Annual Report 2015-16

Promoting Excellence in Learning and Research





CAFRAL Governing Council



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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 and is now headed by G Gopalakrishna as its Director.

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
ED	Executive Director
EU	European Union
FED	Federal Reserve Board
FIMMDA	Fixed Income Money Market and Derivatives
Association	
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
Gol	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
. WODT	radia mantroar bhar tojana

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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
SEANZA	South East Asia, New Zealand and Australia
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



The Centre for Advanced Financial Research and Learning (CAFRAL) has made remarkable progress in its five years of existence. CAFRAL has been steadily working towards the goal of evolving as a global centre of excellence for policy research and advanced learning in banking and finance. From its inception to the end of the year 2015-16, CAFRAL has organized 95 high quality programs in which 3000 senior level officials from commercial banks, financial institutions, central banks, supervisory agencies and the Government have participated. The programs have covered a wide range of topics such as the latest developments in risk management and capital planning; bank regulation and supervision including Basel II and Basel III implementation; governance, leadership and strategic issues; and other topical areas like management of stressed assets, cyber security, financial inclusion, and forensic audit, etc. In the year under review, CAFRAL has organized a few international programs in which not only executives of Indian commercial banks but also bankers/ central bankers from outside India have participated.

In these times when the Indian financial sector is challenged both by domestic and external environment, CAFRAL is poised to provide a

"In my view, CAFRAL, an institution set up by the RBI, is in a unique position to promote excellence in learning and research and meet the growing learning needs of the financial sector"





platform for all the stake holders to deliberate on the issues of interest concerning today's financial system as a whole, and banking system in particular.

In the realm of research too, CAFRAL's focus has been banking and finance, particularly in areas of policy interest. Research topics included financial institutions, sovereign and corporate bond markets, financial networks and stability, behavioral finance, corporate finance, household finance and related areas of macro-finance such as monetary economics and international finance. CAFRAL aims to build capacity in these areas by developing internal data and analytic resources, capabilities, and collaborations with research institutions with similar missions.

I take this opportunity to commend the CAFRAL team for their relentless effort to develop CAFRAL into a world class organisation. I am sure CAFRAL will continue the excellent work over the coming years and establish itself as an international institute of repute.

afhman J. Ley'a

Raghuram G Rajan Chairman, Governing Council, CAFRAL and Governor, RBI CAFRAL's Governing Council

DIRECTOR'S REPORT Activities 2015-16

Director's Report



The Centre for Advanced Financial Research and Learning has completed five years since it started functioning in January 2011. During these five years it has grown manifold in activities and size. In the year 2015-16, CAFRAL has focused on conducting programs on Project and Infra financing, Business Strategy, Risk Governance, Cyber Security, Forensic Audit, Financial Inclusion, Capacity Building apart from dedicated program for Non-Official Directors on the Boards of Public Sector Banks. One of the highlights of this year's calendar was "CAFRAL Advanced Bank Management Program", a first of its kind two-week international program, for senior executives of commercial banks, financial Institutions and Reserve Bank of India which was held in USA, in collaboration with Robert H Smith School of Business, University of Maryland. Like last year, this year also CAFRAL successfully conducted Gyan Sangam – Bankers' Retreat in March 2016, which was organised by Department of Financial Services, Ministry of Finance, Government of India.

CAFRAL's Research team has been successful in bringing out papers on relevant current issues. Research Scholars from Asian Research Network presented their papers at the conference organized by CAFRAL. CAFRAL along with IGIDR organized the Winter School in Economics and Finance during the year.

CAFRAL is committed to conducting high quality outreach events and research with a view to achieve excellence in all its activities.

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G Gopalakrishna Director, CAFRAL

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CAFRAL Learning

During the financial year 2015-16, CAFRAL held **22 programs** and **9 research seminars** which involved **65 days of innovative learning** through programs tailored for the top management of commercial banks and financial institutions. The programs provided the senior executives a unique opportunity to expand their strategic thinking, get exposure to global best practices and interact with peers through a shared learning and researched experience. The details of the programs are given in **Annex I**.

CAFRAL programs are tailored for CMDs/CEOs and other top management team members of the banks, viz., EDs, CGMs, GMs, Presidents, Senior Executive VPs, etc., and are unique in nature as they provide an ideal blend of conceptual learning with practitioner insights. The programs are designed to address the current financial sector issues and challenges and provide tools and cutting-edge inputs to shape the way forward. CAFRAL learning programs 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.

The Department of Financial Services, Ministry of Finance, Government of India, organised **Gyan Sangam 2** jointly with CAFRAL & IBA. CMDs Chairpersons, MDs and EDs of public sector banks, top officials from the Ministry of Finance, Government of India and Reserve Bank of India participated in this two-day summit.

Participant Sound Bytes

"The overall programme was excellent. Various matters related to various types of risk including cyber risk were discussed which are very useful in banks in India. Specially, visits to various organisations were excellent. Various issues were discussed with various organisations. These visits were very lively and informative. Such types of programmes should be arranged for top management officials of banks/ FIs in other countries also in future. We are very thankful to officials of CAFRAL and Smith School who had taken a lot of pain to make CAFRAL Advanced Bank Management Program a grand success."

CABMP Participant

1. RBI Governor, Minister of State for Finance, Secretary, DFS at Gyan Sangam 2 2. Banking Board Bureau members - H N Sinor and Anil K Khandelwal







Hon'ble Finance Minister - Arun Jaitley, Minister of State for Finance - Jayant Sinha, Director - CAFRAL, SBI Chairman and other dignitaries at Gyan Sangam 2 The program was addressed by **Hon'ble Finance Minister - Shri Arun Jaitley, Hon'ble Minister of State for Finance - Shri Jayant Sinha** and **RBI Governor - Dr. Raghuram Rajan**. This event was a follow-up of the previous **Gyan Sangam** in which **Hon'ble Prime Minster - Shri Narendra Modi** had emphasised an agenda for change and banking reforms.

Participant Sound Bytes

"Right mix of topics and the appropriate speakers has made the conference on *Financial Inclusion: New Opportunities for the Financial Sector* apt and relevant to the present paradigm. Well organised."

> Minimole Liz Thomas Financial Inclusion Dept., Federal Bank

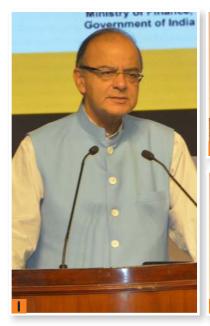
Participant Sound Bytes

"Pre-mortem is an excellent concept which I suggest must be institutionalised in the industry." at the *Program on Business Strategy and Managing Strategic Risks*

> **Ajith Kumar Rath** ED, Andhra Bank



A number of programs were held in order to promote effective corporate governance in banks, especially in the context of the need to build up strong risk management capabilities, an effective leadership, a sound risk culture and risk strategy. A robust risk governance framework can also enable banks to minimise the possibility of contamination in asset quality. CAFRAL organised *Program for Non-official Directors (NoD) on the Boards of Public Sector Banks* with an objective to equip them with necessary skills and







Participant Sound Bytes

"As I was nominated only two months back (as a Non-official Director) it was a great experience to learn all the intricacies of bank functioning." at the *Program* for Non-official Directors on the Boards of Public Sector Banks

> **Girish Ahuja** Director, State Bank of India

- 1. Hon'ble Finance Minister
- Arun Jaitley
- 2. Jayant Sinha
- 3. Anjuly Chib Duggal
- 4. Raghuram G Rajan



 CAFRAL-IIMB program Speakers and Participants
 Anjuly Chib Duggal
 A P Hota
 C Rangarajan
 M D Mallya
 V K Madhav Mohan
 G Gopalakrishna



Participant Sound Bytes

"Advanced Leadership Management Program for the Top Management of Commercial Bank program has really enabled us to take decisions in day to day professional life. Various live experiences discussed have given us a greater confidence to approach challenges."

> A G Varughese SVP, South Indian Bank



knowledge for effective governance. The keynote address was delivered by **Ms. Anjuly Chib Duggal, Secretary, Department of Finance, Ministry of Finance**.

CAFRAL and IIMB jointly organised Advanced Leadership & Management Program for the Top Management of Commercial Banks in India exclusively designed to enhance the managerial and leadership skills of the bank Chairmen/CMDs/MDs/CEOs focusing on leadership, decision making, communication, team building, strategy and negotiation skills.

A program on Business Strategy and Managing Strategic Risks was



organised to equip CEOs and the senior executives of banks to manage all risks associated to business strategies by imparting practical knowledge on tools and models that can help guide them address their own particular business situations strategically and apply learnings to their strategic development.

A Seminar for Chief Risk Officers and Heads of Risk Departments of Public Sector Banks was organised in the light of recent decision by the Government to link capital infusion in PSBs to performance; the keynote address was delivered by **Dr. Hasmukh Adhia, former Secretary, Department of Financial Services, Ministry of Finance, Government of India** to set the tone for the seminar.

- 1. L-R: N S Venkatesh, Dr. M S Sastry, C VR Rajendran, M V Tanksale, Paresh Sukthankar, G Gopalakrishna, Rajinder Kumar
- 2. Dr. Patrick McConnell
- 3. L-R: Smita Aggarwal, Romesh Sobti, G Gopalakrishna, M V Tanksale
- 4. Amarendra Mohan
- 5. Ravindra Sangvai





Participant Sound Bytes

"Seminar of Chief Risk Officers and Heads of Risk Departments of Public Sector Banks served as a platform for sharing experiences."

S K Khatanhar CGM, IDBI Bank

Participant Sound Bytes

"The debate at the *Financial Inclusion: New Opportunities for the Financial Sector* program, was pretty candid and open, allowed for learning."

> Ratna Vishwanathan CEO, MFIN

1. R Gandhi with G Gopalakrishna, M P Baliga and FSI-SEANZA Program Participants

- 2. FSI-SEANZA Speakers and Participants
- 3. N S Vishwanathan with Speakers and Participants

CAFRAL organised an International Program on Stress Testing, Risk Management and Supervision of Banks which was attended by speakers and participants from nine countries. Stress Tests are being used for several purposes such as for macroprudential surveillance, as a crisis management tool and for assessing adequacy of bank capital under severe stress scenarios.

CAFRAL on behalf of South East Asia, New Zealand and Australia (SEANZA) forum of Banking Supervisors and Financial Stability Institute (BIS) jointly organised the *Regional Seminar on 'The Regulation and Supervision of Systemically Important Banks'*. The seminar topics included International



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framework for global SIBs, implementing supervisory frameworks for domestic SIBs, assessing corporate and risk governance in SIBs, total lossabsorbing capacity and its role in addressing "too-big-to-fail" institutions and recovery and resolution planning for SIBs. **Deputy Governor, RBI - Shri R Gandhi** hosted welcome dinner for the participants. **Shri S S Mundra, Deputy Governor, RBI** delivered the concluding remarks at the seminar.

CAFRAL conducted a pilot CAFRAL Advanced Bank Management Program (CABMP) in association with Robert Smith School of Business, University of Maryland, USA, aimed at the senior and top management of commercial banks, financial institutions and RBI. The objective of the program was





Participant Sound Bytes

"The detailed calculations required in the case studies were welcome. The level of understanding was enhanced considerably due to practical sessions during the *Program* on Asset Liability Management and Foreign Exchange Risk."

> Ashish Vernekar CRO, FirstRand Bank



- 1. Stephen P Cohen at Brookings Institution
- 2. At JP Morgan Bank
- 3. Delaware State Bank Commissioner, Robert A. Glen
- 4. Hon. Steve Bartlett at US Capitol
- 5. Scott W Friestad at SEC





- 1. CABMP Participants with Robert H. Smith School and CAFRAL teams
- 2. CABMP Participants with G Gopalakrishna outside the New York Stock Exchange
- 3. CABMP Participants at the TV Asia
- 4. R Gandhi
- 5. N S Vishwanathan
- 6. M V Tanksale
- 7. Shyam Srinivasan

"It was a great experience to meet the senior official of Fed reserve, World Bank, OCC, Moody's, Citi bank, JP Morgan, Securities Exchange Commission and came to know their valuable views about different topics which may be taken forward to implement in our country where we think that their policies are more transparent/stringent/ best as compared to our policies.'

CABMP Participant

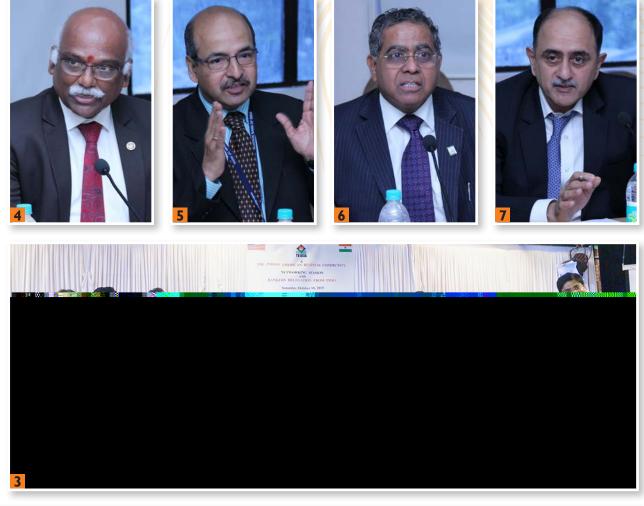
to enhance the technical skills and policy formulation capabilities of the participants in the context of rapidly changing economic environment. An extensive two-week residential program was delivered, with each session carefully structured to combine conceptual clarity with practical experiences delivered by academicians, industry professionals, subject-matter experts and policy leaders. The program structure included interaction with regulatory and financial institutions like the Federal Reserve Board (FED), Office of the Comptroller of the Currency (OCC), Securities and Exchange Commission (SEC), International Monetary Fund (IMF), World Bank/International Finance Corporation apart from case study discussions and lecture sessions. *CABMP Follow-Up* program was held to reinforce the learnings of CABMP, 2015 and to review the adoption of inputs of CABMP in various areas of functioning of the bank. Participants made presentations on the work undertaken by them in this regard.





Program on Asset Liability Management and Foreign Exchange Risk was organised with an aim to enhance the conceptual understanding and strategic thinking of senior bank officials. The focus of the program was on management of assets and liabilities, particularly in the context of interest rate, liquidity and foreign exchange risk.

A Roundtable on Capacity Building in Banks was organised to discuss and debate the implementation of recommendations of RBI's report of the Committee on Capacity Building in Banks and non-Banks with an





Financial Inclusion: New Opportunities for the Financial Sector September 2, 2015 Mumbai, India











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- 1. L- R: Lowell Campbell, Dr. A S Ramasastri, Rajesh Bansal, Amit Kumar
- 2. P. Sharath Kumar with the participants of the Workshop on Forensic Audit
- 3. S S Mundra
- 4. Arundhati Bhattacharya
- 5. Rana Kapoor
- 6. Sanjay Mallik
- 7. Srikanth Rajagopalan

objective to gather feedback to serve as a good input for policy formulation for implementation. The key recommendations of the Committee in the areas of HR management practices, training methodologies and innovations, system wide institutions and processes, exploring mandatory certification requirements and amplifying capacity related requirements in Boards of banks formed the discussion agenda.

Managing change is important from the point of view of the organisation, the people and the banking system as a whole. CAFRAL organised *Program* on Effective Change Management, its Impact on Performance & Future of Banking in changing Marketplace with an objective to formulate strategy to ensure effective implementation of change management for optimum and sustainable outcomes.



Infrastructure can be a key driver of economic growth. The need to promote infrastructure investment and financing is crucial from a public policy point of view. CAFRAL organised *Advanced Program on Project and Infrastructure Financing* to equip the bank executives with effective credit appraisals skills for project and infrastructure financing and to enable the participants to appreciate and understand the various risks involved in project and infrastructure lending.

The Pradhan Mantri Jan-Dhan Yojana (PMJDY) is one of the most ambitious financial inclusion programs in the world. It aims to enable all households to gain easy and universal access to financial services. CAFRAL organised a conference on *Financial Inclusion: New Opportunities for the Financial Sector* to discuss the new emerging opportunities to reach out to hitherto excluded segments by bringing in innovation in access, awareness and product design.

Considering the increasing incidents of NPAs, frauds and cybercrimes in the banks, capacity building for knowledge and skills for forensic audit, cyber security and digital forensics is inevitable. *CAFRAL jointly with ICAI organised Workshop on Forensic Audit, Cyber Security and Digital Forensics* with an aim at developing insights in emerging trends in cyber security management in the banks and strategizing to manage fraud risks by focusing on strengthening the capabilities in forensic audit, understanding use of the forensic tools and

"Advanced Program on Project and Infrastructure Financing certainly gave an insight into the way project financing takes place in various countries. We could understand the various risks associated with project financing and mitigation thereof."

S Suryanarayan Prasad DGM, State Bank of Travancore

"Financial Inclusion: New Opportunities for the Financial Sector provided a better understanding of the changing landscape and, therefore, input into our organisation's strategic thinking."

Veena Mankar Founder, Swadhaar

Participant Sound Bytes

"A lot of clarifications on the subject (AML) were addressed. Our suggestions were also well taken. Good coverage of the subject. Very participative program sharing practices in various banks."

> Ajgaonkar Amita Ramakant Saraswat Bank

"The point of view of the regulator and the difficulties faced in their regulation of markets was very important and invaluable." at the *Financial Markets Program*

> Manish Jadhwani SVP, STCI Primary Dealer Ltd

building cyber security and digital forensic investigative skills.

The objective of the RBI guidelines on KYC/AML/CFT is to prevent banks from being used, intentionally or unintentionally, by criminal elements for money laundering or terrorist financing activities. CAFRAL organised *Conference on Implementation and Compliance of Anti-Money Laundering (AML) Standards* to provide conceptual clarity and practical insights on AML for effective risk management. The AML heads of the banks were sensitized with the requirements/ role of FIU IND and AML/CFT Guidelines and Compliance/Submission of CTR, STR and reporting to FIU IND by the banks.

An interactive Workshop on Supervisory Oversight on Business Correspondents was held exclusively for senior RBI officials. There was a discussion on the various models of BC network across the globe, their unique approaches and the key risks associated with the delivery channels, serving as key learnings for India to innovatively implement policy, regulation and strategies to bank the unbanked.

Two tailor-made programs at the request of Ministry of Finance were organised for the Indian Economic Services (IES) officials as *Financial Markets Program* and for the senior officials of Central Bureau of Investigation (CBI) as *Program on Investigating Financial Frauds – Approaches and Insights*.

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

CAFRAL Research

In an increasingly knowledge-driven world, the role of research in informing policymaking and sensitising the management of cutting-edge policy debate has become paramount. In recognition of these concerns, the research wing of CAFRAL has focused its attention towards analysing issues of contemporary and medium-term relevance for the Indian economy, drawing upon both domestic and international developments. Going forward, a key objective of the research wing is to position itself as a centre of excellence that houses world-class intellectual capital that can continuously inform the policy debate, both within the central bank and outside, through research and analysis.

Research and Analysis

Rigorous empirical research on issues directly germane to economic policymaking in the Indian context comprise a major part of the output. To advance this process, the research wing has initiated projects spanning multiple areas, primarily in the areas of banking and corporate finance, encompassing issues such as corporate leverage, small enterprise financing, creditor rights and bankruptcy law, sovereign and corporate debt markets, financial inclusion and its various facets, household finance as well as the interlinkages among regulation, competition and bank risk-taking. While some of these projects are of recent vintage, several others have already seen fruition in terms of working papers and publication in high-end journals; yet others are at various stages of their life cycle in terms of the conference-seminar-revision-updation and its final fruition.

Several of the research projects are of long-term nature, consistent with its rigor and analytics needed to match up to the standards of the best international journals in the relevant area. The projects relating to creditor rights and bankruptcy laws, household finance and regulation and bank risktaking fall in this category. As CAFRAL builds its research capabilities through training and exposures, the output mix also becomes diversified to include short-term pieces that are more informative in nature or output that primarily exhibits a short-term policy focus.

Reflecting these developments, the CAFRAL website has been refurbished to include the research work done during the past couple of years. (http://www.cafral.org.in/Papers.aspx)



Summary of Selected Work

Given the challenges confronting the corporate sector and its interlinkage with the health of banks, analysing the stress in the corporate sector is a top policy concern. In a policy piece, CAFRAL has characterized the nature of this stress, examined its likely origins and suggested possible policy options. In the areas of monetary transmission and liquidity, CAFRAL researchers examine how capital ratios interact with bank ownership to modulate monetary transmission in India. In another research paper using granular data for India, CAFRAL has collaborated with RBI and IIM Ahmedabad to analyse how internal frictions within banks influence the transmission of monetary policy.

In the area of sovereign debt, CAFRAL, in collaboration with outside researchers, has analysed the structural changes in the bond market infrastructure on the liquidity and trading. With the passage of the Insolvency and Bankruptcy Act in 2016, the debt resolution process in the country is expected to witness a significant change. To understand the possible consequences, studies were initiated that explore corporate debt recovery mechanism and how creditor rights impinge upon long-term lending relationships. Although in its early stages, analysis of tractable and quicker methods to analyse large deviation portfolio losses appears to hold promise.

We briefly touch upon other areas of current policy interest. In the area of financial inclusion, initial work on the gender issues in financial inclusion has already been published; the other piece of research on this topic is underway. Relatedly, some work on the interface between mobile telephone and financial inclusion is also ongoing. In the area of small business financing, priority sector lending schemes have dominated India's landscape for several decades. Some recent collaborative research at CAFRAL points to the need for efficient policy design.

CAFRAL has also been regularly hosting outside researchers, some of whom are proactively involved in India-related issues. To exemplify, one stream of work has sought to understand the impact of monetary policy in the presence of segmented asset markets. In the area of financial markets, work has been focusing on the dynamics of bond liquidity in relation to central bank interventions or, alternately, analysing the information content in the two stage auction of sovereign debt, a mechanism unique to India.

Human Capital

Human capital is undoubtedly the key asset of any research enterprise. Our research associate (RA) program has become quite competitive. It attracts over 500 applications for a handful of positions. Selected individuals get an opportunity to understand modern econometric and analytical methods, imbibe relevant programming skills and apply them hands-on to large datasets and problems as they assist our senior research staff. While the RAs are a necessary asset for our senior researchers, looking ahead, it also enables long-term capacity building by making these individuals well-equipped to take on any task, whether it is for PhD program or for other professional assignments in India or elsewhere.

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. We have been fortunate in finding three new hires, one from a university in Singapore and two from universities in the USA and they are expected to take charge shortly.

Other Outreach Activities

Besides research papers, our outreach activities also include seminars by CAFRAL research scholars at conferences or in local or international universities, as well as our own hosted seminars and conferences, often in collaboration with the RBI to leverage our joint resources. This past year has seen close to a dozen research seminars by distinguished scholars from India and abroad.

CAFRAL also had the privilege of hosting some of the finest minds in modern macroeconomics in the conference titled *Monetary Policy Challenges in Open Emerging Economics*, co-hosted with the RBI. Presenters included Dr. Amartya Lahiri (UBC) on his work with RBI Deputy Governor Dr. Urjit Patel, Dr. V V Chari (Minnesota), Dr. Gita Gopinath (Harvard) and Dr. Nobuhiro Kiyotaki (Princeton).

CAFRAL also co-hosted the 9th Asian Research Network Annual Conference along with the Bank for International Settlements (BIS) in the area of monetary policy and financial stability. The conference featured 15 papers presented by leading central banks in the region such as those from China, Japan, Korea, New Zealand, Philippines, Thailand, besides presentation by senior CAFRAL researchers.

Perhaps the most unique outreach activity has been the *Winter School in Finance and Economics* that we co-hosted with IGIDR in December 2015. For the program, CAFRAL selected Masters and prospective PhD students through an open competitive process. Over a period of five days, these students were exposed to new thinking in economics and finance from top scholars in the field. Presentations were made by Sumit Agarwal (NUS), Abhijit Banerjee (MIT), Debopam Bhattacharya (Cambridge), Esther Duflo (MIT), Ed Glaeser (Harvard), Ravi Jagannathan (Northwestern), Aprajit Mahajan (Berkeley) and Manju Puri (Duke), plus local presenters including the **RBI Governor,** Dr. Prachi Mishra from RBI and Dr. N R Prabhala from CAFRAL.

The initial feedback was encouraging enough to suggest that this event could be repeated. Events such as these could be potentially transformational. Well-trained individuals with higher-order degrees in economics and finance are critical to informed policy dialogue. By bringing together young researchers and top scholars, the hope is that the *Winter School* would increase the curiosity of students as well as their excitement in acquiring PhDs and become part of a vibrant community of researchers to inform India's coming policy challenges with their ideas.



Administration and HR

CAFRAL's team has grown. During the year, many new faces joined CAFRAL, while a few left to pursue other opportunities. As on August 1, 2016, CAFRAL has **31 contract staff** and **3 deputed from RBI**; three officers on deputation from RBI with CAFRAL have superannuated from their service. We hired one new Senior Research Director and two new Research Directors. Also, we hired 10 Research Associates in two batches. CAFRAL mentored five interns this summer.

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; a total of **29,293 visitors** left footprints in this financial year. CAFRAL website has been refurbished to include the research work done during the past couple of years.

CAFRAL team for an offsite at SMAAASH, Lower Parel

As an HR initiative, we went for an outing to SMAAASH on January 8, 2016 with our staff. The names of CAFRAL staff are given in **Annex II**.



Acknowledgements

We would like to acknowledge the valuable guidance given to us by our Governing Council and Research Advisory Council members. We are also thankful to the Management and officials of the Reserve Bank of India, various financial services institutions, consulting organisations, 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 far in our journey to achieve our objectives.

We also acknowledge the contribution of M/s Deodhar & Patel, our internal auditors, M/s Mukund M Chitale & Company, our statutory auditors, and other service providers.

S.er

G Gopalakrishna Director, CAFRAL





BALANCE SHEET

1)

Independent Auditor's Report

To the 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 (The Trust), which comprise the Balance Sheet as at 31st March 2016, the statement of Income and Expenditure of the Trust for the year ended on that date and a summary of significant accounting policies.

Management's Responsibility for the Financial Statements

The Trust's Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position and financial performance of the Trust in accordance with the section 32 of Bombay Public Trust Act 1950. This responsibility includes the design, implementation and maintenance of internal controls 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 conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants 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 misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, 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 control relevant to the Trust's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by 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.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the financial 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:

- (a) in the case of the Balance Sheet, of the state of affairs of the Trust as at 31st March, 2016 and
- (b) in the case of the Income and Expenditure Account of the Trust of the income and expenditure for the year ended on that date

Report on other legal Regulatory Requirements

We report that:

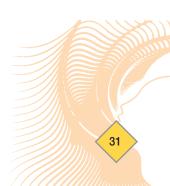
- 1. We have obtained all the information and explanations, which, to the best of our knowledge and belief, were necessary for the purpose of our audit.
- 2. In our opinion, proper books of account as required by law have been kept so far as appears from our examination of those books.
- 3. In our opinion, the Balance Sheet and Income and Expenditure Account dealt with by the report comply with the Accounting Standards issued by the Institute of Chartered Accountants of India.
- 4. The Balance Sheet and Statement of Income and Expenditure dealt with by this report are in agreement with the books of account.

For Mukund M Chitale & Co. Chartered Accountants Firm Reg No. 106655W

> (A V Kamat) Partner

Place: Mumbai Date: August 21, 2016

M. No.: 39585



The Bombay Public Trusts Act, 1950

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

Name of the Public Trust: CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING Balance Sheet as at: 31st March, 2016

FUNDS & LIABILITIES	As at 31 st March 2016	As at 31⁵t March 2015
	₹	₹
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	79,52,395	1,80,66,597
Liabilities as per Schedule "A"	1,30,39,411	78,17,508
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	2,59,91,806	3,08,84,105

Notes to Accounts - Schedule 'F' As per our report of even date For MUKUND M CHITALE & CO. CHARTERED ACCOUNTANTS FIRM REG. NO.106655W

(A V Kamat) Partner M.NO.: 39585

Place: Mumbai Date: August 21, 2016

	PROPERTY & ASSETS	As at 31 st March 2016	As at 31⁵t March 2015	
		₹	₹	
	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):		4 40 00 000	
	Cost	2,25,58,314	1,46,29,328	
	Less: Depreciation up to date	1,44,13,357	98,98,497	
		81,44,957	47,30,831	
	Unsecured and Good			
	Sundry Debtors	9,83,575	37,79,677	
	Advances:-	88,27,901	83,92,788	
	As per Schedule "C"			
	Income Outstanding:			
	- Interest Accured on Fixed Deposit	6,45,660	1,69,945	
			.,,.	
	Cash And Bank Balances:			
	(a) Cash on Hand	15,486	12,314	
	(b) In Saving Account with Bank	23,74,227	87,98,550	
	(b) In Fixed Deposit with Bank	50,00,000	50,00,000	
	TOTAL	0.50.04.000	0.00.04.405	
	TOTAL	2,59,91,806	3,08,84,105	

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: August 21, 2016



The Bombay Public Trusts Act, 1950

Registration No. F - 33749 (Mum)

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 31st March, 2016

Expenditure	For the Year Ended 31 st March 2016	For the Year Ended 31 st March 2015	Income	For the Year Ended 31 st March 2016	For the Year Ended 31 st March 2015
	₹	₹	_	₹	₹
To Expenditure in respect of Properties	NIL	NIL	By Deficit for the year reimbursed by RBI	9,01,14,202	9,35,28,643
To Establishment Expenses			7777777		
As per Schedule "D"	20,93,722	18,40,183	By Bank Interest	14,83,230	7,31,714
			By Dividend	NIL	NIL
To Audit Fees	1,15,000	1,00,000	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 year	1,17,127	NIL	By Interest on Income Tax Refund	4,08,938	NIL
To Amount written off (a) Bad Debts	NIL	NIL			
(b) Loan Scholarship(c) Irrecoverable Rentsd) Other Items					
To Depreciation	45,41,528	28,04,319	By Transfer from Reserve	NIL	NIL
As per Schedule "B"					
To Expenditure on the object of the trust					NE E
Educational As per Schedule "E"	8,51,38,993	8,95,15,855			
To Surplus carried over to Balance Sheet					
Total	9,20,06,370	9,42,60,357	Total	9,20,06,370	9,42,60,357

Notes to Accounts - Schedule 'F' As per our report of even date For MUKUND M CHITALE & CO. CHARTERED ACCOUNTANTS FIRM REG. NO.106655W

(A V Kamat) Partner M.NO.: 39585

Place: Mumbai Date: August 21, 2016 CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

TRUSTEE

TRUSTEE

TRUSTEE

Place: Mumbai Date: August 21, 2016



CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Schedule A: Liabilities

As on 31 st March 2016	As on 31 st March 2015
₹	₹
1,25,19,204	59,76,456
2,67,523	12,88,957
2,28,966	
140	5,40,207
17,178	7,088
6,400	4,800
1,30,39,411	78,17,508
	31 st March 2016 ₹ 1,25,19,204 2,67,523 2,28,966 140 17,178 6,400



CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Schedule B: Movable Properties

Name of the Asset	Rate of		COS	г		
	Depreciation	As on			As on	
		1 st April 2015			31 st March 2016	
		₹	₹	₹	₹	
Tangible						
1. Computer Hardware Including Printers	33.33%	36,67,996	10,27,410		46,95,406	
2. Other Electrical Equipment	33.33%	13,67,716	50,15,705	40,000	63,43,421	
3. Furniture	20.00%	7,15,383	5,78,071		12,93,454	
4. Car	20.00%	27,04,969	-		27,04,969	
Intangible						
5. Computer Software	33.33%	61,73,264	13,47,800		75,21,064	
Total		1,46,29,328	79,68,986	40,000	2,25,58,314	
				•		
Previous Year		92,82,336	53,46,992	-	1,46,29,328	

Schedule C: Advances

Particulars	As on 31 st March 2016	As on 31 st March 2015
	₹	₹
Service Tax Input Credit	1,04,760	92,840
Deposit	17,54,000	15,90,000
Advance to Creditors	-	3,000
Other Receivables	47,031	3,22,295
Income Tax Receivable	18,91,548	47,16,910
Prepaid Expenses	50,30,562	16,67,743
Total	88,27,901	83,92,788

	DEPRECIA	TION		W.D.	.V.
Up to 1 st April 2015	During the Year	Deletions	As on 31 st March 2016	As on 31 st March 2016	As on 31 st March 2015
₹	₹	₹	₹	₹	₹
27,17,852	8,94,096		36,11,948	10,83,458	9,50,145
8,33,081	19,76,757	26,668	27,83,170	35,60,251	5,34,634
3,15,252	2,58,691		5,73,943	7,19,511	4,00,131
5,40,994	5,40,994		10,81,988	16,22,981	21,63,975
54,91,318	8,70,990		63,62,308	11,58,756	6,81,946
98,98,497	45,41,528	26,668	1,44,13,357	81,44,957	47,30,831
70,94,178	28,04,319	-	98,98,497	47,30,831	-

Schedule D: Establishment Expenses

Particulars	For the Year Ended 31 st March 2016	For the Year Ended 31 st March 2015
	₹	₹
Administrative Expenses	16,56,807	15,01,459
Sitting Fees paid to Council Members	1,60,000	1,91,110
Facilities Management Expenses	2,76,915	1,47,614
Total	20,93,722	18,40,183



CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Schedule E: Expenditure on Object of the Trust - Educational

	For the Yea	ar Ended 31 st Ma	rch 2016	
Particulars	Learning	Research	Total	
	₹	₹	₹	
Administration Expenses#	45,01,515	38,77,578	83,79,093	
Computer / Fax / Printer Consumables	59,108	59,108	1,18,216	
Event Related Expenses	2,27,25,612	89,663	2,28,15,275	
Honorarium - Guest Faculty	26,70,532	NC	26,70,532	
Online Data Service	22,52,055	41,84,014	64,36,069	
Paper/ Conference registration fees		4,956	4,956	
Photography / videography	12,64,881	98,691	13,63,572	
Printing & Stationery	11,86,056	96,470	12,82,526	
Professional Fees	2,12,577	19,82,540	21,95,117	
RAC Related Expenses	-	-	-	
Research Projects	-	-	-	
Salaries & Staff Expenses*	2,49,49,850	3,51,22,565	6,00,72,415	
Stay Expenses-Guest Faculty and Participants	10,29,749	-	10,29,749	
Training Expenses related to Employees	2,11,770	1,17,460	3,29,230	
Travel Expenses - Guest Faculty and Participants	5,07,265	20,99,727	26,06,992	
Travelling & Stay Expense of visiting professors	-	35,54,626	35,54,626	
Travelling & Halting Expenses - Staff	40,33,888	31,37,565	71,71,453	
Website Maintenance and subscription	5,62,695	12,87,883	18,50,578	
Foreign Exchange loss	49,134	-	49,134	
	22/22/2			
	6,62,16,687	5,57,12,846	12,19,29,533	
Less: Training Programme Fees Recovered	3,66,78,101	-	3,66,78,101	
Other Receipts		1,12,439	1,12,439	
Total	2,95,38,586	5,56,00,407	8,51,38,993	

Salaries includes remuneration to Director of Rs. 25,23,732/- (P.Y. ₹24,81,999/- including previous Director's) who is also one of the trustees of the trust.

[#]Includes ₹Nil/- (P.Y. ₹1,80,258/-) relating to previous year.

For the	e Year Ended 31 st Marc	h 2015
Learning	Research	Total
₹	₹	₹
40,82,791	16,90,143	57,72,934
2,32,303	2,32,303	4,64,606
1,40,90,744	1,79,438	1,42,70,182
11,08,695		11,08,695
-	41,86,929	41,86,929
-	76,532	76,532
22,11,558	1, <mark>13,760</mark>	23,25,318
13,75,783	1, <mark>06,274</mark>	14,82,057
16,77,850	9,11,200	25,89,050
-	5,80,657	5,80,657
-	20,02,760	20,02,760
3,23,85,784	2,85,66,683	6,09,52,467
19,66,112	3,37,795	23,03,907
1,61,609	1,68,000	3,29,609
22,81,979	5,46,454	28,28,433
-	35,65,885	35,65,885
53,84,487	35,70,833	89,55,320
2,33,138	2,33,138	4,66,276
5,339	318	5,657
6,71,98,172	4,70,69,102	11,42,67,274
2,47,51,419	-	2,47,51,419
4,24,46,753	4,70,69,102	8,95,15,855



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, 2016 and Income and Expenditure Account for the year ended 31st March, 2016.

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/materialised.

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 Accounts as Deficit for the year reimbursed by RBI.

Training programme fees are recognised as income on completion of the programme and these are shown as recovery towards cost of conducting programmes. Expenses on outsourced research projects are recognised 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 ₹10,000/- are not capitalised.

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

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 recognised in the Income and Expenditure Account.

4

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

Lease of Asset 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 recognised 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

 During the year the cost of staff deputed by Reserve Bank of India amounting to ₹1,11,20,294/-(Previous Year – ₹1,73,37,124/-) has been reimbursed to Reserve Bank of India and is included under salaries and staff expenses in Schedule 'E'.

2. Related Party Discourse

Name of the related parties and description of relationship:

1. Key Management Personnel – Mrs. Usha Thorat (up to 23rd April 2014)

– Mr. G Gopalakrishna (from 21st April 2014)

Particulars	Key Management Personnel	
	2015-16	2014-15
	₹	₹
Remuneration to Director	25,23,732/-	24,81,999/-

Details of Related Parties transactions are as under:

3. Leases - Operating Lease

The Trust has taken on leases residential premises for Director under Lease Agreements. Lease Rental expenses incurred for the year is ₹36,15,000/- (Previous Year – ₹18,55,000/-) is included in Administration Expenses under Schedule E. The total lease rental payable over the lease period for the residential premises, as detailed below is ₹57,53,600/- (Previous Year – ₹82,85,000/-).

Particulars	31.03.2016 (In ₹)	31.03.2015 (In ₹)
Not later than One Year	35,81,500/-	32,85,000/-
Later than One Year and not later than Five Years	21,72,100/-	50,00,000/-
Later than Five Years		-
Total ₹	57,53,600/-	82,85,000/-

- 4. During the year a notice was recieved 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 Centre for A	Advanced Financ	ial Research and Learning
For Mukund M Chitale & Co. Chartered Accountants Firm Reg No. 106655W			
(A V Kamat) Partner M No.: 39585	(Trustee)	(Trustee)	(Trustee)
Place: Mumbai Date: August 21, 2016	Place: Mumbai Date: August 21	, 2016	



]]]



Annex 1

solutions.

1. Advanced Program on Project and Infrastructure Finance

Date	April 22-24, 2015
Venue	Lonavla
Coverage	Topics covered during the program included: Fundamentals of Project Finance, Project
	Finance Risk Analysis Framework, Financial Analysis and Modeling, Legal Issues and
	Documentation, Sources of Finance, Transport, Power and Other Infrastructure projects,
	Credit Enhancement, Other Structuring Considerations. Apart from the above classroom
	sessions, there were case studies on Oil & Gas Project, Roads and Highways Financing,
	Hydro Power projects. On the last day of the program there was a panel discussion on "Way
	Forward to Stimulate Healthy Growth in Project and Infrastructure Financing by Banks"
Takeaways	The program gave the participants insights into International best practices for Infrastructure
	Project Finance, risk identification and mitigation framework, guarantee arrangement and
	overseas gas/pipeline projects. It gave a perspective on aspects to be looked into during
	legal documentation and other key issues in Project and Infrastructure Finance and probable

2. Investigating Financial Frauds - Approaches & Insights (for CBI Officers)

Date	April 29-30, 2015
Venue Coverage	Mumbai Diversion of fund, end use of fund, appraisal related issues on under finance/over finance/ adequacy of finance, monitoring of advance, critical aspects of NPA, causes, symptoms and recourse and cases for reporting of Fraud, etc.
Takeaways	A suggestion had emerged that the reporting of any fraud accounts to CBI needs to be necessarily routed through Chief Vigilance Officer of the concerned bank. More sharing of information needs to be initiated between banks and CBI to strengthen the present system of prevention of fraud. A system of Layered Voice Analysis (LVA) may be initiated to identify the right borrowers for ensuring proper due diligence as a pre disbursal mechanism. More stringent Monitoring of advance is required from banks to ensure prevention of slippage and frauds and to ensure end use of fund. For any investigation of Fraud accounts, it is important to investigate the trail of transactions rather than focusing the attention on naming the concerned person. Naming of person can be done only in case of prima facie evidence of criminality. Gap between Sanction terms and modifications at the time of Disbursal ought to be bridged. The changes in terms and conditions from sanction at Head Office level and disbursal at the branch level are root cause of diversion. Advantage of being not registered with Department of Non-Banking Supervision/Regulation compromises system control. If anybody informs to RBI about the existence of such agencies, they should be taken cognizance of and made punishable.

3. CAFRAL Advanced Leadership Program (CALP) Retreat 2015

Date	May 15-16, 2015
Venue	Alleppey
Coverage	The program provided CALP 2015 participants an opportunity to share their experiences
	on implementation of the projects undertaken by them during CALP and to reinforce and

build on the learnings from the CALP Program. The topics covered were Macro-Prudential regulations and the role of Mudra Bank in financing MSMEs. There was a special session on the Use of Analytics to enhance decision-making at banks. The participants made detailed presentations to their peers on the second day of the program on how they had imbibed learnings from CALP into their day-to-day working and what projects they had implemented during the previous three months. A CALP alumni meet was organised as a part of the program, which was well attended by the alumni of the previous two editions of the CALP program. This meet provided the attendees a chance to interact with one another and share their experiences.

4. CAFRAL-IIMB Advanced Leadership & Management Program for the Top Management of Commercial Banks in India

• • • • • • • • • • • • • • • • • • •		
Date	June 6-7, 2015	
Venue	Bengaluru	
Coverage	Leadership, decision making, communication, team building, strategy and negotiation	
	skills.	
Takeaways	1. Change management, HR, People, process, team building are important and a	
	must in banking.	
	2. Even army leadership working can be implemented in banking.	

3. Extremely informative program giving exposure to leadership qualities in diversified fields which can be imbibed in banking.

4. Importance of working together as a team.

5. Insights on how to win over people.

5. Roundtable on Capacity Building in Banks

Date June 18, 2015

Venue Mumbai

- **Coverage** Key recommendations of the Committee are in the areas of HR management practices, training methodologies and innovations, system wide institutions and processes, exploring mandatory certification requirements and amplifying capacity related requirements in Boards of banks.
- **Takeaways** Accreditation: there should be a standard setting body for level of education offered by any banking training institute, courses, standards, products and setting gold standards for key roles. Internal Training benchmarking. Matching strategic training with employee life cycle. Banking Aptitude Test: (BAT) should be there. Guidelines on HR execution model to be followed by HR teams to make the recommendations work need to be delineated. Modern methods of learning to be standardized which have scalability, skills and speed. Repository of banking personnel.

6. Program on Asset Liability Management and Foreign Exchange Risk

Date July 16-17, 2015

Venue Chennai

Coverage The program provided an opportunity to senior bankers to enhance their conceptual understanding and strategic thinking. The focus of the program was on the management of assets and liabilities, particularly in the context of interest rate, liquidity and foreign exchange risk. The fundamentals of risk management were discussed and this understanding was applied to real life cases based on Indian banks. These cases were specially developed for this program and covered a range of contemporary, complex issues that banks are grappling with and provided insights into how to approach these issues and arrive at decisions best suited to each situation. The case discussions involved extensive use of spreadsheets by participants to facilitate a hands-on learning experience for them.

Annex I

Takeaways Despite relaxed regulations, many banks have not issued long-term Infrastructure Bonds. The program highlighted the various factors that need to be considered to arrive at the true cost of these bonds to a bank, including the implicit cost/savings arising from various regulations. The effect of a bank's borrowers having unhedged foreign currency exposure on a banks' capital requirements was also evaluated. It underscored the RWA implications of derivatives; SLR/LCR duplication impact based on current guidelines; need for regulator/accountant to understand the ground reality regarding economic hedges; the hidden costs that are sometimes not being factored in while arriving at the minimum cost of lending.

7. Program on Effective Change Management, its Impact on Performance &

Future of Banking in Changing Marketplace		
Date	July 29-30, 2015	
Venue	Mumbai	
Coverage	Digitisation, democratisation (financial inclusion) and big data analytics, impact on digital technologies, regulation, regional economics and competition, cross learnings from various bank's approaches to change management, responding to new opportunities for change - Aadhaar Enabled Services.	
Takeaways	Takeaways were inputs on how to handle change and how to prepare for changes. A perspective from various players: challenges and opportunities in change management and discussion. Insight into alternate payment systems. Meaningful perspective of what is happening in the industry. Practical insights into how all other banks face transformation. Vital learnings on why to change, what to change, how to change.	

8. Workshop for Chief Risk Officers and Risk Department Heads of Public Sector

Banks

Date	July 31 - August 1, 2015
Venue	Mumbai
Coverage	Main focus of the progra

Main focus of the program was to assess the risk management practices followed by various public sector banks, discuss the industry good practices and think about measures required to strengthen the risk practices. Topics discussed during the program included Building a strong risk management system in banks, Risk Management in the context of evolving international regulation, Role of Chief Risk Officer in banks, Developments in risk and compliance, Risk Appetite and Governance. There was also a panel discussion on 'Improving risk management system in PSBs including operational risk management'. CAFRAL had conducted a survey on "Risk Capabilities and Capacities of PSBs" as a part of the program comprising three sections viz. Risk Governance, People & Skill, Model & validation. Banks participated in the survey were categorised in three groups as per their asset size:

a) Small size - Less than ₹2 lakh crore

b) Medium size - Between ₹2-4 lakh crore

c) Large size - Greater than ₹4 lakh crore

Findings of the survey as arrived from the inputs from the banks were discussed during the seminar.

Takeaways An important observation of the survey conducted by CAFRAL is that there is an urgent need to strengthen risk management practices and risk governance in public sector banks. Risks are invariably looked at in a silo manner rather than at an enterprise wide level in PSBs. Risk measurement skills, models and software available are also not adequate/sufficient. Product pricing, at times, are not commensurate with the risks taken. Average risk management experience of risk committee members in PSBs is between 3-5 years and Risk management departments were inadequately staffed [50% of the banks reported decrease in the number of risk personnel between 2014 and 2015]. Frequent rotation of staff results in loss of experienced people in risk management departments. In small and medium sized banks, the current CROs have been in their position for less than 2 years. In large banks, on an average, the

current CRO has been in the position of CRO for less than 1.5 years. Also, banks tend to consider risk management as a compliance issue.

9. FSI-SEANZA Regional Seminar on "The regulation and supervision of

systemically important banks"

Date August 25-27, 2015 Mumbai

Venue Coverage

- The Financial Stability Institute (FSI) and the South East Asia, New Zealand and Australia (SEANZA) Forum of Banking Supervisors organised a seminar on the regulation and supervision of SIBs. CAFRAL had hosted the program for three days on behalf of Reserve Bank of India. Important topics that were covered during the program were: a) The international framework for global SIBs
 - b) Implementing supervisory frameworks for domestic SIBs
 - c) Assessing corporate and risk governance in SIBs
 - d) Total loss-absorbing capacity and its role in addressing "too-big-to-fail"
 - e) Recovery and resolution planning for SIBs

10. Financial Inclusion: New Opportunities for the Financial Sector

- Date September 2, 2015
- Venue Mumbai
- Coverage The overarching theme of the conference was that using a holistic approach and a sustainable business model, the excluded customer segments can be provided convenient and affordable access to financial services with innovations in access, awareness and product design. It was highlighted how lending to priority sector could become more efficient through the introduction of PSL certificates, how surrogates and analytics could be used for credit due diligence of MSME, how technology and Aadhaar can help in last mile outreach, how BC channel can be strengthened to provide easy access and the importance of financial literacy in ensuring usage of bank accounts and other financial products. Innovative examples of the above from India and other countries were shared by various speakers. A recent survey of first time PMJDY account holders, conducted by CAFRAL, was also presented during the conference. The idea behind the survey was to have empirical evidence on the actual usage of the PMJDY accounts and get the customer's perspective.
- Takeaways An important discussion point was how Aadhaar can be a very powerful and useful instrument as a single reference point for all financial sector transactions. Technology can be a great enabler for financial transactions, with its impact on customer experience and reduction in cost, especially for the last-mile outreach. Stronger and more intensive Financial Literacy campaigns are extremely important to drive actual usage of small accounts, especially the PMJDY accounts. They would also result in better consumer protection. Mobile banking needs to be made more user friendly and multi-lingual. BC model can be used quite cost effectively for transaction banking and for a focused approach towards MSME sector in terms of identification of appropriate borrowers. Interoperability of BCs can create a sustainable financial model for the BCs and reduce costs to the customers. Banks need to have a hard look at how their processes can be improved and how more suitable products can be introduced to tap this market segment.

11. Workshop on Forensic Audit, Cyber Security and Digital Forensics

- Date September 22-23, 2015
- Venue Mumbai
- Coverage Use of forensic tools, capacity building for investigative skills in cyber security and digital forensics, emerging trends in cyber security management, fraud risk management.

12. CAFRAL Advanced Bank Management Program (CABMP)

Date October 5-16, 2015 Venue

Mumbai

Coverage

A first-of-its-kind International program tailored for the Senior Executives of commercial banks in India, financial institutions and Reserve Bank of India was organized in collaboration with Robert H Smith School of Business, University of Maryland, USA. The program structure included visits to regulatory and financial institutions, case study discussions and lecture sessions. The program was divided into four modules viz.

a) Governance and Risk Management

b) Visits to various financial Institutions

c) Regulation and Supervision

d) Business Strategy and Environment

Important topics that were discussed during the two week program were Enterprise wide Risk Management, Risk adjusted performance and capital allocations, Asset Liability Management, Operational Risk and Model Risk Management Cyber Risk Management which gave the participants an international perspective on the respective topics. Interaction with senior officials of Federal Reserve gave an idea about the process of Monetary Policy making, regulations of different US Banks based on size, locations, etc. and consideration of risk perception in their supervision. Interaction with the officials of IMF and World Bank gave insights into how and where they see India in the global context. Other important visits included visit to Securities and Exchange Commission, Office of Comptroller of Currency, J P Morgan Chase and Citibank.

Takeaways It was an overwhelming experience for the participants. Interaction with officials of IMF and World Bank indicated their positive attitude about India and their keenness to invest in India. It gave an opportunity to the participants to understand international banking standards and practices and Risk management practices of banks. The need for an independent CRO, without being under any duress, in order to manage the risk effectively was highlighted. Various modus operandi of Cyber risks and preventive ways to minimise the risk were discussed. It was reiterated that governance at the corporate level is a must to mitigate all sorts of Cyber risks. Another important takeaway is how Securities and Exchange Commission of USA is monitoring and controlling the activities in the securities market and investigating the wrongdoing through different means. Importance of proper information provided by high quality data was emphasised.

13. Conference on Implementation and Compliance of Anti-Money Laundering (AML) **Standards**

Date November 30, 2015 Venue Mumbai Coverage KYC risk rating, customer segmentation with case Studies on penalties and STR filed to FIU, AML risk management best practices, recent AML violation case studies, regulatory expectations, FIU-IND observations on weaknesses in STR/CTR submissions, international AML best practices by AML implementation in-charges of Standard Chartered Bank and JP Morgan, Hong Kong, recent trade finance case studies and Enforcement Directorate analysis of types of AML violations. Suspicious transaction identification procedures at the banks need improvements. It needs to Takeaways be recognized as an independent function manned by expert staff. Banks AML policies should include clear directions on criterion and minimum amounts of transactions to be reported under STR. Red flags need to be defined for identification. It has to be an interdisciplinary function drawing expertise from all departments of the bank at regular intervals. Reporting of suspicious transactions to FIU IND should include detailed comments regarding reasons of such classification and observations about the accounts. Without such detailed reasons, FIU IND is not able to integrate and make meaningful use of such data. The AML Policy of the bank has to cover entire gamut of functions of the bank. Training of the Front Line staff for monitoring and oversight over transactions in the accounts is of primary importance. Structured exchange of information and free flow of alerts observed need to be ensured by

the bank management.

14. Business Strategy and Managing Strategic Risks

DateDecember 8-9, 2015VenueMumbai

Coverage

The program shared practical tools and models that would help senior executives of banks define their strategies, build new business models suited to their targeted customer segments, create differentiation in the market place and leverage their strengths and manage all of the risks associated with their strategies in a dynamic and competitive environment. The program underscored the different types of business models and strategies, factors that need to be considered to create robust business strategies, different types of risks associated with strategies and how to identify them, various methods of mitigating risks and the additional inputs required for building strategies in today's digitised world. Real-life examples from across the world about strategies of successful strategies, were discussed. The program extensively used case studies and group exercises, prompting participants to consider their own particular business situations strategically and to apply learnings to their strategy development.

The program highlighted the fact that it is essential for a firm to have a well thought Takeaways out strategic direction. A firm should know where it wants to go and how it wants to reach there. Strategy requires specialist skills to analyse complex situations and the creativity to identify new directions. It requires courage of conviction to take tough decisions and to follow them through. An organisation should always make sure that it has the capabilities to implement a policy, before it embarks on it. Otherwise, the strategy will be a disaster and will have to be abandoned later on at a great cost to the company. There are three different types of strategies - those that focus on productivity or innovation or restructuring. Some strategies can be a combination of these three, but the focus needs to be very clear. Strategic risk management requires strategic positioning, deep knowledge of the industry, customer trends and effective strategic execution. Choosing a strategy does not mean choosing one with the least risks; it means choosing the one which helps the organisation to achieve its stated goals, identifying the risks involved upfront, ensuring that the organisation has the capabilities to implement the strategy and to deal with the risks and laying down the ways of dealing with these risks. A firm needs to continually evaluate its strategy. The evaluation of a strategy should be based on Risk Adjusted Returns, and not on returns per se. If the strategy is not working for any reason, whether changed environment, regulations, or competition, and it needs to be abandoned, it is imperative that it is done at the right time. A strategy should not be pursued when it is clear that it is doing more harm than good. Effective implementation of the strategy is as important as the strategy itself. Effectual communication - both within the organisation and with external stakeholders - is essential for this. Technology is an essential input to strategy formulation in today's world.

15. CAFRAL-IGIDR Winter School in Economics and Finance

Date December 12-16, 2015

Venue Mumbai

Coverage Top scholars in economics and finance covered topics like Behavioral Economics, Firms in developing countries: Issues on Contracts and Regulation, Household Finance, Macroeconomics and Trade, Corporate Finance and Banking, Forecasting the Equity Premium, Econometric Analysis of Discrete Choice Models, Randomized



Experiments and Structural Modeling, Debt and Crises, Banking and Bank Runs, Cities and Society.

16. Workshop on Supervisory Oversight on Business Correspondents

Date	January 18, 2016
Venue	Mumbai
Coverage	The program was a half-day interactive workshop on "Supervisory Oversight on Business Correspondents" exclusively for senior RBI officers. The discussion during the program centred on the various models of Business Correspondent Network across the world; different approaches adopted by various regulatory authorities to regulate Business Correspondents key risks associated with using BCs as a delivery channel; current practices in Supervision of Business Correspondents; tools and techniques In Supervising Business Correspondents; and the key Learnings for India.
Takeaways	

17. International Program on Stress Testing, Risk Management and Supervision of

Banks	
Date	January 19-20, 2016
Venue	Mumbai
Coverage	The Program provided a forum to discuss the recent international and national developments
	in stress testing, risk management and supervision of banks. Internationally, stress tests
	are being used for macroprudential surveillance, crisis management and microprudential
	supervisory interventions including for assessing the adequacy of bank capital. The systemic
	banks are subjected to a higher standard of stress testing compared to non-systemic banks.
	Experts from abroad and India made presentations on practical implementation of frameworks
	for Stress Testing and enhanced risk management, in particular for the systemic banks.
	It was highlighted that Macro stress tests can be quite effective as a crisis management tool as

It was highlighted that Macro stress tests can be quite effective as a crisis management tool as shown by the U.S. experience. The Macro stress tests are ill-suited as early warning devices, i.e, as tools for identifying vulnerabilities during tranquil times and for triggering remedial action. The asset quality reviews play an important role in establishing the credibility of the stress tests, as was seen in the EU stress tests. The enhanced supervisory expectations from systemically important banks have led to improved implementation of their risk appetite and risk culture. In the Indian context, more work needs to be done on the recovery and resolution frameworks for banks.

18. Financial Markets Program

Date Venue

January 25-29, 2016

Mumbai

Coverage Money Market and Monetary policy, debt market and government borrowing, capital market developments, bond market including masala bonds, forex market and exchange rate and reserves management, mutual funds industry issues, financial market architecture, settlement and players, role of CCIL & FIMMDA, Basel III readiness of banks and Financial Stability Report.

Takeaways Imparting knowledge and awareness about the functioning and dynamics of financial markets (money, debt, forex & capital) at senior levels of Government officials and senior bank officials is of utmost importance to improve perceptions and ensure better decision making. FMP program is able to bring expertise from regulators of financial markets to the practitioners in Finance Ministry and Senior Bank Officials. The program was interactive and found to be of immense use by participants in clearing concepts and building awareness of the current issues and challenges. Interaction with IES officers working in various ministries including MOF revealed that exposure to functioning of the financial markets is lacking or sketchy. Comprehensive knowledge will ensure better responses to real life situations in these officials' respective functions. The monetary policy sessions revealed ignorance of even basic concepts of senior IES officials. More sessions on the working of monetary policy, inflation and liquidity management will have to be organized in the next such program.

19. Gyan Sangam 2

Date March 4-5, 2016

Venue Gurgaon

Coverage

The Department of Financial Services, Ministry of Finance, Government of India along with CAFRAL and Indian Banks' Association had organized this program. Mckinsey was the knowledge partner. Working Groups were set-up which brainstormed on detailing-out initiatives relating to the following 5 key issues:

- a) Restructuring and Mergers & Acquisitionsb) NPA management and Recovery
- c) Credit Growth
- d) Technology & Digital and Financial Inclusion
- e) Risk Management

The progress made by banks against the commitments made at Gyan Sangam 2015 was also presented on the second day. A consolidated reform agenda as suggested by the groups of Gyan Sangam 2016 was presented to Mr. Arun Jaitley, Finance Minister. DFS would be coming out with the reform agenda based on the discussions in due course.

20. CABMP Follow Up

- Date March 7-8, 2016
- Venue Goa

Coverage The program was organised to reinforce the learnings from CABMP 2015. Participants of the program made presentations on:

a) How to improve credit risk management practices in banks?

b) Business strategy - how to improve the efficiency and competitiveness of banks under current situation?

Shri Sushil Muhnot, CMD, Bank of Maharashtra was the moderator during the presentations. Apart from these presentations there were discussions on Basel III Framework and Capital Planning and Issues and challenges facing banks –

Technology, Governance and Human Resources.

21. Program for Non Official Directors on the Boards of Public Sector Banks

Date	March 17-18, 2016		
Venue	New Delhi		
Coverage	The program broadly covered Governance issues, Role and Responsibilities of Non-offic		
	Directors of PSBs, Analysis of Financial Statements and IND AS, Financial inclusion and		
	Technology, Recent regulatory developments, Basel III Capital and Liquidity Framework,		
	and NPA management. The keynote address was delivered by Smt. Anjuly Chib Duggal,		
	Secretary, Department of Financial Services, Ministry of Finance.		
Takeaways	The program brought in awareness about the IND AS and its implications in detail. Rights		
	and responsibilities of the independent directors were clarified. Intricacies of bank functioning		
	were discussed which provided inputs as to how a Director can carry out the duties effectively		

and responsibilities of the independent directors were clarified. Intricacies of bank functioning were discussed which provided inputs as to how a Director can carry out the duties effectively. Significance of different committees and their role in shaping the present and future of PSBs, how the Directors should use their expertise to be a part of a committee was explained.

22. The 9th Annual Workshop of the Asian Research Networks, BIS

Date	March 21-22, 2016
Venue	Mumbai
Coverage	The Asian research ne

The Asian research networks aim to facilitate the sharing of policy-relevant research among network members and promote further research on topics of interest to central banks (and supervisory authorities) in the Asia-Pacific region. Two networks were established in January 2007: the Monetary Policy and Exchange Rate Network (MPER Network) and the Financial Markets and Institutions Network (FMI Network).

Annex 2

CAFRAL Team, as on August 1, 2016

- 1. G Gopalakrishna, Director
- 2. Dr. N R Prabhala, Chief Mentor & Head of Research
- 3. Amarendra Mohan, Senior Program Director
- 4. M P Baliga, Senior Program Director
- 5. Ravindra Sangvai, Program Director
- 6. Alka Telang, General Manager (Administration)
- 7. Janaki Ravindran, Administrative Officer
- 8. N P Khemani, PS to Director
- 9. Reeta Bose, Program Officer
- 10. Nimesh Gopiyani, Accounts Officer
- 11. Nidhi Prabhu, Program Officer
- 12. Vinita Jain, Program Officer
- 13. Anup Sonawane, Web Content Manager
- 14. Farida Driver, Program Officer
- 15. Trupti Kanade, Accounts Assistant
- 16. Pushpalata Nadar, Accounts Assistant
- 17. Dr. Nirupama Kulkarni, Research Director
- 18. Dr. Apoorva Javadekar, Research Director
- 19. Dr. Saibal Ghosh, Deputy Adviser (Research)
- 20. Dr. Jugnu Ansari, Assistant Adviser (Research)
- 21. Vasudevan Nair, Administration Officer (Research)
- 22. B Chakraborty, PS to Chief Mentor & Head of Research
- 23. Vinod Dharmarajan, Research Associate
- 24. Ashiana Salian, Research Associate
- 25. Khushboo Khandelwal, Research Associate
- 26. Nishant Vats, Research Associate
- 27. Vishal Vishe, Research Associate
- 28. Sagrika Gogia, Research Associate
- 29. Shalaka Pradhan, Research Associate
- 30. Anushka Mitra, Research Associate
- 31. Neha Gupta, Research Associate
- 32. Abhiprerna Smith, Research Associate



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