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NBFCs, Systemic Risk and interconnectedness amongst Financial Institutions

IIBF - PUBLICATION LIST

Sr. No.	Examination	Medium	Name of the Book	Edition	Published By	Price (₹)
1	JAIIB / Diploma in Banking & Finance	English	Principles & Practices of Banking	2015/Re-printed in 2019	M/s Macmillan India Ltd.	₹660/-
2	JAIIB / Diploma in Banking & Finance	English	Accounting & Finance for Bankers	2015/Re-printed in 2018	M/s Macmillan India Ltd.	₹440/-
3	JAIIB / Diploma in Banking & Finance	English	Legal and Regulatory Aspects of Banking	2015/Re-printed in 2018	M/s Macmillan India Ltd.	₹440/-
4	JAIIB / Diploma in Banking & Finance	Hindi	Banking ke Sidhanth Avam Vyavahar	2015	M/s Taxmann Publications Pvt. Ltd.	₹870/-
5	JAIIB / Diploma in Banking & Finance	Hindi	Bankeron ke liye Lekhankan Avam Vittya	2015	M/s Taxmann Publications Pvt. Ltd.	₹600/-
6	JAIIB / Diploma in Banking & Finance	Hindi	Banking ke Vidhik Paksh	2015	M/s Taxmann Publications Pvt. Ltd.	₹700/-
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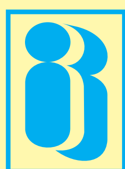
Bank Quest



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MISSION

The mission of the Institute is to develop professionally qualified and competent bankers and finance professionals primarily through a process of education, training, examination, consultancy / counselling and continuing professional development programs.

ध्येय

संस्थान का ध्येय मूलत: शिक्षण, प्रशिक्षण, परीक्षा, परामर्शिता और निरंतर विशेषज्ञता को बढ़ाने वाले कार्यक्रमों के द्वारा सुयोग्य और सक्षम बैंकरों तथा वित्त विशेषज्ञों को विकसित करना है ।

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Dr. J. N. Misra
Chief Executive Officer,
IIBF, Mumbai

Non-Banking Financial Companies (NBFCs) play an important role in providing credit by complementing the efforts of commercial banks, providing last mile financial intermediation and catering to niche sectors. The NBFC sector largely depends on market and bank borrowings, thereby creating a web of inter-linkages with banks and financial markets.

Due recognition of the systemic importance of NBFCs/HFCs and their inter-linkages with the financial system and ensuring higher credit flow by appropriately modulating exposure limits, enabling commercial bank lending to NBFCs and co-financing, and fostering active engagement with stakeholders are the hallmarks of the evolving engagement by the Reserve Bank of India with the sector.

As these financial intermediaries occupy an important place in the financial architectural landscape, the theme of the present issue of the Bank Quest is on "NBFCs, Systemic Risk and interconnectedness amongst Financial Institutions."

The 93rd Annual General Meeting (AGM) of the Institute was held on September 05, 2020 presided over by Mr. Rajnish Kumar, President, IIBF and Chairman, State Bank of India. We are carrying the AGM speech by Mr. Rajnish Kumar as the first article of this issue. The speech highlights the major developments and the financial performance of the Institute during the Financial Year 2019-20.

The Institute has taken an initiative to organize "IIBF Leaders Speak Series", in the Advanced Management Programme wherein, the Institute invites prominent personalities in the banking and finance domains to deliver lectures on the basis of their experience and expertise. A lecture under this series by Mr. Rajkiran Rai G, Managing Director & CEO, Union Bank of India on "Challenges of Indian Banks in Next Five Years" is the second article in this issue. In his speech, Mr. Rai has, inter alia, emphasized that the Indian banks have the challenge of financing India's aspirations of becoming Aatma-nirbhar in its journey to become a USD 5 trillion economy. The large banks can take up the role for driving the strategic focus of the country, say financing infrastructure, global Mergers & Acquisitions, and help relocation of global value-chains to India, etc., whereas the smaller banks and NBFCs could drive the economic focus, financing aspirational consumers, and unorganised sector enterprises with innovative origination and underwriting.

The Institute had organized a Seminar for HR Heads of NBFCs. Mr. Sujit Kumar Varma, Deputy Managing Director (Corporate Account Group), State Bank of

India had delivered an address on “Challenges Faced by NBFCs in India and the Way Forward” in the seminar. We are including his address in this issue which highlights the fact that the role of NBFCs is both complementary and competitive to the banking system. NBFCs which are proactive in dealing with the emerging challenges will be the ones that will deliver sustained growth in business and profits.

The next article on the theme is written by Dr. Bibekananda Panda, Assistant General Manager (Economist), State Bank Institute of Consumer Banking on “NBFCs and Systemic Risks in India’s Integrated Financial System”. This article mentions that the market capitalisation of certain NBFCs have been higher than the market capitalisation of the largest public sector bank in the country. The strong interconnectedness of the NBFCs to the whole financial system could trigger systemic default in case of unforeseen situations.

The fifth article of this issue is penned by Mr. Abhishek Singh, Research Officer, State Bank Institute of Consumer Banking on “Sukanya Samriddhi:Advantage Girl Child”. According to the author, the Sukanya Samriddhi Yojana is a good investment option and must be included in the overall portfolio as it offers many benefits to the girl child and parents/guardians. Every girl child deserves a better future as she has the power to change the country.

The sixth article of this issue is jointly written by Ms.Swati Anand, Officer, Bank of Baroda & Prof. Kushendra Mishra, Professor, Babasaheb Bhimrao Ambedkar University, Lucknow on “Strategic Technology Trends in Banks: Artificial Intelligence, Big Data and Competitive Advantage (ABC)”. According to the authors, at the organisational level, embracing analytics not only means embracing new skills but also welcoming different behaviours from the employees with new ways of managing them with new strategic models. The article concludes by saying that along with the rolling out of the financial literacy campaigns, there is also the need of creating AI awareness and literacy.

We are also carrying the summary of Macro Research Report (2017-18) by Dr. Prakash Singh, Indian Institute of Management (IIM), Lucknow on “Ethics and Corporate Governance in Indian Banking Sector”.

I hope readers will find the articles published in this issue to be useful and informative.

Please stay safe, stay healthy.

Dr. J. N. Misra

93rd Annual General Meeting Speech

Rajnish Kumar*

Ladies and Gentlemen,

It is my pleasure in welcoming you all to this 93rd Annual General Meeting of the Indian Institute of Banking & Finance. The report of the Council and the audited accounts for the year 2019-2020 have already been circulated and with your permission, I take them as read.

Before I proceed with the highlights of the Institute's performance during the financial year 2019-2020, I would like to share with all of you some of the recent initiatives taken by the Institute till this date.

Initiatives taken during COVID-19 pandemic situation

The outbreak of novel Corona Virus (COVID 19), declared pandemic by WHO, affected many places/ states of the country. Despite lockdown, the majority of work of the Institute was handled by the employees working from home to ensure that critical activities are functional. The Institute invoked its Business Continuity Plans (BCP), nearly 50,000 certificates were digitally signed and sent, all its publications were released in digital mode and all financial transactions of the Institute were also put through in time.

On-line Learning Initiatives

The Institute had also taken the initiative of offering undernoted online learning courses for the banking and finance professionals for a period of 3 months completely free of charge:

- Video lectures covering JAIIB/CAIIB.
- E-learning on JAIIB/CAIIB, Credit Management.
- Knowledge Sessions on current banking topics.

Remote Proctored Examinations

The Institute has introduced Remote Proctored Examinations for 3 certificate courses from the month of June'20. Remote proctored exams allow flexibility to candidates of appearing for the exams from the comfort of their homes while simultaneously enhancing the knowledge base. Remote proctoring is being done in combination with AI driven auto proctoring and physical remote proctoring processes to ensure quality and standard. For the examinations to be held in September 2020, 13 certificate examinations will be offered under the remote proctored mode. The number of exams being offered under this mode forms more than 90% of the total enrolments during 2019-2020 for the certificate courses (other than BC/BF and DRA exams) offered by the Institute.

Now, let me share the highlights of the Institute's performance during 2019-2020.

Financial Performance

The balance sheet of IIBF as on 31st March 2020 at Rs. 569.34 crore. While the income of the Institute during 2019-20 was Rs. 115.58 crore, the surplus was Rs.54.25 crore. The amount transferred to the General Reserve was Rs. 54.23 crore.

*President, IIBF & Chairman, State Bank of India.

Membership

The number of Ordinary Members was 9,31,715 as on 31st March, 2020. During the year, 45,135 new members joined the Institute.

Examinations

About 2.95 lakh candidates had enrolled for the Flagship / Associate Examinations conducted by the Institute. It is indeed a matter of pride for all of us that a sizeable number of candidates appear for the flagship courses (JAIIB, CAIIB and DB&F) offered by the Institute. This helps the banks to have well qualified personnel manning different banking verticals. The total enrolments under the capacity building courses have also been good.

Certification of Business Correspondents

RBI had identified the Institute as the sole certifying authority for the BCs of the Scheduled Commercial Banks (SCBs). Timelines for certifying the BCs were also laid down. For ensuring seamless certification of the BCs, the Institute has published the courseware in 11 languages and the examination is also held in 11 languages. In order to help the BCs to understand the subject better, video lectures, in Hindi and English, covering the courseware have been recorded and placed on the YouTube channel of the Institute. During 2019-2020, in consultation with RBI, three models for certifying BCs of the SCBs were also designed. The Institute is also the sole certifying agency for the BCs of the Payments Banks.

Launching of New Certificate / Diploma Courses

The enactment of the Insolvency and Bankruptcy Code, 2016 has been one of the major reforms undertaken by the Government. Recognising the importance of the Code for bankers, the Institute has designed a new course on "Resolution of Stressed Assets of Banks with special emphasis on the Insolvency & Bankruptcy Code, 2016." A dedicated courseware has also been published by the Institute.

Some of the other new certificate courses which are on the anvil are:

- Emerging Technologies
- Strategic Management & Innovations in Banking

Inclusion of Ethics in Banking under JAIIB

As ethical principles need to be followed by all the staff in an organisation, it was felt imperative by the Institute that knowledge on certain fundamental aspects of "Ethics in Banking" is disseminated to a larger population of bankers at different levels. In this connection, the JAIIB examination offered by the Institute is taken by a large number of candidates. It was therefore decided that apart from a separate certificate course on "Ethics in Banking", certain units from the courseware on the subject will be made part of the first paper of JAIIB namely "Principles and Practices of Banking." The examination on this subject held in May 2019 had some questions on "Ethics in Banking". The courseware for the subject "Principles and Practices of Banking." has been accordingly modified and made available in the market.

Other important developments during the financial year 2019-2020

Inauguration of New Premises in Kolkata

The Institute has also acquired its own premises at Kolkata. The new office at Kolkata, besides having state-of-the-art facilities, also has a studio, where classes through the virtual mode can be conducted for the different programmes of the Institute.

Case Study Writing Competition

Case study, as a pedagogical tool, has gained prominence. In order to have a good repository of case studies, the Institute had taken an initiative of organising a case study writing competition for the bankers. This initiative of the Institute was appreciated by the banking fraternity which was evident from the overwhelming response received. The Institute received a total of 61 case studies accompanied by Teaching Notes. The case studies received were evaluated by the Evaluating Committee on the basis of the laid down parameters and the winners were announced.

Research Fellowship in Banking Technology

Indian Institute of Banking & Finance (IIBF) and Institute for Development & Research in Banking Technology (IDRBT) have taken an initiative to jointly announce a "Research Fellowship in Banking Technology".

The research fellowship in Banking Technology, a joint initiative of IIBF and IDRBT, aims to sponsor a technically and economically feasible research project which has the potential to contribute significantly to the Banking and Finance industry. The selected research project carries a cash award of Rs.5,00,000/- (Rupees Five Lakh only) and is expected to be completed in six months. This will be fully funded by IIBF.

The responses received under this Fellowship have been quite encouraging as 48 proposals were received. The proposals received were evaluated by a Committee and the winner has been announced.

Information Technology

The Institute has extensively leveraged technology in its operations commencing from member registration to the award of Certificate after passing the Examination.

The major activities undertaken during the year were:

- The Institute migrated its in-house developed applications and Database to open source technology.
- Banks and Educational Institutes have been provided with facility to upload bulk applications for Diploma and Certificate Examinations conducted by Institute.
- The Institute now issues only Digitally Signed Certificates for all their Examinations thus making the exam system more robust.
- The Data Centre of the Institute migrated to Cloud Environment.
- All the network equipments of the Institute have been upgraded.

Study Support Services

In order to make distance learning a value proposition, apart from publishing a courseware, the Institute provides academic support in terms of e-learning, video lectures, mock tests, regular subject updates and condensed RBI Master Circulars/Directions on its website, a daily e-newsletter "FinQuest", a monthly newsletter (IIBF Vision), a quarterly publication (Bank Quest) and contact classes. These initiatives have been well received.

Video Lectures

The Institute had prepared video lectures for all the 3 subjects of JAIIB / DB&F, 2 compulsory subjects of CAIIB and for the certificate examinations on MSMEs and Business Correspondents.

Mock Test

Mock test is an effort to simulate examination conditions and gives an opportunity to candidates to familiarise themselves with the pattern of on-line examinations. Such tests provide a feel of the MCQ pattern of the examination.

Mock Test facility has been made available for JAIIB, DB&F, CAIIB (compulsory subjects) as also for three of its specialised courses namely, Certified Treasury Professional, Certified Credit Professional and Certificate in Risk in Financial Services. The mock test can be taken by any candidate subject to payment of a nominal fee.

HR Meet

The meet of HR & Training Heads of banks was organised on 1st February 2020 at Kolkata. The Institute shared the achievements and initiatives of the Institute taken during the year. The meet saw a good participation from banks with valuable suggestions from the bankers.

10th R.K. Talwar Memorial Lecture

The 10th Shri R. K. Talwar Memorial Lecture was organised by the Institute on 22nd November, 2019 and was delivered by Mr. Sanjeev Sanyal, Principal

Economic Advisor, Government of India and Co-chair of G20's Framework Working Group, Ministry of Finance, Government of India. The topic for the Lecture was "Beyond Risk: Policy making for an Uncertain World". Many senior bankers and other dignitaries from various fields attended the Lecture.

36th Sir Purshotamdas Thakurdas Memorial Lecture

The 36th Sir Purshotamdas Thakurdas Memorial Lecture was delivered by Hon'ble Justice Shri S J Mukhopadhaya, Chairperson, National Company Law Appellate Tribunal on the topic "Insolvency and Bankruptcy Code, 2016 and its impact on the Economy". The Lecture was held on 1st February at Kolkata and was attended by a large and appreciative audience.

Seminars/Webinar

The Institute organised seminars at the Leadership Centre and PDCs for the benefit of the banking fraternity covering topics like:

- Insolvency & Bankruptcy Code 2016;
- Banking Today: Secur-e-banking;
- Emerging Technologies and
- Non-Banking Finance Companies.
- Forensic Audit

Social Media

The Institute is on Facebook and YouTube. The Facebook page has got 1,25,579 likes on various types of posts uploaded by the Institute. The posts cover IIBF and regulatory notifications, Quote of the day, Opinion Poll, Greetings, Photos etc. The posts also cover various events/seminars/ conferences conducted by the Institute. The YouTube channel of the Institute, which covers various videos of seminars, conferences, workshops, etc, has got 37,00,836 views and more than 65,000 people have subscribed to the Institute's YouTube channel.

Training Highlights

The Institute conducted 191 training programmes during the year 2019-2020 in different areas at the Leadership Centre and at the PDCs at Chennai, Kolkata and New Delhi. This included 57 customised training programmes. A total of 6237 participants attended these training programmes. All the programmes were well received by the participants as the feedbacks were encouraging with strong recommendations for repetition of the programmes.

"TASK" - new periodical

A new periodical by name "TASK" (Training for Attitude, Skill and Knowledge)" was started by the Institute wherein, the news items on training programmes are informed to the bankers. This publication is in e-form only. The idea is to make this e-magazine more attractive and informative in the months to come. So far 5 issues, have been published.

Research and Publication

IIBF's Quarterly Journal, Bank Quest has been included in the Group B of UGC CARE list of Journals. University Grants Commission (UGC) had established a "Cell for Journals Analysis" at the Centre for Publication Ethics (CPE), Savitribai Phule Pune University (SPPU) to create and maintain the UGC-CARE (UGC - Consortium for Academic and Research Ethics). As per UGC's notice, research publications only from journals indexed in UGC CARE list should be used for all academic purposes.

Corporate Collaborations

IIBF offers a Diploma Course in Banking and Finance (DB&F) to develop industry and job ready candidates employable by the banking and finance sector. Indian Banks Association has identified this qualification (DB&F from IIBF) as a desirable qualification along with other prescribed entry level qualifications for recruitment in the Banking Sector. Students who have completed 12th standard as well as those pursuing graduation/post-graduation courses and aspiring for a career in banking and finance sector can take up this course for enhancing their career prospects. In order to provide counselling, coaching and conducting tutorial classes for the candidates/ students enrolled for taking up DB&F and other Diploma/Certificate examinations being conducted by IIBF, the Institute has signed Memorandum of

Understanding (MoU) with eight colleges during the year 2019-20. Apart from the colleges, the Institute has also been apprising the banks about the courses offered by IIBF and other activities carried out by the Institute

Future Outlook

The Institute had appointed M/s KPMG Advisory Services Pvt Ltd for undertaking a "Need Analysis and Organisation and Management (O&M) Study". The report which has been submitted by the consultant has been examined and to start with, the Institute will be taking up the following initiatives.

Introduction of Professional Banker qualification

In order to meet the twin objectives of bridging the skill gap in mid management level and introducing a system of continuous professional development, a gold level aspirational qualification called "Professional Banker" will be introduced by the Institute. There will be different tracks for achieving the Professional Banker qualification and the course curriculum will have sufficient rigor and each track leading to this qualification will represent a critical and important area of banking. The status of a "Professional Banker" will be conferred on a banking & finance professional if he/she has a work experience of 5 years. Details will be communicated to all concerned.

Offering Higher Education Programs

In the current year, the Institute has developed a hybrid model of the Advanced Management Programme (AMP) which is a combination of on-line delivery in Virtual classroom training mode coupled with two short duration physical immersion programmes – one at IIM, Calcutta and other at IIBF, Mumbai. Thus, this programme has been made open to participants all over India.

The Institute will assess responses to this programme at the end of the current financial year and also explore options of having this course in collaboration with well-known Institutions, both domestic as well as international.

Apex Training Centre

I am happy to state that the Institute has acquired its new premises at New Delhi with residential facility. This will be the apex training centre of the Institute.

Building a leadership pipeline will be very important for banks in the years to come. The Institute will be well placed for facilitating the efforts of the banks in this regard.

Proposal

Now I propose that the Report of the Council and audited statement of Accounts of the Institute for the year ended 31st March 2020 be adopted and passed.

Thank you for your kind attention.

Bank Quest Articles - Honorarium for the Contributors

S.No.	Particulars	Honorarium Payable
1	Invited Articles	₹7000
2	Walk-in Articles	₹4000
3	Book Review	₹1000
4	Legal Decisions Affecting Bankers	₹1000

Challenges of Indian Banks in Next Five Years

Rajkiran Rai G*

Very Good Morning to all participants,

1. At the outset, let me congratulate you all for taking an important step in your career, by opting to enrol in Advanced Management Programme of the Indian Institute of Banking & Finance. It demonstrates that you understand the complexities of modern day banking, and why one needs to continuously invest in learning & development. Trust me, it will serve you well in your career. I also appreciate the IIBF team for constantly updating the curriculum and improving the pedagogy, making it more relevant for the times. I expect more bankers to benefit of it, going forward.

2. These are unusual times, with mankind in a grip of fear over Covid-19. The virus has affected more than 2.4crore people and claimed lives of more than 8 lakh, as we speak. Virus is still raging hot even as there is a hope firming on vaccine development. Economists and policymakers are still to their wits end in assessing the fallout of virus. International Monetary Fund estimates put the global economic loss of output to the tune of USD 20 trillion over next five years. Others have been more guarded. Suffice to say that longer the Covid persists, the greater it will have effect on our work and life, in general.

3. My theme of interaction today is “challenges of Indian banks in next five years”. We all are bankers here. If someone says “Challenges of Indian banks”, the first things that come in our mind are Asset Quality, Provisioning, Capitalisation, Business growth, Profitability etc. These terms are all too familiar to need any labouring from my side. Suffice to say that these are challenges that are recurring in nature. With every turn of business cycle, banks do get to face these challenges, and they also overcome these challenges, and emerge with some learnings. We should rather focus on structural challenges that define banking of tomorrow and how should bankers prepare for it, going forward.

4. I have accordingly structured my address in two parts: I will begin with surveying the business landscape, especially the trends that are shaping our choices, the opportunities and challenges therein. It will be followed with a brief on long term trends that have been underway to shape economy, and changing role and relevance for banks in it. I shall conclude with sharing my thoughts on how banks can transform in order to meaningfully serve the role they are expected to play.

Envisioning the Future- Gazing the Crystal Ball

5. Making prediction of future has been never easy. It is fraught with all kinds of uncertainties. More so, when caught in a once-in-a-century kind of Pandemic.

6. Covid disruption, notwithstanding, India is seen a long term growth story. The economic transformation of India, supported by demographics, urbanization and industrialization

*Managing Director & CEO, Union Bank of India.

will provide holistic opportunities for the banking sector – be it retail, corporate or rural banking. There will be considerable heterogeneity, however, in terms of relative contribution to bottom-line. A focused pursuit of business will differentiate winners from laggards.

7. India is becoming a data-rich society. India is home to 1.3 billion people having digital identity in AADHAAR, near universal mobile connectivity and access to bank account, making a robust JAM foundation. The data costs are a fraction of global average, leading to 12 GB data consumption a month by an Indian in 2019. Data consumption is seen doubling to 25 GB per user per month over next five years. The App economy truly covers all facets of life and living. It is difficult to imagine the changes digital technology has ushered in our lives, even from a reference point of a decade ago.

8. Technologies that power rise of India in the decade ahead is difficult to foresee yet. However, a lot of lift will come through deepening digital infrastructure, in terms of 5G/6G web speed, Internet of Things creating unforeseen opportunities in terms of data and optimization, Artificial Intelligence and Machine Learning opening new vistas of growth, 3D printing and Blockchain technology becoming ubiquitous in its usage. Mundane things of today are going to be relegated to the realm of robots with Men moving to tasks demanding application of higher faculties of mind.

9. Banks, like other service enterprises, will likely be subsumed in invisible realm, wherein the consumer will avail the services she desires, without having to think about intermediaries that need to be negotiated with. Challenge for banks is to meet the service expectations of customers. Imagining the Bank of future, it looks more a technology company, with no certainty of a physical presence, but a trust that manifest in algorithms.

10. What has implications for business focus of banks? Conventional banks have relied on asset based model for profitability. This model is, however, getting increasingly challenged by fintechs, which are nimble technology players serving niche financial needs. We have already seen platforms driving down margins in retail lending. Consumer today can browse through quotes of dozens of banks, sitting at home, and chose the one offering lowest price. There is similar development happening in SME loans now. Besides, we also have to contend with alternatives like bond market serving corporate. We need to look beyond the immediate future, therefore.

11. For a banker gazing the crystal ball today, he would like to know answer of three questions: a) who all will be my customers five to ten years from now, b) what do they need/wish for, and c) How do I bring value to him/her.

12. Prospecting customers, there are three categories to look at: a) digitally ignorant/illiterate, who prefer the conventional way of doing things, b) digitally literate, which do surfing on web for entertainment and social connectivity but are conservative when it comes to transacting money matters and c) digital savvy, which leverage connectivity for everything from entertainment to social sharing to shopping, etc.

13. India is a youthful country with average age about 28 years. About half of the population falls in the age group below 25 years. They make the future pool of customers for banking industry. They are/ would be digital savvy. They like to experience banking digitally to the extent of never visiting a brick & mortar branch ever.

14. Of the remaining half, however, the need and expectations of banking service will be varied. With mobile being already ubiquitous, internet usage will deepen faster and so will be availment of banking services. However, banks still need to maintain multiple channels of service delivery, viz. brick & mortar branches as well as state of art digital interfaces to delight customers. Number of branches will likely reduce in metros while doing well in rural areas.

15. Indian banks have rolled out technology to the advantage of the customers. Next phase is about enhancing digitization and leveraging data for business efficiencies. Banks need scaling up portfolio of digital offerings and workflow management, both credit and operational aspects. They should look at co-opting fin-techs in making a holistic offering. Future revenue pools will have more contribution from fee-based avenues than mere interest margins.

16. Indian banks have massive customer base; this wealth of information on customers could be harnessed through data analytics. For example, our banks may shift from conventional balance-sheet /cash-flows analysis based lending framework to transaction based appraisal and now to alternative information footprints with data pooled from ones' social media imprints, mobility data, utility service behaviours, etc. Marketing and sales will accordingly undergo revamp with 'feet-on-street' making way for 'analytics-driven-digital-sales'.

17. Many Indian banks have moved to centralized credit underwriting system for their loan book. Recently some banks have also experimented rule-based processing based on analytics and machine learning algorithms. Retail and MSMEs lending, especially the working capital part, is increasingly seen processed by algorithm driven decision-making.

18. The project loans, however, involve decision-making under uncertainty. It could be about project completion, demand evolution and state of competition in industry that have impact on the revenues for borrower. Underwriting project loan calls for applying lot of human judgement, born of experience and intuition, which cannot be delegated to machines built on algorithm. There will be indeed a role for astute bankers in making credit decisions, going forward. However, humans making decisions will still benefit from variety of information pools available in digital era, and their capabilities to detect, process and control risk will enhance multi-fold.

19. Lenders should be risk prudent, and not risk averse. Otherwise, we don't do justice with our role. While making systems fool-proof is imperative, there is a need to inculcate risk sensitivity across the rank & file. Frauds have risen in frequency and severity, of late. Apart from sophistry of fraudsters, it is a telling commentary on our risk management standards, detection, monitoring and reporting for legal action. We need to leverage technology, say Artificial Intelligence and Machine Learning to sift through big data and identify any breaches in time, to respond proactively and decisively.

20. Sharp shift in the transaction mechanism, and penetration of digital channels, would certainly require strengthened cyber security frameworks. A chain is as strong is as its weakest link. Estimates are that one-third of data breaches involved internal actors. We must work on raising cyber awareness among staff as also customers. To effectively deal with cyber threat, however, we need to respond as a system. Banks can come together for standardisation and share burden of cyber security. Customers will not hold any tolerance for data theft and misguiding.

21. The changing banking models towards a specialised service provider would require a pool of specialised workforce to meet the same. It has implications for the human resource management. Banks may not need the huge manpower base of today to serve clients of tomorrow. As mundane roles get increasingly automated, bank manpower will be freed for more value adding activities, like advisory, sales, credit and technology development. Accordingly, hiring preferences could shift towards specialised professionals instead of bulk hiring for generalists. Performance management and promotions to senior roles will also change accordingly. Existing set of bankers will need to upgrade their digital, risk, credit, marketing skills more frequently. It will also call for re-look in leadership training to prepare for new set of leaders.

22. Indian banks also have the challenge of financing India's aspirations of becoming Aatm-nirbhar in its journey to become USD 5 trillion economy. The large banks can take up the role for driving the strategic focus of country, say financing infrastructure, global Mergers & Acquisitions, and help relocating of global value-chains to India, etc., whereas the smaller banks and NBFCs could drive the economic focus, financing aspirational consumers, and unorganised sector enterprises with innovative origination and underwriting.

To conclude,

23. Indian banking has come a long way since the days of regulatory pre-emption, directed credit, and forbearance. Looking far in future, there will be simultaneous play of technology, regulations and demographic drivers of demand. Technology companies will further chip away banking roles. Interest margins will likely shrink with assets based revenue getting strains due to competition from niche players and platforms.

24. Our operating environment is changing faster than we would like to acknowledge. Meeting customer aspirations, with a service efficiency alike technology firms, calls for new thinking. As bankers, we need to be imaginative in discovering new revenue pools, going forward. We also need to develop capabilities to assess and process risk, and make informed decisions. Winner banks could distinguish by creating an end-to-end digital offering in parallel to conventional multi-channel offering.

25. There cannot be a better preparation than having a skilled and knowledgeable human resource. I am confident that this younger lot of bankers will take the mantle of improving overall efficiency in their banks. I wish you all success!

Thank you!

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7. Certified Accounting & Audit Professional
8. Certificate Course in Foreign Exchange
9. Certificate Examination in Customer Service & Banking Codes and Standards
10. Certificate Examination in IT Security
11. Certified Information System Banker
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Challenges Faced by NBFCs in India and the Way Forward

Sujit Kumar Varma*

At the outset, I would like to extend my sincere thanks to the Indian Institute of Banking & Finance, Dr. J. N. Mishra, CEO of IIBF in particular, for having invited me today to address this august gathering, on a subject which is engaging the attention of the entire financial community ever since the IL&FS episode happened in September 2018. It is pertinent to mention that the default by IL&FS coincided with the 10th anniversary of the collapse of Lehman Brothers which triggered the global financial crisis in September 2008.

Let me also acknowledge that true to its stated mission "to develop professionally qualified and competent bankers and finance professionals primarily through a process of education, training, examination, consultancy/ counselling and continuing professional development programs", IIBF ever since it was established in 1928, has kept reinventing itself to keep pace with the changing times and demands of the banking and financial industry. IIBF continues to play a very important role in skilling, re-skilling and training countless professionals from the industry. As banking and finance becomes more complex, competitive and specialized, IIBF's role in developing a talented pool of qualified and well-trained professionals will assume even greater importance. I am sure the team at IIBF under the able leadership of Dr. J. N. Mishra is fully geared up to meet this challenge.

Before I attempt to analyze in detail the challenges that NBFCs in India face today and the way forward, it is important to understand the role that NBFCs play in the context of the Indian economy and how did the sector get to this situation that it finds itself today.

Non-Banking Financial Companies (NBFCs) play an important role in promoting inclusive growth in the country by catering to the diverse financial needs of bank excluded customers. Further, NBFCs often play a lead role in providing innovative financial services to Micro, Small and Medium Enterprises (MSMEs). NBFCs do play a very critical role in participating in the development of the economy. They supplement the role of banking sector in meeting the increasing financial needs and delivering credit to the unorganized sector and to small local borrowers. Despite the massive expansion of the banking network over the past few decades and the rapid adoption of technology by most banks to provide low cost banking services in rural and semi urban areas, India is still an underbanked country and there are still a large section of the population which is underserved by the financial system. NBFCs have been playing an important role in bridging the gap between organized and unorganized lending and are considered an important pillar of the Indian economy. As of March 2018, the aggregate size of loans and advances of NBFC sector (Including HFCs) registered an annual growth of around 22% amounting to Rs. 27 trillion and loan size reaching Rs. 30 trillion as on March 2019.

Traditionally, retail as well as institutional borrowers in the Indian market prefer to borrow from banks. However, there is a large segment of the population who do not fit the parameters set by banks to be eligible to borrow. Besides, most Public Sector Banks (PSBs) and some private banks were grappling with

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Address delivered during a seminar for HR Heads of NBFCs.

asset quality and capital adequacy issues over the last few years. This opened an opportunity for NBFCs and Housing Finance Companies (HFCs) to step up and fill this demand for credit. These NBFCs and HFCs, particularly those which were Non-Deposit taking, still needed to find avenues to raise adequate resources at optimum cost. They were helped by the large quantum of money which flowed into Debt Mutual Funds after demonetization, which was largely invested in short term papers issued by NBFCs and HFCs that resorted to short term borrowings to reduce their cost of funds. Post demonetization, investors with swollen bank accounts, moved a lot of money into mutual funds, especially equity and balanced funds. NBFCs and HFCs in turn used these abundantly available borrowings to extend long term loans, thereby in the process creating an Asset-Liability mismatch. This phenomenon works smoothly as long there is adequate and continuous liquidity in the system and Mutual Funds (MFs) are chasing higher yields. It would be relevant to mention that the mutual fund industry crossed the milestone of Rs. 10 lakh crore AUM for the first time in May 2014. The industry doubled its Assets under Management (AUM) and crossed Rs.20 lakh crore AUM for the first time in August 2017. The co-relation that I am trying to establish here is that there was a readily available source of funding which helped fuel the rapid growth of the NBFCs and HFCs upto the period when the IL&FS crisis hit the industry like a bolt from the blue. But in a sense, this was a crisis waiting to happen. Any prudent risk manager will tell you that for a bank or a Financial Institution (FI), managing Asset/Liability Management (ALM) and liquidity profile within prudent limits, even if the regulators have not mandated one and whether a crisis is brewing or not, is a sound strategy to de-risk the balance sheet. Most fund and asset managers, if not all, overlooked the cardinal principle of risk management and assumed that short term liquidity would be continuously available on a tap and they can book long term assets to maximize yields. Little did they realize that the slightest sign of liquidity crisis will lead to risk aversion by the fund providers and in some cases an extended liquidity problem has the potential to take the shape of a solvency problem, particularly for those NBFCs whose leverage is high.

Recent Trends

Now let us fast forward and look at some of the recent trends based on the Q2 FY 20 results of the NBFCs:

- NBFC loan book growth slowed to 9.6% Year-over-year (YoY) compared to an average growth of 18-20% seen in the past 5 years. On sequential basis, loan book growth was flattish at 1.8%.
- Asset Quality on aggregate basis was relatively stable on Quarter on quarter (QoQ); Gross Non-Performing Assets (NPAs) were at 4.4%, similar to that in Q1 FY20.
- Borrowings increased 10% YoY and 1.2% on QoQ basis, broadly in line with loan growth. Aggregate gearing improved from 5.9 times in Q2 FY19 to 5.7 times in Q2 FY 20.
- Liquidity position of NBFCs is improving gradually compared to past few quarters due to slower disbursements and securitization. We have seen the securitization market more than double in last year (FY 19) to Rs. 1.98 lakh crore from Rs. 0.84 lakh crore in the previous year (FY 18).
- Liquidity position of NBFCs is improving gradually compared to past few quarters due to slower disbursements and securitization. However, a few entities still have mismatch in ALM, particularly in the short-term buckets.
- Profitability showed a marginal improvement on QoQ basis (ROAs increased from 2.0% in Q1 FY20 to 2.3% in Q2 FY 20) though remains subdued.
- Analysis of top exposures of NBFCs suggests higher concentration (As % of loans, Net Worth) for HFCs towards real estate developers. Gold Loan companies and Asset Finance Companies (AFCs) too have some bigger exposures towards micro finance institutions.
- Similar to previous quarters, HFCs grew at the slowest pace (5.6% YoY and 1% QoQ) followed

by AFCs (7% YoY and 0.6% QoQ). Slowdown in disbursements by NBFCs, focus on conserving liquidity and subdued consumer demand has impacted the loan growth of NBFCs.

- IFCs, diversified NBFCs and gold loan NBFCs grew in double digits (YoY) mainly contributed by larger NBFCs like PFC /REC and Bajaj Finance.
- Out of 20 NBFCs, 15 reported QoQ increase in NPAs in Q2 FY20.
- Larger HFCs which have 15-20% of loans exposed to developers still remain a concern.

Mistakes made and lessons learnt

NBFCs

- In the run up to the IL&FS crisis, most NBFCs, if not all, did not have a prudent risk, ALM and Liquidity management framework in place.
- Most NBFCs Assumed that short term liquidity from banks and MFs will be available on a tap. Using this overhang of short-term liquidity to book long term assets. In the process, running a huge ALM and repricing risk.
- Poor risk and corporate governance standards when it came to booking of assets. Many NBFCs and HFCs chose to take unduly large exposures to the developer finance portfolio and LAP without assessing the project viability and cash flows for servicing of debt. In many cases, the past track record of developers and geographic concentration risks were overlooked. As long as liquidity in the system was easily available, it was not uncommon for a LAP or a developer loan to shift from one NBFC /HFC to another at a higher pricing to avoid being classified as a NPA.
- HFCs were licensed and regulated by NHB. NHB did not have adequate mechanism or resources to closely supervise these HFCs. Thus, a regulatory arbitrage existed which allowed some of these HFCs adopt imprudent risk management and lending practices.
- The immediate impact of the IL&FS crisis was extreme risk aversion by banks and MFs to lend to NBFC and HFCs. The cost of borrowing, even for some reputed players went up at least by 100 to 150 bps.
- Most NBFCs, who were running ALM mismatches, moved quickly to correct that by trying to raise long term funds from banks, even if meant paying a higher rate of interest. NBFCs backed by strong parentage found it relatively easier to raise funds as compared to others. Debt mutual funds continued to cut back on debt instruments issued by NBFCs. Debt mutual fund exposure towards the NBFC sector fell by 24.3% YoY in November 2019. To Rs. 1.83 lakh crore. Investments by debt funds in NBFC papers were lower by Rs. 81,868 crore since July 2018, when the NBFC crisis began.
- NBFCs which found it difficult to raise long terms funds relied on sell down of better-quality asset pools to banks to repay maturing short term loan obligations. We have seen the securitization market double to Rs. 1.98 lakh crore in FY'19 from Rs. 0.84 lakh crore in FY'18.
- As per the latest ICRA Ratings report, the securitization volume is expected to hit a record high of Rs. 30,000 crore in FY'20. As much as 40% of the total disbursements made by NBFCs-MFIs was raised through securitization, as against 18% a year ago. During H-1 FY'20, NBFCs & MFIs raised around Rs. 14,000 crore, nearly twice as much raised in H1'FY 19.
- Direct assignment transactions or bilateral assignment of retail loan pools from one entity to another, continue to remain the preferred mode contributing 78% in H1 FY 20 of loan sell down for the microfinance asset class.

Banks

- Banks for their credit decisions largely relied on the External Rating of the NBFC/ HFC. If an entity was rated AAA or AA, most banks only looked at their Capital Adequacy Ratio, Gross and Net NPA ratios and Total Outside Liabilities to Net Owned Fund (TOL/NOF)

- Banks derived added comfort in case the NBFC/ HFC was backed by a strong parent.
- In the aftermath of the crisis, banks have re-calibrated their risk appetite for NBFCs.
- One of the first things that banks having significant exposures to NBFCs/HFCs did was to carry out a detailed review of individual companies in respect of their ALM mismatch, liquidity profile, leverage, Asset profile, top 10-20 exposures, top 10 NPAs, concentration risk, if any etc.
- As an added risk mitigation measure, banks undertook a detailed review of NBFCs /HFCs which had a high exposure to developer finance portfolio. Status of individual projects to which these loans were given to was carried out to see the project completion stage, bookings, sales velocity etc.
- Most banks have now significantly tightened their credit underwriting standards for NBFCs and are analyzing at much more granular level parameters such as, TOL/NOF, Capital Adequacy, funding mix, ALM position (bucket wise), contingency liquidity plans, quality of credit portfolio, Top 10 exposures, Top 10-20 exposures as a percentage of Net Worth, sectoral and geographical concentration risk, Overdue to demand position, movement in Gross and Net NPA ratios, PCR etc.
- The major risk for banks still persists in respect of those NBFCs/HFCs who have a very high exposure to the developer finance portfolio. To assess and mitigate the risk, some banks, including SBI, have engaged independent qualified agencies to do a detailed due diligence of individual projects to which the NBFCs have large exposures. These projects are then classified into 'High', 'Medium' and 'Low risk'. Projects under 'high risk' category is reviewed at quarterly/half yearly intervals.
- Another measure that some banks are exploring on a bilateral basis is to provide the last mile priority funding to some of these underlying residential real estate projects which are 70 to 80% complete so that the funds of NBFCs locked up in these projects can be freed up.

Rating Agencies

- If you recall, IL&FS group, before it defaulted was rated AAA. This AAA rating, as it apparently turned out, was mainly on account of window dressing of books.
- This default and others that followed turned attention on the credit rating agencies. As a follow up measure and to restore investor confidence in the system, SEBI has now tightened the norms for credit rating agencies. RBI's recent circular mandates credit rating agencies to make more disclosures about the quality of debt instruments they rate. The new guidelines require disclosures on cumulative default rates, probability of default benchmarks and liquidity indicators. SEBI has also tweaked the methodology to arrive at default rates. Rating agencies now need to disclose all factors that ratings are sensitive to. For liquidity indicators, SEBI has made it mandatory for the rating agencies to publish a standardized liquidity indicator, indicating poor, stretched or adequate to superior/ strong classifications. These changes will bring in the much needed transparency in the system and help investors make more informed decisions.

Major challenges facing NBFCs and Outlook (CRISIL NBFC Report 2019)

- NBFCs credit growth to remain moderate – 9-11% in FY 20. Growth is expected to improve to 11-13% in fiscal 21.
- Fund raising and managing liquidity remains the biggest concern for NBFCs; cost of funding to remain elevated in FY'20 and is expected to come down by 25-30 bps in FY'21. Ability of the NBFCs to pass on the incremental costs of funding will be high in segments such as Education, Consumer Durables, Microfinance, Infrastructure and low in Housing and Auto.
- Increased spreads for risky players to remain higher in fiscal 2020; market borrowings (CP & NCD) are expected to reduce in overall NBFC resource mix.

- Wholesale, LAP and low- cost housing segments to see substantial asset quality deterioration over the next fiscals.
- Profitability of non -banks to deteriorate by 30-40 bps over the next two years.
- Liquidity crisis will impact credit growth in wholesale, housing and MSME the most.
- Gold, Consumer Durables, Education, Microfinance and construction equipment segments will be less impacted.
- NBFCs market borrowings' share to decline as they turn to banks for direct as well as indirect lending.
- Apart from direct lending, banks will continue to increase their exposure to securitization of loan pools; beneficial to both banks (no ALM risk) and NBFCs (access to funds).
- NBFCs CP issuances will continue to remain low at 30-40% of pre-crisis levels.
- Despite huge surplus liquidity in the banking system in the past 3 months, risk aversion on the part of banks continues and banks are very selective in lending to NBFC segment. Nevertheless, banks have stepped in to fund the majority of the NBFCs funding requirement. As per RBI's recent data, between September 2018 and 2019, banks have lent Rs. 1.9 lakh crore to NBFCs, growing their portfolios by nearly 40%. The loans extended in the same period between 2017 and 2018 were Rs. 1.43 lakh crore, registering a growth of 43%. Credit to the NBFC sector from banks has expanded by Rs. 39,200 crore in the current fiscal. This clearly debunks the myth that banks are not lending to NBFCs.
- Funding Challenges and chunky loan books can spur delinquencies in wholesale segment. Housing segment is also likely to witness some deterioration. As per CRISIL estimates, Gross NPA over the next two years can go up by more than 100 bps for Wholesale and LAP segment and approx. 40 -50 bps for Low cost housing and Housing segments.

Way Forward

- The Government and the Regulators have been prompt in realizing the seriousness of the problems of the NBFC sector and the risks that it can pose to the overall financial system. Several measures, such as partial credit guarantee scheme for PSBs to purchase high rated pooled assets from financially sound NBFCs/HFCs have been announced. This special window for one-time partial credit guarantee offered by Government will remain open till June 30th, 2020 or till such date by which Rs. 1 lakh crore of assets gets purchased by banks, whichever is earlier. Asset pool rated BBB+ or higher are eligible to be purchased by PSBs. We will have to wait and see as to up to what extent NBFCs/ HFCs are able to utilize this special window.
- The Government has also announced a special window for providing priority debt financing for stalled housing projects in the affordable and middle-income housing sector. The Govt. will invest Rs. 10,000 crore in the total Rs. 25,000 crore AIF. Successful implementation of this will provide last mile funding to nearly 1,600 stalled housing projects comprising 4.58 lakh housing units across the country. If this scheme hits the ground in quick time, then this will provide a major relief to the NBFCs/ HFCs as also to the homebuyers. As per estimates, the unsold inventory of residential flats in MMR is 24 months and the position in NCR is even worse.
- The so-called premium segment residential housing projects, are still struggling to arrange adequate funding and demand from prospective buyers is also missing. The problems of this segment are still largely unaddressed.
- Following the recent amendment in the Insolvency & Bankruptcy Code (IBC), the resolution of NBFIs, including HFCs with asset size greater than Rs. 500 crore may be taken up via the IBC route. Such a resolution process can only be initiated by RBI. DHFL is the first NBFC to be taken up under the IBC process. This measure will enable complex NBFCs/HFCs with

multiple stakeholders to be resolved in an orderly and time bound manner.

- An added comfort is the message from the Governor RBI that the regulator will not allow any major non-bank lender to collapse. On the other hand, RBI is closely monitoring the top 50 NBFCs. This should calm the markets and infuse a sense of confidence amongst all stakeholders.
- One off episodes, such as default in the case of Altico only adds to the risk aversion in the system. NBFCs typically borrow from a large number of banks and MFs under a multiple banking system, and in most cases the security structures are also asymmetrical. At the slightest hint of a crisis, some of the lenders take precipitative steps to protect their own interests. This compromises the overall interest of the other stakeholders. Ideally, all lenders should get together and work out a resolution plan that is in the best interest of all stakeholders.

NBFCs & HFCs on their part have a lot to do to set their own house in order. The critical issues that they need to address are the following:

- Having a sound board approved Risk Management framework beyond just the regulatory prescriptions,
- Improve corporate governance standards, transparency in disclosures,
- Adhere to sound ALM and liquidity management, complying with LCR as and when it becomes applicable. Have a strong capital buffer.
- Rebalancing their portfolio and having a more diversified portfolio in terms of sectors and geographies along with sound underwriting standards, effective follow up and collection mechanism. Use of data analytics can further improve the selection of right borrowers and generate early signs of stress.
- With overall cost of funding going up for most NBFCs, margins will be under pressure. This can be absorbed through enhanced adoption of digital tools for underwriting, monitoring and collection.
- Co-origination of priority sector loans in collaboration with banks is an added opportunity which NBFCs can leverage.
- The ongoing crisis has clearly been able to separate the stronger NBFCs from the ones which are not so strong. The ones backed by a strong parent have been quicker to rebound. The stronger and better managed players have been able to get the support of lenders and will be able to reap the benefits as and when the consumption demand and investment growth picks up. They have also utilized this phase to consolidate their operations.
- Going forward, we can expect some rationalization in the number of NBFCs and higher regulatory stipulation of capital requirement.
- Secondary loan trading platform for trading of loan portfolio is another avenue that the regulator can explore going forward.
- Last, but certainly not the least, NBFCs should strive to have a pool of talented & skilled employees to handle specialized roles such as Credit, Risk, Treasury, IT etc.

Let me conclude by saying that NBFCs and HFCs will continue to play a pivotal role in the Indian financial system. The role of NBFCs in catering to the credit needs of a large and diversified section of the Indian population that cannot be served by the traditional banking system, will continue to be critical. In that sense, the role of NBFCs is both complementary and competitive to the banking system. The road ahead will be arduous and full of new challenges. NBFCs which are proactive in dealing with the emerging challenges will be the ones that will deliver sustained growth in business and profits.

Thank you.

NBFCs and Systemic Risks in India's Integrated Financial System

Dr. Bibekananda Panda*

Introduction

Non-Banking Financial Companies (NBFCs) are one of the major institutional mechanisms promoting inclusive growth in the economy by catering to the diverse financial needs of unbanked customers. NBFCs role in sustainable and equitable economic development is very crucial. Like Banks, NBFCs are a set of financial intermediaries permitted to take deposits and delivering credit, and in the process play an important role in channelizing the scarce financial resources. NBFCs role in providing innovative financial services to MSMEs, apart from offering services to wide variety of customers, both in urban and rural areas is impressive. By extending credit to the capital scarce needy sectors, NBFCs aid in employment generation and reduction in socio-economic inequalities.

2. Cross-Country Perspective of NBFC Sector

Economic prosperity and emergence of new business have led to steady expansion in the size of the global NBFC sector in last few decades. As per the Global Monitoring Report on Non-Bank Financial Intermediation 2019 by Financial Stability Board, the size of the global NBFC sector has grown from USD 31 trillion in 2010 to USD 50.9 trillion in 2018.

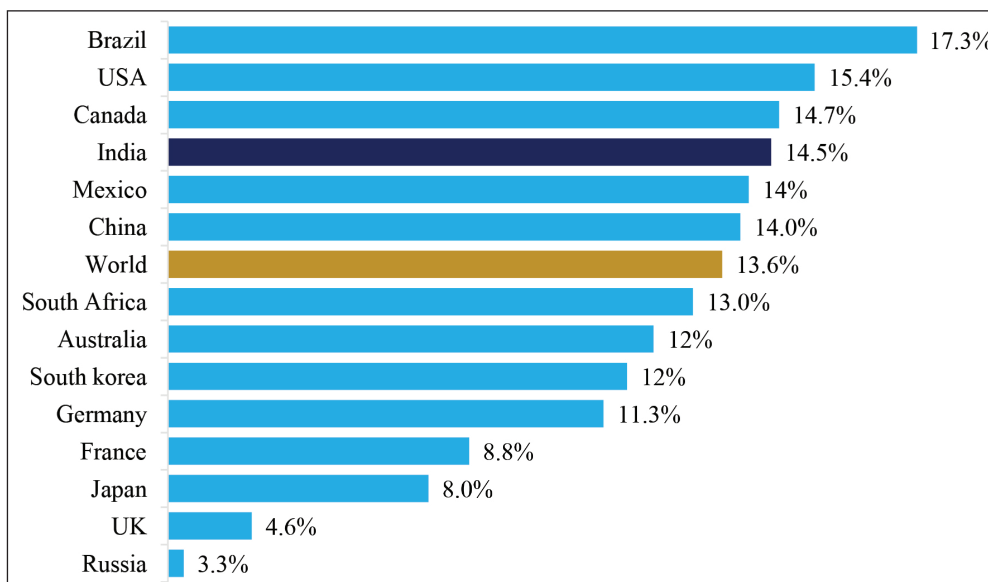

Figure 1: Asset Size of NBFC Sector (as a % of Total Financial Assets): 2018

Source: Global Monitoring Report on Non-Bank Financial Intermediation 2019, FSB

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The US is home to the largest NBFC market with a size of USD 15.2 trillion (2018). While the sector has reached maturing stage in the US, its spread started accelerating in developing economies. Growth of the NBFC sector in emerging market economies has been higher than that in developed markets. However, the growth of NBFCs in emerging markets is attributed to country-specific market development. With a size of USD 0.60 trillion (asset size), India's NBFC sector constitutes nearly 1.2% of the total global NBFC sector.

3. Strategic Importance of NBFCs to the Indian Economy

Indian NBFCs have achieved great success in meeting the diverse financial needs of the economy. Serving the unbanked customers by extending retail asset-backed easy credit, lending against securities and microfinance are all areas where NBFCs have proved their unique position. In supplementing to the banking sector in meeting the growing financial needs of a lower middle-income economy NBFCs extend credit to the corporate sector, delivering credit to the unorganized sector and to small local borrowers.

Additionally, niche NBFCs fulfil the unmet and exclusive credit needs of infrastructure, factoring, leasing, and other such specialised activities. NBFCs are bridging the gaps left by banks in remote unbanked rural areas and have contributed in developing small and micro businesses through their local presence and strong customer relationships. NBFCs also extend small ticket personal loans, financing of two wheelers/ three wheelers, farm equipment financing, loans for purchasing used commercial vehicles/machinery, and small-ticket loans for affordable housing among others and thus, contribute in promoting inclusive growth in the country.

3.1 Present Status of NBFCs in Indian Financial Sector

NBFCs contribution to the Indian economy is through varied channels, such as employment generation, providing livelihood to the unbanked and wealth creation. There were 9,601 NBFCs registered with the RBI as on March 31, 2020, of which 66 were deposit accepting (NBFCs-D) and 278 were systemically important non-deposit accepting (NBFCs-ND-SI). NBFCs-ND-SI constitute 81.8% of the total assets of the Indian NBFC sector. Within the NBFCs-ND-SI sphere, government owned NBFCs hold more than a third of assets, indicating their systemic importance. NBFCs-D accounted for 15% of total assets, and are dominated by non-government companies which accounted for 87.5% of assets of all NBFCs-D.

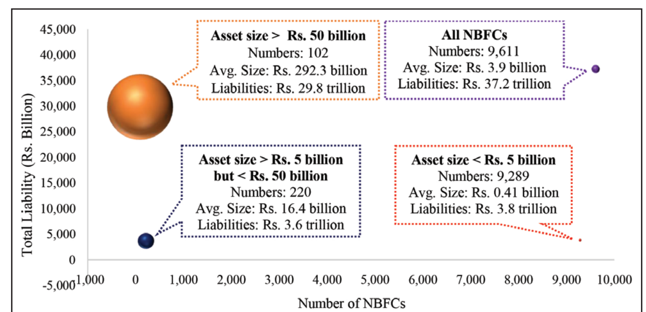

Figure 2: Indian NBFC Domain: Bubble size is proportional to Average Size

Source: Reserve Bank of India

Note: Number of NBFCs have come down from 9,611 in September 2019 to 9,601 by March 2020 (RBI FSR)

The beauty of the Indian NBFC sector is its diversity in size, ownership, as well as sector of operation. Out of 9,611 registered NBFCs, entities with asset size more than Rs. 50 billion are only 102, i.e., 1.1% in number, but representing80.1% of the total liability of the NBFC sector. NBFCs with asset size between Rs. 5 billion and Rs. 50 billion are 220, i.e., 2.3% of total NBFCs and representing 9.7% to the total liability of the sector. NBFCs with asset size less Rs. 5 billion are the largest segment with 9,289 units comprising of 96.6% of total NBFCs, but their contribution to total liability of the sector is only 10.2%. The average size of NBFCs with asset size more than Rs. 50 billion are Rs. 292.3 billion against Rs. 16.4 billion for NBFCs with asset size between Rs. 5 billion and Rs. 50 billion and Rs. 0.41 billion for NBFCs with asset size less Rs. 5 billion.

3.2 Performance of NBFC Sector in India

The NBFC sector has grown considerably in the last couple of decades, where NBFCs credit growth has outpaced banks. Non-food credit outstanding of the NBFC sector was Rs. 23.5 trillion by September 2019, nearly 27.3% of the ASCB's (All Scheduled

Commercial Banks) non-food credit off take. Though NBFC credit has been growing at a healthier rate compared to ASCB, credit concentration in case of NBFCs are much higher compared to ASCB. With growing proportion of bad assets in industrial sector, NBFCs are highly exposed to economic downturn. As on September 2019, the exposure of ASCB to industrial sector (sector with poor asset quality) was 32.2% whereas, the exposure of NBFC were 56.7%. Similarly, in the service sector, the exposure of ASCB to the commercial real estate sector is nearly 2.5% of the total credit outstanding vis-à-vis 5.5% for NBFCs. The exposure of NBFCs in the form of housing loan (secured asset backed lending) were only 0.8% of their total credit outstanding compared to 14.5% for ASCB. Similarly, the exposure of the NBFCs to the automobile sector was much higher than ASCB. By the end of September 2019, aggregate exposure of ASCB in the vehicle/auto loan was nearly 2.4% vis-à-vis 8.9% for the NBFCs.

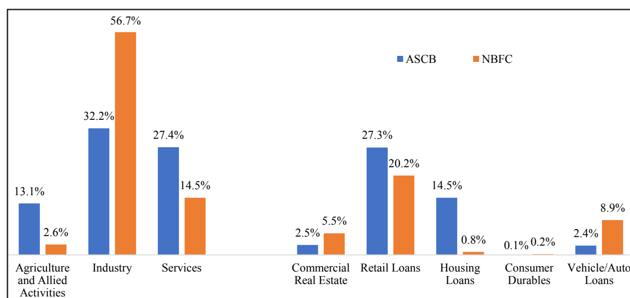

Figure 3: Credit Exposure of ASCBs and NBFCs: September 2019

Source: Reserve Bank of India

The consolidated balance sheet size of the NBFC sector grew by 25.2% YOY to Rs. 32.6 trillion during September 2019 as against an increase of 17.9%in March 2019. The NBFC sector's net profits growth moderated to 7.1% in H1 2019-20 as compared to10.2% growth for FY2018-19. The moderation in profit is mainly due to lower contribution from NBFCs-ND-SI segment. The prolonged economic slowdown and subsequent COVID-19 induced lockdown have widened the GNPA ratio of the NBFC sector to 6.4% in March 2020 against 5.9% in December 2019. The net NPA ratio has also marginally worsened to 3.2% in March 2020 from 3.1% in December 2019. Though the CRAR of the NBFC sector stood at a comfortable level of 19.6% in March 2020, it is lower than its level a year ago (20.1%).

4. Strategic Inter-connectedness among NBFCs, Banks and Other Financial Entities

4.1 NBFCs are heavily dependent on External Funding

Unlike banks which accept deposits to support the business, NBFCs, mainly non-deposit taking NBFCs constituting nearly 82% of NBFC assets, primarily borrow from the financial market to fund their lending activities. Additionally, the source of finance for NBFCs is heavily tilted towards their size. Bank borrowings (term loans, working capital loans), debentures and commercial papers are the major sources of funding for NBFCs. Borrowings from Banks and market constitute almost 70% of total liability of NBFCs.

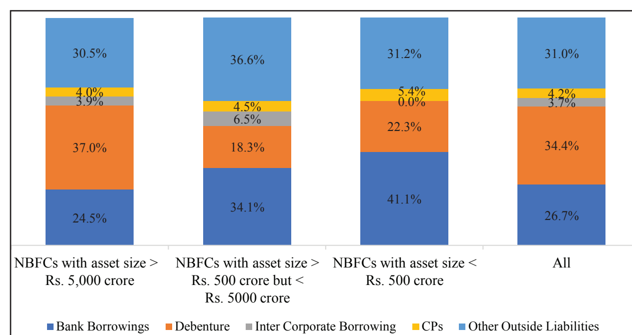

Figure 4: Liability Structure of the NBFC Sector - December 2019 (% of Outside Liabilities)

Source: Reserve Bank of India

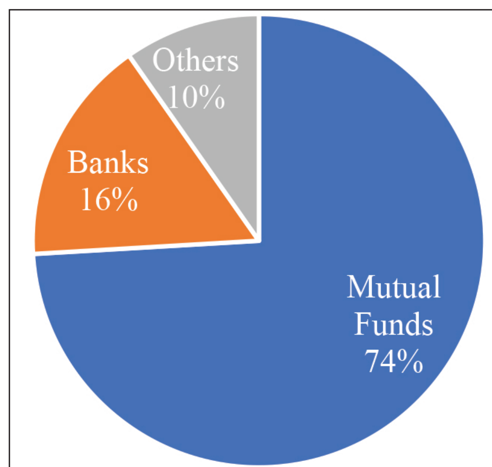

Figure 5: Subscribers share in NBFCs CP Issuance

Source: Reserve Bank of India

Weak market confidence and rise in investors' risk averse behaviour has reduced the share of long-term market debt i.e., non-convertible debentures (NCDs) in total borrowings of the NBFC sector to 40.8% in December 2019 from 49.1% at end-March 2017.The consequent funding gap was met through bank borrowings, which rose from 23.1% of total borrowings to 28.9% over this period. However, as banks are not showing much interest towards lower rated NBFC papers and extending liquidity to lower rated NBFCs, these section of the NBFCs are having a tight liquidity position.

Apart from banks, Asset Management Companies (AMCs) also subscribe to the NBFC floated securities such as debentures and commercial paper. The net exposure that AMCs to NBFCs has steadily increased over the years. Most importantly a number of these AMCs are bank sponsored and hence lead to dual exposure at the bank level. AMCs have subscribed to nearly 74% of total commercial papers (CP) issued by NBFCs, followed by banks subscribing 16% of CPs issued by NBFCs.

4.2 NBFCs and Financial Interconnectedness

NBFCs were the largest net borrowers of funds from the financial system, with gross payables of Rs. 8.8 trillion at end-March 2020, securing more than half of the funds from commercial banks, followed by AMC-MFs (mutual funds) and insurance companies. NBFCs mainly borrow from market through long term loans, long term debts and CPs. Out of these three instruments, the share of funding of NBFCs through long term debts were 42.4%, followed by long term loans (39.2%) and CPs (4.1%).

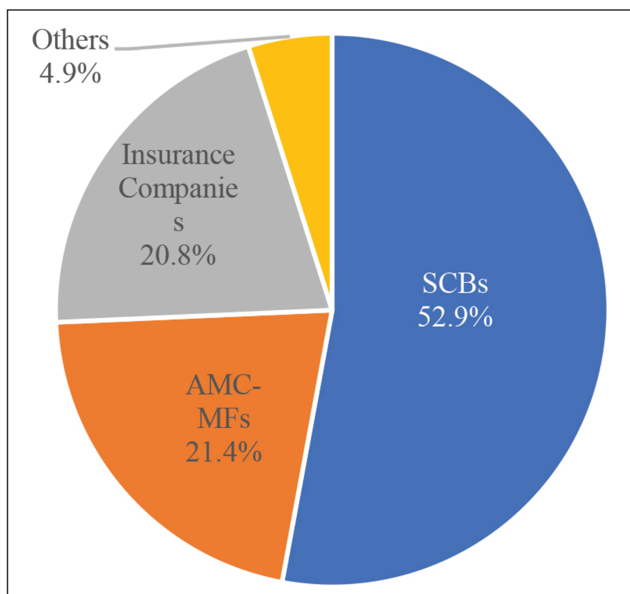

Figure 6:Share of Top 3 lender groups to NBFCs: As on March 2020

Source: Reserve Bank of India

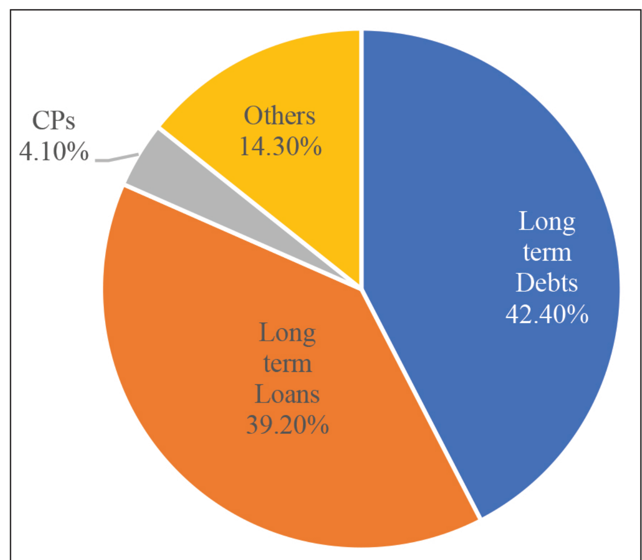

Figure 7: Share of Top 3 Instruments used by NBFCs to Raise Capital: March 2020

Source: Reserve Bank of India

4.3 NBFCs and Banks Interconnectedness

NBFCs and Banks are strongly interconnected as most of the times they are owned and established by same entities in the private as well as public sector. Many NBFCs are subsidiaries or associates or joint ventures of banks. Banks and a few NBFCs compete for similar kinds of business on the asset side. Banks have twin exposure to NBFCs- direct and indirect. In direct exposure, banks offer loans to NBFCs and invest in them. Indirect exposure includes portfolio investment in debentures and commercial paper of a NBFC through the bank sponsored mutual fund arm.

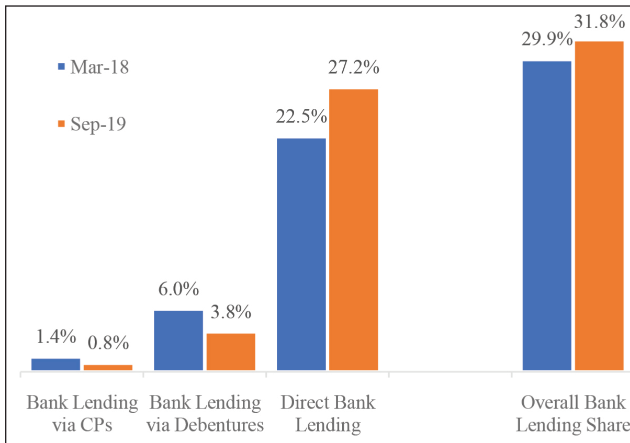

Figure 8: Bank Exposure to NBFC's Total Borrowings

Source: Reserve Bank of India

NBFCs typically raise funds from banks either through term-loans or working capital loans. At the same time banks also invest heavily in commercial papers of NBFCs. AMCs which sometimes are also funded by banks invest in commercial papers of NBFCs. Many a times, the NBFC and Bank may have an exposure to the same borrower (s). This common borrower may have taken a bank loan, raised money in the market through commercial paper and debentures and may also have a loan exposure to the NBFC. In case of default triggered by such borrowers it creates systemic risk for the whole financial system.

Bank exposure to NBFC sector is not limited to direct lending. As on September 2019, the overall bank exposure to total borrowings of the NBFC sector was nearly 31.8% of NBFCs total borrowings. Out of which, bank direct lending was the major source with 27.2%share, followed by bank lending via debentures (3.8%) and bank lending via CPs (0.8%).

4.4 Interconnectedness between NBFCs and AMCs-MFs

Along with banks, AMCs too have exposure to NBFC sector. This increased exposure is attributed to higher NBFC floated CPs and bond issuances in recent years. Increased demand from AMCs side for the NBFC floated securities has gradually shifted their portfolio composition exposure in their liquid and debt funds' portfolio from banks to NBFCs.

NBFCs are the second top recipient of AMC-MFs' funding, after banks. As on March 2020, NBFC's share in AMC-MFs funds were 24.1% vis-à-vis 44.8% in banks, 17.1% in housing finance companies (HFCs) and 13.1% in all India financial institutions (AIFIs). This clearly shows that NBFCs are one of the favoured destinations of AMC-MFs'. Even after a continuous reduction of exposure of AMC-MFs to NBFCs in recent months, it still records a total exposure of Rs. 1.89 trillion by March 2020.

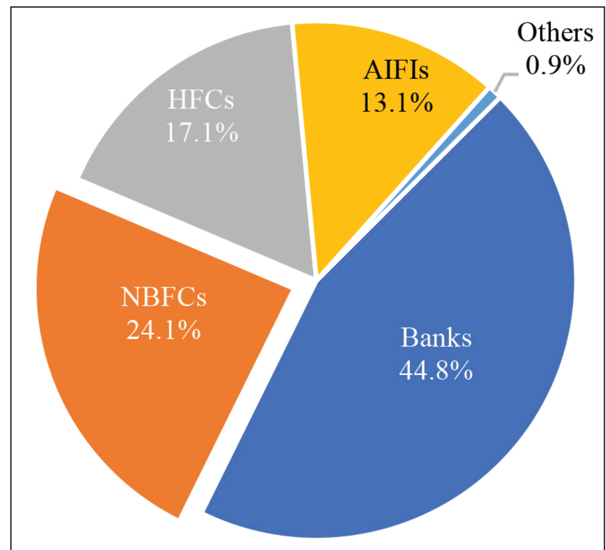

Figure 9: Receivables of AMCs-MFs from the Financial System: March 2020

Source: Reserve Bank of India

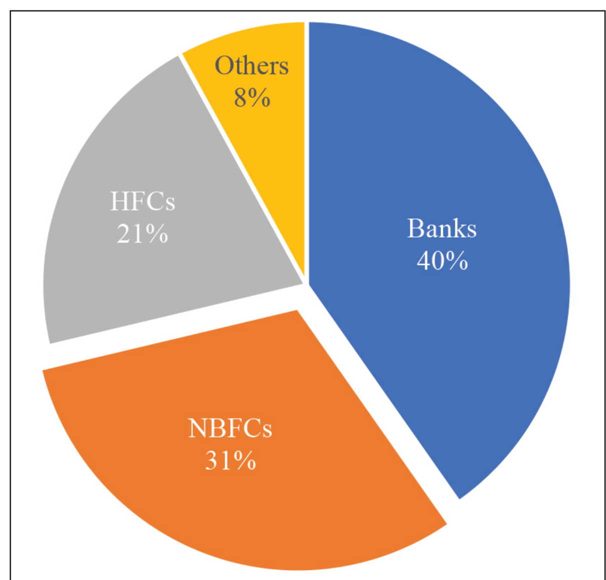

Figure 10: Receivables of Insurance Companies from the Financial System: March 2020

Source: Reserve Bank of India

4.5 Interconnectedness between NBFCs and Insurance Companies

Apart from Banks and AMCs, exposure of insurance companies to NBFCs is also very high and has increased significantly in last decade. After banks, NBFCs are the top recipients of funds from insurance companies. Long term debt and equity accounted for almost all the receivables of insurance companies. Gross receivables of insurance companies from NBFC sector is 31.1% of their total receivables, only after banks (40.4%).Exposure of insurance companies to NBFCs are nearly Rs. 1.84 trillion by March 2020.

4.6 Interconnectedness between NBFCs and AIFIs

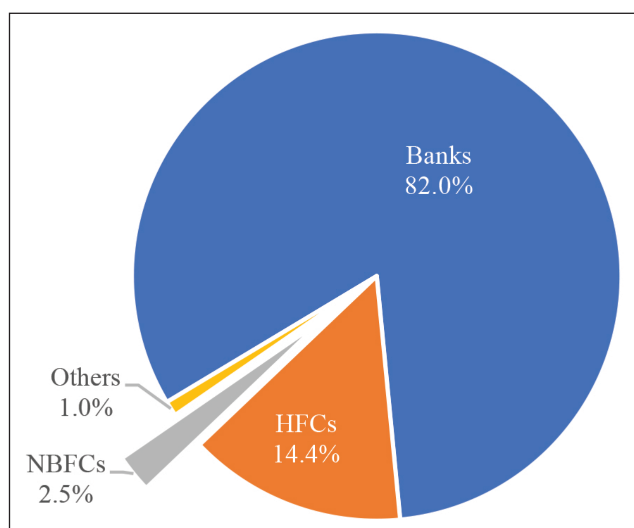

Figure 11: Receivables of AIFIs from the Financial System: March 2020

Source: Reserve Bank of India

After banks and HFCs, exposure of AIFIs to NBFC sector takes the third position. As on March 2020, the exposure of AIFIs' to NBFC are nearly Rs. 79.5 billion, 2.5% of the total receivable of the AIFIs.

5. Impact of COVID-19 Pandemic on NBFCs and Consequent Systemic Risks

The pandemic induced lockdown and economic slump has brought mass unemployment and have resulted into permanent loss in demand. Spike in the delinquencies across asset classes are unavoidable consequences of the COVID-19 to which almost all financial institutions are exposed to. NBFCs may get twisted from both the asset as well as liability side, due to dried liquidity window from banks and capital entities and rising bad assets. The COVID-19 pandemic and the subsequent prolonged lockdown has resulted in cash flow issues for a lot of corporates. This has resulted into an immediate liquidity crisis and spike in yield in corporate bonds. The pandemic induced lockdown and subsequent hazy business scenario have led to contraction in economic activity in H1 FY 20-21 and hence NBFCs funding could remain tight. Due to increased risk averseness among investors, NBFCs with lower ratings are in great difficulty in raising enough capital at competitive prices. On the other hand, after the Franklin Templeton fiasco, mutual funds are shying away and are limiting their exposure in NBFC papers. Mutual funds exposure to NBFCs papers has come down from 34% in September 2018 to 18% in April 2020.

Under the RBI moratorium scheme repayment of loans which was deferred till August 31, 2020extended by NBFCs without hampering the asset quality, some relief is offered on the assets side of NBFCs. With high share of capital market borrowings, there could be severe challenges on the liabilities side of NBFCs. Going by the data of RBI, as on April 30, 2020, 29% of total customers and 49% of total outstanding credit of NBFCs are under moratorium. It significantly affects the flow of receivables to the NBFCs during the period. Additionally, the NBFCs are also restricted from classifying accounts of defaulting borrowers during this period as NPAs. In addition to the crisis, NBFCs are required to continue to repay principal and interest raised under NCDs which are due during the COVID-19 moratorium period. Mismatches in inflow and outflow have created serious issues for NBFCs. Most of the NBFCs rely on banks and capital markets to meet the funding needs, and thus, deferment of moratorium given to the borrowers of NBFCs have had a direct impact on an NBFC's ability to service their debt.

The government has been active in supporting the NBFC sector and has come up with a Rs. 750 billion package consisting of Rs. 300 billion liquidity scheme backed by government security and Rs. 450 billion package supported through a partial

credit guarantee scheme. Even RBI has been trying incessantly to provide liquidity to fund crunched NBFCs through instruments such as targeted long-term repo operations (TLTRO 1 & TLTRO 2). To ensure additional funding from the banking system, the RBI has also allowed a temporary increase in group exposure limits from present 25% to 30% to ensure sufficient liquidity to larger business groups. To avoid any potential systemic risks to the financial sector and improve the liquidity position of NBFCs/HFCs, RBI in consultation with the government of India has recently launched the Special Purpose Vehicle (SPV) scheme.

Conclusion

NBFCs play a dominant role in promoting inclusive growth in the economy. NBFCs act as a complement as well as competitor to the formal banking channel in extending the financial services to the lower strata population, by promoting a fair competition and diversifying the risk of the sector. Meanwhile, the growth of NBFCs has also been a concern given the systemic importance of the sector to the economy, by exposing the system to financial vulnerabilities. It is important to note that market capitalisation of certain NBFCs have been higher than the market capitalisation of largest public sector bank in the country. NBFCs could also become a source of systemic risk, both directly and indirectly through its interconnectedness with the banking system. The strong interconnectedness of the NBFCs to the whole financial system could triggers systemic default in case of unforeseen situation. Any cross defaults across facilities will lead to systemic defaults and would lead to a significant loss in investors' confidence on the CPs and NCDs, which are subscribed by banks, mutual funds, insurance companies and other qualified institutional buyers.

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Bank Quest included in UGC CARE List of Journals

IIBF's Quarterly Journal, Bank Quest has been included in the Group B of UGC CARE list of Journals. The University Grants Commission (UGC) had established a "Cell for Journals Analysis" at the Centre for Publication Ethics (CPE), Savitribai Phule Pune University (SPPU) to create and maintain the UGC-CARE (UGC – Consortium for Academic and Research Ethics). As per UGC's notice, research publications only from journals indexed in UGC CARE list should be used for all academic purposes.

Sukanya Samriddhi: Advantage Girl Child

Abhishek Singh*

Background

Sukanya Samriddhi Yojana (SSY) was launched by the Government of India on 22nd January 2015 as a part of Beti Bachao Beti Padhao campaign. The purpose of the scheme is to meet the education and marriage expenses of a girl child. The scheme instantaneously became popular and within two months, more than 180000 accounts were opened, with states Karnataka, Tamilnadu and Andhra Pradesh leading the way. As of October 2015, around 76.20 lacs girl child accounts were opened with total deposit amounting to Rs. 2838 crores; this alone shows the immediate success that the scheme gained. So far, upto August 2019, more than 1.26 crore accounts have been opened under the scheme with total deposit of Rs. 19183 crores.

Features of the scheme

The Sukanya Samriddhi Yojana was launched with the purpose of securing a better future for the girl child. It is a long-term scheme that can take care of major expenses of marriage and education. This scheme was made in a simple and easily accessible manner. Sukanya Samriddhi Yojana account can be opened in any bank and in any post office. SSY account can be opened for any girl child who is below 10 years of age. Proof of date of birth, birth certificate, of the girl child is mandatory for opening the account. The account can be opened jointly with guardian or parents. Know Your Customer (KYC) documents of guardian or parents are necessary for opening the account. Some of the features of SSY account are:

- Minimum Annual deposit in the account is Rs.250/-, earlier the limit was Rs.1000/- but it was reduced so that the benefit can be provided to masses. Low deposit option ensures that without burden, people can save money under the scheme. The maximum annual limit for deposit is Rs.1,50,000/-.
- Only one account can be opened in the name of girl child and maximum two accounts can be opened for two girl children in a family. In case the first child is a girl and twin daughters are born from the second birth, then three accounts can be opened by parent/guardian.
- Once the account is opened in the name of girl child, only she can withdraw the money after maturity from the account. This empowers the girl child and gives her financial independence. She is also allowed to operate the account once she attains the age of 10 years.
- Only the Senior Citizen Savings Scheme (SCSS) provides a higher interest rate, 8.60%, than that of SSY. The Scheme's Interest rate is 0.50% higher than the Public Provident Fund (PPF). At present, it offers an Interest rate of 8.40%. The Government resets the interest rate every quarter for SSY account (SSA) along with other Government schemes like PPF & SCSS.
- One unique feature of the account is that the account continues to earn interest if it is not closed after the maturity.

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- The guardian and parents can avail tax benefit under section 80C of the Income Tax Act 1961.
- Deposits in SSY account can be made till the completion of 14 years of account from the date of opening. For example, if an account was opened on 1st November 2019, deposits can be made upto 31st October 2033.
- Maturity of SSY account is 21 years from the date of opening of account.
- This account can only be opened for resident Indian girl child. This scheme is not available to non-resident parents and legal guardian. If subsequently to opening the account, girl child becomes non-resident, then this should be intimated to bank/post office and account can be closed.

Benefits of the scheme

The scheme comes with a multitude of benefits:

1. **Partial Withdrawal:** Partial withdrawal to the tune of 50% of account balance is allowed for the purpose of higher education of girl child, if she has passed the tenth standard and attained the age of eighteen years. Parents/Legal Guardians have to submit the documentary proof of admission of a girl child. Withdrawal can be made in lump sum amount or in maximum of five instalments.
2. **Transfer of account:** Account can be transferred freely anywhere in India between two banks or between banks and post offices.
3. **Tax Benefits:** Sukanya Samriddhi Yojana offers tax free returns and comes with exempt-exempt-exempt (E-E-E) status. Contributions made by parents/guardian qualify for exemption under section 80C. The Scheme also offers non taxable maturity benefits.
4. **Premature closure:** Premature closure of account can be done for purpose of marriage expenses, if girl child has attained the age of 18 years. There are some special cases in which the account can be closed prematurely and complete amount can be withdrawn. These include:

 (a) **Death of account holder**: In case of unfortunate death of girl child, parents or legal guardian can withdraw the complete amount along with the accrued interest. The final amount will be handed over to the nominee of the account.

 (b) **Death of parents/guardians**: In an unfortunate event of death of parent/guardian of girl child, the account can be prematurely closed and the entire amount including interest is payable to girl child or her family.

 (c) **Inability to continue the account**: Under extreme passionate grounds like life threatening diseases and medical exigencies, Central Government can allow the premature closure of the account. The Government needs to be convinced that parents/legal guardian is unable to continue with the account.

Interest Rate: Earlier, the Government was announcing yearly interest rate for SSY. After September 2016 Government has decided to review the interest rate every quarter. The following table shows how the interest rate has changed for SSY over the years.

S. No	Financial Year	Time Period	Interest Rate	Minimum Investment	Maximum Investment
1.	2014-15	1st April 2014 to 31st March 2015	9.1%	1000	150000
2.	2015-16	1st April 2015 to 31st March 2016	9.2%	1000	150000
3.	2016-17	1st April 2016 to 3oth Sept 2016	8.6%	1000	150000
4.	2016-17	1st Oct 2016 to 31st March 2017	8.5%	1000	150000
5.	2017-18	1st Apr 2017-30th June 17	8.4%	1000	150000
6.	2017-18	1st July 2017 to 31st Dec 2017	8.3%	1000	150000
7.	2017-18	1st Jan 2018 to 31st March 2018	8.1%	1000	150000
8.	2018-19	1st April 2018 to 30th Sept 2018	8.1%	250	150000
9.	2018-19	1st Oct 2018 to 31st March 2019	8.5%	250	150000
10.	2019-20	1st April 2019 to 30th June 2019	8.5%	250	150000
11.	2019-20	1st July 2019 to 31st Dec 2019	8.4%	250	150000

As can be seen from the table, at the launch of the scheme, interest rate was 9.1% and in next FY'16 it slightly increased to 9.2%.

The biggest decline came when interest rate was reduced from 9.2% in FY'16 to 8.6% in FY'17, and since then it has been continuously declining and reached to its lowest level of 8.1% in September 2018. It is almost stable at around 8.5% since October 2018.

Comparison with other investment schemes

There are many other Investment schemes like Fixed Deposit (FD), Recurring Deposits (RD), Mutual Funds and Child plans offered by insurance companies. Investors frequently question the advantage of investing in SSY. Most Investors often confuse between Public Provident Fund (PPF) scheme and Sukanya Samriddhi Scheme. Some points of comparison with other investment schemes which will be beneficial to the reader are given below:

	SSY	PPF	RD	Mutual Fund	Child Plan
Who can open?	Only Girl Child	Any individual	Any individual	Any individual	Any individual
Return	Fixed	Fixed	Fixed	Variable	Variable as it is unit linked
Liquidity	Low	Low	High	Very High	High
Safety	High	High	Moderate	Low	Low
Minimum Investment	Rs.250 in a year	Rs.500 in a year	No minimum	No minimum	Minimum annual premium generally starts from Rs.20,000/- to Rs.50,000/- depending on the Insurance company
Maximum Investment	Rs.1.50 lakh in a year	Rs. 1.50 lakh in a year	No maximum	No maximum	No Maximum
Tax Benefit on Investment	Exempted under 80 C	Exempted under 80 C	No tax benefit	Under ELSS Exempted under 80 C	Exempted under 80 C
Tax benefit on maturity	Exempt	Exempt	Taxable	Exempted if investment is more than a year.	Tax benefit under 10 (10D)
Partial Withdrawal	Yes, after girl child attains age of 18 years	Yes, after completion of 5 years of account	No partial withdrawal	Partial withdrawal of unit permitted.	Some child plans come with the option.
Loan facility	No Loan facility	Yes, after completion of 5 years of account.	Yes, available.	Yes, available based on value of units.	Not available on Unit linked policies.

An ideal investment basket: All parents have clear plans and long-term objectives like education and marriage of children. SSY account is meant to be exclusively for the girl child and investment in the scheme should not be mixed with other objectives. SSY account will have to be maintained as a demarcated fund and has the advantage that it cannot be spent anywhere else but for the girl child's future. PPF is also a good option for saving, but it should ideally be kept separately for post retirement purposes. Government also allows maintaining both SSY account and PPF account in the name of girl child. Investment in mutual fund is risky when market is volatile but some investment should also go to mutual funds as it is meant for long term investment. Some Insurance companies also offer child plans, which provides for long term investment like child education and marriage. A Child plan have various advantages in that it supports the child in case of death of parents and the corpus can be invested for education & marriage, and as it is a unit linked plan, it can help in beating inflation.

A practical scenario: Assuming that a parent invested Rs.1, 00,000/- every year from current FY'20 for 14 years, i.e., up to FY'34 with current interest of 8.5% then year on year maturity in SSA, is shown in the following table:

Year	Financial year	Interest (%)	Deposit in current Year	Cumulative Deposit	Interest received during the year	Cumulative interest received	Balance
1	2019-20	8.5	100000	100000	8500	8500	18500
2	2020-21	8.5	100000	200000	17723	26223	226223
3	2021-22	8.5	100000	300000	27729	53951	353591
4	2022-23	8.5	100000	400000	38586	92537	492537
5	2023-24	8.5	100000	500000	50366	142903	642903
6	2024-25	8.5	100000	600000	63147	206050	806050
7	2025-26	8.5	100000	700000	77014	283064	983064
8	2026-27	8.5	100000	800000	92060	375124	1175124
9	2027-28	8.5	100000	900000	108386	483510	1383510
10	2028-29	8.5	100000	100000	126098	609608	1609608
11	2029-30	8.5	100000	1100000	145317	754925	1854924
12	2030-31	8.5	100000	1200000	166169	921094	2121094
13	2031-32	8.5	100000	1300000	188793	1109887	2409887
14	2032-33	8.5	100000	1400000	213340	1323227	2723227
15	2033-34	8.5	0	1400000	231474	1554701	2954701
16	2034-35	8.5	0	1400000	251150	1805851	3205851
17	2035-36	8.5	0	1400000	272497	2078348	3478348
18	2036-37	8.5	0	1400000	295660	2374008	3774008
19	2037-38	8.5	0	1400000	320791	2694798	4094798
20	2038-39	8.5	0	1400000	348058	3042856	4442856
21	2039-40	8.5	0	1400000	377643	3420499	4820499

As can be seen from the above, if investment of Rs.100000/- is made every year in SSA, then at the given interest rate one can get an assured sum of Rs.4820499/- at the end of 21 years.

Limitations of Sukanya Samriddhi Yojana

1. Lock in period is quite long as compared to other investment schemes. It also has withdrawal restrictions, investing in other funds gives flexibility of early withdrawal.
2. Interest rate keeps fluctuating every quarter. So, it becomes difficult to predict the maturity amount. The Scheme was started with the interest rate of 9.1% but currently the interest rate has come down to 8.4%
3. SSY is mostly suited to low income individuals. Higher income individuals have better options for investment that includes mutual funds, insurance plans, gold etc.
4. It permits withdrawal of only 50% of accumulated corpus on girl child attaining the age of 18 years or passing the 10th class.
5. This is a fixed income instrument and may not beat inflation. So, SSA can only form part of diversified portfolio. Some other investments like equity funds must be part of overall portfolio for better returns.

Future of Sukanya Samriddhi Yojana

The government is moving one step ahead from Beti Bachao Beti Padhao (BBBP) to Beti Aapki Dhan Lakshmi Aur Vijay Lakhsmi (BADLAV) towards its commitment for development of the girl child. The Economic survey of India 2018-19, has quoted the below mentioned shloka from Manusmriti:

यत्रनार्यस्तु पूज्यन्तेरमन्तेतत्रदेवता

Which means, where women are honoured, divinity blossoms there, and where women are dishonoured, all actions, no matter how noble, remain unfruitful. SSY can help the Government in transforming gender equations. The scheme is here to stay but it can be modified to suit the need of the future. Some of the changes suggested are:

1. Lock in period can be reduced so that parents who are looking for a quick return for their money may find the scheme relevant.
2. Additional tax benefit, above overall limit of Rs. 150000/- under section 80C, can be provided for giving boost to SSY investment.
3. Government should transfer the cash incentives of other schemes like Dhanlakshmi scheme, Balika Samriddhi Yojana etc. to SSY account only in order to motivate the public to open SSY account.
4. Partial withdrawal should be allowed after 5 years, just like PPF, so that some unforeseen expenditure of girl child can be taken care of. Proof of expenditure can also be taken from parents as a support document.
5. Loan facility, on the lines of PPF, can also be provided to the account holder. An undertaking in this regard must be taken from the parents that loan amount will be used for benefit of girl child only.

Conclusion

Despite limitations, Sukanya samriddhi Yojana is a good investment option and must be included in the overall portfolio as it offers many benefits to the girl child and parents/guardians. Although it has a longer lock in period, with good planning, a decent amount of corpus can be built for girl child's education and marriage. Every girl child deserves a better future as she has the power to change the country.

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BANK QUEST THEMES

The themes for "Bank Quest" are identified as:

1. July – September, 2020: NBFCs, Systemic Risk and interconnectedness amongst Financial Institutions
2. October – December, 2020: Challenges & opportunities due to COVID 19 for credit intermediaries
3. January – March, 2021: Role of financial sector in supporting Atmanirbhar Bharat initiative of GOI.
4. April – June, 2021: Infrastructure Financing – New Normal.
5. July – September, 2021: Evolution & future of Monetary & Fiscal Policies – Sub Themes: Regulatory Framework, Monetary Framework, Fiscal Framework.
6. October – December, 2021: International Financial Centers.
7. January – March, 2022: Effective resolution of stressed assets.

Strategic Technology Trends in Banks: Artificial Intelligence, Big Data and Competitive Advantage (ABC)

Swati Anand*

Dr. Kushendra Mishra**

Abstract

New technological developments like Artificial Intelligence and Big data have revolutionized every business due to exchange of data in high volumes and velocity. This new research taxonomy has created renaissance in every sector like health, finance, telecom, automobile, aviation etc. as this taxonomy has the capacity to do the simulation as the human brain and can do investigative trend analysis, prescriptive analysis and forecasting with real time data. Starting from curating smarter products and services as per individual's choice to taking wiser business decisions and automated business processes, AI has done it all. The business that will not encash and capitalise upon these transformative opportunities will be left behind complacent in this fierce and ever-changing competitive environment. We review the application of artificial intelligence and big data in devising the business strategy to gain competitive advantage with special reference to Banking, Financial services and Insurance (BFSI) industry.

Keywords: Artificial Intelligence, Big data, trend analysis, prescriptive analysis, BFSI industry.

Introduction

The finance sector of the country constituting the BFSI industry which stands for Banking, Financial services and Insurance industry has an imperative effect on the economic development of the country. The financial sector is also integrant in shaping the private sector development of the country. It has a significant role in poverty alleviation in a way that it increases the capacity of the individuals as well as the households to avail primary services like food, shelter, health and education. It also enables the wealth and capital accumulation with the array of financial products available. Thus, there is a need of continuous innovation, research and development in the financial sector. Research will help not only in forecasting financial trends but also predicting the financial behavior of the investors. Research will aid not only in routine activities like asset management, portfolio management, IPOs, formulation of capital structure etc. but also assist in preventing undesirable situations like irregularities in security price movements, defaults in payments, frauds and bankruptcy. There has been continuous innovation with the usage of different research tools since time immemorial. The practice of fetching insights from the data available was there but with least innovation and high stability. The limitation with the traditional statistical models is that they are asymptotic, linear, parametric and rational whereas the financial transactions or any kind of investments are non-linear, non-parametric, time variant and uncertain. Thus, arrived the need of the latest approach called '*Analytics*' pertaining to computer science literature. The factors like high speed internet and computing power, cloud computing[1], Internet of Things[2], big data[3], metadata[4], AI 2.0[5], deep learning[6], Industry 4.0[7]

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[1]Cloud computing is the storage service on the web. It allows to keep files on a remote database which can be accessed through internet rather than holding it on a physical hard drive.

[2]Internet of things is a concept of connection of different objects over internet like smart watches, smart tv, fitness devices etc to share data amongst people and the environment.

[3]Big data is large volume of complex and diverse data which can be structured, semi- structured and unstructured data from different sources and size ranging from terabytes to zettabytes.

[4]Metadata is a data which describes other data by giving underlying information and definition about the same which eventually makes us to work with that data easier.

[5]60 year old AI entering into new stage with breakthroughs like big data, sensor network permeation, cyberspace and popularization and increase of internet and information community.

[6]Deep learning is the subset of the machine learning algorithm of the artificial intelligence which does pattern recognition and data processing by imitating like a human brain. The learning is unsupervised and the data can be unstructured and unlabelled.

[7]Industry 4.0 is the fourth industrial revolution in mechanical and automation industry which focusses on interconnectivity, real time data, automation and computing.

etc. have caused digital disruption and the finance sector cannot be left untouched. There is a rapid transformation in the Banking, Financial services and Insurance (BFSI) industry on a global basis. Artificial Intelligence is a group of related technologies with taxonomies like machine learning, deep learning and neural network etc. which has the potential to disrupt, refine and redefine the financial services industry. Fintech (Financial technology) companies who were either e-commerce giants or social media giants are also entering finance sector. With the help of latest technologies, they are able to deliver financial services in a better, improved and automated ways. Thus, there is an imperative need to adopt these technological developments in order to gain an edge over competition.

Rationale

The rationale of the study is an attempt to exfoliate ways to prepare the business decision makers to devise strategies in congruent to the general populace which can be their potential customers in order to achieve the organisational objective with the help of AI and Big data analytics. This survey paper aims to study and understand the different opportunities and threats that these technological developments like AI and Big data will bring to the sustainability of high performance and the future of strategy research. Keeping in mind the financial sector of the country, this paper attempts to understand the challenges and opportunities of the technological disruption on the same.

Objective

- To understand the taxonomy of the Artificial Intelligence and Big Data analytics.
- To study the strength, weakness, opportunity and threat of AI and Big Data analytics on the sustainable development.
- To explore the expectations and experiences of the customers of general populace with the ever-evolving AI aided banking service design and transforming financial services distribution models.
- To study the effects of data analytics tools of AI & ML on the future of strategy research.

Literature Review

Artificial Intelligence dates back to as old as 1940s when **Alan Turing** made a thought whether or not it is possible for machinery to show intelligent behaviour. Then in the year 1956, **John McCarthy** coined the term 'Artificial Intelligence'. Focus was not there on the financial sector in the 1950s and 1960s. Bayesian statistics was developed in the 1960s itself which was later used in machine learning. Then came, neural network in the same year which came out to be the building block of the deep learning algorithm of AI. But in those times of 1960s, the computing power and availability of electronic data was very low. Thus, funding for research pertaining to AI stopped in countries like UK at that point of time and that time of AI is called AI Winter (**Kaplan, 2016; FSB, 2017).**

Again, in 1980s AI witnessed a revival with funding which included the birth of expert system. The idea of personal financial planning expert system was provided by **Brown, Neilson and Phillips (1990).** It used the heuristic approach of learning and was first used by Chase Lincoln First Bank and Arthur D. Little Inc. to employ different kinds of financial planning in which investment planning, retirement planning and income tax planning were also included. Expert system was also used for program trading in stock market to capitalise on pricing disparities between stock index futures and the underlying stock index by **Finnerty and Park (1987).** Apple and IBM desktops arrived in the late 1980s making handling expert system, a costly affair. And with this, the second AI winter arrived which lasted till 1993. The main advancement in AI started in 1993 post second AI winter, in which machine learning algorithm came into picture. The machine learning algorithm does the learning with experience, practice, reasoning and training with limited or no human intervention. **Cybenko (1989)** learned that ML does the general pattern recognition and universal approximations of relations in data when no such tool was there. Machine learning although was first originated by **McCulloch and Pitts (1943)** but was developed to the fullest into five components only by **Chakraborty and Joseph (2017).** The five components of which it is comprised of are defining the problem, source of data, model, an algorithm for optimization and testing for validation. After machine

learning, came the deep learning, which is the latest development in Artificial Intelligence taxonomy. **FSB (2017)** defines deep learning as a form of machine learning that uses algorithm which works as a layer. It uses this layered form of the structure inspired from the structure of the brain which is termed as artificial neural network. The artificial neural network can be present in three forms: supervised, unsupervised and reinforcement learning. **Liebergen (2017)** employed the successful use of classifier machine learning algorithm in credit card detection. The transactions were divided into fraud and non-fraud transactions. This model inspired Mastercard to launch Decision Intelligence module which kept the track of historical transactions and customers spending behaviour to score each and every transaction of the customer. **Javelin (2015)** published a report in which they reported about the false positives. False positives were those transactions which were declined by wrongly suspecting them as false transaction. **Prado and Lewis (2018)** examined the reasons of ever-increasing false positives and arrived at a new technology called EMV (Europay, Mastercard & Visa) which improved upon the card authorization process by lowering the number of false positives. Support vector machines, a machine learning algorithm, was used by **Cecchini et al. (2010**) to identify fraud in corporates. This fraud management of corporates was done using the company's own financial data with the help of support vector machines. There were many instances in which the machine learning algorithms were proved better than the traditional statistical tools. **Zhang and Turbey (2017)** studied that the artificial neural network outperformed parametric logistic regression.

Research Methodology/ Analysis

The data have been collected from various secondary sources like, journals, books, magazines and websites relating to banking and finance. No specific statistical tools have been used for the analysis. This study is deductive in character and nature as majority of the data has been derived from secondary sources.

Discussion

"AI is the 'new electricity'. Just as electricity transformed many industries roughly one hundred years ago; AI will also now change every major industry."

Andrew Ng, 2007

Suddenly, every business is finding itself amidst race to become a leader in the field of Artificial Intelligence and Big data analytics on a global basis. Due to the information overload and open market scenario with many giver options for a sought to be taken product, the customer loyalty is thinning every time. Thus, it becomes important to have a competitive advantage over others with latest technological developments. Business organisations rooted in India are also devising strategies to develop, promote and encourage the use of artificial intelligence. Strategies are devised in congruence with the artificial intelligence in almost all the departments of the organisation like talent development, skills and education, scientific marketing research, public and private sector adoption, data and digital infrastructure, ethics and inclusion standards and regulation.

Understanding the taxonomy: Artificial Intelligence & Machine learning, Analytics, Big data, Structured Data and Unstructured Data.

Artificial Intelligence, as the name suggests, can be defined as the set of algorithms which attempts to simulate or replicate the decision-making capabilities of a human brain through learning.

Machine learning algorithms can be defined as the set of algorithms which learn and develop pattern on the basis of earlier experiences and compare the existing data for future prediction. Learning is also of two types: supervised (where both input and output data is given to make machine learn) and unsupervised learning (where only input data is given).

Analytics: Analytics is defined as the extensive use of data with the statistical and quantitative

aid like explanatory and predictive models with fact-based management to drive decisions and actions. (Davenport & Harris, 2007)

Table 1. Evolution of Data Analytics

Analytics 1.0 (mid 2000s)	Also called **descriptive analytics**. It accesses historical and current data which is majorly structured data in rows and columns to explain what happened in the past to compare it with the present to make future predictions.
Analytics 2.0 (2007-2010)	Birth of big data which is voluminous, fast moving - fast changing, highly unstructured which uses different techniques like econometric forecasting to do predictive analysis. Thus, also called **predictive analytics.**
Analytics 3.0 (2010-2015)	It's a combination of big and small data, analytics 1.0 & 2.0 to do predictive cum prescriptive analysis. It uses models, machine learning and recommendation engines and thus called **prescriptive analytics**.
Analytics 4.0 (2015 onwards)	The most disruptive force of technology employing Artificial Intelligence and cognitive technologies like deep learning, neural network and natural language processing (NLPs) which is giving rise to **Autonomous Analytics** with less, limited and negligible human involvement.

Big Data: The copious data availability which is beyond the capacity of human and traditional statistical tools as well as the traditional relational databases to input and process the datasets and output the desired information, is termed as Big data. Big data has high volume and velocity, much of it in the real time, in the sense that data travels with high speed and volume through mobile, social media, networks, sensors, transactional applications and many more Internet of things (IoT) which are driving the data complexity to a whole new level. Thus, it can be explained on three pillars of **Vs: Variety, Velocity and Volume.**

Structured Data are in the form of spreadsheets in excel or tabular format which is well organised. **Unstructured Data** is the data generated continuously in the form of e-mails, customer complaints and from the content of social media which can be mined and stored in a database and can be characterized by its variety, volume and velocity.

Further, we will do the **SWOT** analysis of technological developments like AI and Big Data on the strategic development of banks to have a better understanding on the same.

STRENGTH:

1. **Unbiased nature:** It is considered as the fair, transparent, unbiased tool for research and development. Unlike humans, machines think intelligently without being biased or partial in nature. The decisions made are rational, impartial and personalized at the same time.

2. **Ability to handle huge data:** It has the ability to work with copious data availability nowadays. For instance, every financial transaction taking place in this world can be a data item, every post on a social media is a data item and same ways every review on an e-commerce site is a data item. Thus, this data availability with very high computing speed and supporting business environment allows AI to work efficiently in any organisation. This huge and plentiful data available these days is beyond human capacity to process. AI technology of JP Morgan can review 12,000 documents in few seconds, for which a human would spend 360,000 hours. (Brummer and Yadav, 2019)

3. **Routine task manager:** It allows employees to free themselves from routine, repetitive, mundane and procedural tasks which can also be called as lower involvement tasks. This way, the employees get more time to involve themselves in the work which needs more creativity, higher focus, human instinct and result oriented mindset.

4. **Increase in productivity by scalability at low cost:** Productivity at the workplace increases manifolds. Productivity in terms of cost and time reduction may happen when artificial intelligence aids the whole process.

5. **Easily adaptable with wider outreach:** It can be easily adopted in various industries like healthcare, manufacturing, BFSI, automobile etc.

6. **Renders better quality of life:** Artificial intelligence and machine learning algorithm add quality to life by simplifying the lives of people. Employees as well as customers benefit with the same. For instance, in BFSI sector, the banks have employed machines to do the routine tasks like passbook printing, cash depositing up to certain limit etc. ATMs nowadays also prompt the customers to open a recurring/ fixed account. It allows for pin change, mobile number change and various other facilities at the kiosk itself. This not only saves the time of the customers but also of the employees. In this way, banking service design is enhanced and a standard is maintained to give a user friendly, standard platform to the customers.

WEAKNESS:

1. **Lacks human touch:** In spite of all the popularity and momentum, AI tools and algorithm have gained in such a short span of time, one need not forget that it has been developed by a human only. It can act as intelligently as and to that extent only till it has been created for. It lacks human touch, common sense, cognition power, contextual awareness, basic human instinct and emotions. These human characteristics are required in service sectors where we interact with customers online as well as in person in real time as well as on a daily and frequent basis.
2. **High cost:** Artificial intelligence needs a conducive environment to perform. High speed internet, high computing power of latest generation computers and technical expertise to process the structured and unstructured data availability are prerequisite for the implementation of the artificial intelligence machines and algorithms in any organisation and huge cost is required to be incurred for the same.

OPPORTUNITY:

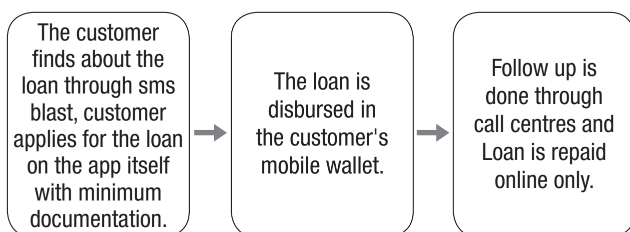
1. **Improve performance and efficiency:** Artificial Intelligence improves upon the performance of the employees by sharing their work and at many instances, replacing the work used to be done by the employees earlier. It assists the organisation in arenas like fraud detection, predictive analysis, virtual private assistants and decision support system. The most promising opportunity which AI gives is the pattern recognition and predictive analysis, which is beyond the human capacity because of such a huge data being involved.
2. **Can be deployed in belligerent activities and complex problem solving:** Robots can be deployed in risky situations where human presence is not advisable as it may be life threatening or dangerous. For instance, a robot can be deployed to diffuse a bomb, a robot can be sent in front to raise an alarm when burglars try to loot the bank, a robot can be deployed to enter an area affected with an epidemic disease or can be sent to the areas affected by famine conditions or any natural disaster to study the situation.

THREAT:

1. **Cyber Security: Privacy** and confidentiality issues may always crop up when every transaction and other informative data in the account opening form itself acts as an open data in the virtual environment travelling in high volume and velocity. Although all precautions are taken in order to prevent any security breaches, risk always prevails.
2. **Machine and Data Dependency:** Too much of machine and data dependency leads to non-usage of human brain which leads to redundancy and compromise at the creativity and innovation level.
3. **Job displacement:** AI can lead to unemployment by replacing humans by their robotic and machine presence. The routine jobs like passbook printing, cash depositing, grievance handling etc. which were diverted to artificially intelligent machines have replaced humans and hence stole their jobs. Self - checkout counters and kiosks at the stores is another example of replacing humans. It can be detrimental in the longer run.

The experiences of the customers of general populace with the ever-evolving AI aided banking service design

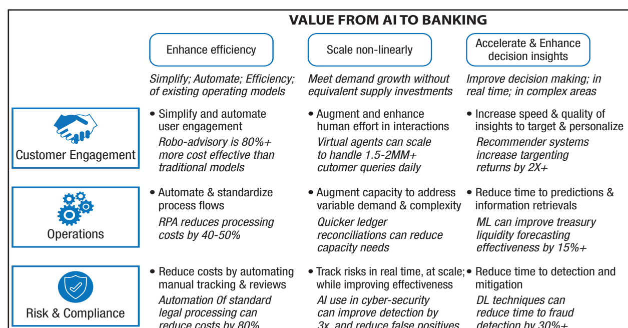
1. **Chatbots & Robo Advisory:** A bot can be defined as a software application developed to automate tasks using AI technology (Future Today Institute, 2017). Same ways, robo advisors are also digital platforms based on algorithms for offering investment advices and financial management services. It should not be misunderstood with robots. They are based on NLP (Natural Language Processing) to provide customised, conversational and natural environment.



2. **Digital Flow Based Lending:** It is a process starting from loan application to loan disbursement all happening digitally. It can be better understood with the following diagram.

3. **Algorithmic trading:** This is a program implemented with trading rules which learns from the structure of the existing and past data and then tries to predict the future pattern of stock's performance.

4. **Fraud detection and compliance:** AI algorithms possess the capability to detect the fraudulent transactions amongst the millions of data points which is beyond the human capability. Credit card fraud detection is one of the most successful examples for the same.



Conclusion and Scope of Future Research

"The rise of powerful AI will be either the best or the worst thing ever happened to the humanity. We do not yet know which"- Late Stephen Hawking

Big data analytics and artificial intelligence is still at its infancy in the finance sector. With more deluge of data as financial services keep generating more and more transactional data, more challenges like ethical and legal issues may crop up. AI will continue to bring more advancement with complexities in the financial ecosystem at the global level as artificial intelligence combined with the internet of things has transformed a mere physical object more responsive to the analytics and algorithms. Thus, with the increasing computing power increases the risk which still needs to be addressed. At the organisational level, embracing analytics not only means embracing new skills but also welcoming different behaviours from the employees with new ways of managing them with new strategic models. Apparently, a lot is still left to be done. Along with the rolling out of the financial literacy campaigns, there is also the need of creating AI awareness and literacy.

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Summary of Macro Research Report

Title: Ethics and Corporate Governance in Indian Banking Sector

Researcher: Dr. Prakash Singh, Indian Institute of Management Lucknow.

Year: 2017-18

Given the importance of the banking sector in a savings driven economy like India, this study was taken to understand and estimate the level of ethical practices/ quality of reporting and internal Corporate Governance models that banks follow. Also, there was a need to study that do our markets provide enough incentives and rewards to managers to practice full disclosures and not get into unethical practices and also adopt sound corporate governance models. The study made a humble attempt to measure the level of Corporate Governance and the Quality of Reporting in Indian Banks using some standard surrogates and also tries to read the market sentiments using the media (both electronic as well as social media) as a tool for investigating the market reaction.

Banks form a crucial link in a country's financial system and their robustness is imperative for the economy. The significant transformation of the banking industry in India is clearly evident from the metamorphism of the financial markets. Globalization has brought with it greater competition and consequently greater risks. In such scenario it becomes imperative to ensure a good ethical culture and a sound corporate governance system in the banking sector. After all the banks, who are the custodians of public deposits in a country like ours and where majority of the savings of the population flows to banks, have a very pivotal role in shaping the direction of the economy. Since major lending decisions are essentially taken by people at the top, it is very important to have the right people at the top who have demonstrated very high ethical behavior and display he highest level of integrity.

Ethics is concerned with the study of morality and the application of reason to elucidate specific rules and principles that determine right and wrong for a given situation. Ethics is the embodiment of moral values, which describes, what is right & what is wrong & what ought to be. Further, the perceptions of ethical or unethical change at times because some values are dropped & some values are added over the period. In this broad sense ethics in business is simply the application of everyday moral or ethical norms to business. Core ethical values include honesty, integrity, fairness, responsible citizenship and accountability. It is relatively easy to identify unethical business practices. However, it is not always easy to create hard-and-fast definitions of good ethical practices. The complexities of operations and transactions that happen in the financial sector; making such demarcation become all the more difficult. They must also pay close attention to moral concerns in order to make the right ethical decisions on a day-to-day basis. The upholding of an ethical culture in banking is of critical interest to regulators, banks, employees and customers alike. Banking ethics are the moral or ethical principles that certain banks chose to abide by. There isn't an ethics ombudsman or a universal code of ethical conduct as such but a major role is played by the corporate governance; system and policies.

The primary objective of financial reporting is to provide high-quality financial reporting information concerning economic entities, primarily financial in nature, useful for economic decision making. Providing high quality financial reporting information is important because it will positively influence capital providers and other stakeholders in making investment, credit, and similar resource allocation

decisions enhancing overall market efficiency. In not just Indian but global scenario, the demand for providing clear and quality financial reports has gone up. It is essential to provide high-quality financial reporting to influence users in making investments decisions, and to enhance market efficiency. It includes not just the quantifiable aspects but also the necessary non- financial aspects as well. The higher the quality of financial reporting, the higher are the benefits to be achieved.

Corporate governance is the system of rules, practices and processes by which a firm is directed and controlled. Corporate governance essentially involves balancing the interests of a company's many stakeholders, such as shareholders, management, customers, suppliers, financiers, government and the community. Corporate governance covers a range of issues such as protection of shareholders' rights, enhancing shareholders' value, Board issues including practices, the control systems, in particular internal control systems. As in any organization, good corporate governance in banks regulates the relationships between banks' stakeholders, their Boards and their management. It prevents the abuse of power and self-serving conduct, restricts imprudent and high risk behavior by bank managers, and resolves conflicts of interests between managers and board members on the one hand and shareholders and depositors on the other.

For the purpose of study, there was a three pronged approach:

1. Construction of a well-defined and acceptable Corporate Governance Index that would include consideration of following parameters/ surrogates.
   a) Level of Earnings Management (Discretionary Cash Accruals)
   b) Board of Directors/ Independent Directors
   c) Audit Committee/ Risk Management Committee
   d) Accounting Policies and Procedures
   e) Disclosure Norms/ Standards
   f) Cooperation between Board and Management/ Attendance in Board meetings
   g) Employee satisfaction etc.
2. Construction of a rank based on Quality of Financial Reporting: The current study will depend on the following qualitative characteristics: relevance, faithful representation, understandability and comparability by totalize the scores on the related items and dividing it by the total number of items.
   a. **Relevance** is usually operationalized in terms of predictive and confirmatory value. IASB (International Accounting Standard Board) defines relevance as the capability of making a difference in decisions made by users on their capacity as capital providers
   b. **Faithful representation** means that all information listed in financial report must be represented faithfully, IASB, (2006) stated that in order to accomplish this; all information and economic phenomena listed in annual reports must be complete, accurate, neutral, and free from bias and errors.
   c. **Understandability:** Understandability is referred to the process of classifying, characterizing, categorizing, then presenting the financial information clearly and concisely, for (IASB, 2008) understandability means assuring financial information transparency and clearness, this process needs referring to some financial measures.
   d. **Comparability:** Comparability means the ability the information has in explaining and identifying similarities in and differences between two common sets or transactions of economic phenomena
   e. **Timeliness**: The last enhancing qualitative characteristic discussed in the IASB (2010) conceptual framework is timeliness. The

framework defines timeliness as having information available to decision makers before it loses its capacity to influence decisions

3. Evaluation of market reaction by conducting Sentimental Analysis on Indian Banks by using both electronic and social media. Also, a structured questionnaire was send to ex bankers, senior academicians in the field of banking to get a first-hand feedback about what they think about the whole issue of Ethical reporting in Banks and what they see are the real challenges related to the governance structure in the banking industry.

Brief Discussion about the results

On Corporate Governance Index, the results are in line with expectations. The banks who have scored the highest ranks are Kotak, HDFC Bank. On Quality of Financial reporting, the results are very encouraging. Most of the government owned banks score quite good marks. More or less the level of financial reporting has matured to a level whereby most of the banks are on same page when it comes to disclosures practices. Some public sector banks score low as compared some private sector banks. It is still an area of concern being that in terms of overall quality of reporting, Indian banks in general are far behind their global counterparts. The global banks after the meltdown have taken serious efforts to build the trust and confidence in the banking system which suffered a serious setback during the Lehman collapse. They are presenting the information about the performance in a more of discussion way, explaining each and every thing to shareholders both in terms of the current performance and risk but also what can be expected from them in near future. They have become extremely proactive in discussing all major risks the bank is exposed to with the shareholders.

Market Reaction: Sentiment Analysis was carried out both on Electronic media and Social Media to understand the market reaction and perception. Major Newspapers were dominated by bad news about the sector, although there was some good news too. Again private banks have done better in terms of media relations and the overall perception in the mind of people reflected in tweets and other social media posts.

Brief Recommendations

State owned banks need to pull up their socks in terms of better visibility in the media and creating a favorable image. Their reporting quality is as good as their private counterparts but the corporate governance structure is little weak. It is not just important to be ethically correct; people should believe in your ethical standards too.

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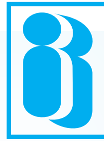

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