Annual Report 2016 - 17

Promoting Excellence in Learning and Research

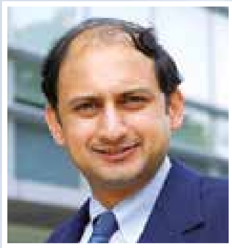
CAFRAL

CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Promoted by Reserve Bank of India

CAFRAL Governing Council

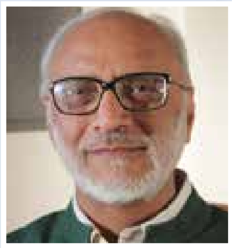
Dr. Urjit R Patel
Chairman, GC &
Governor,
Reserve Bank of India



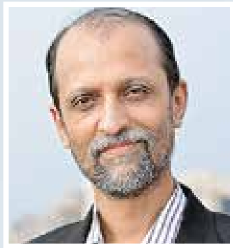
Dr. Viral Acharya
Deputy Governor,
Reserve Bank of India

S S Mundra
Former Deputy
Governor, Reserve
Bank of India

T V Mohandas Pai
Chairman of the Board,
Manipal Global Education
Services
Pvt. Ltd.



Dr. Ashok Gulati
Chair Professor for
Agriculture at Indian
Council for Research
on International
Economic Relations
(ICRIER), Infosys



Dr. Ajit Ranade
Senior President &
Chief Economist,
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India

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Estate Research Initiative, IIM
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Amartya Lahiri
Director
CAFRAL

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About CAFRAL

The Centre for Advanced Financial Research And Learning (CAFRAL) has been set up by the Reserve Bank of India (RBI) in the backdrop of India's evolving role in the global economy, in the financial services sector and its position in various international fora and to develop into a world class global institution for research and learning in banking and finance. CAFRAL is a not-for-profit organisation established as a Society and a Trust; it is an independent body promoted by RBI. CAFRAL became operational in January 2011.

The Governor of RBI is the Chairman of the Governing Council of CAFRAL. CAFRAL's learning arm is engaged in conducting seminars, conferences and other learning programs that serve as a platform for exchange of high-level policy dialogues between the various stakeholders by bringing together regulators, policy makers, bankers, academicians, researchers and practitioners. It also conducts advanced programs for enhancing professional capabilities of senior executives in the financial sector.

CAFRAL's research focus is on the areas of banking and finance. Within these broad areas, our interests include financial institutions, financial markets, behavioural finance, corporate finance, household finance and related areas of macro-finance such as monetary economics or international finance. CAFRAL aims to build intellectual capacity in these areas through its own staff, by hosting researchers of international repute and facilitating collaborative research by building data resources and analytical capabilities.

Mission

To evolve as a global centre of excellence for policy research and advanced learning in banking and finance.

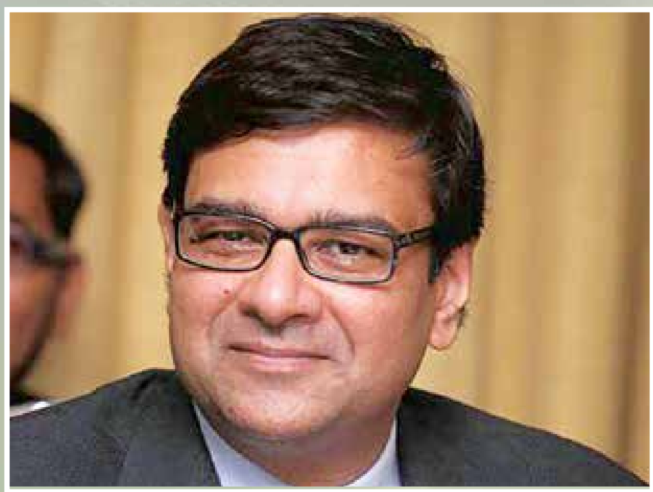
Objectives

- Enhance our understanding of how the financial sector contributes to real sector growth through in-house and collaborative research that is useful and relevant
- Enhance professional capabilities in the banks, financial sector, and among central banks regulators and policy makers through learning events and programs
- Provide a platform for dialogue between policy makers, regulators, financial sector, practitioners and academics on issues of topical relevance and systemic importance
- Communicate and disseminate the conclusions and results of the learning and research activities of CAFRAL to policy makers, central banks, regulators and public at large
- Collaborate and network with domestic and global institutions with similar mandate for mutually beneficial arrangements

Abbreviations

AGM	Assistant General Manager
ALM	Asset Liability Management
AML	Anti-Money Laundering
BAT	Banking Aptitude Test
BBB	Bank Board Bureau
BC	Business Correspondents
BIS	Bank for International Settlements
CAAT	Computer-Assisted Audit Tool
CABMP	CAFRAL Advanced Bank Management Program
CAFRAL	Centre for Advanced Financial Research And Learning
CALP	CAFRAL Advanced Leadership Program
CBI	Central Bureau of Investigation
CCIL	Clearing Corporation of India Ltd.
CEO	Chief Executive Officer
CFT	Combating the Financing of Terrorism
CGM	Chief General Manager
CMD	Chairman and Managing Director
CRO	Chief Risk Officer
CTR	Cash Transaction Report
CVO	Chief Vigilance Officer
D-SIB	Domestic Systemically Important Bank
DFS	Department of Financial Services
DG	Deputy Governor
DGM	Deputy General Manager
DSIM	Department of Statistics and Information Management
ED	Executive Director
EU	European Union
FED	Federal Reserve Board
FIMMDA	Fixed Income Money Market and Derivatives Association of India
FIU Ind	Financial Intelligence Unit India
FMI	Financial Markets and Institutions
FMP	Financial Markets Program
FSI	Financial Stability Institute
FSR	Financial Stability Report
GM	General Manager
GoI	Government of India
HR	Human Resource
ICAI	Institute of Chartered Accountants of India
IDBI	Industrial Development Bank of India
IES	Indian Economic Service
IFC	International Finance Corporation
IGIDR	Indira Gandhi Institute of Development Research
IIMA	Indian Institute of Management Ahmedabad
IIMB	Indian Institute of Management Bangalore
IMF	International Monetary Fund
Ind AS	Indian Accounting Standards
KYC	Know Your Customer
LCR	Liquidity Coverage Ratio
LVA	Layered Voice Analysis
MD	Managing Director
MFIN	MicroFinance Institutions Network
MIT	Massachusetts Institute of Technology
MoF	Ministry of Finance
MPER	Monetary Policy and Exchange Rate
MSME	Micro, Small & Medium Enterprises
NoD	Non-official Director
NPA	Non-Performing Asset
NUS	National University of Singapore
OCC	Office of the Comptroller of the Currency
PMJDY	Pradhan Mantri Jan-Dhan Yojana
PSB	Public Sector Bank
PSL	Priority Sector Lending
RA	Research Associate
RAROC	Risk-Adjusted Return On Capital
RBI	Reserve Bank of India
RWA	Risk-Weighted Assets
SBI	State Bank of India
SEC	Securities and Exchange Commission
SIB	Systemically Important Bank
SLR	Statutory Liquidity Ratio
STR	Suspicious Transaction Report
SVP	Senior Vice President
UBC	University of British Columbia
USA	United States of America
VP	Vice President

Chairman's Message



It gives me immense pleasure as the Chairman, Governing Council of Centre for Advanced Financial Research and Learning (CAFRAL) to pen down my first message. CAFRAL has been established by the Reserve Bank of India to develop into a hub for rigorous data-centric policy research, as well as a centre for advanced learning in the field of banking and finance; the last six years has been an exciting journey towards achieving these goals. The recent period, however, has been a challenging one for the banking industry in India. The lessons learnt from this backdrop have underscored the need for improving, inter alia, the governance and risk management skills in our banks. I am sure CAFRAL would continue to be a facilitator for helping banks achieve the necessary skills and aid their capacity building through its learning programs and policy research.

The Research Wing of CAFRAL has made notable progress in 2016-17. CAFRAL's Research team has been successful in bringing out papers on relevant current issues as well as topics of long term interest to researchers in India and abroad. Fourteen research and policy papers were completed during the year. The research areas included sovereign & corporate bond markets, financial networks & stability, venture capital, corporate finance, monetary policy and related areas

CAFRAL's Governing Council

in macro-finance. In addition, there have been a number of longer term research projects on a wide set of issues ranging from growth to mutual fund returns. CAFRAL researchers are also involved in selective briefings to the Monetary Policy Committee.

During 2016-17, the Learning wing of CAFRAL has increased its footprint in the teaching and training space. It organized twenty three programs aimed at Board level and senior level executives of commercial banks, Reserve Bank of India and Financial Institutions. The programs covered varied issues of contemporary relevance like corporate governance, risk management, credit & NPA management, project & infrastructure financing, stress testing, capital planning, cyber security and digital crime management. The list of programs also included two international programs conducted in collaboration with the Robert H. Smith School of Business, University of Maryland and the Central Bank of Sri Lanka.

I am sure that CAFRAL will continue its ascendant journey in the coming year and establish itself as a centre of excellence in the field of learning and research. I take this opportunity to wish success to the entire team of CAFRAL in their future endeavours.

Urjit R. Patel

Chairman, Governing Council, CAFRAL and Governor, RBI

DIRECTOR'S REPORT

2016-17

Director's Report

In the year 2016-17, CAFRAL's Research team has been successful in bringing out papers on relevant current issues as well as topics of long term interest to researchers in India and abroad. There have been a total of fourteen research and policy papers that have been completed this year. We have briefed the Monetary Policy Committee on selected topics such as the potential exchange rate impact of the unwinding of the US Quantitative Easing, and the impact of Foreign Institutional Investor flows on the value of the rupee. In addition, there have been a number of longer term research projects in different areas. CAFRAL researchers have examined the impact of creditor rights on banking, the impact of type of Indian Treasury auctions on revenue, developed measures of financial stress in the Indian corporate sector, studied monetary policy transmission in Indian banks, as well as quantified the effect of individual investor behaviour on mutual funds. Several past visiting fellows have been actively developing their research papers on topics such as treasury auctions and development of credit risk models. We are doing policy work comparing the Indian Non-Performing-Assets problem to the impact of the Asian financial crisis in Korea, and are preparing recommendations regarding the lessons that India can adopt.

CAFRAL's Learning team conducted twenty three programs with the primary objective of enhancing the skills of senior officers. The broad areas covered relate to Credit, Risk, Non-Performing-Assets, Project Financing, Compliance, Cyber Security, Data Integrity and Risk Based Supervision. There were new programs that covered Small Finance Banks & Payment Banks, Financial Crimes and Commodity Markets while we continued with our dedicated programs for Non-Executive Directors on the Boards of Public Sector Banks and another one for officials of the Indian Economic Service which focused on Financial Markets. In October 2016, CAFRAL collaborated with the Robert H Smith School of Business, University of Maryland to hold the "CAFRAL Advanced Bank Management Program" for senior executives in the USA. The program focused on risk management, asset liability management, consumer & project financing, cyber security, regulation/ supervision & financial markets, which was supplemented by study visits to various institutions like Federal Reserve Board, Securities and Exchange Commission, the World Bank, the IMF, the FDIC, etc.

CAFRAL is committed to conducting high quality research and learning with a view to achieve excellence in all its activities. In the year ahead we hope to continue and improve on our work till now.

Amartya Lahiri
Director, CAFRAL

CAFRAL Research

Our objective is to position ourselves as a globally leading research centre engaging in research on the Indian financial and macroeconomic system. We seek to engage in research that is executed to an international standard in terms of quality of execution, and at the same time, addresses questions that are relevant to RBI as well as other policy making bodies in India. In addition, we also seek to undertake international research on other countries that can shed light on similar issues for the Indian economy.

Research Papers

Our research this year spanned a variety of topics. We had papers on India as well as research in an international setting. For India, the topics we studied included financial inclusion, impact of state owned banks on the Indian economy, a survey on demonetization, bank panic in India, bond market trading, government debt auctions, corporate debt restructuring (CDR) mechanisms, financial stress in the corporate sector and transmission of monetary policy, and building of portfolio credit risk models. In the international context, we studied mortgage lending, intergenerational mobility effects and the impact of behavioural attributes of investors on mutual fund flows. A list and abstracts of the papers with completed drafts for this Fiscal Year (2016-2017) is attached in Appendix A. Here, we provide a sampling of research done at CAFRAL this year.

In a paper on the relationship between government guarantees and bank vulnerability during a crisis, Dr. Nirupama Kulkarni and Deputy Governor, Dr. Viral Acharya, analyze the performance of Indian banks during 2007. Vulnerable private-sector banks performed worse than safer private-sector banks; however, the opposite was true for state-owned banks. Vulnerable private-sector banks also experienced deposit withdrawals and shortening of deposit maturity. In contrast, vulnerable state-owned banks grew their deposit base and increased loan advances at cheaper rates, especially to politically important sectors, but with poorer ex-post performance. Their evidence suggests that access to stronger government guarantees and forbearance during an aggregate crisis allows state-owned banks to access and extend credit cheaply despite underperforming.

In a working paper titled “The transmission of monetary policy within banks: Evidence from India,” former Head of Research, Dr. Prabhala and his co-authors, study the impact of changes in cash reserve requirements in India. This paper analyzes the lending responses to these quantitative tools of monetary policy using branch level lending data. It shows that the intra-bank variation in lending is economically significant.

Branches that are larger, make loans with smaller ticket size, are deposit-rich, make shorter term loans, have fewer non-performing assets, and with greater managerial capacity respond more to monetary policy. The paper also finds that transmission effects are more sluggish in state-owned banks.

In a paper titled "Financial stress in Indian corporates," Dr. Prabhala, Dr. Ansari and Ms. Khushboo Khandelwal (a research associate), characterize the changes in credit quality of a large sample of listed Indian corporates. Multiple indicators suggest that credit quality declines sharply between 2010 and 2015, creating a thick tail of vulnerable corporate debt. The stress is primarily due to a sharp contraction in aggregate corporate growth coupled with modest drops in profitability and imbalanced financing patterns with overreliance on debt. Default risk models suggest that state-owned banks bear the brunt of corporate stress. Reviving corporates is likely to depend on growth as well as successful restructuring and reallocation of assets in place. Remedies for banks pose more difficult choices.

In a paper studying mutual funds, Dr. Apoorva Javadekar examines whether mutual fund manager can generate value either by picking profitable assets and earning alpha or by timing the market by adjusting the portfolio beta. While traditional theories have studied alpha component of the manager's skill, he builds a model where a manager has both these types of skills. In this set-up investor's learning about managerial skill is a function of performance as well as the state of the aggregate market. A period of high (low) market volatility is more informative about timing (picking) skill. This learning together with persistent and counter-cyclical conditional market volatility implies that fund flows are more sensitive during the periods characterized by high volatility and low market return. Dr. Javadekar tests and confirm these predictions in the data.

Other Outreach Activities

We have also provided input to RBI on a variety of policy issues – for example, to the FMRD on the rating efficiency of commercial paper markets, to the MPC on INR valuation and impact of FII flows on this and to the DBR on co-operative banks.

We had several internal brown bag seminars. In addition, we had several international speakers – current DG (RBI) Acharya (who at that time was a senior visiting fellow at CAFRAL) on the real effects of unconventional monetary policy, Professor Manju Puri from Duke University on the types of depositors who run when their bank faces a low risk and high risk shock in India, Professor Reena Agarwal from Georgetown University on the role of securities lending in government bonds on collateral transformation, Professor Rohit Lamba from Penn State on a structural model of Indian treasury auctions, Professor Sandeep Juneja from Tata Institute of Fundamental Research, who developed a model of portfolio credit risk, and lastly Professor Stefan Siegel from the University of Washington at Seattle who presented the results of a survey of demonetization.

We had three visiting fellows – Professor Stephan Siegel from the University of Washington at Seattle, and Professor Raunaq Pungaliya from SKKU University in South Korea, and current Senior Research Director, Dr. Anand Srinivasan (at the time of the visit, Dr. Srinivasan was a finance faculty at National University of Singapore). In one of his research projects, Professor Siegel administered a survey on demonetization in 28 slums in Mumbai and found that over 50 percent of respondents (despite their low economic status) supported it. Also, a large fraction of respondents stated that they were more likely to keep cash in a bank account, suggesting that demonetization may help increase usage of bank accounts by low income households. Professor Pungaliya helped connect CAFRAL to Korean Government institutions that were involved in restructuring troubled loans in South Korea after the Asian financial crisis of 1998. He is writing a short policy piece on the resolution with particular emphasis on what features may be useful for resolving Indian NPA's. Dr. Srinivasan has assembled a data set on finance of trade using letters of credit which can be potentially useful for answering research questions in this area.

Dr. Nirupama Kulkarni was a discussant at the American Finance Association annual meetings. Her papers were also presented at Ashoka University and the University of Chicago. Dr. Apoorva Javadekar was cited in the Mint and DNA news outlets. Dr. Anand Srinivasan was a discussant to three papers at the DSIM department's annual conference in Kolkata, and also at the NSE-NYU annual conference in Mumbai. Dr. Srinivasan was also on the program committee of the European Finance Association annual meetings, the Financial Intermediation Research Society Annual Meeting and the ISB Center for Analytical Finance annual conference. He was a reviewer for the Hong Kong Research Grants Council, Management Science and the Review of Financial Studies.

Human Capital

Human capital is undoubtedly the key asset of any research enterprise. Our research associate (RA) program has become quite competitive. It attracts several hundred applications for a handful of positions. We have been fortunate to hire several applicants from globally recognized research schools such as Barcelona School of Economics, IGIDR, London School of Economics, National University of Singapore & Warwick University. Out of our existing RA pool, one RA has been admitted to the University of Chicago Ph.D. program in Finance, and another secured admission into the Ph.D. program in Economics at UC Irvine. Coupled with the previous year's RA placement at MIT's doctoral program, this suggests that we have developed a very good reputation in top doctoral programs. Two RA's have moved to Barclays and Nomura, and one went to the National Stock Exchange. In a short span of three years, our RA program has developed a strong reputation both in the Indian financial industry as well as in the international research community.

Our senior research staff comprise of individuals with PhDs in finance or economics with a research track record or potential for publication at the top-tier journals in finance or economics. The market for this talent is global and is thus competitive. This year, we were fortunate to hire two top doctoral candidates – Dr. Apoorva Javadekar from Boston University, and Dr. Nirupama Kulkarni from the University of California at Berkeley. Dr. Javadekar works in the area of asset pricing and mutual funds and Dr. Kulkarnia in the area of mortgages and real estate. Both have also started several new projects in the Indian financial sector. We also have engaged Dr. Anand Srinivasan from the National University of Singapore on a two year contract as a Senior Research Director. His area of research is banking and credit risk.

Dr. Prabhala has returned back to the University of Maryland and is continuing to work on the projects started here at CAFRAL. Dr. Sareen has returned to the US and hopes to continue on her bond market work. Dr. Juneja has completed his part time appointment and returned to Tata Institute of Fundamental Research. He has completed two papers on portfolio credit risk. Ms. Manuela Günther (ODI visiting fellow) completed her work on financial inclusion and went to South Africa for the remaining part of her fellowship.

CAFRAL Learning

This year, CAFRAL has worked towards creating learning opportunities covering wider functional areas of banking. Our focus has been on practical implementation through experiential learning from practitioners. The types of programs that were held reflected an effort to address changing scenario of concerns of banks. As the participants are typically senior bank executives who are interested in resolving ongoing teething issues or in improving performance in their verticals, it was our endeavor to design and deliver on these needs using all the expertise available to CAFRAL.

Three of our programs focused on covering the latest developments and revised approaches in determining regulatory capital, the use of Pillar II for micro and macro prudential purposes by refining risk appetite, and Risk-Based supervision for strengthening the risk culture to match enhanced supervisory expectations.

CAFRAL, jointly with the Department of Financial Services, Ministry of Finance, Government of India, organized Seminar on DEBT Recovery at SBI Academy, Gurgaon. The seminar was inaugurated by Hon'ble Finance Minister, Shri Arun Jaitley. Ms. Anjuly Chib Duggal, Secretary, DFS addressed the Chairpersons of the Debt Recovery Appellate Tribunals and the Presiding Officers of Debt Recovery Tribunals (DRT) highlighting the need for improving the efficiency of DRTs part - empowerment by the amendments to RDDBFI

Participant Sound Bytes

"Very good insight on cyber risks its mitigation techniques , live case studies, expert views. Cyber security changing to response assuming you are compromised rather than the prevent mode at the International Seminar on Cyber Risk and Mitigation for banks and FIs"

Dena Bank
Trisha Guaha, ED

Participant Sound Bytes

"The program topics were well articulated . Had a good insight on various aspects of stress barriers. The speakers are really very good . All experts in their fields. Last the ambience of the classroom was "" awesome"". Good venue. Overall a high quality program at Program on Asset Resolution and Managing NPAs"

Axis Bank
Prasanta K Das, SVP

1. Hon'ble Finance Minister, Shri Arun Jaitley addressing gathering

I

Hon'ble Finance Minister - Arun Jaitley, Ms. Anjuly Chib Duggal, Secretary, FS at Seminar on Debt Recovery

Act and SARFAESI Act. Detailed discussions took place on the steps taken by the Government to empower the DRTs and improving their effectiveness, thereby improving the climate for recovery of debts due to banks and financial institutions. Five Chairpersons of Debt Recovery Appellate Tribunals and 31 Presiding officers of Debt Recovery Tribunals attended the program.

Participant Sound Bytes

"Selection of speakers was awesome and all of them were authority in their subject. Variety of subjects covered was diverse and did cover most important issues related to crimes. Overall excellent program with practical takeaways from almost all the speakers. Infrastructure arrangement was also well managed at Program Financial Crimes Management."

Manoj Sethi
EVP, Yes Bank

Participant Sound Bytes

"Understanding the regulators expectations from the compliance function, Hearing from other banks on common issues or areas of concern, Listening to international experts in the area of compliance at conference at Cheif Complaince Officers"

Prabhat Gupta
Head-Regulatory Compliance,
Standard Chartered Bank

Program on Credit Risk Management and Regulatory Capital focused on latest international and national developments in the management of credit risk and regulatory capital following the revisions in the Standardised and Internal Rating Based (IRB) approaches for credit risk. These changes were aimed at promoting simplicity & comparability by reducing the variability in risk-weighted assets across banks and jurisdictions. In the Indian context, banks are planning to implement IRB Approaches.

Advanced Program on Risk Management aimed at enhancing the skill levels of senior officers of banks and financial institutions in the area of risk management. Case studies helped improved analytical knowledge for credit and market risk management with use of statistical tools like duration gap analysis and interest rate risks techniques.

Participant Sound Bytes

"The need for board level awareness on the importance of cyber security. The risk to which we are exposed and how to approach for mitigation. Why a cyber security set up is so required. Importance of a well-defined cyber policy and the need for constant updation of people, processes and systems."

G Subramania Iyer
ED, UCO Bank

Program on Risk Based Supervision provided a platform for senior executives of commercial banks to discuss the modalities of Risk Based Supervision (RBS), challenges faced by them in the transition (to RBS) and also to appreciate the expectations of the regulators, especially in regard to the timeliness and quality of supervisory data to be furnished by them.

1. L:R - Shri. M. R. Umarji, Legal Advisor, IBA, Smt. Anjuly Chib Duggal, Secretary (FS) Justice KR. Bhasin, Chairperson DRAT, Delhi

1. L:R - Anjuly Chib Duggal, Vinod Rai, Raghuram Rajan, at Roundtable with Chairmen and CMDs
2. S S Mundra
3. L:R - Raghuram Rajan & Urjit Patel Governor, RBI
4. Uday Kotak
5. Deepak S. Parekh

A Roundtable Meeting on the role of Chairman in PSBs was organised at the instance of the Governor, RBI to deliberate upon the role of the new Chairpersons of four PSBs (after segregation of the roles of the Chairman & MDs in Bank of Baroda, Bank of India, Indian Bank & Vijaya Bank) and identify the best practices for adoption. The role of non-official Directors on the Boards of the banks was also discussed from the point of improving a bank's functioning. Apart from the Governor and three Deputy Governors of RBI, Secretary, DFS and Chairman & Members of the Banks Board Bureau, the meeting was attended by the Chairman, HDFC Housing Ltd; MD & CEO, Axis Bank Ltd.; Executive Vice Chairman & MD, Kotak Mahindra Bank Ltd; the four newly appointed Non-Executive Chairmen of PSBs and CMDs of Allahabad Bank, Bank of Maharashtra, Central Bank of India, Punjab National Bank, Punjab & Sind Bank and Union Bank of India.

A **Program for the Non-Official Directors** is our flagship program which focusses on the role and responsibilities of the Directors and provides inputs to them on the regulatory and supervisory issues by covering themes like risk management, prudential norms, restructuring of accounts, financial markets, capital planning, etc. over two days.

Participant Sound Bytes

"Advanced Risk Management Program - A very good program for understanding, interpreting and analysing the risks emanating from interest rate movements, credit, forex and concentration risk."

Fayaz Ahmad Zargar
VP, Jammu & Kashmir Bank Ltd

Program on Asset Resolution and Managing NPAs aimed at developing skills for strategizing, handling of stressed assets, provisioning, resolving pricing issues in ARC sales and use of Insolvency and Bankruptcy Code. Lack of transparency in monitoring consortium accounts contributing to increasing NPAs with associate member banks was discussed at length. Differentiated portfolio approach and sector specialization like automobiles, mines, steel, power, construction, roads, financial inclusion would help ensuring risk management across banking sector were some important learnings. Need of improvement in public sector banks' low usage of CIBIL reports was an important takeaway.

1. Participants with speakers at Workshop on Reporting to CRILC Database by Banks
2. Nachiket More at Advanced Risk Management Program
3. L-R: Ashish Gupta, G Gopalakrishna, Ashwani Kumar, D Sarkar
4. Meena Hemchandra, ED, RBI

Participant Sound Bytes

"Advanced Risk Management program *provided very good insight into granular aspects of credit and market risk management."*

S Suresh Kumar
GM, DBS,RBI

"Program for Non -Executive Directors has nicely covered the areas like Treasury, overseas operations, IBC & Cyber security. This kind of program helps us (Independent Directors) to understand and play proactive role at the board meetings."

Ketul Patel
Central Bank of India

CAFRAL Advanced Bank Management Program (CABMP) was continued this year in association with the Robert H Smith School of Business, University of Maryland, USA. One leg of the program was in the USA. The program focused on risk management, asset liability management, consumer and project financing, cyber security, regulatory issues and financial markets with study visits to institutions like the Federal Reserve Board (FRB), Securities and Exchange Commission (SEC), World Bank, IMF and FDIC.

1. *L-R: N S Vishwanathan, Renny Thomas, Sushil Muhnot, Dr. M. G. Vaidyan*
2. *Speakers and Participants at Program for Non-Executive Directors on the Boards of Commercial Banks*
3. *Peter Monaci*
4. *S. S. Mundra, Former Deputy Governor at International Seminar on Cyber Risk and Metigatin foro Banks and FIs*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International Seminar on Cyber Risk and Mitigation for Banks and FIs focused on assessment and mitigation of threats posed by cyber-attacks. International and domestic experts shared their experience. Some useful suggestions made by participants included setting up banks own SOC Security Operations Centre (SOC) and IS Audit Entity in view of the limited number of private players in this field, use war games to test cyber security preparedness, mapping the Institute for Development and Research in Banking Technology's 300 Red Flags with RBI's Cyber Security Framework, sharing case studies on the CISO platform and the need for regulatory guidelines on cyber security insurance.

"CAFRAL Advanced Bank Management Program (CABMP) - It is one of the best program, I have ever attended. Opportunity to meet such great institute. Excellent professors to listen to."

Ajit Kumar Rath
ED, Andhra Bank


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1. *CABMP Participants at IFC World Bank, Washington DC*
2. *At Securities and Exchange Commission*
3. *In front of World Bank, Washington DC*
4. *Program Participants and Speakers at International Seminar on Cyber Risk and Metigatin foro Banks and FIs*

"Understanding the latest trends and the nature and form of APT which can disrupt business. The need for immediate assessment of the existing security gaps which should be identified in the bank at International Seminar on Cyber Risk and Metigation for Banks and FIs".

SAUMYA SANKAR BANERJEE
ED, IDBI Bank

1. *CABMP Participants with Robert H. Smith School and CAFRAL team*
2. *CABMP Participants At Federal Reserve Board, Wahington DC*
3. *CABMP Participants in the Class room with Teresa A Rutledge, OCC*
4. *Meeting with Matt Loeb, ISACA CEO*
5. *S. S. Mundra, Former Deputy Governor with Participants at Program on Financial Crimes Management*

"CAFRAL Advanced Bank Management Program (CABMP) - It is a well-structured program with balance of classroom sessions and discussions with various regulators and officials of IMF and World Bank. The programme provided insight into risk Management as also developing trends in the global and economic sphere. I thank CAFRAL for structuring and arranging the programme."

P H Pammi
GM, State Bank of India

Program on financial crimes dealt with fraud management encompassing controls for prevention, early detection, prompt reporting and timely initiation of the accountability exercise. The importance of operational risks has got enhanced in the overall risk management function of banks with increasing threats of cyber risks and financial crimes and it works on best practices for BCP, Cyber Risk, Fraud Risk and Process Management.

The importance of operational risks has got enhanced in the overall risk management function of banks with increasing threats of cyber risks and financial crimes.

Program on Best Practices in Operational Risk Management was structured around five themes - Business Continuity Management, Process Excellence, Cyber-crime prevention & detection controls, Loan fraud management and Documentary & Mobile channel fraud management. Each theme was assigned to a Group (of participants) with a mentor who facilitated

their understanding and presentations subsequently.

Program for guiding Small Finance Banks and Payments Banks was essentially to provide guidance to the new entrants on regulatory issues and familiarise them with the expectations of the regulator

Program on Credit and NPA Management addressed the issue dominating and troubling the banking system by focusing on the need

"Program on Project and Infrastructure Financing - Gave a 3600 view of the entire gamut of infra funding, large scale financing of projects, stress in such projects, way forward in revival, issues and challenges from the perspective of lenders."

Sudhakar D Nayak
DGM, Vijaya Bank


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"Program on Credit and NPA Management - Galaxy of star speakers sharing their experiences and giving useful tips."

Ram Kumar
DGM, PNB

"Program on Best Practices in Operational Risk Management - Good sharing of experience and best practices."

Selvaraj K
Chief Vigilance Officer, Dena Bank

for developing a risk culture to curb potential NPAs, bringing transparency and independent assessment in consortium account monitoring, making use of regulatory tools for handling incipient NPAs, pricing of sales to ARCs, technical skills for project financing, effective use of CRILCs data and CIBIL reports while sanctioning, etc.

The five day long Financial Markets Program, open to the Indian Economic Service officers and bankers, provided an unique mix of macro-economic issues impacting and shaping policy making in financial markets together with an understanding of the inter-linkages amongst the various segments of the domestic market as well as global linkages.

Advanced Program on Project and Infrastructure Financing was organized to enhance the credit appraisal skills for project and infrastructure financing through classroom sessions and case studies. It also provides a forum for serious deliberations and feedback to the regulator. Participants suggested that the number of lenders in a consortium should be reduced

2

and each bank should conduct independent due diligence of the project, the weightage of state government guarantees should be at par with the central government guarantee, infrastructure projects stalled for reasons beyond the control of the sponsors should not be treated as NPAs, time schedule of SDR implementation should be 36 months or more, etc.

As part of dissemination of knowledge contributed by the various speakers, their speeches, session discussiosns, papers and presentations are posted on CAFRAL's official website (www.cafral.org.in).

1. *Participants at Program on Credit and NPA Management*
2. *Participants at Program on Regulatory and Supervisory issues for Payment Banks and Small Finance Banks*
3. *N. S. Vishwanathan*
4. *Amarendra Mohan*
5. *A. P. Hota*
6. *Anand Sinha*
7. *N.S.Venkatesh*

"International Program on Credit Risk Management and Regulatory Capital - Good overall sensitisation to current developments with regard to capital adequacy and accounting standards."

Utpal Gokhale
GM, EXIM Bank

Administration and HR

CAFRAL's team is growing. During the year, many new faces joined CAFRAL, while a few left to pursue other opportunities. As on September 1, 2017, CAFRAL has 28 contract staff and 2 deputed from RBI; two officers on deputation from RBI with CAFRAL have superannuated/left from their service. CAFRAL welcomes new Director and Additional Director (Learning & Administration) who have joined recently. CAFRAL also welcomes the new GC Members viz. Dr. Ashok Gulati, Dr. Venkatesh Panchapagesan and Dr. Ajit Ranade. Also, we hired 9 Research Associates in two batches. CAFRAL mentored six interns this summer in Research wing & Learning wing.

Since its launch in January 2014, CAFRAL's website has been instrumental in global content distribution and expanding CAFRAL's reach. The online nomination process, introduced in June 2014, has been a big success in streamlining and smoothening the entire nomination process. The website has been attracting a lot of new and repeat visitors. As per the analytical study on CAFRAL's website out of a total of 30,553 Visitors - 20,284 are New visitors (66.5%) and 10,269 are Repeat Visitors (33.5%) who had left footprints in this financial year alone. CAFRAL website has been refurbished to include the research work done during the past couple of years.

The names of CAFRAL staff are given in Annex 3.

Acknowledgements

We would like to acknowledge the valuable guidance given to us by our former Governor & Chairman, CAFRAL, as also the Governing Council and Research Advisory Council members. CAFRAL has received the immense benefit during each one's tenure and has now poised to further develop on research and learning due to the solid foundation that was given during their tenure at CAFRAL. We are also thankful to the Management and officials of the Reserve Bank of India, various financial services institutions, consulting organizations, academicians and professionals from various fields for their support provided to our activities. Without their unstinted support and encouragement, we could not have been able to reach this stage of development in our journey to achieve our objectives.

We also acknowledge the contribution of M/s Deodhar & Patel, our internal auditors, M/s C N K & Associates LLP, our statutory auditors, and other service providers.

Amartya Lahiri

Director, CAFRAL

CAFRAL - FINANCIAL STATEMENTS

2016-17

Independent Auditor's Report

To the Board of Trustees of
CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Report on the Financial Statements

We have audited the accompanying financial statements of CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING (hereinafter referred to as "the Trust") comprising of the Balance Sheet as at March 31, 2017 and the Income and Expenditure Account for the year ended on that date, and a summary of significant accounting policies (hereinafter referred to as "the financial statements"). The financial statements have been prepared management based on the Indian Generally Accepted Accounting Principles and the relevant provisions of the Bombay Public Trusts Act, 1950 (hereinafter referred to as "the Act").

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the state of affairs and results of the Trust in accordance with the accounting principles generally accepted in India and in accordance with the provisions of section 32 of the Act; this includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit.

We have taken into account the provisions of section 34 (2), 36B (4) the Act, the generally accepted accounting principles and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made there under.

We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accounts of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and the disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal financial control relevant to the Trust's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Trust has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Trust's Management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Opinion

In our opinion and to the best of our information and according to the explanations given to us and based on the consideration of reports of other auditors, the aforesaid financials statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Trust as at March 31st 2017 and its surplus for the year ended on that date.

For C N K & Associates LLP
Chartered Accountants
Firm Reg No:101961W/W100036

(Manish Sampat)
Partner

M. No.: 101684

Place: Mumbai
Date: 20th September 2017

SCHEDULE - VIII [(Vide Rule 17 (1)]

The Bombay Public Trusts Act, 1950 Registration No. F - 33749 (Mum)

Name of the Public Trust: CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Balance Sheet as at: 31st March, 2017

FUNDS & LIABILITIES	As at 31st March 2017 ₹	As at 31st March 2016 ₹
Trusts Funds or Corpus:		
Balance as per last Balance Sheet	50,00,000	50,00,000
Other Earmarked Funds:	NIL	NIL
(Created under the provisions of the Trust Deed		
or Scheme or out of the Income)		
Loans (Secured/Unsecured):	NIL	NIL
Liabilities:		
Advance From Reserve Bank of India	83,45,965	79,52,395
Liabilities as per Schedule “A”	69,43,336	13039411
Income And Expenditure Account:		
Balance as per last Balance Sheet	NIL	NIL
Add : Surplus/(Deficit) as per Income and Expenditure A/c	NIL	NIL
TOTAL	**2,02,89,301**	**2,59,91,806**

Notes to Accounts - Schedule ‘F’
As per our report of even date
For C N K & Associates LLP
CHARTERED ACCOUNTANTS
FIRM REG. NO.101961W/W100036

(Manish Sampat)
Partner
M.NO.: 101684

Place: Mumbai
Date: 20th September 2017

	PROPERTY & ASSETS	As at 31st March 2017	As at 31st March 2016
		₹	₹
	Immovable Properties: (At Cost)	NIL	NIL
	Balance as per last Balance Sheet		
	Add: Additions during the year		
	Less: Sales during the year		
	Less: Depreciation up to date		
	Investments:	NIL	NIL
	Movable Properties (Schedule B):		
	Cost	2,39,54,940	2,25,58,314
	Less: Depreciation up to date	1,93,98,331	1,44,13,357
		45,56,619	81,44,957
	Unsecured and Good		
	Sundry Debtors	10,02,200	9,83,575
	Advances:-	67,50,300	88,27,901
	As per Schedule "C"		
	Income Outstanding:		
	- Interest Accured on Fixed Deposit	2,46,868	6,45,660
	Cash And Bank Balances:		
	(a) Cash in Hand	11,343	15,486
	(b) In Saving Account with banks	27,21,981	23,74,227
	(b) In Fixed Deposit with banks	50,00,000	50,00,000
	TOTAL	**2,02,89,301**	**2,59,91,806**

The above Balance Sheet to the best of our belief contains a true account of the Funds and Liabilities and of the Property and Assets of the Trust.

CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

TRUSTEE TRUSTEE TRUSTEE

Place: Mumbai
Date: 20th September 2017

SCHEDULE - IX [(Vide Rule 17 (1)]

Name of the Public Trust: CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Income and Expenditure Account for the year ended 31 March, 2017

Expenditure	For the Year Ended 31st March 2017	For the Year Ended 31st March 2016	Income	For the Year Ended 31st March 2017	For the Year Ended 31st March 2016
	₹	₹		₹	₹
To Expenditure in respect of Properties	NIL	NIL	By deficit for the year reimbursed by RBI	7,46,06,428	9,01,14,202
To Establishment Expenses As per Schedule "D"	16,83,631	20,93,722	By Training Programme Fees Recovered	3,20,60,064	3,66,78,101
			By Bank Interest	10,64,438,	14,83,230
			By Dividend	NIL	NIL
To Audit Fees	1,25,000	1,15,000	By Donations in Cash or Kind	NIL	NIL
To Contribution and Fees	NIL	NIL	By Grants	NIL	NIL
To Short Provision for Income Taxes of earlier yr	NIL	1,17,127	By Interest on Income Tax Refund	98,886	4,08,938
To Amount written off	NIL	NIL	By Misc Income	23,900	NIL
(a) Bad Debts					
(b) Loan Scholarship			By Other Rceipts	NIL	1,12,439
(c) Irrecoverable Rents					
d) Other Items					
To Depreciation	50,21,640	45,41,528	By Transfer from Reserve	NIL	NIL
As per Schedule "B"					
To Expenditure on the object of the trust Educational As per Schedule "E"	10,10,23,445	12,19,29,534			
To Surplus carried over to Balance Sheet	-	-			
Total	**10,78,53,716**	**12,87,96,910**	**Total**	**10,78,53,716**	**12,87,96,910**

Notes to Accounts - Schedule 'F'
As per our report of even date

For C N K & Associates LLP
CHARTERED ACCOUNTANTS
FIRM REG. NO.101961W/W100036

(Manish Sampat)
Partner
M.NO.: 101684

Place: Mumbai
Date: 20th September 2017

CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

TRUSTEE TRUSTEE TRUSTEE

Place: Mumbai
Date: 20th September 2017

Schedule A: Liabilities

Particulars	As on 31st March 2017	As on 31st March 2016
	₹	₹
Expenses Payable	67,36,577	1,25,19,204
Liability for Tax Deducted at Source	1,84,581	2,67,523
Advance from Debtors	-	2,28,966
Service Tax Liability	-	140
Retention Money	17,178	17,178
Profession Tax Payable	5,000	6,400
Total	**69,43,336**	**1,30,39,411**

Schedule B: Movable Properties

Name of the Asset	Rate of Depreciation	COST			
		As on 1st April 2016	Additions	Deletions	As on 31st March 2017
		₹	₹	₹	₹
Tangible					
1. Computer Hardware Including Printers	33.33%	46,95,406	13,49,927		60,45,333
2. Other Electrical Equipment	33.33%	63,43,421	76,199	55,000	63,64,620
3. Furniture	20.00%	12,93,454	25,500		13,18,954
4. Car	20.00%	27,04,969			27,04,969
Intangible					
5. Computer Software	33.33%	75,21,064			75,21,064
Total		**2,25,58,314**	**14,51,626**	**55,000**	**2,39,54,940**
Previous Year		**1,46,29,328**	**79,68,986**	**40,000**	**225,58,314**

Schedule C: Advances

Particulars	As on 31st March 2017	As on 31st March 2016
	₹	₹
Service Tax Input Credit	83,481	1,04,760
Deposit	17,54,000	17,54,000
Other Receivables	17,141	47,031
Tax deducted at source	17,85,650	18,91,548
Prepaid Expenses	31,10,028	50,30,562
Total	**67,50,300**	**88,27,901**

DEPRECIATION				Writen Down Value (WDV)	
Up to 1st April 2016	During the Year	Deletions	As on 31st March 2017	As on 31st March 2017	As on 31st March 2016
₹	₹	₹	₹	₹	₹
36,11,948	11,44,734		47,56,682	12,88,651	10,83,458
27,83,170	19,13,396	36,667	46,59,899	17,04,721	35,60,251
5,73,943	2,63,786		8,37,729	4,81,225	7,19,511
10,81,988	5,40,994		16,22,981	10,81,988	16,22,981
63,62,308	11,58,732		75,21,040	24	11,58,756
1,44,13,357	**50,21,640**	**36,667**	**1,93,98,331**	**45,56,609**	**81,44,957**
98,98,497	**45,41,528**	**26,668**	**144,13,357**	**81,44,957**	**-**

Schedule D: Establishment Expenses

Particulars	For the Year Ended 31st March 2017	For the Year Ended 31st March 2016
	₹	₹
Administrative Expenses	11,90,152	16,56,807
Sitting Fees paid to Council Members	1,30,000	1,60,000
Facilities Management Expenses	3,63,479	2,76,915
Total	**16,83,631**	**20,93,722**

Schedule E: Expenditure on Object of the Trust - Educational

Particulars	For the Year Ended 31st March 2017			
	Learning	Research	Total	
	₹	₹	₹	
Administration Expenses	37,67,238	36,03,565	73,70,803	
Computer / Fax / Printer Consumables	1,71,376	1,71,376	3,42,753	
Event Related Expenses	1,67,33,953	-	1,67,33,953	
Honorarium - Guest Faculty	11,96,819	-	11,96,819	
Online Data Service	7,47,945	47,71,339	55,19,284	
Paper/ Conference registration fees	-	-	-	
Photography / videography	7,03,581	-	7,03,581	
Printing & Stationery	6,14,301	60,429	6,74,730	
Professional Fees	2,71,352	10,96,425	13,67,804	
Salaries & Staff Expenses*	2,02,04,450	3,32,50,022	5,34,54,472	
Stay Expenses-Guest Faculty and Participants	11,00,468		11,00,468	
Training expenses relating to Employees	7,28,060	1,02,818	8,30,878	
Travel Expenses - Guest Faculty and Participants	4,08,398		4,08,398	
Travelling & Stay Expense of visiting professors	-	19,53,656	19,53,656	
Travelling & Halting Expenses - Staff	35,02,627	33,50,088	68,58715	
Website Maintenance and subscription	5,56,426	19,36,260	24,92,686	
Foreign Exchange loss	20,446		20,446	
Total	**5,07,27,440**	**5,02,96,005**	**10,10,23,445**	

**Salaries included remuneration to Director of ₹25,39,733/- (P.Y. ₹25,23,732/-) who is also one of the trustees of the trust.*

	For the Year Ended 31st March 2016		
	Learning	**Research**	**Total**
	₹	₹	₹
	45,01,515	38,77,578	83,79,093
	59,108	59,108	1,18,216
	227,25,612	89,663	228,15,275
	26,70,532		26,70,532
	22,52,055	41,84,014	64,36,069
	-	4,956	4,956
	12,64,881	98,691	13,63,572
	11,86,056	96,470	12,82,526
	2,12,577	19,82,540	21,95,117
	-	-	-
	-	-	-
	2,49,49,850	3,51,22,565	6,00,72,415
	10,29,749	-	10,29,749
	2,11,770	1,17,460	3,29,230
	5,07,265	20,99,727	26,06,992
	-	35,54,626	35,54,626
	40,33,888	31,37,565	71,71,453
	5,62,695	12,87,883	18,50,578
	49,134		49,134
	6,62,16,687	**5,57,12,846**	**12,19,29,534**

Schedule F

Centre for Advanced Financial Research and Learning

Notes on Accounts annexed to and forming part of the Balance Sheet as at 31st March, 2017 and Income and Expenditure Account for the year ended 31st March, 2017.

A. SIGNIFICANT ACCOUNTING POLICIES

1. Basis of preparation of financial statement

a) The financial statements are prepared under the historical cost convention on the basis of going concern and in accordance with the Generally Accepted Accounting Principles in India (GAAP) and provisions of the Bombay Public Trust Act, 1950.

b) The presentation of financial statements are in conformity with generally accepted accounting principles, requires estimates and assumptions to be made that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities on the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates and the differences between actual results and estimates are recognized in the periods in which the results are known/ materialized.

2. Recognition of Income/Expenditure

Income and Expenditure are accounted on accrual basis. The amount equal to the deficit arising from the activities of the Trust is shown in the Income and Expenditure Account as Deficit for the year reimbursed by RBI.

Training programme fees are recognised as income on completion of the programme. Expenses on outsourced research projects are recognized on completion of the project and submission of final report.

3. Fixed Asset and Depreciation

Fixed Assets are stated at cost less depreciation. All costs relating to acquisition and installation of Fixed Assets are capitalized. Assets costing less than Rs 10,000/- are not capitalized.

Depreciation on assets is charged on the Straight Line Method for the full year.

4 **Foreign Currency Transactions**

A foreign currency transaction is recorded, on initial recognition in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency prevailing on the date of transaction. At the balance sheet date, foreign currency monetary items are reported using the closing rate. Gain or loss if any, is recognised in the Income and Expenditure Account for the year. The gain or loss, arising on account of exchange rate differences between the payment date and transaction date is recognized in the Income and Expenditure Account.

5 Related Party Transaction

Disclosure is made as per the requirement of the AS -18 – Related Party Disclosures and the same is given under Note No.B.2.

6 **Operating Leases**

Leases of Assets under which all the risks and rewards of ownership are effectively retained by the lessor are classified as operating lease. Lease payments under Operating Leases are recognized as an expense on accrual basis in accordance with respective lease agreements. The disclosure as required by AS – 19 – Lease in respect of operating leases in the books of lessee is given in Note No B.3.

7 **Impairment of Assets**

An Asset is considered as impaired when at the Balance Sheet date there are Indications of Impairment and the carrying amount of Asset exceeds its recoverable amount (i.e. the higher of the asset's Net Selling Price and Value In Use). The carrying amount is reduced to the recoverable amount and the reduction is recognised as an Impairment loss in the Income & Expenditure Account.

8 **Provisions, Contingent Liabilities and Contingent Assets**

Provisions are recognized for liabilities that can be measured only by using substantial degree of estimation. These are reviewed at each balance sheet date and adjusted to reflect the current management estimates. Contingent Liability is disclosed in case of possible obligation where the probability of outflow of resource is not certain. Contingent Asset is neither recognized nor disclosed in the balance sheet.

B. NOTES TO ACCOUNTS

1. During the year the cost of staff deputed by Reserve Bank of India amounting to Rs. 1,41,76,862/- (Previous Year – 1,11,20,294/-) has been reimbursed to Reserve Bank of India and is included under as salaries and staff expenses in Schedule 'E'.

2. **Related Party Discourse**

Name of the related parties and description of relationship :

1. Key Management Personnel – Mr. G. Gopalakrishna, Director
2. Key Management Personnel – Mr. Y.H. Malegam, Trustee
3. Key Management Personnel – Dr. J. J. Irani, Trustee
4. Key Management Personnel – Dr. Ashok Ganguly, Trustee
5. Key Management Personnel – Mr. T. V. Mohandas Pai, Trustee
6. Key Management Personnel – Mrs. Usha Thorat, Trustee

Details of Related Parties transactions are as under:

Particulars	Key Management Personnel	
	2016-17	2015-16
	₹	₹
Remuneration	25,39,733	25,23,732
Governing Council Fees	1,30,000	1,60,000
Reimbursement of Expenses	53,062	79,096

3. **Leases - Operating Lease**

The Trust has taken on lease residential premises for Director under Lease Agreement. Lease Rental expenses incurred for the year is Rs.35,81,500/- (Pervious Year – Rs.36,15,000/- included in Administration Expenses under Schedule E. The total lease rental payable over the lease period for the residential premises, as detailed below, is Rs.6,20,600/- (Previous Year – Rs.57,53,600/-).

Particulars	31st March 2017	31st March 2016
Not later than One Year	6,20,600	35,81,500
Later than One Year and not later than Five Years	-	21,72,100
Later than Five Years	-	-
Total Rs.	6,20,600	57,53,600

4. A notice was received from the Office of the Commissioner, Service Tax IV, Mumbai requiring the Trust to show cause as to why the deficit reimbursed by the Reserve Bank of India during the financial period 2012-13 to 2014-15 should not be considered as a taxable service liable to service tax. A suitable reply has been furnished.

5. Previous year figures have been regrouped wherever necessary.

Signature to Notes A to F

For C N K & Associates LLP
Chartered Accountants
Firm Reg No:101961W/W100036

(Manish Sampat)
Partner
M No.: 101684

Place: Mumbai
Date: 20th September 2017

For Centre for Advanced Financial Research And Learning

(Trustee) (Trustee) (Trustee)

Place: Mumbai
Date: 20th September 2017

ANNEXES

Annex 1

Completed projects by CAFRAL Researchers and Visiting Researchers[1]

Dr. Apoorva Javadekar

1. **Mutual fund flows when manager has timing and picking skill**

Mutual fund manager can generate value either by picking profitable assets and earning alpha or by timing the market by adjusting the portfolio beta. While traditional theories have studied alpha component of the manager's skill, I build a model where manager has both these types of skills. In this set-up investor's learning about managerial skill is a function of performance as well as the state of the aggregate market. A period of high (low) market volatility is more informative about timing (picking) skill. This learning together with persistent and counter-cyclical conditional market volatility implies that fund flows are more sensitive during the periods characterized by high volatility and low market return. I test and confirm these predictions in the data.

2. **Historical performance and risk-shifting in mutual funds**

i document new evidence regarding the risk-shifting behavior of mutual fund man- agers. First I show that the historical fund performance influences fund-flow patterns as well as employment incentives for the managers. Second I show that the managerial risk-shifting in response to their midyear position is influenced by the historical performance. In addition, the direction of risk-shifting is consistent with the directions in which historical performance alters the incentives. The risk-shifting for the managers with excellent track record is driven primarily by the fund-flow incentives.

Dr. Jugnu Ansari

3. **Financial Stress in Indian Corporates (co-authored with N.R. Prabhala and Khushboo Khandelwal)**

We characterize the changes in credit quality of a large sample of listed Indian corporates. Multiple indicators suggest that credit quality declines sharply between 2010 and 2015, creating a thick tail of vulnerable corporate debt. The stress is primarily due to a sharp contraction in aggregate corporate growth coupled with modest drops in profitability and imbalanced financing patterns with overreliance on debt. Default risk models suggest that state-owned banks bear the brunt of corporate stress. Reviving corporates is likely to depend on growth as well as successful restructuring and reallocation of assets in place. Remedies for banks pose more difficult choices.

Dr. Nirupama Kulkarni

4. **Government guarantees and bank vulnerability during a crisis: Evidence from an Emerging Market (Co-authored with Viral Acharya)**

We analyze the performance of Indian banks during 2007--09 to study the impact of government guarantees on bank performance during a crisis. Vulnerable private-sector banks performed worse than safer private-sector banks; however, the opposite was true for state-owned banks. Vulnerable private-sector banks also experienced deposit withdrawals and shortening of deposit maturity. In contrast, vulnerable state-owned banks grew their deposit base and increased loan advances at cheaper rates, especially to politically important sectors, but with poorer ex-post performance. Our evidence suggests that access to stronger government guarantees and forbearance during an aggregate crisis allows state-owned banks to access and extend credit cheaply despite underperforming.

[1] This includes the papers by Dr. Ghosh, Dr. Prabhala and Dr. Sareen who have now left CAFRAL, but were full time employees in this year. It also includes one paper by Dr. Juneja who has completed his part time appointment term during this year.

5. **Homeownership and the American Dream -- An Analysis of intergenerational mobility effects (Co-authored with Ulrike Malmendier)**

The benefits of homeownership feature prominently in the academic literature and policy discussion alike. This has been a theme worldwide. The Indian prime minister, Narendra Modi too in the 2014--2015 budget promised "Housing for All" by 2022. Specifically, the budget provided additional tax incentive on home loans to encourage people, especially the young, to own houses. However, the benefits of homeownership are not clear. We study the US homeownership markets which has pursued a similar aggressive push towards home owning since the 1930s. We examine one benefit of homeowning, namely, the positive impact on children of homeowners. We show that the positive relationship between homeownership and intergenerational mobility (children's outcomes) is highly place-dependent. First, we link commuting zone-level homeownership rates to intergenerational mobility, and find a strong positive relationship. The relationship persists after instrumenting for ownership using housing supply and price shocks. Second, we show that the positive relation between of homeownership and upward mobility is significantly diminished, or disappears, in areas with high sprawl or segregation, whether we use income segregation, racial segregation, or a new measure of homeowner segregation. These results, as well as additional findings on the formation of social capital and on school quality, suggest that homeownership may not benefit, or even disadvantage children in segregated, poor areas, possibly through reduced residential mobility.

6. **Are uniform pricing policies unfair? Mortgage Interest Rates, Credit Rationing, and Regional Inequality**

Federal policy often institutes uniform pricing across regions in the name of fairness. This regional uniformity of prices is a feature of many government policies the world over. I study the unintended consequences of such uniform pricing in the context of the US residential mortgage market, which is heavily influenced by the securitization policies of the government sponsored enterprises (GSEs). I show that the regional uniformity of GSE-conforming mortgage rates leads to credit rationing. I develop three results by exploiting differences in the strength of lender rights --- state laws that limit a lender's recourse and ability to foreclose on property --- as a source of regional variation. First, controlling for borrower characteristics, I find that GSE-securitized mortgage rates do not vary across lender rights whereas those of privately securitized mortgages do vary. Second, the lack of regional variation in mortgage rates leads to the credit rationing of marginal borrowers in regions with borrower-friendly laws, whereas, regression discontinuity and bunching estimates show that the GSEs "cherry-pick" the better risks leading to greater credit access in lender-friendly areas. Finally, I find that the GSEs' cost of funds advantage distorts the pool of borrowers available to the private market and that only some of the GSE-rationed borrowers can access privately securitized mortgages. Overall, the results demonstrate how uniform regional pricing and cost of funds advantages of the GSEs distorts the competitive landscape of the US mortgage market.

Dr. N.R. Prabhala

7. **Creditor Rights and Relationship Banking: Evidence from a policy experiment (Co-authored with Gursharan Bhue and Prasanna Tantri)**

We examine how creditor rights shape the choice between arms-length and relationship banking, exploiting natural variation due to changes in law. We show that arms-length lending increases after a 2002 law that significantly expands creditor rights in India. The results are stronger when banks that enjoy greater informational advantage, for small firms, non-group firms and lenders empowered under the law. The results are confirmed by placebo tests and external validation tests using staggered implementation of an earlier, though weaker, law. Creditor rights determine not only the quantity but also the type of credit in an economy.

8. **The transmission of monetary policy within banks: Evidence from India (Co-authored with Abhiman Das and Prachi Mishra)**

Between 2001 and 2013, India's central bank injected or drained liquidity from banks through changes in cash reserve requirements. We analyze the lending responses to these quantitative tools of monetary policy using branch level lending data. We focus on frictions within banks that influence transmission, in contrast to prior work that focuses on external frictions between banks and funding markets, which we control for in a saturated specification with high-order interactive bank-year and region-year fixed effects. We show that the intra-bank variation in lending is economically significant. A rich set of branch level asset, liability, and organizational variables explain the intra-bank transmission. Branches that are larger, make loans with smaller ticket size, are deposit-rich, make shorter term loans, have fewer non-performing assets, and with greater managerial capacity respond more to monetary policy. Transmission effects are more sluggish in state-owned banks.

9. **Venture Capital Communities (Co-authored with Amit Bubna and Sanjiv R. Das)**

We show that Venture Capitalists (VCs) tend to draw syndicate partners from very small pools of potential partners. This preferential attachment to some VCs over others leads VCs to cluster into new organizational forms, communities, or pools of VCs who tend to co-syndicate with each other. Using a large sample of syndications, we characterize the number, size, and composition, of communities and examine their economic activities. Communities comprise VCs with similar age, influence, and functional style. Community VC-funded firms, especially earlier stage firms with limited innovation histories, display more innovation scale and novelty and mature faster, particularly when communities pool diverse VC experiences.

Dr. Saibal Ghosh

10. **Bailouts and bankruptcies: Corporate distress, troubled debt restructurings and equity stripping**
(Co-authored with Ashiana Salian)

We investigate the debt restructuring process and outcomes for a sample of 483 firms that undergo corporate debt restructuring (CDR) between 2002 and 2013. 58 firms exit successfully, 71 are unsuccessful or withdrew and the rest await resolution. Firms that exit successfully are more profitable and less levered entering the CDR process and spend longer times in restructurings. Little net equity enters CDR firms, while there is some evidence of equity stripping, particularly in firms with greater promoter control. The lack of coordination between creditors and interestingly, across different bankruptcy forums, impedes restructuring. The changes in the types of firms entering the CDR process in recent years appears to indicate lower Kaplan-Meier survival rates, although the insufficient passage of time makes the conclusion tentative.

Dr. Samita Sareen

11. **Trading activity in the Indian government bond market (Co-authored with Michael Fleming and Seema Saggar)**

We study how the Indian government bond market functions, how it has changed over time, and what factors help explain some of its features. In the primary market, we describe how underwriting obligations are allocated to primary dealers via auction and identify several significant determinants of the underwriting commission cutoff rate, including the launch of the NDS-OM electronic trading platform. In the secondary market, we explore the importance of benchmark bonds, the launch of NDS-OM, the growth in trading activity, and the migration of activity from the OTC market to NDS-OM. We find that benchmark bonds, larger issues, and recently issued bonds tend to trade more actively, but that that the launch of NDS-OM is associated with a reduced likelihood of a bond trading, but greater trading volume conditional on trading. Benchmark bonds, larger issues, and recently issued bonds are associated with a greater share of NDS-OM trading volume (as opposed to OTC trading volume), suggesting that the NDSOM platform is especially attractive for trading bonds with benchmark attributes.

Papers by CAFRAL visitors

12. Effects of demonetization: Evidence from 28 Slum neighborhoods in Mumbai Authors: Deepa Krishnan and Stephan Siegel

We survey about 200 families living in 28 slum or lower-income neighborhoods in Mumbai in early December of 2016 to document and examine the immediate and short-term impact of the November 8, 2016, demonetization decision by the Indian government. The survey elicits changes in families' income, expenditure, and savings following the policy announcement as well as possible longer-run effects and a subjective assessment of the policy at the beginning of December 2016. We find that the policy led to a drop in income, with an average drop in income during the month of November of about 10% of families' monthly income. The effect varies significantly across different groups, in particular between those receiving a regular salary and those not. The income drop is associated with a drop in consumption as well as changes in families' savings in November. We document a significant difference between past savings behaviour and expected future savings behaviour, with the expected use of bank accounts increasing and the expected use of cash as a storage of value decreasing substantially. Finally, we find that the majority of respondents view the policy overall as positive, including the majority of those that experienced some loss of income in November.

13. Dynamic portfolio credit risk and large deviations Author: Sandeep Juneja

We consider a multi-time period portfolio credit risk model. The default probabilities of each obligor in each time period depend upon common as well as firm specific factors. The time movement of these factors is modelled as a vector autoregressive process. The conditional default probabilities are modelled using a general representation that subsumes popular default intensity models, logit-based models as well as threshold based Gaussian copula models. We develop an asymptotic regime where the portfolio size increases to infinity. In this regime, we conduct large deviations analysis of the portfolio losses. Specifically, we observe that the associated large deviations rate function is a solution to a quadratic program with linear constraints. Importantly, this rate function is independent of the specific modelling structure of conditional default probabilities. This rate function may be useful in identifying and controlling the underlying factors that contribute to large losses, as well as in designing fast simulation techniques for efficiently measuring portfolio tail risk.

14. Underwriting Government Debt Auctions
Authors: Sudip Gupta, Rangarajan K. Sundaram, Suresh Sundaresan

We examine a novel two-stage mechanism for selling government securities, wherein the dealers underwrite in the first stage the sale of securities, which are auctioned in stage 2, via either a Discriminatory Auction (DA) or a Uniform Price Auction (UPA). Using proprietary data on auctions during 2006-2012, we nd under DAs (a) The underwriting commissions are higher and exhibit more volatility, (b) Stage 1 award concentrations are higher, and (c) Stage 2 bid-shading and the degree of underpricing are higher. Stage 1 outcomes are powerful in explaining Stage 2 auction outcomes including the likelihood of devolvement, and bid shading.

Annex 2

1. Workshop on Forensic Audit – Colombo, Sri Lanka

Date April 04-05, 2016

Venue Colombo, Sri Lanka

Coverage The broad objective of the program was to sensitise and impart investigative skills to counter and detect frauds to the participants from CBSL who are qualified in Accounting but fresh to the subject area of Forensic Audit.

Takeaways Use of forensic tools in NPA life cycle and data security. Digital forensics and investigative skills to detect fraud and mistakes are also very relevant in view of the computerized & networked environment of banking.

2. International Program on Credit Risk Management and Regulatory Capital

Date April 12-13, 2016

Venue Mumbai

Coverage The program focused on practical implementation issues and covered topics such as -The Revised Standardised Approach for Credit Risk; Recent International Developments in implementing IRB Approach; Key Issues and Challenges in Migration to IRB Approaches by Indian Banks ; Latest International Developments in Implementing Pillar 2 under Basel III; Role of Credit Bureaus in Managing Credit Risk; Managing Credit Risk: Risk Appetite, Risk Culture and Risk Quantification; Implementing Basel III: Capital Needs and Capital Planning by Indian Banks. There were 34 participants from public sector, private sector and foreign banks and financial institutions, including two international participants.

Takeaways Banks will need to enhance their risk assessment of other banks and corporates under the Revised Standardised Approach for credit risk as this would be a key input into the risk-weighting scheme. The IRB approach is undergoing a fundamental transformation as there are constraints being put on the modelling parameters. Reserve Bank of India and Indian Banks will need to take note of the developments in this regard for implementing the IRB Approach. Similarly, the Advanced Measurement Approach would not be permitted for determining regulatory capital for operational risk.Pillar 2 under Basel III has to consider not only the individual risks in a bank under the micro-prudential approach but also consider how the capital buffers (including macro-prudential buffers) interact with the Pillar 2 requirements. D-SIBs must refine their risk appetite, strengthen their risk culture and their overall risk management capabilities as there would be enhanced supervisory expectations from D-SIBs.

3. Advanced Risk Management Program

Date May 02-04, 2016

Venue Chennai

Coverage The program broadly covered the following topics: data generating process, Risk and Return trade-offs, credit risk, interest rate risk, value-at risk, capital and balance sheet management. Participants also got an opportunity to work on case studies. There were 30 participants from 17 commercial banks.

Takeaways The program gave the participants a better understanding of data generating process and its usage i.e. how to use this process for calculating and calibrating risk parameters, proficiency in compilation of data, simulation, analysis of the same and drawing inferences from them; better understanding of the concept of capital allocation to various portfolios, risk pricing, understanding of underlying risk parameters and their interpretation and, understanding the relevance of correlation as a contributory factor in risk management.

4. Risk Based Supervision - Implementation Challenges

Date May 26-27, 2016

Venue Mumbai

Coverage The program was specially designed for senior officials from Risk Management, Inspection, Audit and

Compliance departments dealing with RBS in commercial banks.It provided a platform for senior officers of commercial banks to discuss the challenges faced by them in transiting to risk based supervision and also understand the expectations of the supervisor on data/information requirements under the SPARC framework, data definitions and interpretations, key control/Compliance parameters, illustrations on data/control templates. Pillar 2 of Basel II viz. Supervisory Review Process – ICAAP and SREP, was also discussed.

Takeaways Participants were sensitised regarding the requirements of RBS, importance of its proper implementation, the seriousness with which RBI is implementing the same. It gave them an insight about the importance of data quality and accuracy, its relevance in RBS framework, impact of data quality to the rating of banks as also its effect on business and capital of the bank. It was emphasised that Top Management involvement is a must for its successful implementation. RBS is to be taken as a process of putting in place robust governance system, risk and controls in place and data & information should flow from this process. Data lineage and documentation play an important role in RBS.

5. Program on Asset Resolution and Managing NPAs

Date June 01-02, 2016

Venue Mumbai

Coverage Banks have made efforts to identify, assess and address large NPAs particularly in regard to infrastructure loans and project finance but more work needs to be done for improving banks management and governance of NPAs The objective of the program was to deliberate and reflect on strategizing handling of stressed assets, provisioning, sale of assets, role of ARCs, Bankruptcy code, etc. The Program was attended by 45 participants include senior officers handling the stressed assets, credit risk management and senior legal officers of commercial banks from Public sector banks and Private sector banks including RBI.

Takeaways There is a need to develop risk culture in banks to curb potential NPA. Blinding trust and lack of transparency in consortium leader's monitoring and assessments of consortium accounts has contributed to increasing NPAs with associate member banks. Delay in identifying incipient NPA and ignoring system alerts and red flags needs to be addressed. The banks should have well defined policy for exiting NPAs through sales. Sale to ARCs often gets stuck on pricing issues as large discounts may attract CVC oversight. Taking the Board in confidence for arriving at realistic value with justifications may be explored to ensure both sale and protection. A differentiated portfolio approach and sector specialization would enhance better grip of portfolio risk. Technical skills for project finance needs to be built on a continuing basis as also use of industry experts from relevant sectors for feasibility analysis is desirable. Also process change in appraisals and monitoring using Fintech may be advantageous. Banks may also focus on geographies for sector selection for financing. Volume FI financing needs specialization and/or partnering with relevant institutions with suitable loan products offerings to generate business potential.

6. Program for Non-Official Directors of Commercial Banks

Date June 13-14, 2016

Venue Mumbai

Coverage Current issues and challenges faced by banks including asset quality, role and responsibilities of Non-official Directors, recent developments in regulation - prudential norms, capital and risk management, KYC/AML, Basel II/III Capital Framework, recovery and resolution of distressed assets, likely implications from enactment of Insolvency and Bankruptcy code and risk based supervision.

Takeaways Non-Executive Directors benefited from an exposure to risk management, risk based supervision, Basel III as also the implications of the recent Bankruptcy code. It gave them a better understanding about compliance, implications of Ind-AS and the need for a better credit risk and liquidity risk management. It was observed that mere compliance with regulations was not sufficient and it is necessary that regulatory guidelines including risk management guidelines needs to be followed both in letter and spirit. The program also provided a forum for the directors to interact with regulators and their peers.

7. Roundtable Meeting with Chairmen and CMDs

Date June 15, 2016

Venue Mumbai

Coverage The objective of the closed door meeting organised at the suggestion of the then Governor following the appointment of the new non-executive Chairmen of banks (BOB, BOI, Canara bank, Indian bank, Vijaya bank after segregation of roles of Chairman and MD/CEO), was to understand and adopt best practices from existing banks Chairmen & CMDs as also iron out any impediments in their role ahead. The role of non-official Directors on the Boards of the banks was also discussed from the point of improving functioning of banks. Apart from the Governor and three Deputy Governors from RBI, the Secretary, DFS and the Chairman & Members of the Banks Board Bureau, the meeting included Chairman, HDFC Housing Ltd; MD & CEO, Axis Bank Limited; Executive Vice Chairman & MD, Kotak Mahindra Bank Ltd; the newly appointed four Non-Executive Chairmen of PSBs, and CMDs of six PSBs.

8.Evidence in Financial Inclusion: New Findings and their Applications Policy Workshop with IFMR and IPA

Date July 20, 2016

Venue The workshop was co-hosted in association with IFMR LEAD and IPA in Mumbai

Coverage The program facilitated discussions on financial inclusion issues, opportunities for innovation and digitization of financial services in India, role of the policy and regulatory environment in promoting innovation and ensuring client protection, scope for leveraging alternative data and big data in promoting innovation.

9. Program on Best Practices in Operational Risk Management

Date July 28-29, 2016

Venue Mumbai

Coverage Standard and Advanced Measurement Approaches of Operational Risks, fraud management, business continuity management, security & cyber risk, mobile & channel fraud management, inadequate information systems and other operational problems including breaches in internal controls. Program was structured around groups five themes of ORM namely- Business Continuity Management, Process Excellence, Cyber-crime prevention & detection controls, Loan fraud management and Documentary & Mobile channel fraud management. These themes were assigned of groups of participants with dedicated mentors. The Thirty eight participants included Heads of Operation Risk Management, Fraud Risk Management, Mobile and Channel Fraud Management, Internal Audit and Internal Controls in the commercial banks. CISO, CVO, etc.

Takeaways Program provided a great opportunity to learn about the best practices of ORM. Peer group interaction and understanding the various best practices followed by various banks was quite effective. The need to create awareness amongst staff/customers/clients about do's and don'ts of cyber security by conducting surprise drills was imperative.

10. Workshop on Reporting to CRILC Database by Banks (DBS)

Date August 12, 2016

Venue Mumbai

Coverage To discuss best industry practices followed for submission of CRILC data covering IT Infrastructure, practical difficulties in internal data flow systems, data completeness and quality assurance. The program attracted 71 number of participants from PSBs, Pvt. foreign banks and RBI.

Takeaways The need for alert messages for marking as RFA/Fraud /non cooperative account by lenders was highlighted. In addition to system alerts on SMA2 with names of lenders with exposure, CRILC portal may carry the same on real time basis. In spite of instructions to form JLF by the leader of consortium having highest exposure, there are instances fixing this responsibility was a problem. CRILIC may provide alerts on the largest lender in the first SMA2 reporting in a particular account to initiate to formation of JLF. Banks requested that while uploading Master on quarterly basis, mail address of respective branch may also be stated by making additional column for it. Additional / availability of some of the parameters discussed during the seminar would enhance the effective credit monitoring. Private sector banks access CRILIC more often than PSBs for credit appraisal etc. Interaction of the supervisor with the banks was helpful in resolving the issues concerning timeliness and accuracy of CRILC reporting.

11. Advanced Program on Project and Infrastructure Financing

Date August 29 to September 01, 2016

Venue Mumbai

Coverage The program broadly covered the following topics: project risk management, regulatory prescriptions relating to project and infrastructure financing, turnaround strategy and issues/ challenges for strategic restructuring of viable projects, case study based discussions on financing of steel projects, renewable energy projects and power projects. The program had 24 participants from banks & financial institutions associated with corporate lending.

Takeaways Proved a perspective on aspects to be looked into during appraisal process for new projects. Discussion with speakers and experience sharing by the participants brought out many suggestions for better project lending practices. It was observed that although both private sector banks and public sector banks face similar problems as far as project/infrastructure lending is concerned, private sector banks are better placed to exit as their decision making process is faster.

12. International Seminar on Cyber Risk and Mitigation for Banks and Fis

Date September 07-08, 2016

Venue Mumbai

Coverage Deliberating on sources and types of cyber threats, cyber-attacks for banks and financial institutions and ways for mitigating cyber risk. Sharing of expertise and experience by domestic and international speakers.The program attracted 45 number of participants from PSBs which includes Executive Directors in charge of Cyber Security,CISOs and Heads of Cyber Security in Banks.

Takeaways Banks may set-up and run a Security Operations Centre (SOC) on their own to avoid dependence on market players in this field. Similarly, IS Audit or Cyber Security Audit required under Cyber Security Framework is currently assigned mostly to the big 4 firms which creates excessive reliance. Banks can think of having their own specialised common body to conduct Cyber Security Audits for them. For cyber security literacy and inculcating culture of protection in the bank staff and clients, adopting strategy of creating war-games could be adopted. The 300 Red Flags of IDRBT for cyber security could be grouped to create a checklist of cyber frame work in banks. On Cyber Insurance, participants felt the need of some regulatory guidelines. Importance of sufficient budget allocation, ongoing capacity building, awareness of legal aspects of digitisation and cybercrimes, the need for continuous research, an information sharing culture amongst peers and importance of having a strong governance framework ,etc. were also appreciated. Implementing of Deception Technique as innovative and false-positive free solution was advocated by one of the presenters as a way to increase cyber intelligence and detection capabilities. For Tackling Next Generation Cyber Threats, it is important to think of solutions like using big data analytics, machine learning, using big bounties, using red teams, making cyber threats viral etc.

13. CAFRAL Advanced Bank Management Program (CABMP)

Date October 05-07, 2016
October 17-22, 2016

Venue Mumbai & USA. The overseas leg was held in association with Robert H Smith School of Business, University of Maryland.

Coverage The coverage was in the area of risk management, asset liability management, project and infrastructure financing, Basel capital framework, cyber security, regulation/supervision and financial markets. The program included, inter alia, class room sessions, case studies and study visits and interactions with officials of Federal Reserve Board (FRB), Office of the Comptroller of Currency (OCC), Securities and Exchange Commission (SEC), World Bank, IMF, etc. This was an intensive program, leading to issue of certificates to participants by Robert H Smith School of Business, University of Maryland after completion of the course. The program was attended by 15 participants from 8 public sector banks, 2 private sector banks and Reserve Bank of India.

Takeaways Insights into risk management issues and the developing trends in the global and economic sphere as well as an excellent opportunity to interact with officials from multilateral institutions and US regulators like International Monetary Fund, World Bank, Office of the Comptroller of Currency, Securities Exchange Commission and Federal Reserve Board and learn about their roles and functioning.

14. Seminar on Debt Recovery

Date November 05, 2016

Venue Gurgaon

Coverage CAFRAL co-organised the seminar along with Department of Financial Services, Ministry of Finance at State Bank Academy at Gurgaon. The seminar highlighted the need for improving the efficiency of DRTs. Finance Minister, Shri Arun Jaitley, addressed the participants in an interactive session, emphasizing the need for speedier resolution of debt recovery cases.

Takeaways A major point emanated from the seminar was that there is an urgent need for strengthening the DRTs with better infrastructure and adequately skilled staff for expeditious disposal of cases.

15. Conference of Chief Compliance Officers

Date November 17, 2016

Venue Mumbai

Coverage Objective was to provide a platform for exchanging perspectives, resolving difficulties and having fruitful dialogue amongst the Compliance Heads of Commercial banks and Senior Compliance Officers on the key regulatory compliance issues with special emphasis on Risk Based Supervision. The program also facilitated discussion between the Regulator/ Supervisor and Chief Compliance Officers of banks along with sharing of experience by international experts on how international banks are managing regulatory and management reporting. The program attracted 47 participants, mainly Senior Compliance Officers and Heads of Compliance of both Indian and Foreign banks..

Takeaways Actual experience of compliances for RBS exposes lacunae which need to be plugged. Some of the sensitive areas of areas of noncompliance traced by the Supervisor include achieving priority sector lending targets, NPA classification, IRAC norms implementation, JLF rectification, restructuring, exposure calculation/cancellation of limits, window dressing, pricing of loans, unhedged foreign currency exposure, MCLR calculation housing loans to builders, disclosures, import advance/ export advances (under invoicing\over invoicing), CTR and STR submission (breaking transactions to small lots), bill discounting (kite flying), opening current accounts for borrowers of other banks and allowing transactions like bill discounting, mis-selling of products, recognising red flagged accounts in fraud reporting for action, Central Repository of Information on Large Credits (CRILC) reporting etc. Different banks follow different methodologies for organising compliance function, which were shared by them on this program platform. Compliance function should have independent and formal status within bank and comp staff should have access to all necessary info with sufficient and appropriate resources. Importance of proper information provided by high quality data was emphasised. Compliance should be subjected to audit; Compliance cost has gone up for Know Your Customer & Anti Money Laundering violations. Future compliance should move from better compliance to proper compliance and should take into consideration the following factors: connect with customer service/complaints to find tech solution to issues; regional compliance; connect with risk management for operational risk and pillar 2 risk; adequate staff to handle compliance and skilling them in tax, regulation etc. Future compliance will also have to deal with complex banking (debit card issue- internet banking-overseas operations) with data integrity and optimal work processes. Automating compliance necessary so that customer service time is not slowed down.

16. Program for Non-Executive Directors of commercial Banks

Date November 29-30, 2016

Venue Bengaluru

Coverage The program covered the following topics: overview of financial markets in India with specific focus on government securities, forex and capital markets, role of treasury in banks, recent regulatory developments, likely implications from Ind-AS for banks. The program also covered Insolvency & Bankruptcy Code and recent amendments to SARFAESI Act and DRT Act. The program attracted 31 Non-Executive Directors on the Boards of commercial banks, both public and private sector.

Takeaways The program provided an insight to Non-Executive Directors about the expectations and role & responsibilities of Directors, recent regulatory developments, Indian financial market, challenges arising on account of digital banking and cyber security, etc.

17. CAFRAL workshop on Commodity Risk Management for Bankers

Date December 15, 2016

Venue Mumbai

Coverage Generally commodity risk is less recognized and its potential impact less appreciated among bankers in the risk management framework of banks, but banks face indirect commodity risks because of the borrowers dealing in commodities., The program exposed bankers to the various dimensions and issues connected with commodity price risk that they encounter, creating awareness in the industry with regard to hedging commodity risk exposures for making markets more inclusive by sensitising companies that do not hedge. The program had 40 participants, mainly those dealing with risk management in commercial banks.

Takeaways Banks have a role in creating incentives for firms to hedge and should think of making hedging mandatory before financing commodities due to price risks associated with the commodities market. Some speakers felt that (a) RBI should come out with policies for banks to hedge when lending to the commodity sector on the lines of its policies in forex or interest rate risks (b) key challenge remains in education, one that of the banks and secondly that of their customers. Banks could educate the SMEs about the benefits of hedging their risk on a commodity derivative platform (c) Banks could be allowed to participate in India's commodity derivatives market for hedging price risks arising out of their activities in gold imports, warehouse receipt financing and under the Gold Monetisation Scheme. Exposure of banks to derivatives, efficiency of spot markets and ability of banks to handle physical delivery would be pertinent when deciding about banks' entry into commodity derivatives markets (d) Banks can promote 'indirect hedging', by incentivizing their commodity sector borrowers to hedge their exposure to commodity prices, which will diminish the probability of credit default(e)Brokerages sponsored by banks could be allowed to offer broking services in commodity derivatives, similar to providing such services in the securities markets.

18. Program on Financial Crimes Management

Date January 30-31, 2017

Venue Mumbai

Coverage Examining various challenges and solutions for implementation of "Framework for dealing with loan frauds" in commercial banks and draw their focus to issues of prevention, early detection, prompt reporting and timely initiation of the accountability exercise for minimizing the vulnerability of the banking system. The program attracted 47participants financial institutions, which included senior officers handling fraud monitoring, CVOs, Heads of Operational Risk Management Department and Compliance Officers of the commercial banks.

Takeaways Useful to learn the practice adopted by peer bankers in identifying and taking action in respect of Red Flagged A/cs. Appreciation of the Do's & Don'ts and proactive and preventive measures role of Central Fraud Registry in the ecosystem for managing cyber frauds and the complexities involved in financial crime management space and the ways and means to manage the offenders. Updates on cyber security, exposure to the legal & law enforcement agencies and insight into PML Act and the activities of FIU-India were found to be helpful.

19. Program on Credit and NPA Management

Date February 01-03, 2017

Venue Mumbai

Coverage The program broadly covered the issues and challenges in credit and NPA Management: assessment of credit proposals, financial statements analysis, scenario analysis and risk mitigation techniques for Infrastructure financing, recent amendments to DRT and SARFAESI Act, implications of Insolvency and Bankruptcy Code, use of various debt restructuring/refinancing mechanism for asset quality management, Role of ARCs and a brief overview on IND-AS. Apart from the classroom sessions there were group presentations. 26 senior officers at the level of AGM or equivalent and above who are involved with credit, recovery/stressed assets and risk Management functions of commercial banks attended. The program attracted 26 number of participants from PSBs, Pvt and foreign banks and also from financial institutions like RBI, Nabard, SIDBI, Exim Bank, etc.

Takeaways Understanding the finer aspects of credit risk management, governance, internal and external rating, risk pricing, asset quality management, risk management and restructuring guidelines.

20. Seminar on System Identification of NPAs (By invitation) (DBS)

Date February 09, 2017

Venue Mumbai

Coverage Deliberating and showcasing the best practices being followed in collaboration with DBS, RBI for system identification of NPAs. Presentations on findings of AQR and various system identification methods used by banks like SBI, HDFC, ICICI and service providers like D2K, Finnacle. The program attracted 62 number of participants from PSBs, Pvt and foreign banks. Sixty two participants from commercial banks, mainly those dealing with NPA management along with their technology system providers for NPA identification, attended.

Takeaways Exposure to different NPA Identification systems followed by various banks in the industry and the the importance of system based identification for NPA's. Identification of NPA should be fully automated or at least to the extent of 90 to 95 %. Insight into solutions employed by peer banks for NPA identification and opportunity to interact with peer banks and the supervisor. Robust IT solution for NPA identification and monitoring is required at each bank. System parameters have to be dynamic for complying with the evolving RBI norms. Coordination between functional teams/ IT team / Vendor on regular basis is the key. The current technology solutions need a review for their capability to detect and throw alerts, red flags etc.

21. CABMP Follow up Program

Date March 17-19, 2017

Venue Kochi

Coverage The program primarily discussed issues and challenges faced by Indian banks, Indian financial market, cyber security and the role of treasury in banks.

Takeaways The discussions highlighted the need for designing appropriate business strategies by individual banks for meeting the deteriorating asset quality and profitability, capital planning and capacity building.

22. Financial Markets Program for Bankers and IES officers

Date March 06-10, 2017

Venue Mumbai

Coverage Providing an opportunity for senior officials and economists of banks and financial institutions to develop an in-depth knowledge of financial markets and interface with regulators and operators and gain experience of dealing in policy formulations, strategic issues that impact and shape policy making in financial markets, understanding the inter-linkages between money, debt, forex, derivatives and capital market and global economy. The program attracted 30, 15 Senior IES officials from various Ministries including Ministry of Finance and other 15 were senior bankers.

Takeaways Understanding the state of the financial markets in the background of the current global and domestic economic scenario. Knowledge of the monetary policy making and transmission process; practical impediments in monetary policy transmission. Appreciation of action taken by the policymakers at different points of time for market stability. Understanding macro level technicalities of financial markets and inter-linkages between various markets. Knowledge about functioning of forex market and valuation of government securities.

23. Program on Regulatory and Supervisory Issues for Payments Banks and Small Finance Banks

Date March 09, 2017

Venue Mumbai

Coverage To discuss the regulatory policy for the payments banks and small finance banks and the expectations of the RBI from the new banks in terms of financial inclusion and conduct of business in a safe and sound manner along prudential lines. The program also included sessions on KYC/AML, Frauds and Cyber Security and the role of Fintech and for leveraging their business growth. The program attracted 35 participants, of 6 were MDs/CEOs (from Capital Small Finance Bank Ltd, Ujjivan Small Finance Bank, NSDL Payments Bank, Au Financiers (India) Ltd, India Post Payments Bank and Suryoday Small Finance Bank).

Takeaways The program gave good insight into the regulatory and supervisory framework of RBI in respect of Small Finance Banks. It also highlighted importance of Governance principles, Compliance framework and robust internal audit system.

Annex 3

CAFRAL Team, as on August 1, 2017

1. Dr. Amartya Lahiri, Director
2. Chandan Sinha, Additional Director (Learning and Administration)
3. Dr. Anand Srinivasan, Senior Research Director
4. Amarendra Mohan, Senior Program Director
5. M P Baliga, Senior Program Director
6. Ravindra Sangvai, Program Director
7. Dr. Nirupama Kulkarni, Research Director
8. Dr. Apoorva Javadekar, Research Director
9. D P Kasabe, General Manager (Administration)
10. Dr. Jugnu Ansari, Assistant Adviser (Research)
11. Mrs.Janaki Ravindran, Administrative Officer
12. Mrs. Vasanti Panshikar, Administration Officer (Research)
13. N P Khemani, PS to Additional Director (Learning & Administration)
14. B Chakraborty, PS to Director
15. Reeta Bose, Program Officer
16. Nimesh Gopiyani, Accounts Officer
17. Madhusudan Dutta, Program Officer
18. Ms. Vinita Jain, Program Officer
19. Anup Sonawane Web Content Manager
20. Mrs. Trupti Kanade, Accounts Assistant
21. Ms. Pushpalata Nadar, Program Officer
22. Ms. Kushboo Khandelwal, Research Associate
23. Vishal Vishe, Research Associate
24. Ms. Anushka Mitra, Research Associate
25. Ms. Sumedha Rai, Research Associate
26. Ms. Sargam Jain, Research Associate
27. Ms. Bhavika Nanawati, Research Associate
28. Rishab Devnani, Research Associate
29. Ms. Bhavya Agarwal, Research Associate
30. Ms. Muskan Chawla, Research Associate

Notes

Notes

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