incentives for them to research firms, managers and market conditions with positive ramifications on resource allocation and growth. Furthermore, Rajan and Zingales (1999) emphasize that powerful banks with close ties to firms may be more effective at exerting pressure on firms to repay their debts than atomistic markets.

Thus, banks will do a better job at researching firms, overseeing managers, and financing industrial expansion.

On corporate governance, a large literature stresses that markets do not effectively monitor managers [Shleifer and Vishny (1997)]. Second, some argue that the takeover threat as a corporate control device also suffers from the ‘free rider’ problem [Grossman and Hart (1980)]. Third, existing managers often take actions that deter takeovers and thereby weaken the market as an effective disciplining device [DeAngelo and Rice (1983)]. There is some evidence that in the United States, the legal system hinders takeovers and grants considerable power to management. Fourth, although in theory, shareholders control management through boards of directors, an “incestuous” relationship may blossom between boards of directors and management [Jensen (1993)]. Members of a board enjoy their lucrative fees and owe those fees to nomination by management. Thus, boards are more likely to approve “golden parachutes” to managers and “poison pills” that reduce the attractiveness of takeover. This incestuous link may further reduce the effectiveness of the market as a vehicle for exerting corporate control

[Allen and Gale (2000)]. Chakraborty and Ray (2004) conclude that banks can partially resolve the tendency for insiders to exploit the private benefits of control.

Shleifer and Summers (1988) and Bhidé (1993) show that the liquidity of stock markets can also adversely influence resource allocation.

Allen and Gale (1997, 2000) argue that the bank-based systems offer better inter-temporal risk sharing services than markets with beneficial effects on resource allocation. Besides the fact that concentrated ownership implies that wealthy investors are not diversified [Acemoglu and Zilibotti (1997)], concentrated owners may benefit themselves at the expense of minority shareholders, debt holders and other stakeholders in the firm with adverse effects on corporate finance and resource allocation

Zingales (1994) and Morck, Wolfenzon and Yeung (2005) argue that concentrated control of corporate assets produces market power that may corrupt the political system and distort public policies.

### **Case for Market-based**

Bank-based systems may involve intermediaries with a huge influence over firms and this influence may manifest itself in negative ways.

In terms of new investments or debt renegotiations, banks with power can extract more of the expected future profits from the firm (than in a market-based system) [Hellwig (1991)]. This ability to extract part of the expected payoff to potentially profitable investments may reduce the effort extended by firms to undertake innovative, profitable ventures [Rajan (1992)]. Furthermore, Boot and Thakor (2000) model the potential tensions between bank-based systems characterized by close ties between banks and firms and the development of well-functioning securities markets.

Banks - as debt issuers - also have an inherent bias towards prudence so that bank-based systems may hinder corporate innovation and growth [Morck and Nakamura (1999)].

Weinstein and Yafeh (1998) argue that banks may not be effective gatherers and processors of information in new, uncertain situations involving innovative products and processes [Allen and Gale (1999)]. Similarly, Dewatripont and Maskin (1995) demonstrate that in a bank-based system characterized by long-run links between banks and firms, banks will have a difficult time credibly committing to not renegotiate contracts.

Another line of attack on the efficacy of bank-based systems involves their role in exerting corporate control over firms and the corporate governance of banks themselves. Bankers act in their own best interests, not necessarily in the best interests of all creditors or society at large. Thus, bankers may collude with firms against other creditors [Black and Moersch (1998), Wenger and Kaserer (1998) and Charkham (1994)].

Wenger and Kaserer (1998) also provide examples in which banks misrepresent the accounts of firms to the public and systematically fail to discipline management. Also, Rajan and Zingales (2003) argue that in response to adverse shocks that affect the economy unevenly, market-based systems will more effectively identify, isolate, and bankrupt truly distressed firms and prevent them from hurting the overall economy than a bank-based system.

Thus, to the extent that banks actually weaken the corporate governance of firms, bank-based systems represent sub-optimal mechanisms for overseeing firms and improving resource allocation.

Furthermore, relying on a bank-based financial system may be problematic because of the difficulties in governing banks themselves [Caprio and Levine (2002)].

The governance problem facing depositors is of course exacerbated in the presence of deposit insurance. Perhaps because of the particularly severe informational impediments to governing banks, banks are even more likely than nonfinancial corporations to have a large, controlling owner [Caprio, Laeven and Levine (2003)]. This concentration of ownership in conjunction with lack of transparency may make it easier for bank insiders to exploit both other investors in the bank and the government if it is providing deposit insurance. The history of Mexico, for example, is replete with incidents of powerful families using their control over banks to exploit other creditors and taxpayers [Haber (2004, 2005), Maurer and Haber (2004)]. For instance, La Porta, Lopez-de-Silanes and Zamarripa (2003) find high rates of connected lending in Mexico. Laeven (2001) presents evidence that insiders in Russian banks diverted the flow of loans to themselves and then defaulted 71% of the time.

Finally, the proponents of market-based financial systems claim that markets provide a richer set of risk management tools that permit greater customization of risk ameliorating instruments. While bank-based systems may provide inexpensive, basic risk management services for standardized situations, market-based systems provide greater flexibility to tailor make products. Thus, as economies mature and need a richer set of risk management tools and vehicles for raising capital, they may concomitantly benefit from a legal and regulatory

environment that supports the evolution of market-based activities, or overall growth may be retarded.

### **Complementarity**

Banks have several financial functions: they evaluate project, exert corporate control, facilitate risk management, ease the mobilization of savings, and facilitate exchange. Thus, this “financial functions view” rejects the primacy of distinguishing financial systems as bank-based or market-based [Merton (1992, 1995), Merton and Bodie (1995, 2004), Levine (1997)]. According to this view, the crucial issue for growth is whether the economy has access to a well-functioning financial system; the exact composition of the financial system is of secondary importance.

Another criticism for emphasizing market-based versus bank-based differences is that markets and banks may provide *complementary* growth-enhancing financial services to the economy [Boyd and Smith (1998), Levine and Zervos (1998a), Huybens and Smith (1999)].

The theoretical literature is making progress in modeling the “co-evolution” of banks and markets [Boyd and Smith (1996), Allen and Gale (2000)]. Furthermore, microeconomic evidences emphasize potential complementarities between banks and markets. Using firm-level data, Demirgüç-Kunt and Maksimovic (1996) show that increases in stock market development actually tend to increase the use of bank finance in developing countries. Moreover, Sylla (1998) describes the interdependence of banks and securities markets in providing financial services to the US economy in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries.

### **Legal Systems**

One additional argument for not focusing on distinguishing between bank- and market-based systems is that legal system differences are the fundamental source of international differences in financial development [La Porta et al. (2000)]. While focusing on the law is not inconsistent with banks or markets playing a particularly important role, they clearly argue that legal institutions are a more useful way to distinguish financial systems than concentrating on whether countries are bank-based or market-based.

## **Section 4: Conceptualizing a Bank**

### **Facilitator of Safe-keeping and Transactions**

Etymologically, the word 'bank' is derived from the French word 'banquet and the Italian word 'banca'. The word 'banque' means 'chest' and the word 'banca' means 'bench'. 'Chest' signifies



the 'safekeeping' function of banks, i.e., a place where precious things are kept (e.g., gold or jewellery chest). Today, a bank's chest transcends the physical dimensions of its strong-room; it is the 'portfolio' of earning assets that represents the bank's chest. In other words, a bank's deposits are kept or invested in the form of financial assets representing claims on the earnings of households, business firms and governments. This portfolio, according to Sinkey (1992), provides a bank's "lifeblood", namely, net earnings.

'Banca' (bench), in 12th Century Italy, meant the 'table', 'counter' or 'place' where a moneychanger transacted his business. In a bank, there are many 'benches', such as, the savings bank desk, the teller's counter, loan desk, etc. These benches facilitate the customers' accessibility to the safekeeping and transactions functions of the commercial banks.

By virtue of providing the safekeeping and transactions functions, banks virtually act as information collector, analyst and disseminator.

### **As a Balance Sheet**

Conceptualizing a bank as a balance sheet follows from the basic balance sheet identity, i.e.,  $\text{Assets} = \text{Liabilities} + \text{Net Worth}$ . The assets mainly comprise (a) loans to households, business firms and governments (both secured and unsecured, long- and short-term) and (b) investments in government and other securities including shares, bonds, investments in subsidiaries or joint ventures, etc. For example, as at March-end 2015, the assets of SCBs in India (excluding RRBs) composed of over 61% of loans and over 26% of investments. Assets are financed primarily by deposits from households, business firms and governments. Bank liabilities consist mainly of deposits from the households or retail deposits. For example, as at March-end 2015, over 78% of the liabilities of SCBs in India were deposits. Net worth is total equity capital plus reserves and surplus. Net worth accounted for 7.5% of the liabilities of the SCBs in India as at March-end 2015. This reveals that banks are highly leveraged business units. Theoretical literature suggests several types of "synergies" between the assets and liabilities sides of a bank's balance sheet.

Boyd and Prescott (1986), Diamond (1984) and Gorton and Pennachi (1990) suggest that a bank is an intermediary that structures its contracts to minimize the risk it shares with outside investors when it possesses private information about the value of its portfolio. Flannery (1994) views the bank's lending as inherently opaque and sees short-term demand deposits as the low cost way to prevent bank moral hazard. Myers and Rajan (1998) argue that too much asset liquidity can aggravate moral hazard problems, and claim that, historically, the bank's illiquid

lending business arose to offset the inherent liquidity of the assets it needed to hold to service deposit demand. Kashyap, Rajan and Stein (1998) find a synergy between loan commitments and deposits. Nakamura (1988) argues the information from customer deposit accounts can be used by banks to make better credit decisions, while Qi (1998) assumes that the information from credit decisions helps depositors-cum-borrowers evaluate the bank's competence. Diamond and Dybvig (1983) focus on the liquidity the bank provides depositors, taking the illiquidity of real assets as given. Finally, Diamond and Rajan (1999) establish that the synergy arises through the specific skills a lender may have.

### **Liquidity Creators**

Banks can be conceptualized as ‘liquidity creators’, i.e., they provide illiquid loans to borrowers on one hand and allow freedom to the depositors to withdraw their deposits at par value with accrued interest any time they want on the other<sup>6</sup> [Bryant (1980) and Diamond and Dybvig (1983)]. Banks also provide liquidity to borrowers through off-balance sheet products like loan commitments based on liquid funds [Boot, Greenbaum and Thakor (1993), Holmstrom and Tirole (1998), Kashyap, Rajan and Stein (2002) and Thakor (2005)]. In a fractional reserve system, banks create this liquidity after meeting the cash reserve ratios set by the central banks. As ‘liquidity creators’ banks play a very significant role in the economy [Bernanke (1983), and Dell’Ariccia, Detragiache and Rajan (2009)] and the role assumes increasing importance, especially during financial crises [Acharya, Shin and Yorulmazer (2009)].

Banks perform this through 4 transformation mechanisms: (a) Liability-asset transformation – acceptance of deposits as liability and conversion of the same into assets, such as, loans, (b) Size transformation - combine small amounts of deposits from numerous savers to give large loans to investors, (c) Maturity transformation – offer savers alternate forms of deposits according to their liquidity preferences while providing borrowers with loans of desired maturities and (d) Risk transformation – through diversification banks distribute the risks so as to reduce risks to savers which otherwise would have prevailed without bank intermediation.

### **Transformation Service Providers**

Diamond and Dybvig (1986) conceptualize banks as providers of transformation service. Transformation services require no explicit service provision to borrowers or depositors but

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<sup>6</sup> Premature withdrawal of time deposits, however, attracts penalty.

instead involve providing the depositors with a pattern of returns that is different from (and preferable to) what depositors could obtain by holding the assets directly and trading them in a competitive exchange market. Explicitly, this means the conversion of illiquid loans into liquid deposits or, more generally, the creation of liquidity. They conclude that creation of liquidity by providing transformation services is done almost exclusively by banks which is their “most subtle and probably the most important function.”

### **“Special” Business Units**

Banks are conceptualized as ‘special’ business units. The doctrine of specialness of banks is, by and large, attributed to the Federal Reserve System. The doctrine hypothesizes that by virtue of playing a unique (special) role in the economy, banks require extraordinary (special) regulatory treatment. The principal proponent of specialness includes Gerald Corrigan (1982).

The Fed’s arguments for specialness is based on the 'interaction' of 3 banking functions: (i) the provision of transactions services and the accompanying administration of the payments system, (ii) the role as credit decision makers and providers of backup liquidity to the economy and (iii) the position as carriers of monetary policy to the economy. Although the Fed acknowledges that the banks are not the only financial service firms to perform these functions, yet it argues that the interplay of the 3 together justifies the public policy. The 'specialness' argument also means that the deposit-taking franchise must be kept competitively strong.

However, this view is not without controversy. Aspinwall (1983) has 2 points against the 'specialness' doctrine. These are: (i) banks are not special because nonbanks, which are subject to substantially less regulation, provide essentially the same financial services as banks and the expansion of the banking franchise to nonbanks has no adverse impact apprehended by bank regulators and (ii) fewer restrictions on pricing, service and location will escalate competition, improve financial services and ultimately strengthen the financial service firms. Thus, contrary to the Fed's position, Aspinwall is against protection to deposit-taking franchise. Kane (1987) and Congressman Doug Barnard (1987) also join Aspinwall to oppose the special treatment of banks. Finally, Rajan (2009) observes that combination of essential services and unique vulnerability has led many observers and governments to consider and treat banks in “special” ways.

### **“Agents” of Socio-economic Change**

Banks have been conceptualized as “agents” of socio-economic change, especially in many developing and emerging market economies. In many of these countries, banks have to deploy

mandatorily a certain percentage of their deposit liabilities for the development of socially and economically backward regions and population groups. Sometimes, activities that are not too lucrative for investors come in the ambit of such finance. For instance, in India, these sectors go by the nomenclature of ‘Priority Sectors’. Nationalization of private banks in India (1969 and 1980) was motivated by this purpose of making banks the harbinger of socio-economic development.

### **Banks as Fragile Business Units**

Calomiris and Kahn (1991) and Diamond and Rajan (2001) emphasize the importance of fragility - the possibility of liquidation by depositors - as a “commitment mechanism” for banks. Calomiris and Kahn (1991) argue that the ability of depositors to withdraw deposits on demand provides incentive for informed depositors to monitor banks and trigger a run if the bank is likely to expropriate depositor funds. Diamond and Rajan (2001) argue that the threat of runs commits banks to share rents that accrue through their loan-collection skills, facilitating liquidity creation. Fragility allows panics and unjustified runs that can lead to the failure of solvent but illiquid banks (Diamond and Dwyer, 1983).

### **Financial Superstores**

Lastly, technical change, deregulation and institutional change together have led banks to emerge as financial superstores by diversifying into mutual funds, insurance, pension funds investment banking, venture capital financing, hedge funds, etc., either directly or indirectly through subsidiaries or JVs. Banks are also moving away from plain-vanilla products to complex ones which are illiquid and they have to hedge the risks in the market. This transformation has thrown up many opportunities; but opportunities can be for good or for bad [Rajan (2005)].

We conclude with a quote from Yellen (2015): “The contribution of the financial sector to household risk management and business investment, as well as the significant contribution of financial-sector development to economic growth, has been documented in many studies. Such research shows that, across countries and over time, financial development, up to a point, has disproportionately benefited the poor and served to alleviate economic inequality.”

## **Summing Up**

- *There is wide and deep theoretical and empirical evidence that financial development contributes to economic growth.*

- *Although financial development enhances growth, the dark side is finance per se is vulnerable to shocks or fragility.*
- *Although there have been debates as to whether banks, as financial infrastructure, are better than the market, the consensus, by and large, is that they are complementary to each other.*
- *Banks have been conceptualized as:*
  - *information collector, analyst and disseminator*
  - *a balance sheet with synergies between the assets and liabilities sides*
  - *liquidity creators*
  - *providers of transformation service*
  - *'special' business units*
  - *"agents" of socio-economic change*
  - *fragile business units*
  - *financial superstores*

## Chapter III

### Bank Risks, Deposit Run, Bank Panic and Bank Contagion

This Chapter is divided into 3 Sections: Section 1 glosses over the various types of risks a bank today is exposed to, along with some case studies; Section 2 deals with how deposit runs transform into bank runs and then become contagious; and Section 3 assesses the socio-economic cost of bank runs.

#### Section 1: Bank Risks

'Risk' is the probability that any event or set of events might occur. It originates from the vulgar Latin word 'rescur', meaning 'risk at sea', 'danger' or 'that which cuts'. The Chambers Dictionary (1995) defines risk as the "degree of probability of loss". 'Risk', thus, usually denotes a negative or undesired event, e.g., an event that will cause a bank to fail rather than to be successful.

Banks are in business of money and therefore, they are naturally into business of risks and risk management because money, one of the most inflammable commodities so to say, can play havoc with individuals and nations, if inappropriately managed. It may also be added that risks cannot be reduced to zero and nor they should be. However, risks can be mitigated through trade-offs. For example, fraud risk can be minimized by putting in place detailed audit and vigilance systems. *Ex ante* trade-offs are more cost effective because in the case of *ex post* trade-offs, by the time the fraud has occurred and been detected, as in the above example, the bank must have lost a lot money as well as reputation.

Table 3.1 presents a bird's eye view of the risks that the banks today deal with. It also presents some case studies, albeit briefly, as to how overlooking the risks led to failure of some banks in the recent past.

**Table 3.1: Bank Risks and their Dimensions**

SI No	Type	Definition	Dimensions
1	<b>Credit risk</b>	<p>The Basel Committee on Banking Supervision (or BCBS) defines credit risk as “the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms” The phrase “agreed terms” includes both uncertainty involved in repayment of the bank’s dues and repayment of dues on time</p> <p>The goal of credit risk management is to maximise a bank’s risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters</p>	<p>The default usually occurs due to inadequate income or business failure as well as unwillingness on the part of the borrower to repay the loan in spite of having adequate income</p> <p>Credit risk signifies a decline in the credit assets’ values before default that arises from the deterioration in a portfolio or an individual’s credit quality Credit risk also denotes the volatility of losses on credit exposures in two forms: (i) loss in the credit asset’s value and (ii) loss in the current and future earnings from the credit</p> <p>Banks create provisions while disbursing loan Net charge-off is the difference between the loan amount gone bad minus any recovery on the loan. An unpaid loan is a risk of doing the business The bank should position itself to accommodate the expected outcome within profits and provisions, leaving equity capital as the final cushion for the unforeseen loss</p>
2	<b>Market risk</b>	<p>BCBS defines market risk as “the risk of losses in on and off-balance sheet positions arising from movements in market prices” Market risk is the most important risk for investment banks as those are generally active in capital markets</p>	<p>The major components of market risk include:</p> <ul style="list-style-type: none"> <li>• Interest rate risk</li> <li>• Equity risk</li> <li>• Foreign exchange risk</li> <li>• Commodity risk</li> </ul> <p><b>Interest rate risk</b></p> <p>It’s the potential loss due to movements in interest rates This risk arises because a bank’s assets usually have a significantly longer</p>

SI No	Type	Definition	Dimensions
			<p>maturity than its liabilities Management of interest rate risk is also known as asset-liability management</p> <p><b>Equity risk</b></p> <p>It's the potential loss due to an adverse change in the stock price Banks can accept equity as collateral for loans and purchase ownership stakes in other companies as investments from their free or investible cash Any negative change in stock price either leads to a loss or diminution in investments' value</p> <p><b>Foreign exchange risk</b></p> <p>It's the potential loss due to change in value of the bank's assets or liabilities resulting from exchange rate fluctuations Banks transact in foreign exchange for their customers or for the banks' own accounts Any adverse movement can diminish the value of the foreign currency and cause a loss to the bank</p> <p><b>Commodity risk</b></p> <p>It's the potential loss due to an adverse change in commodity prices These commodities include agricultural commodities (e.g., wheat, livestock and corn), industrial commodities (e.g., iron, copper and zinc), and energy commodities (e.g., crude oil, shale gas and natural gas) The commodities' values fluctuate a great deal due to changes in demand and supply Any bank holding them as part of an investment is exposed to commodity risk</p>
3	<b>Operational risk</b>	BCBS defines operational risk "the risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems, or from	The fall of one of Britain's oldest banks, Barings, in 1995, is an example of operational risk leading to a bank's collapse One of Barings' traders in Singapore, Nick Leeson, was able to hide his



SI No	Type	Definition	Dimensions
		<p>external events (including legal risk), differ from the expected losses"</p> <p>The following lists the official Basel II defines the seven event types with some examples for each category:</p> <ol style="list-style-type: none"> <li>1. Internal Fraud - misappropriation of assets, tax evasion, intentional mismarking of positions, bribery</li> <li>2. External Fraud - theft of information, hacking damage, third-party theft and forgery</li> <li>3. Employment Practices and Workplace Safety - discrimination, workers' compensation, employee health and safety</li> <li>4. Clients, Products, and Business Practice - market manipulation, antitrust, improper trade, product defects, fiduciary breaches, account churning</li> <li>5. Damage to Physical Assets - natural disasters, terrorism, vandalism</li> <li>6. Business Disruption and Systems Failures - utility disruptions, software failures, hardware failures</li> <li>7. Execution, Delivery, and Process Management - data entry errors, accounting</li> </ol>	<p>trading losses for more than 2 years because the bank's internal control processes were inadequate</p>

SI No	Type	Definition	Dimensions
		<p>errors, failed mandatory reporting, negligent loss of client assets</p> <p>Contrary to other risks operational risks are usually not willingly incurred nor are they revenue-driven. Moreover, they are not diversifiable and cannot be laid off, i.e., as long as people, systems and processes remain imperfect, operational risk cannot be fully eliminated</p> <p>Operational risk is, nonetheless, manageable as to keep losses within some level of risk tolerance (i.e., the amount of risk one is prepared to accept in pursuit of his objectives), determined by balancing the costs of improvement against the expected benefits</p>	
4	<b>Liquidity risk</b>	<p>Liquidity risk arises because revenues and outlays are not synchronised (Holmström and Tirole, 1998). Applied to banks, it means the probability of a bank not being able to meet payment obligations primarily from its depositors and give enough loans to its existing or potential borrowers. Therefore, liquidity risk can impair the basic function of a bank and that is, financial intermediation on a daily basis</p>	<p>Liquidity risk, if not managed properly, can lead to a bank run which in turn gives rise to reputational risk</p> <p>A recent example of a bank not being able to manage liquidity risk is Northern Rock. Northern Rock was a small bank in Northern England and Ireland. Northern Rock didn't have a large depositor base. It was only able to fund a small part of its new loans from deposits. So it financed new loans by securitizing the loans it originated</p> <p>Northern Rock would then take short-term loans to fund its new loans. So the bank was dependent on two factors - demand for loans, which it sold to other banks, and availability of credit in financial markets to fund those loans. When markets were under pressure in</p>

SI No	Type	Definition	Dimensions
			<p>2007-08, the bank wasn't able to sell the loans it had originated. At the same time, it also wasn't able to secure short-term credit</p> <p>Due to the financial crisis, a lot of investors took out their deposits, causing the bank to have a severe liquidity crisis Northern Rock got a credit line from the government. But the problems persisted, and the government took over the bank</p>
5	<b>Reputational risk</b>	<p>Reputational risk is the potential that negative publicity regarding a bank's business practices, whether true or not, will cause a decline in the customer base, costly litigation or revenue reductions Reputational risk leads to the loss of public confidence in a bank</p>	<p>It can arise from any type of situation relating to mismanagement of the bank's affairs or non-observance of the codes of conduct under corporate governance. For example, suppression of facts, manipulation of records and accounts, bad customer service, inappropriate staff behaviour and delay in decisions may lead to bad public image and hamper business development</p> <p>Salomon Brothers provides an example of reputational risk. In the 1990s, Salomon Brothers was the fifth largest investment bank in the US All banks are allowed to buy government securities up to a specified limit at auctions Salomon falsified records to buy government securities in quantities much larger than it was allowed</p> <p>By buying such large quantities, the bank was able to control the price that investors paid for these securities. In 1991, the government caught the bank in its act Salomon Brothers suffered considerable loss of reputation The US government fined Salomon Brothers USD 290 million, the largest fine ever levied on an investment bank at that time</p>
6	<b>Business risk</b>	<p>Business risk is the risk arising from a bank's faulty long-term business strategy which in turn makes it uncompetitive, lose</p>	<p>In the heyday of cheap money in the 1990s and early 2000s, many banks adopted a strategy of taking excessive leverage and earning supernormal profits When the situation turned for worse from 2007-08, many of those suffered and had to be bailed out by the</p>

SI No	Type	Definition	Dimensions
		market share, business stagnation and ultimately its closure or M&A	government or were forced to close down (The so-called Sub-Prime Crisis)
7	<b>Systemic risk</b>	It refers to the risk that the entire financial system might fail It may occur due to one bank failing and inducing domino effects on its counter parties and others, threatening the stability of the whole financial system	This post-2008 scenario that gripped the world is an example of what the systemic risk can do
8	<b>Moral hazard</b>	Moral hazard refers to a situation where a person, a group of persons or an organization deliberately takes a high-level risk even if it is economically unviable The reasoning is that if the risk pays the person, group or organization will stand to gain, whereas if it does not, someone else will bear the cost	Moral hazard is likely to alter the bank managers' behaviour towards risk-taking It precipitates in overly aggressive behaviour by bankers resulting in excessive risk taking They would think that even if they took very high risks - gambling on depositors' money - they would have to bear no costs of such behaviour, as the bank would eventually be bailed out by taxpayer's money
9	<b>Legal risk</b>	Legal risk arises from the potential that unenforceable contracts, lawsuits or adverse judgments can disrupt or otherwise adversely impact the operations or condition of a banking organization	India is a case in point where the lack of adequate and proper recovery system has led to burgeoning loan losses and bade debts eroding the banks' capital as a consequence
10	<b>Country risk</b>	A multinational bank faces country risk when there is a localized economic problem in a country where it operates	

## **Section 2: Deposit Run, Bank Panics and Bank Contagion**

Absent deposit insurance, depositors know that their banks will be able to pay back their deposits in full and in time (both are important) as long as the bank is solvent, i.e., the market value of the bank's assets is greater than value of deposits. Secondly, since banks operate on fractional reserve system, depositors know that if, at future time, the market value of the bank assets decline below that of deposits, banks will not be able to pay back the depositors in time and in full. Thirdly, in a multi-bank system, depositors can always transfer their deposits from their existing bank to another bank with minimal cost if they perceive that the former is on the verge of failure rather than actually verifying that the former is facing difficulties and their deposits are jeopardized. Thus, when a large number of depositors withdraw deposits from their banks in large amounts, other depositors will interpret that there is something ominous and they will also join the bandwagon of withdrawal.

Calomiris and Gorton (2000) argue that there are 2 main models of bank panics (a) Random withdrawal theory and (b) Asymmetric information theory. The random withdrawal theory builds on the work of Diamond and Dybvig (1983) and emphasizes the first-in-line first-to-withdraw constraint. If depositors believe that other depositors are convinced that bank assets have fallen in value, then depositors will withdraw their funds to avoid the losses associated with being at the end of the withdrawal line. Random events cause depositors to form expectations of what turns out to be a self-fulfilling panic.

In the asymmetric information model, depositors must expend resources to monitor their bank, a job that might be made more difficult if banks are small and geographically separated. If depositors are heterogeneous, the first-in-line first-to-withdraw constraint arises as a way to reward those depositors who choose to pay the monitoring costs, since the informed depositors will never be at the end of the withdrawal line. Uninformed depositors do not know whether their bank (or any other bank) is solvent and choose to withdraw from all banks, generating the panic.

Eventually, the panic compels banks to suspend the conversion of deposits to cash. During the suspension, banks collectively sort out the solvent from the insolvent. Thus, the panic is an optimal response to the information asymmetry.

### **Fire-sale Losses**

Banks in order to meet the situation have two options: (a) asset management - sale of assets and (b) Liability management - attracting offsetting funding. At a time of crisis, it is difficult

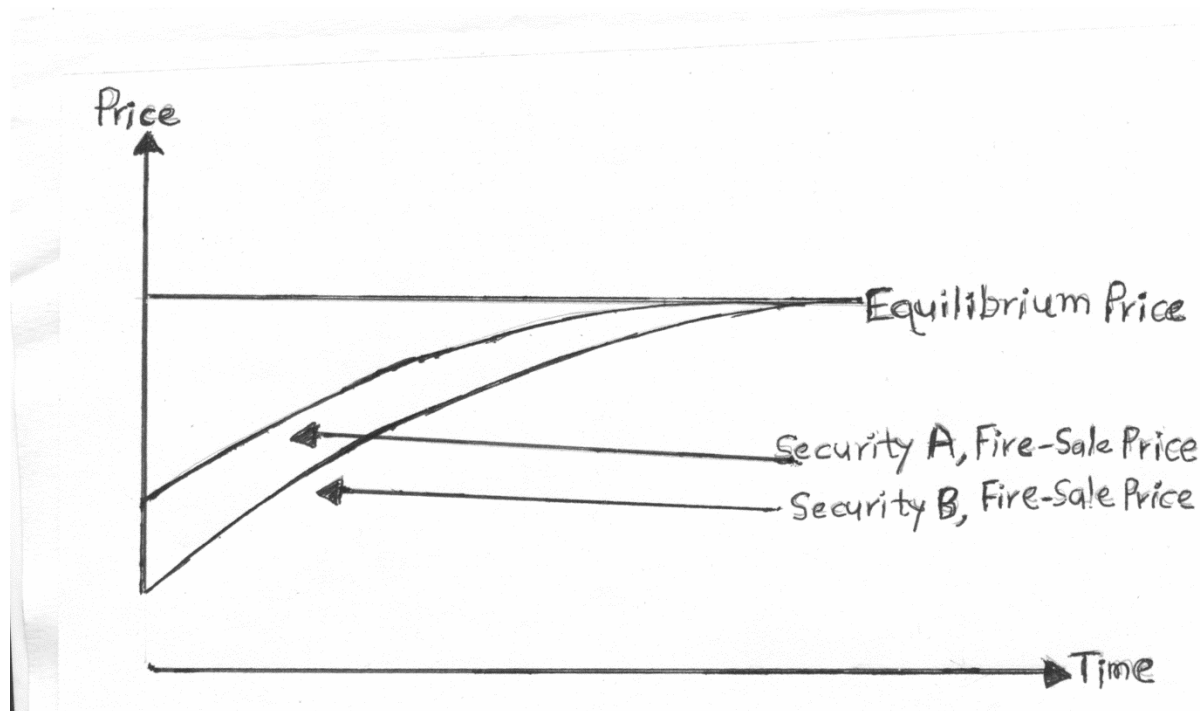
for the affected bank to canvass funds from other entities or the market unless at exorbitant rates and with stringent conditionalities. Therefore, they will be forced to sell assets.

Every earning asset has two market prices - (a) an 'equilibrium' market value (EMVA) and (b) an immediate or fire sale market value (FSVA). Book values carry no meaning. The equilibrium price is that price at which the asset can be sold to the highest potential bidder in the market.

But assets markets are imperfect. Secondly, the potential bidders are not known and all the potential bidders do not participate always in the market, i.e., they are not continuous participants. Moreover, since banks assets are varied, starting from easily marketable assets to highly unmarketable, it becomes difficult to find bidders for such a large spectrum of assets. Thus, there will be search and information cost. Higher the search and information cost, longer the process and less the value that will be realized from the assets which, may not fully meet the depositors' demand.

Here comes the concept of FSVA. The fire sale price is the price that can be obtained immediately without significant search and collecting required information. It represents a lower limit on the obtainable price. Movement from FSV to MVA would depend upon the marketability of the assets, width and depth of the market for the assets and the number of net sellers of the assets in the market. More the liquidity or marketability of the assets, higher the width and depth of the markets and larger the number of net sellers, easier will it be to find a potential bidder and lower will be the search and information costs. For example, for treasury bills the fire-sale price will be equal to the equilibrium price. However, for customized assets fire sale price will be much below the equilibrium price and more the uniqueness of the assets the higher will be the gap between market and equilibrium prices.

The relationship between fire-sale price and equilibrium price of an asset is illustrated in figure 3.1.

**Figure 3.1: Fire-sale Price and Equilibrium Price of an Asset**

Source: Benston, George J., Robert, A. Eisenbis., Paul, M. Horvitz., Edward J. Kane., George G. Kaufman. (1986), pp.44.

Figure 3.1 depicts 2 securities having the same equilibrium market price but different marketability. Security A is more marketable and requires less information than Security B. If an immediate sale has to be made, the fire sale price of B will be less than that of A. If additional search time is permitted, the fire-sale prices of both the assets will approach asymptotically the market from below, but A will do it at faster rate than B. The difference between the equilibrium price and market price of a security is its liquidity premium for that security.

When a bank experiences a large deposit run, it has to sale at least some of its assets quickly at fire-sale prices. If these prices are less than their equilibrium market price, then the bank suffers losses in its sale of assets which may have to be adjusted against its net worth. In this case, the bank is said to be suffering from a fire-sale or 'liquidity' problem. The severity of the liquidity problem directly varies as the difference between the equilibrium price and fire-sale price. If the loss is less than the market value of the bank's capital or market net worth (MNW), the bank is solvent. When a bank is solvent, losses are experienced by shareholders although the bank will lose some of its depositors, deposits and borrowers or their relationships. These conditions are summarized in Box 3.1.

**Box 3.1: Conditions for Bank Liquidity and Solvency**Liquid and Solvent

$$EMVA=FSVA>MVD; EMNW=FSNW>0$$

Liquidity Problem but Solvent

$$EMVA>FSVA>MVD; EMNW>FSNW>0$$

Liquidity or Fire-sale induced Solvency Problem

$$EMVA>MVD>FSVA>; EMNW>0>FSNW$$

Fundamental Solvency Problem

$$MVD>EMVA>FSVA; 0>EMNW>FSNW$$

Where

EMVA = Equilibrium Market Value of Assets

FSVA = Fire Sale Value of Assets

MVD = Market Value of Deposits (and Credit other than Capital)

EMNW = Equilibrium Market Value of Net Worth

FSNW = Fire Sale Value of Net Worth

*Source: ibid.*

**Impact of a Deposit Run***Deposit Runs to Other Banks*

If the depositors of a troubled bank perceive that some other bank/s are safer, they will shift their deposits from the former to the latter. Thus, total deposits in the banking system will remain unaltered and the bank run may not be contagious. The cost of such shifts may be small, but it does cause uncertainties and anxieties. The impact is more on smaller or local banks than regional or national banks. Nevertheless, steps must be taken before the liquidity problem transforms into a solvency problem. 'Informed' depositors would withdraw and may get their money fully and those who perceive later would suffer more. Even the bank will suffer more losses. If the deposits are not redeposited locally, unfavourable impact of the bank failure on the community will intensify by further reducing liquidity in the locality (including money and other liquid wealth), further damaging the trust between bank and the customer and leading to latter's apprehension against the entire banking system, and creating employment problem in banks. All these can be avoided if timely intervention is made by declaring the bank insolvent in time.

Whether depositors perceive correctly or not that other banks are equally vulnerable depends on the following factors: if (i) banks serve the same geographical market area which is



economically depressed, (ii) banks give loans outside the local market area to the same customer or industry that is encountering financial difficulties, (iii) banks give loans to the affected bank(s) or (iv) banks have large open positions, such as, intraday overdrafts with these banks. In such circumstances, one bank run may trigger a system-wide run. There is a direct correlation between the number of affected banks and the severity of liquidity problem, because a larger number of simultaneous sellers will push down FSVAs. This will also damage the breadth and resiliency of the market, and the more likely is the liquidity problem to turn into a solvency problem. In addition, the greater are the number of broken banking connections with the accompanying transfer costs, greater will be job changes and public uncertainty. But as long as deposits are redeposited at some banks and are not withdrawn from all banks, the contagiousness is limited and contained to the troubled banks, and is not transmitted system-wide.

### *Flight to Quality*

The nature of the run is largely determined by the number, size, location and type of banks perceived to be in financial difficulties. The larger the number and size of the banks in question, and the more they are located in the same market area, the more likely are depositors to be uncertain about the source and extent of the contamination and to question the financial integrity of other banks, and the less likely are depositors to redeposit the withdrawn funds in other banks.

Better options for depositors will be to either withdraw funds as currency and maintain them in that form or purchase safer securities. The latter run is referred to as 'a flight to quality'. The seller of the security, who gets the initial deposit is now in the position to redeposit or withdraw in currency. It has been argued that the seller is likely to redeposit the funds in her/his bank because of 2 reasons: (i) the seller surrendered a secure security and (ii) such transactions are likely to occur more frequently among larger depositors who are less likely to be able to conduct their business in currency. Business and other large deposits are the frontrunners in a run and they run the most. But they are likely to be the last to be converted permanently into currency in large amounts. If redeposited, funds are not lost to the system. This bank will now hold the deposit of the original bank. Thus, a flight to quality culminates in an indirect transfer of funds among banks, i.e., an indirect re-deposit.

By moving funds into non-bank securities, flight to quality initially would bid up the prices (reduce the interest yields) of these securities and reduce the prices (increase the interest rates)

of bank and other perceived 'riskier' securities. That is, the flight to quality widens interest rate spreads between bank deposits (and other risky securities) and riskless government securities.

Banks may also become more cautious in their lending. Unless offset by a reverse flow of funds from outside the banking sector, the wider spreads and more cautious lending posture are likely to affect (probably reduce) bank income, depending upon the mix of the assets and discourage private investments. Neither effect is favourable to local or national economies, but both are likely to be considerably less important than a decline in total deposits and credit. Nor is such a flight to quality likely to create severe instability in national financial markets.

### *Flight to Currency*

If a large number of depositors, including the sellers of safe securities, lose faith in banks readily available to them, they will not redeposit in other banks but will hold their funds in currency outside the banking system. A permanent flight to currency is fundamentally different from a deposit transfer. Net currency outflows under a fractional reserve banking system will lead to a multiple contraction in aggregate bank assets in order to satisfy legal or voluntary reserve requirements. Moreover, banks are likely to increase their excess reserves to be able to accommodate abrupt deposit losses, thereby reducing the deposit-reserve multiplier and intensifying the multiple contraction in deposit (money) and credit. The resulting larger sale of assets is likely to reduce further the FSVA, increase the severity of liquidity problems, and increase the likelihood that liquidity problems will be transferred into solvency problems. Unlike the effects of the bank runs analyzed earlier, the effects of a net currency outflow are likely to affect banks initially not perceived to have been in financial difficulties as well as those that were so perceived. In the absence of government intervention, the former banks will now have to liquidate assets at possible fire-sale prices and many experience liquidity problems. In addition, these problems may cause depositors to change their perceptions of these banks and to begin to view them with concern. This may ignite a run on previously perceived healthy banks.

Gradually, as more number of banks are perceived as unhealthy, more of the deposit outflow will be in currency that is not redeposited at other banks. This results in further fire-sale even at lower prices, thus widening the scope and increasing the severity of the bank problems. Progressively, more banks experience solvency problems through little or no fault of their own. The initial localized run on one or more banks perceived to have been experiencing financial problems spread to other healthy banks. In other words, the localized run on one or more banks

perceived to have been experiencing financial problems spread to other healthy banks. In other words, the run becomes contagious. In contrast to the non-contagious or limited contagious bank run cases, bank management can do little to halt a system-wide contagious run.

The implications of system-wide contagious bank run on the stability of the financial system and the economy overall can be severe. It is unlikely that all the banks whose FSVAs are less than MVDs can be declared insolvent at the same time, or, even if they could, whether it would be socially desirable to do so and, if so, whether mergers, sales or liquidations could be implemented before further losses are incurred. Nevertheless, the number of operating banks may be expected to decline sharply. Bank-customer relations will be severed more frequently and become increasingly more difficult to restore, losses to depositors and other creditors will be larger, aggregate deposits will decline, the remaining value of bank stock will decline further, and more bank employees will be discharged.

The loss of faith in banks is likely to infect other financial institutions, causing widespread liquidations and enhancing the selling pressures, driving down security prices and raising interest rates. As progressively more banks are infected and currency withdrawals intensify, the resulting reductions in money supply will depress spending, both in the commodities directly affected and in the country overall, and contribute to precipitating or reinforcing an economic recession or depression, as occurred during the Great Depression of the 1930s.

### **Special Case of Large Banks**

Although all bank runs are widely feared, runs on large banks are particularly feared. While runs on large banks may be more visible, the implications are not greatly different from those for smaller banks. As long as reserves do not fly from the banking system in the form of currency, as is particularly unlikely from runs on larger banks, any run produces only "churning" (Benston, et.al., 1986) – either or both among banks and among securities. But because the flow of funds is larger, the "churning" will be more serious, particularly from a flight to quality.

In addition, to the extent that most of the larger banks operate in the same national or international markets and have similar loan portfolios, runs on any one bank may be more likely to set off runs on the others. The degree of public concern and uncertainty is likely to be considerably greater, particularly in foreign countries where knowledge of the affected economy is weaker. This may, at least temporarily, depress economic activity. While runs by foreigners to foreign banks again only reshuffle the ownership mix of deposits and do not cause

loss of reserves in the banking system as a whole, they could exert downward pressure on the dollar exchange rate. Large banks are also exposed through electronic clearing with other large domestic and foreign banks.

### **Bank Contagion: Theory and Evidence**

The term 'contagion' describes the spill-over of the effects of shocks from one and more firms to others. There is a general consensus that it is more probable to occur in banking than in other industries and to be more serious when it does occur. Bank contagion is of particular concern because adverse shocks, such as, failures, may be transmitted in domino fashion not only to other banks and the banking system as a whole, but beyond to the entire financial system and macro economy.

The literature highlights 4 channels of interbank contagion: (a) Macro contagion where failure of a bank worsens macroeconomic fundamentals, weakening other banks [Goldstein and Pauzner (2004), Acharya and Yorulmazer (2008b) and Bebchuk and Goldstein (2011)], (b) Counterparty risk from interbank exposures [Allen and Gale (2000) and Freixas et al. (2000)], (c) Fire sales by distressed banks which depress asset prices and affect balance sheet constraints of other banks, pushing them to sell at a loss too [Lorenzoni (2008) and Korinek (2011)] and (d) Contagion can spread through a squeeze in bank funding markets [Caballero and Krishnamurthy (2003), Diamond and Rajan (2005) and Morrison and White (2013)].

It may be underscored that it is impossible for an individual bank operating in a modern banking system to fully protect itself from contagion [Ariccia (2013)]

An in-depth analysis of theory and evidence of bank contagion by Kaufman (1992) concludes that in comparison to other industries, absent deposits insurance, bank contagion:

- i. occurs faster,
- ii. spreads more broadly within the industry,
- iii. results in a large number of failures,
- iv. results in large losses to creditors (depositors) although such losses are smaller than in non-bank industries and
- v. spreads more beyond the banking industry and causes substantial damage to the financial system as a whole and the macro economy.

### Section 3: Cost of Bank Runs

Bank runs impose social costs affecting output in different ways. The most traditional way was pointed out by Friedman and Schwartz (1963). By analyzing past bank runs in the US, they argued that the banks' difficulties made the general contraction of the economy worse, by leading to a rapid fall in the money supply. In their view, the damage to the money supply process caused by bank runs affects the real economy.

Later, Bernanke (1983) showed that the monetary channel specified by Friedman and Schwartz for the transmissions of negative effects from the financial to the real sector does not completely exhaust the damages done by bank runs. By focusing the spotlight on the credit allocation function of banks rather than on money multiplying function, Bernanke argued that the financial crises of the past were socially costly in terms of output contractions by way of destroying an important conduit of investment funds in the economy. The disruptions of 1930-33 reduced the effectiveness of the financial sector as a whole in performing market making and information gathering services.

Banking crises raise the cost of bank intermediation services. As Bernanke argues, banks choose operating procedures that minimize the cost of credit intermediation. Thus, banking troubles affect the intermediation performed by banks and hence allocation efficiency and impose high social costs. A bank experiencing a run may be forced to sell its assets on the spot. Premature liquidation of loans has immediate adverse effects on economic activity. Production and consumption plans are consequently frustrated.

The information problems associated with bank assets also play an important role in making runs particularly costly for social welfare.

However, Kaufman's (1988) argument goes totally in a different line. The fear of high cost of bank failures, Kaufman points out, is based on a belief that one or more of the following occurs: (i) failed banks are liquidated and disappear, (ii) bank services are unique and even a brief interruption is exceptionally harmful to the community and (iii) failure of one bank can set in motion a domino effect, tumbling other banks throughout the country as well as the payments system. Available evidence, according to Kaufman, shows that none of these fears is justified. Liquidation of failed banks or any other type of firm is generally limited to smaller firms. Larger firms are recapitalized, merged or sold, although some time in bankruptcy may be required to work out a least-cost solution for larger institutions.

But even liquidations do not necessarily indicate that a community is left without banking

facilities.

There is an additional indirect societal cost to carrying insolvent institutions. In a market economy, failure is the market's way of indicating that customers are not satisfied with the products offered by the suppliers at the prices charged. Economically insolvent suppliers of banking services are kept in business only through subsidies from banking authorities, and the welfare of the economy would be improved if these institutions were permitted to close and resources were shifted elsewhere. Restrictions on exit are in effect also restrictions on entry, and they result in misallocation of resources.

Systemic financial crises have important indirect effects on investor confidence. Reduced investor confidence following a crisis is likely to be an important component of the cost of a systemic financial crisis and to make recovery more challenging. [Osili, Una Okonkwo and Paulson, Anna (2008)]

### Summing Up

- *Banks have to manage several risks of which credit risk, interest risk, liquidity risk and operational risk are the most important. Many banks in the recent past have waded into troubled waters owing to inappropriate management of these risks*
- *Trade-off of risks is possible either through ex ante or ex post mechanisms of which the former is more effective and economical.*
- *Depositor runs are susceptible to become a self-sustaining process, and when these become so, a typical bank run ensues.*
- *Bank runs result in depositors running to safer banks, and taking flight to quality (i.e., investing in safer securities) as well as to currency. Flight to currency is most pernicious.*
- *Runs on large banks produce only “churning” among the banks or securities or both - larger the bank, more serious is the churning.*
- *Bank contagion:*
  - *occurs faster*
  - *spreads more broadly within the industry*
  - *results in a large number of failures*
  - *results in large losses to creditors (depositors) although such losses are smaller than in non-bank industries*
  - *spreads more beyond the banking industry and causes substantial damage to the financial system as a whole and the macro economy*
- *By and large, it is widely acknowledged that bank runs impose heavy socio-economic cost on the society through various channels, besides dampening investors' confidence.*

## Chapter IV

### Deposit Insurance: Theory and Evidence

There exists a voluminous literature on deposit insurance. For instance, annotated bibliographies prepared by FDIC covering only publications appearing during 1989 - 2003 run to almost 350 pages! [Kroszner and Melick (2008)] And, our investigation reveals 3,442 references listed by FDIC between 1934 and 2012 in EXCEL format!

The US being the first country to establish a national DIS, which in turn has emerged as an exemplar to other countries wishing to set up or refurbish their DISs, and the country which has experienced numerous bank failures, both large and small, it is quite but natural that most of the voluminous literature is devoted to the US DIS. Moreover, the regulators are quite concerned about maintaining depositors' confidence in the banking system as well as financial stability. At the same time, although all depositors do not monitor their banks, they are, by and large, conscious about their personal finance.

This Chapter is divided into 3 Sections: Section 1 focuses on some of the theoretical aspects relating to deposit insurance including its relationship with ordinary insurance and the lender of last resort (Llr) policy of the central bank authorities; Section 2 analyzes the purpose of Deposit Insurance; and Section 3 is devoted to a critical assessment of deposit insurance. Both Sections 2 and 3 are based on available theoretical and empirical evidences.

#### Section 1: Deposit Insurance, Ordinary Insurance and Llr

Deposit insurance ensures that depositors will be made whole even if there is a run [Diamond and Dybvig (1986)]. According to monetary authorities, deposit insurance can substantially mitigate the external diseconomies arising out of bank failures. These externalities are broadly of 2 types: (i) micro-externalities and (ii) macro-externalities. The micro- externalities refer to *an agent* and justify deposit insurance on the grounds of protecting small depositors, increasing the competitive equality among different size banks and protecting banks as financial intermediaries performing a unique role in the economic system. The macro-externalities, on the other hand, look upon deposit insurance as a mechanism to prevent the disastrous consequences ensuing from contagious bank runs, primarily relating to the money supply and the payment system.

#### Deposit Insurance versus Ordinary Insurance

Both deposit insurance and ordinary insurance contracts are founded on the same insurance

principles. In an ordinary insurance contract, the insurer promises to third party beneficiaries that they will be wholly reimbursed in the event that the parties carrying the insurance do not pay their claims. The same principle when applied to deposit insurance would read as: the agency - the insurer – promises to pay depositors - third party beneficiaries - that they will be wholly reimbursed in the event that the banks - the parties carrying the insurance contract - do not redeem deposits - pay their claims. It is evident from this that deposit insurance uses some typical tools to protect itself against risk. It: (i) frames rules for the applicability of the insurance, (ii) collects information on the likely risks that the insured parties will impose on it, (iii) practices coinsurance and (iv) limits the amount of the insurance *offered* to the insured. Nevertheless, all the existing deposits insurance systems are not *proper* insurance. Mostly structured on the model of insurance contract, they are rather financial guarantees for depositors' accounts. In *effect*, this contract identifies 3 different beneficiaries of the insurance: (i) the single insured depositor, (ii) the financial system as a whole and (iii) banks.

The first and foremost beneficiaries of the insurance are depositors, whose interest is directly protected by the agency even if only partially due to the coinsurance provision. The second beneficiary in every deposit guarantee scheme is the financial system. Whatever may be the political nature of insurance systems, the main objective pursued remains the stability and soundness of the overall financial sector. By virtue of protecting the system they protect banks, too. Therefore, banks become the third beneficiary of the guarantee provided by the deposit insurance. Furthermore, deposit insurance is a *suis generis* insurance because in providing the claims arising from a damaging event and in preventing this event, as it is for any other insurance, the second element, that is, prevention, prevails. The primary intention of deposit insurance is to prevent bank runs, not to indemnify depositors, and thus potentially contagious runs with their accompanying *effects* are prevented. Viewed from a different angle what deposit insurance aims to do is it allows unsound banks to leave the banking industry, while protecting the banking system against widespread panics.

But the deposit insurance differs from a typical insurance contract in a more fundamental sense. The nature of risks to be insured against by deposit insurance and other kinds of insurance are different. The probability of a bank failure does not belong to the same actuarial category as the probability of death, illness, fire or car accident. In these cases, the probability of the risk to occur is determinable and hence measurable in terms of a fair premium for the insurance. In contrast, the risk of bank failure is difficult to determine, measure and price.



Deposit insurance does not use yet another typical insurance tool. An insurance company can limit the amount of insurance offered to an insured. In principle, this device could be available in the case of deposit insurance, for example, by placing limits on the growth of liabilities in undercapitalized institutions. But this is an indirect way.

### Deposit Insurance versus Llr

As one of the central banks' prime responsibilities, Llr function acts as: (i) monetary policy instrument and (ii) a mechanism to provide liquidity to individual banks encountering temporary bottlenecks in converting deposits at par into currency. By enabling banks to honour their obligation of convertibility, the Llr function makes the central bank a necessity for the banking system. The historical experience of most countries justify this argument, and, moreover, even theoretically speaking, there has to be in place a 'bank of the banks' to protect and stabilize the system against runs and panics. Table 4.1 presents the differences between these two safety nets.

**Table 4.1: Deposit Insurance and Llr**

Deposit Insurance	Llr
Deposit insurance guarantee is <i>explicit</i> in the sense that if a bank fails, depositors <i>know</i> that the insurance system is there to protect their deposits <i>definitely</i> .	The guarantee of Llr function of the central bank in protecting deposits is <i>contingent</i> and there is no <i>definiteness</i> about it.
Deposit insurance is <i>non-discretionary</i> , rather <i>automatic</i> . The payoff of the insured deposit in the event of failure is a <i>specific</i> commitment of deposit insurance.	Llr is <i>discretionary</i> . Its operation depends on the central bank's judgements as to the solvency of the bank experiencing the run.
Deposit insurance's intervention can be known <i>ex ante</i> .	The Llr's decision concerning support to a bank cannot be known <i>ex ante</i> .
Deposit insurance is <i>limited</i> in the sense that a financial limit is prescribed up to which depositors can be made good in case a bank fails.	Llr's guarantee has <i>no institutional constraint</i> . However, the central bank does estimate the impact which Llr might have on the creation of reserve and thus money supply.
Deposit insurance charges the <i>cost</i> of bank failures to the banking system and to the agents involved in it.	Llr charges the costs to the community

Despite these differences between deposit insurance and Llr function of the central bank, both complement each other to maintain safety and soundness of the banking system. For instance,

with its unlimited resources and discretionary power, the Llr could keep the banking industry so sound that no bank would ever fail and leave the system. On the contrary, failures are an important source of market discipline because inefficient banks can leave the industry in the process without adversely affecting economic activity. A public policy totally preventing runs is undesirable; what is desirable is a policy to mitigate the effects of a widespread bank failure.

In the case of bankruptcy of a bank with largescale liabilities, the insurance agency may be forced to borrow from the central bank to reimburse depositors. The insurance funds are often too small to cover major disturbances of the banking system and the implicit guarantee by the central bank to the insurance scheme obligations is a necessary complement to it.

Moreover, the availability of emergency loans from the central bank acts as a substitute for deposit insurance reserves. It reduces the insurer's cost of maintaining a given set of deposit guarantee by creating a prime source of credit.

## **Section 2: Purpose of Deposit Insurance**

In Chapter 2, it was observed that banks have been modelled as fragile business units and therefore, banks commit themselves to their safety and soundness.

### **Protection of Small Depositors**

Government action is sometimes necessary to help a particular segment of the society which is perceived to be disadvantaged. Protagonists of deposit insurers argue that small depositors are basically financially naïve or unsophisticated and do not monitor their banks, and therefore, their risk perception level is low and they cannot foresee whether or when a potentially weak bank will fail. Under such circumstances, deposit insurance helps protect these depositors against possible loss or *de facto* loss from a bank failure [Merton (1977), Gorton and Pennacchi (1990) and Pennacchi (2009)].

### **Preventing Bank Runs**

Banks are financial intermediaries which receive short-term deposits and transform them into short- to medium-term assets (loans and investments) which are rather illiquid. They are illiquid in the sense that they cannot be converted into cash at a short notice without suffering from loss in value. Therefore, if a bank is perceived by the depositors as potentially failure-prone they will rather withdraw their deposits before the bank actually becomes broke. Since it is first come first served, a panic is created and depositors run to their banks to withdraw their deposits. However, deposit insurance ensures that even if a bank fails, depositors will be

made good their money up to a certain limit and this restricts the panic run. Here, it is pertinent to mention that the central bank's lender of resort also plays a similar, if not the same, role. However, the lender of resort facility is less effective than deposit insurance when a panic run spreads like a domino or contagious disease. Thus, by preventing bank runs, deposit insurance helps preserve financial stability.

### **Preventing Cost of Bank Runs**

Bank runs impose substantial 'external' costs which from the standpoint of economic efficiency lead to wastage of resources. These costs are of 4 types:

#### *Contractionary Effect on Money Supply*

Banks are conduits through which the central banks create or contract money supply in the system via reserve money under a fractional reserve system. Widespread bank runs carry the potential to sharply curtail money supply in the system that, if unchecked, may lead to deflation and recession. However, normally, a depositor who withdraws money from his bank re-deposits the same in another bank which he perceives as less risky. But in the case of an adverse risk perception becoming system-wide, economic disruptions are bound to happen. The Diamond and Dybvig model (1986) concludes that deposit insurance is the only known effective measure to prevent runs without preventing banks from creating liquidity.

#### *Disruption of the Payment System*

Although system-wide bank runs do not interfere with money supply they do affect the banks' functioning in the payment system. Banks, needless to mention, constitute the spinal cord of the payment system in an economy. This is particularly so today where the electronic payment system has fast evolved to play a dominant role. And, the payment system is a 'public good' and the government or the central bank is responsible for maintaining a smooth payment system. Bank runs interfere with the payment system when one or some weak banks fail to honour their obligations to another bank/s. Deposit insurance, by virtue of preventing bank runs, maintain the fluidity of the payment system which, in turn, keeps the wheels of the economy moving.

#### *Interference with Financial Intermediation*

Banks are financial intermediaries which bring millions of savers in contact with millions of investors (both groups unknown to each other) and thereby enhance the output and investment in the economy. Thus, bank failures throttle both deposit taking activities as well as credit

allocation process and thereby impose social cost. Part of the social cost emanates from the fact that banks have to forcefully sell their nonmarketable assets for which the buyers have to incur cost to collect information about those assets. Banks are the repositories of the information of those assets which they would not part with. Secondly, in the case of a bank run, creditworthy borrowers lose access to credit and therefore their production of goods and services is interrupted and consumption plans are affected.

Secondly, as mentioned earlier, depositor runs are self-fulfilling. That a depositor run has occurred and depositors are likely to flock to banks to withdraw their deposits would force banks hold cash or liquid assets thus constricting their fund to hold for the long-term investment. Thus, deposit insurance may have the effect of channelizing excess funds to banks.

#### *Systemic Effects of Runs on Individual Large Banks*

Large systemically important banks impact the whole banking and economic system even if the failure does not spread into many other banks. This occurs through two channels: (a) Disruption of the payment system and (b) ‘ripple effects’ felt by smaller banks which maintain accounts with the large failed bank or for whom the large bank provides custodial services.

### **Section 3: Criticisms against Deposit Insurance**

Failure of banks in the US in the 1990s brought to the fore some of the negative aspects of deposit insurance. Some of these were foreseen when the Deposit Insurance System was instituted in the US in the 1930s but were sidelined due to the urgency then for restoring public confidence in the system. Some of these criticisms are mentioned below:

#### **Moral Hazard**

Deposit insurance protects the depositors against loss emanating from bank failure. Therefore, the protected depositors do not have any incentive to monitor the activities of the bank or what are the risks the bank is undertaking and what return they are getting. The majority of depositors rely on public release of regulatory action and coordinate their actions accordingly (Iyer, Puri and Ryan – year not mentioned). Thus, there is an absence of market discipline without which banks assume higher risk profile than what otherwise safe and sound operations principles would require them to [see, for example, Diamond and Dybvig (1986) and Rajan (2010)]. Entities who stand to lose in case the bank fails are the equity holders, subordinated creditors and other general creditors. Therefore, they only monitor the risk-return trade-off of the bank; however, if the multitude of depositors did monitor then banks would be less incentivized to take higher risk positions. This happens when there is no risk-related deposit insurance

premium, i.e., 'flat rate' system which does not allow banks to internalize the cost of the risks they are taking. Higher risks by banks means financing of economically inefficient projects and high deposit insurance costs.

Moral hazard problem can be viewed from another perspective. When a bank is on the brink of insolvency, it has less and less to lose and therefore, it takes additional risks and finances speculative projects. If the risks pay off, it returns to profitability and if it does not, then bank would have little to lose as it was anyway going to fail. "Heads the bank wins, tails the DIA loses" aptly describes the moral hazard problem in this case.

### **Concerns about Insurance Coverage and Pricing**

This follows from the moral hazard problem mentioned above. Because fully protected depositors or otherwise uninsured depositors who believe that they are *de facto* covered by deposit insurance are assured of DI coverage after a bank fails they do not demand higher deposit rates to compensate for the higher risks undertaken by the banks. Therefore, if the insurance coverage is lowered or the scope is limited, then the depositors will ask for more returns on their deposits from banks taking higher risks or withdraw their deposits from high risk to low risk banks. This will act as a disciplining force on those banks. Thus, the cost to DIA can also be reduced.

Flat rate premium assumed by banks provides incentives to banks to assume higher risk positions.

### **Concern about Bank Supervision**

The concern about bank supervision revolves around what is called forbearance which means that ignoring or bending or weakening rules to make easier for banks to comply with them till they grow out of their problems. Many DIAs do this so that the rate of bank failures remains within limits which otherwise would be a reflection on the supervisory capacity of the DIAs. However, when the banks ultimately fail, the cost to DIAs out of forbearance becomes overwhelming. In the US, supervisory forbearance was granted to S&L industry in 1980s which ultimately did not pay off.

Sometimes supervisory forbearance is granted to undercapitalized banks with the hope that they will eventually capitalize themselves. Capital acts as a cushion against any adverse shocks and in that respect mitigates moral hazard problem. However, undercapitalized institutions are seen to be indulging in speculative activities and thus pose a potential threat to DIA.

Another issue relates to whether DIA is supervising the insured institutions in the manner it should be. It has been observed that some DIAs rush for supervision when a bank is close to being insolvent. The question is whether solvent but undercapitalized banks are being adequately supervised and whether economically insolvent institutions are being allowed or forced to close in a timely manner. In both the cases, it should be seen that whether banks are going for high risks and/or transferring funds inappropriately to its owners. Supervisory forbearance also has political or bureaucratic influence.

### **Concerns about Competitiveness of Banking Industry**

Failures are one way of flushing uncompetitive units out of the industry. Uncompetitive units promote inefficiency in the system. Therefore, by deposit insurance and the attendant forbearance, if uncompetitive units thrive that would lead to the whole system being contaminated with inefficiency and less profitability and productivity. Of course, the role of deposit insurance in this regard should be viewed along with the regulatory restrictions that does not allow banks to operate in profitable manner sometimes.

Today, perhaps, the most vociferous argument against deposit insurance has come from Rajan (2010). Rajan, terms deposit insurance as an “anachronistic subsidy” for banks. His arguments are based on the following:

- Deposit insurance may make sense for small banks that are poorly diversified and subject to bank runs, but not for large well-diversified banks. Large banks will have to be bailed out anyway when a general run surfaces. Therefore, deposit insurance encourages the poorly managed lots among the large banks to grow without market scrutiny. Larger the bank, larger the subsidy. Therefore, he prescribes phasing out deposit insurance as domestic deposits grow beyond a certain size for a bank. Otherwise, deposit insurance merely contributes to excess.
- When households did not have access to safe deposits, deposit insurance made sense. With the advent of money market funds, households gained access to near-riskless deposits. Money market runs can be eliminated by daily marking them to market; they do not need deposit insurance.
- If deposit insurance is withdrawn from large banks, depositors in large banks would have the choice between being fully insured in a small bank and largely uninsured in a large bank. Such a measure would place some constraints on the growth of seriously

mismanaged larger banks and ensure a level playing field. One of the central appeals of this approach is that it encourages large depositors to take a more active role. There will be a flight from risky banks to less-risky banks, a market discipline that might lead banks to abandon large bonuses on their own.

However, there are disagreements. Absent deposit insurance, everyone would flock to the banks deemed the safest – most expectedly the big ones. In order to preserve the very important presence of smaller banks, they would still get to offer deposit insurance for their accounts. Eventually, as deposits at a bank grow, that would phase out. Banks could still offer retail deposit accounts, but they would probably have to pay people more interest to attract their money. As banks grow larger, so would their cost of capital. That would naturally restrict unruly growth.

### Summing Up

- *According to monetary authorities, deposit insurance can substantially reduce the external diseconomies – both micro and macro - arising out of bank failures.*
- *Both deposit insurance and ordinary insurance contracts are founded on the same insurance principles; nevertheless, all the existing deposits insurance systems are not proper insurance. Mostly structured on the model of insurance contract, they are rather financial guarantees for depositors' accounts.*
- *There are fundamental differences between deposit insurance and Llr.*
- *Deposit insurance aims at*
  - *Protecting small depositors*
  - *Preventing bank runs and*
  - *Preventing cost of bank runs via precluding*
    - ❖ *Contractionary effect on money supply*
    - ❖ *Disruption of the payment system*
    - ❖ *Interference with financial intermediation and*
    - ❖ *Systemic effects of runs on individual large banks.*
- *Failure of banks in the US in the 1990s brought to the fore some of the negative facets of deposit insurance. These include concerns about:*
  - *Moral hazard*
  - *Coverage and pricing*
  - *Bank supervision and*
  - *Competitiveness of banking industry.*
- *Rajan, one of the vociferous critics of deposit insurance, calls it as an “anachronistic subsidy” for banks.*

## **Part – B: Deposit Insurance Systems – A Global Roundup**

**This Part contains only 1 Chapter, i.e., Chapter 5, but a very important one from our research point of view. While researching on any subject, it becomes important and interesting to know about the global position. Therefore, this lone Chapter is considered as important.**

**Country-wise surveys of DISs have been done from time to time, though irregularly, in order to document their characteristic features and their temporal and spatial evolution. The latest in the series is by IMF published in 2014. This Chapter is based on this Survey.**

**Our contribution in this Chapter has been grouping the country-wise characteristic features of DISs available in the Survey in accordance with the IMF classifications. In general, IMF classifies the countries into 2 major groups: (a) as per a country's development status (i.e., developed, developing, emerging, etc.) and (b) as per a country's income (i.e., high, medium, low, etc.). This grouping made it possible for us to arrive at some patterns, which was otherwise not possible by looking at the individual country data, for further analysis and conclusions. And to the best of our knowledge, such a group analysis is missing in the current published literature.**



## Chapter V

### World Deposit Insurance Systems

The earliest meaningful global survey of Deposit Insurance Systems (DISs) was carried out by Talley and Mas (1990). This was further bolstered by Kyei (1995), Garcia (1999) and Demirgüç-Kunt, Karacaovali and Laeven (2005). The latest available comprehensive database is from IMF (2014) compiled by Asli Demirgüç-Kunt, Edward Kane and Luc Laeven which covers DISs as obtained in 2013. This database is built upon the above-mentioned 2005 work which covered the schemes up to 2003. The 2014 IMF Database (henceforth referred to as *IMF Survey*) takes into account several country sources, earlier studies, surveys conducted by the International Association of Deposit Insurers (IADI)<sup>7</sup> in 2008, 2010 and 2011, and in the case of European countries, information obtained from the European Commission (2011).

This chapter is based on the *IMF Survey* which covers 188 IMF member countries and Liechtenstein.<sup>8</sup> We have grouped the countries into 7 groups as per the IMF classification. These groups are: (a) Advanced - 37 countries, (b) Commonwealth of Independent States (CIS) - 12 countries, (c) Emerging and Developing Asia (EDA) - 29 countries, (d) Emerging and Developing Europe (EDE) - 13 countries, (e) Latin America and Caribbean (LAC) - 22 countries, (f) Middle East, North Africa and Pakistan (MENAP) - 22 countries and (g) Sub-Saharan Africa (SSA) - 44 countries. The country composition of the groups is presented in Annexure 5.1.

#### Establishment of DISs

Information as to the year of establishment of DISs are sourced from the IADI database. The US was the first country to introduce deposit insurance system in the world. However, the significance of deposit insurance was realized only in the post-1980 crisis, as demonstrated by the fact that 29 countries established DISs in 1990s (Table 5.1). This continued in the next

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<sup>7</sup> IADI was formed in May 2002 to enhance the effectiveness of DISs by promoting guidance and international cooperation. IADI currently represents 80 deposit insurers from 77 jurisdictions. IADI is a non-profit organization constituted under Swiss Law and is domiciled at the Bank for International Settlements in Basel, Switzerland.

<sup>8</sup> The following 9 jurisdictions are not covered by the *IMF Survey* although IADI database includes their systems: Bailiwick of Jersey, Bailiwick of Guernsey, Bermuda, British Virgin Islands, Taiwan, Isle of Man, Northern Mariana Islands, Palestine and Puerto Rico.

decade when during the 7-year period in 2000-07, as many as 22 countries went for DISs. Five countries reported to have gone for DISs following the 2007-08 crisis.<sup>9</sup>

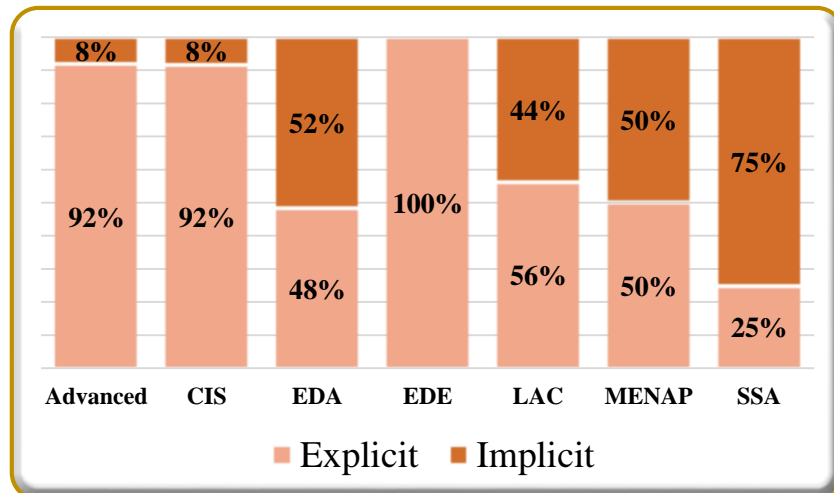
**Table 5.1: DISs – Year of Formation**

Year	No. of Countries
1930s	2
1940s	0
1950s	1
1960s	5
1970s	5
1980s	9
1990s	29
2000-07	22
2008 onwards	5
<b>Total</b>	<b>78</b>

### Type of DIS

Basically, there are 2 types of DISs: (a) Explicit and (b) Implicit. A country is said to have Explicit DIS if it has in place formal legislation or regulation providing for explicit deposit insurance coverage. Implicit DIS is one which provides relief to the depositors at the time of widespread banking failures at the instance of the government. Chart 5.1 presents the composition of DISs according to the above-mentioned 7 country groups.

**Chart 5.1: Country Group-wise DIS Type**



<sup>9</sup> However, according to the *IMF Survey*, 12 countries established DISs during 2008-13 which included 4/5 countries included in the IADI database for the same period.

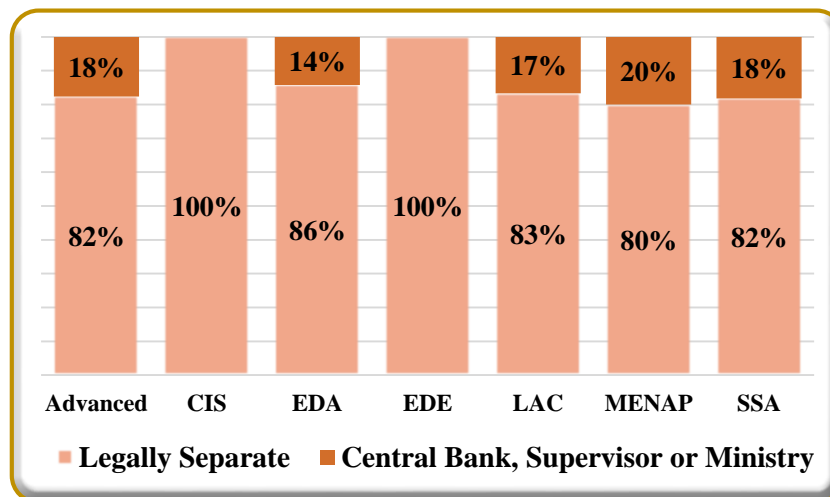
In aggregate, out of 189 countries 112 (59%) and 77 (41%) have Explicit and Implicit DISs respectively. The country group-wise incidence reveals that except in EDA and SSA, in the other groups, Explicit DIS is predominant.

Henceforward, the discussion is focussed only on the Explicit systems unless otherwise mentioned.

### Ownership

Ownership of DISs has an important bearing on their functioning. The *IMF Survey* observes 2 types of ownership: (a) Legally separate and (b) Owned by the country's central bank or banking supervisor or a ministry. The ownership pattern according to the 7 country groups are illustrated in Chart 5.2.

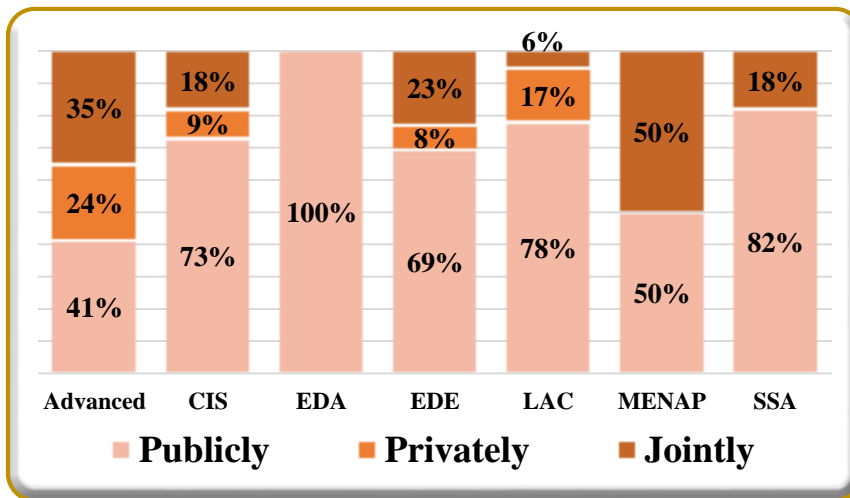
**Chart 5.2: Country Group-wise DIS Ownership**



Ownership status is not available for 1 country, i.e., Mauritania in the MENAP group. Out of the remaining 111 countries which have Explicit systems, 96 (82%) have separate legal arrangements and in the remaining 15 (18%), the systems are owned by the respective country's central bank or banking supervisor or a ministry. In all the country groups, separate legal arrangement is predominant. In fact, in CIS and EDE country groups, all the DISs have separate legal arrangements.

### Administration

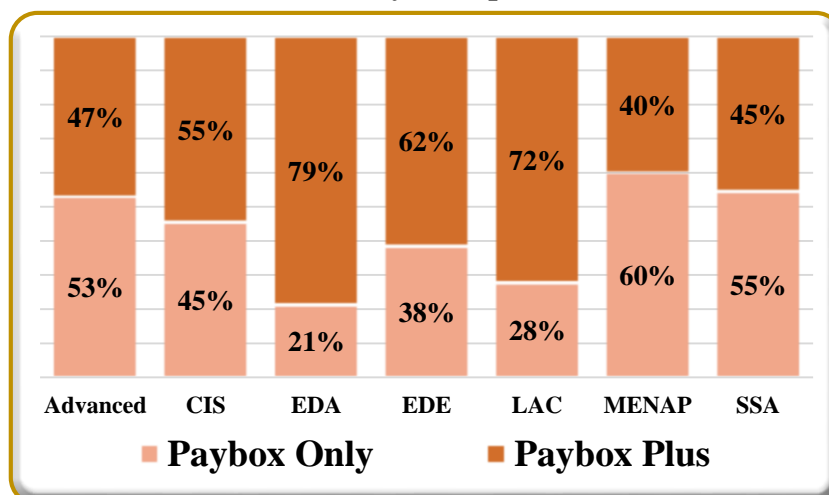
Besides ownership, administration is an equally important determinant of the efficacy of DISs. The *IMF Survey* classifies the observed administrative patterns into 3 categories: (a) Public, (b) Private and (c) Joint, i.e., Public plus Private. Chart 5.3 presents the classification of DISs into these 3 categories according to the 7 country groups.

**Chart 5.3: Country Group-wise DIS Administration**

In total, the 111 countries with the Explicit systems comprise 73 (66%), 13 (12%) and 25 (23%) public, private and joint administration respectively. Country group-wise also, public administration is the most prevalent form of administration. However, in the Advanced and MENAP country groups, in addition to public administration, joint administration emerges as an important form of administration. As far as joint administration is concerned, it is common in the European countries (most of which belong to the Advanced group) and in the Middle East countries, in the MENAP group.

### Role

There is great divergence in the role played by DISs across countries. The *IMF Survey* classifies the roles into 2: (a) Pay-box - simply providing pay-out to the depositors if a bank fails and (b) Pay-box plus in which case, the DIS, in addition to the pay-out, carries out the resolution of failed banks and/or supervision and/or macro-prudential regulation, even including replacement of the management. Chart 5.4 looks into the roles played by DISs in the 7 country groups.

**Chart 5.4: Country Group-wise DIS Role**

Overall, out of the 111 countries with Explicit systems, a majority of 63 have ‘Pay-box Plus’ and 48 ‘Pay-box only’ constituting respectively 57% and 43% of the total. The country group-wise position is a little different, with the DISs playing more of a ‘Pay-box Plus’ role in CIS, EDA, EDE and LAC groups of countries. In the other 3 country groups, the role of DISs is rather limited as ‘Pay-box only’. The European countries belonging to the Advanced countries group lead the ‘Pay-box only’ role.

A few 16/111 countries operate multiple schemes in order to provide cover to different types of financial institutions - both public and private - and in some such cases, the effective coverage is more than the stipulated limit under the national scheme.

### Participation by Bank and Deposit Type

Table 5.2 presents the extent of participation by banks/branches in the DISs of the respective countries and the types of deposits covered by the DISs.

**Table 5.2: Participation of Banks/Branches and Coverage of Deposits**

Country Group	Compulsory for Domestic Banks	Local Subsidiaries of Foreign Banks	Local Branches of Foreign Banks	Foreign Currency Deposits	Inter-bank Deposits	Co-insurance
<b>Advanced</b>	100%	100%	79%	82%	15%	-
<b>CIS</b>	100%	100%	55%	64%	36%	-
<b>EDA</b>	100%	100%	71%	64%	43%	-
<b>EDE</b>	100%	100%	69%	77%	31%	-
<b>LAC</b>	100%	100%	89%	28%	39%	6%
<b>MENAP</b>	100%	100%	90%	40%	60%	10%
<b>SSA</b>	100%	100%	82%	64%	27%	-
<b>Total</b>	100%	100%	77%	63%	32%	2%

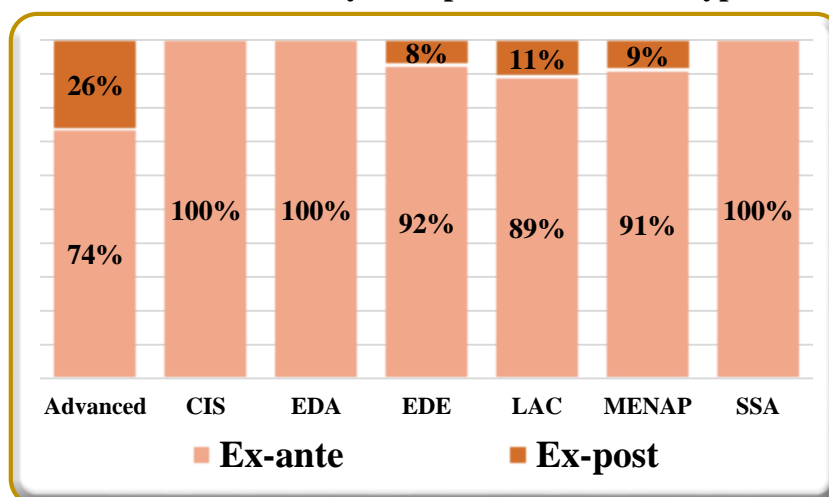
In all the countries, DIS is compulsory for the domestic banks. The same is true for local subsidiaries of foreign banks. However, in 86/111 countries (77%), the local branches of foreign banks participate - the proportion being relatively high in the Advanced, LAC, MENAP and SSA country groups.

Coming to the type of deposits, foreign currency deposits are covered in 70/111 countries (63%) - relatively high in almost all country groups except LAC and MENAP. Comparatively, less number of countries, i.e., 35/111 (32%) cover inter-bank deposits - relatively high in CIS, EDA, LAC and MENAP country groups. Co-insurance is very limited and observed only in LAC and MENAP to a little extent. This aspect is discussed later also.

### Funding

DISs maintain Deposit Insurance Funds (DIFs) so that they can, at the time of a bank failure, pay the depositors and thus prevent a single bank run from snowballing into a systemic run. The *IMF Survey* observes 2 types of funding DISs: (a) *Ex ante* in which DISs collect premium regularly from the covered banks and build the fund and (b) *Ex post* in which DISs collect funds from the surviving banks after the covered banks fail and DIFs are inadequate to make good the affected depositors. Chart 5.5 presents the funding pattern country group-wise.

**Chart 5.5: Country Group-wise DIS Fund Type**

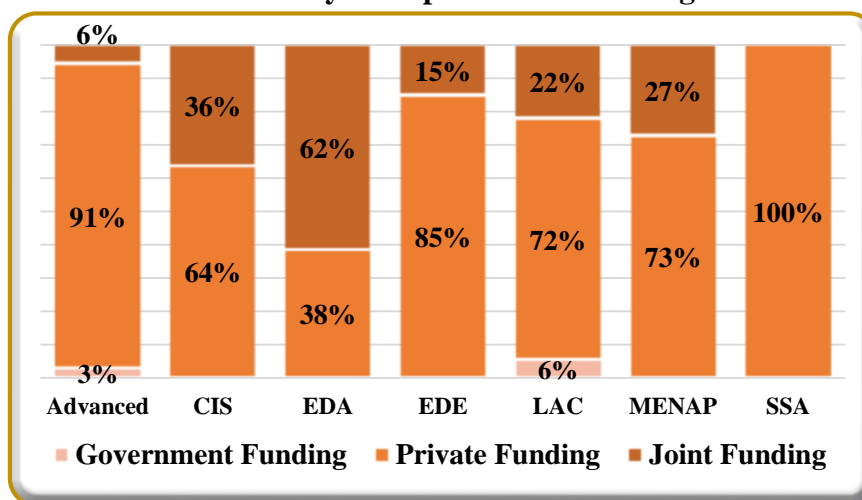


Out of 112 countries for which the information is available, a majority of 99 (88%) follow *ex ante* funding and 13 (12%) *ex post* funding. In general, the predominance of the former is reflected in almost all the country groups, except the Advanced group in which 9 countries (8 from the European continent and Australia) have adopted *ex post* funding.

### Funding by Whom?

Apart from the DIS being *ex ante* or *ex post*, the funding source is observed to be of 3 types, according to the *IMF Survey*: (a) by the government, (b) privately by the covered banks and (c) both by the government and the covered banks. Chart 5.6 provides the details on this across the 7 country groups.

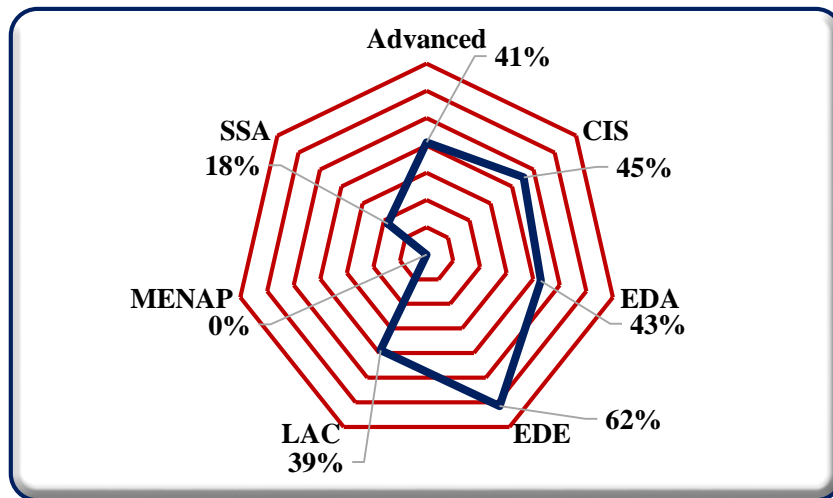
**Chart 5.6: Country Group-wise DIS Funding Pattern**



Out of the 111 countries for which data on funding source are available, a majority of 86 (77%) report private funding. A little over one-fifth of the countries also follow joint funding, which is visible especially in EDA where over three-fifth of the countries report this. In the remaining countries, the incidence of joint funding varies between 6% and 36%.

### Backstop Facility

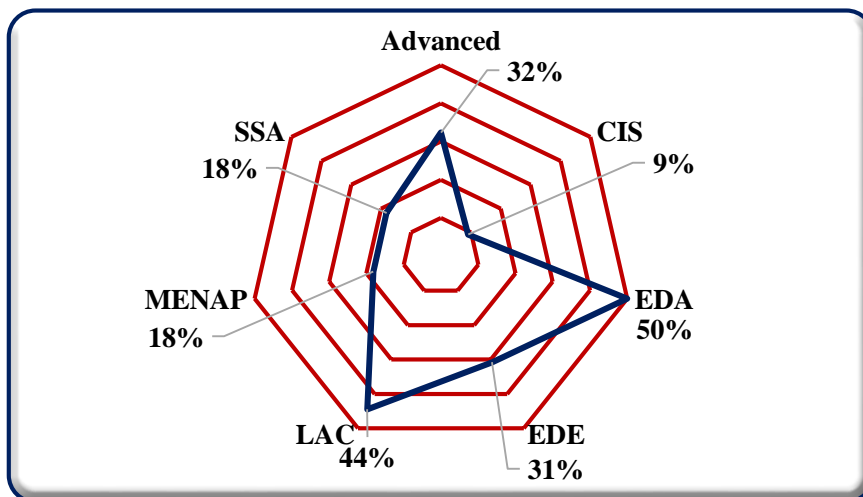
Backstop refers to the government support to the DISs in case the latter falls short of funds in paying the depositors. Such support is normally explicitly mandated by appropriate legislation or regulation. However, support from the central bank of a country is not reckoned as backstop facility. Chart 5.7 provides a glimpse of the backstop facility among the 7 country groups.

**Chart 5.7: Country Group-wise Backstop Facility**

Out of 112 countries reporting data on the backstop facility, 42 (38%) provide this facility. Except MENAP, in all other country groups, the backstop facility exists to some extent or the other. Over three-fifth of the countries in EDE provide this facility, whereas in the other groups (barring SSA), the proportion of countries offering this hovers around 40%.

### Risk-adjusted Premium System

In the risk-adjusted premium system, the premium paid by an insured bank varies directly as its risk level measured in terms of some designated parameters. The system of estimating the risk level as well as the parameters used therefor varies from one country to another. Chart 5.8 presents the incidence of risk-adjusted premium systems across the 7 country groups.

**Chart 5.8: Country Group-wise Risk-adjusted Premium System**

Data on the premium system are available for 112 countries. Out of these, in 35 (below one-third), the risk-adjusted premium system exists. Half of the countries in EDA follow the risk-adjusted premium system, whereas in each of the Advanced and EDE groups, almost one-third of the countries follow the system. While in the CIS group, the incidence is the lowest, in the

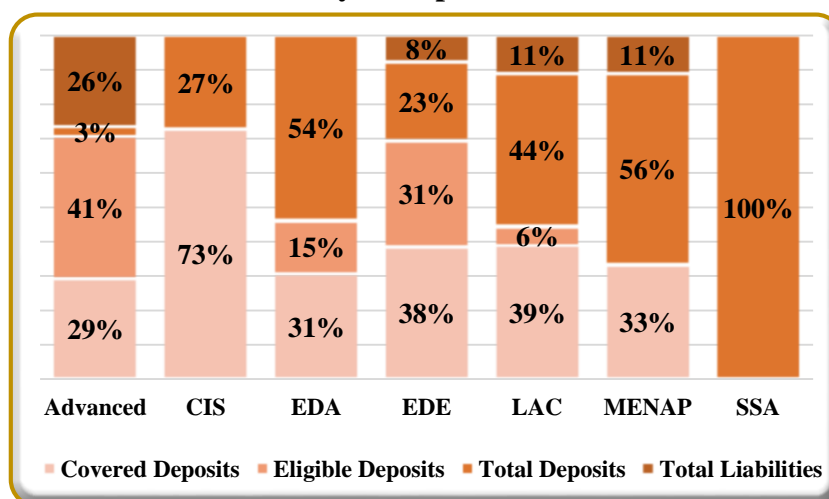


SSA and MENAP each, it is comparatively better. In the LAC group, the incidence of risk-adjusted premium system at over four-tenth of the countries therein is higher than that in the Advanced and EDE groups each.

### Assessment Base

‘Assessment base’ refers to the base on which premiums are assessed. The *IMF Survey* categorizes the assessment base of premiums into 4: (a) eligible deposits, (b) covered deposits, (c) total deposits and (d) total liabilities. Eligible deposits denote deposits repayable by the DISs before applying the level of coverage and covered deposits are obtained from eligible deposits while applying the level of coverage. Chart 5.9 depicts the country group-wise system of assessment base.

**Chart 5.9: Country Group-wise Assessment Base**



Data on assessment base is available for 109 countries. Almost equal number of countries report assessment base as total deposits as well as covered deposits – 38 (35%) and 37 (34%) respectively. All the countries in the SSA group have total deposits as the assessment base. Other country groups in which total deposits as the assessment base is predominant are EDA, LAC and MENAP. The category of eligible deposits as the assessment base exists in 21 (19%) countries, especially in the Advanced and EDE country groups. Total liabilities are also reported as the assessment base in 12% of the countries, but visible in the Advanced group, where countries wanted to shift the balance of the cost of deposit insurance away from small banks to large banks that mobilize more of non-deposit wholesale money, e.g., as stipulated by the Dodd-Frank Act, the US FDIC changed the assessment base from total domestic deposits to average total assets minus tangible equity (i.e., Tier 1 capital).<sup>10</sup>

<sup>10</sup> IMF Survey, pp.8.

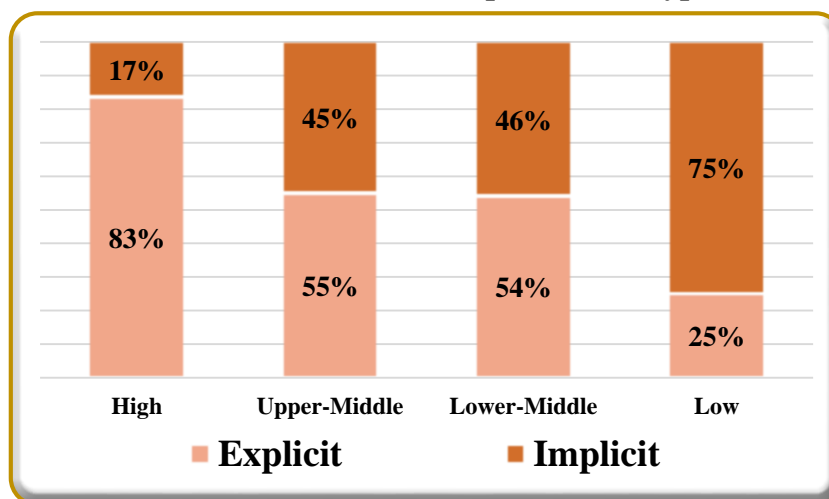
### Pay-outs

The *IMF Survey* classifies modes of pay-outs into 4 categories: (a) Per Deposit Account, (b) Per Depositor per Bank, (c) Per Depositor and (c) Deposit Losses Imposed. Out of these, (b), i.e., ‘per depositor per bank’ is the predominant form of pay-out, as observed in respect of 104/112 countries, in aggregate. Pay-out in the form of ‘per depositor account’ (observed in 1 country in the SSA group) is more generous than that of ‘per depositor per bank’, as it allows depositors to increase their effective coverage by opening multiple accounts within the same bank. Pay-out in the form of ‘per depositor per bank’ is more generous than that of ‘per depositor’ because it allows depositors to increase their effective coverage by placing deposits in multiple banks. ‘Per depositor’ criterion is prevalent in 5 countries - 1 each in CIS and EDA groups, and 3 in LAC. Imposition of losses is obtained in the case of 2 countries – 1 each in the Advanced and LAC. DISs impose losses in the extreme event of lack of sufficient funds.

### DIS Type by Income Groups

Chart 5.10 presents the types of DIS according to the income groups to which the countries belong, as per the IMF per capita income criteria: (a) Low-income countries (\$1,045 or less), (b) Lower-middle-income countries (\$1,046 to \$4,125), (c) Upper-middle-income countries (\$4,126 to \$12,735) and (d) High-income countries (\$12,736 or more).

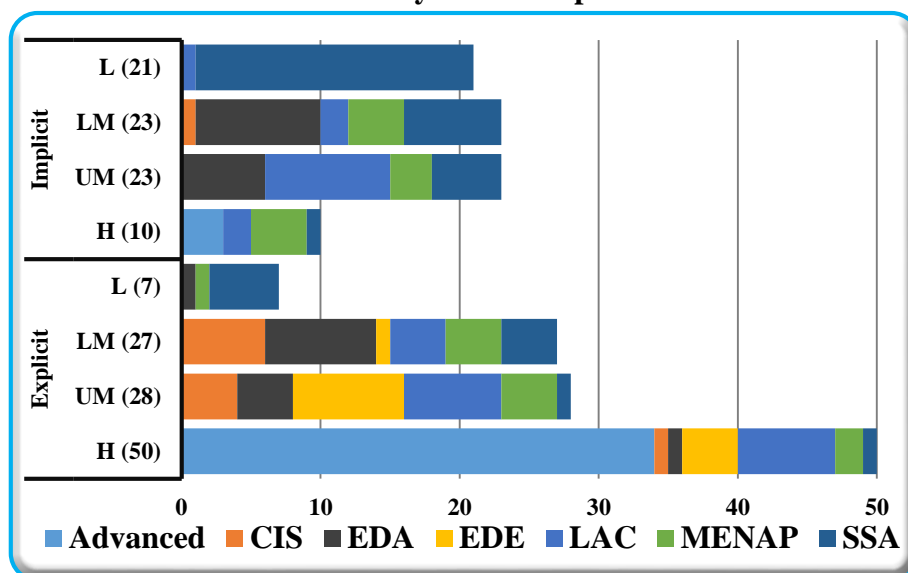
**Chart 5.10: Income Group-wise DIS Type**



It can be discerned from the Chart that there is direct correlation between the incidence of the Explicit schemes and the income levels of the countries. In other words, the number of Explicit schemes is more in the relatively high income group countries than in the relatively low income group countries. Conversely, the Implicit schemes are more in the relatively low income groups of countries. Thus, one can conclude that income level of a country is an important ‘enabler’

for it to go for Explicit schemes because such schemes require steady commitment from the DIS owners. Hence, most Explicit schemes are funded *ex ante*. Secondly, it is observed that the relatively new entrant countries first go for the Implicit schemes, especially those belonging to the low and lower-middle income groups (See Chart 5.11 which gives country-wise distribution of DIS types).

**Chart 5.11: Country-wise Composition of DIS**



### Monetary Coverage

The *IMF Survey* provides the magnitude of monetary coverage in terms of both local currency and US Dollar. Data are available for 3 years, i.e., 2003, 2010 and 2013. Majority of the countries have provided the exact amount of maximum coverage, but a few have indicated the coverage in uncertain terms, e.g., ‘proportion of a fixed amount or the fixed amount whichever is higher’. We have termed the ‘exact’ as ‘point’ data. Further, some countries have shifted from the uncertain system to point system, as mentioned above, over time. The *IMF Survey* also provides the coverage as percentage of GDP. Against the above-said backdrop, it is examined how the coverage has moved during the 3 years mentioned above.

Table 5.3 provides data on the movement in local currency for those countries where the ‘point’ data are available for all the 3 years.

<b>Country-group</b>	<b>(No. of Countries)</b>							<b>Total</b>
	<b>Continuous Increase for all 2 years</b>	<b>Increase between 2003 and 2010 but constant thereafter</b>	<b>Decrease between 2003 and 2010 but increase thereafter</b>	<b>Decrease between 2003 and 2010 but constant thereafter</b>	<b>Constant between 2003 and 2010 but increase thereafter</b>	<b>Constant between 2003 and 2010 but decrease thereafter</b>	<b>Constant in 2010 and 2013 at 2003 level</b>	
<b>Advanced</b>	-	14	-	1	-	-	3	18
<b>CIS</b>	-	3	-	-	-	-	-	3
<b>EDA</b>	-	5	-	-	-	-	2	7
<b>EDE</b>	-	4	-	-	1	-	-	5
<b>LAC</b>	6	3	-	-	-	1	4	14
<b>MENAP</b>	-	2	-	-	1	-	2	5
<b>SSA</b>	-	2	1	-	-	-	2	5
<b>Total</b>	6	33	1	1	2	1	13	57

Out of the 57 countries for which 'point' data are available for all the 3 years, a majority of 33 (58%) report increase between 2003 and 2010 but thereafter constancy. It is noteworthy here that in the aftermath of the 2007-08 financial crisis, many countries had increased their deposit insurance coverage levels, most of which belonging to the advanced economies which were hit the hardest by the crisis. This is followed by 13 countries (23%) which report no change in 2010 as well as 2013 from their 2003 level. Six countries (all belonging to the LAC group) report continuous increase in their coverage level from 2003 to 2010 and to 2013.

Table 5.4 provides data on the movement in local currency for those countries where the 'point' data are available for only 2010 and 2013.

<b>Country-group</b>	<b>(No. of Countries)</b>			
	<b>Increase</b>	<b>Decrease</b>	<b>Constant</b>	<b>Total</b>
<b>Advanced</b>	1	1	13	15
<b>CIS</b>	-	-	6	6
<b>EDA</b>	-	-	5	5
<b>EDE</b>	1	-	5	6
<b>LAC</b>	-	-	2	2
<b>MENAP</b>	-	-	3	3
<b>SSA</b>	-	-	-	-
<b>Total</b>	2	1	34	37

As observed in respect of Table 5.2, it can be concluded from Table 5.3 that between 2010 and 2013, i.e., after the impact of the financial crisis dissipated, most of the countries kept their deposit insurance coverage unchanged at the 2010 level.

Now, we examine the movement in coverage levels in terms ratio to GDP of the countries. Table 5.5 presents the relative data for those countries where the ‘point’ data are available for all the 3 years.

<b>Table 5.5: Trend for those countries for which all 3 years’ ‘point’ data are available</b>						
<b>(No. of Countries)</b>						
<b>Country-group</b>	Continuous Increase for all 2 years	Increase between 2003 and 2010 but decrease thereafter	Increase between 2003 and 2010 but constant thereafter	Continuous Decrease for all 2 years	Decrease between 2003 and 2010 but increase thereafter	Total
<b>Advanced</b>	9	16	1	2	1	29
<b>CIS</b>	-	4	-	-	-	4
<b>EDA</b>	-	4	-	3	-	7
<b>EDE</b>	2	7	-	1	1	11
<b>LAC</b>	1	2	-	12	1	16
<b>MENAP</b>	1	1	-	4	1	7
<b>SSA</b>	-	2	-	2	1	5
<b>Total</b>	13	36	1	24	5	79

Out of 79 countries for which data are gathered, the highest number of 36 (46%) countries report initial increase in the coverage/GDP ratios during 2003-10 but decrease during 2010-13. Most of such countries belong to the Advanced country group. Thirteen countries (16%) report continuous increase in their ratios from their 2003 levels in 2010 and 2013. Both are reflective of post-crisis situation during which GDP fell but coverage level remained high. In the case of 24 (30%) countries, the ratios decreased continuously from their 2003 level in 2010 and 2013 with most of these countries belonging to the LAC group.

Table 5.6 provides data on the movement in the coverage/GDP ratios for those countries where the ‘point’ data are available for only 2010 and 2013.

<b>(No. of Countries)</b>			
<b>Country-group</b>	<b>Increase</b>	<b>Decrease</b>	<b>Total</b>
<b>Advanced</b>	1	3	4
<b>CIS</b>	-	5	5
<b>EDA</b>	-	5	5
<b>EDE</b>	1	-	1
<b>LAC</b>	1	-	1
<b>MENAP</b>	1	1	2
<b>SSA</b>	-	-	-
<b>Total</b>	4	14	18

Most of the countries displayed reduction in the ratios in 2013 from that in 2010.

### **Impact of Crisis**

According to the *IMF Survey* which draws upon the work by Laeven and Valencia (2012), 26 countries comprising 20 from the advanced group experienced banking crisis during 2007-13. But the reverberations of the crisis were felt all over the world and many countries, even though they were not directly hit by the crisis, either introduced DIS or increased the existing coverage limit or did both. Table 5.7 summarizes the impact of the crisis on the affected countries as far as deposit insurance is concerned.

<b>Country Group</b>	<b>Experienced banking crisis during 2007-13</b>	<b>Introduction of DIS</b>	<b>Increase in statutory DIS coverage</b>	<b>Co-insurance abolition</b>
<b>Advanced</b>	20	-	29	6
<b>CIS</b>	3	1	2	-
<b>EDA</b>	1	5	3	-
<b>EDE</b>	1	2	10	4
<b>LAC</b>	-	1	10	1
<b>MENAP</b>	-	3	3	1
<b>SSA</b>	1	-	1	-
<b>Total</b>	26	12	58	12

While 12 countries were added to the DIS space all over the world (highest number from the EDA country group), as many as 58 countries increased their DIS coverage levels. This comprised 49 countries - 29 belonging to the advanced country group, and 10 each to EDE and LAC groups. Further, co-insurance facility was withdrawn in 12 countries - 10 belonging to the advanced and EDE groups together - as the facility led to losses by the DISs.

## Summing Up

- *Although the system of insuring bank depositors started in 1933 pioneered by USA in the post-Depression period, most of the DISs were established in 1990s, followed by the 7-year period 2000-07 and in the post-2007-08 crisis.*
- *Explicit DISs are predominant.*
- *Most of the Explicit systems have separate legal arrangements and are publicly administered.*
- *Both 'Pay-box Plus' and 'Pay-box only' roles are common.*
- *In all the countries, DIS is compulsory for the domestic banks as well as local subsidiaries of foreign banks. However, in several countries, the local branches of foreign banks participate.*
- *Apart from domestic deposits, foreign currency deposits are covered by several countries. Almost a third of the countries cover inter-bank deposits too. Co-insurance is very limited; it lost its appeal during the 2007-08 crisis.*
- *Majority of the DISs follow ex ante funding and are funded privately.*
- *About four-tenth of the countries report backstop facility.*
- *A little below one-third of the DISs follow the risk-adjusted premium system.*
- *Both total deposits and covered deposits are predominant as the assessment base.*
- *'Per depositor per bank' is the predominant form of pay-out.*
- *The number of Explicit schemes is more in the relatively high income group countries than in the relatively low income group countries.*
- *In the aftermath of the 2007-08 financial crisis, many countries had increased their deposit insurance coverage levels in terms of their local currencies, most of which belonging to the advanced economies which were hit the hardest by the crisis.*
- *After the impact of the financial crisis dissipated, most of the countries kept their deposit insurance coverage unchanged at the 2010 level.*
- *However, in terms of the coverage/GDP ratios, maximum number of countries reported initial increase during 2003-10 but decrease during 2010-13.*
- *In the post 2007-08 crisis period, while 12 countries were added to the DIS space, all over the world, as many as 58 increased their DIS coverage levels.*
- *Post 2007-09 crisis, co-insurance declined.*

## Annexure 5.1: Country-wise Type of DISs

Country Group	Type of Scheme	
	Explicit Schemes	Implicit Schemes
<b>ADVANCED</b>	Australia, Austria*, Belgium*, Canada, Cyprus*, Czech Republic**, Denmark**, Estonia*, Finland*, France*, Germany*, Gibraltar, Greece*, Hong Kong SAR, Iceland, Ireland*, Italy*, Japan, Korea, Rep. of, Latvia*, Lithuania**, Luxembourg*, Malta*, Netherlands*, Norway, Portugal*, Singapore, Slovak Republic*, Slovenia*, Spain*, Sweden**, Switzerland, United Kingdom** and United States	Israel, New Zealand and San Marino
<b>CIS</b>	Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan	Georgia
<b>EDA</b>	Bangladesh, Brunei Darussalam, India, Indonesia, Laos, Malaysia, Marshall Islands, Micronesia, Mongolia, Nepal, Philippines, Sri Lanka, Thailand and Vietnam	Bhutan, Cambodia, China, Fiji, Kiribati, Maldives, Myanmar, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu and Vanuatu
<b>EDE</b>	Albania, Bosnia & Herzegovina, Bulgaria**, Croatia**, Hungary**, Kosovo, Lichtenstein, Macedonia, FYR, Montenegro, Poland**, Romania**, Serbia and Turkey	NIL
<b>LAC</b>	Argentina, Bahamas, The, Barbados, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela	Antigua and Barbuda, Belize, Bolivia, Costa Rica, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Suriname
<b>MENAP</b>	Afghanistan, Algeria, Bahrain, Jordan, Lebanon, Libya, Mauritania, Morocco, Oman, Sudan and Yemen	Djibouti, Egypt, Iran, Iraq, Kuwait, Pakistan, Qatar, Saudi Arabia, Syrian Arab Republic, Tunisia and United Arab Emirates
<b>SSA</b>	Cameroon, Central African Rep., Chad, Congo, Rep., Equatorial Guinea, Gabon, Kenya, Nigeria, Tanzania, Uganda and Zimbabwe	Angola, Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Comoros, Congo, Democratic Rep., Côte d'Ivoire, Eritrea, Ethiopia, Gambia, The, Ghana, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius,



		Mozambique, Namibia, Niger, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Togo and Zambia
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\* *Euro Area.* \*\**Belongs to EU but not Euro Area.*

Annexure 5.2: Country-wise Movement in Deposit Insurance Coverage (Continued)						
Country Group	Country	Reported Currency	2003	2010	2013	Trend Line
Advanced	Australia	AUD	NA	1,000,000	250,000	
	Austria	EUR	20,000	100,000	100,000	
	Belgium	EUR	20,000	100,000	100,000	
	Canada	CAD	60,000	100,000	100,000	
	Cyprus	EUR	90% of first 22,222 (up to maximum of 20,000)	100,000	100,000	
	Czech Republic	EUR	90% of first 27,778 (up to maximum of 25,000)	100,000	100,000	
	Denmark	EUR	#	100,000	100,000	
	Estonia	EUR	#	100,000	100,000	
	Finland	EUR	25,000	100,000	100,000	
	France	EUR	70,000	100,000	100,000	
	Germany	EUR	90% of first 22,222 (up to maximum of 20,000)	100,000	100,000	
	Gibraltar	EUR	50,000	100,000	100,000	
	Greece	EUR	20,000	100,000	100,000	
	Hong Kong SAR	HKD	NA	500,000	500,000	
	Iceland	EUR	#	#	20,887	
	Ireland	EUR	90% of first 22,222 (up to maximum of 20,000)	100,000	100,000	
	Italy	EUR	103,291	100,000	100,000	
	Japan	JPY	10,000,000	10,000,000	10,000,000	
	Korea, Rep. of	KRW	50,000,000	50,000,000	50,000,000	
	Latvia	EUR	4,600	100,000	100,000	
	Lithuania	EUR	NA	100,000	100,000	
	Luxembourg	EUR	90% of first 22,222 (up to maximum of 20,000)	100,000	100,000	
	Malta	EUR	90% of first 22,222 (up to maximum of 20,000)	100,000	100,000	
	Netherlands	EUR	20,000	100,000	100,000	
	Norway	NOK	2,000,000	2,000,000	2,000,000	
	Portugal	EUR	25,000	100,000	100,000	
	Singapore	SGD	NA	20,000	50,000	
	Slovak Republic	EUR	90% of first 22,222 (up to maximum of 20,000)	100,000	100,000	
	Slovenia	EUR	18,500	100,000	100,000	
	Spain	EUR	20,000	100,000	100,000	
Sweden	EUR	#	100,000	100,000		
Switzerland	CHF	30,000	100,000	100,000		
United Kingdom	GBP	100% of first 2,000; 90% of next 33,000 (up to maximum of 31,700)		85,000	85,000	
United States	USD	100,000	250,000	250,000		
CIS	Armenia	AMD	NA	4,000,000	4,000,000	
	Azerbaijan	AZN	NA	30,000	30,000	
	Belarus	EUR	#	5,000	5,000	
	Kazakhstan	KZT	4,000,000	5,000,000	5,000,000	
	Kyrgyz Republic	KGS	NA	100,000	100,000	
	Moldova	MDL	NA	6,000	6,000	
	Russian Federation	RUB	100,000	700,000	700,000	
	Tajikistan	TJS	NA	7,000	7,000	
	Turkmenistan		Unlimited	Unlimited	Unlimited	
	Ukraine	UAH	1,500	150,000	200,000	
Uzbekistan	UZS	1,360,000	Unlimited	Unlimited		
EDA	Bangladesh	TAK	60,000	100,000	100,000	
	Brunei Darussalam	BND	NA	50,000	50,000	
	India	INR	100,000	100,000	100,000	
	Indonesia	IDR	NA	2,000,000,000	2,000,000,000	
	Laos	KIP	20,000,000	20,000,000	20,000,000	
	Malaysia	MYR	NA	250,000	250,000	
	Marshall Islands	USD	100,000	250,000	250,000	
	Micronesia	USD	100,000	250,000	250,000	
	Mongolia	MNT	NA	20,000,000	20,000,000	
	Nepal	NPR	NA	200,000	200,000	
	Philippines	PHP	100,000	500,000	500,000	
	Sri Lanka	RS	NA	NA	200,000	
	Thailand	THB	NA	Unlimited	50,000,000	
	Vietnam	VND	30,000,000	50,000,000	50,000,000	

Annexure 5.2: Country-wise Movement in Deposit Insurance Coverage (Concluded)						
Country Group	Country	Reported Currency	2003	2010	2013	Trend Line
EDE	Albania	LEK	100% of first 350000; 85% of next 411765, (up to a max of 700,000)	2,500,000	2,500,000	
	Bosnia & Herzegovina	BAM	5,000	35,000	35,000	
	Bulgaria	BGN	15,000	196,000	196,000	
	Croatia	EUR	#	#	100,000	
	Hungary	EUR	#	100,000	100,000	
	Kosovo	EUR	NA	NA	3,000	
	Liechtenstein	CHF	#	100,000	100,000	
	Macedonia, FYR	EUR	100% of first 10,000; 90% of next 11,111	30,000	30,000	
	Montenegro	EUR	NA	20,000	50,000	
	Poland	EUR	100% of first 1,000; 90% of next 23,889 (up to maximum of 22,500)	100,000	100,000	
	Romania	EUR	3,400	100,000	100,000	
	Serbia	EUR	3,000	50,000	50,000	
Turkey	TRY	50,000	50,000	100,000		
LAC	Argentina	ARG	30,000	120,000	120,000	
	Bahamas, The	BAH	50,000	50,000	50,000	
	Barbados	USD	NA	12,500	12,500	
	Brazil	BRR	20,000	70,000	250,000	
	Chile	UDF	90% of first 120 (up to maximum of 108)	90% of first 120 (up to maximum of 108)	90% of first 120 (up to maximum of 108)	
	Colombia	COP	75% of first 26,666,667 (up to maximum of 20,000,000)	20,000,000	20,000,000	
	Ecuador	USD	7,416	27,000	31,000	
	El Salvador	USD	6,700	9,000	9,800	
	Guatemala	GTQ	20,000	20,000	20,000	
	Honduras	USD	9,633	9,633	9,633	
	Jamaica	JMD	3,000,00	6,000,00	600,000	
	Mexico	UDI	10,000,000	10,000,000	400,000	
	Nicaragua	USD	10,000	10,000	10,000	
	Paraguay	PYG	72,930,975	113,061,300	124,367,400	
	Peru	PNS	68,474	85,793	92,625	
	Trinidad and Tobago	TTD	50,000	75,000	125,000	
	Uruguay	USD	27,000	31,612	*	
Venezuela	BSF	10,000	30,000	30,000		
MENAP	Afghanistan	AF	NA	100,000	100,000	
	Algeria	DIN	600,000	600,000	600,000	
	Bahrain	BHD	75% of first 20,000 (up to maximum of 15,000)	75% of first 20,000 (up to maximum of 15,000)	75% of first 20,000 (up to maximum of 15,000)	
	Jordan	JOD	10,000	10,000	50,000	
	Lebanon	LBP	5,000,000	5,000,000	5,000,000	
	Libya	LYD	NA	100% of first 10,000, 50% for next 90,000, 25% of next 300,000, 12.5% of next 600,000, and 10% for amounts above 1,000,000, up to a maximum of 250,000	100% of first 10,000, 50% for next 90,000, 25% of next 300,000, 12.5% of next 600,000, and 10% for amounts above 1,000,000, up to a maximum of 250,000	
	Mauritania		NA	NA	NA	
	Morocco	MAD	50,000	80,000	80,000	
	Oman	OMR	75% of first 26,667 (up to maximum of 20,000)	20,000	20,000	
	Sudan	SDG	1,500	10,000	10,000	
	Yemen	YER	NA	2,000,000	2,000,000	
	SSA	Cameroon	XAF	NA	NA	5,000,000
Central African Rep.		XAF	NA	NA	5,000,000	
Chad		XAF	NA	NA	5,000,000	
Congo, Rep.		XAF	NA	NA	5,000,000	
Equatorial Guinea		XAF	NA	NA	5,000,000	
Gabon		XAF	NA	NA	5,000,000	
Kenya		KES	100,000	100,000	100,000	
Nigeria		NGN	50,000	500,000	500,000	
Tanzania		TZS	250,000	1,500,000	1,500,000	
Uganda		UGX	3,000,000	3,000,000	3,000,000	
Zimbabwe		USD	3,640	150	500	

#denominated in another currency. NA – Not Available.

<b>Annexure 5.3: Coverage Limit/GDP Per Capita (%) (Continued)</b>					
<b>Country Group</b>	<b>Country</b>	<b>2003</b>	<b>2010</b>	<b>2013</b>	<b>Trend Line</b>
<b>Advanced</b>	Australia	NA	1,628	342	
	Austria	73	296	282	
	Belgium	76	306	304	
	Canada	157	8,799	7,394	
	Cyprus	123	485	557	
	Czech Republic	304	703	731	
	Denmark	115	236	233	
	Estonia	100	936	724	
	Finland	90	302	292	
	France	276	326	321	
	Germany	77	329	306	
	Gibraltar	181	254	203	
	Greece	130	506	631	
	Hong Kong SAR	NA	198	171	
	Iceland	72	71	63	
	Ireland	57	289	302	
	Italy	446	383	397	
	Japan	256	265	247	
	Korea, Rep. of	312	211	195	
	Latvia	109	1,173	906	
	Lithuania	273	1,125	861	
	Luxembourg	35	130	125	
	Malta	177	645	603	
	Netherlands	NA	450	292	
	Norway	573	386	326	
	Portugal	183	618	665	
	Singapore	NA	32	72	
	Slovak Republic	267	827	778	
	Slovenia	144	580	606	
	Spain	108	447	473	
Sweden	88	271	238		
Switzerland	49	136	138		
United Kingdom	167	354	354		
United States	262	518	471		
<b>CIS</b>	Armenia	NA	377	308	
	Azerbaijan	NA	638	484	
	Belarus	55	115	91	
	Kazakhstan	129	377	253	
	Kyrgyz Republic	NA	249	159	
	Moldova	NA	30	21	
	Russian Federation	109	216	144	
	Tajikistan	NA	216	138	
	Turkmenistan	Unlimited	Unlimited	Unlimited	
	Ukraine	27	634	619	
	Uzbekistan	354	Unlimited	Unlimited	
<b>EDA</b>	Bangladesh	271	203	142	
	Brunei Darussalam	NA	115	99	
	India	384	152	107	
	Indonesia	NA	7,373	4,644	
	Laos	393	222	169	
	Malaysia	NA	897	720	
	Marshall Islands	4,107	8,114	7,731	
	Micronesia	4,359	8,734	7,776	
	Mongolia	NA	660	307	
	Nepal	NA	450	292	
	Philippines	181	514	403	
	Sri Lanka	NA	NA	48	
	Thailand	NA	Unlimited	26,846	
	Vietnam	394	202	125	

<b>Annexure 5.3: Coverage Limit/GDP Per Capita (%) (Concluded)</b>					
<b>Country Group</b>	<b>Country</b>	<b>2003</b>	<b>2010</b>	<b>2013</b>	<b>Trend Line</b>
<b>EDE</b>	Albania	319	586	531	
	Bosnia & Herzegovina	131	547	537	
	Bulgaria	328	2,078	1,870	
	Croatia	194	530	1,016	
	Hungary	162	1,047	1,028	
	Kosovo	NA	NA	116	
	Liechtenstein	25	71	83	
	Macedonia, FYR	969	879	836	
	Montenegro	NA	401	981	
	Poland	451	1,083	1,029	
	Romania	141	1,735	1,547	
	Serbia	130	1,325	1,167	
	Turkey	730	333	430	
<b>LAC</b>	Argentina	303	336	155	
	Bahamas, The	223	218	213	
	Barbados	NA	78	81	
	Brazil	215	359	939	
	Chile	54	36	30	
	Colombia	306	168	128	
	Ecuador	339	583	519	
	El Salvador	268	261	253	
	Guatemala	139	86	73	
	Honduras	784	467	415	
	Jamaica	145	143	110	
	Mexico	1,988	1,594	1,457	
	Nicaragua	994	690	544	
	Paraguay	2,556	842	648	
	Peru	863	582	497	
	Trinidad and Tobago	92	76	94	
Uruguay	740	273	193		
Venezuela	191	84	38		
<b>MENAP</b>	Afghanistan	NA	412	260	
	Algeria	364	180	141	
	Bahrain	262	170	145	
	Jordan	713	326	1,365	
	Lebanon	65	38	33	
	Libya	NA	1,597	1,828	
	Mauritania	NA	NA	NA	
	Morocco	316	333	306	
	Oman	571	225	206	
	Sudan	119	257	388	
	Yemen	NA	716	633	
	<b>SSA</b>	Cameroon	NA	NA	1,031
Central African Rep.		NA	NA	3,142	
Chad		NA	NA	860	
Congo, Rep.		NA	NA	318	
Equatorial Guinea		NA	NA	51	
Gabon		NA	NA	85	
Kenya		299	160	114	
Nigeria		76	224	184	
Tanzania		74	210	134	
Uganda		670	288	190	
Zimbabwe	802	20	51		

NA – Not Available.

**Annexure 5.4: Multiple DISs**

<b>Country</b>	<b>No. of Systems/Schemes</b>
<b>Austria</b>	5 DISs
<b>Canada</b>	In addition to the Canada Deposit Insurance Corporation and AMF <sup>#</sup> , there are 9 other deposit insurers in Canada. These largely insure provincially-chartered credit unions. There is separately one in each province.
<b>Colombia</b>	2 DISs: FOGAFIN covering deposits in banks and FOGACOOOP to deal with deposits in cooperatives.
<b>Cyprus</b>	2 DISs: Deposit Protection Scheme and Deposit Protection Scheme for Co-operative Societies.
<b>Germany</b>	6 DISs
<b>Italy</b>	3 DISs
<b>Jamaica</b>	2 DISs
<b>Japan</b>	While the Deposit Insurance Corporation of, is responsible for insuring deposit-taking institutions in general, the agricultural and fishery cooperatives are separately insured by the Agricultural and Fishery Cooperative Savings Insurance Corporation due to the different risk features of these institutions.
<b>S. Korea</b>	The Korea Deposit Insurance Corporation provides deposit insurance for banks, insurance companies, securities companies, merchant banks and mutual savings banks. There are other deposit protection schemes for cooperative financial institutions.
<b>Mexico</b>	In addition to the government agency that guarantees bank deposits and manages the only deposit insurance system in the country, a provision in law provides for 2 private trusts: the fund of Auxiliary Supervision of Savings and Loans Cooperative Societies and Protection for their Depositors (members are associations that provide savings and loan transaction to their members as non-profit financial intermediaries) and the Fund for Protection of Popular Financial Societies and Protection for their Depositors (members are microfinance institutions incorporated as public limited/open companies that expand access to funding to persons excluded from the traditional loans system).
<b>Poland</b>	2 DISs: (a) Bank Guarantee Fund insuring deposits with banks (both commercial and cooperative) and (b) deposits with credit unions are insured by the Polish Cooperative Saving and Credit Union Mutual Insurance Society.
<b>Portugal</b>	2 DISs
<b>Spain</b>	3 deposit guarantee funds for: (a) banking institutions, (b) savings banks and (c) cooperative credit banks.
<b>US</b>	The US has 2 federally mandated deposit insurance systems. The explicit protection of deposits in banks and savings associations (thrifts) is provided by the Federal Deposit Insurance Corporation. Protection of depositor funds in credit unions (termed share accounts) is provided under a separate legislative mandate by the National Credit Union Administration

<sup>#</sup> *Autorité des marchés financiers.*

## **Part – C: The World of Indian Banks and Bank Depositors**

**There are 2 Chapters in this Part – Chapters 6 and 7. Chapter 6 is a succinct one aimed at introducing the reader to the Indian banking structure and the significance of deposits to the Indian banks. It also traces, in brief, the history of bank failures in India, as deposit insurance is a positive fallout of bank failures or crises.**

**However, Chapter 7 is a detailed one in which we have deeply analyzed the available data from various issues of RBI's Basic Statistical Return and conceptualized the typical Indian bank depositor. This is a new dimension we have added to the existing literature on the Indian banking sector, especially from the viewpoint of policy formulation.**

**The Chapter also puts together the basic deposit schemes of banks for both resident and non-resident Indians.**

## Chapter VI

### Banking System and Bank Failures in India

The Chapter contains 2 Sections: Section 1 presents a snapshot of the Indian banking structure and Section 2 assesses the vulnerability of the different segments of the Indian banking sector.

#### Section 1: The Indian Banking Structure in Brief

Reserve Bank of India (RBI), India's central bank, regulates and supervises the banking sector in the country.

The Indian banking sector consists of two segments: Scheduled and non-Scheduled banks.<sup>11</sup> The Scheduled banks comprise both commercial and cooperative banks. The commercial banking turf is dominated by Public Sector Banks (PSBs) in which the government owns a majority stake (i.e., more than 50%). The shares of almost all PSBs are listed on stock exchanges. PSBs are further divided into 2 categories: (a) State Bank of India (SBI) and its Associates (jointly referred to as the State Bank Group or SBG) and (b) Nationalized Banks (NBs), i.e., those private banks which were nationalized or taken over by the government in two tranches, in 1969 and 1980. In the case of private sector banks private shareholders, not the government, owns the majority stake. The Private Banks (PVTBs) are divided into 2 categories: (a) Old Private Banks and (b) New Private Banks. The former constitutes those private banks which existed before 1969 but were not nationalized because their operations were too narrow catering to small regions and/or communities. The new private banks came into existence in 1994 and thereafter following the announcement of new norms for setting up private banks consequent upon the recommendations of the *Report of the Committee on the Financial System* (Chairman: M Narasimham) (1991). These banks, though not as big as PSBs, are nonetheless Pan-India in character and bigger than Old Private Banks in all respects. Foreign shareholding is permitted in both PSBs and Private Banks subject to government-stipulated caps. RBI permitted 2 more 'new' banks to start operation as scheduled commercial banks in 2015 after it announced another set of new guidelines for the entry of banks in the private sector in February 2013. RBI in April 2014 gave licences to two new banks as per the revised norms and both have commenced their businesses. The third set of commercial banks is Foreign Banks (FBs) whose conventional banking operations are by and large limited;

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<sup>11</sup> Scheduled Banks in India constitute those banks which have been included in the Second Schedule of Reserve Bank of India (RBI) Act, 1934. RBI in turn includes only those banks in this schedule which satisfy the criteria laid down vide section 42 (6) (a) of the Act.



however, these are rather active in money and foreign exchange markets. Besides, there are dedicated rural banks known as Regional Rural Banks (RRBs) which are jointly sponsored by the Central government, concerned State government and a sponsoring bank. Finally, there are Local Area Banks (LABs) which are classified as non-Scheduled commercial banks.

The cooperative sector consists of rural and urban cooperatives. These banks, an offshoot of the cooperative movement in the country in the 1900s, operate in smaller areas, have limited operations and are mostly community-based. These are owned by their members and subject to a dual regulatory framework by RBI and the Registrars of Cooperative Societies of the States in which the banks are located. The cooperative banks can be both Scheduled and non-Scheduled. Scheduled cooperative banks consist of scheduled State cooperative banks and scheduled urban cooperative banks. The rural cooperative banking structure includes both short- and long-term banks.

Recently, RBI has allowed setting up of two new categories of banks, i.e., Payments Bank and Small Finance Bank to cater to the niche markets as their respective names indicate. This is for the first time in the history of India's banking sector that RBI has given out differentiated licences for specific activities. In August 2015, RBI granted 'in principle' approval for payment banks to 11 entities (See Box 6.1).

### **Box 6.1: Payment Banks**

These are specialized banks to cater to remittances and are expected to reach customers mainly through their mobile phones rather than traditional bank branches.

#### **Functions**

- They cannot offer loans but can raise deposits of up to INR 1,00,000, and pay interest on these balances just like a savings bank account does.
- They can enable transfers and remittances through a mobile phone.
- They can offer services, such as, automatic payments of bills, and purchases in cashless, cheque-less transactions through a phone.
- They can issue debit cards and ATM cards usable on ATM networks of all banks.
- They can transfer money directly to bank accounts at nearly no cost being a part of the gateway that connects banks.
- They can provide forex cards to travellers, usable again as a debit or ATM card all over India.
- They can offer foreign exchange services at charges lower than banks.
- They can also offer card acceptance mechanisms to third parties, such as, the 'Apple Pay.'

Entities granted in-principle approval by RBI include Aditya Birla Nuvo Ltd., Airtel M Commerce Services Ltd., Cholamandalam Distribution Services Ltd., Department of Posts, Fino PayTech Ltd., National Securities Depository Ltd., Reliance Industries Ltd., Dilip Shantilal Shanghvi, Vijay Shekhar Sharma, Vodafone and Tech Mahindra Ltd.

*Source: Based on RBI Web Site.*

The small finance bank will primarily undertake basic banking activities of acceptance of deposits and lending to unserved and underserved sections including small business units, small and marginal farmers, micro and small industries and unorganized sector entities. Box 6.2 presents the details.

### **Box 6.2: Small Finance Banks**

#### **Functions:**

#### **What they can do**

- Take small deposits and disburse loans
- Distribute mutual funds, insurance products and other simple third-party financial products
- Lend 75% of their total adjusted net bank credit to priority sector
- Maximum loan size would be 10% of capital funds to single borrower, 15% to a group
- Minimum 50% of loans should be up to INR 25,00,000

#### **What they cannot do**

- Lend to big corporates and groups
- Cannot open branches with prior RBI approval for first five years
- Other financial activities of the promoter must not mingle with the bank
- It cannot set up subsidiaries to undertake non-banking financial services activities
- Cannot be a business correspondent of any bank

The 10 selected applicants are: Au Financiers (Jaipur), Capital Local Area Bank (Jalandhar), Disha Microfin (Ahmedabad), Equitas Holdings (Chennai), ESAF Microfinance and Investments (Chennai), Janalakshmi Financial Services (Bengaluru), RGVN (Northeast) Microfinance (Guwahati), Suryoday Micro Finance (Navi Mumbai), Ujjivan Financial Services (Bengaluru) and Utkarsh Micro Finance (Varanasi).

*Source: Based on RBI Web Site.*

Table 6.1 presents the Indian banking structure schematically, especially from the viewpoint of the concentration of deposits in the balance sheets of different categories of banks as discussed above.

Table 6.1: Deposit Concentration in the Indian Banking System as at March-end 2015

Scheduled Commercial Banks			Cooperative Banks		
<b>Public Sector Banks</b>	State Bank of India (the largest bank). Balance Sheet Size - INR 20,481 billion. Deposits - INR 15,768 billion. Deposits/Liabilities - 77%.	Associates of SBI. 5 banks. Balance Sheet Size - INR 5,586 billion. Deposits - INR 4,643 billion. Deposits/Liabilities - 83%.	Nationalized. 21 banks. Balance Sheet Size - INR 60,721 billion. Deposits - INR 51,544 billion. Deposits/Liabilities - 85%.	<b>Urban Cooperative Banks</b>	1,579 banks: 50 Scheduled banks having a combined Balance Sheet size of INR 2,036 billion and Deposits/Liabilities at 81% and 1,529 non-Scheduled banks with a combined Balance Sheet size of INR 2,316 billion and Deposits/Liabilities at 82%.
<b>Private Sector Banks</b>	Old. 13 banks. Balance Sheet Size - INR 5,348 billion. Deposits - INR 4,469 billion. Deposits/Liabilities - 84%.	New. 7 banks. Balance Sheet Size - INR 20,656 billion. Deposits - INR 13,876 billion. Deposits/Liabilities - 67%.		<b>Rural Cooperative Banks</b>	
<b>Foreign Banks</b>	43 banks. Balance Sheet Size - INR 7,547 billion. Deposits - INR 4,052 billion. Deposits/Liabilities - 54%.		<i>Short-term Rural Credit Cooperative Banks</i>		
<b>Regional Rural Banks</b>	56 banks. Balance Sheet Size - INR 3,550 billion. Deposits - INR 2,713 billion. Deposits/Liabilities - 76%.		1. State Cooperative Banks		32 banks. Balance Sheet Size - INR 1,809 billion. Deposits - INR 1,042 billion. Deposits/Liabilities - 58%.#
<i>Non-scheduled Commercial banks</i>			2. District Central Cooperative Banks		370 banks. Balance Sheet Size - INR 3,489 billion. Deposits - INR 2,359 billion. Deposits/Liabilities - 68%.#
<b>Local Area Banks</b>	4 banks. Balance Sheet Size - INR 23 billion. Deposits - INR 20 billion. Deposits/Liabilities - 88%.@		3. Primary Agricultural Credit Societies		93,042 Societies. Balance Sheet Size - INR 1,790 billion. Deposits - INR 671 billion. Deposits/Liabilities - 37%.*
			<i>Long-term Rural Credit Cooperative Banks</i>		
			1. State Cooperative Agriculture and Rural Development Banks		20 Banks. Balance Sheet Size - INR 242 billion. Deposits - INR 15 billion. Deposits/Liabilities - 6%.#
			2. Primary Cooperative Agriculture and Rural Development Banks		714 Banks. Balance Sheet Size - INR 205 billion. Deposits - INR 7 billion. Deposits/Liabilities - 4%.#

Source: RBI and NABARD. @ For one bank the values are as at March-end 2015 and another as at September-end 2015. # Monetary values are for 2014 (Provisional). \* Monetary values are for 2013.

## Section 2: Vulnerability of the Indian Banks – Perception and Historical Evidence

In terms of vulnerability, evidence and general perception indicate that PSBs are the least failure-prone as they are owned and implicitly guaranteed by the Central government. PSBs by virtue of their being government-owned and therefore TITF are able to get deposits at a premium, i.e., at cheaper rates. According to the IMF *Global Financial Stability Report*, April 2014, in 2013, premium were nearly 15 basis points in the US, 25-60 basis points in Japan, 20-60 basis points in the UK, and 60-90 basis points in the euro area. This is so also in India. While the top 3 PSBs offer 7.25% to 7.50% on deposits for 2-3 years for a deposit of below INR 10 million, the top 3 private banks offer 7.65% to 7.75%. Thus, the rates of interest charged by banks to mobilize deposit resources do also indicate the extent of their soundness. Since Nationalization, there has so far been only one failure in the PSB domain in 1980 (i.e., New Bank of India) and this was resolved through merger of the failed bank with a stronger PSB (i.e., Punjab National Bank). Relative to PSBs, the Private Banks are evidently a little more susceptible to failure. The Old Private Banks, as mentioned earlier, are regional in their operations and have, historically, faced regular crises in the post-1969 era and these were resolved through amalgamation/merger with stronger PSBs as well as Private Banks. Twenty-seven such banks were liquidated/amalgamated/reconstructed up to March-end 2015 from 1960s. The New Private Banks were, *ab initio*, well-capitalized; however, out of the 9 such banks which had started their operations in 1994 and thereafter, 4 were to be amalgamated/merged with other banks during 2000-04. The cooperative banks are considered and observed to be highly fragile as exemplified by the fact that up to March-end 2015, 328 cooperative banks were liquidated/amalgamated/reconstructed. Nevertheless, the too-important-to-fail (TITF) doctrine has also guided the decision of the owners and regulators as to whether a bank should be allowed to fail or revived, even though it has come at the cost of the taxpayers' money as well as perpetuating systemic inefficiency.

Historically speaking, in India, bank crises and failures date back to the 18<sup>th</sup>, 19<sup>th</sup> and the early 20<sup>th</sup> century (1913-14). The first bank failure in India dates back to 1791 when the General Bank of India went for voluntary liquidation due to losses following the currency difficulties in 1787 (Desai, 1987). Subsequently, the Bengal Bank experienced a run around 1791 ensuing from the difficulties posed by a related firm. The quinquennium (1829-33) witnessed failure of most of the banks which had come into existence during the period following the 1813 Act. A constellation of factors including banking and trading nexus, speculative transactions, mismanagement and frauds were responsible for this. The next spate of bank failures surfaced

during 1860-1905. At the centre of this was the American Civil War choking the supply of American cotton to England. This led to unprecedented boom in India's cotton trade with England and speculative clouds gathered again. Numerous banks and several types of companies sprouting up to partake the likely speculative gains. However, when the cloud burst within a short span of time, all but 3 banks survived. Consequently, public confidence in banks was shattered. The Partition of Bengal and the resultant Swadeshi movement witnessed establishment of several indigenous banks, which were not only small but also financially weak and lax in practice. The post-Swadeshi movement boom ended up in a banking crisis during 1913-17 in which a large segment of these banks failed. Public confidence in banks again received a setback. The occurrence of bank failures took a break, but briefly, from 1918 to 1921. The industrial boom that followed World War I also gave a fillip to the banking sector; however, from 1922 onwards bank failures again rose following economic depression, which was further aggravated during the Great Depression and thereafter.

According to Bagchi (1972), the monetary arrangement in India (up to World War I and probably right up to the Great Depression) aimed solely at fulfilling all the short-term or working capital borrowing requirements of trade and industry, which were highly risky and therefore, interest rates charged were very high. Whetted by the high demand and high interest rates, a number of banks came up, especially in Western India, Punjab and United Provinces. However, these banks hardly followed any sound banking principles, howsoever elementary those were. Keynes attributed the vulnerability of Indian banks to undercapitalisation, inadequate cash reserves and speculative proclivities (Keynes, 1913).

Consistent time-series data on the number of bank failures are not available. Therefore, depending on the availability, the number of bank failures are presented in the following 3 tables.

**Table 6.2: Number of Failed Banks:  
1913-55 (January - December)**

Year	Number	Year	Number	Year	Number
1913	12	1928	13	1943	59
1914	42	1929	11	1944	28
1915	11	1930	12	1945	27
1916	13	1931	18	1946	27
1917	9	1932	24	1947	38
1918	7	1933	26	1948	45
1919	4	1934	30	1949	55
1920	3	1935	51	1950	45
1921	7	1936	88	1951	60
1922	15	1937	65	1952	31
1923	20	1938	73	1953	31
1924	18	1939	117	1954	27
1925	17	1940	107	1955	29
1926	14	1941	94		
1927	16	1942	50		

*Source: Based on RBI and DICGC data.*

**Table 6.3: Number of Banks Amalgamated and Liquidated:  
1956-79 (January - December)**

Year	Amalgamated		Liquidated		Banks otherwise Ceased to Function/ Transferred their Liabilities and Assets	Total
	Compulsorily	Voluntarily	Compulsorily	Voluntarily		
1956	0	0	6	16	6	28
1957	0	1	3	16	10	30
1958	0	4	5	9	10	28
1959	0	4	7	7	20	38
1960	0	2	5	4	15	26
1961	30	0	3	5	9	47
1962	1	3	3	4	22	33
1963	1	2	1	1	15	20
1964	9	7	0	3	63	82
1965	4	5	3	6	24	42
1966	0	0	3	7	7	17
1967	0	0	2	4	9	15
1968	1	0	1	3	2	7
1969	2	0	1	2	1	6

<b>1970</b>	1	0	2	1	1	5
<b>1971</b>	0	0	1	2	0	3
<b>1972</b>	0	0	0	1	0	1
<b>1973</b>	0	0	0	2	1	3
<b>1974</b>	0	0	0	1	1	2
<b>1975</b>	0	1	0	0	1	2
<b>1976</b>	0	0	0	0	1	1
<b>1977</b>	0	0	0	0	0	0
<b>1978</b>	0	0	0	1	0	1
<b>1979</b>	0	0	0	1	0	1

Source: Based on RBI and DICGC data.

**Table 6.4: Number of Banks Amalgamated:  
1980-2007 (April-March)**

<b>Year</b>	<b>Number</b>	<b>Year</b>	<b>Number</b>
<b>1980@</b>	0	<b>1993-94</b>	0
<b>1981@</b>	0	<b>1994-95</b>	0
<b>1982@</b>	0	<b>1995-96</b>	1
<b>1983@</b>	0	<b>1996-97</b>	1
<b>1984@</b>	0	<b>1997-98</b>	0
<b>1985@</b>	3	<b>1998-99</b>	2
<b>1986@</b>	1	<b>1999-2000</b>	1
<b>1987@</b>	0	<b>2000-01</b>	1
<b>1988@</b>	1	<b>2001-02</b>	1
<b>1988-89</b>	1	<b>2002-03</b>	1
<b>1989-90</b>	4	<b>2003-04</b>	2
<b>1990-91</b>	0	<b>2004-05</b>	2
<b>1991-92</b>	0	<b>2005-06</b>	2
<b>1992-93</b>	1	<b>2006-07</b>	2
<b>@: On January-December basis.</b>			

Source: Based on RBI and DICGC data.

**Table 6.5: Number of Banks Liquidated: 2008-14 (April-March)**

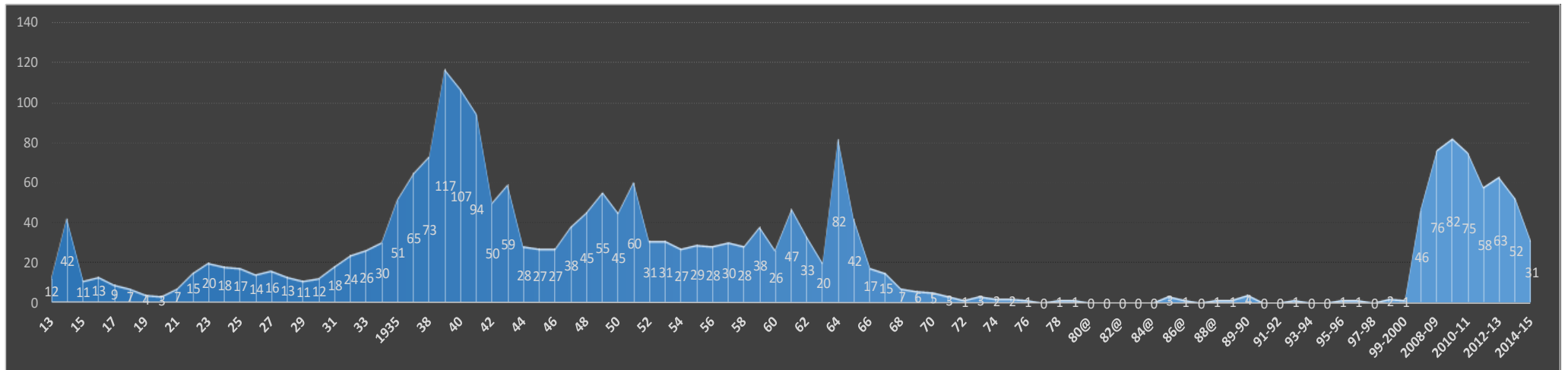
<b>Year</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
<b>Number</b>	46	76	82	75	58	63	52	31

Source: Based on RBI and DICGC data.

Chart 6.1 plots the combined data of the preceding 4 tables.



**Chart 6.1: Turbulence in the Indian Banking Sector: A Graphical Illustration**



Source: Based on RBI and DICGC data.

It can be gleaned from the table that:

- The periods surrounding the World War I, Great Depression and World War II were marked by higher incidence of banking turbulence implying that sound banking is dependent on political and economic stability.
- Further, in the post-Independence period, the Sixties were relatively dominated by banking troubles.
- However, after the first major Bank Nationalization in 1969, the incidence of bank failures diminished significantly.
- The hike is observed around 2000s is due to failure of cooperative banks and the subsequent sectoral consolidation that ensued.

## Summing Up

- *The Indian commercial banking sector predominantly comprises: (a) Public Sector Banks – State Bank Group and Nationalized Banks, (b) Private Sector Banks – Old, New and ‘new’ New Banks, (c) Foreign Banks and (d) Regional Rural Banks.*
- *The cooperative banking sector is dominated by the Urban Cooperative Banks. There also exists a distinct rural cooperative banks segment.*
- *The commercial banking sector is perceived and evidenced to be more safe and sound than its cooperative counterpart.*
- *Within the commercial banking sector, PSBs are regarded as fail-safe due to government ownership.*
- *Historically, bank crises and failures in India date back to the 18<sup>th</sup>, 19<sup>th</sup> and the early 20<sup>th</sup> century.*
- *Banking turbulence is historically observed to have been linked to political and economic disturbances, although instances of mismanagement cannot possibly be ruled out entirely.*

## Chapter VII

### Deposit Taking Activities by Banks and Indian Bank Depositors

The Chapter is divided into 2 Sections: Section 1 describes the first leg of financial intermediation function of banks, i.e., deposit mobilization activities and Section 2 analyzes some of the characteristic features of the depositors of the Indian banks who indeed constitute the backbone of the banking sector.

#### Section 1: Deposit Taking Activity by Banks

Section 5(b) of the Banking Regulation Act (1949) defines 'banking' as “the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise and withdrawal by cheque, draft, order or otherwise.” Demand liabilities, according to Section 5(f) the Act, mean “liabilities, which must be met on demand, and time liabilities mean liabilities, which are not demand liabilities.”

Schedule 3 of the balance sheets of banks mention 3 categories of deposits. These are: (i) Demand Deposits, (ii) Savings Bank Deposits and (iii) Term Deposits. Except (ii), the other two are further classified into two categories as: (i) from banks and (ii) from others. Banks with international presence, such as, the State Bank of India show the deposits of branches in India and deposits of branches outside India, separately.

Schedule 3 of a commercial bank’s balance sheet presents the detailed classification of deposits as under:

- I. Demand Deposits: (i) From Banks and (ii) From Others
- II. Savings Bank Deposits<sup>12</sup>
- III. Term Deposits (i) From Banks and (ii) From Others
- IV. Deposits of Branches in India
- V. Deposits of Branches outside India

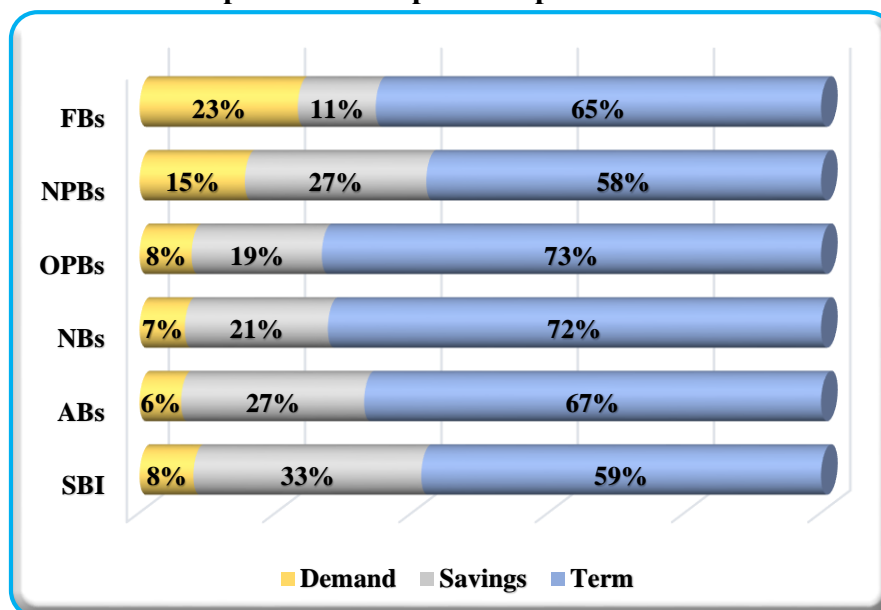
As at March-end 2015, according to the combined balance sheets of scheduled commercial banks (excluding RRBs), two-third of their total deposits were term deposits and the remaining

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<sup>12</sup> Demand Deposits are also termed as Current Account (CA) deposits. The sum of CA deposits and Savings Account (SA) deposits is abbreviated as CASA Deposits in the Indian banking parlance. CASA deposits are extremely important from the business viewpoint of banks as these are a source of low-cost and stable funds for those.

one-third CASA deposits, comprising 9% Demand Deposits and 24% Savings Deposits.<sup>13</sup> The bank group-wise composition is presented in Chart 7.1.

**Chart 7.1: Composition of Deposits as per Banks' Balance Sheets**



*Source: Based on RBI data.*

For SCBs together, inter-bank deposits accounted for 6% of total deposits varying in the range of 1% to 8% across the bank groups.

Similarly, deposits in branches outside India constituted 6% of the total deposits varying between 2% and 9% over the bank groups. Associate Banks of SBI and Old Private Banks did not have any branch abroad.

Demand deposits (Current Accounts) do not earn any interest; on the contrary, the holders of such accounts pay service charges to banks. These accounts are operated through cheques and there is no restriction on the number of transactions in the account. Normally, businessmen hold this kind of accounts for their day-to-day operations. Further, the account holder can avail of overdraft facility through this type of account.

Savings bank deposits earn some rate of interest although the holders of such accounts enjoy tremendous flexibility in terms of depositing and withdrawal. The rate of interest on savings bank deposits has been deregulated since October 2011; however, except a few private sector banks, all other banks still pay 4% rate of interest. This type of account is preferred by

<sup>13</sup> Balance sheet data for the year ending March 2016 are not yet available for all SCBs. However, according to the “Scheduled Bank's Statement of Position in India as on Friday, March 18, 2016” released by RBI on March 30, 2016, SCB aggregate deposits stood at INR 93,786.5 billion comprising 9.6% of demand and 90.4% of time deposits.

individuals, who hold it basically for transaction purposes. No service charge is levied on the account holder, subject to maintenance of minimum balances criteria, which vary from bank to bank. To avail of cheque book facility, the account holder has to maintain a stipulated minimum balance. Corporate entities are not allowed to open savings bank accounts.

There are a few variants of savings bank accounts, such as, premium savings banks accounts and No-Frills accounts or Basic Savings Bank Deposit Account. The latter has come in the wake of Financial Inclusion movement which enables the unbanked people to open bank accounts in a hassle free manner with minimum formalities but subject to certain restrictions on transactions in the account.

Term or fixed deposits mean deposits repayable after the expiry of a certain period. In the Banking Regulation Act (1949), the term of fixed deposits is nowhere mentioned. However, the term now varies between 7 days and 10 years. Normally, interest on term deposits is paid on monthly/quarterly rests. There are basically 2 types of term deposits: (a) Fixed deposits, and (b) Recurring deposits.

**Fixed Deposit Accounts:** In the case of fixed deposits, the period of the deposits is usually fixed at the time of depositing the money. The fixing of the period enables the banker to invest money or otherwise employ it in business without having to keep a reserve and this is one of the reasons why fixed deposits are so popular with banks in India. Customers usually keep their money as fixed deposits with a view to earning interest as well as withdrawing the same on the expiry of the stipulated period in case they need it either for meeting certain expenses or utilizing it in more profitable manner. A good number of relatively small investors prefer this to shares and debentures. A fixed deposit account holder can opt for premature withdrawal but with loss of interest income on his fixed deposit. The rates of interest on term deposits vary over the length of the maturity period. Consequent upon interest rate deregulation, various banks are offering term deposits with various maturity periods and various interest rates.

There are many variants of fixed deposits, such as, Capital Gains Deposit schemes, Special Term Deposit schemes, Multi-Option Deposit schemes, Senior Citizen schemes, etc., and these schemes vary from bank to bank.

**Recurring Deposits:** Recurring deposits are those where a monthly instalment is deposited in the accounts every month. The deposit amount, along with interest accrued, is paid on the date of maturity.

Bank deposit accounts can be held individually or jointly. The holder of the account also enjoys the facility of nomination.

Interest earned on bank fixed deposits is added to the taxpayer's income and taxed according to the tax slab he falls in. In the case of savings bank, interest earned beyond INR 10,000 during a financial year is taxable under Section 80TTA of the Income Tax Act, 1961.

Term deposit holders can avail of loans against the term deposit, subject to a margin. The interest rate to be charged by the bank for this loan is free but cannot be below the Base Rate of the bank.

Besides, there are Certificates of Deposits (CDs) through which banks mobilize short-term high-value deposits from the cash-rich corporate entities. The instrument, introduced in India in 1989, is a document of title to a time deposit. Technically speaking, CDs are unsecured negotiable promissory notes issued by scheduled commercial banks (excluding the RRBs) and the DFIs and issued at discount to face value. The difference from the traditional deposits lies in their being tradable and in the nature of being wholesale deposits and interest rates or the discount rates being market determined. Two major features of the CDs are their liquidity and marketability. CDs can be issued to individuals, corporates, trust funds, associations as well as NRIs (with certain conditions). Banks can also invest in CDs of other banks and financial institutions. CDs are freely transferable by endorsement and by delivery but only after the lock-in period of 15 days after the date of issue. Banks cannot grant loans against CDs nor can they buy back their own CDs before maturity.

### **Deposit Schemes for Non-resident Indians (NRIs)**

NRIs constitute an important source of foreign exchange for the Indian economy, which is always in need of conserving foreign exchange. Classification of bank deposit accounts relating to the NRIs is based on two criteria: (a) repatriation and (b) currency of account. Under the first classification, there are two types of accounts, namely, ordinary accounts without any repatriation facilities and external accounts with full repatriation rights. Under the second classification, NRIs can maintain their accounts either in INR or in specified foreign currencies. Currently, there are four different kinds of bank accounts for NRIs. These are: (a) Non-resident (External) in Rupees (NRE), (b) Ordinary Non-Resident Accounts in Rupees (NRO), (c) Foreign Currency (Non-Resident) Accounts (Bank) Scheme, and (d) RFC.

The features of these schemes along with *inter se* comparison are presented briefly in Table 7.1.

**Table 7.1: Deposit-taking Activities of Banks relating to NRIs**

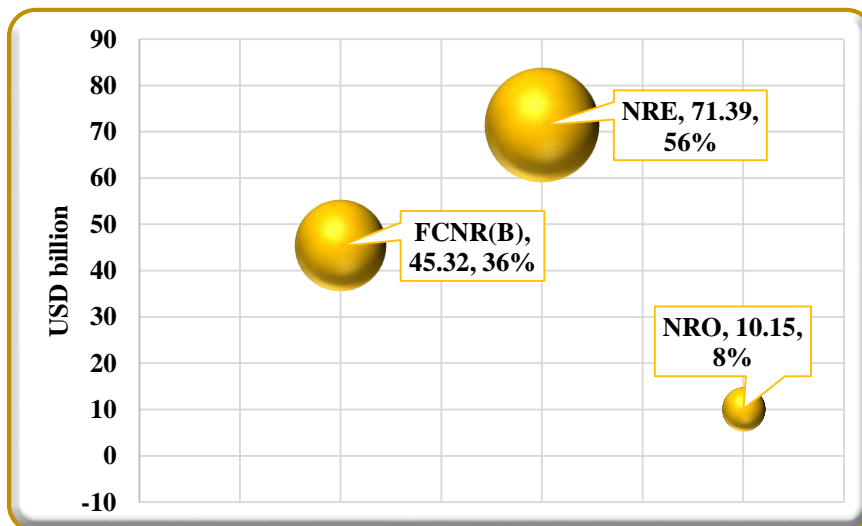
Accounts	NRE	NRO	FCNR (B)	RFC
Purpose of account	To park funds remitted from overseas to India	To park funds remitted from overseas to India or funds from Indian sources	To park funds, in foreign currency, remitted from overseas to India	To park funds for returning Indians (for permanent settlement)
Currency	INR	INR	USD, GBP, EURO, CAD, JPY and AUD	USD, GBP and EURO
Types of account	Savings, Current, Fixed Deposits (TDR/STDR) and RD	Savings, Current, Fixed Deposits (TDR/STDR) and RD	Fixed Deposits (TDR/STDR)	Fixed Deposits (TDR/STDR)
Investment Term	Min: 1 Year	Min: 7 Days	Min: 1 Year	Min: 1 Year
	Max: 10 Years	Max: 10 Years	Max: 5 Years	Max: 3 Years
Initial funding for opening	Savings, Current: Nil		USD 1,000	USD 1,000
	RD: INR 100		GBP 1,000	GBP 1,000
	TDR and STDR: INR 1,000		EURO 1,000	EURO 1,000
			CAD 1,000	
			JPY 1,000	
			AUD 1,000	
Minimum Balance	Savings, Current: Nil			
	RD: INR 100			
	TDR and STDR:			
	For Personal Banking Branches in:			
	Metro/Urban centres: INR 1,00,000			
	Semi-Urban/Rural centres: INR 50,000			
	For all other Branches: INR 1,000			

Accounts	NRE	NRO	FCNR (B)	RFC
Joint Holding with	NRI	NRI	NRI	Only with any person who is eligible to open an RFC
	Resident Indians on Former or Survivor basis	Resident Indians	Resident Indians on Former or Survivor basis	
Repatriability of Principal	Freely Repatriable	Current income up to USD 1 million (Conditional)	Freely Repatriable	Freely Repatriable
Repatriability of Interest	Freely Repatriable	Freely Repatriable subject to deduction of tax	Freely Repatriable	Freely Repatriable
Taxability in India	Interest income tax free in India	Interest income is taxed as per India Income Tax Rules. Reduced tax under Double Tax Avoidance Agreement	Interest income tax-free in India	Interest income tax-free in India till the account holders' status changes

Source: Collated from State Bank of India Web Site.

As at March-end 2016, NRI deposits with SCBs (excluding RRBs) stood at USD 126.85 billion. The composition according to the 3 different schemes elaborated above are presented in Chart 7.2.

**Chart 7.2: NRI Deposits Composition, March 2016**



Source: Based on RBI data.

## Regulation over Bank Deposits

### Scheduled Commercial Banks

For banks to carry out their deposit taking activities in India they must fulfil 3 basic regulatory requirements. These are meeting the: (a) Cash Reserve Ratio (CRR) requirements, (b) Statutory



Liquidity Ratio (SLR) requirements and (c) Deposit Insurance requirements. The former 2 also serve as direct, but complementary, monetary control instruments through which RBI exercises control over liquidity in the banking system. Until recently, the deposit taking activity by banks was heavily regulated in terms of interest rates and maturity pattern. The journey to interest rate (both deposit and lending) deregulation started in the 1990s and currently banks enjoy full freedom in determining their deposit rates.

*Primary (Urban) Co-operative Banks*

The Primary (Urban) Co-operative Banks (PCBs), like other co-operative societies, are registered and governed by the State Governments under respective Co-operative Societies Acts of the States concerned. With the passage of time, the size and operations of PCBs had increased significantly and, therefore, it was considered necessary to bring them under the purview of the Banking Regulation Act, 1949. Besides, there was a demand from certain quarters, particularly after introduction of the Deposit Insurance Scheme for commercial banks in 1962, that co-operative banks should also get the benefit of this scheme. In view of these factors, effective March 1, 1966, certain provisions of the Banking Regulation Act, 1949 were made applicable to PCBs. With the extension of the provisions of the Banking Regulation Act, 1949 to PCBs, they came under the dual control of respective State Governments and RBI. While the managerial aspects of these banks, namely, registration, constitution of management, administration and recruitment, amalgamation, liquidation, etc., are controlled by the State Governments under the provisions of the respective State Co-operative Societies Act, the matters related to banking are governed by the directives/guidelines issued by RBI.

According to Section 56 (ccv) of the Banking Regulation Act, 1949, "primary Co-operative Bank means a co-operative society, other than a primary agricultural credit society-

- (1) the primary object or principal business of which is the transaction of banking business;
- (2) the paid-up share capital and reserves of which are less than one lakh of rupees; and
- (3) the bye-laws of which do not permit admission of any other co-operative society as a member"

Traditionally, the area of operation of PCBs was confined to metropolitan, urban or semi-urban centres and these banks mainly catered to the credit needs of small borrowers including small scale industries, retail traders, small entrepreneurs, professionals and salaried classes. Pursuant to the recommendations of the Committee on Licensing of New Urban Cooperative Banks (Marathe Committee) (1992), RBI permitted these to extend their area of operation to the entire

district in which they are registered including the rural areas without its prior approval. They can also finance agricultural activities subject to certain conditions. Further, banks proposed to be organized in the least developed States, such as, those in the North-Eastern region, etc., can extend their area of operation to 2 or 3 districts or even to the whole State depending upon the viability of the bank.

As some of the large-sized PCBs had developed their banking business comparable to the size of private sector scheduled commercial banks, there was a demand to include them in the Second Schedule to the RBI Act, 1934. Accordingly, in the year 1988, it was decided by RBI to include the names of well-managed PCBs with deposits of INR 500 million and above in the Second Schedule to the RBI Act, 1934. In the case of the scheduled PCBs, the area of operation was made co-extensive with the territorial jurisdiction of the State of registration. With a view to creating a level playing field for well managed banks, PCBs with deposits over INR 500 million were permitted to extend their area of operation beyond their respective States of registration subject to their complying with certain norms. Multi-State Urban Cooperative Banks (MS-UCBs) are cooperative societies registered under the Multi-State Cooperative Societies Act, 2002 (MSCS Act), and licensed to carry out banking business under Section 22 of the Banking Regulation Act, 1949 (As Applicable to Cooperative Societies) [BR Act (AACS)]. By virtue of their registration under MSCS Act, they can have membership (shareholders)/carry out business in more than one State. This is in contrast to other UCBs registered under the Cooperative Societies Act of a particular State, whose area of operation is limited to the State of registration.

## **Section 2: Characteristic Features of Bank Depositors in India**

The objective of this section is to analyze the various characteristics of the Indian bank depositors and their transformation over last 4 decades. The data used in this section are sourced from various issues of the RBI annual publication *Basic Statistical Returns of Scheduled Commercial Banks in India*. Data have been analysed at the following intervals: 1972 (i.e., the year from which BSR was published), 1980, 1990 and 2000 (all relate to December-end) and 2010 and 2015 (both relate to March-end). However, one limitation is data for all the characteristics are not available for all the above-mentioned years, as RBI continuously improvised the BSR database.

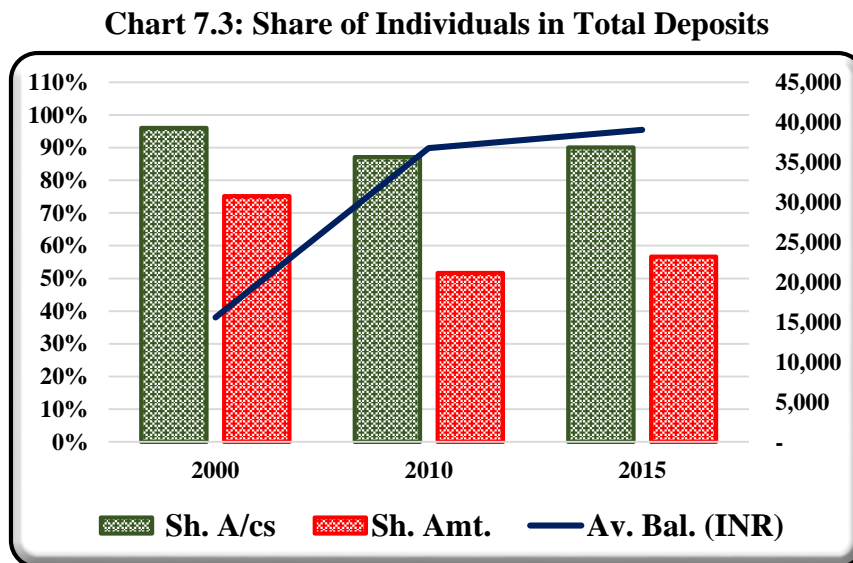
As at March-end 2015, there were 1,440 million deposit accounts (135 million in 1980) with a balance of INR 89,221 billion (INR 84 billion in 1972). Some of the salient traits of deposit accounts are mentioned below with their implications for the DIS.

#### *Individual vs Non-individual*

Out of the total 1,440 million accounts, 1,296 million (90%) were individual deposit accounts which had INR 50,601 billion as balance, constituting 56.7% of the total. Thus, the remaining 10% of the accounts were of non-individuals who commanded the remaining 43.3% of the balance. This is quite but natural since non-individual accounts comprise those of companies, trusts, government bodies, etc., wherein bulk transactions (both deposit and withdrawal) take place.

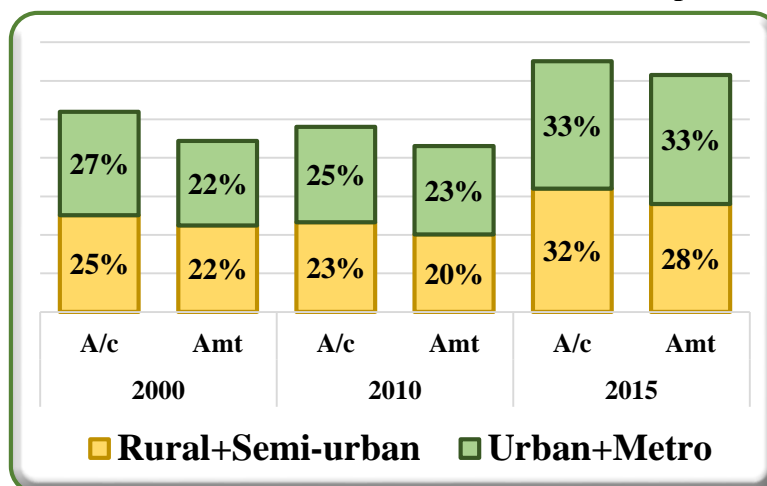
The average balance per individual depositor account was a little over INR 39,000, which highlights that they were ‘small’ depositors.

Chart 7.3 presents the movement over time in the share of individual depositors in terms of accounts and amount in the respective totals and the average balance per account.



*Source: Based on RBI data.*

Of the total individual deposit accounts, 32.4% belonged to females with 31.6% share in balance. Chart 7.4 presents the movements in shares of female depositors in the total for the rural + semi-urban and urban + metro areas, which reflect an increasing trend.

**Chart 7.4: Share of Females in Individuals' Deposits**

Source: Based on RBI data.

Further, Table 7.2 presents the average balance per deposit account for female depositors for 2000, 2010 and 2015. The averages rose substantially over the time, although the increases were more in urban + metro than in rural + semi-urban areas. This 'divide' is attributed primarily to better education, and employment and income generation opportunities for women in the former places than in the latter. Moreover, awareness about savings as well as availability of banking facilities is much better in urban + metro than in rural + semi-urban areas.

**Table 7.2: Average Balance per Deposit Account - Female Depositors**

Population Groups	2000	2010	2015	Trend
Rural+Semi-urban	9,701	18,887	18,873	— ■ ■
Urban+Metro	18,308	52,887	68,133	— ■ ■
All Population Groups	13,368	33,765	38,061	— ■ ■

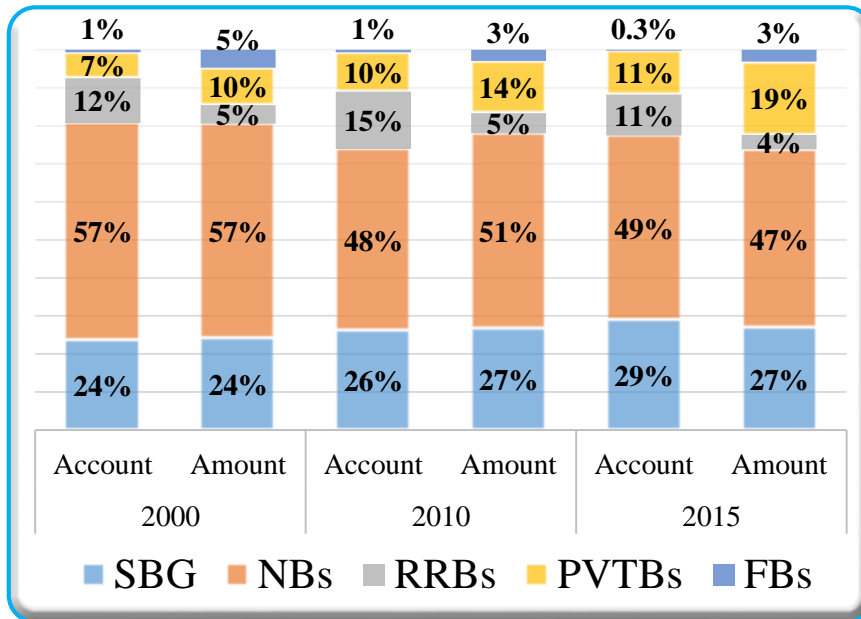
Source: Based on RBI data.

#### Bank group-wise Share

As at March-end 2015, a predominant 89% of the individual depositors banked with PSBs (including RRBs). In terms of amount, they held 78% of deposits. The most important reason for banking with PSBs is their omnipresence cutting across population groups, and geographical and topographical regions. The second reason is the peoples' trust in the government support to these banks as they would never close down and this imparts them the confidence that their deposits will always be safe. However, individual depositors' perception about what a bank failure means, what could be its ramifications and above all, the availability

of deposit insurance for protection against any banking mishap is grossly limited. Chart 7.5 presents the movements of bank group-wise shares of individual depositors over time.

**Chart 7.5: Bank Group-wise Share in Individuals' Deposits**

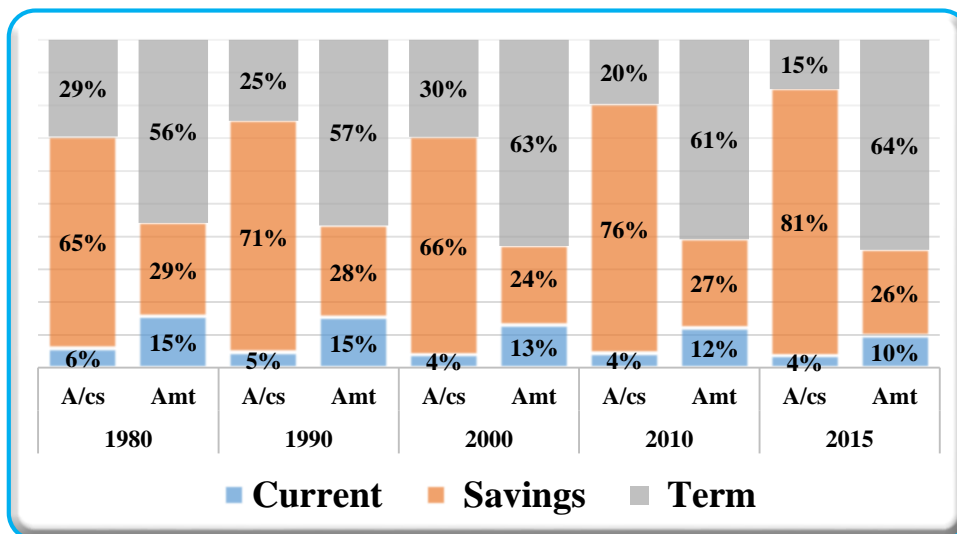


Source: Based on RBI data.

*Type of Account*

As at March-end 2015, over four-fifth of the total number of accounts were Savings Bank accounts which are normally maintained for transaction purposes and small savings. Term deposit accounts which are used for saving larger amounts for the future were 15% of the total number of accounts but had a share of 64% in the balance. Chart 7.6 presents the movement of depositors, account type-wise, over time.

**Chart 7.6: Account Type-wise Share in Total Deposits**

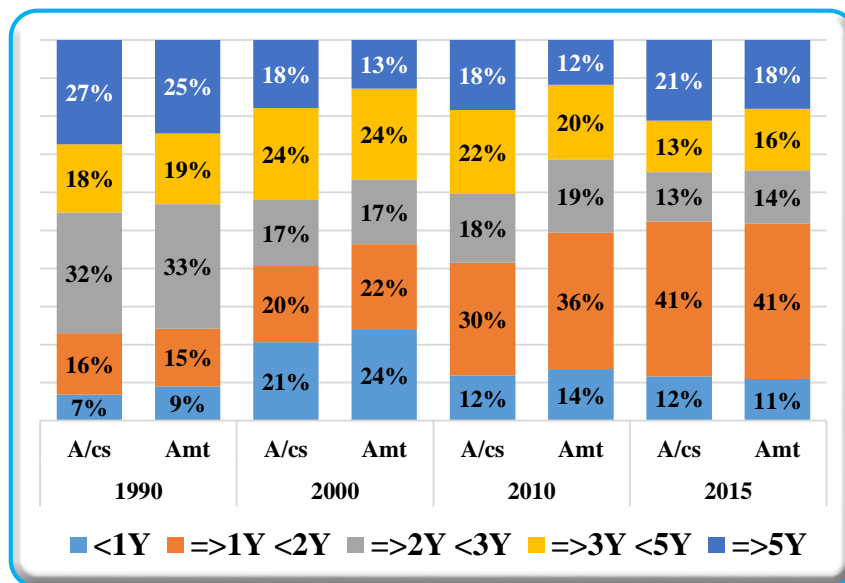


Source: Based on RBI data.

### Original Maturity

As at March-end 2015, most of the individual Term deposit accounts (53%) were opened for below 2 years constituting 52% of the balance. At the same time, over a fifth of these accounts had original maturity of 5 years and above, commanding 18% of the balance outstanding. The preference for short-maturity deposits highlights the need for liquidity, frequent changes in rates of interest offered by banks and risk averseness by the individual depositors. This can also be verified from Chart 7.7 which presents the movement of depositors, maturity pattern-wise, over time. The pattern also held good across the 4 population groups.

**Chart 7.7: Maturity-wise Individuals' Deposits**

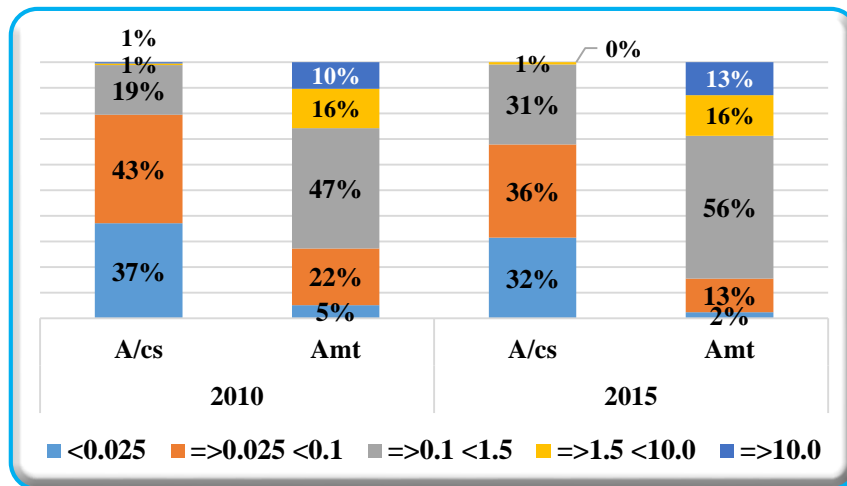


Source: Based on RBI data.

### Deposit Size

As at March-end 2015, 68% of the individual deposit accounts were 'small' with deposit sizes below INR 0.1 million, i.e., the current threshold for deposit insurance cover. These deposit accounts had 15% share in balance. Another 31% of the individual deposit accounts were in the category of INR 0.1 million to INR 1.5 million with 56% share in balance. Chart 7.8 illustrates the transition of depositors, size-wise, over time.

**Chart 7.8: Size-wise Individuals' Deposits**

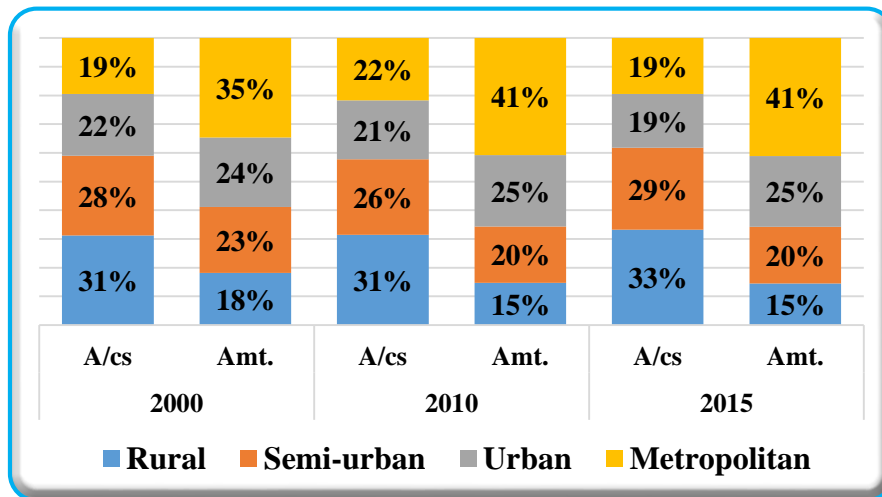


Source: Based on RBI data. Legend is in INR million.

*Population Group-wise Distribution*

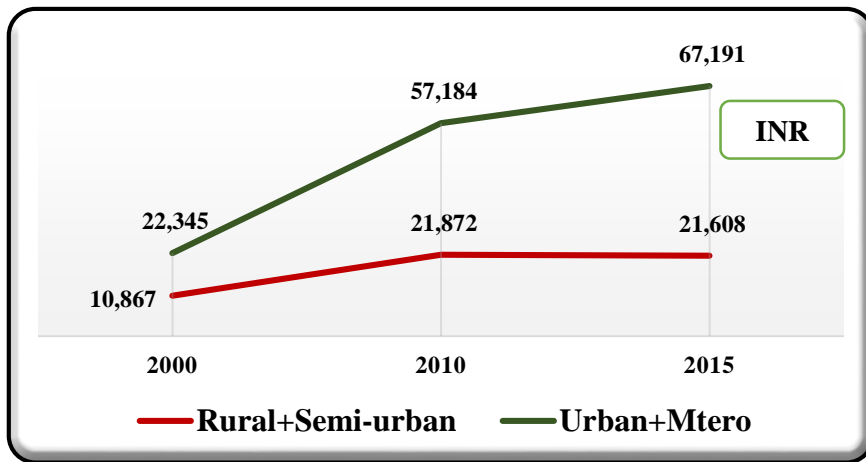
As at March-end 2015, 62% of the total number of individual accounts belonged to rural and semi-urban centres, whereas the rest belonged to urban and metro centres. However, amount-wise, the share of the latter was much higher at 66% than the former at 35%. A similar pattern was obtained in the earlier 2 years which can be seen from Chart 7.9.

**Chart 7.9: Population Group-wise Share in Individuals' Deposits**



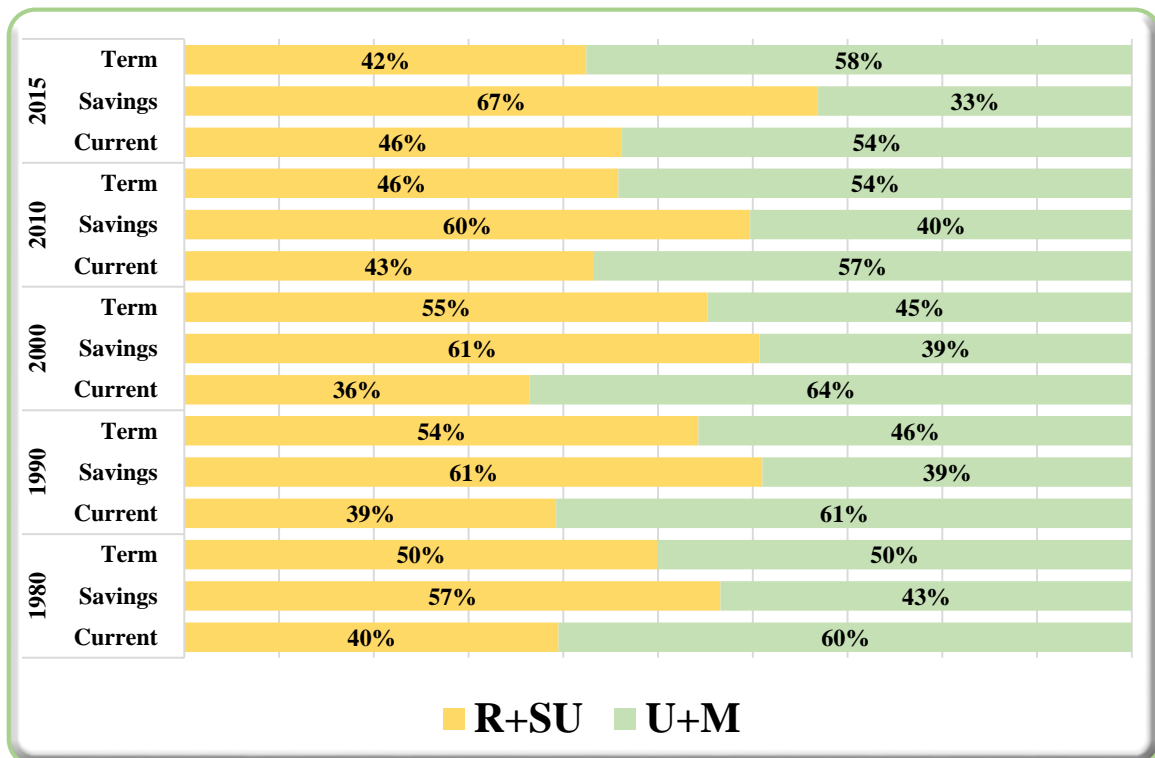
Source: Based on RBI data.

As at March-end 2015, the average balance per account of individuals in rural and semi-urban areas together was a little below INR 22,000 as against over INR 67,000 in urban and metro areas together. The gap in the average balance per account between the 2 areas increased over time as reflected in Chart 7.10.

**Chart 7.10: Average Amount of Deposit per Individual Account**

Source: Based on RBI data.

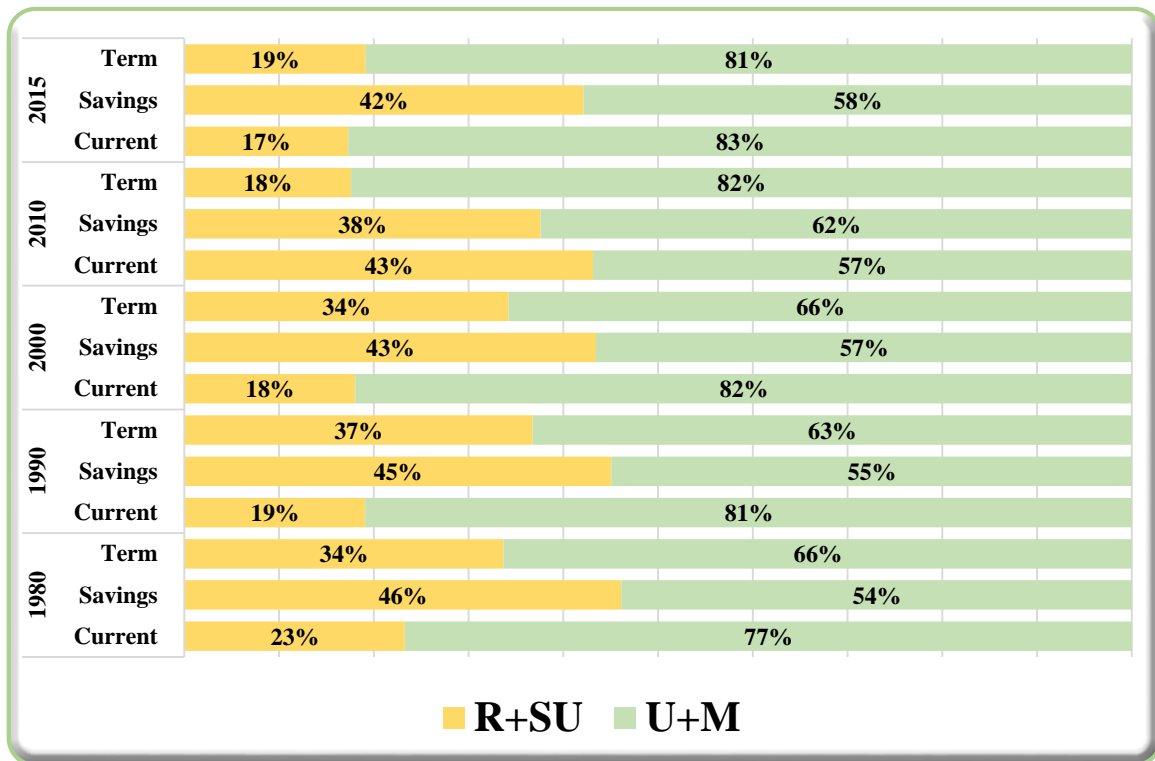
In terms of number of individual accounts, Savings Bank accounts were, in general, concentrated in rural and semi-urban areas, varying in the range of 57% to 67% during 1980 to 2015 (Chart 7.11). In contrast, in urban and metro areas, current accounts were predominant because of crowding of industry and business there. Term deposit accounts were more or less predominant in both categories of areas.

**Chart 7.11: Account-wise and Population Group-wise Share in Individuals' Deposits**

Source: Based on RBI data.

However, in terms of balance outstanding, urban and metro areas scored over rural and semi-urban areas in respect of all the 3 types of accounts (Chart 7.12).



**Chart 7.12: Amount-wise and Population Group-wise Share in Individuals' Deposits**

Source: Based on RBI data.

In a word, characteristically, an Indian individual depositor is small, unsophisticated (a large part belonging to rural and semi-urban areas where the literacy rate is lower than that in urban and metro areas) and risk-averse and hence, s/he throngs to PSBs which are perceived by her/him as safe and secure. It is beyond the imagination of an Indian depositor that, like many other business enterprises, there *can* be moments of crisis in the life of a bank and it *can* fail to return her/his full amount of deposits with interest when demanded and in time. The incidence of women depositors is increasing along with the balances in their accounts also increasing, albeit marked by rural-urban divide. However, this is a good development, especially looked from the viewpoint of bridging the gender disparity in banking services.

Nevertheless, due to lack of financial literacy, many gullible savers go for 'unauthorized' and potentially fraudulent deposit schemes floated by various entities from time to time in both rural and urban areas alike which promise highly lucrative returns in short span of time, in considerable contrast to what banks can actually give. Obviously, there is no Deposit Insurance for such notorious schemes.

## Summing Up

- *Deposits of the banks in India are basically classified into: (i) Demand Deposits, (ii) Savings Bank Deposits and (iii) Term Deposits. Except (ii), the other two are composed of: (i) inter-bank deposits and (ii) public deposits.*
- *As at March-end 2015, two-third of the total deposits of SCBs (excluding RRBs) were term deposits and the remaining one-third CASA deposits, comprising 9% Demand Deposits and 24% Savings Deposits.*
- *Banks mobilize deposits from both Resident and Non-Resident Indians.*
- *For banks to carry out their deposit taking activities in India they must fulfil 3 basic regulatory requirements. These are meeting the: (a) Cash Reserve Ratio (CRR) requirements, (b) Statutory Liquidity Ratio (SLR) requirements and (c) Deposit Insurance requirements.*
- *Currently, banks enjoy full freedom in determining their deposit rates.*
- *As at March-end 2015:*
  - *There were 1,440 million deposit accounts (135 million in 1980) with a balance of INR 89,221 billion (INR 84 billion in 1972). Out of the total 1,440 million accounts, 1,115 million (90%) were individual deposit accounts which had INR 50,601 billion as balance, constituting 56.7% of the total.*
  - *The average balance per individual depositor account was a little over INR 39,000, which highlights that they were 'small' depositors.*
  - *A predominant 89% of individual depositors banked with PSBs (including RRBs). In terms of amount, they held 78% of deposits.*
  - *Over four-fifth of total number of accounts were Savings Bank accounts which are normally maintained for transaction purposes and small savings.*
  - *Individual depositors preferred short-maturity deposits which highlights their need for liquidity as also risk averseness. Frequent changes in interest rates by banks do also play a role in recent times.*
  - *Sixty-eight per cent of individual deposit accounts were 'small' with deposit sizes below INR 0.1 million, i.e., the current threshold for deposit insurance cover*
  - *Sixty-two per cent of total number of individual accounts belonged to rural and semi-urban centres, whereas the rest belonged to urban and metro centres. However, amount-wise, the share of the latter was much higher at 66% than the former at 35%.*
  - *In terms of number of individual accounts, Savings Bank accounts were, in general, concentrated in rural and semi-urban areas, varying in the range of 57% to 67% during 1980 to 2015. In contrast, in urban and metro areas, current accounts were predominant because of crowding of industry and business there.*
  - *Gender disparity among bank depositors is diminishing fast.*
- *In a word, characteristically, an Indian individual depositor is small, unsophisticated (a large part belonging to rural and semi-urban areas where the*

*literacy rate is lower than that in urban and metro areas) and risk-averse and hence, s/he throngs to PSBs which are perceived by her/him as safe and secure.*

## Part - D: Enter the Deposit Insurance System in India

**This Chapter is composed of 2 Chapters, i.e., Chapters 8 and 9. Chapter 8 tracks the evolution of DIS in India. But the most important part of the Chapter is the detailed critical evaluation of the activities performed by the Indian DIA, i.e., DICGC. It is noteworthy here that, if we exclude the official RBI *Report on Deposit Insurance Reform (1999)*, then our analysis in this Chapter is the first such analysis to have been made privately. We may also add that even the official report did not carry out as deep an analysis as we have done. It is an empirical analysis based on data available from DICGC. The analysis throws signals as to where the system is faltering and what could be the remedies. It may also be noted that there is hardly any literature available on deposit insurance in India.**

**Chapter 9 lists the recommendations of all the committees on deposit insurance reforms in chronological order.**

## Chapter VIII

### Deposit Insurance in India: Evolution and Progress

The Chapter is composed of 3 Sections: Section 1 discusses the factors and events that led to the establishment of Deposit Insurance System in India in 1962, Sections 2 is devoted to a critical assessment of the working and function of DICGC, India's Deposit Insurance Agency, and Section 3 endeavours to benchmark DICGC's rules, regulations and practices against the IADI-BIS *Core Principles for Effective Deposit Insurance Systems (2014)*.

#### Section 1: Ushering in DIS

After RBI was established in 1935, the issue of deposit insurance came up prominently in 1938 when the Travancore National and Quilon Bank, the largest bank in the Travancore region, collapsed. A number of banks were liquidated also during the period 1939-42. This led to bringing in interim measures relating to banking legislation and reform in the early 1940s. The idea of 'Deposit Insurance' was first mooted in 1948 against the backdrop of West Bengal banking crisis (1946-48) which had precipitated in widespread failure of small banks there. However, it did not make much headway. The Rural Banking Enquiry Committee (1950), which had also considered this issue, felt that the time was not opportune for such a scheme. It had proposed that once RBI's control and examination machinery had fully developed and a sufficient number of banks been issued licences, it should set up an expert committee to consider the issue. RBI had made some progress towards satisfying these preconditions when the Committee on Finance for the Private Sector (Shroff Committee) (1954) considered deposit insurance scheme as a means to strengthen the banking system and increase public confidence in it. Thus, lack of adequate capacity within RBI to supervise and examine the banks and the doubt as to the viability of Deposit Insurance against the backdrop of an underdeveloped banking system retarded the progress. Moreover, there were misgivings among the larger Indian banks and exchange banks, and many feared flight of deposits from cooperative banks to commercial banks, since the scheme was proposed to be limited to the latter.<sup>14</sup>

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<sup>14</sup> In his speech at the Thirty-Third Annual Conference of the Indian Institute of Bankers in September 1960. Shri H V R Iyengar, Governor of the Reserve Bank, stated that a scheme for insurance of bank deposits was being actively considered by the Reserve Bank in collaboration with the banking industry. Then in November of the same year Shri Iyengar announced that condition of the Banking industry was quite sound and there was no immediate need for deposit insurance. However, the reaction to the Palai Bank failure and the general demand for deposit insurance soon brought about a change of attitude [Bose (1961)].

Thus, the introduction of a new concept like Deposit Insurance had materialized after long-drawn debates and discussions among bankers in operation, banker-researchers, bureaucrats and legal experts which resembled a similar process in the US which had led to the establishment of the exemplary Federal Deposit Insurance Corporation (FDIC) in 1933. Thus, RBI took a meticulous decision aimed at extending effective protection to depositors, especially the small depositors, from the risk of loss of their savings emanating from bank failures and at the same time, preventing bank runs and runs further snowballing into crises.

The Deposit Insurance Corporation (DIC), and with it the insurance of bank deposits came into existence in 1962, triggered by the crash of the Laxmi Bank and Palai Central Bank (Kerala) in 1960. The Deposit Insurance Corporation Act, which was finally passed by the Parliament and received the Presidential assent towards end-1961, came into force from January 1, 1962 when DIC was established under the aegis of RBI, with authority to extend insurance protection up to specified amounts for the deposits of all functioning commercial banks in the country. India was the second country in the world, after the US, to provide insurance cover to bank deposits. Thus, during the three decades (1933-62) no DIS had come into being. The DIS was initially extended to functioning commercial banks.

The introduction of Credit Guarantee Schemes by the erstwhile Credit Guarantee Corporation of India Limited was part of the measures taken in the late 1960s to encourage banks to extend credit to economically backward sectors. In July 1978, DIC assumed also the function of credit guarantee, and hence, was renamed as Deposit Insurance and Credit Guarantee Corporation (DICGC). As no credit institution is participating in any of the credit guarantee schemes administered by DICGC, at present, it is not operating any of the schemes, and Deposit Insurance remains its principal function.

### **Section 2: DIS – An Evaluation**

The Section is divided into 3 sub-Sections: Sub-Section 2.1 deals with the Deposit Insurance function (i.e., crisis prevention), Sub-Section 2.2 focuses on Resolution function (i.e., crisis management function) and Sub-Section 2.3 reviews the organizational aspects of DICGC.

## Sub-Section 2.1: Deposit Insurance Function

### *Nature of the Scheme*

DIS is compulsory for all banks except cooperative banks in those States which are yet to pass the required legislation.

### *Institutional Coverage*

DIS covers all commercial banks (including RRBs and LABs) and all cooperative banks, except a few as mentioned above. At March-end 2015, 2,129 banks were registered comprising 92 commercial banks, 56 RRBs, 4 LABs and 1,977 cooperative banks. (Time-series data are presented in Table 8.1)

**Table 8.1: DIS - Institutional Coverage**

Year	Commercial Banks	RRBs	LABs	Cooperative Banks	Total
1996-97	108	196	0	1,992	2,296
1999-2000	108	196	0	2,372	2,676
2004-05	88	196	4	2,259	2,547
2009-10	83	82	4	2,080	2,249
2010-11	82	82	4	2,049	2,217
2011-12	87	82	4	2,026	2,199
2012-13	89	67	4	2,007	2,167
2013-14	89	58	4	1,994	2,145
2014-15	92	56	4	1,977	2,129

*Source: Based on DICGC data.*

Reductions in number of banks reflect consolidation via merger/acquisition/closure in the respective categories over time.

Development finance institutions, mutual funds, non-banking financial/non-financial companies are NOT covered under DIS.

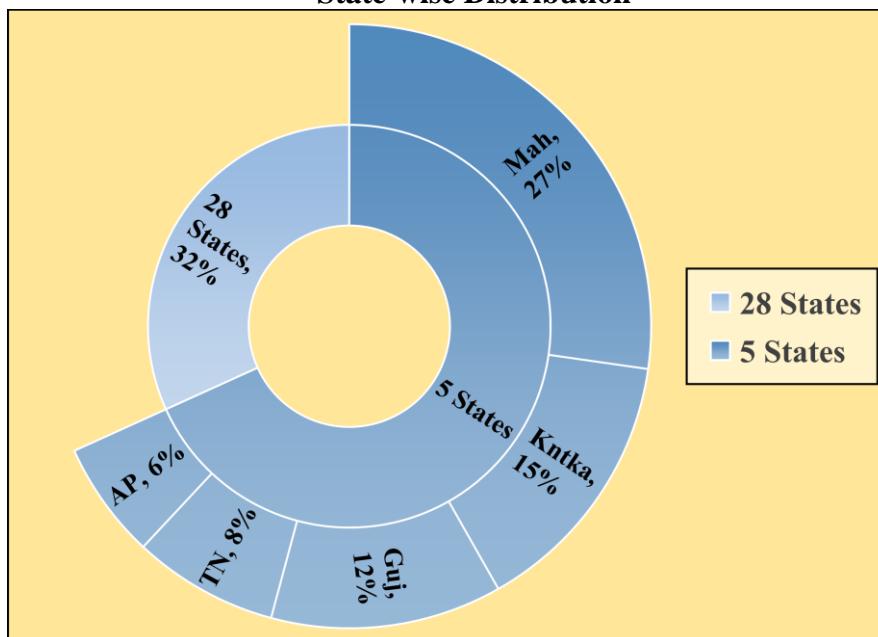
A few observations about the cooperative banks, as given below, are warranted here.

- Cooperative banks segment was dominated by primary (urban) cooperative banks. In 2014-15, four-fifth of the total number of cooperative banks were UCBs followed by central banks at one-fifth and the rest few were apex banks.
- State/UT-wise distribution of the registered cooperative banks during 2014-15 revealed acute skewness (Chart 8.1). While a little below seven-tenth of the cooperative banks were concentrated in 5 States in the western and southern parts of the country,

the remaining ones, i.e., a little over 30% of the total were dispersed over the rest 28 States/UTs.

- Maharashtra with a share of 27% was at the top and combined with Gujarat, it commanded almost four-tenth of the total number of these banks. Three States belonging to the southern region, namely, Karnataka, Tamil Nadu and Andhra Pradesh had a combined share of around 30%.
- Such concentration of banks in geographically contiguous regions is undesirable, especially at the time of a bank run which escalates the probability of contagion and thereby posing threat to the Bank Insurance Fund, a point to which we will return afterwards. However, the sizes of cooperative banks are too small to jeopardize systemic stability in any way.

**Chart 8.1: Cooperative Banks registered with DICGC (2014-15) – State-wise Distribution**



*Mah – Maharashtra. Kntka – Karnataka. Guj – Gujarat. TN – Tamil Nadu. AP - Andhra Pradesh. Source: Based on DICGC data.*

#### *Deposit Coverage*

DIS coverage extends to all deposits *except* the (a) deposits of foreign governments, (b) deposits of State/Central governments, (c) inter-bank deposits and (d) deposits held abroad. Thus, the scheme covers, by and large, the deposits of the household sector. Simultaneously, the scheme covers Certificates of Deposits (CDs) and Foreign Currency Non-Residents (Banks) FCNR (B) deposits, both of which are high-value deposits.

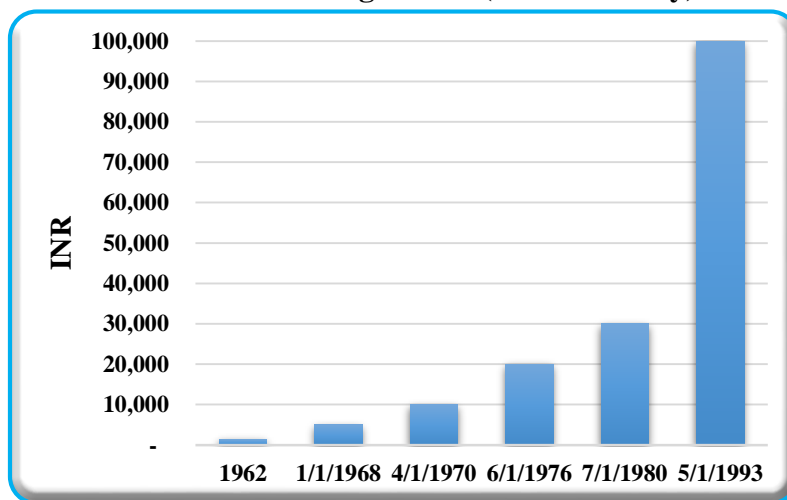


### *Level of Insurance Coverage*

DIS, with effect from May 1, 1993, protects INR 100,000 of deposits held by the depositor at all the branches of a bank put together in the same capacity and right.

The limit which was originally INR 1,500 was raised to INR 5,000 on January 1, 1968, to INR 10,000 on April 1, 1970, to INR 20,000 on June 1, 1976 and to INR 30,000 on July 1, 1980 (Chart 8.2). The substantial increase in deposit coverage in 1993 was the outcome of the review of the scheme against the background of Security Scam in 1992 and the subsequent liquidation of Bank of Karad.<sup>15</sup>

**Chart 8.2: Coverage Limit (1962 to Today)**

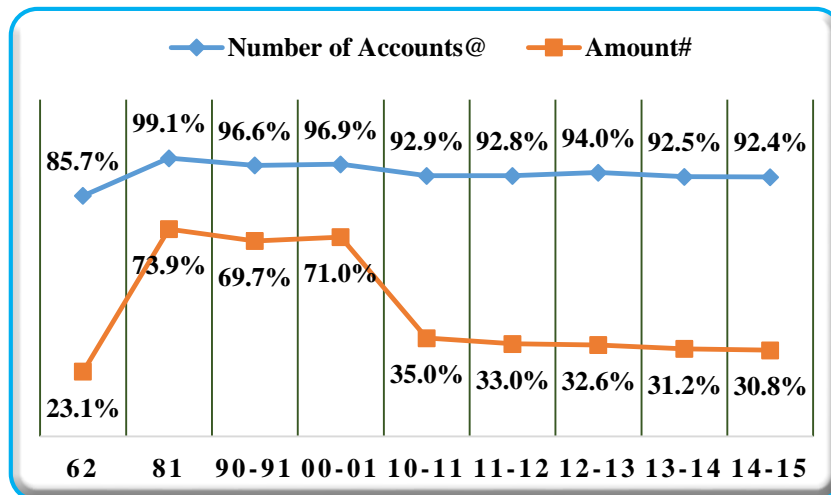


*X-axis is in m/d/y format. Source: Based on DICGC data.*

As at March-end 2015, out of a total of 1,456 million accounts 1,345 million (92.4%) were fully protected. Amount-wise, out of INR 84,752 billion ‘assessable’ deposits INR 26,068 billion (30.8%) were ‘insured’ deposits. Historical movements in coverage are illustrated in Chart 8.3.

<sup>15</sup> RBI, “Report on Reforms in Deposit Insurance in India”, 1999.

**Chart 8.3: Full Coverage in terms of**

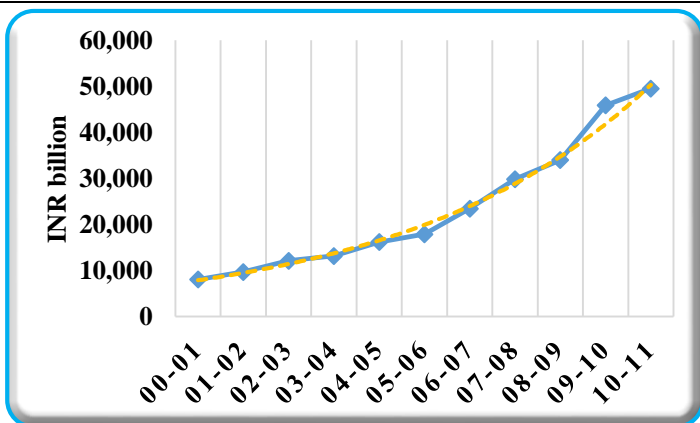


@ Percentage of number of fully protected accounts to total number of accounts. # Percentage of insured deposits to total assessable deposits. *Source: Based on DICGC data.*

It is noteworthy that virtually all accounts enjoy deposit insurance protection. However, there is a sharp fall in the ratio of insured deposits to total assessable deposits, especially during the decade 2000-01 to 2010-11. This is due to a combination of 2 factors: (a) during the above-mentioned decade assessable deposits went up rapidly at an exponential growth rate of over 18% (Chart 8.4), whereas (b) the deposit insurance limit remained static at INR 100,000. However, between 2010-11 and 2014-15 assessable deposits grew at a relatively low exponential growth rate of a little over 14% (Chart 8.5) with the deposit insurance limit remaining unaltered thereby reflecting a rather slow tapering.

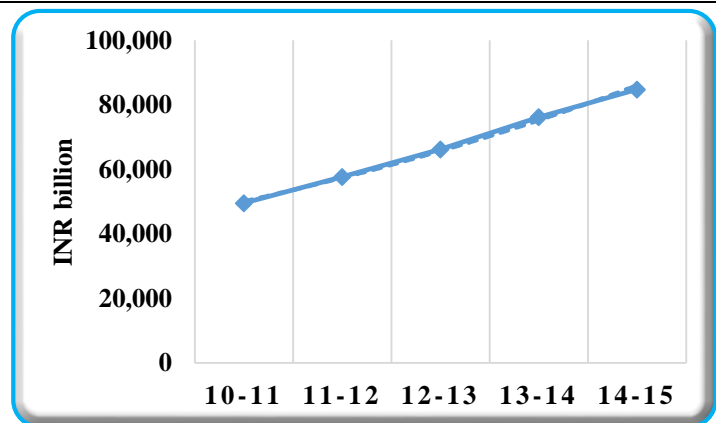
**Growth in Assessable Deposits**

**Chart 8.4: 2000-01 to 2010-11**



$Y = 6549.8e^{0.1854x}$ .  $R^2 = 0.9924$

**Chart 8.5: 2010-11 to 2014-15**



$Y = 43095e^{0.1429x}$ .  $R^2 = 0.9995$

*Source: Based on DICGC data. Yellow line is the exponential trend line.*

Table 8.2 presents the extent of full deposit insurance coverage according to the bank groups.

**Table 8.2: Full Deposit Protection Coverage: Bank Group-wise**

<b>Bank Groups</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>Trend Line</b>
I. Commercial Banks (i to v)	57.9%	55.5%	56.4%	59.2%	54.4%	33.0%	31.4%	29.6%	29.5%	27.7%	27.9%	
(i) State Bank Group	67.7%	71.2%	68.2%	81.9%	68.0%	40.4%	37.2%	35.0%	40.0%	34.5%	33.9%	
(ii) Nationalized Banks	63.9%	60.4%	68.4%	69.1%	65.4%	38.8%	35.3%	31.5%	29.5%	28.4%	30.4%	
(iii) Foreign Banks	19.7%	12.9%	9.8%	7.8%	16.7%	4.2%	9.8%	8.4%	8.0%	6.8%	3.8%	
(iv) Private Banks	34.2%	29.3%	24.8%	22.6%	22.9%	24.9%	22.1%	23.5%	23.0%	22.9%	20.6%	
(v) Local Area Banks	69.3%	54.0%	51.6%	51.7%	53.6%	53.5%	54.6%	51.9%	41.0%	42.9%	27.8%	
II. RRBs	94.9%	91.1%	92.0%	92.1%	84.7%	79.8%	78.0%	73.6%	70.0%	63.0%	64.6%	
III. Cooperative Banks	80.0%	74.1%	70.5%	65.4%	67.3%	62.9%	64.0%	62.4%	57.0%	58.2%	54.5%	

Source: Based on DICGC data.

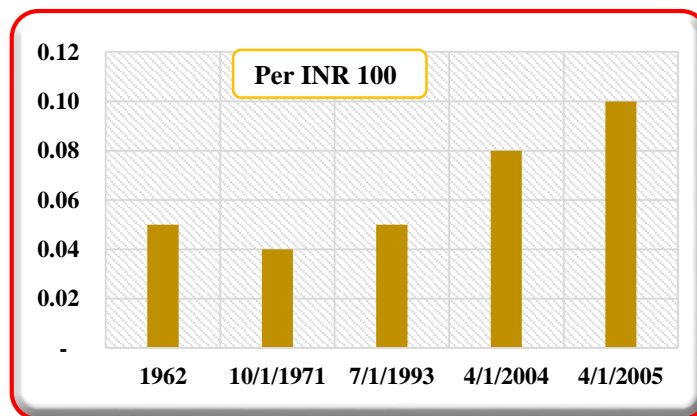
RRBs, cooperative banks and LABs showed high incidence of full deposit insurance coverage, since those generally operate in rural and semi-urban areas where relatively small depositors abound. Compared to PVTBs, PSBs are relatively heavy on small depositors and therefore, reflect higher incidence of full deposit insurance coverage.

#### *Nature and Level of Premium Rates*

Although the DICGC Act, 1961 allows for a variable premium system, DICGC follows a flat rate premium system which currently stands at INR 0.10 per INR 100 of ‘assessable’ deposits per annum (statutory cap - INR 0.15 per INR 100). The premium is required to be paid on the total ‘assessable’ deposits and not merely on the ‘insured’ deposits, although DICGC makes good only the ‘insured’ amounts of deposits (not the ‘assessable’ deposits) in the case of a bank failure.

The premium rate which was initially INR 0.05 was reduced to INR 0.04 on October 1, 1971, again raised to INR 0.05 on July 1, 1993, to INR 0.08 on April 1, 2004 and to INR 0.10 on April 1, 2005 (Chart 8.6).

**Chart 8.6: Coverage Limit (1962 to Today)**



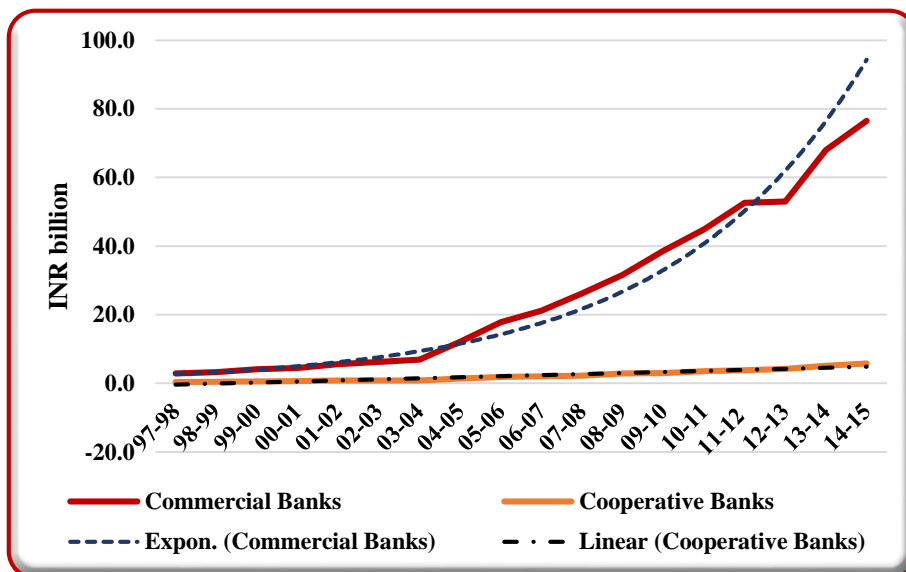
*X-axis is in m/d/y format. Source: Based on DICGC data.*

Section 15(3) of DICGC Act, 1961 provides that if any insured bank defaults in payment of any amount of premium, it shall, for the period of such default, be liable to pay DICGC interest on such amount at a rate not exceeding the Bank Rate plus 8%, as prescribed under Section 20 of the DICGC General Regulations.

#### *Premium Collected*

Chart 8.7 presents time-series data on premium collected by DICGC from commercial and cooperative banks separately.

Chart 8.7: Premium Collected



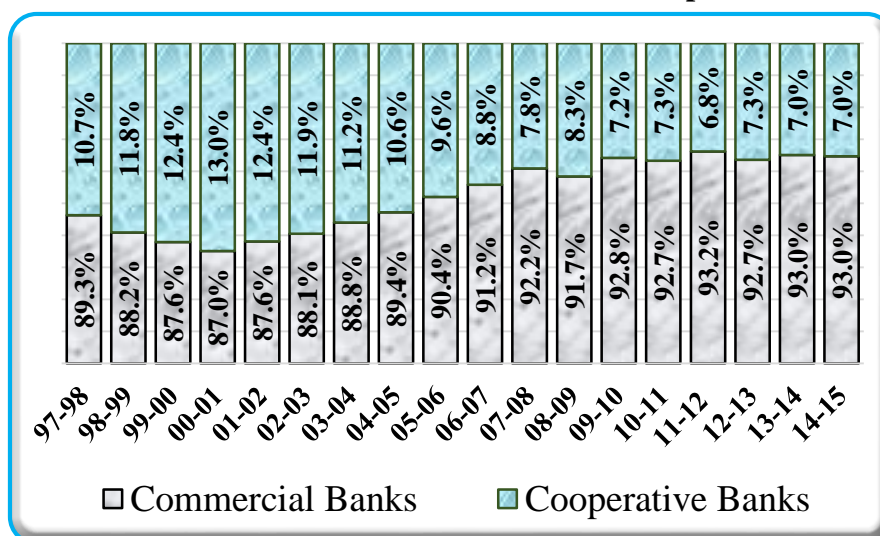
Commercial banks equation:  $Y=2.1546e^{0.2099x}$ .  $R^2 = 0.9801$ .

Cooperative banks equation:  $Y=0.3057x-0.6596$ .  $R^2 = 0.933$ . Source: Based on DICGC data.

Premium collected from the commercial banks increased at an EGR of nearly 21%. In contrast, premium collected from the cooperative banks grew in a linear way. The growth in premium received is mainly attributed to sound growth in assessable deposits, especially in respect of the commercial banks as referred to earlier rather than any substantial increase in premium rates.

Premium received from the cooperative banks constituted a small proportion of the total premium which moreover declined over time from nearly 11% in 1997-98 to 7% in 2014-15 (Chart 8.8).

Chart 8.8: Premium Share – Commercial vs. Cooperative Banks



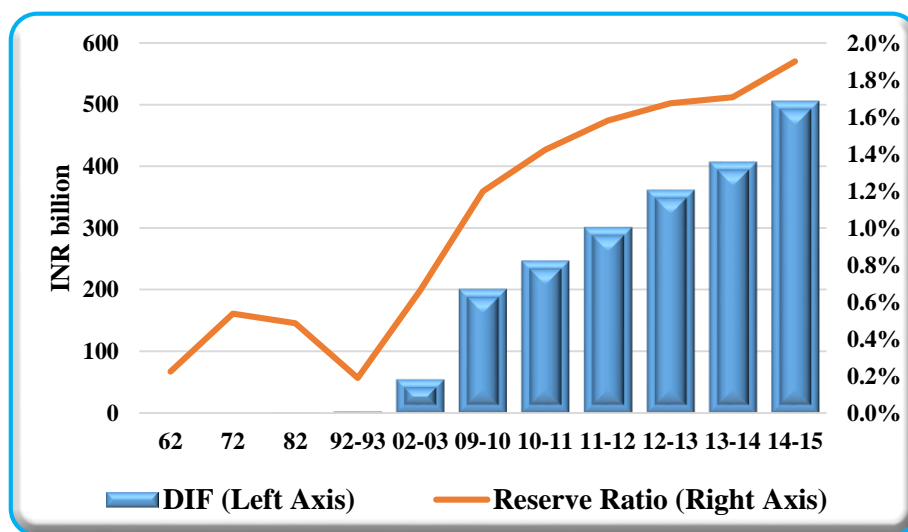
Source: Based on DICGC data.

### *Deposit Insurance Fund (DIF)*

Income of DIF is composed of: (a) Balance of Fund at the beginning of the year, (b) Deposit Insurance Premium (including interest on overdue premium), (c) Income from investments (investments are made in the Central government securities), (d) Recoveries in respect of claims paid/settled (including interest on overdue repayment) and (d) Other incomes like interest on refund of income tax.

The size of DIF stood at INR 504.5 billion implying a Reserve Ratio (ratio of DIF to Insured Deposits) of 1.9%.

**Chart 8.9: DIF and Reserve Ratio**



*Source: Based on DICGC data.*

Both DIF and the Reserve Ratio reflected continuous upward movement from 1992-93 onwards (Chart 8.9). Although there is no mandate to maintain the Reserve Ratio at a specific level, DICGC aims at maintaining the ratio at not below 2%. Thus, the Reserve Ratio at March-end 2015 stood at a tad below this ‘desired’ level.

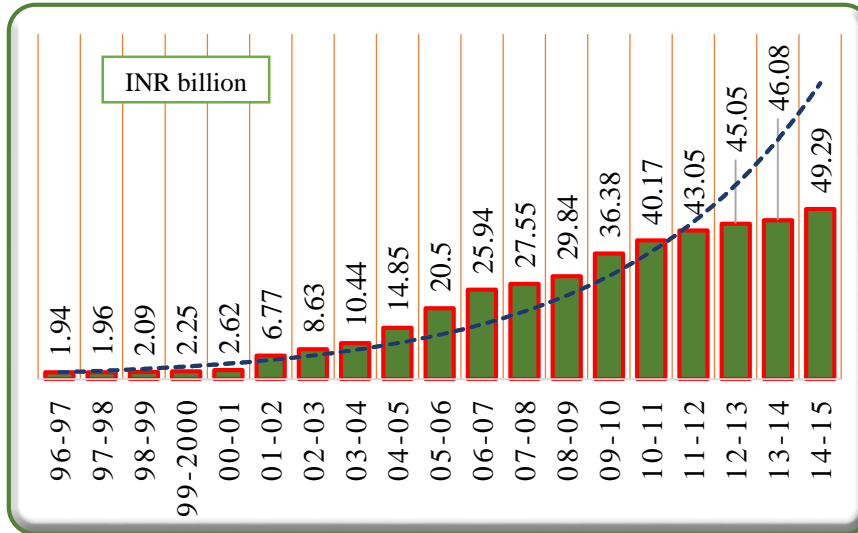
### **Sub-Section 2.2: Resolution Function**

Though RBI resolves the failed banks collaboratively with DICGC, in practice, however, DICGC acts as a ‘pay-box’ only. Sections 16 to 21 of the DICGC Act, 1961 deliberate on the settlement of claims in the case of a liquidation/amalgamation/merger of a troubled bank. Annexure 8.1 presents the claims settlement process adopted in respect of the cooperative banks schematically.

### Settlement of Claims

**Claims Settled – Cumulative:** As at March-end 2015, the amount of claims settled cumulatively stood at a tad below INR 50 billion. Between March-end 1997 and March-end 2015, the cumulative amount grew at an EGR of over 21% per annum (See Chart 8.10).

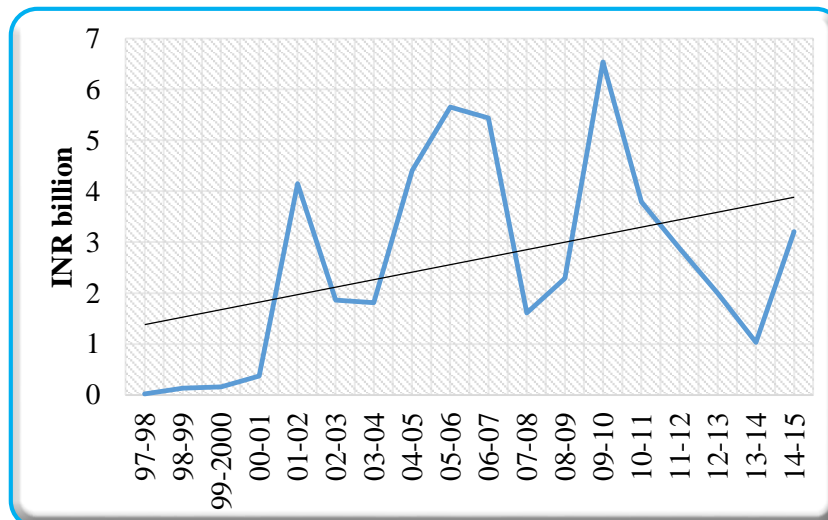
**Chart 8.10: Claims Paid Since Inception**



$Y=1.562e^{0.2108x}$ .  $R^2 = 0.9225$ . Source: Based on DICGC data.

**Claims Settled – Year-on-Year:** The amount of claims settled on yearly basis, as plotted in Chart 8.11 does not reveal any steady trend. The average amount per year turned out to be INR 2.63 billion with a high of INR 6.54 billion (2009-10) and low of INR 0.02 billion (1997-98). The coefficient of variation was 76.68%. However, in general, the amount moved up over the years. In fact, out of 18 years plotted in the case of only 4, the amount recorded a decline over their respective preceding years.

**Chart 8.11: Year-on-Year Claims Paid**



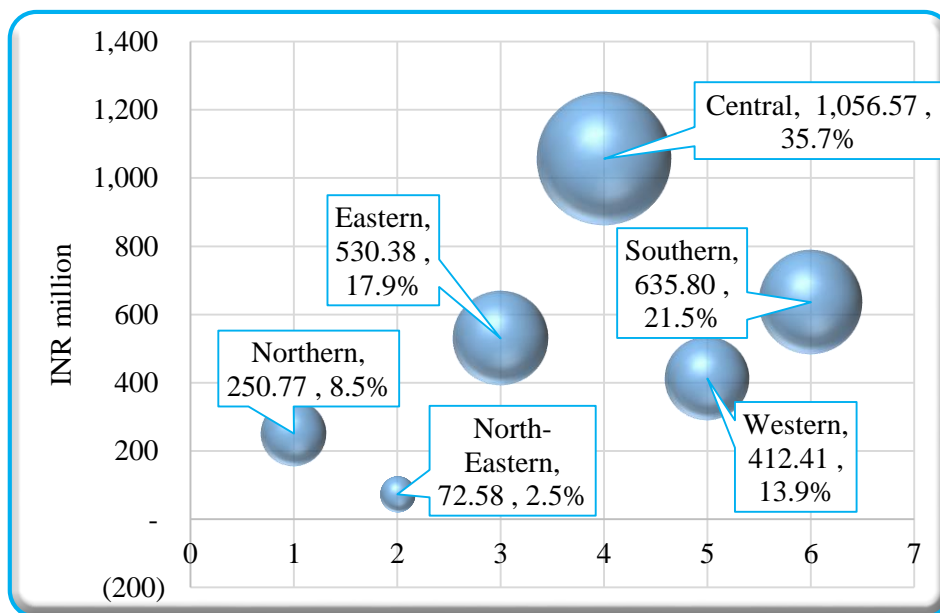
$Y=0.1471x+1.2328$ .  $R^2 = 0.1516$ . Source: Based on DICGC data.

*Insurance Claims Settled in respect of All Banks Liquidated/Amalgamated/Reconstructed up to March 31, 2015: Region- and State-wise Distribution*

In the commercial banks segment, 18 out of 26 banks in respect of which claims have hitherto been settled belonged to West Bengal (5), Maharashtra (4) and 3 each to New Delhi, Kerala and Tamil Nadu. These banks together cornered 44.5% of the total amount of claims settled so far. Although Uttar Pradesh had only 2 banks, one of those alone, i.e., Benares State Bank Ltd., grabbed a solid 35.7% of the total amount of claims settled so far.

The region-wise shares in the total amount of claims settled so far can be gleaned from Chart 8.12.

**Chart 8.12: Claim Settlement Amount - Region-wise Distribution**



Source: Based on DICGC data.

An inter-temporal distribution analysis revealed that during 1963 (i.e., shortly after DICGC was set up) to 1969 (i.e., the first Bank Nationalization), claims were settled for 12/27 banks comprising 4 in West Bengal (out of 5 therein) and 2 in Kerala (out of 3 therein). However, the amount of claims settled was nominal constituting 0.2% of the total hitherto. Although the 1980s had only 4 banks, it had 3 relatively large banks, namely, Lakshmi Commercial Bank Ltd., Bangalore, Bank of Cochin Ltd., Cochin and Hindustan Commercial Bank, Delhi against which the amount of claims settled were relatively high constituting 22.6% of the total hitherto. Subsequently, in the 1990s, 7 claims were settled comprising 2 each from Maharashtra and Tamil Nadu. Whereas the former included a major bank, i.e., Bank of Karad Ltd., Mumbai, the latter Bank of Thanjavur Ltd., Thanjavur, and both cornered 16.2% of the total amount of claims settled so far. Though there was only one bank from West Bengal, it was a big one,



namely, United Western Bank Ltd., which alone took away 11.8% of the total amount of claims settled so far. The years 2000-15 had only 2 banks which included a large bank, namely, Benares State Bank Ltd., U.P., as already mentioned in the preceding paragraph.

The position in respect of the cooperative segment is presented in Table 8.3.

**Table 8.3: Claims Paid to Cooperative Banks**

<b>Region</b>	<b>State</b>	<b>No. of Banks</b>	<b>Claim Amount Settled (INR million)</b>
<b>Northern</b>	Delhi/New Delhi	2	5.19
	Haryana	1	30.05
<b>North-Eastern</b>	Assam	3	17.45
<b>Eastern</b>	Bihar	4	172.52
	Jharkhand	1	93.93
	Odisha	3	94.64
	West Bengal	1	4.16
<b>Central</b>	Chhattisgarh	2	346.21
	Madhya Pradesh	18	1,128.58
	Uttar Pradesh	6	531.90
	Uttaranchal	1	16.48
<b>Western</b>	Gujarat	84	24,007.05
	Maharashtra	115	15,192.78
	Rajasthan	2	11.39
<b>Southern</b>	Andhra Pradesh	45	3,124.33
	Karnataka	36	1,235.40
	Kerala	1	1.74
	Tamil Nadu	3	316.16
<b>Total</b>	18	328	46,329.95

*Source: Based on DICGC data.*

In the cooperative banks segment, 280 (85.4%) of the total number of banks were concentrated in the Western and Southern regions - Western (60.7%) and Southern (24.7%). In West, the majority belonged to Maharashtra followed by Gujarat. Similarly, in South, the majority were in Andhra Pradesh followed by Karnataka. This corroborates our earlier observation that the concentration of banks in geographically contiguous areas is inimical to sectoral stability.

The banks in Maharashtra dominated all the decades starting with the 1970s, except the 1980s. The banks in Gujarat prominently figured the 2000s and 2010s. While the banks in Karnataka was dominant in the 1980s, Andhra Pradesh was dominant to some extent in the 2000s.

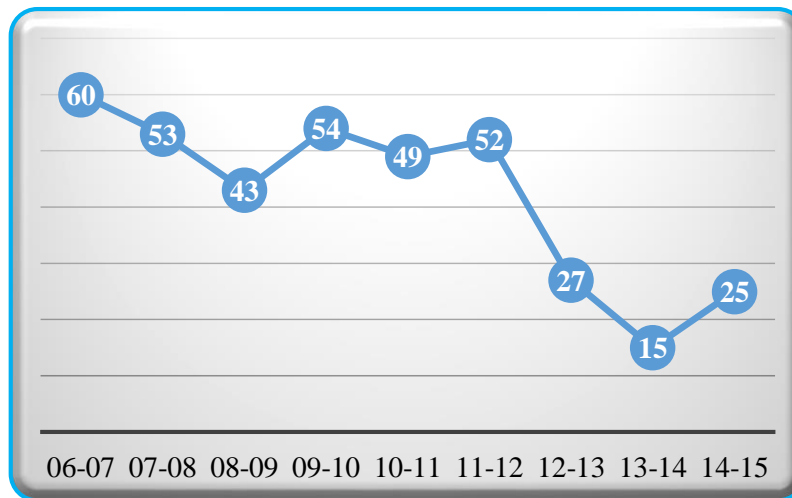
Data for depositors made good were available from 2008 onwards. One-third of the total depositors of about 2.41 million belonged to 10 banks including 9 from Maharashtra and 1

from Gujarat, whereas as the rest two-third belonged to the remaining 123 banks. The claim amount settled per depositor worked out to INR 8,943 with the highest at INR 48,658 and the lowest at INR 75 (excluding Madhavpura Mercantile Cooperative Bank Ltd., Ahmedabad).<sup>16</sup> This highlights that these banks were very small banks.

#### *Time taken for Claims Settlement*

Chart 8.13 depicts the average time DICGC normally takes for settlement of claims.

**Chart 8.13: Claim Settlement - Average Number of Days Taken**



*Source: Based on DICGC data.*

The average period for settlement of claims came down substantially over time and was 25 days in 2014-15. Despite ups and downs, it has, in all the years, remained below 60 days (from the date of receipt of the specified 'list' from the liquidators) as stipulated in the DICGC Act, 1961, which is noteworthy.

#### *Claim Settlement and Repayment Received*

In terms of Section 21(2) of the DICGC Act read with Regulation 22 of the DICGC General Regulations, the liquidator or the insured bank or the transferee bank, as the case may be, is required to repay DICGC out of the amounts realised from the assets of the failed bank and other amounts in hand after making provision for the expenses incurred.

Charts 8.14 and 8.15 illustrate insurance claims settled and repayment received from commercial banks and cooperative banks liquidated/amalgamated/reconstructed up to March-end 2015 respectively.

<sup>16</sup> Madhavpura Mercantile Cooperative Bank Ltd., Ahmedabad excluded because claims were settled in 2 tranches, i.e., in 2001 and 2013.

### Claims Settled and Repayment Received

Chart 8.14: Commercial Banks

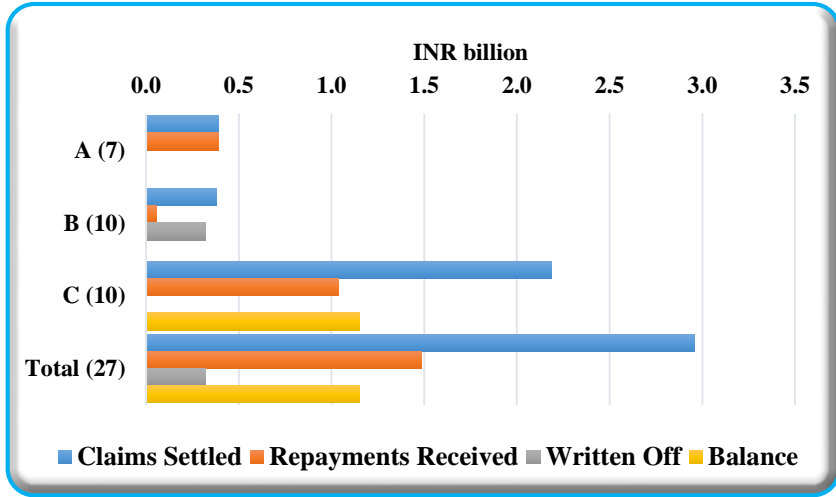
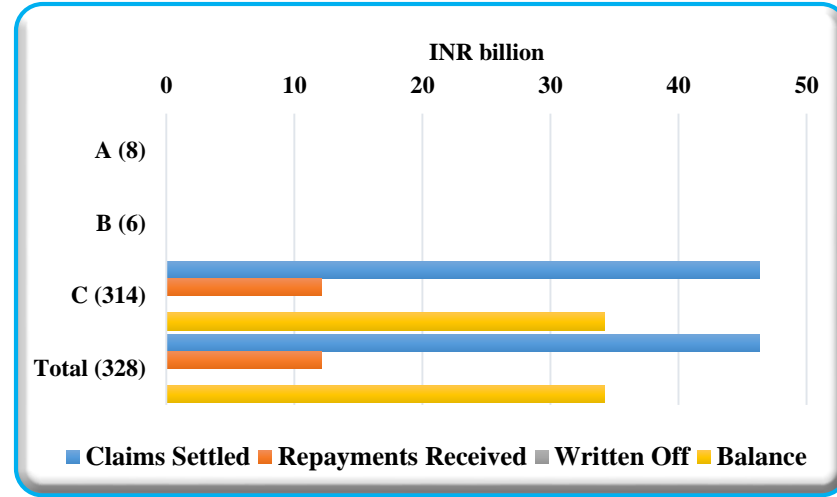


Chart 8.15: Cooperative Banks



A - Full repayment received, B - Repayment received in part and balance due written off and C - Part repayment received. Figures in brackets give the number of banks.

Source: Based on DICGC data.

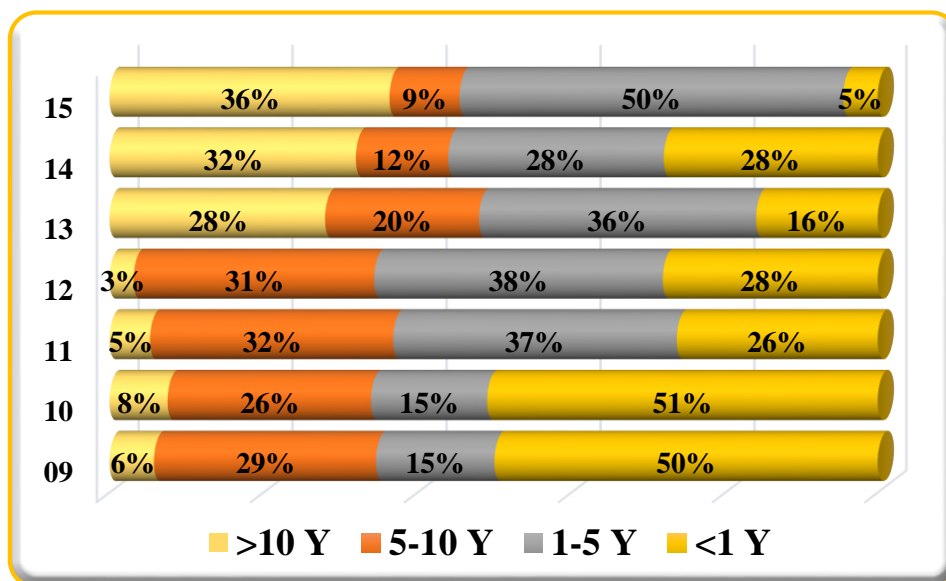
Cooperative banks reflect an extremely poor show vis-à-vis commercial banks as under:

- As against 27 commercial banks, claims were settled in respect of 328 cooperative banks.
- The amount of claims settled was below INR 3 billion in respect of commercial banks, whereas it was a whopping over INR 45 billion for cooperative banks.
- In the case of commercial banks, almost half of the amount settled was received back, whereas it was a little above 25% in the case of cooperative banks.
- Balance remaining was somewhat above INR 1 billion in the case of commercial banks, whereas in the case of cooperative banks it was over INR 34 billion.
- In respect of amount written-off, cooperative banks scored over commercial banks. Whereas about INR 0.32 billion was written off in the case of latter, INR 0.01 billion figured against cooperative banks. It may give an impression that DICGC has been partial DICGC towards commercial banks, but it is not. Over 97% of the total amount written off in the case of commercial banks belong to a single bank (out of 10), i.e., United Industrial Bank Ltd., Kolkata, which failed in 1990.

#### *Pending Claims*

It has been observed that the liquidators do not submit the claim lists within the stipulated time period to DICGC many a time. The number of such delayed cases, along with their age (of delay)-wise break-up, are plotted in Chart 8.16.

**Chart 8.16: Age-wise Distribution of Pending Claims**



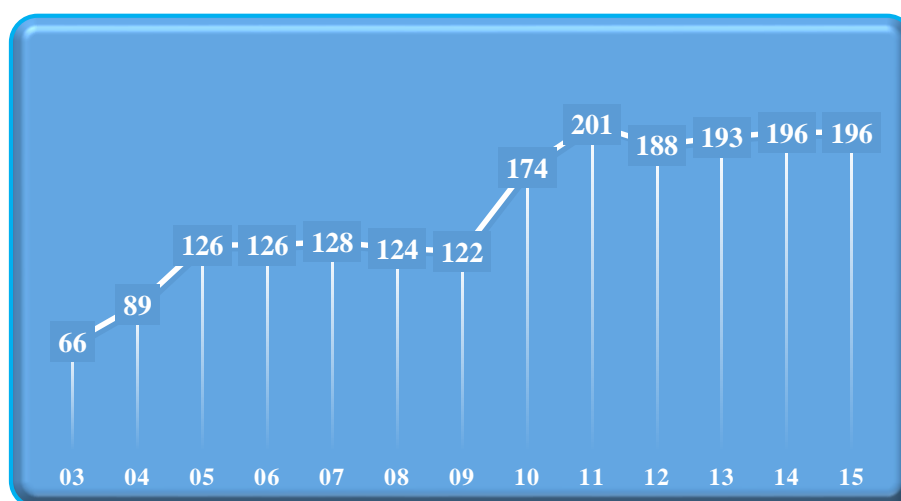
*Y – Year. Source: Based on DICGC data.*

It was heartening to note that the total number of delayed cases reduced to 22 in 2015 from 52 in 2009. However, there was a change in the age-wise composition of such cases. The incidence of ‘above 10 years’ and ‘1-5 years’ cases increased, whereas that of ‘5-10 years’ and ‘below 1 year’ decreased. The observed shift is a mixed blessing.

### *Legal Suits*

As on March 31, 2015, the number of legal suits relating to deposit insurance activity of DICGC pending in various courts stood at 196 - 32 filed by DICGC and 164 filed against it. The number of court cases jumped almost 3 fold between 2003 and 2014. Large increases were observed in 2004 and 2005 and further in 2010 and 2011 (Chart 8.17).

**Chart 8.17: Court Cases**



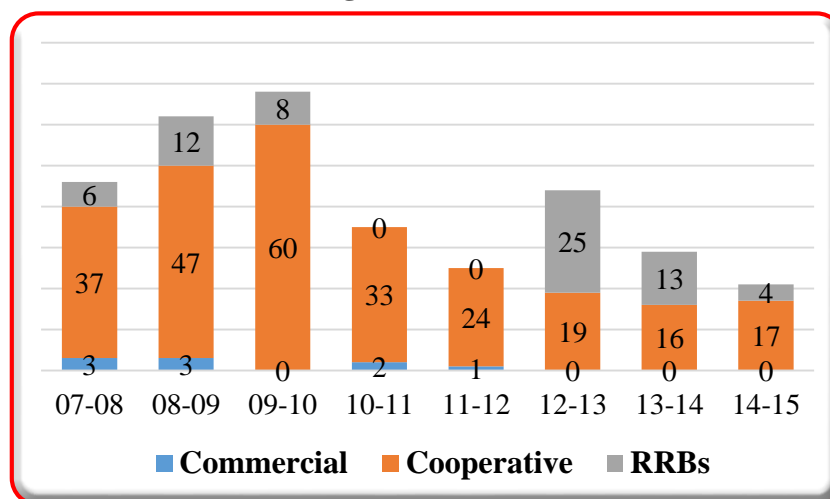
*Source: Based on DICGC data.*

DICGC attributes the pendency of such a high number of court cases to liquidation of a large number of banks or RBI's directions issued under Section 35A of the Banking Regulation Act, 1949 (AACS), which restricted withdrawal of deposits. This led the distressed depositors approach the Consumer Courts against DICGC. There are instances of depositors filing suits even before the liquidation of the banks or submission of the claim list by the liquidators. In such cases, DICGC is not liable to pay any amount to the depositors. The suits mainly relate to demand for payment of amounts over and above the maximum permissible limit or those inadmissible under DICGC Act, 1961, dispute over DICGC's preferential right of repayment in terms of Section 21 of DICGC Act, 1961 read with Regulation 22 of DICGC General Regulations, 1961, and payment of claims when a bank is placed under directions. All these simply point to lack of awareness among the depositors about deposit insurance.

### Other Powers

- DICGC is vested with powers to cancel the registration of an insured bank under various conditions including non-payment of premiums for 3 consecutive half-year periods. The number of banks deregistered, bank category-wise, for the 8-year period ending at 2014-15 is illustrated in Chart 8.18.

**Chart 8.18: No. of Deregistered Banks (2007-08 to 2014-15)**



Source: Based on DICGC data.

The number of banks in all the categories initially increased, but gradually tapered off from 2010-11 onwards. The leaders in the pack were the cooperative banks.

The incidence of deregistration (i.e., Number of banks deregistered in a year/Number of banks at the beginning of the year\*100) remained low varying between 1.0% and 2.9% over the period.

Over the years, between 27% and 67% of the banks deregistered, DICGC's liability was attracted.

The highest number of cooperative banks deregistered was from Maharashtra followed by Gujarat and Andhra Pradesh, together accounting for 76.3% of the 253 cooperative banks deregistered during this period.

- DICGC can have free access to the records of an insured bank and call for copies of such records. On DICGC's request, RBI is required to undertake/cause examination/investigation of an insured bank.

### Sub-Section 2.3: Organizational Matters

#### Board of Directors

The Chairman of the Board is a Deputy Governor of RBI nominated by RBI under Section 6 (1) (a) of the Deposit Insurance and Credit Guarantee Corporation Act, 1961.

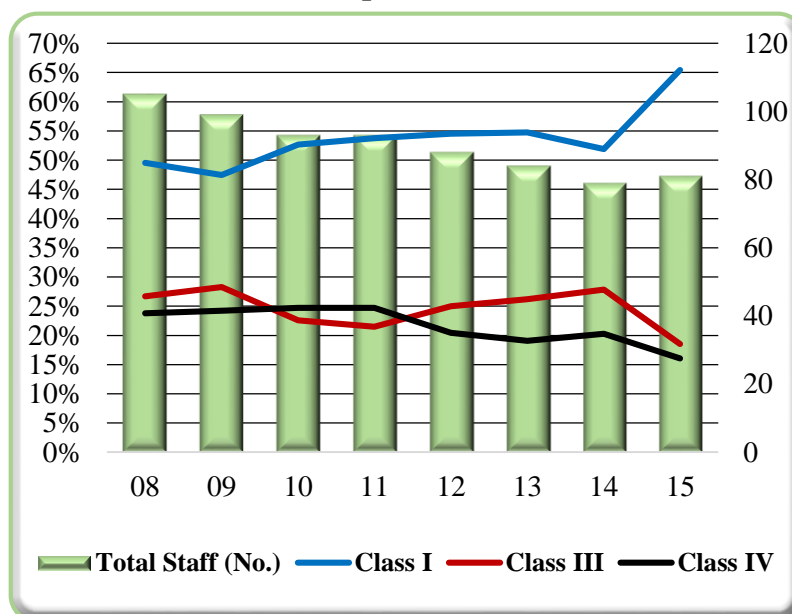
The other Directors include an Executive Director of RBI nominated by RBI under Section 6 (1) (b) of the Deposit Insurance and Credit Guarantee Corporation Act, 1961 who also heads DICGC and 4 other Directors nominated by the Central Government under Sections 6 (1) (c), 6 (1) (d) and 6 (1) (e) of the Deposit Insurance and Credit Guarantee Corporation Act, 1961.

Annexure 8.2 presents the organizational chart of DICGC.

#### Staff

All officials of DICGC, except the Chief Financial Officer (CFO), are on deputation from RBI. CFO, recruited from the market, is on a 3-year contract from May 30, 2014. Chart 8.19 presents the staff strength and its composition for the period 2008 to 2015.

**Chart 8.19: Staff Composition of DICGC (2008-15)**



Source: Based on DICGC data.

The staff strength showed a declining trend, with it falling to 81 in 2015 from 105 in 2008. While the share of Class I (i.e., officers) has by and large increased from about 50% to over 65%, that of Classes III and IV steadily fallen during 2008-15. Thus, the DICGC has been on a path of becoming an officer-oriented organization, which is a healthy feature, besides being in consonance with the recommendation of the RBI Deposit Insurance Reforms Report, 1999 in regard to HR.

## **Committees**

There are 2 internal committees, namely, IT Committee and Audit Committee to address the issues and guide DICGC in their respective domains. Besides, in the wake of a recommendation by the *Financial Sector Legislative Reforms Commission* and subsequent direction from FSDC, the Government of India set up a Task Force (Chairman: Shri Damodaran) on September 30, 2014 to prepare a detailed plan for the establishment of the Resolution Corporation subsuming DICGC.

## **Internal Control**

Internal control includes (a) Budgetary Control over revenue and expenditure, (b) Risk Based Internal Audit by RBI, (C) Concurrent Audit and (d) Control & Self- Assessment Audit or peer review which requires the DICGC officers to conduct audit of areas with which they do not have any functional association and submit reports to General Managers.

## **Treasury Function**

Section 25 of the DICGC Act,1961 requires DICGC to invest its surplus in the central government securities. The investment portfolio of DICGC stood at INR 531.43 billion as at March-end, 2015, overwhelmingly comprising dated securities. The return on the portfolio was 17.37% during the 2014-15 financial year.

## **Financials of DICGC**

### *Capital of DICGC*

The authorised capital of DICGC is INR 500 million which is entirely subscribed by RBI. Historically, the capital was raised from INR 10 million in 1962 to INR 20 million in 1972 and INR 150 million in 1982.

### *Funds*

DICGC maintains 3 separate Funds, namely, (i) Deposit Insurance Fund (DIF); (ii) Credit Guarantee Fund (CGF) and (iii) General Fund (GF). The former 2 are created by accumulating the insurance premiums and guarantee fees respectively and are utilized for settlement of the respective claims. The General Fund is utilized for meeting the establishment and administrative expenses of DICGC. The surplus balances in all the 3 Funds are invested in central government securities. Inter-Fund transfer is permissible under the DICGC Act, 1961. DICGC follows mercantile accounting system and has adopted the actuarial valuations system of its liabilities from 1987 onwards.



### Taxation

Initially, DICGC was exempt from paying income tax. However, it has started paying income tax since the financial year 1987-88, being assessed as a ‘company’ within the definition provided under the Income Tax Act, 1961. Moreover, it has started paying service tax on premium income accrued as on October 1, 2011.

Table 8.4 presents the highlights of DICGC’s finances and some efficiency indicators.

**Table 8.4: DICGC Operations - Financial Highlights**

(Amount in INR billion)

Items	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Trend Line
<b>Revenue Indicators</b>							
Premium Income	41.55	48.44	56.4	57.18	73.12	82.29	
Investment Income	15.13	18.01	23.53	27.68	33.9	40.32	
Net Claims#	4.07	1.71	3.57	4.2	-0.93	-0.34	
Revenue Surplus before Tax	37.53	61.45	60.01	86.27	91.52	146.89	
Revenue Surplus after Tax	28.93	41.32	40.54	58.27	60.72	96.96	
<b>Balance Sheet Indicators</b>							
Fund Balance (Actuarial)	32.75	37.74	47.68	52.65	50.68	52.07	
Fund Surplus	168.77	209.3	253.25	308.55	355.49	452.46	
Outstanding Liability for Claims\$	7.64	6.03	6.89	9.05	3.92	3.14	
<b>Select Efficiency Indicators</b>							
1. Average number of days between receipt of a claim and its settlement@	54	49	52	27	15	25	
2. Average number of days between deregistration receipt of a bank and claim settlement (First claims)@	361	388	533	410	678	4,856	
3. Operating Costs/Premium Income	0.26%	0.35%	0.27%	0.25%	0.22%	0.24%	
Of which, Employee Cost/Premium Income	0.14%	0.15%	0.14%	0.13%	0.12%	0.12%	

Source: Based on DICGC data. # Net Claims = Claims (a) Paid during the year + (b) Admitted but not paid + (c) Estimated liability in respect of claims intimated but not admitted + (d) Insured Deposits in respect of Banks Deregistered. \$ Estimated liability in respect of claims intimated but not admitted. Insured deposits in respect of banks deregistered. @ Actual number of average days has been arrived at by weighting the number of days with the corresponding sanctioned amount involved.

It can be gleaned from the Table that almost all the indicators are in the right direction. However, measuring operating costs and/or staff cost as ratio to premium income is debatable, as, unlike conventional insurance, a special kind of insurance like deposit insurance does not incur any direct cost for market acquisition or collecting premiums. Deposit insurance

premiums flow automatically, as banks are statutorily required to get their deposits insured and pay as per the prescribed schedule.

In view of the above, we have computed the following 3 ratios as presented in Table 8.5 for the above-mentioned period which we consider as more appropriate to evaluate operational efficiency.

**Table 8.5: DICGC - Alternative Measures for Operational Efficiency**

<b>Year</b>	<b>Total Cost/ Total Income</b>	<b>Staff Cost/ Total Income</b>	<b>Staff Cost/ Total Cost</b>
<b>2009-10</b>	100%	11.4%	11.4%
<b>2010-11</b>	56%	20.4%	36.7%
<b>2011-12</b>	100%	30.3%	30.4%
<b>2012-13</b>	27%	13.9%	51.6%
<b>2013-14</b>	43%	22.8%	53.3%
<b>2014-15</b>	34%	17.0%	50.0%

*Source: Based on DICGC data.*

The first 2 indicators, i.e., Total Cost/Total Income and Staff Cost/Total Income corroborate that operational efficiency has by and large increased over time. However, Staff Cost/Total Cost reflected more or less an increasing trend and even went beyond 50% in 2013-14 before scaling back to just 50% in 2014-15. This could be due to more number of Class I officials in the total staff.

The logo of DICGC is presented in Annexure 8.3.

### **Section 3: DICGC and IADI Core Principles (2014)**

The first set of *Core Principles for Effective Deposit Insurance Systems* was issued by The International Association of Deposit Insurers (IADI) and the Basel Committee on Banking Supervision (BCBS) in June 2009. The Core Principles and their compliance assessment methodology which was finalized in December 2010 (together called the Core Principles) provide a benchmark to the jurisdictions for evaluating their deposit insurance systems, identifying the drawbacks and advocating policies to rectify those. IMF and the World Bank use the Core Principles for their Financial Sector Assessment Program while assessing a jurisdiction's deposit insurance systems and practices.

Deposit insurance systems over many jurisdictions learnt several lessons from the global financial crisis of 2007–09. This, coupled with changes in global regulatory environment, demanded a review of the 2009 Core Principles. IADI's reform proposals which were discussed

in a Joint Working Group consisting of representatives from the BCBS, the European Forum of Deposit Insurers, the European Commission, the FSB, the IMF and the World Bank were finally released to the jurisdictions for guidance in November 2014. The new Core Principles are 16 in number in lieu of 18 in the previous one.

Table 8.6 presents a critical evaluation of the Indian DIS vis-à-vis the IADI-BIS Core Principles, 2014. We have also assigned scores to the Indian status against each principle out of a total score of 6. All the Principles carry equal weight.

**Table 8.6: Indian DIS vis-à-vis IADI-BIS Core Principles**

<b>Principle No. and Title</b>	<b>Description of the Principle</b>	<b>Status of DICGC vis-à-vis the Principle</b>	<b>Score</b>
<b>Principle 1 - Public Policy Objectives</b>	The principal public policy objectives for deposit insurance systems are to protect depositors and contribute to financial stability. These objectives should be formally specified and publicly disclosed. The design of the deposit insurance system should reflect the system's public policy objectives.	India is the largest democracy in the world and its Constitution avows socialism. Therefore, democratic and socialistic pattern of governance is weaved into all its public policies. As far as protecting depositors is concerned, India realized the need long ago and became the second country - next to FDIC of the US - to enact the DIC Act in 1961. DIC came into being quickly thereafter in 1962. The Preamble to DIC Act, which is a public document, describes it as " <i>an act to provide for the establishment of a corporation for the purpose of insurance of deposits.</i> " Further, the Mission Statement of DICGC is " <i>To contribute to financial stability by securing public confidence in the banking system through provision of deposit insurance, particularly for the benefit of the small depositors.</i> " The structure of DIC has hitherto succeeded in accomplishing this goal in various ways.	6/6
<b>Principle 2 - Mandate and Powers</b>	The mandate and powers of the deposit insurer should support the public policy objectives and be clearly defined and formally	The mandate to protect depositors against bank failures has been made crystal clear in the Act. Further, the Act, along with the Regulations thereunder, empowers DICGC to carry out this mandate fast and in a clean way. However, in practice,	5/6

Principle No. and Title	Description of the Principle	Status of DICGC vis-à-vis the Principle	Score
	specified in legislation.	DICGC does these activities in consultation with its parent, i.e., RBI, especially in respect of the Resolution of failed banks. However, the Act provides for this kind of collaboration in several Sections. Nevertheless, this kind of 'collaboration' has been recently criticized as DICGC being 'dependent' on RBI which, <i>inter alia</i> , has precipitated in poverty of independent thought and action on the part of DICGC. <sup>17</sup>	
<b>Principle 3 - Governance</b>	The deposit insurer should be operationally independent, well-governed, transparent, accountable, and insulated from external interference.	DICGC is a wholly-owned subsidiary of RBI. However, it is constituted under a separate Act and has a separate Board with members in accordance with the provisions in the Act. However, its operational independence is subject to the fact that a Deputy Governor of RBI is its Chairman, and its entire staff including the CEO (called Executive Officer) belongs to RBI. Four out of five Board members are nominated by the Government under different Sections/Sub-sections of the Act. Its accounts are scrutinized by RBI-appointed chartered accountants and publicly available. There is no recorded evidence of undue external influence in its functioning so far. Its publications including the Annual Report, which, <i>inter alia</i> , contains its annual accounts, failed bank settlement amounts and recoveries, research papers, and speeches are available on its Web Site. However, it does not make public the <i>modus operandi</i> adopted, in practice, for resolution of troubled or failed banks which may be differing from case to case.	4.5/6

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<sup>17</sup> Rajan Committee

Principle No. and Title	Description of the Principle	Status of DICGC vis-à-vis the Principle	Score
<b>Principle 4 - Relationships with Other Safety-Net Participants</b>	In order to protect depositors and contribute to financial stability, there should be a formal and comprehensive framework in place for the close coordination of activities and information sharing, on an ongoing basis, between the deposit insurer and other financial safety-net participants.	Although DICGC works in close coordination with RBI as also the government, it does not directly deal with either the insurance regulator, i.e., IRDAI or PFRDA – the 2 financial safety-net regulators. It does not have any link with individual insurance providers. But both IRDAI and PFRDA are members of FSDC, a high-level body of the regulators of various segments, such as, RBI and SEBI and other government representatives, especially from the Ministry of Finance. FSDC is chaired by the Finance Minister. FSDC has a sub-committee, groups, inter-regulatory groups, working groups, etc., on specific issues. For example, it had set up a Working Group on Resolution Regime for Financial Institutions which submitted its report in 2013.	4.5/6
<b>Principle 5 - Cross-Border Issues</b>	Where there is a material presence of foreign banks in a jurisdiction, formal information sharing and coordination arrangements should be in place among deposit insurers in relevant jurisdictions.	DICGC is a member of IADI. The Executive Director of DICGC is an elected member of the Executive Committee of IADI, the decision taking and executive body. Apart from exchanging information with IADI, DICGC participates in IADI's conferences and other events. It also shares information with deposit insurers of other countries, especially whose banks are operating in India.	6/6
<b>Principle 6 - Deposit Insurer's Role in Contingency Planning and Crisis Management</b>	The deposit insurer should have in place effective contingency planning and crisis management policies and procedures, to ensure that it is able to effectively respond to the risk	The contingency planning and crisis management policies and procedures are in place by RBI which are continuously reviewed and shared with DICGC. Therefore, DICGC also remains constantly in readiness. However, as mentioned above, its coordination with the other safety net providers is only through FSDC.	4/6

Principle No. and Title	Description of the Principle	Status of DICGC vis-à-vis the Principle	Score
	of, and actual, bank failures and other events. The development of system-wide crisis preparedness strategies and management policies should be the joint responsibility of all safety-net participants. The deposit insurer should be a member of any institutional framework for ongoing communication and coordination involving financial safety-net participants related to system-wide crisis preparedness and management.		
<b>Principle 7 - Membership</b>	Membership in a deposit insurance system should be compulsory for all banks.	In India, it is mandatory for all banks to become members of DICGC.	6/6
<b>Principle 8 - Coverage</b>	Policymakers should define clearly the level and scope of deposit coverage. Coverage should be limited, credible and cover the large majority of depositors but leave a substantial amount of deposits exposed to market discipline. Deposit insurance coverage should be	The DICGC Act, 1961 unambiguously defines the terms 'deposit' and 'insured deposit' in the Sections 2(g) and 2(j) respectively. The current level of coverage is limited to INR 1,00,000 (since May 1, 1993). At this level, 92.4% of the depositors (down from 96.9% in 2000-01) and 30.8% of the deposit amount (down from 71.0% in 2000-01) were fully covered as at March-end 2015 vis-à-vis the international	5.5/6

Principle No. and Title	Description of the Principle	Status of DICGC vis-à-vis the Principle	Score
	consistent with the deposit insurance system's public policy objectives and related design features.	benchmarks of 80% and 20% respectively.	
<b>Principle 9 - Sources and Uses of Funds</b>	The deposit insurer should have readily available funds and all funding mechanisms necessary to ensure prompt reimbursement of depositors' claims, including assured liquidity funding arrangements. Responsibility for paying the cost of deposit insurance should be borne by banks.	<p>Both DIF and the Reserve Ratio have been continuously increasing from 1992-93 onwards. Although there is no mandate to maintain the Reserve Ratio at a specific level, DICGC aims at maintaining the ratio at not below 2%, as recommended by Capoor Committee. The Reserve Ratio at March-end 2015 stood at 1.90%.</p> <p>Secondly, Section 26 (1) of the DICGC Act, 1961 provides that DICGC can obtain supplementary back-up funding from RBI up to INR 50 million, in case of need which, however, seems paltry in today's context. Therefore, the DICGC Board has recommended amending the Act to provide for unlimited collateralised borrowing from RBI, in case of need, which is in consonance with the Capoor Committee recommendation.</p> <p>The Capoor Committee had also recommended increasing DICGC's capital to INR 5 billion. In addition, it was recommended that DICGC should have financial support from the Government to meet any contingencies.</p> <p>However, the above proposals have not yet been acted upon.</p> <p>The insured banks pay the premium for their depositors without recourse to the latter.</p>	4.5/6
<b>Principle 10 - Public Awareness</b>	In order to protect depositors and contribute to	DICGC disseminates information relating to deposit insurance both in physical form (e.g., booklets,	2/6

<b>Principle No. and Title</b>	<b>Description of the Principle</b>	<b>Status of DICGC vis-à-vis the Principle</b>	<b>Score</b>
	financial stability, it is essential that the public be informed on an ongoing basis about the benefits and limitations of the deposit insurance system.	pamphlets, posters, etc.) and through its Web Site. It also operates a customer care cell for prompt redressal of complaints from the members of the public. In spite of this, the awareness level among the public in general and depositors in particular is very low. Bank branches hardly display the facility of deposit insurance in their premises or in various forms used by customers for transactions.	
<b>Principle 11 - Legal Protection</b>	The deposit insurer and individuals working both currently and formerly for the deposit insurer in the discharge of its mandate must be protected from liability arising from actions, claims, lawsuits or other proceedings for their decisions, actions or omissions taken in good faith in the normal course of their duties. Legal protection should be defined in legislation.	Such immunity is available under Sections 40 and 42 of the DICGC Act, 1961 to Directors/Officers of DICGC/RBI or any other person or agency authorized by DICGC/RBI to discharge any function under the Act, except in the case of damages caused by her/his own wilful act or default.	6/6
<b>Principle 12 - Dealing with Parties at Fault in a Bank Failure</b>	The deposit insurer, or other relevant authority, should be provided with the power to seek legal redress against those parties at fault in a bank failure.	In the case of a fraud or criminal act by any party precipitating in a bank failure, the regulator/liquidator can seek action against the concerned party from the appropriate legal authority under the criminal law. Besides, the Banking Regulations Act, 1949, has provisions under which a High Court can take cognizance of and try in a summary way any offence alleged to have been committed by any	4/6



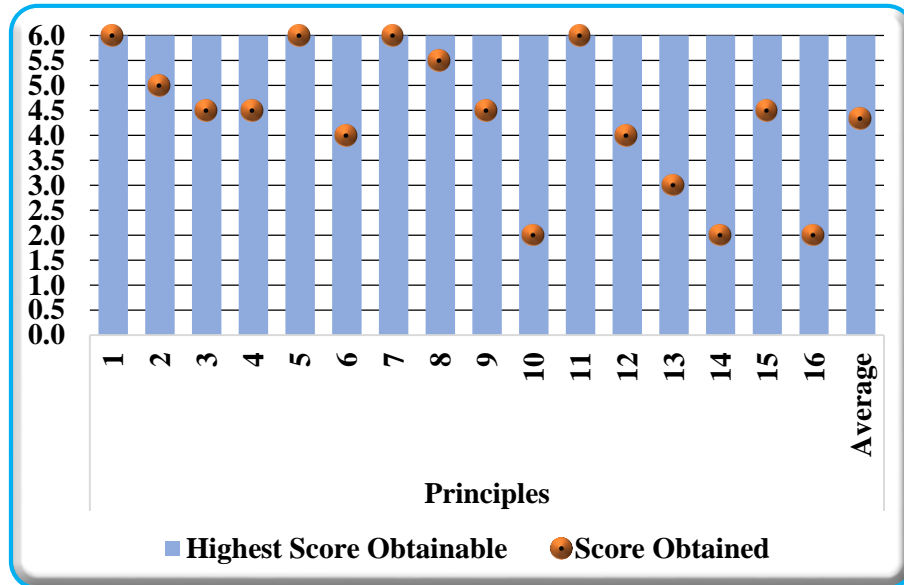
Principle No. and Title	Description of the Principle	Status of DICGC vis-à-vis the Principle	Score
		<p>promoter/director/employee of the bank which is being wound up.</p> <p>However, the resolution of the cases by the courts is tardy as mentioned earlier in this chapter.</p>	
<p><b>Principle 13 - Early Detection and Timely Intervention</b></p>	<p>The deposit insurer should be part of a framework within the financial safety-net that provides for the early detection of, and timely intervention in, troubled banks. The framework should provide for intervention before the bank becomes non-viable. Such actions should protect depositors and contribute to financial stability.</p>	<p>Although DICGC constitutes an integral part of the financial safety net mechanism, its role is limited to being just a 'pay-box'. It has no regulatory and supervisory power. RBI, DICGC's parent, is the natural regulator and supervisor of the commercial banks entrusted with powers for early detection of troubles in a bank and taking prompt corrective action with a view to stalling any further deterioration in the financial condition of the bank. RBI is also legally empowered to carry out similar exercises in the case of cooperative banks.</p>	3/6
<p><b>Principle 14 - Failure Resolution</b></p>	<p>An effective failure resolution regime should enable the deposit insurer to provide for protection of depositors and contribute to financial stability. The legal framework should include a special resolution regime.</p>	<p>As far as the resolution mechanism is concerned, DICGC enters the turf, as per the Statute, only after the Competent Authority approves the liquidation or merger or reconstruction of a failed bank with DICGC subvention. Section 17 (1) of the DICGC Act, 1961 provides 3 months to the liquidator to submit the Claim List to DICGC and thereafter Section 17 (2) provides 2 months to DICGC to pay the depositors. While DICGC has been strictly adhering to the time norm, the liquidators often delay.</p> <p>In general, the resolution mechanism for the failed financial entities in India needs to be overhauled. The B L Krishna committee has made recommendations thereto which are under debate and discussion at</p>	2/6

Principle No. and Title	Description of the Principle	Status of DICGC vis-à-vis the Principle	Score
		<p>various levels. Meanwhile, the process can be accelerated, within the existing legal framework, through computerization, starting from the failed banks to DICGC.</p> <p>DICGC has initiated the process of developing a Web-enabled Integrated Claims Management System which enables backward integration with depositors' database. This carries particular significance in the context of certain cooperative banks which are yet to computerize their depositors' databases, comprehensively.</p>	
<b>Principle 15 - Reimbursing Depositors</b>	The deposit insurance system should reimburse depositors' insured funds promptly, in order to contribute to financial stability. There should be a clear and unequivocal trigger for insured depositor reimbursement.	The agility with which the depositor's insured funds are reimbursed is linked to how quickly the claim is settled. The number of days to settle claims has fallen drastically from 60 in 2006-07 to 25 in 2014-15. Once a proper resolution mechanism is instituted and the whole system is computerized, the reimbursement process will further accelerate.	4.5/6
<b>Principle 16 - Recoveries</b>	The deposit insurer should have, by law, the right to recover its claims in accordance with the statutory creditor hierarchy.	<p>Repayment to DICGC out of recoveries from the estate of the failed bank is clearly spelt out in Section 21 of the DICGC Act, 1961 in conjunction with Regulation 22 of the DICGC General Regulations, 1961.</p> <p>The liquidator is empowered to manage the assets of failed banks and the recovery process. However, loopholes in the system result in delay leading to administrative cost overruns and low recoveries. DICGC is considering measures to plug the loopholes.</p>	2/6
Overall Average Score Obtained			4.344/6

In a scale of 0 to 6, if ‘0 to 1.5’ is defined as ‘Poor’, ‘Above 1.5 but less than 3’ as ‘Average’, ‘Above 3 but less than 4.5’ as ‘Good’ and ‘Above 4.5 but less than 6’ as ‘Very Good’, then the Indian DIS can be said as ‘Good’ as evaluated above against the IADI-BIS Core Principles. Thus, it leaves a lot of room for improvement and attain the global benchmarks.

The summary of the above scoring exercise is illustrated in Chart 8.20.

**Chart 8.20: Score of Indian DIS in respect of IADI-BIS Principles**



*Principle 1 - Public Policy Objectives. Principle 2 - Mandate and Powers. Principle 3 - Governance. Principle 4 - Relationships with Other Safety-Net Participants. Principle 5 - Cross-Border Issues. Principle 6 - Deposit Insurer's Role in Contingency Planning and Crisis Management. Principle 7 - Membership. Principle 8 - Coverage. Principle 9 - Sources and Uses of Funds. Principle 10 - Public Awareness. Principle 11 - Legal Protection. Principle 12 - Dealing with Parties at Fault in a Bank Failure. Principle 13 - Early Detection and Timely Intervention. Principle 14 - Failure Resolution. Principle 15 - Reimbursing Depositors. Principle 16 - Recoveries.*

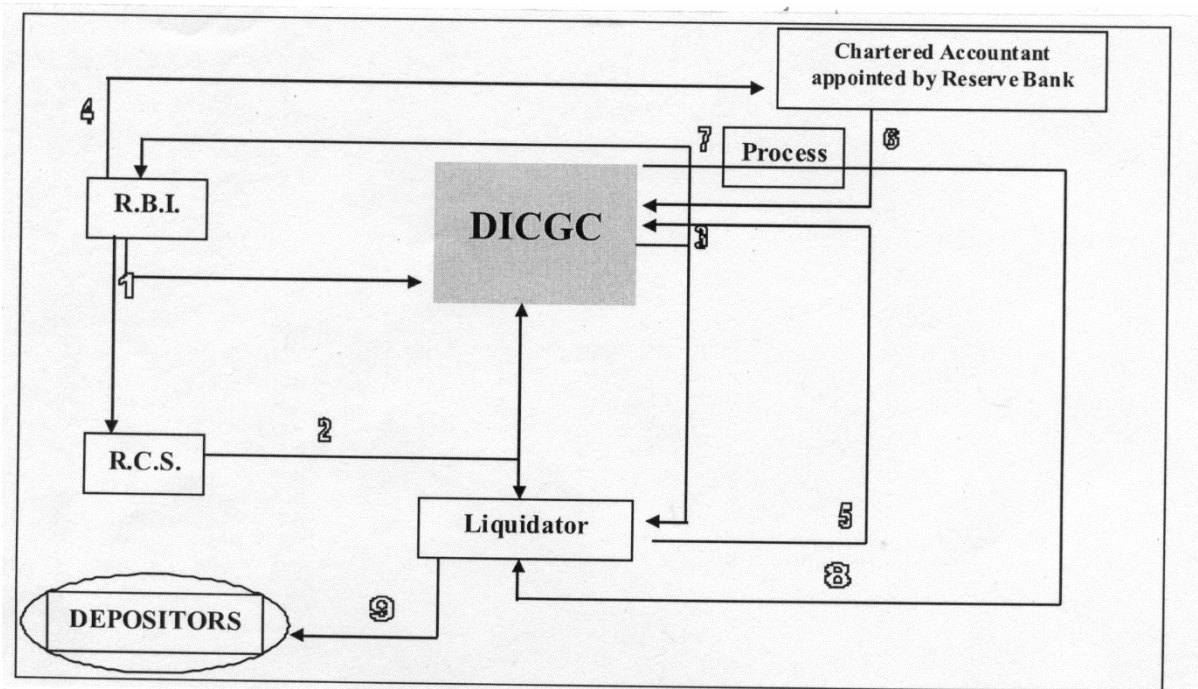
## Summing Up

- *The Deposit Insurance Corporation (DIC), and with it the insurance of bank deposits came into existence in 1962, directly as a consequence of the crash of the Laxmi Bank and Palai Central Bank (Kerala) in 1960.*
- *DIS is compulsory for all banks except cooperative banks in those States which are yet to pass the required legislation.*
- *In July 1978, DIC assumed also the function of credit guarantee, and hence, was renamed as Deposit Insurance and Credit Guarantee Corporation (DICGC). At present, no credit institution is participating in any of the credit guarantee schemes administered by it.*
- *The authorised capital of DICGC is INR 500 million which is entirely subscribed by RBI.*

- *DIS covers all commercial banks (including RRBs and LABs) and all cooperative banks, except a few designated ones. As at March-end 2015, 2,129 banks were registered comprising 92 commercial banks, 56 RRBs, 4 LABs and 1,977 cooperative banks.*
- *The scheme covers, by and large, the entire deposits of the household sector. Simultaneously, the scheme covers high-value deposits, such as, CDs and FCNR (B) deposits.*
- *DIS, with effect from May 1, 1993, protects INR 100,000 of deposits held by the depositor at all the branches of a bank put together in the same capacity and right, increased in stages from the original INR 1,500.*
- *As at March-end 2015, 92.4% of the total deposit accounts were fully protected. Amount-wise, 30.8% were 'insured' deposits.*
- *Although the DICGC Act, 1961 allows for a variable premium system, DICGC follows a flat rate premium system which currently stands at INR 0.10 per INR 100 of 'assessable' deposits per annum (statutory cap - INR 0.15 per INR 100).*
- *Premium received from the cooperative banks constituted a small proportion of the total premium which moreover declined over time.*
- *Both DIF and the Reserve Ratio reflected continuous upward movement from 1992-93 onwards. Although there is no mandate to maintain the Reserve Ratio at a specific level, DICGC aims at maintaining the ratio at not below 2%. The Reserve Ratio at March-end 2015 stood at 1.9%.*
- *As at March-end 2015, the amount of claims settled cumulatively stood at a tad below INR 50 billion, registering an EGR over 21% per annum between March-end 1997 and March-end 2015.*
- *The average amount of claims settled per year turned out to be INR 2.63 billion with a high of INR 6.54 billion and low of INR 0.02 billion. In general, the amount moved up over the years.*
- *As far as claims settlement and their repayment by banks are concerned, cooperative banks reflected an extremely poor show vis-à-vis commercial banks.*
- *The average period for settlement of claims came down substantially over time and was 25 days in 2014-15.*
- *As on March 31, 2015, the number of legal suits relating to deposit insurance activity of DICGC pending in various courts stood at 196 - almost 3 times that in 2003.*
- *DICGC is vested with powers to (a) cancel the registration of an insured bank under various conditions (in 2014-15 21 banks – all cooperative – were deregistered, (b) have free access to the records of an insured bank and call for copies of such records and (c) request RBI to undertake/cause examination/investigation of an insured bank.*
- *All officials of DICGC, except CFO, are on deputation from RBI. The staff strength showed a declining trend over time.*
- *DICGC has been on a path of becoming an officer-oriented organization, which is a healthy feature, besides being in consonance with the recommendation of the RBI Deposit Insurance Reforms Report, 1999 in regard to HR.*

- *The financial indicators and efficiency parameters portray a healthy picture of DICGC.*
- *The Indian DIS is in a 'Good' position vis-à-vis the IADI-BIS 16 Core Principles for Effective Deposit Insurance Systems, as it operates in the desired way specified by the "Principles" to various extent.*

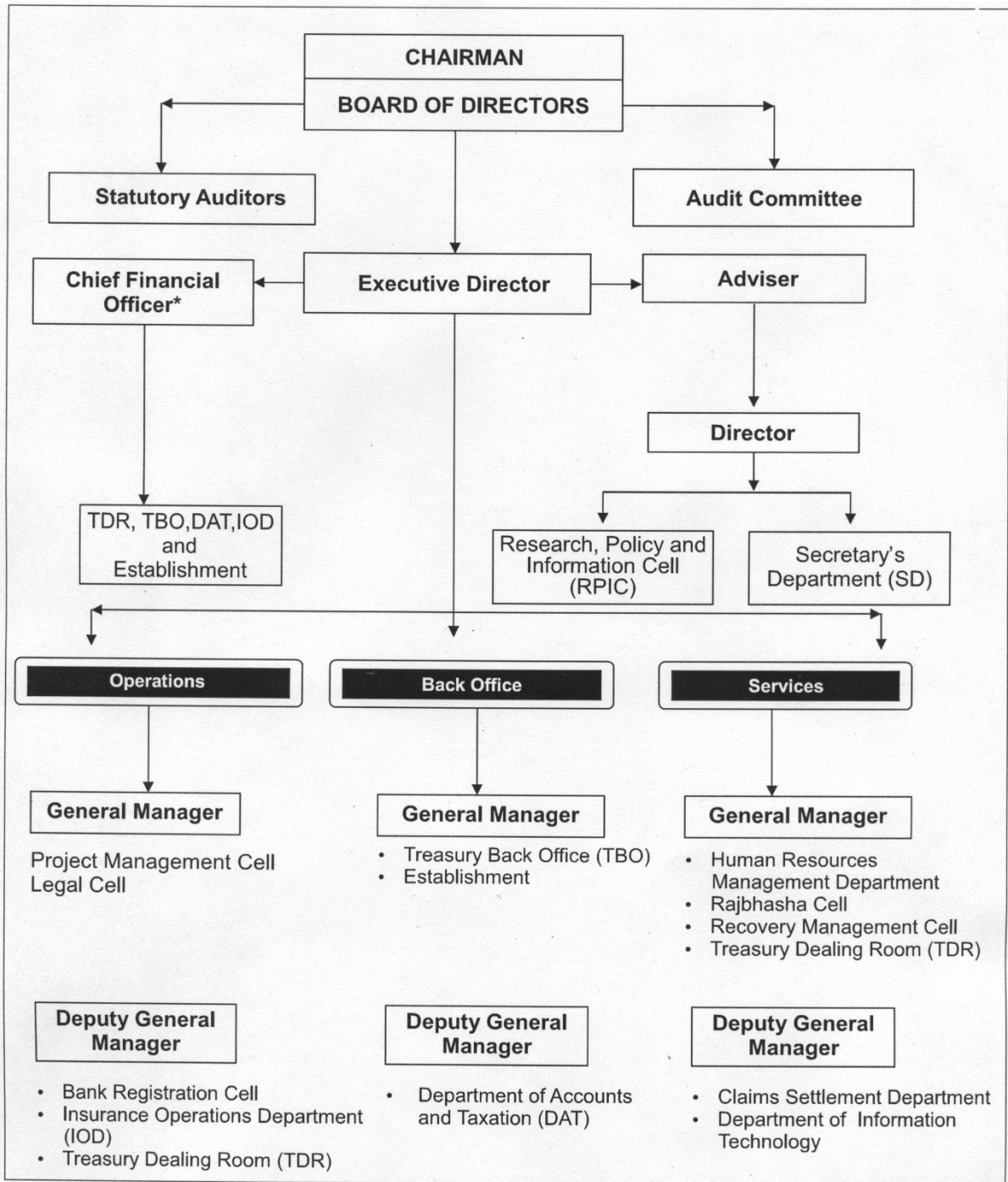
### Annexure 8.1: Typical Process of Claims Settlement for Cooperative Banks



(Reproduced from DICGC Annual Report, 2014-15 through scanning)

1. RBI cancels the licence/rejects the application for licence of a bank and recommends its liquidation to the concerned Registrar of Cooperative Society (RCS) with endorsement to DICGC.
2. RCS appoints a Liquidator for the liquidated bank with endorsement to DICGC.
3. DICGC cancels the registration of the bank as an insured bank and issues guidelines for submission of the claim list by the Liquidator within 3 months and requests RBI to appoint an external auditor [Chartered Accountant (CA)] for on-site verification of the list.
4. RBI appoints CA and DICGC conducts briefing and orientation session for CA to check the claim list.
5. The Liquidator submits the claim list for payment to the depositors (both hard and soft forms).
6. The external auditors (CAs) submit their report on the aspects of the claim list.
7. The claim list is computer-processed and payment list is generated.
8. Consolidated payment is released to the Liquidator and further information sought on incomplete/doubtful claims. The release of claims is announced through the Website of DICGC.
9. The Liquidator releases the payment to the depositors.

**Annexure 8.2: Organizational Chart of DICGC**



\*With effect from May 30, 2014.

(Reproduced from DICGC Annual Report, 2014-15 through scanning)

### Annexure 8.3: The Logo of DICGC



#### Logo Colour

DICGC logo explicitly showing well-known acronym of Deposit Insurance and Credit Guarantee Corporation in green colour is also the base colour in the Indian flag. Abundant in nature, green signifies growth, renewal, health, and environment. The green colour represents both a warming and cooling effect, thus denotes balance, harmony, protection and stability - DICGC being a vital link in financial stability of the Indian Economy.

#### Logo Design

In a configuration suggestive of a face, the circles signifying coins symbolizes deposits and the enclosures created by the structures of letters are indicative of protection to depositors thereby the stability of financial system. The two eyes in the logo stand for observation, care and vigilance or alertness indicating that the depositors are well looked after by the DICGC.

Apparent enclosures formed by the curvilinear structures of four out of five letters are signifying a gestures and expression of concern as well as protection around the coins hence closely relating to the logo with the world of banking and insurance.



The squarish look and the solid lower alphabets represent a robust base indicative of the increased strength of the Corporation in terms of resources to act as an effective safety net for depositors and small borrowers.

(The logo is reproduced from DICGC Annual Report through scanning and the write-up from the DICGC Web Site)

## Chapter IX

### Deposit Insurance Reform Endeavours in India

The Chapter comprises 2 Sections: Section 1 mentions the backdrop against which RBI initiated the process of reforming the DIS in the 1990s and Section 2 carries a detailed discussion of the reform measures that have been recommended by several committees thereafter.

#### Section 1: The Trigger

Established in 1962, the Indian DIS is the second oldest in the world, next to the US deposit insurance system which came into being in 1933. Unlike in many advanced economies, in India, the Deposit Insurance story is rather of low profile. This could be attributed to a blend of factors: (a) the largest chunk of public deposits is with PSBs which by virtue of having government support and implicit guarantee are perceived to be fail-safe and therefore obviating the need for insurance, (b) as mentioned earlier, most of the individuals are not bothered about failure of banks as their banks, being mostly PSBs, are perceived as fail-safe and even in the case of non-PSBs they feel, mistakenly though, that in the case of a failure, the government will protect them and (c) most of them do not know that banks *can* and *do* fail. In short, depositors' discipline on banks is non-existent. Simultaneously, the concerned authorities have hitherto, by and large, favoured TITF doctrine.

Reforming the deposit insurance system emerged as one of the major items of the second phase of financial sector reforms in India. The Narasimham Committee Report on the *Banking Sector Reforms* (1998), while focusing on the structural issues, observed:

*“Deposit insurance has increased public confidence in the banking system, promoted savings in bank deposits and has enabled banks to perform the intermediation function more effectively...Deposit insurance and the aversion to bank failures could create a moral hazard that distorts the incentives for banks and create competitive distortions... The Committee is of the view that there is need for a reform of the deposit insurance scheme. In India, deposits are insured up to Rs.1 lakh. There is no need to increase the amount further. There is, however, need to shift from the ‘flat’ rate premiums to ‘risk based’ or ‘variable rate’ premiums...”. (Paragraphs 5.30 to 5.42)*

Thus, the 2 takeaways from the Narasimham-II Report were:

- No need to increase the insurance limit (i.e., INR 1,00,000) further.
- Need to shift from the ‘flat’ rate premiums to ‘risk based’ or ‘variable rate’ premiums.

In India, the feasibility of extending deposit insurance to non-banks, which mobilize substantial financial resources from the so-called small depositors, has become another compelling reason for reforming the deposit insurance system. The concern arises from the fact that several non-banks in the country are highly vulnerable. The Shere Committee (1997) and the Vasudev Committee (1998), which went into this aspect, advised against extending deposit insurance to the non-banks on the grounds of moral hazard, among others. In fact, the Committee on Banking Sector Reforms (1998) also endorsed this view. Thus, given the increasing signs of vulnerabilities in certain segments of banks and non-banks, a review of the deposit insurance system was overdue.

## **Section 2: Recommendations by Committees**

It was in the above-mentioned context that RBI constituted, on April 9, 1999, an Advisory Group and a Working Group under Shri Jagdish Capoor, Deputy Governor to look into this issue. The Groups consisted of the following persons:

### **Advisory Group**

1. Shri Jagdish Capoor, Deputy Governor. Chairman.
2. Dr. Y.V. Reddy, Deputy Governor.
3. Shri M.G. Bhide, Former Chairman, Bank of India.
4. Shri S.H. Khan, Former Chairman, IDBI.
5. Dr. Ganti Subrahmanyam, Director, NIBM.
6. Dr. Ajay Shah, Professor, IGIDR.
7. Shri A. Chandramouliswaran, E.D., DICGC.

### **Working Group**

1. Shri V.S.N. Murty, CGM, DNBS, RBI.
2. Shri M.R. Das, Chief Manager (Economist), SBI.
3. Dr. Mathew Joseph, ICICI.
4. Shri J.P. Sharma, GM, DICGC.
5. Shri K.V. Subba Rao, DGM, UBD, RBI.
6. Dr. D. Ajit, Director, DEAP, RBI, Convenor.

Shri S.P. Talwar, Deputy Governor was a permanent invitee.

The terms of reference of the Working Group are as follows:

- Review the role of Deposit Insurance in financial sector and economic developments, including a review of the international experience with regard to Deposit Insurance.

- Conduct a detailed survey of the nature of Deposit Insurance in India – instruments, institutions and regulatory legal framework.
- Propose changes in the existing system in regard to deposit coverage, institutions to be brought within the ambit of the Deposit Insurance, regulatory systems to be put in place in the case of each category of institutions accepting deposits from public as a pre-requisite for extension of the Deposit Insurance, risk-based premium and the parameters relevant for the assessment of the risk in regard to each category of the institutions and the ownership and capital of the existing Deposit Insurance Agency.
- Consider any other matter referred to it by the Advisory Group.

The *Report on Deposit Insurance Reforms* was submitted to the Governor, RBI in October 1999. The Report, the first serious attempt to reform DIS, made wide-ranging reform proposals including coverage of DIS, premium system, DIF, structure and role of DICGC, etc. The major recommendations of the Report are presented in Table 9.1.

**Table 9.1: RBI Report on Deposit Insurance Reforms, 1999 - Highlights**

Area	Reform Measure	Current Status
<i>Deposit Types Covered</i>	<ul style="list-style-type: none"> <li>• Exclusion of CDs from the deposit insurance coverage.</li> <li>• Deposit insurance cover should not be extended to deposits taken as cash collaterals as also to deposits which are created by transferring subordinated liabilities, at least six months prior to a bank failure/moratorium, whichever is earlier.</li> </ul> <p>(Paragraph 4.10)</p>	No action taken.
<i>Institutional Coverage</i>	<ul style="list-style-type: none"> <li>• While the deposit insurance cover for banks would continue to be compulsory, it would not be obligatory for the Corporation to provide it (Paragraph 4.18).</li> <li>• Banks, which at present enjoy the deposit insurance cover but do not meet the following criteria, should be excluded from the purview of deposit insurance: (i) Non-compliance with CRAR prescriptions (not mandatory for RRBs and cooperative banks) and (ii) Entities with CAMEL rating of “C” or below consistently for three years. Besides, if the Corporation notices any deterioration of the</li> </ul>	No action taken.

Area	Reform Measure	Current Status
	<p>financial position of the weak banks within the stipulated three years, deposit insurance coverage may be withdrawn. (<i>Paragraph 4.20</i>).</p> <ul style="list-style-type: none"> <li>• DFIs are not under the same regulatory regime as that of banks. As they transform themselves to banks or NBFCs, as envisaged by the Khan Working Group, and would in the former case be covered under Deposit Insurance. (<i>Paragraph 4.21</i>).</li> <li>• It is premature to extend deposit insurance cover to NBFCs. But denying their access to deposit insurance cover indefinitely may not be prudent. Once these entities are adequately regulated and supervised, and there is some degree of regulatory parity vis-à-vis banks extension of deposit insurance could be considered. For this purpose, a review may be made after two years. (<i>Paragraph 4.25</i>)</li> </ul>	
<b>Coverage Level</b>	<ul style="list-style-type: none"> <li>• No change in the present deposit insurance.</li> <li>• But given the relatively high deposit coverage, a limited coinsurance for deposits between INR 90,000 and INR 1,00,000 with a cover of 90% is recommended; deposits up to INR 90,000 will, however, continue to be covered at 100%. (<i>Paragraph 4.14</i>)</li> </ul>	No action taken.
<b>Deposit Insurance Fund</b>	<ul style="list-style-type: none"> <li>• Two deposit insurance funds may be instituted, one for the commercial banks and the other for the cooperative banks. (<i>Paragraph 4.37</i>)</li> <li>• Maintaining a deposit insurance fund of 2% of the insured deposits is thought to be reasonably adequate.</li> <li>• As in the case of the FDIC, whenever a particular fund falls below the threshold level, the premium for that segment will have to be altered in tune with the change in the risk profile. In the case of DIF exceeding the target level, insurance premium will have to be adjusted downwards. (<i>Paragraph 4.38</i>)</li> </ul>	Although not legally mandated yet, DICGC aims at attaining a Reserve Ratio of 2%.

Area	Reform Measure	Current Status
	<ul style="list-style-type: none"> <li>• To test the waters, the Corporation may explore possibilities of re-insuring 2.5% of the insured deposits. (<i>Paragraph 4.39</i>)</li> </ul>	
<p><b>Premium System</b></p>	<ul style="list-style-type: none"> <li>• Risk-based pricing of the deposit insurance premium in lieu of the present flat-rate system.</li> <li>• Pricing of risk-based premium to base on the latest available CAMELS rating. In the case of entities, which do not have a reliable CAMELS rating (like RRBs and cooperative banks), one may have to opt for flat-fee based deposit insurance till the CAMELS database becomes available. However, the flat-fee based premium will be higher than the lowest/best premium rate for the scheduled commercial banks.</li> <li>• Banks, which do not report data to the deposit insurance agency in time and thereby increase the asymmetry of information, may be levied a penalty of 50 to 100 basis points more deposit insurance premium.</li> </ul> <p>(<i>Paragraph 4.33</i>)</p>	<ul style="list-style-type: none"> <li>• In 2006, DICGC set up a Committee called “Committee on Credit Risk Model” for suggesting a risk-adjusted premium system (Chairman: Prof. D M Nachane<sup>18</sup>) which had recommended option-pricing model for India (the report is unpublished). Although theoretically appealing, the use of an option-pricing model is a data-intensive exercise and poses serious challenges, given the banking environment of India.<sup>19</sup> Therefore, the recommendations were kept in abeyance.</li> <li>• Further, in March 2015, another committee called “Committee on Differential Premium System for Banks in India” (Chairman: Jasbir Singh<sup>20</sup>) was constituted to make recommendations for the introduction of risk-based premium in India. The committee has drawn up a system in the lines of the US (and some other countries) system and posted its recommendations in own and RBI’s Web Sites eliciting public</li> </ul>

<sup>18</sup> Professor at Indira Gandhi Institute for Development Research and then a Director on the DICGC Board.

<sup>19</sup> DICGC, 2015, Report of the Committee on Differential Premium System for Banks in India, paragraph 3.2.

<sup>20</sup> Executive Director, DICGC.

Area	Reform Measure	Current Status
		comments and suggestions in September 2015.
<b><i>Withdrawing Credit Guarantee Fund</i></b>	The function of credit guarantee on loans may be withdrawn from the Corporation and DICGC renamed as “Deposit Insurance Corporation”. <i>(Paragraph 4.51)</i>	<ul style="list-style-type: none"> <li>• No bank participates in the credit guarantee schemes of the DICGC and hence those are defunct now.</li> <li>• Name not yet changed as it would require legislative approval.</li> </ul>
<b><i>DICGC Capital</i></b>	<ul style="list-style-type: none"> <li>• The capital of the Corporation may be fixed at INR 5 billion and contributed fully by RBI.</li> <li>• The capital increase should be in a phased manner and be done only after securing the income-tax exemption.</li> <li>• Besides, it should also have a lender of last resort facility from the central bank or the Government. Ideally, it can have collateralized liquidity support from RBI and financial support from the Government to meet any contingencies.</li> </ul> <i>(Paragraph 4.41)</i>	No action taken.
<b><i>Tax Concession</i></b>	Keeping in view the social obligations served by DICGC and also the position that it is not a company within the meaning of the Companies Act, 1956, it should be exempted from payment of corporate tax, as was the practice before December 1986. <i>(Paragraph 4.43)</i>	No action taken.
<b><i>Board</i></b>	<ul style="list-style-type: none"> <li>• DICGC should not have any nominee from the insured entities in its Board.</li> <li>• The representatives of the supervisors of the commercial banks and cooperative banks of fairly senior ranks should be in the Board.</li> <li>• In addition, 5 directors may be nominated by RBI.</li> </ul> <i>(Paragraph 4.44)</i>	No action taken.

Area	Reform Measure	Current Status
<b><i>Inspection and Supervision</i></b>	<ul style="list-style-type: none"> <li>• A well-defined platform be statutorily mandated where periodical exchange of information between DICGC and RBI shall take place.</li> <li>• DICGC shall have access to inspection reports, post-inspection discussions, and to be actively involved in action plans for banks and in compliance with action plans.</li> </ul> <p><i>(Paragraph 4.44)</i></p>	No action taken.
<b><i>Investment</i></b>	<ul style="list-style-type: none"> <li>• DICGC should be empowered by a suitable amendment to its Act to invest in instruments other than the central government securities.</li> <li>• DICGC should have an “investment policy”, with the approval of its Board.</li> </ul> <p><i>(Paragraph 4.42)</i></p>	No action taken.
<b><i>Human Resources</i></b>	<ul style="list-style-type: none"> <li>• The reformed DICGC should be lean and have officer-oriented staff of its own with a strong IT base.</li> <li>• DICGC should have the option to recruit its personnel from the market and also have the authority to screen officers who wish to be deputed to DICGC from RBI.</li> <li>• If DICGC has to perform specialized task in order to discharge its envisaged function, the salary structure of its staff should be in line with the market expectations so that it will have adequate response to its recruitment from the market.</li> </ul> <p><i>(Paragraph 4.46)</i></p>	No action taken.



Area	Reform Measure	Current Status
<b>Liquidator and Receiver Role</b>	<ul style="list-style-type: none"> <li>• DICGC should be assigned the role of liquidator and receiver.</li> <li>• It should be vested with powers to appoint liquidator/receiver in the case of failure of the insured entity; to appoint parties to take over the assets, sell them and realize the proceeds to meet the liabilities of the insurer; to take steps and to adopt suitable measure for the reconstitution of the insured entity or for the amalgamation of the insured entity with any other institution.</li> </ul> <p><i>(Paragraph 5.7)</i></p>	<p>No action taken. Meanwhile, the Report of the Financial Sector Legislative Reforms Commission (Chairman: B N Srikrishna) (2013) recommended for subsuming DICGC into the proposed Resolution Corporation, which will work across the financial system. The matter is under high-level debate and discussion.</p>
<b>Public Awareness</b>	<ul style="list-style-type: none"> <li>• Deposit insurance agency to educate the people about the safety nets available for financial entities through various media.</li> <li>• Branches of various banks should be advised to display clearly in the branches that the depositors' money is insured up to INR 1,00,000 and elucidate the point.</li> <li>• The deposit insurance agency must develop a suitable logo, which would be displayed in the bank branches, account opening forms, etc., so as to instil necessary confidence among the depositors.</li> </ul> <p><i>(Paragraph 5.13)</i></p>	<ul style="list-style-type: none"> <li>• DICGC disseminates policy changes/information/data through circulars to all insured banks, press release in newspaper/RBI Web Site, and its own annual report and Web Site.</li> <li>• The detailed information relates to deposit insurance system in India, FAQs, manner of settlement of claims, list of insured banks, details of claims settled, such as, name of the bank along with the amount, circulars issued to insured banks, etc.</li> <li>• For the convenience of insured banks, it has posted forms of periodic returns required to be submitted by them and is also in the process of uploading a Premium Calculator on its Web site.</li> <li>• DICGC has forwarded a booklet on FAQs on deposit insurance together with a copy of the poster containing basic information on deposit</li> </ul>

Area	Reform Measure	Current Status
		<p>insurance to all banks, to be printed according to their requirement in the language generally read and understood by their account holders. The booklet on deposit insurance is to be made available to the depositors and the poster is to be displayed prominently in the premises of every branch.</p> <ul style="list-style-type: none"> <li>• A logo has also been developed (see Annexure 8.3).</li> </ul>

The recommendations made by the group were examined by DICGC in consultation with RBI following which an outline of the Deposit Insurance Corporation Bill, 2000 (without specifying the drafting details of the legislation) was sent to Ministry of Finance (MoF), Government of India (GoI) on September 13, 2000.

In a related development, the then Finance Minister in his Union Budget speech for 2002-03 announced that DICGC would be converted into the Bank Deposits Insurance Corporation (BDIC) to make it an effective instrument for dealing with distressed banks, and appropriate legislative changes would be brought in for this purpose.

The Ministry of Finance, Government of India decided that before proposing legislative changes the FDIC model should be closely studied and a suitable model evolved for India. FDIC is not only the oldest deposit insurance agency in the world but also the most successful one in resolving banking crises in the US. In fact, FDIC has become the role model for many deposit insurance agencies across the globe. In view of these developments, a joint team of the Finance Ministry, RBI and DICGC visited the US in June 2002 to have discussions with FDIC and other US banking regulatory and supervisory agencies. Basically, the objectives of discussions were two-fold:

- To gather knowledge about the functioning of the US system and
- To evolve a framework for adapting the US system in India, given the constraints of the Indian system.

The members of the study team were:

1. Shri S.K. Purkayastha, Additional Secretary (Financial Sector), Banking Division, Ministry of Finance, Government of India, New Delhi.
2. Shri G.P. Muniappan, Deputy Governor, RBI, Mumbai.
3. Shri A. Sinha, Chief General Manager, DICGC, Mumbai.
4. Shri O.P. Bhatt, Officer on Special Duty, State Bank of India, Washington (Shri A. Lal, Deputy General Manager, also joined in).
5. Shri M.R. Das, Assistant General Manager (Economist) from State Bank of India on deputation to DICGC, Mumbai.

The team submitted its report titled *Modelling Bank Deposits Insurance Corporation* in January 2003 to the Union Government. Based on the team's Report, an outline of the Bank Deposit Insurance Corporation (BDIC) Bill, 2003 to replace the DICGC Act, 1961 was submitted to MoF, GoI on February 28. Subsequently, DICGC made a presentation on the salient features of the Bill to MoF, GoI on June 23. Based on the presentation the following two suggestions were confirmed by MoF, GoI on November 28:

- BDIC should have powers to initiate remedial/rehabilitation measures for failing banks if the regulatory/supervisory authorities do not act promptly.
- RBI should have a senior officer nominee dealing with regulation and supervision issues on the Board of BDIC to facilitate exchange of information.

Further, the RBI Governor indicated that DICGC should work on a new law taking into consideration the latest international best practices, but tailored to Indian financial conditions.

In 2008, the *Committee on Financial Sector Assessment* (Chairman: Dr. Rakesh Mohan) stressed the need for maintaining an adequate and solvent DIF for ensuring public confidence in the DIS. It also recommended grant of exemption to DICGC from paying income tax.

Another important committee called *Committee on Financial Sector Reforms* (Chairman: Dr. Raghuram G Rajan) (2008) had deliberated on Deposit Insurance and made several recommendations. It had recommended strengthening the capacity of DICGC to both monitor risk and resolve a failing bank, instilling a more explicit system of prompt corrective action and making Deposit Insurance premiums more risk-based. The observations and recommendations of the Rajan committee are as under:

- DICGC lacks the financial capital required to cope with the failure of one or more large bank in a business cycle downturn. This in tune with the Capoor committee recommendation that the capital of DICGC needs to be augmented from INR 5 billion today to INR 100 billion.

- It lacks the operational capability to close down a bank swiftly, cleanly and pre-emptively. In the case of a troubled bank, the timing of DICGC intervention is of essence. DICGC should take care that the bank is fixed when it is a ‘going’ concern, not a ‘gone’ concern.
- If DICGC waits too long, the net worth of a weak bank can become deeply negative, with substantial cost to the public exchequer. If DICGC steps in early to resolve a bank that cannot raise capital from the market, the cost of resolution is much lower. Thus, the timing of intervention, if any, is crucial.
- DICGC needs to be independent of RBI. This has several benefits: (a) it will help reduce the feeling on the part of DICGC that it has access to unlimited resources of RBI and (b) it will encourage DICGC to think without any influence from RBI. Distancing DICGC from the banking regulator helps induce independence of thought and make pre-emptive decisions about the closure of a bank. In fact, the Capoor committee had also hinted at this when it had recommended that DICGC should have its own staff.
- DICGC should build up capacity for quick and clean resolution of troubled banks; otherwise bank runs cannot be prevented. It should avoid aberrant mergers of weak banks with strong ones.
- DICGC should consider and possibly enact automatic triggers for corrective action and bank resolution. This will keep at bay unnecessary political interference in weak bank resolution.
- RBI should make corrective action mechanism transparent which again should not be too flexible to allow subjectivity and promote regulatory forbearance.
- DICGC should fortify its MIS, especially the information which have a bearing on a bank’s safety and soundness.
- *Status quo* should be maintained in respect of the current coverage limit of INR 1,00,000 until per capita GDP exceeds INR 1,00,000. The committee terms India’s deposit insurance system as “unusually generous”.

### Summing Up

- *Reforming the deposit insurance system emerged as one of the major items of the second phase of financial sector reforms in India. The **Narasimham Committee Report on the Banking Sector Reforms (1998)**, while focusing on the structural issues, observed: (a) No need to increase the insurance limit (i.e., INR 100,000) further. And (b) Need to shift from the ‘flat’ rate premiums to ‘risk based’ or ‘variable rate’ premiums.*

- *The **RBI Report on Deposit Insurance Reforms (1999)**, the first serious attempt to reform DIS, made wide-ranging reform proposals including coverage of DIS, premium system, DIF, structure of DICGC, etc. However, many are not yet acted upon.*
- *The then Finance Minister in his Union Budget speech for 2002-03 announced that DICGC would be converted into the **Bank Deposits Insurance Corporation (BDIC)** to make it an effective instrument for dealing with distressed banks, and appropriate legislative changes would be brought in for this purpose.*
- *Following the Budget announcement, a **High-Powered Committee** of the Ministry of Finance, RBI and DICGC visited US to study the FDIC system and submitted a report to MOF.*
- *Subsequently, based on a DICGC presentation on the salient features of the Bill to MoF, the following two suggestions were confirmed by the latter: (a) BDIC should have powers to initiate remedial/rehabilitation measures for failing banks if the regulatory/supervisory authorities do not act promptly and (b) RBI should have a senior officer nominee dealing with regulation and supervision issues on the Board of BDIC to facilitate exchange of information.*
- *Further, the RBI Governor indicated that DICGC should work on a new law taking into consideration the latest international best practices, but tailored to Indian financial conditions.*
- *In 2008, the **Committee on Financial Sector Assessment** stressed the need for maintaining an adequate and solvent DIF for ensuring public confidence in DIS. It also recommended grant of exemption to DICGC from paying income tax.*
- *The **Committee on Financial Sector Reforms (2008)** made several recommendations which, inter alia, included: (a) strengthening the capacity of DICGC to both monitor risk and resolve a failing bank, (b) instilling a more explicit system of prompt corrective action and making Deposit Insurance premiums more risk-based, (c) making DICGC independent of RBI and (d) maintaining status quo on monetary coverage of deposit insurance.*

## **Part – E: Policies towards Comprehensive Reforms**

**Part E contains the goals of the research work It consists of 6 Chapters (Chapters 10 to 15) which contain our recommendations in respect of various components of the present DIS.**

**Chapter 10 pleads in favour of deposit insurance emerging, in 3 to 5 years, as a mainstream constituent in the Indian banking system. Chapter 11 talks of revamping the coverage of deposit insurance in terms of institutions and monetary limit for depositors. Chapter 12 discusses various approaches to the most critical issue of risk-based system of deposit insurance pricing and recommends one which can work in the present Indian milieu. Chapter 13 examines how to maintain the integrity and adequacy of DIF. Chapter 14 presents our arguments as to how to transform DICGC into a resolution institution for failed or troubled banks – currently, a much-discussed topic in the country. Chapter 15 focuses on how to reorganize DICGC so that it can take on the challenges effectively when DI becomes important.**

**We have challenged many of the recommendations made in the official reports and provided alternatives. All the recommendations reflect the contemporary realities and take into account the prescribed global best practices.**

## Chapter X

### Emerging Significance of Deposit Insurance: An Assessment

Unlike in many advanced economies, in India, the Deposit Insurance story is rather of low profile. As mentioned earlier, a constellation of factors has led to this. To recapitulate these are as under:

- PSBs as well as their depositors confidently perceive that they are fail-safe, as they have been historically salvaged by the government from difficult situations howsoever extreme they have been.
- The above perception of the public also extends to the non-PSBs, and they feel, mistakenly though, that the government will protect them, and historically, it has been true to some extent.
- Most of the public do not know that banks, like any other business, *can* and *do* fail. In short, depositors' discipline on banks is non-existent. Simultaneously, the concerned authorities have hitherto, by and large, favoured the TITF doctrine.

This Chapter is divided into 2 Sections: Section 1 puts forth several arguments to demonstrate that the requirement of a modernized DIS can no longer be underplayed, and Section 2 explores how urgent the need is.

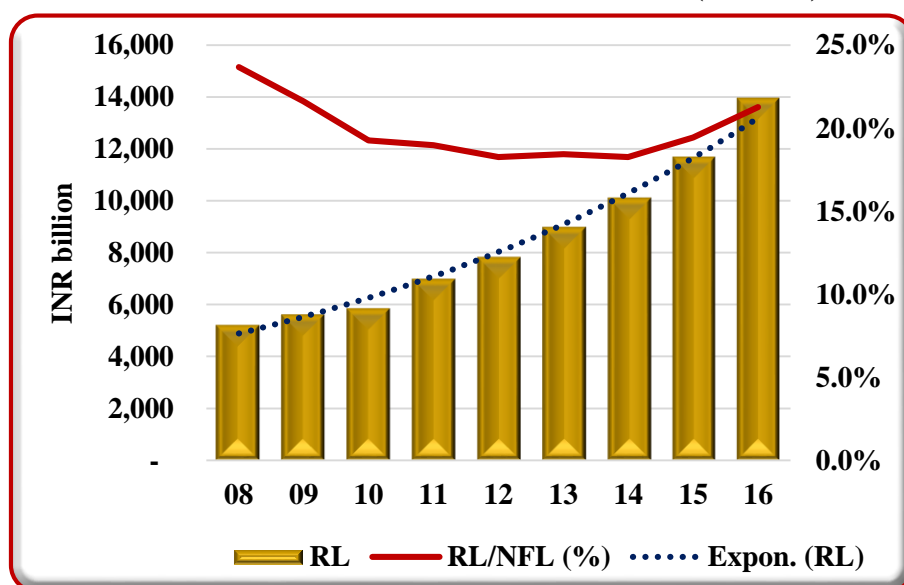
#### Section 1: Arguments For

Despite the above attitudes, going by the way the banking sector is trending now, the role of Deposit Insurance is expected to emerge as significant and, coupled with change in perception and increasing awareness among the people, it will influence the shape of the banking sector in future. Some of these trends are elaborated below:

- i. *Increasing participation by retail customers:* As noted earlier, retail depositors abound in India. The share of retail depositors in banks is slated to increase further, a favourable outcome of the emergence of the burgeoning middle class as one of the major economic forces in recent times. According to a report by PricewaterhouseCoopers, "*Future of India: The Winning Leap (2015)*", in 2010, the middle class constituted an estimated 48% of the total 1.19 billion Indian people which is projected to surge to 78% of the total 1.36 billion people in 2021. The middle class phenomenon is not confined to urban/metro areas; it is equally visible in rural/semi-urban areas. One of the major reasons for this has been the unprecedented expansion of the services sector in the

Indian economy which today contributes over 57% to GDP at current prices. A significant chunk of the middle class prefers to save in banks not because the post-tax real return on bank deposits is attractive but for the safety of their hard-earned income and by becoming a bank account holder s/he can avail of several ancillary services that banks offer at reasonable rates and conveniently (e.g., safe deposit vaults, money transfer, bills payments, etc.) and more importantly, s/he can avail of various kinds of retail loans like housing loans, consumer durables loans and education loans at lower rates and on easier terms than what the non-banks offer. This has led to a strong growth in the retail loan portfolios of banks as evidenced by the fact that these grew at an EGR of 12.4% between March-end 2008 and March-end 2016 and constituted 21.3% of their total non-food loans as at March-end 2016 (Chart 10.1). As a matter of fact, retail loans are in an upswing during the last couple of years.

**Chart 10.1: Retail Loans Portfolio of SCBs (2008-16)**



$$Y = 4314.5e^{0.1242x}, R^2 = 0.9858, \text{RL} - \text{Retail Loans}, \text{NFL} - \text{Non-Food Loans}.$$

Source: Based on RBI data.

Furthermore, the Financial Inclusion programmes have led to opening of millions of individual accounts, especially in the rural and semi-urban areas. To cite a recent example, under the comprehensive Financial Inclusion Programme launched by the Prime Minister titled *Prime Minister's Jan-Dhan Yojana (PMJDY)* on August 28, 2014, over 217 million accounts have been opened comprising 61.4% in rural and 38.6% in urban areas by May 4, 2016. A total sum of INR 374.45 billion has been mobilized during the same period. This has earned the country a distinction in the *Guinness Book of Records*. One may argue that the incidence of zero balance accounts therein is high



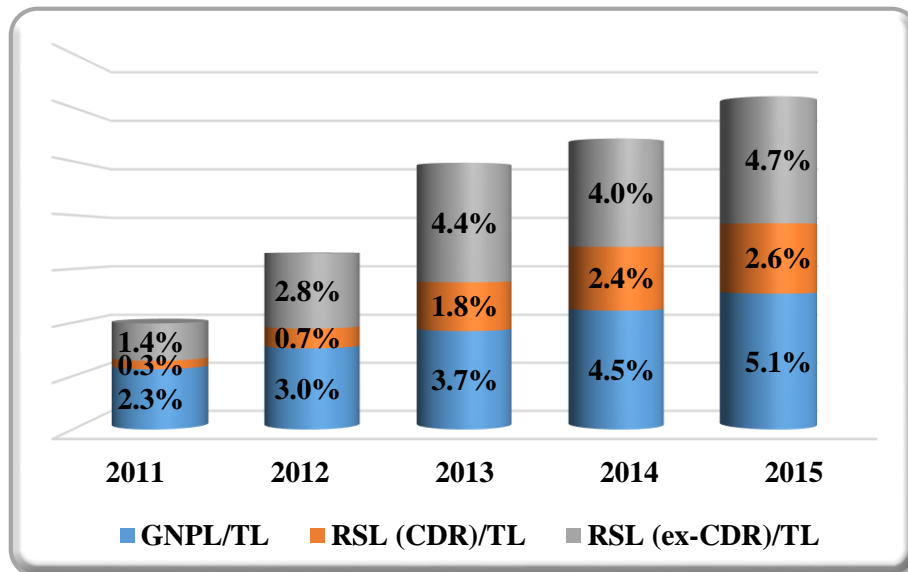
(26.36%) but opening of the account is just the first step for mobilizing deposits from the unbanked or underbanked people who have hitherto not even seen the face of a bank office or staff. Moreover, it has steadily declined from over two-third a year back.

Private banks, especially the new ones are aggressively targeting retail customers not only for marketing their core banking products but also fee-based products – predominantly the card business and electronic payment products. Instances are ample that these banks begin their customer acquisition right from the doorstep of colleges/universities so that the students continue to bank with them even after getting employment (the so-called ‘catch-them-young’ policy). As at March-end 2015, the share of other income of 7 New Private banks together constituted about 18% of their total income compared to PSBs' at a tad above 10%. Between March-end 2005 and March-end 2015, other income of these New Private banks increased at a CAGR of 21.9% compared to 12.1% in the case of PSBs. And, private banks, unlike their public sector counterparts, do not enjoy State immunity in case they fail.

- ii. *Elevated stressed conditions of PSBs:* Even though PSBs are considered TITF, their financial conditions are increasingly coming under stress owing to a blend factors, both exogenous and endogenous. Inadequate macroeconomic revival coupled with turbulent policy regimes and unwarranted external interference in banks’ business have exogenously contributed to soaring stressed loan assets, which have been further aggravated endogenously by their past baggage and inadequate risk management. Stressed loans, defined as Gross Non-Performing Loans (GNPLs) plus Restructured Standard Loans (RSLs) of PSBs multiplied over 5 times from INR 1,314 billion at March-end 2011 to INR 6,798 billion at March-end 2015. As ratio to Total Loans these leapt from 4.0% to 12.4% over the same period (See Chart 10.2 for the composition of Stressed Loans).<sup>21</sup>

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<sup>21</sup> In order to arrive at a more inclusive and realistic assessment of the total impaired assets amounts in respect of all the restructured assets as also amounts written off should be taken into account. However, the latter has been for the first time made public on an RTI petition only this year.

**Chart 10.2: Stressed Loans of PSBs (2011-15)**

Source: Based on RBI data. TL – Total Loans. CDR – Corporate Debt Restructuring.

Another aspect that adversely affects the banks' asset quality is corporate leverage and its impact on banks' balance sheets, particularly 'double leveraging' through holding company structures and the pledging of shares by promoters.<sup>22</sup> Subdued operating ratios of PSBs have added fuel to the fire. In addition, the deadline for meeting the BASEL III capital norms is overpowering. According to recent RBI estimates, PSBs' capital requirement may exceed the estimated INR 2,600 billion required to meet the Basel-III norms by 2018-19.<sup>23</sup> PSBs' ability to access the market for fresh equity to shore up the capital base and Capital to Risk-weighted Assets Ratio (CRAR) is highly contingent on further dilution of government ownership and/or availability of other avenues for raising resources.

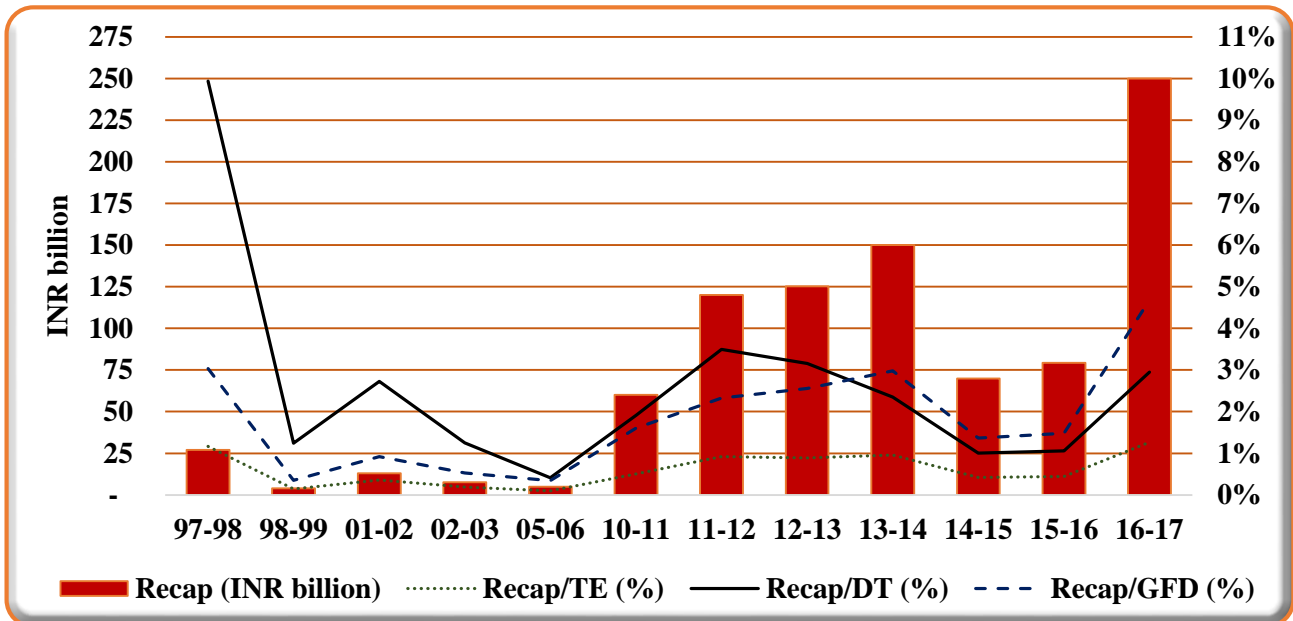
On the other side, the government's earlier easy recourse to recapitalization of PSBs through annual budgets is now becoming increasingly difficult by the excruciating compulsion for adhering to the deficits benchmarks. This is reflected by the government going for 'selective' recapitalization of PSBs in 2015-16 wherein it provided fresh capital of INR 69.9 billion to those which were more efficient as per the stipulated efficiency parameters than others. For a prolonged period, the whole process of recapitalization, not being adequately matched by expected improvement in the recapitalized banks' performance, is proving to be uneconomical, ideologically

<sup>22</sup> RBI, "Financial Stability Report, December 2014".

<sup>23</sup> The Economic Times, January 25, 2016.

unhealthy and taxpayer-unfriendly. Chart 10.3 illustrates some of the dimensions of recapitalization ‘tradition’.

**Chart 10.3: Government Recapitalization of PSBs - Some Dimensions**



*Recap - Recapitalization. TE - Total Expenditure. DT - Direct Taxes. GFD - Gross Fiscal Deficit of the Centre. Source: Budget Documents (various years).*

Thus, if some of these banks are *not* to be kept as ‘zombies’, then either they have to be privatized or mergers/acquisitions should take place or perhaps in the worst case, be taken out of the ambit of the TITF doctrine. Even in the case of merger/acquisition, it is probable that the acquiring bank, depending on the level of earning assets of the merging bank, may refuse or find it strenuous to absorb all its deposit liabilities. DIC may step in to make good the gap, but it would depend on the size of deposit liabilities of the merging bank and resources available with DIC as well. Whatever the case may be, this will have implications for the DIS, directly or indirectly.

- iii. *Mind-set changes imminent:* The stubborn mind-set of the policy and even the decision makers at the political level that prevailed earlier against dilution of government’s majority shareholding in PSBs is gradually fading. There could possibly be two kinds of generic developments: (a) favourable, in which the financial conditions of PSBs radically turn around, may be due to improved macroeconomic conditions or well-planned reforms or endogenously, and the government gets a good valuation for its shareholding and decides to dilute its stake and (b) unfavourable, in which the economic imperatives combined with recapitalized banks’ unresponsiveness lead to annulment of

the recapitalization programme. In any event, it may require changes in the existing Deposit Insurance arrangements.

- iv. *Cross-subsidization to stop:* It is time that a solution to the perennial threat that the fragile cooperative banking sector poses to the DIS was found and implemented. Apart from the weak banks extracting a rent from the banking system as a whole, at a more practical level, the process of cross-subsidization by paying off failed cooperative bank customers from the premium amount collected from the commercial banks has to be phased out. The extent of the asymmetry is illustrated in Table 10.1. This doesn't seem appropriate.

**Table 10.1: Commercial and Cooperative Banks – Extent of Cross-subsidization (March-end 2015)**

<b>Bank Type</b>	<b>Share in Insured Deposits</b>	<b>Share in Premium Collected</b>	<b>Ratio of Claim Settled to DIF</b>	<b>Ratio of Balance Outstanding to DIF</b>
<b>Cooperative</b>	12.4%	7.0%	9.2%	6.8%
<b>Commercial</b>	87.6%	93.0%	0.6%	0.2%

*Source: Based on DICGC data.*

It is at times argued that some cross-subsidization is inherent in any kind of insurance, but as far as the cooperative banks and commercial banks interface in this regard is concerned, it has been too long and too large to be sustainable.

- v. *DIS reforms overdue:* The Indian DIS is age-old, having been set up in the Sixties. Subsequently, several countries have set up their DISs and many have refurbished too. The Indian DIS has been hardly touched by the financial sector reforms unleashed since 1991, despite some systematic attempts made in the late-1990s and early-2000s as mentioned earlier. However, in the meantime, the banking sector has witnessed sea change, especially in the context of risk-return trade-off. Apart from the traditional credit and interest rate risks, operational risks and within that, risks especially emanating from the fast mushrooming technology-based products, and systems and procedures pose gargantuan threat to the stability of the banking sector unless appropriate risk mitigation measures are instituted in time. The risk-return frontier will continue to enlarge *ad finitum* along with the reforms process and technological advancement which would compel DIA to effect corresponding changes in its systems and procedures. In addition, the resolution regime for the failed financial institutions is

becoming increasingly deficient in the changing environment, thus evoking the need for streamlining the process.

- vi. *Resolution process imperative*: The next imperative is to establish a well-defined, well-structured and seamlessly integrated resolution mechanism for the financial institutions in trouble. The urgent need for this has been felt globally as also in India in the aftermath of 2007-09 financial crisis. Consequently, the Financial Stability Board (FSB) issued a framework in 2011 called *The Key Attributes of Effective Resolution Regimes for Financial Institutions* (the ‘Key Attributes’) which it recommends for countries to follow. Following this, in India, the government-appointed *Financial Sector Legislative Reforms Commission* recommended in 2013 for a single Resolution Corporation for financial institutions.<sup>24</sup>

At present, India lacks a special resolution regime or comprehensive policy or law on bankruptcy exclusively for the financial institutions as a whole. However, there are some provisions contained in various Acts which empower the respective regulator/supervisor and/or the Central government to resolve different types of problems of financial institutions in India.<sup>25</sup> Therefore, at the instance of the sub-Committee of the Financial Stability Development Council, RBI constituted a High Level Working Group (Chairman: Anand Sinha then an RBI Deputy Governor and Arvind Mayaram then the Union Finance Secretary) in January 2013 which submitted its report in January 2014 and the report was released for public consultation in May 2014. However, no action has yet been taken on this.

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<sup>24</sup> *Report of the Financial Sector Legislative Reforms Commission*, Chapter 7, pp.69-79.

<sup>25</sup> Banking Regulation Act, 1949 and Companies Law for banking companies (private sector banks, foreign banks and Local Area Banks); State Bank of India Act, 1955, Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970/1980; SBI (Subsidiary Banks) Act, 1959 and Banking Regulation Act, 1949 for public sector banks including State Bank of India and its subsidiaries; Banking Regulation Act (As Applicable to Co-operative Societies), 1966, the Multi-State Co-operative Societies Act, 2002 and respective State Co-operative Societies Acts for co-operative banks (State Co-operative Banks, District Central Co-operative Banks and Primary Co-operative Banks); Regional Rural Banks Act, 1976 and Banking Regulation Act, 1949 for Regional Rural Banks; Insurance Act, 1938, Insurance Rules, 1939, Insurance Regulatory and Development Authority Act, 1999 and the regulations framed thereunder for insurance companies; The Securities Contracts (Regulation) Act, 1956, The Securities and Exchange Board of India Act, 1992 and Stock Exchanges and Clearing Corporations Regulations, 2012 for Securities companies/brokers and stock exchanges; The Reserve Bank of India Act, 1934 and Companies Law for Non-Banking Financial Companies; and Pension Fund Regulatory and Development Authority Act, 2013 for pension companies.

vii. *Interconnectedness and Contagion:* Banks, insurance companies and Asset Management Companies-Mutual Funds (AMC-MFs) are fairly strongly interconnected. This had precipitated in inter-sectoral contagion globally, as evidenced by the 2007-09 financial crisis. In the Indian context, the banking sector, according to RBI, “has remained reasonably interconnected”<sup>26</sup> and “connectivity remained consistent over the last four years, with a few major banks dominating the system”.<sup>27</sup> Between March 2012 and September 2015 while the connectivity ratio gradually declined from 27.7% to 22.5%, the cluster coefficient remained relatively steady at around 40%, albeit a generally declining trend. Table 10.2 presents the extent of interconnectedness among banks, insurers and AMC-MFs).

**Table 10.2: Financial Sector Interconnectedness**

Items	Unit	March			
		2012	2013	2014	2015
<i>Insurance Companies</i>					
<b>1. Banks' Investment in Insurance Companies</b>	% of total assets	0.06	0.09	0.02	0.04
<b>2. Funds Raised from Insurance Companies by Banks</b>		2.80	2.80	2.70	4.00
<b>3. Insurance Companies' Investment in Banks</b>					
<b>3 (a) Short-term</b>	% of AUM	2.20	2.00	2.00	NA
<b>3 (b) Total</b>		12.70	13.40	12.90	NA
<i>AMCs</i>					
<b>1. Banks' Investment in AMCs</b>	% of total assets	0.09	0.15	0.04	0.15
<b>2. Funds Raised from AMCs by Banks</b>		3.30	2.90	3.30	2.60
<b>3. AMCs' Investment in Banks</b>					
<b>3 (a) Short-term</b>	% of AUM	34.80	27.00	31.80	16.60
<b>3 (b) Total</b>		43.00	35.30	39.90	24.70

Source: Based on RBI data.

In addition, a secondary level of interconnectedness emerges via various interrelated segments of the financial markets to which banks are exposed.

The contagion analysis by RBI reveals that “The failure of the top net borrower bank could result in a loss of 33.3% of Tier-I capital of the banking system (under the joint solvency

<sup>26</sup> RBI: *Financial Stability Report, June 2015*, paragraph 2.53.

<sup>27</sup> RBI: *Financial Stability Report, December 2015*, paragraph 2.57.

liquidity contagion), while the failure of the top net lender bank could result in a loss of 35.3% of Tier-I capital, subject to certain assumptions made with regard to contagion.”<sup>28</sup>

### **Section 2: How Imminent are the Changes?**

The possible factors elaborated above are plausible to necessitate changes in the DIS. However, the question is: how imminent are these changes? Or, what are the determinants of the ‘velocity’ of the above-mentioned factors to materialize?

1. Although some changes in the mind-set as to the government ownership of PSBs are visible, a consensus is yet to develop in the political and bureaucratic sphere. Even no serious thought has yet crystallized. The required change in the mind-set will be drastic, because the country is used to government ownership since the beginning of the planning era. Any decision to reduce government ownership below 51% in PSBs will have implications for government ownership in the public sector undertakings in the real sector too. This is because PSBs provide a convenient conduit for the government to implement its plans and programmes, and this has been incontrovertibly so since the Nationalization/s of the banks or even the insurance sector. Further, the government finds it hard to sell their programmes through the private sector banks. To cite a recent example, in respect of PMJDY, as on May 4, 2016, out of a total of 217.5 million accounts under the programme the private sector banks had opened a meagre 8.1 million accounts, constituting only 3.7%. Therefore, the government will take considerable time to implement such a change.

Furthermore, it does not seem feasible, especially in the short-run, as the government lacks majority in the Upper House (Rajya Sabha), and it is finding extremely strenuous to get equally important Bills like GST Bill and Land Bill passed. Even the government moved the Insolvency and Bankruptcy Code, 2015 in the Lok Sabha in the garb of a Money Bill in order to eschew any possible bottleneck in the Rajya Sabha. Similarly, the Insurance Bill could be passed after a lot of time.

Next, the mind-set of the trade union leaders should also undergo sharp change. PSBs with a strong workforce of nearly 1 million is quite well-represented in the national-level government-recognized trade unions. The workforce constitutes almost three-fourth of that engaged in the scheduled commercial banks, 68% of that in the Finance,

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<sup>28</sup> RBI: *Financial Stability Report, December 2015*, paragraph 2.61.

insurance, real estate, etc., segment and 5.3% of that in total public sector organized sector workforce. Besides, precedents reveal that normally any major systemic change has been thwarted by the trade unions (e.g., stake dilution in PSBs in the 1990s, merger of Associate Banks with the parent, State Bank of India – which still continues today). Therefore, to expect drastic mind-set changes at the trade union level in the short-run would seem far-fetched.

2. Serious HR related issues are likely to emerge, such as, manpower right-sizing and management of the attendant socio-economic and more importantly, emotional issues. Such problems cannot be ruled out even if some PSBs are merged with each other because (a) HR policies differ from one PSB to another and because of this (b) the stronger bank would not give all its benefits to the employees of the weaker or merging bank, (c) many employees of the weaker or merging bank would find it difficult to lose their original identity and consider it diminutive to be identified as the employee of the bank merged with, and (d) the employees of the stronger bank may look down upon those of the weaker bank. In view of these issues, there has been no merger of PSBs from the time New Bank of India was merged with Punjab National Bank in the 1980s.
3. NPA is definitely a big issue; however, there are signs, albeit bleak, that it will be contained in the medium-term, if not in the short-run. Consensus is building in the political and bureaucratic sphere to have suitable mechanisms so that resolving failures of bank-financed enterprises and recovering dues by banks becomes easier and faster. The Bankruptcy Code is on its way; however, there are several prerequisites, which may require time and energy, for successful implementation of the Code.

The most essential prerequisite is to have market/s for the bank-financed assets. The word ‘market’ warrants some contextual emphasis here. The market/s for the bank-financed assets, which will be ‘specialized’ market/s, would comprise special instruments, intermediaries, participants - both individuals and non-individuals, systems (including information system) and procedures, and last but not least, a set of legally enforceable laws, besides many practices which may be quasi-legally enforceable, but are to be abided by the market/s.

Indian banks, universal in their functioning, have financed a gargantuan spectrum of assets starting from consumer durables to automobiles to real estate to huge manufacturing and infrastructure projects. Do we have ‘market/s’ for this grand medley



of assets juxtaposed against the above-mentioned definition? No. It has to develop and develop fast in a transparent and robust way. Or else, assets will be sold much below their equilibrium prices, even at ‘fire-sale’ prices. Many may not find takers too. This would not help banks. The basis reason why Asset Reconstruction Companies fell short of making any meaningful dent is the lack of ‘market/s’ for the bank-financed assets.

And, the whole process has to be carried out on 'least-cost' basis.

Second, at the level of banks, there will be an urgent need to have a cadre of officials who can operate in this market, diligently, intelligently and nimbly. Do banks have it, now? Probably, not. In order to minimize cost if banks ‘transform’ some of their generalist officers to perform the job, then the fruitfulness of the arrangement will await ground-level tests. Banks, in other words, will essentially require specialists.

One has to study the experience of a few banks which, probably, to test the waters, have started e-auctioning some of their assets, especially in the real estate sphere.

On the legal side, one would require separate ‘commercial’ courts and a separate cadre of legal professionals to deal with the cases. Maybe, at the beginning, the legal system will have to lean on expertise from the advanced countries where such markets and systems are well-established.

Besides, several laws – banking or non-banking and antiquated or new – will require rationalization and coherence.

The existing recovery mechanism like DRTs, Lok Adalats, etc., are also being strengthened. Moreover, PSBs are today in ‘once-bitten-twice-shy’ mood, and therefore, they will definitely wait for, *inter alia*, getting more teeth to recover their dues before lending afresh.

4. PSBs today are well-capitalized and will continue to be so though the fact remains that it will be through government recapitalization until and unless the NPA imbroglio fades and the government can dilute some of its stake through the market when the stock prices become more lucrative. As at March-end 2015, all PSBs and Private Banks had CRAR above the benchmark – both in respect of BASEL II and III
5. Finally, RBI’s ever conservatism has always worked in favour of the banking sector. Pre-emptions through cash reserve and statutory liquidity reserve requirements, lender of last resort facility, restrictions on exposure to risky segments like capital, commodities and real estate markets, cautious approach to allowing highly risky

derivatives, and regulatory and supervisory forbearance are some of the examples in point, even though RBI's conservatism, especially relating to the introduction of complex derivatives has been praised for sealing the contagion during the 2007-09 crisis.

On the basis of the above, we conclude that although there are grounds for changing the DIS, the factors may not materialize within a span of 3 to 5 years. However, one must use the intervening period to refurbish the DIS in a phased manner so that it is ready for the new regime, when it ushers in, and fulfils the *IADI-BIS Core Principles* for a sound and globally benchmarked DIS.

## Summing Up

- *The Chapter focused on the emerging factors in the economic and banking sphere that would necessitate a robust Deposit Insurance System. These factors include:*
  - *Increasing participation by retail customers both on assets and liabilities side of banks.*
  - *Continued high level of stressed assets of PSBs*
  - *Emerging compulsion to phase out the 'tradition' of government recapitalization of PSBs*
  - *Imminent changes in the mind-set of decision makers at political and bureaucracy level*
  - *Need to annul cross-subsidization between commercial banks and cooperative banks as far as payment from DIF is concerned.*
  - *Reforming DIS is overdue*
  - *Need to institute a functionally sound resolution process for the troubled financial institutions*
  - *Continuously increasing interconnectedness among the various segments of the financial sector leading to increasing contagion*
- *The 'velocity' of the changes will be limited by:*
  - *The speed with which political and bureaucratic consensus is built, the necessary Bills are passed by the Parliament and the consequent regulatory changes are brought about.*
  - *Likely trade union problems that may jam the banking activities.*
  - *HR-related issues in banks in case mergers/acquisitions take place in the banking arena.*
  - *The government is trying to mitigate the debt issue which may bring some relief to banks in the medium-term, if not short-run.*
  - *Banks are well capitalized.*

- *RBI's armour has adequate weapons to forestall any system-wide crisis.*
- *Thus, it is concluded that although there are grounds for reforming the DIS, the factors may not materialize within a span of 3 to 5 years. However, the intervening period may be utilized to refurbish the DIS in a phased manner so that it is ready for the new regime, when it ushers in, and fulfils the 'IADI-BIS Core Principles' for a sound and globally benchmarked DIS.*

## Chapter XI

### Revising the Deposit Insurance Coverage

The Chapter is divided into 2 Sections: Section 1 presents our recommendations regarding coverage of deposit insurance in terms of types of banks; and Section 2 dwells upon the present status as to the monetary coverage limit, determinants of the coverage limit and based upon those recommends the policy action for the Indian DIS.

#### Section 1: Institutional Coverage

As discussed in Chapter 8, at present, deposit insurance coverage is extended to all scheduled commercial banks (including RRBs and LABs) and scheduled cooperative banks. The blanket coverage is independent of size, strength and ownership of the banks which seems illogical and unnecessary and has become anachronistic. Since the 1960s, the financial landscape in the country has undergone metamorphic change and therefore, a relook at the institutional coverage of deposit insurance is warranted.

Recently, RBI declared 2 banks, namely, SBI (in the PSB segment) and ICICI Bank (in the new private banks segment) as TBTF based upon the FSB criteria adapted by it to fit the Indian conditions. Being TBTF, stricter capital standards have been prescribed for these 2 banks relative to the other banks.

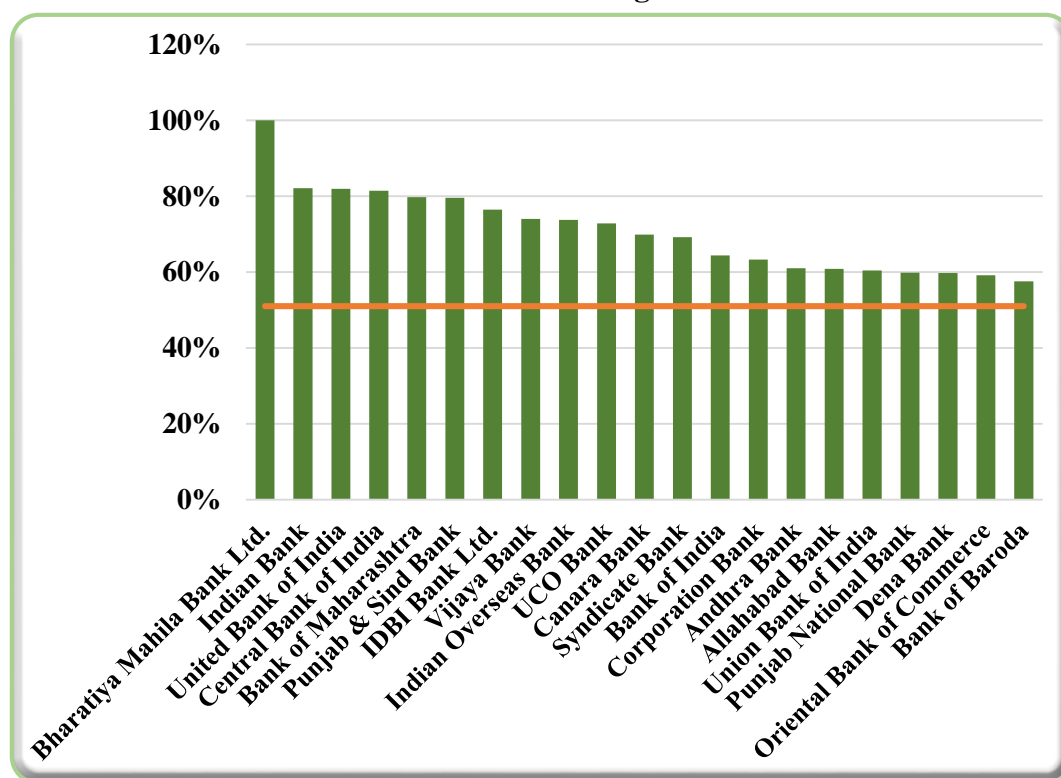
Secondly, the central government is the majority shareholder in the nationalized banks, these are 'not-allowed-to-fail', though not considered as TBTF according to RBI criteria. Year over year, the nationalized banks are being recapitalized through central government budgets which has convinced both the banks and their depositors that they *cannot* fail.

Thirdly, the 5 Associate Banks of SBI do not have any government shareholding. Therefore, it depends on their parents to recapitalize these should any adverse situations arise warranting such an action.

In view of the above, it is recommended that the above-mentioned 2 RBI-recognized TBTF banks and the nationalized banks should be kept outside the ambit of deposit insurance, since these banks will any way be rescued by government action in case they encounter solvency issues. In other words, in the commercial banking sphere, deposit insurance coverage should be made available to the (a) Associate Banks of SBI, (b) old private banks, (c) remaining 6 new private banks, (d) 2 'new' private banks which have started operations recently, (e) RRBs and (f) LABs.

Moreover, in future, as the insured banks expand and become either TBTF or are nationalized, they should automatically be excluded from enjoying deposit insurance coverage. Conversely, when the government shareholding in any nationalized bank falls below 50%, deposit insurance should be extended to that bank. Chart 11.1 illustrates the government shareholding position in the nationalized banks as at March-end 2015.

**Chart 11.1: Government Shareholding in Nationalized Banks**



*The red line indicates the 51% level below which if the government holding in a bank falls, then the bank will lose its 'nationalized' status. Source: Based on RBI Data.*

Such an arrangement of paring institutional coverage of deposit insurance will increase both depositors discipline on banks and market discipline among banks, and ensure a safe and competitive banking system by eliminating moral hazard problem.

## Section 2: Monetary Coverage

### Current Status

The last revision in the coverage limit was in May 1993 when a bullet hike was effected from INR 30,000 to INR 1,00,000 against the background of the Securities Scam of 1992 (popularly known as the Harshad Mehta scam) which had led to the failure and subsequent liquidation of Bank of Karad, a private bank in Maharashtra, referred to earlier. The scam had brought severe distress to the financial sector including the capital market, money market and banks. The confidence of the market men, including the bank depositors, was severely shaken. Thus, the

decision to hike the limit substantially at one go was a decision taken rather in an emergency with a view to pacifying the panic-stricken depositors so that a run on banks could be prevented (the ‘crisis prevention’ role of DIA). However, thereafter, even if more than 2 decades have elapsed, the limit has not been reviewed, either way.

At this level, 92.4% of the depositors and 30.8% of the deposit amount were fully covered as at March-end 2015 vis-à-vis the internationally favoured of 80% and 20% respectively.

During 2014-15, the per capita GDP stood at INR 93,938 (current market prices) and compared to this, the coverage limit was 1% higher. Compared to the per capita NNP (at current market prices), the coverage limit was 12.3% higher.

Internationally speaking, according to the IMF Survey (2014), India is positioned 95/111 countries arranged in the descending order of coverage limit to per capita GDP ratio. And, the ratio has been declining since 2003, as the coverage limit has stayed static as against increasing per capita income. In the case of 94 countries above India, the ratio varies from ‘unlimited’ to 1.1 times, whereas India is 1.07 times.

The Rajan committee in this respect recommends to hold the limit of INR 1,00,000 per person until per capita GDP exceeds INR 1,00,000. It characterizes India’s safety net as “unusually generous.” (pp.147).

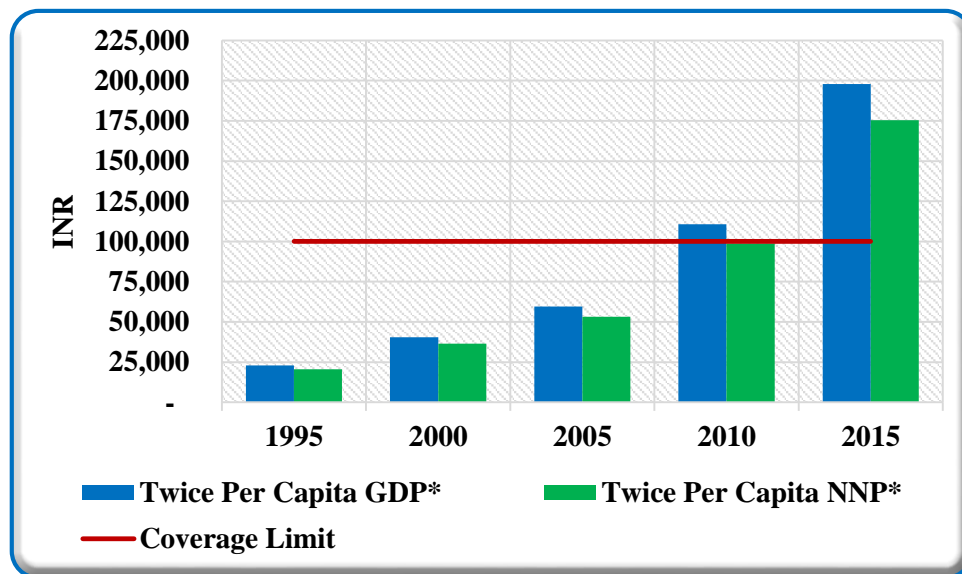
### **Determinants of Coverage Limit**

There are 2 ‘thumb rules’ which give some objectivity for setting the coverage level: (i) On an average, coverage levels should amount to 2 times per capita GDP and (ii) Fully cover 80% of the number of depositors but only 20-30% of the value of deposits, which is known as the “80-20” rule. These are ‘thumb rules’ based on some empirical research but do not have enough analytical backing.

Going by the first rule, this would work out to nearly INR 1,88,000. If per capita NNP is taken into account, it would work out to about 1,75,000.<sup>29</sup> Chart 11.2 illustrates at 5-year intervals the position of the coverage limit vis-à-vis twice per capita income.

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<sup>29</sup> Per capita GDP and per capita NNP taken at current market prices. Twice per capita GDP worked out to INR 1,87,876 approximated upward by us to INR 1,88,000. Likewise, twice per capita NNP worked out to INR 1,75,496, approximated downward by us to INR 1,75,000 (Computed on the basis of figures published in RBI’s *Handbook of Statistics for Indian Economy, 2014-15*) (Table 1).

**Chart 11.2: Twice Per Capita Income vs. Coverage Limit (1995 - 2015)**

*\*At current market prices. Per Capita GDP/NNP figures are taken from Handbook of Statistics on the Indian Economy, 2014-15, RBI.*

Therefore, there is a case for increasing the ‘per depositor’ insurance limit at least by 50%. The second motivation comes from the *RBI Report of the Committee on Customer Service in Banks* (Chairman: M. Damodaran) (2011). The Committee recommended to increase drastically the cover to at least INR 5,00,000 so as to encourage individuals to keep all their deposits in a bank convenient for them. The Committee felt that a way should be found out to insure 100% deposit by making necessary amendments in the relevant Acts. (Paragraph 8 - ‘Other Aspects’).

However, if one goes by the second rule, DICGC today provides full cover to over 90% of the deposit accounts and over 31% of the amount, which exceed the “80-20” rule, to some extent. This looks more akin to the Rajan Committee’s “unusually generous” characterization.

Further, especially at the present juncture when PSBs are beleaguered by huge stockpile of NPLs and the government along with RBI is concerned about salvaging the banks, an increase in the deposit insurance coverage limit may send a wrong signal or more likely to be misinterpreted by the marketmen, ‘ever-overenthusiastic’ media as well as the ‘sophisticated’ depositors that there is some kind of crisis brewing and some banks may not be able to honour their deposit liabilities in some way or the other.

Therefore, keeping in view the ‘unusual generosity’ argument as well as to nip in the bud any speculation as to the banking sector stability, it is opined that the current coverage limit of INR 1,00,000 may not be increased for the time being. It can wait till the current NPA imbroglio eases and/or the actual coverage in terms of the above-mentioned ‘second thumb rule’ somewhat comes down.

Secondly, in order to avoid frequent changes in the coverage limit, every revision should remain valid for next 3 years, unless otherwise warranted by possible bank crises.

Next, the female depositors may be provided an extra 10% to 20% coverage over and above the prevalent monetary coverage limit (i.e., at present, INR 1,00,000 + 10% to 20%) which will enthruse women to open deposit accounts in banks and save regularly and in turn help mitigate the gender gap among the bank depositors. This will help realize the goal of Financial Inclusion in the country.

Nevertheless, the coverage limit is required to be reviewed as and when necessary to factor in inflation, growth in real income, development of new financial instruments, extent of financial inclusion and the impact of these factors on the composition and size of deposits as well as depositors. Moreover, there is a need to balance depositor protection and the discipline depositors exercise on the insured banks.

### Summing Up

- *Institutional coverage of deposit insurance should exclude the 2 RBI-recognized TBTF banks and the nationalized banks. In other words, in the commercial banking sphere, deposit insurance coverage should be made available to the*
  - *Associate Banks of SBI*
  - *Old private banks*
  - *Remaining 6 new private banks*
  - *2 'new' private banks which have started operations recently.*
  - *RRBs and*
  - *LABs*
- *Moreover, in future, as the insured banks expand and become either TBTF or are nationalized, they should automatically be excluded from enjoying deposit insurance coverage.*
- *Conversely, when the government shareholding in any nationalized bank falls below 50%, deposit insurance should be extended to that bank.*
- *The last hike – a bullet one - in the monetary limit of deposit insurance coverage from INR 30,000 to INR 1,00,00 which was effected in 1993 in the wake of the failure of Bank of Karad as an emergency measure still remains in force even after over 2 decades.*
- *At this level, 92.4% of the depositors and 30.8% of the deposit amount were fully covered as at March-end 2015 vis-à-vis the internationally favoured of 80% and 20% respectively.*
- *During 2014-15, the coverage limit was 1% and 12.3% higher than the per capita GDP and the per capita NNP respectively.*



- *Internationally speaking, India is positioned 95/111 from the top in terms of the coverage limit to per capita GDP ratio, though the ratio has been declining since 2003.*
- *There are 2 'thumb rules' for setting the coverage level. Going by the first rule, i.e., on an average, the coverage levels should amount to 2 times per capita GDP, there is a case for increasing the 'per depositor' insurance limit at least by 50%. The RBI Report of the Committee on Customer Service in Banks (2011) recommended for a drastic hike in the coverage limit.*
- *However, if one goes by the second rule, i.e., fully cover 80% of the number of depositors but only 20-30% of the value of deposits, the present corresponding coverages at over 90% and over 31% are, to some extent, in excess.*
- *Further, a hike in the coverage limit, especially in the present scenario when PSBs are beleaguered by huge NPA problem may send a wrong message or be misinterpreted that the banking sector is facing some crisis.*
- *In view of the above 2 reasons, it is recommended to maintain status quo in coverage limit till such time the NPA issue eases and the actual coverage limit climbs down.*
- *In order to avoid frequent changes in the coverage limit, every revision should remain valid for next 3 years, unless otherwise warranted by possible bank crises.*
- *The female depositors may be provided an extra 10% to 20% coverage over and above the prevalent monetary coverage limit (i.e., at present, INR 1,00,000 + 10% to 20%)*

## Chapter XII

### Risk-based Premium System

This Chapter is divided into 3 Sections: Section 1 critically examines the various approaches to determining the risk-based premium system; Section 2 deliberation on the evolving thought process in the Indian context; and Section 3 contains our recommendation as to the system which can be adopted in India and the prerequisites therefor.

#### Section 1: The Approaches

It is widely acknowledged that a flat-rate premium structure *per se* generates perverse incentives that prompt bank managers to take additional unwarranted risks. Equally unequivocal is the argument as to how the more conservatively run institutions are penalized under a flat-rate premium structure. Diamond and Dybvig (1986) observe:

“Deposit insurance premiums should be based on the riskiness of the bank's loan portfolio to the extent that the riskiness can be observed. While this policy cannot prevent banks from taking on too much risk, it could reduce the incentive to do so.”

However, experts' opinions are divided as to whether a more explicit risk-related pricing system could replace the flat-rate system by sterilizing the perverse incentives. Internationally, many proposals for instituting risk-related premium structures have come to the fore. Each proposal has some advantages and disadvantages *vis-à-vis* the flat-rate system. These proposals, in general, are of two categories:

- Those that use the market's assessment of a bank risk, and
- Those that depend on the public insurer's assessment of risk.

#### Using Market Information to Assess Risk

A review of literature shows that there are 3 prominent methods that use market information to price deposit insurance. These methods use (a) Interest Rate on Uninsured Deposits, (b) Private Reinsurance of Deposits and (c) Option Pricing Theory a means to arrive at an appropriate pricing of deposit insurance premium. Let us briefly see what each of these proposals say.

##### *Interest Rate on Uninsured Deposits*

This method has been propounded by Peltzman (1972) and Thompson (1987). The rationale is as follows: DICGC provides coverage up to INR 1,00,000. For depositors with deposits in

excess of this limit, the extra amount is not insured. Thus, if such depositors perceive that the uninsured amount is at risk, they would ask for a higher rate of interest from the bank or place the uninsured funds in another instrument with the same level of risk. Thus, in either situation, there should be a similar risk premium. This risk premium could be used as the basis for determining deposit insurance premium.

#### Limitations

1. Depositors, going by their past experience of dealing with the bank, may perceive that the bank is TITF, and hence will not ask for a risk premium on the uninsured part of their deposits.
2. Apart from the risk perception, rate differential may arise out of market imperfections, such as, transaction costs and/or lack of perfectly competitive markets.
3. Some sophisticated depositors and/or corporate customers may feel that they will get advance signal as to the onset of crisis in their bank and hence will be able to withdraw the deposits before the crisis actually occurs.

In view of the above, the rate paid on the uninsured part of the deposits may not truly reflect the risk premium chargeable and therefore, it would be incorrect to use that for fixing the deposit insurance premium.

#### *Private Reinsurance of Deposits*

This method combines both public and private insurance approaches. According to Baer (1985), one of the proponents of this method, the government would provide the major part (say, 95%) of the insurance leaving the rest 5% to private insurers. The private insurers would determine the market-based prices for both the public and private insurers. In case an insured bank fails, the private insurers would be required to pay off its portion of bank's insured deposits and would share losses with the public insurer on proportionate basis.

#### Limitations

1. For successful operation of the arrangement, the private insurers should be capable of surviving the crisis. This would require them to maintain high reserve ratio against the insured deposits. Further, it should be ensured that when a crisis becomes imminent, the private insurers do not desert the depositors.
2. Secondly, there could be clash of interest between the public and private insurers, especially pertaining to such critical areas as failure resolution.

### *Option Pricing Theory*

Merton (1977) pioneered the use of option pricing framework developed by Black and Scholes in 1973 for determining the value of deposit insurance to a bank. The application goes as follows: Essentially, in purchasing deposit insurance, the bank purchases a put option, and has the right to sell (put) its assets at a price equal to its insured liabilities. If the value of the bank's assets falls below the bank's obligations to insured depositors, the insurer will appropriate the bank's assets and, in turn, pay off insured depositors. This option to sell its assets to the insurer at a price equal to the value of the bank's insured liabilities has value to the bank because it makes insured deposits perfectly safe and allows the bank to attract deposits at a risk-free rate.

When the option pricing framework is applied to the problem of pricing deposit insurance, the relationship between the value of the put (and in turn the 'fair price' of deposit insurance to the bank) and the probability of insolvency is underscored. Notably, changes in the capital position of the bank lead to changes in the value of the deposit insurance contract. For example, if the value of the bank's assets were to decrease relative to the value of its liabilities, the value of the put (or deposit insurance) to the bank's owners would increase. Similarly, an increase in the variability or volatility of the bank's return on assets would increase the probability of insolvency which would be reflected in an increase in the value of the put and deposit insurance to the bank's owners. The put option analogy also reveals other factors that influence the value of deposit insurance. Among these are the lifetime of the put option, as measured by the time between bank examination and the total amount of insured deposits, referred to as the strike or exercise price of the put option. Additionally, the closure rate followed by the regulators will affect the total amount of liabilities covered by insurance and therefore the exercise price.

### Limitations

Adapting option pricing theory to determining deposit insurance premium is fraught with getting adequate and correct information on a regular basis over a long period of time for the insured banks which, more often than not, are unavailable. Even if available, the cost of acquiring information will be exorbitantly high, which, if factored into the deposit insurance premium, banks will find it difficult to comply with.

### **Using Non-Market Information to Assess Risk**

Non-Market information is used when it is either not possible or not desirable to utilize the market's assessment of bank risk. In this case, DIA develops its own methods for assessing risk, administratively. Various proposals have come up on these lines including both *ex ante*

and *ex post*. The former measures the inherent risk of banking activities regardless of the bank's current performance and the latter measures risk after it has materially affected the performance of the bank. However, most proposals have adopted primarily *ex post* measures of risk. The methods adopted by DIAs using non-market information are: (a) Asset Risk Baskets, (b) Ratings based on Inspection Information, (c) Failure Prediction Models, (d) Adjusted Capital Approach, (e) *Ex Post* Settling Up and (f) Multi-test Risk-based Pricing Schemes. Let us briefly see what each of these proposals say.

#### *Asset Risk Baskets*

This method proposes to adapt the capital adequacy guidelines issued by the regulator for determining the deposit insurance premium by adding more parameters to the existing ones. No doubt, the approach gives some flexibility to DIA, but the main problem is whether it is advisable to alter the capital adequacy guidelines which are a product of international agreements.

#### *Ratings based on Inspection Information*

It has been proposed that DIA can use the information contained in the on-site inspection reports of the regulators to determine the deposit insurance premium. The principal objection to this approach emergence from the 'confidentiality' aspect of the inspection reports. Therefore, extreme care needs to be taken to eschew any leakage of such information to the public. Secondly, it would lead to development of an 'adversarial' relationship into the inspection process and the inspectors may encounter restricted flow of information from the insured banks which in turn would adversely affect the whole inspection process whose aim is to give correct feedback to the regulators on one hand and the banks on the other, for improving the affairs of the insured bank.

#### *Failure Prediction Models*

Failure prediction models use historical data on various vulnerability parameters, such as, NPA, CRAR and earnings to forecast the likelihood of a bank's failure, and insurance premium can be linked to each bank's probability of failure. However, these models have not been successful because their predictive power is undermined by the fact that they use all *ex post* measurement of the vulnerability parameters.

### *Adjusted Capital Approach*

This approach aims at adjusting a bank's capital-to-asset ratio by some measure of asset quality or similar other performance measure and assessing premium on this for different banks. Though it reflects simplicity, the method unnecessarily introduces another definition of capital in addition to the risk-based capital and leverage ratio. Secondly, the objective can be achieved by taking into the loan loss reserves.

### *Ex Post Settling Up*

Such proposals have been put forth by Merrick and Saunders (1985), and Benston, et.al. (1986). Under this approach, the insured banks could be required to establish an escrow account with DIA or the bank stockholders could be legally subject to extended liability. If a bank fails, *ex post* penalties may be levied on the stockholders depending on DIA's actual loss undergone. However, this approach would increase the cost of capital for the stockholders as they would demand additional compensation for the increase in their potential losses, should the bank fail. Requirement of additional capital in the escrow account will also increase the capital requirement which cannot be put to any use. Thus, the method has the advantage of restricting the risk-taking capacity of banks but would overly limit the growth of the banking industry.

### *Multi-test Risk-based Pricing Schemes*

This method combines all the approaches discussed above. For example, statistical models can use the inspection information to arrive at risk of failure of a bank or its cost to DIA. This can be verified by the rates paid on uninsured deposits or information derived from option pricing model. Although sounds complicated, since it uses information derived from various models, it can instil greater confidence among the official determining the premium at DIAs.

### *Ex ante vs Ex Post*

Formulating an appropriate *ex ante* measure of risk is hindered by intense informational asymmetry between the insured and the insurer, especially in a banking set-up. Therefore, the majority of the risk-based premium systems is based on *ex post* measures. However, there are 2 important criticisms against *ex post* measures. First, if the premium system recognizes risk only after the asset quality has come under stress, then the premium structure has failed in its prime objective of retarding risk-taking behaviour of banks. However, the counter-argument to this is that the *ex post* penalties can still deter the riskiness of bank activities. Second, *ex post* measures penalize banks when they are in weakened condition and therefore, they can least afford it.

### ***Explicit vs Implicit***

Theoretically or conceptually, both explicit and implicit pricing can achieve the same goal. However, there are operational differences between the 2 approaches. Implicit pricing (e.g., post-inspection letters of agreement and enforcement actions) generally gives greater flexibility and discretion to the regulator in the form of tailoring sanctions and solutions to individual cases. Even while following a strict formula-based risk-based capital guidelines regulators can have discretion to fix compliance time tables for banks with weak capital positions. Therefore, the implicit pricing can be criticized to be subjective and at times arbitrary.

Therefore, conversely, explicit pricing would ensure uniformity and constrain the regulator's discretionary authority. Explicit pricing allows flexibility to the bankers. For instance, when a bank's capital ratio dips below the benchmark, it finds it costly to mobilize more capital. In such a situation, the bank may elect to pay higher insurance premium and manage temporarily with lower capital. With implicit pricing, no such arbitrage exists (except at the regulator's discretion). Thus, an explicit pricing scheme is helpful to banks in selecting more efficient means of countering a financially difficult situation.

Another operational difference is that an explicit system is more visible or transparent than the implicit system and therefore verifiable by regulators, banks and the public. The explicit system enables banks to observe directly the impact of moving to riskier positions as identified by the regulator and therefore those may be incentivized to scrutinize the formulas used to calculate premiums than they scrutinize the implicit premiums. Moreover, an explicit system of would provide banks, analysts and the public with information more suitable to make inter-bank comparison of risk.

Increased scrutiny may, however, have both positive and negative implications. In the short run, the adverse publicity that a high-risk bank will get generate liquidity problems for it and consequently deter its potential to revive. However, in the long run, the adverse publicity may increase the deterrent effect of risk-based premiums, if those are relatively small.

An explicit system and the consequential scrutiny by the banks and analysts would keep the deposit insurers on their toes and they will always verify the appropriateness of the system including the premium rates before asking banks to comply. This may also prompt regulators to keep an eye on DIAs.

Thus, all the methods, whether based on market or non-market information and *ex ante* or *ex post*, are fraught with some limitations or the other. The epicentre of the problems lies in

‘information’: availability, quality, cost, ease, adaptability, confidentiality, transparency, comprehensiveness, integrity and reliability. All these have a bearing on developing a simple, durable, intelligible and verifiable system of explicit deposit insurance premium.

## **Section 2: Evolution of Thought Process in India**

One of the earliest attempts to recommend a risk-based premium system in India can be found in the author’s project work titled “Bank Failures & Role of Deposit Insurance: The USA Experience” (1994) (unpublished) carried out under the Diamond Jubilee Overseas Banking Research Fellowship awarded to him by the erstwhile Indian Institute of Bankers (IIB) (now rechristened as Indian Institute of Banking & Finance (IIBF)). The report observed that “Premiums have to be risk-related so that the moral hazard problem is precluded. Higher the risk-based capital of a bank, lower the premiums it should pay. This will reinforce the incentive to build and maintain strong capital. The most appropriate measure of capital to be used for fixing risk-based premiums would be based on a combination of Tier 1 and Tier 2 capital currently used for risk-based capital. This would reinforce the risk-based concept for capital, which the Indian supervisors have adopted within the guidelines established by the Basel Committee on Bank Supervision” (pp.289).

The Narasimham Committee on Banking Sector Reforms (1998) recommended that "...there is.... need to shift away from the 'flat' rate premiums to 'risk based' or 'variable rate' premiums. Under the risk based premium system all banks would not be charged a uniform premium. While there can be minimum flat rate which will have to be paid by all banks on all their customer deposits, institutions which have riskier portfolios or which have lower rating should pay higher premium. There would thus be graded premium. As the Reserve Bank is now awarding CAMELS ratings to banks, these rating could form the basis for charging deposit insurance premium" (Chapter V, para 5.42)

Working further on this, the RBI Report on Deposit Insurance Reforms in India recommended that the introduction of risk-based premium pricing could minimize moral hazard. Hence, the introduction of risk-based pricing of deposit insurance should

- Be set high enough to cover the expected reimbursement that would be needed in the event of one or more bank failures and
- Vary with the riskiness of the individual bank - with weak or poorly capitalized banks being forced to pay more.



It went on further to add that in practice, it is very difficult to attain both the goals. Given the difficulties in forecasting the timing, depth and spread of financial crisis, it may be virtually impossible for insurance fund to quantify the expected cost of a banking crisis. This is more difficult in a country like India dominated by public sector banks (including RRBs), which have an implicit guarantee from the Government.

Risk-based premiums should be determined objectively and the criteria should be simple for the banks to understand. The Report had examined a number of methodologies including the use of option pricing models and it was felt that the CAMELS model could be adopted in the Indian context (paras 4.30 to 4.33).

With a view to working out a model for introduction of differential premium system in India, DICGC constituted a Committee in 2006 under the Chairmanship of D. M. Nachane, the then Professor/Director at IGIDR and a Director on the DICGC Board, to formulate a credit risk model for introduction of a system of risk-adjusted premium. The Committee submitted its report on September 29, 2006. The Committee's recommendations for implementing risk-based premium were, however, kept in abeyance as the supervisory rating system, on which most of the methodologies for developing a system of differential premium based on risk profile of banks rely, was yet to stabilise.

The Committee on Financial Sector Reforms (Chairman: Shri Raghuram Rajan) (September 2008) recommended that deposit insurance premiums should be more risk-based. The Rajan Committee had observed "A uniform insurance premium tends to reduce incentives for weak banks to maintain soundness. By contrast, higher insurance premiums for higher risk generates better discipline." (pp.147) Premiums have to be risk-related so that the moral hazard problem is precluded.

In November 2011, the RBI Governor Dr. D. Subbarao observed as follows: "..... charging premium at a uniform rate from all categories of banks obviously raises a moral hazard. One option for reducing cross-subsidy is to charge a risk-based premium, but we are not sanguine that this is necessarily optimal in India. There needs to be a clearer assessment of the trade-off between minimising the moral hazard and placing the additional burden of a higher premium on banks that are already weak and yet serve the very important objective of financial inclusion. Another concern is that imposition of risk-based premiums could have a market impact, with stock prices of already weak banks negatively affected by the burden of higher premiums. On

the other hand, cross-subsidisation can, in fact, be justified by viewing higher premiums on larger banks as a surcharge for their larger externalities on the rest of the system.”

In his valedictory address at the same conference, a Deputy Governor of RBI Dr. K.C. Chakrabarty said as follows: “DICGC has been having a flat rate premium system. This could be replaced by a risk-based differential premium system. The latter would reduce moral hazard and bring greater fairness in the premium assessment process.”

On March 31, 2015, the DICGC Chairman constituted a 10-member committee under the Chairmanship of the Jasbir Singh, the Executive Director of DICGC, “in order to operationalise the introduction of risk based premium for the insured banks as also for the flow of information between regulatory/supervisory Departments of Reserve Bank of India (RBI) and DICGC”. In September 2015, DICGC put the Report of the Committee on Differential Premium System for Banks in India on its Web Site for public comments/suggestions. The Report combines risk measures and supervisory ratings as the basis for computing differential premium system. The Report is on track as far as its objectives are concerned, but the method could have been simpler.

### **A Critique of the Report**

The business of insurance is more information-intensive than that of banking, and information comes at a cost. Deposit Insurance is no exception. These risks can only be minimized, not eliminated, by, *inter alia*, continuous collection of information, processing the same and adjusting the premium rates, keeping in view the target reserve ratio.

A variable deposit insurance pricing system has to reckon with 3 informational problems: (i) asymmetrical information regarding the insured’s risk type which gives birth to 2 more common problems, i.e., (ii) adverse selection and (iii) moral hazard. The Report has tried to address the issues relating to the informational problems in 3 ways: (i) maintaining coordination with RBI’s Banking Supervision Department, (ii) having its own MIS machinery and (iii) collecting data from outside sources.

As far as (i) is concerned, it is hoped that the situation has over time improved between RBI and DICGC as far as several rigidities that existed earlier in sharing of supervisory information. In future, it will all depend upon the coordination between the 2 entities improving progressively without any ego hassles.

Regarding (ii), a little more elaboration is required as to (a) banks’ willingness to add one more tier to their already burgeoning compliance burden or cost (both manpower and financial)

which should be one of the most important considerations, (b) the constitution of the MIS Group within DICGC, its staffing - whether from RBI or outside, additional cost to DICGC, since the set-up will have to be fully technology-based.

As regards (iii), the external sources will have to be extremely reliable. Brokerage firms, newspaper reports, etc., howsoever reputed those may be, should be kept at bay, because their perspectives are different from DICGC's. A more basic question, however, is whether the market information on individual bank risks are measurably better than those derived from other sources that are potentially available to regulators. Theory of Banking says that a major reason for borrowers approaching banks for loans rather than issuing marketable securities is that public information on their economic condition and prospect is extremely limited and costly. Thus, as far as the quality of a bank's loans is concerned, the bank possesses information that is generally publicly unavailable. In that case, one should not expect markets to be particularly efficient at evaluating risks in banking.

Coming to the model *per se*, the Report aims at developing a "simple and easy to understand model" (paragraph 3.5) and further observes that one of the objectives of a good Differential Premium System (DPS) is to "find acceptability among the insured member banks" (paragraph 3.2). Viewed in this perspective, the Report's intent is perfectly on track, as it is the bankers who have to understand and then implement the framework. A word about the relevance of simplified systems and procedures in banking today is warranted here. In today's banking, especially after the 2007-09 crisis, the two catchwords are (a) Simplicity and (b) Transparency, to the maximum extent possible. It applies to many other areas too while framing policies or procedures. For instance, the whole debate of 'Doing Business' all over the world is about simplified procedures and how transparently those are implemented. Further, despite all the complicated mathematical or financial or econometric models, the 2007-09 crisis could not be prevented. Against this backdrop as well as our experience, we are not sure whether bankers will appreciate the model as simple and easy to understand as it aims to be. Another issue that bankers will likely raise is the verifiability of the model.

Paragraph 3.6 of the Report makes the following assumptions while framing the model: (a) the taxpayers' money should not be used in resolving any institution, (b) implicit guarantees in the form of government ownership should not be given weightage in risk profiling of institutions and (c) over the time, the government ownership of public sector banks may be diluted substantially.

As regards (a), recapitalization of banks is a euphemism for resolving troubled PSBs, and who funds recapitalization? Ultimately, the taxpayers.

As regards (b), the model may be ownership neutral, but when it comes to risk profiling of PSBs in practice, the government ownership plays a critical role in influencing the PSBs' decision-making process and hence their risk-profile.

As regards (c), yes, dilution of government ownership is expected, but not below 51% in short-to medium-term, i.e., the government will still be reining PSBs.<sup>30</sup>

### **Section 3: An Alternative Suggestion**

Absent Deposit Insurance, a bank will be able pay back its deposits in full with the accrued interest and in time (both are important) as long as it is solvent. Therefore, the question boils down to what makes a bank insolvent? The answer is: significant loan losses and/or investment losses, out of which, in India, the former has been predominant. Primarily, loan losses are represented or estimated by gross non-performing assets (GNPA). The magnitude of GNPA, coupled with the accounting and prudential norms, determines the quantum of provisions to be made in a bank's P&L account, which in turn erodes its net worth.

Therefore, we would argue that the GNPA figure which reflects the root of vulnerability of a bank in the Indian setting can be used to assess the premium rates for banks. Banks with higher GNPA ratios should pay more premium and *vice versa*. GNPA ratios are public figures, banks easily comprehend it and GNPA, sans public recapitalization or regulatory or supervisory forbearance, is one basic element that erodes capital adequacy and ultimately generates cracks in the safety and soundness of banks. Every year, the GNPA ratios are made public by banks after their statutorily audited annual accounts (by RBI-appointed auditors) are announced. (Even the unaudited figures are available at quarterly intervals) Hence, the GNPA figures have a firm basis and do reflect transparency. Diamond and Dybvig (1986) also observe that: "the deposit insurance premium should be increased for banks with many nonperforming loans, banks that have previously underestimated loan losses..."

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<sup>30</sup> "...experience confirms the theoretical hypothesis that information risk, bureaucratic lags and political restraints on closing economically insolvent institutions underlie the imperfect controllability that creates risk-management and pricing problems for deposit insurers." Benston, G J, Eisenbis, R A, *et. all.: Perspectives on Safe & Sound Banking: Past Present and Future*, 1986, pp.236, MIT Press.

### What needs to be fixed before implementing DPS?

As per the IMF's Deposit Insurance Database, only 35/112 countries (i.e., less than one-third) have adopted risk-based premium system. The percentages according to the IMF-classified income group-wise countries are: Advanced (32), CIS (9), EDA (50), EDE (31), LAC (44), MENAP (18) and SSA (18).<sup>31</sup>

The ultimate objective of risk-related Deposit Insurance premium is to use insurance premium as an instrument to leash the overly risky behaviour of the banks. This prompts us to ask whether, in India, risk behaviour of the banks is in any way driven by the Deposit Insurance premium. Or, is the flat-rate premium system evidenced to have led to aggressive behaviour by banks? Well, our experience has been negative in this regard, although we have not come across any empirical study on this in the Indian context. However, according to the Safety Net Index (SNI)<sup>32</sup> presented in the IMF Survey, India's value remains low within - 1 to + 1, whereas for the entire set of countries under survey it oscillates between - 11.9 and + 7.9. This indicates that moral hazard problem is extremely low in India.

In India, credit risk dominates the risk profile of the banks and deployment of credit by them is influenced majorly by many factors other than the Deposit Insurance premium, to say the least. Further, the government ownership of over three-fourth of the SCB (excluding RRBs) business (deposits + advances as at March-end 2015) in the country exerts, directly or indirectly, a determining influence on the banking sector as a whole. Our experience also reveals that many bankers, especially at junior level mistake Deposit Insurance premium as the premium paid for cash in currency chests. Further, in many advanced countries, more than the deposit insurance premium, depositors constitute a major disciplining force on the banks, in addition to the regulators and shareholders. And, in India, how many depositors are aware of the facility of Deposit Insurance? In fact, for bulk of the Indian savers, *any* bank is safe. Otherwise, so many people would not be flocking to cooperative banks even after seeing their failure rates. In a word, most of the individual depositors are 'unsophisticated'. Even bank branches do not display the facility of Deposit Insurance in their premises! Therefore, *depositors' discipline* is a crucial prerequisite for bringing in DPS.

The riskiness and fragility of the cooperative banks is both well-known and well-documented. However, charging them the same rate of premium as the commercial banks means

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<sup>31</sup> Asli Demirgüç-Kunt, Edward Kane, and Luc Laeven: Deposit Insurance Database, WP/14/118, IMF.

<sup>32</sup> Higher SNI denotes a more generous DIS and consequently, more moral hazard.

subsidization of their risks. This has led to a situation where, at present, the premium collected from the commercial banks are being used to pay off the depositors of failed cooperative banks. The Report also notes this. For instance, our calculation reveals that between 1997-98 and 2014-15, claims settled by DICGC in respect of the failed cooperative banks amounted to INR 46.12 billion which was higher by INR 5.72 billion than the premium collected from these banks.<sup>33</sup> This sum was made good from the premium collected from the commercial banks. At this level, it constituted just 1.20% of the premium collected from the commercial banks. Thus, it is concluded that although the risk is relatively subsidized, there seems to be no significant cross-subsidization in terms of transfer of funds from the commercial banks premium account to cooperative banks premium account. With the proposed model coming into force, some commercial banks' premium may escalate from today's flat rate and those banks may raise their voice against the cross-subsidization, which will be well within their rights as stakeholders. Therefore, before implementing the system, the Deposit Insurance Fund (DIF) should be segregated into 2 funds: one for commercial banks and the other for cooperative banks because their DNAs are different and a combined fund would mean faulty risk-pooling. Instead of cross-subsidization, there can be a provision for DIF (commercial banks) to lend funds to DIF (cooperative banks) at a stipulated rate of interest. Otherwise, determining an appropriate and coherent premium structure will be difficult.

### **What could be the probable impact of DPS?**

It is almost certain that if under DPS a bank is required to pay more premium, it will factor in that into its deposit rates offered to the depositors. This will be true, especially in today's environment, when banks' operating expenses are high and inelastic, interest income is sluggish, and NIM too is under severe pressure. Further compression in deposit interest rates will not only adversely impact the already slowing deposit growth of banks<sup>34</sup> but also the saving community at large which may divert their savings to other channels, albeit their limited numbers.

In the event of banks not being able to pass on the increased premium to the depositors and cost of compliance increasing, they may explore cheaper alternatives like intra-industry arrangements or private/joint systems. According to the above-mentioned IMF database, there

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<sup>33</sup> The sum of INR 5.72 billion will be somewhat less if the investment income from INR 46.12 billion collected is taken into account.

<sup>34</sup> Slow growth in deposits is partly deliberate by the banks as loan deployment is not picking up for a considerable period of time.

are 13 private and 25 joint Deposit Insurance systems in the world. The situation would become difficult, as the market for assets sale is still undeveloped.

If DPS comes, there should also be a system of rebate. When DIF achieves its required reserve ratio, there should be premium holidays for banks and/or when a bank is in the 'zero-risk' cell in the matrix, it should pay zero premium until its rating deteriorates.

DICGC should base the premium not on 'assessable' but on 'insured' deposits. The 1999 Report, though favoured this, had recommended for *status quo*, since the system was not conducive. Now, with technological capability, the switch-over to insured deposits could be considered. According to the IMF database, 37/109 countries have 'covered deposits' as the base.

DICGC may consider conducting a survey of bankers and depositors before implementing the new system.

### Summing Up

- *The methods for determining the risk-based deposit insurance premium system, whether based on market or non-market information and ex ante or ex post, are fraught with some limitations or the other. The epicentre of the problems lies in 'information': availability, quality, cost, ease, adaptability, confidentiality, transparency, comprehensiveness, integrity and reliability. All these have a bearing on developing a simple, durable, intelligible and verifiable system of explicit deposit insurance premium.*
- *In India, officially, the voices to have a variable system of deposit insurance premium have been making rounds since 1998 when the Narasimham Committee-II mentioned about it in its Report.*
- *Finally, in September 2015, DICGC put the Report of the Committee on Differential Premium System for Banks in India on its Web Site for public comments/suggestions. The Report combines risk measures and supervisory ratings as the basis for computing differential premium system.*
- *Alternatively, we have mooted for using GNPA as the basis for risk-based premium system because the GNPA figure reflects the root of vulnerability of a bank in the Indian setting.*
- *In India, the existence of the moral hazard problem in banking is not well-established. According to the SNI value for India computed in the IMF Survey, it could be very low.*
- *Nevertheless, there are many other issues, such as, bifurcating DIF between commercial and cooperative banks, depositors' literacy about deposit insurance, the extent to which depositors exercise discipline on their banks and overwhelming control of the government in banking business which need to be fixed before implementing a risk-based premium system.*

- *If a variable premium system comes, there should also be a system of rebate. When DIF achieves its required reserve ratio, there should be premium holidays for banks and/or when a bank is in the 'zero-risk' cell in the matrix, it should pay zero premium until its rating deteriorates.*
- *DICGC should base the premium not on 'assessable' but on 'insured' deposits.*
- *DICGC may consider conducting a survey of bankers and depositors before implementing the new system.*



## Chapter XIII

### Deposit Insurance Fund Adequacy

The Chapter is divided into 2 Sections: Section 1 focuses on the current status of DIF and the cross-subsidization between commercial and cooperative banks and Section 2 deals with the recommendations.

#### Section 1: Current Status and Cross-subsidization

There is a consensus that a scientific determination of the optimal size of DIF, either in terms of an absolute amount or in relation to some measure of exposure, is not possible because bank failures and insurance losses are cyclical in nature, and therefore, difficult to predict. Simply and objectively speaking, DIF should have money enough to cover losses and meet cash needs first. How much additional money it should have would depend upon: (i) the type of contingencies DIF should be expected to manage and (ii) the perceptions of the public regarding the ability of DIA to protect deposits (and perhaps other bank liabilities) under different economic conditions. If the public attitude is favourable, the required DIF may not be large and *vice versa*.

Nevertheless, the premium structure has to be essentially flexible to the varying loss situations over time. Such a system necessitates insurance assessments on banks to be high enough to keep the reserve ratio of DIF at a desired level always.

It may be recalled from Chapter 8 that as at March-end 2015, DICGC's DIF stood at INR 504.5 billion with the Reserve Ratio at 1.9% which was a tad below the 'desired' level of 2.0% in the absence of any mandate to maintain the Reserve Ratio at a specific level. DICGC protects equally the insured deposits of both commercial banks and cooperative banks. Despite the latter being highly fragile, DICGC doesn't maintain a separate DIF for them. It uses the commercial banks' funding of the DIF to make good the insured deposits of the failed cooperative banks.

The inappropriateness of the practice has been made crystal clear in Table 10.3. To recapitulate, as at March-end 2015 the share of commercial banks' deposits in total deposits was 87.6% and that of cooperative banks 12.4%. As against this, the premium received from the cooperative banks constituted a mere 7% of the total premium, that too on a declining trend from nearly 11% in 1997-98. Conversely, the commercial banks contributed 93%. While the ratio of claims settled to DIF was just 0.6% in the case of commercial banks, it was more than 15 times at 9.2% for cooperative banks. The corresponding ratios in respect of the ratio of balance outstanding to DIF was 0.2% and 6.8%.

Further, in the international setting, the IMF Survey which gives the data on the size of DIF for 2010, in a set of 39 countries, the median Fund size to covered deposits ratio stood at 0.37% with high-low values at 6.2%-0.12%.

### **Section 2: Recommendations**

The RBI Report on Deposit Insurance Reform (1999) had recommended for instituting 2 deposit insurance funds, one for the commercial banks and the other for the cooperative banks. (*Paragraph 4.37*). The recommendation, which has not yet been acted upon, should be implemented. In addition:

- In case the DIF (Cooperative Banks) falls short of fund, the DIF (Commercial Banks) may lend stipulated amount at stipulated rate of interest to the former, maybe at the prevailing Bank Rate.
- Commercial bank failures are not many, but cooperative bank failures are a yearly affair. Therefore, as a rule of thumb, three-year moving averages of the cooperative bank failures can be taken to predict the next year's expected failure and accordingly DIF (Cooperative Banks) may be capitalized.
- Capitalization of DIF through a line of credit or collateralized borrowing from the government at the times of crises may be facilitated, which the RBI Report on Deposit Insurance Reform had recommended.
- Another alternative to guarantee a minimum fund size which may be pursued in addition to increases in assessments could be some sort of capitalization of DIF through the banking industry deposits or capital contributions. Under this plan, banks may be asked to provide capital to DICGC in the form of deposits mounting to, say, 1% of total deposits. This deposit may be treated as an asset by the banks and earn a dividend as determined jointly by the banking industry and DICGC.
- On the positive side, a capitalization reduces the probability of the incidence of the cost of bank failures on taxpayers. Secondly, without a capitalization, DICGC may face difficulties in raising assessments sufficient enough to pay for unforeseen excessive losses. Thirdly, the 'market discipline' among the contributing banks may be strengthened as well. On the negative side, recapitalization would involve significant costs to the banking industry, which may tell upon its profitability. It may, in turn, also dissuade investors from committing risk capital to the industry.

## Summing Up

- *A scientific determination of the optimal size of DIF, either in terms of an absolute amount or in relation to some measure of exposure, is not possible because bank failures and insurance losses are cyclical in nature, and therefore, difficult to predict.*
- *Simply and objectively speaking, DIF should have money enough to cover losses and meet cash needs first.*
- *Such a system necessitates insurance assessments on banks to be high enough to keep the reserve ratio of DIF at a desired level always.*
- *As at March-end 2015, DICGC's DIF stood at INR 504.5 billion with the Reserve Ratio at 1.9% which was a tad below the 'desired' level of 2.0% in the absence of any mandate to maintain the Reserve Ratio at a specific level.*
- *DICGC protects equally the insured deposits of both commercial banks and cooperative banks. Despite the latter being highly fragile, DICGC doesn't maintain a separate DIF for them.*
- *The practice has been demonstrated to be inappropriate.*
- *Internationally, the median Fund size to covered deposits ratio stood at 0.37% with high-low values at 6.2%-0.12%.*
- *Pursuing the recommendations of the RBI Report on Deposit Insurance Reform (1999) DICGC should institute 2 deposit insurance funds, one for the commercial banks and the other for the cooperative banks.*
- *In case the DIF (Cooperative Banks) falls short of fund, the DIF (Commercial Banks) may lend stipulated amount at stipulated rate of interest to the former, maybe at the prevailing Bank Rate.*
- *As a rule of thumb, three-year moving averages of the cooperative bank failures can be taken to predict the next year's expected failure and accordingly DIF (Cooperative Banks) may be capitalized.*
- *Capitalization of DIF through a line of credit or collateralized borrowing from the government at the times of crises may be facilitated, which the RBI Report on Deposit Insurance Reform had recommended.*
- *Another alternative to guarantee a minimum fund size could be some sort of capitalization of DIF through the banking industry deposits or capital contributions.*

## Chapter XIV

### Resolution Mechanism

The Chapter is divided into 2 Sections: Section 1 presents the current mechanism and the recent developments to institute a new one and Section 2 contains our analysis and recommendations.

#### Section 1: Current Mechanism

At present, India lacks a special resolution regime or comprehensive policy or law on bankruptcy exclusively for the financial institutions as a whole. However, there are some provisions contained in various Acts, as mentioned in Chapter 10, which empower the respective regulator/supervisor and/or the Central government to resolve different types of problems of financial institutions in India.

RBI, assisted by DICGC, carries out the resolution of troubled or failed banks. The typical resolution methods used in India are assisting the troubled bank in restructuring or merging it with a strong institution or closure. The most common method has been an assisted or compulsory merger when the weak bank is merged with another bank, usually a PSB. There have been also cases of voluntary merger where a healthy bank voluntarily took over a weak bank. Apart from making pay-outs to banks that are put under liquidation, DICGC assists in mergers by meeting the shortfalls in depositors' claims up to the coverage limit, when the acquiring bank is unable to meet this liability. In the case of smaller urban cooperative banks, the general approach has been to liquidate them with reimbursement made to the depositors.

One of the imperatives to reform DICGC as mentioned in Chapter 10 is to establish a well-defined, well-structured and seamlessly integrated resolution mechanism for financial institutions in trouble. The urgent need for this has been felt globally as also in India in the aftermath of 2007-09 financial crisis. Consequently, Financial Stability Board (FSB) issued a framework in 2011 called *The Key Attributes of Effective Resolution Regimes for Financial Institutions* (the 'Key Attributes') which it recommends for countries to follow. Following this, in India, the government-appointed *Financial Sector Legislative Reforms Commission* (mentioned earlier) recommended in 2013 for a single Resolution Corporation for financial institutions.<sup>35</sup>

The observations and recommendations of FSLRC, especially to the extent these have implications for DICGC are summarized as under:

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<sup>35</sup> *Report of the Financial Sector Legislative Reforms Commission*, Chapter 7, pp.69-79.

“At present, India has a deposit insurance corporation, the DICGC. However, the DICGC is not a resolution corporation; it deals only with banks; and is otherwise unable to play a role in the late days of a financial firm. This is a serious gap in the Indian financial system. DICGC will cease to exist and its obligations will be subsumed by the Resolution Corporation till the new rules are put in place. Employees will be transferred or reverted. The Board will begin consultation on new regulations. Existing regulations will transition to the new regulations over time.”

Therefore, at the instance of the sub-Committee of the Financial Stability Development Council (FSDC) RBI constituted a High Level Working Group (Chairman: Anand Sinha then an RBI Deputy Governor and Arvind Mayaram then the Union Finance Secretary) in January 2013 which submitted its report in January 2014 and the report was released for public consultation in May 2014.

Table 14.1 summarizes the recommendations of the Working Group.

**Table 14.1: RBI Working Group on Resolution of Financial Institutions: Recommendations**

<b>Recommendation</b>	<b>Objective</b>
<i>Comprehensive legal framework</i>	To deal with the failure of financial institutions and financial market infrastructures (FMIs) that are on the verge of turning non-viable in such a way that the supply of critical financial services is not disrupted.
<i>Objectives of resolution framework</i>	<p>To promptly initiate resolution action to minimize value erosion and resolution costs.</p> <p>To safeguard stability of the financial system and public confidence therein.</p> <p>To protect customers’ funds/assets within reasonable limits through appropriate schemes/arrangements.</p> <p>To eschew use of taxpayers’ money, but ensuring that shareholders and unsecured creditors bear the losses in conformity with the hierarchy of claims.</p>
<i>Scope of resolution framework</i>	To cover all financial institutions and FMIs other than those owned and operated by RBI, viz., real time gross settlement system and securities settlement systems. To also include the parent undertaking or the holding company regulated by the financial sector regulator of the financial groups.
<i>Role and constitution of resolution authority</i>	<p>A single Financial Resolution Authority (FRA) to be established as the sole authority responsible for operating and implementing the financial resolution framework for all financial institutions and FMIs.</p> <p>FRA to be institutionally independent of the regulators/supervisors and the government.</p>

Recommendation	Objective
	<p>The mandate of FRA will be to resolve failed financial institutions along with providing deposit insurance and protection to insurance policy holders and investors/clients within limits.</p> <p>FRA can be set up by either transforming the present DICGC into FRA or by setting up a new authority, namely, FRA that will subsume DICGC.</p>
<i>Triggers of early intervention and Prompt Corrective Action (PCA) framework</i>	<p>Financial sector regulators/supervisors may formulate PCA frameworks with clear trigger levels for institutions under their respective jurisdictions so that they can intervene at much early stage to prevent the institutions becoming nonviable.</p> <p>When an institution fails to demonstrate or take corrective action within a given timeline it should be transferred to FRA.</p>
<i>Resolution tools</i>	<p>FRA to have a bouquet of resolution tools mandated by the proposed statute, which can be used flexibly, either singly or jointly.</p> <p>The bail-in mechanism can be a resolution tool in respect of global systemically important banks (G-SIBs)/domestic systemically important banks (D-SIBs).</p>
<i>Resolution fund</i>	<p>A resolution fund, different from DIF and other protection funds, may be instituted. The fund would be capitalized over time through <i>ex ante</i> premiums determined on risk-based assessments. The government may provide temporary liquidity support at the times of stress. FRA may raise funds from the market through issue of bonds.</p>
<i>Reforms in deposit insurance framework</i>	<p>To be carried out in tune with international benchmarks, namely, Core Principles for Deposit Insurance Systems.</p>
<i>Recovery and resolution planning (RRP)</i>	<p>RRPs, to begin with, will apply to those financial institutions that could be systemically significant if they fail and to all financial groups/conglomerates irrespective of their systemic importance.</p> <p>RRPs could be extended to other financial institutions in a phased manner.</p> <p>Institutions to regularly prepare the recovery plan according to a pre-approved format. The respective regulators will approve the plans. Institutions to frame the resolution plan containing the resolution strategy to be adopted for resolving the institutions. FRA will approve the plan in consultation with the concerned regulator.</p>
<i>Improving resolvability</i>	<p>In order to smoothen the resolution process in respect of complex financial institutions the financial groups and the regulatory authorities should work jointly to reduce the complexity in group structures and ensure prudent, intra-group transactions and exposures. The</p>

<b>Recommendation</b>	<b>Objective</b>
	<p>regulatory/supervisory authorities should be empowered to take actions to improve resolvability of SIFIs.</p> <p>In order to improve resolvability of financial conglomerates the financial holding company structure may be introduced.</p>
<i>Development and management of database</i>	An integrated financial database management centre may be set up to function as a centralised database to which all financial institutions and FMIs will submit regular financial information electronically. The supervisory agencies and FRA should have access to this.
<i>Rules for set-off and netting and temporary stay on contracts/claims</i>	<p>The financial resolution framework or the existing statutes governing the financial institutions and FMIs should explicitly provide for rules, laws and practices governing enforceability of contractual set-off, close-out netting and collateral arrangements, and segregation of client assets.</p> <p>A brief stay on the exercise of early termination and netting rights may be allowed only in situation of entry of a firm into resolution.</p>
<i>Hierarchy of creditors and depositor preference</i>	<p>FRA to respect the established law as to hierarchy of claims from the assets of a failed institution.</p> <p>FRA may depart from the general principle of equal treatment of creditors of the same class, only in exceptional circumstances and by providing sufficient reasons.</p> <p>As the ultimate objective of regulation and supervision in India is to protect the interests of secured creditors (i.e., depositors, insurance policy holders and investors), the proposed statute for financial resolution framework should explicitly provide for giving preference to them over other unsecured creditors while resolving failed financial institutions.</p> <p>Equal treatment may be provided to uninsured depositors of banks and claims of DICGC on account of payments made to insured depositors in sharing the distribution of proceeds of liquidated assets of a failed bank.</p>
<i>Cross-border co-operation and information sharing</i>	The proposed legislation should enable FRA to chalk out cooperative solution with foreign resolution authorities.

*Summarized from the Report.*

## **Section 2: Our Proposal**

It is proposed that DICGC should be designated as the exclusive resolution authority for the banking sector. Our reasoning is two-fold: (a) it is widely acknowledged that banks are ‘special’ business units and their roles and responsibilities are fundamentally and markedly

different from those of other kinds of financial institutions, especially so in India as alluded to before and (b) hitherto, RBI, with active assistance of DICGC, has been resolving the weak/failed banks and therefore, these two apex institutions know the ground realities well and have acquired necessary expertise and experience. Since bank failures, unless checked through appropriate means and in time, are evidenced to (a) occur faster, (b) spread more broadly within the industry, (c) result in a large number of failures, (d) result in large losses to creditors (depositors) and (e) spread more beyond the banking industry and cause substantial damage to the financial system as a whole and the macro-economy,<sup>36</sup> what should be of importance is a comprehensively efficient mechanism in terms of speed and cost (to DIC, depositors and economy) for resolving bank troubles/failures, and here DICGC may score over a totally new institution. An absolutely new mechanism on the lines of proposed FRA has already taken considerable time to be established and it may take more to start functioning and more importantly, stabilize. Besides transition hassles, FRA will have to depend, to a significant extent, on support from the regulators as well as institutions. Therefore, there is merit in transforming the existing institutional mechanism by bolstering DICGC with appropriate powers, personnel and technology. RBI should work, in a calibrated fashion, towards making DICGC a full-fledged and independent Resolution Authority, in addition to it serving as the DIA for the banking sector. One of the priorities for DICGC, as the resolution authority, should be to resolve the institutions when they are ‘going’ concerns rather than ‘gone’ concerns.

Further, to be transparent, DICGC should make public the resolution process adopted in resolving the failed banks.

It is worth citing what the Rajan Committee had recommended:

“There are considerable benefits in separating the resolution mechanism from either the central bank or the banking regulator. Distancing the DICGC from the central bank helps reduce the feeling on the part of the DICGC that it has access to unlimited resources. Distancing the DICGC from the banking regulator helps induce independence of thought on the part of the DICGC, which must make pre-emptive decisions about the closure of a bank without worrying whether this will signal its past failure.” pp.148

Furthermore, the Rajan Committee has not proposed subsuming DICGC into a Resolution Corporation, but argues for strengthening its capacity to both monitor risk and resolve a failing

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<sup>36</sup> Kaufman, George G, 1992, “Bank Contagion: Theory and Evidence”, Working Paper Series, Issues in Financial Regulation, Research Department, Federal Reserve Bank of Chicago.



bank, instilling a more explicit system of prompt corrective action, and making deposit insurance premium more risk-based (pp.17).

However, a nagging question is does India need a separate Resolution Authority for financial institutions in addition to the existing sectoral regulators and supervisors and above all, FSDC with its sub-committees? While the issue, being important with far-reaching consequences, is debatable as it should be, our argument is as follows:

The proposal was mooted in the post-2007-09 crisis, especially against the backdrop of failure of SIFIs in some of the advanced economies where the financial sector is much more complex than in India in all respects. Secondly, FSB's concern is **Global-Systemically Important Financial Institutions**, (G-SIFIs) not **Domestic-Systemically Important Banks (D-SIBs)**. In contrast, India is and should be primarily concerned with **Domestic** (not **Global**) and **Banks** (not **Financial Institutions**) which is also one of the RBI's chief concerns because India is a bank-dominated economy, and Indian banks' operations are hardly globally significant. As a member of G-20 and FSB, India should, no doubt, move in the direction of the international framework, but the primary goal should be ensuring domestic financial stability. RBI has adapted the FSB guidelines to the Indian conditions while assigning weights for capital adequacy to D-SIBs.

The Financial Stability Board (November 2015 Update) has identified 30 banks as systemically important from global perspective. RBI has designated 2 Indian banks, namely, SBI and ICICI Bank as D-SIBS.<sup>37</sup> These 2 Indian banks are too small compared to the 30 G-SIFIs (See Table 14.2).

**Table 14.2: G-SIFIs versus D-SIBs (India)**

Sl. No.	Bank	Country	USD billion		% to GDP	
			Assets	Gross Total Deposits	Assets	Gross Total Deposits
1	Agricultural Bank of China	China	2,611	2,184	25%	21%
2	Bank of China	China	2,492	2,070	24%	20%
3	China Construction Bank	China	2,736	2,272	26%	22%
4	Industrial and Commercial Bank of China Ltd	China	3,368	2,723	33%	26%
5	BNP Paribas	France	2,522	876	89%	31%
6	Credit Agricole	France	2,139	392	76%	14%
7	Groupe BPCE	France	1,485	657	52%	23%
8	Societe Générale	France	1,588	478	56%	17%

<sup>37</sup> RBI Press Release dated August 31, 2015 "RBI releases list of Domestic Systemically Important Banks (D-SIBs)".

Sl. No.	Bank	Country	USD billion		% to GDP	
			Assets	Gross Total Deposits	Assets	Gross Total Deposits
9	Deutsche Bank	Germany	2,074	647	54%	17%
10	Unicredit	Italy	1,025	595	48%	28%
11	Mitsubishi UFJ FG	Japan	2,382	1,415	52%	31%
12	Mizuho FG	Japan	1,579	871	34%	19%
13	Sumitomo Mitsui FG	Japan	1,527	922	33%	20%
14	ING Bank	Netherlands	1,006	630	114%	72%
15	Nordea	Sweden	712	213	125%	37%
16	Credit Suisse	Switzerland	932	399	133%	57%
17	UBS	Switzerland	1,074	425	153%	61%
18	Barclays	UK	2,118	758	71%	25%
19	HSBC	UK	2,634	NA	88%	NA
20	Royal Bank of Scotland	UK	1,639	609	55%	20%
21	Standard Chartered	UK	726	460	24%	15%
22	Bank of America	US	2,107	1,121	12%	6%
23	Bank of New York Mellone	US	385	266	2%	2%
24	Citigroup	US	1,843	920	11%	5%
25	Goldman Sachs	US	856	83	5%	0%
26	JPMorgan Chase	US	2,573	1,363	15%	8%
27	Morgan Stanley	US	801	134	5%	1%
28	State Street	US	274	209	2%	1%
29	Wells Fargo	US	1,687	1,169	10%	7%
30	Santander	Spain	1,537	NA	111%	NA
	<b>SBI</b>	<b>India</b>	<b>432</b>	<b>328</b>	<b>21%</b>	<b>16%</b>
	<b>ICICI Bank Ltd.</b>	<b>India</b>	<b>103</b>	<b>58</b>	<b>5%</b>	<b>3%</b>

Source: Based on G-SIFIs data from The Banker Web Site, D-SIBs data from respective balance sheets and GDP data from World Bank Web Site. The 30 banks have headquarters in 11 countries. NA – Not Available.

The risk profile of the Indian banks also differs substantially from global banks. Within India, the banks mainly do plain vanilla lending to companies and retail clients. In the advanced economies, on the other hand, most banks have high exposure to inter-connected financial products like derivatives, credit guarantees and other financial contracts which in fact had led to the global crisis.

There is no doubt that after the financial crisis global banks strengthened their operations by increasing profit retention and focusing more on retail funds as evidenced by a BIS study of 92 banks from advanced and emerging economies. The study notes that one-third of the institutions that entered the crisis in 2007 as wholesale or trading or investment banks adapted a retail model with plain vanilla lending through retail deposits by 2012.

With Indian banks already following traditional businesses, the risk is already lower. Both SBI and ICICI Bank are well capitalized with Tier-1 capital ratio of 9.60% and 12.78% respectively

as at March-end 2015, as per Basel-III norms. These, according to BIS, are higher than the capital ratio of 9.5% for large, internationally active banks.

Similarly, RBI requires Indian D-SIBs to set additional common equity Tier 1 capital (CET 1) of 0.2-1% of risk weighted assets (SBI – 0.6% and ICICI Bank – 0.2%).

Finally, out of the 30 identified G-SIFIs, 16 were present in India as at March-end 2015. Their total assets totaled INR 6,578 billion constituting as little as one-twentieth of the total assets of SCBs (excluding RRBs). In USD terms, it worked out to just 97 billion (assuming 1 USD = INR 68). Moreover, these banks were well capitalized with their Basel III CRAR varying in the range of 11.61 to 248%. Thus, any threat of systemic proportion from any of these banks is insignificant. However, their off-balance sheet exposure (notional) as percentage of on-balance sheet liabilities remained significantly higher as compared with other bank groups due to their higher exposure to forward contracts, guarantees and acceptance/endorsements.

Thus, our conclusion is that a separate FRA for banks in India at this stage is not called for. The present arrangement of separate segment regulators along with FSDC is adequate. However, DICGC may be designated as FRA when the situation calls for such a body.

## Summing Up

- *At present, India lacks a special resolution regime or comprehensive policy or law on bankruptcy exclusively for the financial institutions as a whole. However, there are some provisions contained in various Acts which empower the respective regulator/supervisor and/or the Central government to resolve different types of problems of financial institutions in India.*
- *RBI, assisted by DICGC, carries out the resolution of troubled or failed banks. The typical resolution methods used in India are assisting the troubled bank in restructuring or merging it with a strong institution or closure.*
- *DICGC assists in mergers by meeting the shortfalls in depositors' claims up to the coverage limit, when the acquiring bank is unable to meet this liability.*
- *One of the imperatives to reform DICGC is to establish a well-defined, well-structured and seamlessly integrated resolution mechanism for financial institutions in trouble. The urgent need for this has been felt globally as also in India in the aftermath of 2007-09 financial crisis.*
- *Following the FSB's announcement of Key Attributes of Effective Resolution Regimes for Financial Institutions (the 'Key Attributes') in 2011, the Indian government set up the Financial Sector Legislative Reforms Commission which recommended in 2013 for a single Resolution Corporation for financial institutions.*
- *It also recommended that DICGC should be subsumed by the Resolution Corporation.*

- *However, we have argued that a separate Resolution Corporation for banks in India at this stage is not called for. The present arrangement of separate segment regulators along with FSDC is adequate. However, DICGC may be designated as the Resolution Corporation for the banking sector when the situations warrant such a body.*

## **Chapter XV**

### **Organizational Matters**

The organizational matters of DICGC has been critically examined in Chapter 8. Therefore, this Chapter focuses on our recommendations.

#### **Ownership**

The Rajan Committee had observed “DICGC is technically a separate corporation, in practice, it is a department of RBI.” (pp.147) In other words, although DICGC is a product of a separate legal arrangement, today, it is virtually fully under the control of its parent, RBI. To recapitulate from Chapter 5, 96/111 countries covered by the IMF Survey have separate legal arrangements and in the remaining 15, the systems are owned by the respective country’s central bank or banking supervisor or a ministry. Therefore, the Indian DIA conforms to the global order or practice.

DICGC may continue as a 100% subsidiary of RBI, but it should be accorded complete independence in its working and functions. Besides, both the RBI and DICGC should act in tandem without any ‘complex’ on either side.

#### **Capital**

At INR 500 million, DICGC’s (authorised) capital today is fully subscribed by RBI. This has remained static since 1992-93. Although the DIF level and Reserve Ratio remain at sound levels, yet looking at the transformation the banking landscape has undergone since 1993 and keeping in view the increased vulnerability of the sector, the capital level of DICGC, as the final cushion for loss absorption should there be a big crisis, needs to be augmented. Moreover, the premium system continues to be ‘flat’.

The Rajan Committee had observed “DICGC lacks the financial capital required to cope with the failure of one or more large bank in a business cycle downturn. It lacks the operational capability to close down a bank swiftly, cleanly and pre-emptively.” (pp.147)

In fact, the RBI Report on Deposit Insurance Reform (1999) had recommended for hiking the authorised capital of the Corporation to INR 5 billion and be contributed fully by RBI in tranches. In addition, it had recommended for a lender of last resort facility or collateralized liquidity support from the central bank as well as government support to meet any contingencies (Para 4.41). This may be revisited.

### **Organization Pattern**

There should be a department exclusively devoted to regular coordination and exchange of information with the Department of Banking Regulation, Department of Banking Supervision, Department of Co-operative Bank Regulation and Department of Co-operative Bank Supervision. The same department may also hold periodic meetings with the Financial Stability Unit.

### **Staff**

If DICGC is to be made an independent organization, it has to have its own staff - not on deputation from RBI. It should be allowed to recruit its staff from the market. It can also give an option to the staff on deputation from RBI to join it on permanent basis. The modalities can be worked out. Secondly, it should be an officer-oriented organization.

### **Expertise**

There should be an overall expert on Deposit Insurance in the Board of DICGC. Alternatively, an exclusive advisor on the subject should be appointed in the senior executive cadre, be it on regular or consultation basis. DICGC should have the latest IT-based information and data systems.

### **Taxation**

A case may be made out to the government to tax the investment income, not the deposit insurance premium because deposit insurance is a 'special' kind of insurance and it is aimed at protecting the economy from unforeseen financial instability, which has been in the past and can be in future quite devastating.

## **Summing Up**

- *DICGC may continue as a 100% subsidiary of RBI, but it should be accorded complete independence in its working and functions. Besides, both RBI and DICGC should act in tandem without any 'complex' on either side.*
- *The authorized capital of DICGC may be hiked to at least INR 5 billion and contributed fully by RBI in tranches. In addition, it should have a lender of last resort facility or collateralized liquidity support from the central bank as well as government support to meet any contingencies.*
- *There should be a department exclusively devoted to regular coordination and exchange of information with the Department of Banking Regulation, Department of Banking Supervision, Department of Co-operative Bank Regulation and Department*

*of Co-operative Bank Supervision. The same department may also hold periodic meetings with the Financial Stability Unit.*

- *If DICGC is to be made an independent organization, it has to have its own staff.*
- *There should be an overall expert on Deposit Insurance in the Board of DICGC. Alternatively, an exclusive advisor on the subject should be appointed in the senior executive cadre either on regular or consultation basis.*
- *A case may be made out to the government to tax the investment income, not the deposit insurance premium.*

## Part F: Concluding Remarks

**The lone Chapter 16 in this Part shows how the required size of DIF will be lower and premium rate will come down for the insured banks if our proposals are implemented. It also encapsulates the revamped role of DICGC, which will be multidimensional. The Chapter underscores the vital role to be played by ‘public awareness’ in enforcing depositors’ discipline on the banks so that those can be refrained from becoming overly aggressive in their risk behaviour which in turn will prevent banks from running into troubles.**



## Chapter XVI

### Concluding Remarks

The previous chapters argued for ushering in various reforms in DICGC and presented a framework for specific reforms encompassing the coverage limit, pricing, adequacy of DIF, resolution mechanism and organizational issues. To sum up:

- Since, according to our proposal, SBI, ICICI Bank and the Nationalized Banks will be out of the purview of deposit insurance coverage, the size of the required DIF will automatically come down. However, the amount so far collected from these 3 groups of banks need not be refunded to them, as they have already enjoyed the facility.
- Second, according to our proposal, premium will be collected only on 'insured' instead of 'assessable' deposits, which is the current practice, the required size of DIF will further lower.
- However, as proposed, if the monetary coverage limit is increased, then it will exert an upward effect on the required fund size of DIF.
- In view of the above, the minimum rate of premium (based on the Risk-related system) for the safest insured commercial bank should be fixed at INR 0.05 per INR 100. The subsequent rates, which will be in accordance with the GNPL levels of the insured banks, can be fixed through simulation to attain a minimum 2% Reserve Ratio.
- For the cooperative banks, the minimum premium rate for the safest of the insured lot should be fixed at INR 0.75 per INR 100 and the procedure mentioned above in respect of the commercial banks can be followed for the other banks.
- Ultimately, DICGC should aim at moving towards becoming a full-fledged resolution institution for the banking sector with increasing powers for regulation and supervision.

DICGC, in its new avatar, may be named as the Bank Deposit Insurance Corporation (BDIC), as was proposed by Yashwant Sinha in his Union Budget for 2002-03. The role of BDIC should be as follows:

- Insurer of bank deposits, as defined
- Safeguarding the adequacy of Deposit Insurance Funds - one for the commercial banks and the other for the cooperative banks
- Administrator of the variable deposit insurance premium system, as required from time to time

- As a corollary to the above, BDIC should, either on its own or in collaboration with RBI, monitor the riskiness and health of the insured banks on a continuous basis.
- Proactively and expeditiously resolve the vulnerable or insolvent banks when they are *going* concerns rather than *gone* concerns and on *least cost basis* so that the viability and stability of the financial system is not jeopardized. The whole process of an orderly exit of inefficient entities and their restructuring needs to be transparent to the maximum extent possible.
- Making good the depositors with their eligible dues from the failed banks in a time-bound manner.
- Accomplish as much independence as possible in its working and function even though it continues to be a subsidiary of the central bank or if its ownership is transferred to the government at any point of time in future.

No doubt, the changes envisaged are metamorphic. Therefore, it would necessitate wide and deep changes in the DICGC Act, 1961 or probably a new set of laws. In addition, some of the connected Acts like the Banking Regulations Act, 1949, Regional Rural Banks Act, 1976, State Bank of India Act, 1955, State Bank of India Subsidiaries Act, 1959 and Co-operative Banks (State enactments) will also have to undergo suitable amendments.

### **Public Awareness Programme**

The new organization should take the task of creating public awareness earnestly and seriously. FSB's "Key Attributes" lists public awareness as one of the important parameters. However, as noted earlier, public awareness about the existence of a facility called 'deposit insurance' is at a low ebb even among the 'sophisticated' or 'informed depositors'. Therefore, it should be part and parcel of financial literacy programmes by banks.

Peoples' literacy about the health and various facilities of the banking system in general and the banks with which they bank in particular plays a critical role in preventing runs and therefore allowing the regulator, DIA and the government to manage the crises in the least impactful way. Therefore, there is a strong case for DIA to educate the people about deposit insurance through various media, as is being currently done by SEBI and IRDAI.

Secondly, bank branches should be advised to display prominently the logo of DIA in their premises, especially at the transaction counters and bring to the customer's notice that their

deposits are insured up to INR 1,00,000 or whatever is the prevalent limit and also elucidate them the point.

Thirdly, the insured banks should mention in the forms used by their customers and/or publicity materials that they are a member of DIA.

The bank staff also needs to be educated about deposit insurance through issuance of necessary guidelines/instructions/literature from time to time.

Insured banks may be asked to give 'Know Your Bank' pamphlets to the depositors – converse of KYC – giving the financial status of their banks.

Finally, DICGC officials may undertake periodic inspection of bank branches to ascertain whether they are displaying the awareness-creating materials in their premises or not and interview randomly some customers also.

### Summing Up

- *If our proposals as to institutional coverage, monetary coverage limits, shifting the assessment base to 'insured' deposits from 'assessable' deposits and risk-based premium system are implemented, the required size of DIF will lower and hence the premium rates for the insured banks.*
- *DICGC, in its new avatar, may be named as the Bank Deposit Insurance Corporation (BDIC), as was proposed by Yashwant Sinha in his Budget in 2001-03.*
- *Its metamorphic role should be as follows:*
  - *Insurer of bank deposits*
  - *Guardian of DIFs*
  - *Administrator of risk-based deposit insurance premium*
  - *Monitor of riskiness and health of banks*
  - *Resolution authority*
  - *Reimbursing the dues of depositors of failed banks in time*
  - *Accomplishing independence in working and function*
- *Ultimately, DICGC should aim at moving towards becoming a full-fledged resolution institution for the banking sector with increasing powers for regulation and supervision.*
- *It has a big role to play in spreading awareness about Deposit Insurance among the public directly as wells as indirectly through bank branches, besides making it part and parcel of the Financial Literacy Programme.*

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