

ANNUAL REPORT

2022-2023

Promoting Excellence in Learning and Research



CAFRAL

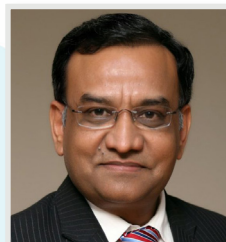
CENTRE FOR ADVANCED FINANCIAL
RESEARCH AND LEARNING

Promoted by Reserve Bank of India

CAFRAL Governing Council



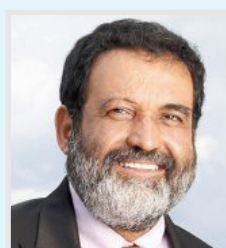
Shri Shaktikanta Das
Chairman, GC &
Governor,
Reserve Bank of India



Shri M K Jain *
Deputy Governor,
Reserve Bank of India



Dr. Michael Debabrata Patra
Deputy Governor,
Reserve Bank of India



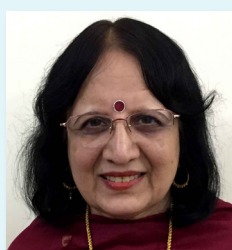
Shri T V Mohandas Pai
Chairman of the Board,
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Dr. Abhiman Das *
Professor of Economics,
Indian Institute
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Director of IIT Patna,
Prof. of CSE, IIT
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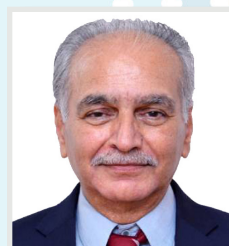
Dr. Pami Dua
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Director, Delhi School
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Prof. Partha Ray
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Dr. Sajjid Z. Chinoy
Managing Director and Chief
India Economist, J.P. Morgan



Dr. Ravindra H. Dholakia
Director, Central Board of RBI



Shri B P Kanungo
Director, CAFRAL

* Shri M K Jain demitted office as Deputy Governor, Reserve Bank of India on June 21, 2023
Dr. Abhiman Das completed his term as GC member on June 25, 2022

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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

AML	Anti-Money Laundering	TBML	Trade Based Money Laundering
ATs	Advanced Technologies	V-CIP	Video based Customer Identification Process
BT	Blockchain Technology	VC	Virtual Conference
CAFRAL	Centre for Advanced Financial Research And Learning	VLP	Virtual Learning Program
CBI	Central Bureau of Investigation	VP	Virtual Program
CBDC	Central Bank Digital Currency	UC	University of California
CDD	Customer Due Diligence	US	United State
CCO	Chief Compliance Officer	WDV	Written Down Value
CGST	Central Goods and Services Tax		
CERSAI	Central Registry of Securitisation Asset Reconstruction and Security Interest of India		
CFT	Countering the Financing of Terrorism		
CHRO	Chief Human Resources Officer		
CISO	Chief Information Security Officer		
CRO	Chief Risk Officer		
CLO	Chief Learning Officer		
DCM	Department of Currency Management		
DL	Digital Lending		
e-KYC	Electronic Know Your Customer		
EDD	Enhanced Due Diligence		
ED	Enforcement Department		
ERP	Enterprise Resource Planning		
FI	Financial Institution		
FIU	Financial Intelligence Unit		
FPO	Farmer Producer Organization		
GAAP	Generally Accepted Accounting Principles in India		
GST	Goods Service Tax		
HR	Human Resource		
ICAI	Institute of Chartered Accountants of India		
IDs	Independent Directors		
IEG	Institute of Economic Growth		
IGIDR	Indira Gandhi Institute of Development Research		
IIM	Indian Institute of Management		
IIT	Indian Institutes of Technology		
IMF	International Monetary Fund		
ISB	Indian School of Business		
ISI	Indian Statistical Institute		
KRIs	Key Risk Indicators		
KPIs	Key Performance Indicators		
KYC	Know Your Customer		
MSME	Micro, Small & Medium Enterprises		
NBFC	Non-Banking Financial Company		
NDF	Non-Deliverable Forward		
NIBM	National Institute of Bank Management		
NISM	National Institute of Securities Markets		
NIPFP	National Institute of Public Finance and Policy		
OIS	Overnight Index Swap		
PMLA	Prevention of Money Laundering Act		
RAs	Research Associates		
RBI	Reserve Bank of India		
RCM	Reverse Charge Mechanism		
REs	Regulated Entities		
SAs	Standards on Auditing		
SDD	Simplified Due Diligence		
SEBI	Securities and Exchange Board of India		
SERI	Social and Environmental Research Institute		
SOC	Security Operations Center		

**DIRECTOR'S
REPORT**
2022-23

Director's Report



During the year, CAFRAL continued to deliver on its dual mandate of achieving excellence in research and learning in banking and finance.

CAFRAL's research wing published six new working papers on diverse areas such as organization and export performance, sovereign default, bank deposit franchise and credit booms, homeownership and segregation, and real-economy impacts of bank branch expansions. CAFRAL researchers also presented in international and domestic conferences as part of CAFRAL's mandate for disseminating research. CAFRAL researchers have also been actively involved in policy work with ongoing projects in currency management. Besides this, CAFRAL hosted 10 external seminars by Indian and international scholars that covered topics such as financial inclusion, informal employment, corporate finance, household finance, banking and business cycles, international trade, firm growth and productivity, digitization and financial inclusion, and capital markets. Presenters included leading researchers from central banks, and domestic and academic research institutions. The research vertical conducted two conferences in the areas of macroeconomics, finance, and FinTech.

CAFRAL's learning team conducted 19 learning programs and organised a talk on CBDC and Crypto Assets by Sir Jon Cunliffe, Deputy Governor, Bank of England, bringing together on one platform, bankers, policy makers, practitioners and other stakeholders from the financial world for deliberating on topical issues in the financial landscape. The team worked towards creating learning opportunities covering more emerging areas impacting the financial sector along with the regular flagship programs. Learning programs were designed and delivered to enhance awareness of top and senior executives in the financial sector in areas including Board Governance and Assurance, Financial Markets, and Risk Management. Contemporary issues of relevance were focussed upon such as Climate Change Risk, Digital Lending, Advanced Technologies in financial intermediation and Cyber Security. A program on Platform Economy, Technology and Finance was conducted for the first time. In each of these programs, there was a significant overlay of regulatory and supervisory aspects. The Flagship programs conducted by CAFRAL included Programs on KYC and AML, Financial Frauds & Forensic Audit, besides conferences for Chief Risk Officers, Chief Economists, Heads of Compliance and CCOs of banks, NBFCs and financial institutions, and a new conference for the Heads of Customer Service in banks.

In the year ahead, CAFRAL will continue to conduct high quality research and learning with a view to achieving excellence in all its endeavours.

B P Kanungo
Director, CAFRAL

CAFRAL Research

Academic Research

A list and abstracts of the papers with completed drafts for the Fiscal Year 2022-2023 is attached in Annex 1. Here, we provide a sampling of research done at CAFRAL this year.

CAFRAL researchers prepared six new working papers, and are actively working on projects that are at an advanced stage in a variety of areas such as household finance, banking, and financial inclusion.

Dr. Kaushalendra Kishore released a working paper titled “Does facetime with the boss matter? Soft information communication and organizational performance”. Dr. Yogeshwar Bharat released a working paper titled “Credit Constraints, Bank Incentives, and Firm Export: Evidence from India”. Dr. Nirvana Mitra released a working paper titled “Political Constraints and Sovereign Default”. Dr. Nirupama Kulkarni released three working papers, titled “Bank Deposit Franchise, Interest Rate Risk, and Credit Booms: Evidence from India”, “Distributional Implications of Bank Branch Expansions: Evidence from India”, and “Homeownership Segregation”.

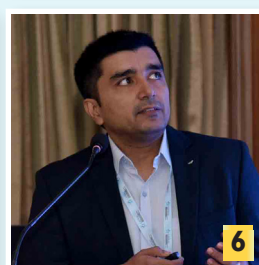
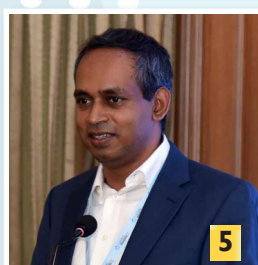
RBI related work

The internal project with the Department of Currency Management (DCM) has concluded and a presentation of the same was made to the RBI top management. The next stage is to implement it as part of DCM’s ongoing currency forecast generation. A joint paper with CAFRAL researchers and DCM team as coauthors is being prepared for the RBI bulletin. Reference is made in this report to the internal project.

Other Outreach Activities - Research Conferences and Programs



The research vertical of CAFRAL conducted two conferences in the Financial Year. It resumed its annual academic research conference, titled **“Financial System and Macroeconomy in Emerging Economies”**. It was held in Taj Mahal Palace, Colaba, Mumbai on December 12-13, 2023. Professor Alan M Taylor, Distinguished Professor of Finance and Economics, University of California at Davis, delivered keynote address on the negative impacts of prolonged easy monetary policy. The two-day flagship event was attended by more than 60 researchers from across the globe, officials from the Reserve Bank of India, members from the Indian banking industry, and



1. B P Kanungo, Director, CAFRAL; 2. Prof. Alan M Taylor, UC Davis; 3. Dr. Nirupama Kulkarni, Senior Research Director, CAFRAL; 4. Dr. Gautham Udupa, Research Director, CAFRAL; 5. GV Nadhanael, Reserve Bank of India; 6. Nishant Kashyap, ISB Hyderabad; 7. Nikhil Patel, IMF; 8. Arpita Chatterjee, IIM Bangalore



graduate students.

The theme for the first day was macroeconomics and a number of topics were covered under this umbrella. The papers look at the consequences of US market power in issuing debt, trade-offs from issuing foreign debt in local currency versus dollars, dollarization of assets in emerging markets, on the central bank's commitment to inflation targeting, and there was a paper that looks at how the recruiters are responding to higher job applications and the effect on wages. Overall, the macro papers touched upon topics that are highly relevant to emerging markets, which is a goal of this conference.

For the second day, the theme was finance and there were two papers that look at climate finance, an issue that



1. Dr. Vidhya Sounderajan, IIT Bombay; 2. Husnu Dalgic, University of Mannheim ; 3. Aeimit Lakdawala, Wake Forest University
4. Sanjay Singh, San Francisco Fed and UC Davis; 5. Emanuela Benincasa, University of Zurich; 6. Dr. Nirvana Mitra, Research Director, CAFRAL; 7. CAFRAL Research Team



is gaining traction by the year. One of these papers looks at bank lending rate and economic activity responses to natural calamities in India and the other climate-finance paper looks at banks' lending portfolio response to climate-related regulations. The other papers on finance covered topics such as evaluating the effectiveness of prompt-corrective-action policy of the RBI, banks' responses to import competition, and the role of state-owned-banks in allocating deposits and credit after financial crises. The conference is expected to be held every year going forward.

The research vertical also co-organized an **International Research Conference with IIM-Ahmedabad on "FinTech: Innovation, Inclusion and Regulation"**. The conference was held on March 10-11, 2023 at IIM-Ahmedabad campus. It brought together researchers in the field of FinTech and policy makers, and saw a wide participation from the industry.

The first keynote address was delivered by Shri. M. K. Jain, Deputy Governor, Reserve Bank of India. The second keynote speaker was Prof. Thorsten Beck, Director at Florence School of Banking and Finance, and Professor of Financial Stability at the European University Institute. The topic of his talk was "Digitalization and Finance: Opportunities and Challenges." The conference covered a broad range of topics related to FinTech including regulation, consumer protection, adoption, and its role in financial inclusion.

1. Inauguration of the international research conference on FinTech at IIMA campus; 2. B P Kanungo, Director, CAFRAL ; 3. M K Jain, Deputy Governor, Reserve Bank of India; 4. Panel discussion; 5. Dr. Nirupama Kulkarni, Senior Research Director, CAFRAL

Publications

Dr. Nirupama Kulkarni's paper titled "Homeownership Segregation" was published at the Journal of Monetary Economics in its July 2022 issue.

Research Seminars

The full listed of seminars hosted by CAFRAL is in Annex 3. CAFRAL hosted 10 seminars and webinars and invited leading researchers from academic institutions worldwide (National University of Singapore, University of British Columbia), presenters from other central banks such as Bank of Italy, Reserve Bank of India, Federal Reserve and researchers from domestic institutions such as IIT Kanpur and ISB Hyderabad. The seminars covered a variety of interesting topics such financial inclusion, informal employment, corporate finance, household finance, banking and business cycles, international trade, firm growth and productivity, digitization and financial inclusion, and capital markets.

Presentations to industry and academic institutions.

In line with the goal of increasing CAFRAL's visibility, CAFRAL researchers were successful in disseminating their research in leading domestic and international conferences, seminars, as well as in presenting and participating in events organized by industry bodies. The full list of presentations is in Annex 2.

CAFRAL researchers made a total of 18 conference presentations during the Financial Year. Dr. Nirupama Kulkarni presented her papers at IMF-Bank of Morocco conference, CAFRAL annual conference, NIBM Pune seminar series, NIPFP credit markets workshop, Ashoka University seminar series, and Econometric Society Asian conference. Dr. Kaushalendra Kishore presented his papers in SERI conference and at ISI Delhi annual conference. Dr. Gautham Udupa presented his papers at IGIDR Mumbai seminar series, IIM-Bangalore seminar series, Midwest Macroeconomics Conference and was invited as a discussant at the SERI conference. Dr. Nirvana Mitra presented his papers at Ashoka University seminar series and IIM-Bangalore seminar series. Dr. Yogeshwar Bharat presented his papers at ISI Delhi annual conference and Shiv Nadar University seminar series.

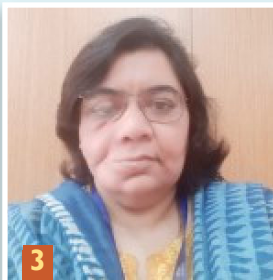
Dr. Nirupama Kulkarni was invited as Distinguished Speaker at Yes Securities Benchmark 2023, organized by SP Jain Institute and held on April 12, 2023. She presented "How to Conduct Practitioner Research?" Dr. Kulkarni also served as a jury member in the Fourth SEBI NISM Research Conference held from 2-3 March 2023 and was invited as an academic expert for the Department of Economic Affairs for the Physical Workshop (Private Investments in Manufacturing, Housing, Real Estate, and Services) organized by IIT Guwahati on December 1, 2022. She was also invited as a Distinguished Speaker at O.P. Jindal Global University at the Global Finance Conclave 2023 on February 18, 2023. The title of the talk was "State-owned banks: Challenges and the way forward".

Human Capital

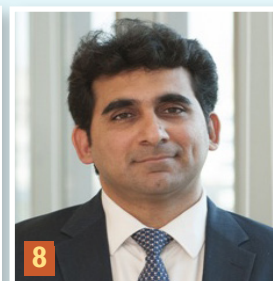
RAs who completed our program continued to see success in terms of securing admission to reputed post-graduate programs. The 2022-2023 cohort had offers from PhD programs at University of Minnesota, University of Maryland, University of Texas, among other reputed ones. CAFRAL completed recruitment cycle for Research Directors and has recruited two new Research Directors.

CAFRAL Learning

Virtual Program on Recent Developments in Financial Markets Regulations: In this Virtual Learning Program (VLP), participants gained insights into the rationale of regulatory changes which have taken place in recent times relating to financial markets. They were also provided an opportunity to interact with regulators and understand the nuanced aspects of the regulations. Topics discussed in the VLP were: Recent Developments in the Financial Markets – A Regulatory Perspective; Financial Markets Regulations – Practitioners' View; New Products & Evolving Regulations – Recent Changes and Implications



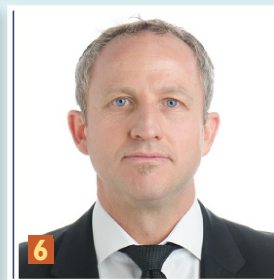
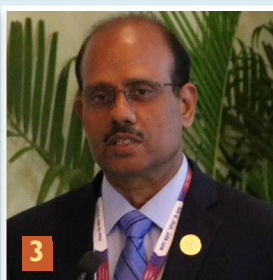
Virtual Conference of Chief Economists - Emerging Macroeconomic, Geopolitical and Environmental Challenges: This maiden one-day CAFRAL conference provided Chief Economists and their senior team members a platform to meet and review the post pandemic macroeconomic, geopolitical and environmental developments. The delegates discussed the potential impact these developments, including possible changes in regulatory standards, could have on the strategy and operation of financial intermediaries. Alongside, discussions also explored how and how far the increasing pace of digitalization, digital transformation and use of advanced technologies in the financial sector would change the nature of financial intermediation, particularly banking. The discussions in this conference was led by top professionals with expertise on the issues and rich domain experience. The VC covered topics such as Looking Through the Glassdoor: Challenges for Central Banking in the Post Pandemic World; Decoding Geopolitical and Macroeconomic Landscape: Outlook 2022-23; Evolution of Platform Economies and Changing Nature of Financial Intermediation; Economic Outcomes, Markets and Policies: What is Certain About Uncertainty?; The Global Economic Backdrop: Is This Time Different?; Climate Change, Transition to Low-Carbon Economy and Financial Regulation.



Program on Climate Change, Transition Risk and Sustainable Finance: This program brought together regulators and financial intermediaries on one platform to undertake a quick review of the evolving climate change risk facing financial intermediaries both from micro prudential and macro prudential perspectives. The program covered topics such as Climate Change Risk and Sustainable Finance: Emerging Issues in Regulation; Green Finance: Opportunities and Risks; Climate Change and Transition to a Green Economy; Green Transition Risks to

1. Indrani Banerjee, Additional Director, CAFRAL; 2. R Subramanian, Executive Director, Reserve Bank of India; 3. Dimple Bhandia, Chief General Manager, Financial Markets Regulation Department, Reserve Bank of India; 4. Dr. Barendra Kumar Bhoi, RBI Chair Professor, Utkal University 5. Neeraj Gambhir, Group Executive – Treasury, Markets & Wholesale Banking Products, Axis Bank (Speakers during Program on Recent Developments in Financial Markets Regulations) 6. Dr. Mridul K. Sagar, Executive Director, Reserve Bank of India; 7. Dr. Ajit Ranade, President and Chief Economist, Aditya Birla Group; 8. Dr. Sajjid Z. Chinoy, Managing Director and Chief India Economist, J.P. Morgan; 9. Pierpaolo Grippa, Senior Economist, International Monetary Fund, Washington DC.; 10. Dr. Vijay Singh Shekhawat, Chief General Manager, Department of Supervision, RBI (Speakers during Conference of Chief Economists)

Indian Banks; Recent Indian Experiences in Sustainable and Green Finance; Strategies for Resilient, Sustainable and Green Asset Portfolios. In the session on strategies, different aspects such as portfolio rebalancing, incremental growth strategy and green washing were discussed. The program provided an enhanced understanding of Climate Change,



Transition Risk and Sustainable Finance and current scenarios both from global and domestic perspectives. It discussed the possible methods/approaches to quantify/measure climate risk and initiatives by stakeholders to address the risks. The deliberations on regulatory and business options for management of risks, adoption of suitable business models and implementation of processes for sustainable and green finance was appreciated by the participants.

Virtual Conference of CROs and Heads of Risk Department “Cyber Risk & Resilience: New Frontiers”::

This virtual conference discussed recent developments in the area of cyber-attacks and cyber risk from the perspectives of strategy, governance and technology with a view to capacity building at senior and top executive levels. It deliberated on the need to move from cyber risk management to cyber resilience strategy. Topics deliberated upon in the Conference were Cyber Risk & Resilience – Supervisory Outlook; New Frontiers of Data Protection and Cyber Risk; Review of Recent Cases of Cyber Attacks; Cyber Risk and Financial Stability – Regulatory Approaches and Supervisory Practices; Enterprise Approach to Cyber Risk Management; Cyber Attacks, Cyber Security and Cyber Frauds – Nuances of Laws and Legal Framework.

Program on Know Your Customer (KYC) and Anti Money Laundering (AML): This program sensitized senior and middle level officers of Regulated Entities (REs) about the risk and strategic issues surrounding KYC framework and AML measures. The program also provided participants with updates on changes in e KYC and AML regulations after a quick review of some of the basic and original prescriptions on the relevant regulations. The program covered topics such as RBI Guidelines on KYC and AML Measures- Recent Developments; KYC and AML Framework: Risks and

1. Group photo during Program on Climate Change, Transition Risk and Sustainable Finance; 2. Saurav Sinha, Executive Director, Reserve Bank of India (RBI); 3. Swaminathan Janakiraman, Managing Director, State Bank of India; 4. Dr. Richard Damania, Chief Economist, Sustainable Development, World Bank (Speakers during Program on Climate Change, Transition Risk and Sustainable Finance); 5. Dr. Pavan Duggal, Founder & Chairman, International Commission on Cyber Security Law; President Cyber Laws.Net; 6. Chris Wilson, Former Senior Financial Expert, International Monetary Fund; (Speakers during Conference of CROs and Heads of Risk Department)

Strategies; Supervisory Observations and Expectations on KYC, AML and CFT Compliance; Transaction Monitoring and Beyond; The Central KYC Registry and KYC Compliance by the REs: Developments, Issues and Challenges; Beyond KYC: Need for KYU in Cyber Age; KYC Compliance , AML & CFT Measures and Combating Financial Crime-



FIU Perspective; Enterprise-wide KYC & AML Risk Management; Testing, Validation and Optimisation in AML and CFT Compliance: Role of RegTechs; Trade Based Money Laundering (TBML); How to Curb the Misuse of Banking System in Money Laundering and Financial Crime; Transforming Approaches to AML and Financial Crimes. There was an experience sharing session in which the participants discussed their experiences regarding e-KYC, Video based Customer Identification Process (V-CIP), Customer Due Diligence (CDD), Simplified Due Diligence (SDD) and Enhanced Due Diligence (EDD) etc.

Virtual Program on Platform Economy, Technology and Finance: This program was for emerging leaders in the financial sector to enhance their learning about transformational developments in these areas in a holistic manner. The participants listened to and interacted with thought leaders from the academia, technology space and financial sector. The objective of this program was to equip the participants with the basics as well as the deeper dimensions of these developments, with particular reference to financial intermediation and regulation. Topics deliberated upon in the Conference were Evolution of Platform Economy; Platformization of Financial Ecosystem; Platforms in Financial System: Conduct and Governance Issues and Platforms: Solutions, Designs and Architectures.

Conference of Heads of Compliance and CCOs:

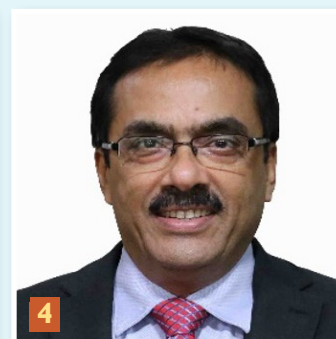
During the conference, there were deliberations on various aspects against the backdrop of the emerging compliance



1. Group Photo during Program on Know Your Customer (KYC) and Anti Money Laundering (AML), 2. M Rajeshwar Rao, Deputy Governor, Reserve Bank of India during Conference of CCOs 3. Group photo during Conference of Heads of Compliance and CCOs

landscape and in the context of specific regulatory changes which have taken place or likely to take place soon. Topics discussed in the conference were Building a Stronger Compliance Culture; Compliance, Accountability and Enforcement; Compliance Culture – A Strategic Perspective; Insights on Regulatory Compliance; Strengthening Compliance Function Against Financial Crime.

Virtual Program on Digital Lending: The program discussed how innovative Digital Lending strategies, new business models, advanced technologies and new Digital Lending players could eventually cause sharp and dramatic rise of share of Digital Lending in total credit from business, technology, governance and regulatory perspectives. The program also



deliberated on regulatory approach towards Digital Lending and upcoming regulations & guidance in relation to the Digital Lending ecosystem. The program covered topics such as Digital Lending – Paths to Regulatory Policy Landing; Digital Lending & Digital Lending Ecosystem: Evolving Regulatory Approach and New Regulatory Framework; Digital Lending: Bank Perspective and Digital Lending: Fintech Perspective.

Program on Advanced Technologies in Financial Intermediation: This one-day program aimed at providing financial sector leaders with a rounded view of Advanced Technologies (ATs) from technological, business, strategic and



governance perspectives. It provided a conceptual insight into the ways several ATs are radically changing the face of financial intermediation and the structure of the financial system. It highlighted the potential that advanced technologies have, to radically alter the structure and function of the internal control processes within organizations. The program also discussed, from governance perspective, how advanced technologies could usefully and efficiently connect the external oversight mechanism to the internal controls & assurance functions in financial intermediaries. Topics deliberated in the conference were Advanced Technologies: What is in Store for Financial Intermediation; Advanced Technologies in Financial Intermediation: Today and Tomorrow; Blockchain Technology (BT) and its Adoption in Financial Sector:

1. J K Dash, Executive Director, Reserve Bank of India; 2. Manoranjan Mishra, Chief General Manager, Department of Regulation, Reserve Bank of India; 3. Oliver Bossert, Partner, McKinsey, Frankfurt; 4. Pramod Panda, Senior Program Director, CAFRAL, 5. Group Photo during Program on Advanced Technologies in Financial Intermediation (Speakers during Virtual Program on Digital Lending and Virtual Program on Platform Economy, Technology and Finance)

Concepts and Applications; Use of BT in Finance and Accounting: An Assurance 3 Perspective; Adoption of Advanced Technologies in Finance.

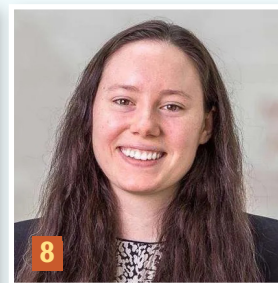
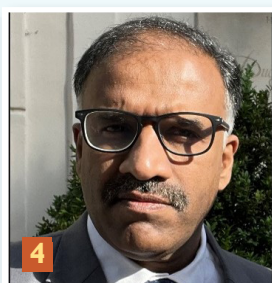
Virtual Program on Lending to Agro - MSMEs: During this Virtual Program, speakers discussed and explored the business case for lending profitably to Agro-MSMEs as they hold promise for the development of the rural, semi urban and even urban economies in an integrated, sustainable and impactful manner, while significantly contributing to the bottom lines of financial intermediaries. The program also covered policy & regulatory developments and innovation in the Agro-MSME sector with inputs on the technical aspects of Agro-MSME financing. Topics covered in this VP



1. Anil Sharma, Executive Director, Reserve Bank of India
2. Hemendra Mathur Co-founder, ThinkAg & Venture Partner, Bharat Innovation Fund
3. Anil Bhavnani, Sr Executive Vice President and National Rural Banking Head, HDFC Bank (Speakers during Program on Lending to Agro MSMEs)

were Financing Agro-MSMEs: Agri Business Models and Regulatory Developments; Financing Super Value Chains: Linkages with Agri-entrepreneurs, Agritechs and Fintechs/ Agri-fintech; Lending to Agro-MSMEs Linked to Urban Farming, Impact Agriculture and Social Enterprises; Bank Lending to FPOs; Green & Climate Smart Finance Strategy and Lending to Agro-MSMEs; Co-lending Model for Agro-MSME Financing.

Virtual Conference on Climate Change Risk and Regulatory Developments: This one-day long VC sought to dive deeper into climate risk related financial risks and their management, particularly in the context of the recent RBI Discussion Paper on Climate Risk and Sustainable Finance. It sought to contribute more substantively towards capacity



building among senior and top executives of all RBI Regulated Entities in the matter of climate risk management within their current risk management framework. Topics deliberated in the Conference were Climate-Related Financial Risk: Evolving Situation; Climate Risk for Banks, NBFCs and FIs: An Overview; Managing Climate Related Financial Risk; Climate Risk and Financial Risk Management in Financial Institutions; Climate Risk Regulation: What the Future Holds; Climate Credit Analytics; Mainstreaming Climate Action within Financial Institutions: Cross Country Good Practices.

Virtual Conference on Financial Markets in India: What the Future Holds: This Virtual Conference provided updates to the delegates on the emerging trends in financial markets and regulations. It sought to provide a platform to the top executives of banks, NBFCs and FIs to interact with speakers and amongst themselves to discuss possible policy measures/initiatives which could potentially make the markets more resilient and efficient, particularly in the

4. Sunil T S Nair, Chief General Manager, Reserve Bank of India; 5. Dhruva Purkayastha, Director (India), Climate Policy Initiative & Director, US-India Clean Energy Finance Facility; 6. Roopa Satish, Country Head Sustainable Banking and CSR, IndusInd Bank; 7. Emma Renu Dalhuijsen, Green & Climate Risk Specialist, World Bank; 8. Michaela Mei Dolk, Financial Sector Specialist, World Bank (Speakers during Virtual Conference on Climate Change Risk and Regulatory Developments)

current volatile and uncertain global situation. Topics covered in the VC were Recent Regulatory Developments in Financial Markets – Challenges and Opportunities; Contemporary Trends and Issues in Financial Markets – Practitioner's Perspective; Hedging of Financial Risks: Credit Default Swaps; Rupee Trade: Recent RBI Measures and Rupee Trade – Way forward.

Program on Financial Frauds & Forensic Audit: The program discussed the importance of enhancing the fraud risk management systems of banks, financial institutions and NBFCs, including the need for having an enhanced framework for early warning signals, strengthening their fraud governance and response systems and having a dedicated Market Intelligence Unit for frauds. The participants were also sensitized on the need for having a sound forensic audit that would help in identifying control failures, uncover trails and trace the funds besides gathering legally tenable evidence to achieve financial resolution and prosecution.



1. D. C. Jain, Additional Director, Central Bureau of Investigation (CBI),
2. Mehul Thakkar, Founder, Awesome Analytics
3. Jyoti Kumar Pandey, Senior Program Director, CAFRAL (Speakers during Program on Financial Frauds & Forensic Audit)

Topics covered in this program were Overview of Financial Frauds, Financial Crimes and Investigation; Fraud Monitoring & Mitigation Systems, Detection and Reporting; Frauds in Loan Accounts – Regulatory Perspective; Enhanced Fraud Warning Systems; Digital and Cyber Frauds – Tools, Techniques, Prevention, Detection and Investigation; Trade Based Fraud and Mitigating Money Laundering; Evidence Collection, Maintenance of Record and Legal Resolutions – Case Studies and Discussion; Forensic Audit – Processes, Techniques, Tools and Approaches; Technological Tools for Forensic Audit and Solutions; Transaction Monitoring: Use of Analytics, Artificial Intelligence and Machine Learning; Financial Statement Analysis for Fraud Detection and Due Diligence Analysis.

Program on Governance and Assurance for Directors on Boards of Banks, FIs and NBFCs: This program sought to enhance board effectiveness through inputs on policy and practical aspects of board governance and functioning, delving deep into some of the core and strategic issues that should engage the Board's attention. It offered opportunities to interact with regulators and industry leaders on challenges and remedial measures on Governance and



4. Group photo during Program on Governance and Assurance for Directors on Boards of Banks, FIs and NBFCs;

Assurance issues. Topics deliberated upon in the program were Governance Practices: Looking Beyond Regulation; Risk Based Supervision-Assessment of Governance Standards and Assurance Functions; Corporate Governance



Framework in Banks, FIs and NBFCs- Role of Independent Directors; Ethical Performance and Value Oriented Decision making; Strategic Issues & Behavioural Dynamics in Board Functioning and Governance Challenges in use of Advanced Technologies in Financial Intermediation.

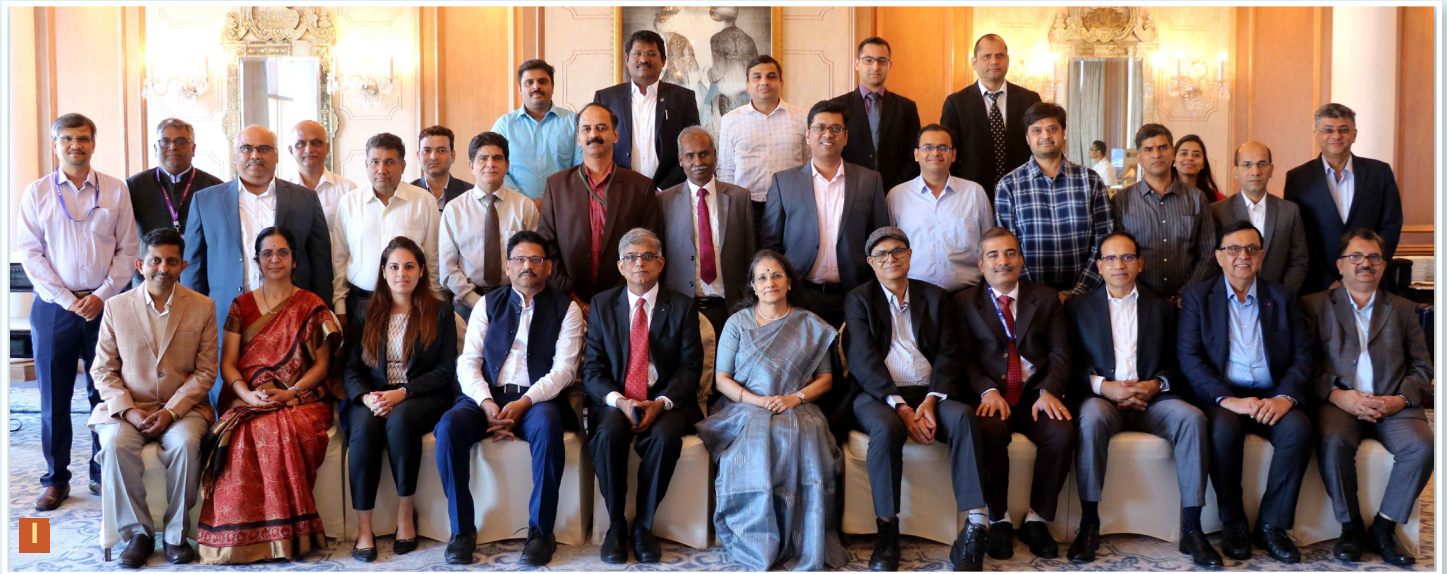
Conference of Heads of Chief Human Resources Officers (CHROs) and Chief Learning Officers (CLOs) of Banks, Financial Institutions (FIs) and NBFCs: The Conference deliberated on the new trends and provided valuable inputs on the new learning challenges and requirements. It provided an opportunity for interaction and ideation with HR experts on recent trends and developments in the capacity building space, relevant key issues and on emerging HR requirements. Topics covered in this conference were Human Capital in Transformed Financial Services – A Side View; Emerging Trends in HR and The Way Forward; Managing HR in Current Times: Issues & Strategies; Competencies and Skill Sets Required for a Future Ready Workforce; CAFRAL Learning Programs: Approaches and Strategies; Creating a Future



1. L-R: Indrani Banerjee, Additional Director, CAFRAL and J K Dash, Executive Director, Reserve Bank of India;
2. G Mahalingam, Former Whole Time Director, SEBI ; 3. Dr. Anil Khandelwal, Former Chairman, Bank of Baroda (Speakers during Program on Governance and Assurance for Directors on Boards of Banks, FIs and NBFCs and Conference of CHROs and CLOs)
4. Dinesh Kumar Khara, Chairman, State Bank of India, 2. Group photo during Conference of Heads of Chief Human Resources Officers (CHROs) and Chief Learning Officers (CLOs) of Banks, Financial Institutions (FIs) and NBFCs.

Ready Workforce - Need for Skilling and Reskilling; Bridging Learning Gaps & Meeting Emerging Needs.

Program on Cyber Risk & Resilience: Evolving Paradigm: This one-day program contributed to capacity building at senior & top executive level, providing insights into the emerging trends in cyber-defence from the perspectives of strategy, governance and technology. Recent trends in cyber risk & resilience were discussed to facilitate improved cyber-defence mechanisms. Topics deliberated in the program were Cyber Risk & Resilience: Emerging Threats and Regulatory Expectations; Data Protection and Privacy: Cyber Risk; Responding and Managing Cyber Attack & Cyber



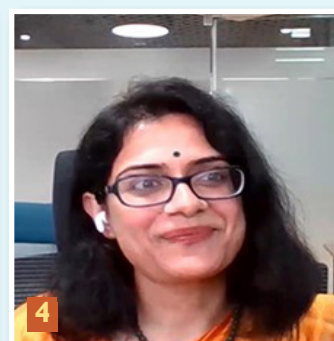
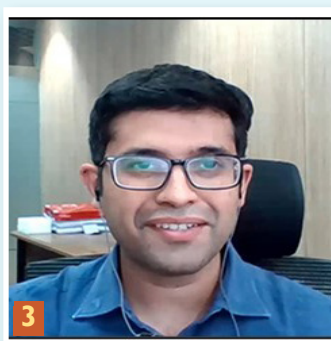
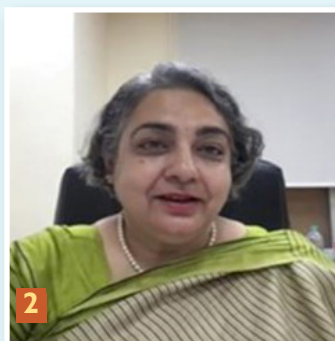
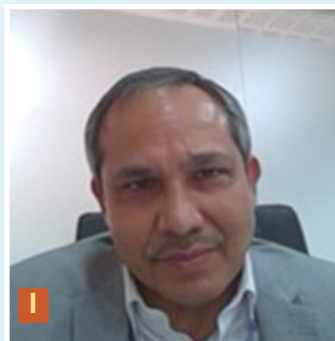
1. Group photo during Program on Cyber Risk & Resilience: Evolving Paradigm

Crisis Management Plan; Cybercrime and Trends New Tools for Combat: Developing a Robust Threat Intelligence; Managing Cyber Risk: Audit Perspective & Approach.

Virtual Learning Program on Issues in Digital Lending: This half day virtual learning program provided a perspective on the digital lending ecosystem in the country and the regulatory approach. The experience of digital lending practitioners, both from banks & fintechs, in respect of business strategies, products and processes were also discussed. Topics covered in this virtual program were Digital Lending - Regulatory Perspective; Digital Lending Ecosystem: Issues and Concerns; Digital Lending by Banks: Emerging Areas and Opportunities; Digital Lending: Fintech Perspective.

Virtual Conference of Heads of Customer Service: This one-day virtual conference sensitised senior executives of Banks / NBFCs on the need to ensure high standards of customer service and to be well conversant with the institutional and technological framework required for enhanced customer service, customer protection and grievance redressal. Topics covered in this conference were Customer Service in Changing Times: Expectation from Regulated Entities; Approach to Consumer Protection & Grievance Redressal Framework – International and Domestic Perspective; Managing Customer Expectations: Practitioner's Perspective; Leveraging Technology for Customer Service & Safeguards; Bridging the Gaps in Service Delivery: Case Studies; Customer Protection – Emerging Trends.

Virtual Program on Know Your Customer (KYC) and Anti Money Laundering (AML): This virtual program provided an overview and an enhanced understanding of the KYC framework including measures to address the various risks associated with KYC non-compliance. The program also provided updates on changes in the KYC and AML regulations including the requisite management oversight, systems and controls, segregation of duties, training and other related matters. Topics deliberated in the virtual program were KYC and AML Compliance – Expectations from Bank Boards; KYC and AML Measures - Regulatory Perspective and Recent Developments; Supervisory Observations and Expectations on KYC, AML and CFT Compliance; Transaction Monitoring and Beyond; KYC and AML implementation - FIU Perspective; Trade Based Money Laundering.



Talk on CBDC and Crypto Assets by Sir Jon Cunliffe, Deputy Governor, Bank of England: CAFRAL invited Sir Jon Cunliffe, Deputy Governor, Bank of England, to deliver a talk on CBDC and Crypto Assets. The talk was attended by top and senior executives from the Reserve Bank of India and the banking industry



1. Santosh K Panigrahy, Chief General Manager, Reserve Bank of India; 2. Monisha Chakraborty, Chief General Manager, Reserve Bank of India; 3. Salil Bijur, Joint Director, Financial Intelligence Unit-India; 4. Ashima Batra, Additional Director, Financial Intelligence Unit-India. (Speakers during Virtual Program on Know Your Customer (KYC) and Anti Money Laundering (AML)) ; 5. T Rabi Sankar, Deputy Governor, Reserve Bank of India,; 6. Sir Jon Cunliffe, Deputy Governor, Bank of England



1. L-R: Jyoti Kumar Pandey, Senior Program Director, CAFRAL, Sir Jon Cunliffe, Deputy Governor, Bank of England, T Rabi Sankar, Deputy Governor, Reserve Bank of India, B.P. Kanungo, Director, CAFRAL and Indrani Banerjee, Additional Director, CAFRAL

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

Administration and HR

CAFRAL welcomed Dr. Sajjid Z. Chinoy, Managing Director and Chief India Economist, J.P. Morgan and Dr. Ravindra H. Dholakia, Director, Central Board of RBI as its new Governing Council Members. During the year, many new persons joined CAFRAL, while a few left CAFRAL on completing their term or to pursue other opportunities. As on July 31, 2023, CAFRAL has 41 staff on contract and an office boy who has been outsourced from an agency. CAFRAL welcomed four new Research Directors, two Senior Program Directors, one Private Secretary to Director and seventeen Research Associates. However, as on 31st July fifteen Research Associates are there in CAFRAL.

The names of CAFRAL staff are given in Annex 3.

HR Initiatives

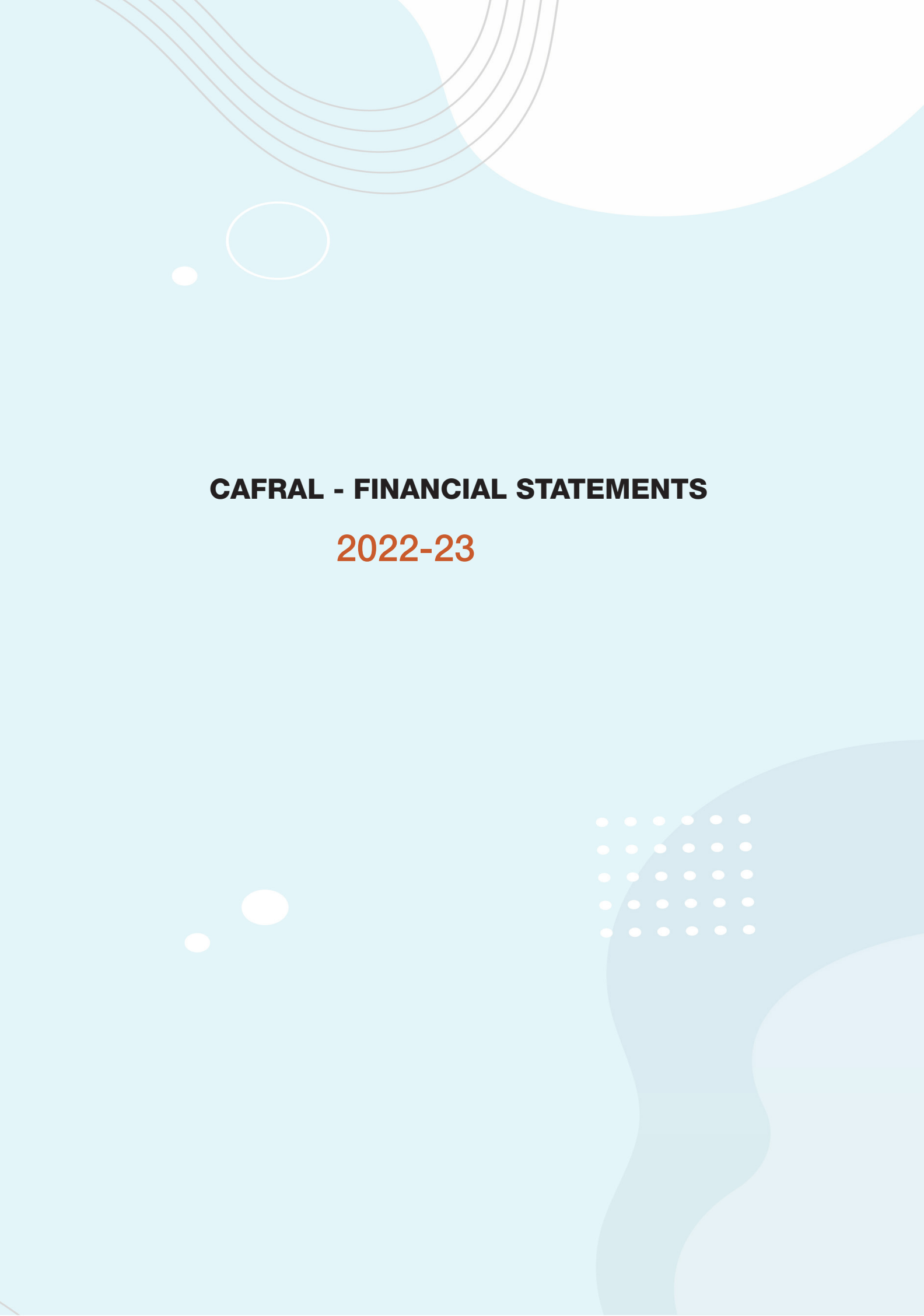
An Internal Committee on Prevention of Sexual Harassment of Women at Work Places is in place and the meetings of the Committee are being held regularly. The last meeting of the Committee was held on June 16, 2023. These meetings have brought awareness and sensitized the staff about the legal provisions of the Sexual Harassment of Women at Workplaces (Prevention, Prohibition and Redressal) Act, 2013.

Acknowledgements

We would like to acknowledge the valuable guidance given to us by Governor & Chairman, CAFRAL and the other Governing Council members including Shri M K Jain who demitted office as Deputy Governor, Reserve Bank of India on June 21, 2023 and Dr. Abhiman Das who completed his term as GC member on June 25, 2022. CAFRAL has received immense benefit from each one of them and is now poised to further develop its research and learning due to the solid foundation given by them in CAFRAL. 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 would 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 Kailash Chand Jain & Co, our internal auditors, M/s Chhajer & Doshi, our statutory auditors, and other service providers.

B P Kanungo
Director, CAFRAL



CAFRAL - FINANCIAL STATEMENTS

2022-23

Independent Auditor's Report

**The Members of
CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING
[Registration No. F-33749(MUM)]**

1. Opinion

We have audited the financial statements of Centre for Advanced Financial Research And Learning ("the trust") which comprises the Balance Sheet as at 31st March, 2023, the Income & Expenditure Account for the year ended and a summary of the significant accounting policies and other Explanatory Information ("financial statements").

In our opinion and to the best of our information and according to the explanations given to us, the financial statements read along with notes to accounts give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting policies adopted by the Trust;

- (a) in the case of the Balance Sheet, of the state of affairs of the Trust as at 31st March, 2023;
- (b) in the case of the Income and Expenditure Account, for the year ended 31st March, 2023.

2. Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by ICAI. Our responsibilities under those standards are further described in the Auditor's Report.

We are independent of the Trust in accordance with the ethical requirements that are relevant to our audit of the financial statements and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion

3. Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the aforesaid policies, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Trust's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the

going concern basis of accounting unless management either intends to liquidate the Trust or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Trust's financial reporting process.

4. Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Trust's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Trust to cease to continue as a going concern.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

5. Other Matter

5.1 As required by the Maharashtra Public Trust Act 1950 (the Act) and the Rules made there under and in our opinion and to the best of our information and according to the explanations given to us, we report as under:

- a) The Accounts are maintained regularly and in accordance with the provisions of the Act and Rules.
- b) The receipts and disbursements are properly and correctly shown in the accounts.
- c) There is a cash balance as on 31/03/2023 of Rs. 10,248/-.
- d) All books, deeds, accounts, vouchers or other documents or records as required were produced before us.
- e) Register of movable and immovable properties was updated till 31st March 2023.
- f) The Trustees / managers or other person required to appear before us did so and furnished the necessary information required by us.
- g) Based on the information and explanation provided to us, no property or funds of the Trust were applied for any object or purpose other than the object or purpose of the Trust.
- h) There are no sundry receivable outstanding for more than one year
- i) Based on the information and explanation provided to us, The Trust has not carried out any repairs or construction involving expenditure more than Rs. 5,000/-.
- j) The moneys of the Trust have not been invested contrary to the provisions of section 35 of the Act.
- k) Based on the information and explanation provided to us, we have not come across any alienation of the immovable properties contrary the provisions of Section 36 of the Act.
- l) We have not come across any special matter that requires to be brought to the specific notice.
- m) So far as it is ascertainable from the books of accounts and according to the information and explanation given to us there were no cases of irregular, illegal or improper expenditure or failure or omission to recover such money or other property thereof.
- n) Budget has been filed in the form as provided by Rule 16-A.
- o) Information to be submitted by the Auditor along with Audit Report under sub-section (1) of section 34 of the Maharashtra Public Trusts Act are attached herewith as Annexure to this report.

5.2 With regard to rules and regulations of the Trust, in our opinion and to the best of our information and according to the explanations given to us, we further report as under:

- a) The number of Members as required by the Rules and Regulations of the Trust is maintained.
- b) Meetings of Board of Governors have been held during the year as required by Para 12(a) of Rules and regulations of Trust.
- c) The minute books of the proceedings of the meetings are maintained.
- d) None of the member of the Board of Governors has any interest in the investments of the Trust.
- e) None of the member of the Board of Governors is a debtor or creditor of the Trust.
- f) No irregularities were pointed out by the auditors in the accounts of the previous year.
- g) There is no special matter which the auditor may think fit or necessary to bring to the notice of the Deputy or Assistant Charity Commissioner

Place: Mumbai

Date: November 1, 2023

For CHHAJED & DOSHI
Chartered Accountants
[FRN No: 101794W]

CA M.P. Chhajed
Partner
M. No. 049357
UDIN:

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

The Maharashtra Public Trusts Act, 1950

Registration No. F - 33749 (Mum)

CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

Balance Sheet as at: 31st March, 2023

FUNDS & LIABILITIES	As at 31 st March 2023	As at 31 st March 2022	
	₹	₹	
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	1,91,13,934	1,78,84,229	
Liabilities (As per Schedule "A")	18,18,781	18,95,041	
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	2,59,32,715	2,47,79,270	

Significant Accounting Policies & Notes to Accounts form an integral part of Financial Statements- Schedule F

As per our report of even date

For CHHAJED & DOSHI
Chartered Accountants
[FRN No: 101794W]

CA M.P. Chhajed
Partner
M. No. 049357

Place: Mumbai
Date: November 1, 2023

	PROPERTY & ASSETS	As at 31 st March 2023	As at 31 st March 2022
		₹	₹
	Immovable Properties: (At Cost)	NIL	NIL
	Investments:	NIL	NIL
	Movable Properties (Schedule B):		
	Cost	2,31,20,876	3,30,22,674
	Less: Depreciation up to date	2,00,22,349	3,04,37,147
		30,98,527	25,85,527
	Unsecured and Good		
	Sundry Debtors	3,73,600	11,22,640
	Advances:-	66,08,637	37,06,286
	(As per Schedule "C")		
	Income Outstanding:		
	- Interest Accrued on Fixed Deposit	5,20,981	2,62,468
	Cash And Bank Balances:		
	(a) Cash on Hand	10,248	7,871
	(b) In Saving Account with Bank	1,03,20,722	1,20,94,478
	(b) In Fixed Deposit with Bank	50,00,000	50,00,000
	TOTAL	2,59,32,715	2,47,79,270

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: November 1, 2023

SCHEDULE - IX [(Vide Rule 17 (1))]**CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING
Income and Expenditure Account for the year ended 31 March, 2023**

Expenditure	For the Year Ended 31 st March 2023	For the Year Ended 31 st March 2022	Income	For the Year Ended 31 st March 2023	For the Year Ended 31 st March 2022
	₹	₹		₹	₹
To Expenditure in respect of Properties	NIL	NIL	By Training Programme Fees Recovered	1,17,58,000	1,24,72,000
To Establishment Expenses (As per Schedule "D")	12,67,210	7,92,086	By Bank Interest	8,47,876	6,69,484
To Audit Fees	1,73,250	1,57,500	By Donations in Cash or Kind	NIL	NIL
To Amount written off	NIL	NIL	By Grants	NIL	NIL
(a) Bad Debts					
(b) Loan Scholarship			By Interest on Income Tax Refund	66,358	1,38,740
(c) Irrecoverable Rents					
(d) Other Items					
To Short Provision for Income Taxes of earlier year	NIL	NIL	By Misc Income	NIL	29,913
To Contribution and Fees	NIL	NIL	By Deficit for the year reimbursed by RBI	8,01,70,296	4,85,37,609
To Depreciation (As per Schedule "B")	15,23,309	18,30,440			
To Expenditure on the object of the trust			By Transfer from Reserve	NIL	NIL
- Educational (As per Schedule "E")	8,98,78,761	5,90,67,720			
To Surplus carried over to Balance Sheet					
Total	9,28,42,530	6,18,47,746	Total	9,28,42,530	6,18,47,746

Significant Accounting Policies & Notes to Accounts form an integral part of Financial Statements- Schedule F

As per our report of even date

CENTRE FOR ADVANCED FINANCIAL RESEARCH AND LEARNING

For CHHAJED & DOSHI
CHARTERED ACCOUNTANTS
FIRM REG. NO. 101794WCA M.P. Chhajed
Partner
M. No. 049357Place: Mumbai
Date: November 1, 2023

TRUSTEE

TRUSTEE

TRUSTEE

Place: Mumbai
Date: November 1, 2023

Schedule A: Liabilities

Particulars	As on 31 st March 2023	As on 31 st March 2022
	₹	₹
Expenses Payable	14,82,367	18,38,137
Liability for Tax Deducted at Source	5,948	27,824
Advance from Debtors	20,000	0
GST liability (RCM)	2,18,126	0
Retention Money	85,540	23,680
Profession Tax Payable	6,800	5,400
Total	18,18,781	18,95,041

Schedule B: Movable Properties

Name of the Asset	Rate of Depreciation	COST				
		As on 1 st April 2022	Additions	Deletions	As on 31 st March 2023	
		₹	₹	₹	₹	
Tangible						
1. Computer Hardware Including Printers	33.33%	1,00,17,160	14,85,781	30,46,370	84,56,571	
2. Other Electrical Equipment	20.00%	72,74,860	1,59,953	15,35,527	58,99,286	
3. Furniture	20.00%	16,10,303	1,46,244	1,65,059	15,91,488	
Intangible						
Computer Software	33.33%	1,41,20,351	2,65,332	72,12,152	71,73,531	
Total		3,30,22,674	20,57,310	1,19,59,108	2,31,20,876	
Previous Year		3,12,12,625	19,57,944	1,47,895	3,30,22,674	

Schedule C: Advances

Particulars	As on 31 st March 2023	As on 31 st March 2022
	₹	₹
GST Input Credit	26,09,781	10,66,082
Tax Deducted at Source	4,74,644	10,68,568
Advance to Creditors	13,566	-
Deposit	14,000	14,000
Other Receivables	24,944	43
Prepaid Expenses	19,99,946	15,57,593
Deposit paid to Service Tax Authorities for Appeal	14,71,756	-
Total	66,08,637	37,06,286

	DEPRECIATION				Written Down Value (WDV)	
	As on 1 st April 2022	During the Year	Deletions	As on 31 st March 2023	As on 31 st March 2023	As on 31 st March 2022
	₹	₹	₹	₹	₹	₹
	89,40,810	7,85,693	30,46,370	66,80,133	17,76,438	10,76,350
	67,79,249	1,65,401	15,14,526	54,30,124	4,69,162	4,95,611
	15,45,347	61,313	1,65,059	14,41,601	1,49,887	64,956
	1,31,71,741	5,10,902	72,12,152	64,70,491	7,03,040	9,48,610
	3,04,37,147	15,23,309	1,19,38,107	2,00,22,349	30,98,527	25,85,527
	2,87,19,934	18,30,440	1,13,227	3,04,37,147	25,85,527	24,92,691

Schedule D: Establishment Expenses

Particulars	For the Year Ended 31 st March 2023	For the Year Ended 31 st March 2022
	₹	₹
Administrative Expenses	7,90,867	4,25,576
Sitting Fees paid to Council Members	2,40,000	1,60,000
Facilities Management Expenses	2,36,343	2,06,510
Total	12,67,210	7,92,086

Schedule E: Expenditure on Object of the Trust - Educational

Particulars	For the Year Ended 31 st March 2023			
	Learning	Research	Total	
	₹	₹	₹	
Administrative Expenses	16,35,651	18,02,877	34,38,528	
Program/Seminar/Conference Expenses	25,29,189	8,25,000	33,54,189	
Honorarium	7,68,445	2,75,000	10,43,445	
Data Service	26,499	57,68,267	57,94,766	
Conference Registration Fees	-	64,954	64,954	
Audio Visual Charges	4,34,137	1,25,856	5,59,993	
Printing and Stationery	2,17,918	42,663	2,60,581	
Professional Fees	5,000	22,500	27,500	
Salaries and Allowances*	2,15,56,703	4,71,07,316	6,86,64,019	
Travel and Stay Expenses (Visiting Faculty/Guest Faculty/Mentor/Researchers/Participants)	2,79,807	39,56,572	42,36,379	
Travelling and Halting Expenses (staff)	76,722	7,20,302	7,97,024	
Website Maintenance Charges	8,17,598	8,17,598	16,35,196	
Foreign Exchange Loss	342	1,845	2,187	
Total	2,83,48,011	6,15,30,750	8,98,78,761	

* Salaries and Allowances includes remuneration to Director of Rs.81.98 Lakhs for FY 2022-23 (FY 2021-22 - Rs.42.44 Lakhs) who is also one of the trustees of the trust.

	For the Year Ended 31 st March 2022		
	Learning	Research	Total
	₹	₹	₹
	16,49,302	15,04,159	31,53,461
	5,48,891	-	5,48,891
	6,45,912	-	6,45,912
	23,988	52,94,553	53,18,541
	-	21,919	21,919
	-	-	-
	45,511	13,004	58,515
	3,00,900	-	3,00,900
	1,64,52,033	3,09,88,594	4,74,40,627
	-	-	-
	1,14,102	10,018	1,24,120
	7,27,397	7,27,397	14,54,794
	40	-	40
	2,05,08,076	3,85,59,644	5,90,67,720

Centre for Advanced Financial Research and Learning

Schedule F

Notes to Accounts annexed to and forming part of the Balance Sheet as on 31st March, 2023 and Income and Expenditure Account for the year ended 31st March, 2023.

A. OVERVIEW OF THE ORGANISATION:

Centre for Advanced Financial Research And Learning (CAFRAL) is a trust registered as a Public Charitable Trust under The Maharashtra Public Trusts Act, 1950. The trust was formed on 28th March 2007 and has following registrations:

- As a Society vide Registration no. 826, 2007 GBBSD.
- As a Trust vide Registration no. F-33749 (Mumbai).
- Registration under Section 12AA of Income Tax Act, 1961 vide Unique Registration no AABAC0190PE20128.

B. SIGNIFICANT ACCOUNTING POLICIES:

1. Basis of preparation of financial statement:

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

The presentation of financial statements is in conformity with generally accepted accounting principles, required estimates and assumptions to be made that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities as 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 recognized as income on completion of the programme. Expenses on outsourced research projects are recognized on completion of the project and submission of final report.

All direct allocable expenses of Learning and Research are charged to the respective heads. In case of the Administrative/Common Expenses incurred by the Trust are distributed in the ratio of 40:40: 20 between Learning, Research and Establishment Expenses.

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 over the useful life of the assets. Depreciation is charged on monthly pro rata basis from the month of capitalization in respect of additions during the 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.C.2.

6 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.

7 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 recognised nor disclosed in the balance sheet.

C. NOTES FORMING PART OF THE ACCOUNTS:

1. Contingent Liability not provided for :

The Additional Commissioner of CGST Mumbai has issued the order dated August 30, 2022 and raised the demand of Rs. 1,87,81,140/- for deficit reimbursed by the Reserve Bank of India from FY 2012-13 to FY 2017-18 (upto June 2017). Subsequently, the Department issued a corrigendum dated December 19, 2022 and increased the demand to Rs.1,96,23,416/-. CAFRAL had filed an appeal against order on November 02, 2022 and subsequently filed the revised appeal on January 16, 2023 for increased in the demand. Based on the legal opinion the management is hopeful that the demand would be cancelled in the appeal.

2. Related Party Disclosure :

Name of the related parties and description of relationship :

1. Key Management Personnel - Shri Shaktikanta Das, Chairman
2. Key Management Personnel - Shri Mahesh Kumar Jain, Member
3. Key Management Personnel - Dr. Michael Debabrata Patra, Member
4. Key Management Personnel - Shri. T. V. Mohandas Pai, Member
5. Key Management Personnel - Dr. Abhiman Das, Member
6. Key Management Personnel - Dr. Pami Dua, Member
7. Key Management Personnel - Dr. Pushpak Bhattacharyya, Member
8. Key Management Personnel - Prof. Partha Ray, Member
9. Key Management Personnel – Dr. Sajjid Z Chinoy, Member
10. Key Management Personnel – Dr. Ravindra H. Dholakia, Member
11. Key Management Personnel - Shri B. P. Kanungo, Director & Member

Details of Related Parties transactions are as under:

Particulars	Key Management Personnel	
	2022-23	2021-22
	₹	₹
Remuneration	81,98,335	42,44,447
Governing Council Fees	2,40,000	1,60,000
Travel related expenses of Members	2,07,455	Nil

3. Previous year figures have been regrouped/recast wherever necessary.

Signature to Notes A to F

For Chhajed & Doshi
Chartered Accountants
FRN No: 101794W

(CA M. P. Chhajed)
Partner
M No.: 049357

Place: Mumbai
Date: November 1, 2023

For Centre for Advanced Financial Research And Learning

(Trustee)

(Trustee)

(Trustee)

Place: Mumbai
Date: November 1, 2023

ANNEXES

Annex 1

Working/published Papers on CAFRAL Website during FY 2022-23 (April 1, 2022 - March 31, 2023)

1. **Distributional Implications of Bank Branch Expansions: Evidence from India**
Author: Nirupama Kulkarni, Kanika Mahajan, S. K. Ritadhi
Date: January 24, 2023
Published: CAFRAL Website
Abstract:
 Does financial deepening affect capital investment by credit constrained firms? We examine this question by exploiting a nationwide branch expansion policy in India that incentivized banks to open branches in “underbanked” districts i.e., where the ex-ante bank branch density was less than the national district level average. Extending a regression discontinuity design, we find large increases in both capital expenditures and credit growth undertaken by manufacturing establishments in underbanked districts following the policy intervention. The increase in capital spending is driven by small and young establishments, which are also the most likely to be credit constrained. Two key channels explain our findings: increased physical proximity of lenders to borrowers and the comparative advantage of select banks in lending to small manufacturing units. Our results show that financial deepening can aid in the relaxation of credit constraints in developing economies with imperfect capital and credit markets.

2. **Bank Deposit Franchise, Interest Rate Risk, and Credit Booms: Evidence from India**
Author: Nirupama Kulkarni, Akshat Singh
Date: December 27, 2022
Published: CAFRAL Website
Abstract:
 Deposit franchise allows banks to pay deposit rates that are low and insensitive to market interest rates. However, maintaining this franchise requires high fixed costs. In order to hedge against interest rate risk arising from these fixed costs, banks with strong deposit franchises seek to reduce sensitivity of their interest income to market rates by holding longer-term fixed-rate assets. We provide evidence for this theory from India, and show that this behaviour can help partially rationalise India’s infrastructure credit boom of the 2000s. During this period, banks with stronger deposit franchise switched from long-term government securities to long-term fixed rate loans, particularly in the infrastructure sector. We highlight that rising bond yields and associated mark to market losses on bond holdings may have exacerbated the switch towards risky infrastructure sector, eventually resulting in high non-performing loans. Overall, while maturity transformation allows banks to shield their net interest margins from interest rate risk, we propose that market incompleteness in developing economies may lead to a trade-off between stabilising net interest margin and default risk.

3. **Political Constraints and Sovereign Default**
Author: Marina Azzimonti, Nirvana Mitra
Date: December 2, 2022
Published: CAFRAL Website
Abstract:
 We study how political constraints, characterized by the degree of flexibility to choose fiscal policy, affect the probability of sovereign default. To that end, we relax the assumption that policymakers always repay their debt in the dynamic model of fiscal policy developed by Battaglini and Coate (2008). In our setup, legislators bargain over taxes, general spending, debt repayment, and a local public good that can be targeted to the region they represent. Under tighter political constraints, more legislators have veto power, implying that local public goods need to be provided to a larger number of regions. The resources that are freed after a default have to be shared with a higher number of individuals, which reduces the benefits from defaulting in per-capita terms. This lowers the incentive to default compared to the case with lax political constraints. The model is calibrated to Argentina and the results conform to robust empirical evidence. An event study for the 2001/2002 sovereign debt crisis shows that political constraints had an important role in the buildup that led to the crisis. .

4. **Credit Constraints, Bank Incentives, and Firm Export: Evidence from India**

Author: Yogeshwar Bharat, Raoul Minetti

Date: November 24, 2022

Published: CAFRAL Website

Abstract:

The aim of this paper is to investigate the impact of firms' financial fragility and banks incentives on firms' decision to exit the export market. We draw information from the Prowess database on a large sample of Indian businesses between 2002 and 2017 and we obtain bank data from the Reserve Bank of India. Estimation results indicate that more indebted firms are associated with a high probability of exiting the export market. However, when we focus only on bank borrowing, we find that firms with high levels of bank debt (over total assets) are characterized by a lower probability of abandoning the export sector. By interacting our measures of financial fragility with a state-owned bank dummy, we also show that highly indebted firms borrowing from state-owned banks are associated with an even lower probability of exiting the export market. Finally, when we employ the change in the priority sector regulation to test the causality of our results and avoid endogeneity concerns, we provide evidence that firms borrowing from banks that were missing their priority sector targets are characterized by a significantly lower probability of abandoning foreign markets. The study did not find any significant effect of policy change on firms trying to enter the export market. Using an indirect definition of productivity showed that the policy change did not affect the productivity of the leveraged firms.

5. **Does facetime with the boss matter? Soft information communication and organizational performance**

Author: Samarth Gupta, Kaushalendra Kishore

Date: November 24, 2022

Published: CAFRAL Website

Abstract:

Can better communication with the boss (she) improve the performance of the employees (he), even if he has authority for making decisions? The term boss, in our paper, refers to the person who decides the remuneration of the employee based on his performance. An employee's performance depends not only on his effort but also on unpredictable factors beyond his control, which may be soft information. Communicating this soft information through face-to-face interaction would allow the employee to explain why he may have performed poorly (or well). Using the informativeness principle, the boss can offer more efficient contracts ex ante which share more risk and elicit higher level of effort by the employees. Using granular within bank data, we exploit exogenous change in the ability of bank managers to communicate with their boss and show that better communication improves their productivity. The results in the paper suggest that there may be an alternative complementary explanation (compared to Stein (2002)) for why small banks are more efficient at lending to small businesses.

6. **Homeownership Segregation**

Author: Nirupama Kulkarni, Ulrike Malmendier

Date: May 10, 2022

Published: CAFRAL Website and Journal of Monetary Economics in its July 2022 issue

Abstract:

Homeownership is considered an essential part of the "American Dream" and forms the foundation of upward mobility. We show that the upward mobility of children from low-income families is not predicted by homeownership rates, but by homeownership segregation. Higher residential segregation between homeowners and renters predicts lower upward mobility of children from low-income families, while not affecting high-income families. We hypothesize the 1968 Fair Housing Act preserved homeownership segregation in CZs since the 1970s, and feature more land-use regulation even today. Channels mediating the effect of homeownership on upward mobility include income segregation, racial segregation, school segregation, and commuting times.

External Presentations by CAFRAL Researchers

1. Dr Nirupama Kulkarni was invited as Distinguished Speaker at Yes Securities Benchmark 2023, organized by SP Jain Institute and held on April 12, 2023. She presented “How to Conduct Practitioner Research?”
2. Dr. Nirupama Kulkarni served as a jury member in the Fourth SEBI NISM Research Conference held from 2-3 March 2023.
3. Dr. Yogeshwar Bharat was invited as a speaker to an international conference hosted by Patliputra University, Patna, on “Engage, Encourage and Empower Youth and Women for an Equitable World”. The topic that was presented was “Women and Trade: Where India Stands”. The presentation took place on March 20th, 2023.
4. Dr. Nirvana Mitra was invited to present his paper titled “Sovereign Debt Crises, Tax Smoothing, and Quality of Government” at IIM Bangalore on the 9th of March, 2023
5. Dr. Nirvana Mitra presented his paper titled “Sovereign Debt Crises, Tax Smoothing, and Quality of Government” at the Delhi Macro Workshop organized by The Institute of Economic Growth (IEG) on the 16th and 17th of March 2023
6. Dr. Nirupama Kulkarni was invited as a Distinguished Speaker at O.P. Jindal Global University at the Global Finance Conclave 2023 on February 18, 2023. The title of the talk was “State-owned banks: Challenges and the way forward”
7. Dr. Kulkarni presented her paper “Bank Deposit Franchise, Interest Rate Risk, and Credit Booms: Evidence from India” at the Asian Econometric Society, Mumbai held between January 10-12, 2023.
8. Dr. Kulkarni was invited as a seminar speaker at Ashoka University on February 1, 2023. She presented her research on mortgage policies and racial segregation.
9. Dr. Yogeshwar Bharat presented his paper “Credit Constraints, Bank Incentive and Firm Exports: Evidence from India” at Shiv Nadar University, Institution of Eminence on February 24, 2023
10. Dr. Nirupama Kulkarni, Senior Research Director was a discussant at NIPFP “Credit Markets Workshop” on November 3, 2022.
11. Dr. Nirupama Kulkarni was invited as an academic expert for the Department of Economic Affairs for the Physical Workshop (Private Investments in Manufacturing, Housing, Real Estate, and Services) organized by IIT Guwahati on December 1, 2022.
12. Dr. Kulkarni presented her paper: Zombie Lending in India at NIBM Seminar Series on December 9, 2022.
13. Dr. Kulkarni presented her paper: Deposit and Credit Reallocation in a Banking Panic: The Role of State-Owned Banks at the CAFRAL Annual Conference, which was held on December 12-13, 2022.
14. Dr. Gautham Udupa, Research Director presented his paper titled “Food, Fuel, and Facts: Distributional Effects of External Shocks” at the Midwest Macroeconomics Conference in Dallas, Texas, USA on November 12, 2022,
15. Dr. Gautham Udupa presented his paper “Food, Fuel, and Facts: Distributional Effects of External Shocks” at the 17th Annual Conference on Economic Growth and Development at the Indian Statistical Institute (Delhi) on December 21, 2022
16. Dr. Kaushalendra Kishore, Research Director presented his paper: Does facetime with the boss matter? Soft information communication and organizational performance on December 21, 2022, at the 17th Annual Conference on Economic Growth and Development, ISI Delhi.

17. Dr. Yogeshwar Bharat, Research Director presented his Paper: Credit Constraints, Bank Incentives, and Firm Exports: Evidence from India on December 21, 2022, at the 17th Annual Conference on Economic Growth and Development, ISI Delhi.
18. Dr. Nirvana Mitra, Research Director presented his paper titled “Political Constraints and Sovereign Default” at Ashoka University on December 7, 2022.
19. Dr. Gautham Udupa presented his paper titled “Food, Fuel, and Facts: Distributional Effects of External Shocks” at the Indira Gandhi Institute for Development Research (IGIDR), Bombay on September 21, 2022.
20. Dr. Gautham Udupa, Research Director, CAFRAL presented a paper titled “Growth Miracles and Consumer Bankruptcy Policy” at the Indian Institute of Management - Bangalore on July 6, 2022.
21. Dr. Gautham Udupa discussed a paper titled “Granular Origins of Co-movement in Fluctuations” at the SERI conference on July 23, 2022.
22. Dr. Kaushalendra Kishore, Research Director, CAFRAL presented a paper titled “Does Facetime With The Boss Matter? Soft Information Communication And Organizational Performance” at the SERI conference on July 24, 2022. The SERI conference was held at the Indian School of Business in Hyderabad.
23. Dr. Nirupama Kulkarni, Research Director, CAFRAL presented her paper “The Unholy Trinity: regulatory Forbearance, Government Banks, and Zombie firms” at a conference co-hosted by IMF and Bank of Morocco 4 titled “Transformational Recovery: Seizing Opportunities from the Crisis” held between June 23-24, 2022 in Rabat, Morocco

Seminars/Webinars

1. Do Price Points Contribute to Price Stickiness? Evidence from Price Setting in a Cash-Dominant Economy by Dr. G.V. Nadhanael, DEPR, Reserve Bank of India on March 28, 2023
2. Rewarding Failure by Dr. Nishant Ravi, ISB on November 2, 2022
3. Insurance Cyclicalities by Dr. Anand Chopra, IIT Kanpur on November 30, 2022
4. Bank Information Production Over the Business Cycle by Dr. Cooper Howes, Federal Reserve Board of Governors on September 14, 2022
5. Foreign Inputs, Import Intermediaries and Aggregate Productivity by Dr. Kunal Dasgupta, Associate professor, IIM Bangalore on October 12, 2022
6. Productivity and Output Quality of Multi-Product Firms by Dr. Arpita Chatterjee, Associate professor, IIM Bangalore on October 19, 2022
7. Competitive Disclosure of Information to a Rationally Inattentive Agent by Dr. Vasudha Jain, IIT Kanpur on July 13, 2022.
8. “Broadband and Bank Intermediation” by Dr. Enrico Sette, Bank of Italy on May 12, 2022
9. What Happens When Ratings Shopping is Visible? Evidence from Unaccepted Ratings Disclosure by Dr. Rajesh Vijayaraghavan, University of British Columbia on May 18, 2022
10. Capital Quality, Productivity, and Financial Constraints: Evidence from India by Dr. Poorya Kabir, National University of Singapore on June 8, 2022

Learning programs during FY 2022-23 (April 1, 2022 - March 31, 2023)

1. Virtual Learning Program on Recent Developments in Financial Markets Regulations

Date April 22, 2022

Coverage Recent Developments in the Financial Markets – A Regulatory Perspective; Financial Markets Regulations – Practitioners’ View; New Products & Evolving Regulations – Recent Changes and Implications.

Takaways

The conference served as a platform for comprehensive discussions on various facets of financial markets, presenting both the current panorama and potential future trajectories. One notable highlight was the adept presentation of recent regulatory changes that have expanded market access for active risk management, notably through instruments like NDF/OIS. With regulators setting the stage, the onus now falls on banks to advance this agenda in collaboration with them. Another key aspect discussed was the integration of offshore elements and the proposal for simplified hedging guidelines, both of which hold potential to reshape the landscape.

2. Virtual Conference of Chief Economists - Emerging Macroeconomic, Geopolitical and Environmental Challenges: Strategies for Financial Intermediaries

Date April 28, 2022

Coverage Looking Through the Glassdoor: Challenges for Central Banking in the Post-Pandemic World; Decoding Geopolitical and Macroeconomic Landscape: Outlook 2022-23; Evolution of Platform Economies and Changing Nature of Financial Intermediation; Economic Outcomes, Markets and Policies: What is Certain About Uncertainty; The Global Economic Backdrop: Is This Time Different; Climate Change, Transition to Low-Carbon Economy and Financial Regulation.

Takaways

A very well-rounded program that covered key economic issues including macro-economics, climate change, financial intermediation, digital transformation, policy challenges in the platform economy, better corporate balance sheet post pandemic, and global risks. The program had cross pollination of thoughts between economists, helping them to clarify thoughts and understanding, especially on the global landscape. The discussions also explored how far the increasing pace of digitalisation, digital transformation and use of advanced technologies in the financial sector would change the nature of financial intermediation, particularly banking.

3. Program on Climate Change, Transition Risk and Sustainable Finance

Date May 27, 2022

Coverage Climate Change Risk and Sustainable Finance: Emerging Issues in Regulation; Green Finance: Opportunities and Risks; Climate Change and Transition to a Green Economy; Green Transition Risks to Indian Banks; Recent Indian Experiences in Sustainable and Green Finance; Strategies for Resilient, Sustainable and Green Asset Portfolios - Portfolio Rebalancing, Incremental Growth Strategy, Staying away from greenwashing.

Takaways

The program provided an enhanced understanding of Climate Change, Transition Risk and Sustainable Finance and current scenarios both from global and domestic perspectives. The discussions on how the industry is approaching assessment of climate risk, possible methods/approaches to quantify/measure climate risk, challenges for banks, realization about climate risk and initiatives by stakeholders to address risks and act with the urgency required were all very useful.

4. **CAFRAL Virtual Conference of CROs and Heads of Risk Management; Cyber Risk and resilience: New Frontiers**

Date May 30, 2022

Coverage Cyber Risk & Resilience – Supervisory Outlook; New Frontiers of Data Protection and Cyber Risk; Review of Recent Cases of Cyber Attacks; Cyber Risk and Financial Stability – Regulatory Approaches and Supervisory Practices; Enterprise Approach to Cyber Risk Management-Reimagining risks, attacks and defences, Enterprise wide and beyond enterprise; Risk Culture and Security Culture; Cyber Attacks, Cyber Security and Cyber Frauds – Nuances of Laws and Legal Framework.

Takeaways

The conference added greatly to the awareness of issues on Cyber Security and Cyber Risks, clearly bringing out the importance of cyber resilience and cyber immunity. The responsibilities of regulated entities and how they have to ensure end to end control of cyber risk in organizations were key takeaways, as also the need for continuous education and awareness for not only bankers but also customers and third-party service providers. The conference was an enriching experience and was well organised.

5. **Program on Know Your Customer (KYC) and Anti Money Laundering (AML)**

Date June 20-21, 2022

Coverage RBI Guidelines on KYC and AML Measures- Recent Developments; Experience sharing - e-KYC, Video based Customer Identification Process (V-CIP), Customer Due Diligence (CDD) – Simplified Due Diligence (SDD) - Enhanced Due Diligence (EDD); KYC and AML Framework: Risks and Strategies; Supervisory Observations and Expectations on KYC, AML and CFT Compliance; Transaction Monitoring and Beyond; The Central KYC Registry and KYC Compliance by the REs: Developments, Issues and Challenges; Beyond KYC: Need for KYU in Cyber Age; KYC Compliance , AML & CFT Measures and Combating Financial Crime- FIU Perspective; Enterprise-wide KYC & AML Risk Management; Testing, Validation and Optimisation in AML and CFT Compliance: Role of RegTechs; Trade Based Money Laundering; How to Curb the Misuse of Banking System in Money Laundering and Financial Crime; Transforming Approaches to AML and Financial Crimes.

Takeaways

The program provided a comprehensive understanding of the subject. It emphasized on the importance of AML/CFT architecture. The perspectives of RBI (Regulation and Supervision), FIU-IND, ED, CERSAI were critical inputs in enriching understanding of the issues. The insights into transactions alerts to decide on suspicious transactions, their reporting and escalations were useful. The program discussed the need for Know Your User (KYU) in the cyber age, requirement to think beyond transaction monitoring, and how several aspects of Trade Based Money Laundering will be helpful in scaling up abilities and skills to meet the challenges. Red flag indicators for TBML and other red flag indicators to review suspicious transactions in digital space were also very useful.

6. **Virtual Learning Program on Platform Economy, Technology and Finance**

Date June 28, 2022

Coverage Evolution of Platform Economy: An Overview; Platformization of Financial Ecosystem; Platforms in Financial System: Conduct and Governance Issues; Platforms: Solutions, Designs and Architectures.

Takeaways

The program provided a roadmap for the future of the Indian financial ecosystem. Discussions focused on the different digital platforms available for banks and tie up with digital platforms/fintechs. The Virtual Learning Program also deliberated on the role of platforms in financing and how governance is a must. The discussions were all very informative, adding value to the understanding of the participants.

7. **Conference of CCOs and Heads of Compliance**

Date August 31, 2021

Coverage Building a Stronger Compliance Culture; Compliance, Accountability and Enforcement; Compliance Culture – A Strategic Perspective; Insights on Regulatory Compliance; Strengthening Compliance

Function Against Financial Crime

Takeaways

The program focused on building a good compliance culture in organizations. The program also provided an insight into the regulator's perspective of compliance culture in the light of evolving regulations. The conference highlighted the importance and the need for evaluating performance of the top management on compliance indicators, especially since business considerations often overshadow compliance requirements. The 3 pillars of compliance were one of the key takeaways from the conference. Overall, the coverage was exhaustive and the conference was an enriching experience.

8. Virtual Program on Digital Lending

Date September 16, 2021

Coverage Digital Lending – Paths to Regulatory Policy Landing; Digital Lending & Digital Lending Ecosystem: Evolving Regulatory Approach and New Regulatory Framework; Digital Lending: Bank Perspective; Digital Lending: Fintech Perspective.

Takeaways

The program provided insights into the legal and regulatory framework for Digital Lending. It also helped in understanding of thought process of regulators, practitioners' perspectives and the way forward. The program provided good details about digital lending and explained how digital lending is changing the lending ecosystem. The program was extremely useful and proved to be a great learning experience. It provided insight into new trends and the need for data analytics in the matter of digital lending. The program included topics which were very apt and resonated perfectly with the theme of the program. It provided a lot of clarification on new regulatory guidelines. Topics were very insightful and provided holistic inputs.

9. Program on Advanced Technologies in Financial Intermediation

Date August 25, 2022

Coverage Advanced Technologies: What is in Store for Financial Intermediation; Advanced Technologies in Financial Intermediation: Today and Tomorrow; Blockchain Technology (BT) and its Adoption in Financial Sector: Concepts and Applications; Use of BT in Finance and Accounting: An Assurance Perspective; Adoption of Advanced Technologies in Financial Intermediation: Governance and Regulatory Challenges; RegTech, SupTech and Embedded Supervision.

Takeaways

The program was well-structured, where the role and importance of advanced technologies and assessment of cost and benefit of blockchain technology were discussed. Discussion on how lack of trained resources is a hindrance to scaling up blockchain in India was instructive. The program provided the regulator's view on advanced technologies and its use in the audit functions of the organisation. The keynote address gave bankers an idea, inter alia, of how white label branches can play a crucial role in the digitalized banking industry.

10. Virtual Program on Lending to Agro-MSMEs

Date September 23, 2022

Coverage Financing Agro-MSMEs: Agri Business Models and Regulatory Developments; Financing Super Value Chains: Linkages with Agri-entrepreneurs, Agritechs and Fintechs/ Agri-fintech; Lending to Agro-MSMEs Linked to Urban Farming, Impact Agriculture and Social Enterprises; Bank Lending to FPOs; Green & Climate Smart Finance Strategy and Lending to Agro-MSMEs; Co-lending Model for Agro-MSME Financing.

Takeaways

The program was very useful. Recent developments in Agri-tech and experience from the stakeholders threw light on Agro-MSME lending. Participants stated that learning about new avenues, products and choices for Agro-MSME lending was quite helpful.

11. **Virtual Conference on Climate Change Risk and Regulatory Developments**

Date October 14, 2022

Coverage Climate-Related Financial Risk: Evolving Situation; Climate Risk for Banks, NBFCs and FIs: An Overview; Managing Climate Related Financial Risk; Climate Risk and Financial Risk Management in Financial Institutions; Climate Risk Regulation: What the Future Holds; Climate Credit Analytics; Mainstreaming Climate Action within Financial Institutions: Cross Country Good Practices.

Takeaways

The conference facilitated understanding of Climate Change Risk and how Banks, FIs and NBFCs need to adopt practices for mitigating climate change risk. It emphasized that climate risk is not a future agenda and those who take the lead will definitely be ahead in mitigation of this risk. The VC also helped participants understand the transition risk and mitigation and adaptation of financing opportunities for renewable energy, electric vehicles, etc. Prospective guidance from regulators and best practices in other banks were deliberated upon intensively, adding value to the understanding of the participants.

12. **Virtual Conference on Financial Markets in India: What the Future Holds**

Date October 19, 2022

Coverage Recent Regulatory Developments in Financial Markets – Challenges and Opportunities; Contemporary Trends and Issues in Financial Markets – Practitioner's Perspective; Hedging of Financial Risks: Credit Default Swaps; Rupee Trade: Recent RBI Measures; Rupee Trade – Way forward.

Takeaways

The virtual conference provided good insights into the current financial market landscape. The conference deliberated on credit default swaps architecture, futuristic developments in financial markets; updates on the trends and changes in global trade scenario, among others. It also discussed how crucial it is for India to look at innovative ways to boost our forex reserves as well as to deepen our bond markets. The conference provided a better understanding of futuristic developments in financial markets, new challenges in the global economy and the way forward.

13. **Program on Financial Frauds & Forensic Audit**

Date December 21-22, 2022

Coverage Overview of Financial Frauds, Financial Crimes and Investigation; Fraud Monitoring & Mitigation Systems, Detection and Reporting; Frauds in Loan Accounts – Regulatory Perspective; Enhanced Fraud Warning Systems; Digital and Cyber Frauds – Tools, Techniques, Prevention, Detection and Investigation; Trade Based Fraud and Mitigating Money Laundering; Evidence Collection, Maintenance of Record and Legal Resolutions – Case Studies and Discussion; Forensic Audit – Processes, Techniques, Tools and Approaches; Technological Tools for Forensic Audit and Solutions; Transaction Monitoring: Use of Analytics, Artificial Intelligence and Machine Learning; Financial Statement Analysis for Fraud Detection and Due Diligence Analysis.

Takeaways

The program deliberated on the factors contributing to financial frauds and the regulatory prescription for its mitigation and reporting. It provided insight into methods for fraud prevention, detection and response, and use of artificial intelligence and machine learning to track frauds. The program also discussed the modus operandi of fraudulent transactions through the use of money mules and using cross border trade transactions for laundering and siphoning of funds. Another key takeaway of the program was a perspective on the approach of forensic audit that should comprise of strong ERP systems for data collection & monitoring of transactions including related party transactions, having strong documentation process and ensuring timely compliance. Further, various speakers highlighted that a significant gap between occurrence and reporting of frauds results in poor resolution of such cases. The program provided good insight into the latest audit tools, trends and techniques.

14. **Program on Governance and Assurance for Directors on Boards of Banks, Financial Institutions and NBFCs**

Date January 05, 2023

Coverage Governance Practices: Looking Beyond Regulation; Risk Based Supervision-Assessment of Governance Standards and Assurance Functions; Corporate Governance Framework in Banks, FIs and NBFCs- Role of Independent Directors; Ethical Performance and Value Oriented Decision-making; Strategic Issues & Behavioral Dynamics in Board Functioning; Governance Challenges in use of Advanced Technologies in Financial Intermediation

Takeaways:

The program provided an insight into the roles and responsibilities of the Independent Directors (IDs). It highlighted the need for clear communication and effective management of board dynamics. It also stressed on the need to have alternate views and raise questions on topics which require further clarifications and transparency. The program emphasized on recording the board minutes reflecting the processes, discussions and alternative views. It also emphasized on the importance of ethical behavior amongst its members and protecting the interest of minority shareholders along with maintaining the financial integrity with fearless intervention. An exclusive session on Advanced Technologies was conducted discussing the data governance, system governance, model governance and AI related challenges in the banking sector.

15. **Conference of Heads of Chief Human Resources Officers (CHROs) and Chief Learning Officers (CLOs) of Banks, Financial Institutions (FIs) and NBFCs**

Date January 24, 2023

Coverage Human Capital in Transformed Financial Services – A Side View; Emerging Trends in HR and The Way Forward; Managing HR in Current Times: Issues & Strategies; Competencies and Skill Sets Required for a Future Ready Workforce; CAFRAL Learning Programs: Approaches and Strategies; Creating a Future Ready Workforce - Need for Skilling & Reskilling and Bridging Learning Gaps & Meeting Emerging Needs.

Takeaways:

The conference enhanced the understanding of the need for reskilling & upskilling of employees and introspected on the new training programs with the current available learning opportunities. The conference emphasized the need to constantly evaluate the competencies required and build the right talent strategy in place, to attract and retention of its work force. The conference also shed light on the need to develop an organizational culture as a choice of strategy and the need to strive for building an environment that facilitates development of its employees. The conference was appreciated for focusing on creating a culture of continuous learning and development in the organization.

16. **Program on Cyber Risk and Resilience: Evolving Paradigm**

Date February 16, 2023

Coverage Cyber Risk & Resilience: Emerging Threats and Regulatory Expectations; Data Protection and Privacy: Cyber Risk; Responding and Managing Cyber Attack & Cyber Crisis Management Plan; Cybercrime and Trends New Tools for Combat: Developing a Robust Threat Intelligence; Managing Cyber Risk: Audit Perspective & Approach.

Takeaways:

The program provided a detailed coverage of the regulatory expectations in the Cyber Security Framework of regulated entities. The program made the participants ponder and question the level of cyber resilience in their organizations and whether they are adequate enough to mitigate the new age cybercrimes and its challenges. The program emphasized on how cyber risk is no longer a technological risk, but also a business and strategy risk which needs to be duly reported to the CRO by the CISO and cyber risk should be a mandatory agenda item for discussion in all the risk management committee /board meetings. The program threw light on how the CISO's function is to monitor and manage SOC and drive cyber security projects, develop cyber security KRIs and KPIs to name a few. The session on threat intelligence delved into few case studies that talked about the core banking server compromise and database server compromise. The program also deliberated on Cyber Risk and Resilience; Cyber Crime trends; responding and managing cyber-attack.

17. Virtual Learning Program on Issues in Digital Lending

Date February 22, 2023

Coverage Digital Lending - Regulatory Perspective; Digital Lending Ecosystem: Issues and Concerns; Digital Lending by Banks: Emerging Areas and Opportunities; Digital Lending: Fintech Perspective.

Takeaways:

The VLP deliberated on the digital guidelines framework, latest regulatory guidelines and business landscape of the digital lending ecosystem. The speakers clearly laid out the digital lending landscape and the risks and opportunities arising from it. Many ambiguities and interpretational issues have been adequately clarified among the participants. The VLP provided new insights into the ideal design of digital lending model and the various issues faced by this sector. The program provided insights into the Digital Lending guidelines and the necessary clarifications on the recent FAQs issued by the Reserve Bank on Digital Lending.

18. Virtual Conference of Heads of Customer Service

Date March 10-11, 2022

Coverage Customer Service in Changing Times: Expectation from Regulated Entities; Approach to Consumer Protection & Grievance Redressal Framework – International and Domestic Perspective; Managing Customer Expectations: Practitioner's Perspective; Leveraging Technology for Customer Service & Safeguards; Bridging the Gaps in Service Delivery: Case Studies and Customer Protection – Emerging Trends

Takeaways:

The VC discussed the importance of customer service in the banking industry, the need for banks to establish an efficient grievance redressal mechanism and how to handle customer complaints more effectively. The conference also discussed various aspects of customer service, including the need to enhance financial literacy and awareness, customer protection and the rights of customer. The need for banks and NBFCs to adequately and appropriately address customers' grievances, considering the regulatory, legal, and reputational risks if left unaddressed, was also emphasized. Overall, the conference focused on the challenges faced by banks in delivering quality customer service, and how they can overcome these challenges by establishing effective grievance redressal mechanisms and protect the rights of customers.

19. Virtual Learning Program Know Your Customer (KYC) and Anti Money Laundering(AML)

Date March 15, 2023

Coverage KYC and AML Compliance – Expectations from Bank Boards; KYC and AML Measures - Regulatory Perspective and Recent Developments; Supervisory Observations and Expectations on KYC, AML and CFT Compliance; Transaction Monitoring and Beyond KYC and AML implementation - FIU Perspective; Trade Based Money Laundering

Takeaways:

The Virtual Program was designed to provide an update on the KYC/AML guidelines. It provided clarity on the role and responsibilities of the Directors in ensuring compliance to the KYC/AML framework. The speakers presented case studies that enabled the participants to have a comprehensive understanding of the Prevention of Money Laundering Act (PMLA) and its recent amendments. The participants were apprised on the need to adherence for KYC/AML guidelines in letter and spirit, which was agreed upon unanimously.

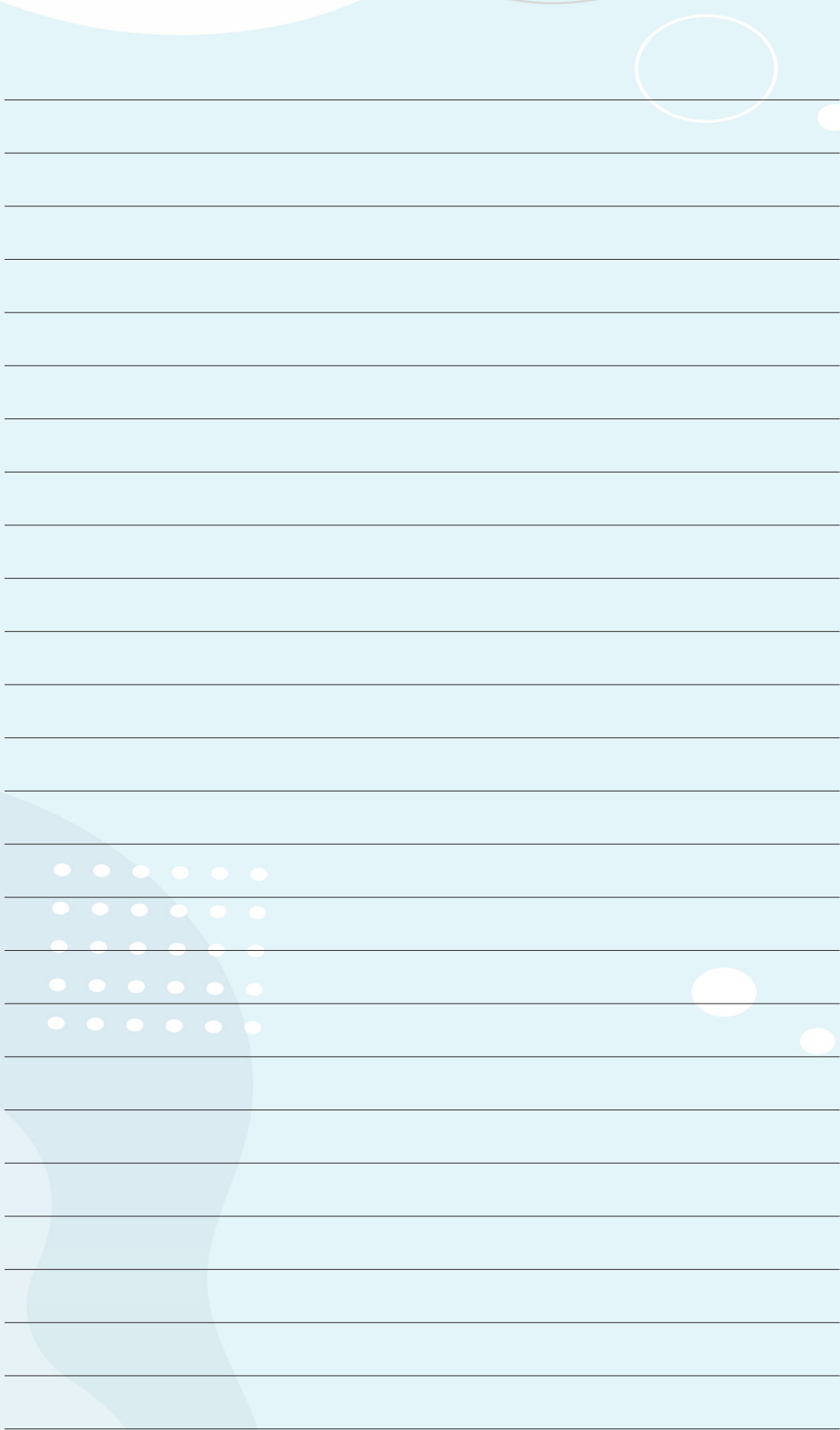
Annex 3

CAFRAL Team, as on July 31, 2023

1. Bibhu Prasad Kanungo, Director
2. Indrani Banerjee, Additional Director, Learning & Administration
3. Diwakar Gupta, Senior Research Advisor
4. Dr. Nirupama Kulkarni, Senior Research Director
5. J K Pandey, Senior Program Director
6. Sunita S Ratanpal, Senior Administrative Officer
7. Sankaranarayanan Chandramouli, Senior Program Director
8. Dr. Gautham Udupa, Research Director
9. Dr. Kaushalendra Kishore, Research Director
10. Dr. Yogeshwar Bharat, Research Director
11. Dr. Nirvana Mitra, Research Director
12. Dr. Vidya Soundararajan, Research Director
13. Dr. Sankalp Mathur, Research Director
14. Dr. Hari Babu Varshney, Administrative Officer
15. Monica Monteiro, Administrative Officer (Research)
16. Vijaya Lakshmi Das, PS to Director
17. Ashok Bathija, PS to Additional Director
18. Nimesh Gopiyani, Accounts Officer
19. Anup B Sonawane, Web Content Manager
20. Pushpalata Nadar, Program Officer
21. Charulatha Ramesha, Program and Relationship Officer
22. Trupti Kanade, Junior Accounts Officer
23. Chandrakant Kolase, IT Support Officer
24. Tanya Agrawal, Research Associate
25. Siddharth Verma, Research Associate
26. Somnath Ingole, Research Associate
27. Rupsha Dey, Research Associate
28. Manas Vaidya, Research Associate
29. Rumana Patel, Research Associate
30. Vaishnav Garg, Research Associate
31. Advait Moharir, Research Associate
32. Saptashya Ghosh, Research Associate
33. Sounak Ghosh, Research Associate
34. Amartya Prem Rajamalla, Research Associate
35. Suraj Kumar, Research Associate
36. Niranjan Kumar, Research Associate
37. Aishwarya Bhamidipati, Research Associate
38. Oshin Lodhi, Research Associate
39. Mahesh Vetkoli, Office Boy
40. Mangesh Vetkoli, Office Boy
41. Amol Gaikwad, Office Boy



Notes



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CAFRAL

CENTRE FOR ADVANCED FINANCIAL
RESEARCH AND LEARNING

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