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Evolution & future of Monetary & Fiscal Policies

IIBF - PUBLICATION LIST

Sr. No.	Examination	Medium	Name of the Book	Edition	Published By	Price (Rs.)
1	JAIIB / Diploma in Banking & Finance	English	Principles & Practices of Banking	5th Edition, 2021	M/s Macmillan India Ltd.	Rs. 830/-
2	JAIIB / Diploma in Banking & Finance	English	Accounting & Finance for Bankers	4th Edition, 2021	M/s Macmillan India Ltd.	Rs. 570/-
3	JAIIB / Diploma in Banking & Finance	English	Legal and Regulatory Aspects of Banking	4th Edition, 2021	M/s Macmillan India Ltd.	Rs. 560/-
4	JAIIB / Diploma in Banking & Finance	Hindi	Banking ke Sidhanth Avam Vyavahar	2015	M/s Taxmann Publications Pvt. Ltd.	Rs. 870/-
5	JAIIB / Diploma in Banking & Finance	Hindi	Bankeron ke liye Lekhankan Avam Vittya	2015	M/s Taxmann Publications Pvt. Ltd.	Rs. 600/-
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INDIAN INSTITUTE OF BANKING & FINANCE
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MISSION

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

ध्येय

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

Printed by Mr. Biswa Ketan Das, **published by** Mr. Biswa Ketan Das on behalf of Indian Institute of Banking & Finance, and **printed at** Onlooker Press 16, Sasoon Dock, Colaba, Mumbai-400 005 and **published from** Indian Institute of Banking & Finance, Kohinoor City, Commercial-II, Tower-I, 2nd Floor, Kirol Road, Kurla (W), Mumbai - 400 070. **Editor** Mr. Biswa Ketan Das.

Editorial

Mr. Biswa Ketan Das
Chief Executive Officer,
IIBF, Mumbai

The Indian Institute of Banking & Finance (IIBF) has succeeded in establishing its prowess in academic, training, research and publication. It has emerged over a period of nine decades as a premier Institute of learning for Banking and finance professionals. IIBF had convened the 94th Annual General Meeting (AGM) on 4th September 2021. We are including the address by Mr. Rajkiran Rai G, President, Indian Institute of Banking & Finance and Managing Director & CEO of Union Bank of India on the occasion of the 94th Annual General Meeting (AGM) of the Institute as the first article of this issue which covers various activities of the Institute.

The economic well-being of a nation is defined by the developmental policies planned and implemented at the right time and in the right direction. On its journey of becoming a 5 trillion-dollar economy, India has witnessed several reforms in its regulatory framework, particularly, in Monetary & Fiscal Policies. Considering the significance of these Policies in shaping the present and future economic state of a nation, we have kept the theme of this issue of Bank Quest as “Evolution & Future of Monetary & Fiscal Policies”.

The second article of this issue is penned by Mr. Jashvant Raval, Principal Partner, JCR & Co. on “Evolution and Future of Fiscal Policy in India”. This article enlists the key fiscal policy measures and concludes that fast tracking of economic reforms and its faster implementation will go a long way in fulfilling the aspirations of millions of poor when more wealth is not only generated but also distributed fairly among the population.

In response to the COVID pandemic, the Government provided agile and flexible policy support to prevent severe contraction of economy. The third article of this issue is authored by Dr. Manas R. Das, Former Assistant General Manager (Economist), State Bank of India and co-authored by Ms. Aradhana Shukla, Visiting Faculty, Symbiosis School of Economics, Pune is on “India’s Fiscal Policy during the COVID-19 Pandemic.” This article focuses on the fiscal policies and the associated measures that the Government has adopted to control the economic shocks and restore normalcy with minimal pain.

The fourth article of this issue is written by Mr. Pramod Kumar Ojha, SWO ‘A’, Punjab National Bank on “Monetary Policy Transmission in India: Analysing the framework and impediments with special focus on financial inclusion.” This article suggests that there is a large scope of research in new dimensions of monetary transmission like financial inclusion, expectation building, etc. The author concludes that efficient monetary transmission is a prerequisite for the successful pursuit of novel objectives of the central bank.

One of the objectives of the Institute is to promote research in the areas of banking and finance and encourage innovation and creativity among banking and finance professionals. The Institute organises ‘Micro Research’ paper competition every year exclusively for the members of the Institute to present their original ideas, thoughts and best practices on the themes identified by the Research Advisory

Committee of the Institute. We are including the prize winning articles under Micro Research Competition, 2020-21 in this issue.

The fifth article of this issue is written by Mr. Ishan Katyal, Manager, Reserve Bank of India on “Role of Artificial Intelligence and Analytics in Banking.” This article was awarded first prize under Micro Research Competition, 2020-21. Mr. Katyal discusses the current status of implementation of Artificial Intelligence and analytics in banks. This article briefly highlights prominent case studies of Indian Banks that have benefitted by implementing Artificial Intelligence in their business processes. The author has also prescribed a set of recommendations for banks to adopt Artificial Intelligence.

The sixth article of this issue is jointly written by Mr. Rakesh Mamodia, Assistant General Manager & Faculty, State Bank Institute of Human Resource Development and Mr. Vivek Jarolia, Assistant General Manager & Faculty, State Bank Institute of Human Resource Development on “Talent Management in Emerging Banking Scenario”. This article discusses the steps of talent management specifically in emerging banking scenario and analyses the measures for promoting talent retention. This article was awarded second prize under Micro Research Competition, 2020-21.

The seventh article of this issue is jointly written by Mr. Rama Krishna Reddy Danda, Chief Manager, Economic Research, Punjab & Sind Bank and Ms. Anjali Pandey, Manager, Punjab & Sind Bank on “Monetary Policy Transmission through Banking Channel”. The authors have discussed in detail the role of various channels in monetary policy transmission. This article was awarded third prize under Micro Research Competition, 2020-21.

Apart from the above articles we are also carrying summary of Macro Research Report (2019-20) by Dr. G Bhaskar N. Rao, IDBI Bank Ltd. & Ms. Rachel Alice Filbert, Andhra Pradesh Grameena Vikas Bank on “Financial Intervention for Sustainable Tribal Livelihoods: A study to understand the Objectives Vs Outcomes of Microfinance and SHG’s (Women) Empowerment”. The study will throw some light on interesting aspects of financing of Micro Finance Institutions and Self Help Groups (SHGs).

This issue also carries a review of the book “Differentiated by Mission – Small Finance Banks in India” authored by Dr R. Bhaskaran, Former CEO, Indian Institute of Banking & Finance and reviewed by Mr. Sugata K. Datta, Former Chief General Manager, Bank of India.

I hope readers will find this issue interesting which has a wide range of articles. Suggestions for improving the contents of the journal are welcome.

Wish you all a very happy festive season ahead.

Biswa Ketan Das

94th Annual General Meeting Speech

Rajkiran Rai G.*

Ladies and Gentlemen,

It is my pleasure in welcoming you all to this 94th Annual General Meeting of the Indian Institute of Banking & Finance. The report of the Council and the audited accounts for the year 2020 - 2021 have already been circulated and with your permission, I take them as read.

Before I proceed with the highlights of the Institute's performance during the financial year 2020 - 2021, I would like to share with all of you some of the recent initiatives taken by the Institute till this date.

1. Remote-Proctored Examinations

In view of the COVID-19 pandemic outbreak and consequent changes in the environment, the Institute, during 2020-2021, introduced examinations under remote-proctored mode in respect of select Certificate/Blended courses for the benefit of bankers and other learners. Remote proctored exams allow flexibility to candidates for appearing in the exams from the comfort of their homes/offices. Remote proctoring is done in combination with AI driven auto-proctoring and physical remote proctoring processes to ensure quality standards.

In all 1,14,770 candidates [including BC/BF candidates (88,037)] appeared for the various examinations of the Institute under the remote proctored mode. The Institute is getting good feedback as this mode is quite aligned with the requirements of the present-day environment.

2. Introduction of Professional Banker Qualification

The Institute has introduced a gold level aspirational qualification "Professional Banker". This qualification aims to bring the focus on specialisation in various verticals of banking. This will be a unique qualification to plug the long-felt skill gap in mid-management levels and will provide cutting edge knowledge to professionals in the banking & finance fields. A banker seeking to achieve status of a "Professional Banker" needs to have an experience of five years and should have completed CAIIB. The Professional Banker qualification is based on the concept of job families introduced in many of the banks.

3. Rationalisation of CAIIB Electives

The electives offered for CAIIB and CPD have been rationalised and have been brought down to six. The six electives offered are:

1 Central Banking

2 Human Resource Management

3. Information Technology

4. Retail Banking

5. Risk Management

6. Rural Banking

4. Introduction of a new certification course.

A certificate course on "Resolution of Stressed Assets of Banks, with special emphasis on the

*President, IIBF & MD & CEO, Union Bank of India.
The speech was delivered on the occasion of 94th Annual General Meeting of the Indian Institute of Banking & Finance held on 04th September, 2021.

Insolvency & Bankruptcy Code 2016" has been introduced by the Institute. The course aims to develop among banking professionals and employees an understanding of the Code, enable bankers to understand better the procedures to be followed for resolution of stressed assets and their roles in an insolvency resolution process and strengthen their capacity to discharge their duties and responsibilities, including commercial decisions with utmost care and diligence, in the best interests of all stakeholders.

5. Introduction of additional certificate courses

The Institute will also be introducing shortly two new certificate courses on:

- Strategic Management & Innovations in Banking
- Emerging Technologies

6. E-Learning

In order to enable the candidates to understand the finer aspects of the subjects, the Institute has several pedagogical tools, one of them being e-learning for its examinations. Presently, the Institute is offering E-learning covering JAIIB, CAIIB, Certified Credit Professional, Treasury, Investment & Risk Management, International Banking & Finance, International Trade Finance, AML/KYC, MSME, IT Security, Prevention of Cyber Crimes & Fraud Management.

A comprehensive and immersive e-learning for on-boarding of the direct recruits of banks has also been developed. One of the large public sector banks had taken this e-learning and the feedback with regard to the academic contents have been positive.

Customised e-learning has also been made available to some banks in the public and private sectors. The Institute is also in touch with some of its vendors for further enriching the contents of the e-learning on some subjects and to develop e-learning on other important topics / courses.

7. Joint Certification Programme by IIBF with XLRI

IIBF, in collaboration with XLRI, has designed a "Leadership Development Programme for Banks/ FIs" The programme is aimed at transforming good managers in banks into effective leaders, with a human centric approach. The first batch of the programme, which started in July 2021, has seen an encouraging response.

8. New Training programmes

To keep pace with the new emerging requirements of the industry, the Institute has been updating its existing training programmes and introducing new programmes from time to time. During the year 2020-21, following programmes were drafted afresh addressing the latest developments and with focus on practical application in banks:

1. Program/Workshop on MSME Lending and Restructuring of MSME Advances
2. Program on Ethics and Protection of Women from Sexual Harassment at Workplace
3. Program on Preventive Vigilance & Fraud Management
4. Program on Internal Audit & Compliance
5. EDP for Women Officers.

9. Customised Training Programmes

Thirty customised programmes were conducted wherein, 984 trainees participated. The banks for whom customised programmes were conducted included IOB, IDBI Bank, Kotak Mahindra Bank, Canara Bank, Punjab & Sind Bank, UCO Bank etc.

Now, let me share the highlights of the Institute's performance during 2020-2021.

1. Financial Performance

The balance sheet of IIBF as on 31st March 2021 stood at Rs. 607.57 crore. While the turnover (income) of the Institute during 2020-21 was Rs.

83.05 crore, the surplus was Rs. 34.80 crore. The amount transferred to General Reserve was Rs. 34.75 crore.

2. Membership

The number of Ordinary Members was 9,66,718 as on 31st March, 2021. During the year, 39,162 new members joined the Institute.

3. Examinations

About 1.46 lakh candidates had enrolled for the Flagship / Associate Examinations conducted by the Institute. It is indeed a matter of pride for all of us that a sizeable number of candidates appear for the flagship courses (JAIIB, CAIIB and DB&F) offered by the Institute. This helps the banks to have well qualified personnel manning different banking verticals. The total enrolments under the capacity building courses have also been good.

4. Rising to the Social Cause

The Institute conducted special JAIIB/DB&F/SOB/CAIIB/CAIIB Elective examinations for candidates who were affected with COVID-19 or having symptoms of COVID infection due to which, they could not take the exam held in December 2020. The special exam was conducted on 27th February, 28th February and 7th March 2021.

5. Digital Certificates

The Institute is issuing Digitally signed e-Certificates to candidates who have enrolled and passed the course/examination conducted from Oct-2019 onwards. The Institute is also issuing Digitally signed e-Certificates to candidates who request for duplicate certificate. The e-Certificate is e-mailed to the email id of the candidate registered with the Institute. Till 31st March 2021, Institute has issued 2,59,021 Digitally signed e-Certificates. The paper certificates issued by the Institute have been discontinued.

6. Study Support Services

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

7. Video Lectures

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

8. Mock Test

Mock test is an effort to simulate examination conditions and gives an opportunity to candidates to familiarise themselves with the pattern of on-line examinations. Such tests provide a feel of the MCQ pattern of the examination. This facility has been made available for JAIIB, DB&F, CAIIB (compulsory subjects) as also for three of its specialised courses namely, Certified Treasury Professional, Certified Credit Professional and Certificate in Risk in Financial Services. The mock test can be taken by any candidate subject to payment of a nominal fee.

9. Webinar on Risk Management for Banking using Treasury

As part of Institute's Member Education Series and in order to spread a higher level of awareness amongst bankers about the important developments happening in the banking and finance domains, the Institute had organised a Webinar on a very contemporary topic "Risk Management for Banking using Treasury" on 5th January 2021. The webinar was jointly presented by Mr. Prasanna Balachander, Group Head – Global Markets (Sales, Trading & Research), ICICI Bank Ltd and Mr. Vasudeva Konda, Head – Asset Liability Management, ICICI Bank Ltd.

10. Shri. R. K. Talwar Memorial Lecture

The 11th Shri R. K. Talwar Memorial Lecture was organised by the Institute on 9th February 2021 and was delivered by Dr. Krishnamurthy

V Subramanian, Chief Economic Adviser, Government of India. The topic for the Lecture was "India's Covid Response". More than 500 participants registered for the Lecture, which was held in the virtual mode and the feedback received was excellent.

11. Training Programmes conducted

A total of 104 training programmes were conducted during 2020-21 wherein, 4531 participants were trained. All the programmes were well received by the participants as the feedbacks were encouraging with strong recommendations for repetition of the programmes.

12. Advanced Management Programme (AMP) in Banking & Finance

The Advanced Management Programme (AMP) is a prestigious course offered by IIBF for developing and nurturing competent future leaders of the industry in tandem with the Vision statement of the Institute. The programme has evolved over a period of time and has gained acceptance with banks, NBFCs and regulators including RBI and NABARD. IIBF has strategically tied up with IIM, Calcutta to conduct a Management Development Programme at their Campus as an integral part of the Advance Management Programme (AMP). This collaboration has added much value to the AMP and has been widely appreciated by the participants as well as nominating institutions. The monthly address by top Industry Leaders under "Leaders Speak" Series is also a special feature of AMP. In order to make the programme more useful to the Bankers and Financial Institutions and keep it contemporary and relevant in the changing times, the current structure and syllabus of the AMP has been thoroughly revised both in terms of contents and duration. The X batch of the AMP has witnessed an overwhelming response inasmuch as 88 participants have enrolled for the course.

13. Collaborations

(a) National Collaboration

Insolvency and Bankruptcy Board of India

A certificate course on "Resolution of Stressed Assets of Banks, with special emphasis on the Insolvency & Bankruptcy Code 2016" has been introduced by the Institute. The first exam on the subject was held in April 2021. IBBI is the knowledge partner. The MOU with IBBI was signed on 12th August 2020.

(b) Corporate Collaborations

In order to provide counselling, coaching and conducting tutorial classes for the candidates/ students enrolled for taking up DB&F and other Diploma/Certificate examinations being conducted by IIBF, the Institute has entered into Memorandum of Understanding (MoU) with Subbalakshmi Lakshmipathy College of Science, Madurai, Allana Institute of Management Studies, Mumbai and Asia Pacific Institute of Management, New Delhi during the year 2020-21.

(c) International Collaborations

Chartered Banker Institute, Edinburgh, U.K

The Institute has signed a Mutual Recognition Agreement (MRA) with the Chartered Banker Institute, Edinburg, UK; wherein, Certified Associates of the Indian Institute of Bankers (CAIIB) are eligible to have their qualification recognised by the Chartered Banker Institute and attain Chartered Banker status through a Professional Conversion Programme, commencing September 2017. Taking the MRA forward, the Institute has now entered into an agreement with the Chartered Banker Institute, for offering a pathway for the Junior Associates of the Indian Institute of Bankers (JAIIB) holders to acquire the Associate Chartered Banker Status through the JAIIB Professional Conversion Route.

Global Association of Risk Professionals

The Institute has signed an MoU with the Global Association of Risk Professionals (GARP) for the benefit of risk professionals in the Indian banking sector. GARP is a non-partisan, not-for-profit professional association for risk managers, dedicated to the advancement of the risk profession through education, research, and the promotion of best practices globally.

Through the collaboration, IIBF members will have the opportunity to enrol in GARP's Financial Risk and Regulations (FRR) certificate program at a preferred rate, access other GARP educational offerings and connect with its global network of risk professionals.

14. Upgradation of Information Technology

COVID has drastically changed the way we were functioning. The Institute had to adopt to the new environment quickly to continue its normal operations.

The Institute's IT Department initiated 'Creation of Secure Environment' for "Work from Home" through Virtual Private Network [VPN]. The Institute is also undergoing IS (Information Security) Audit of Infrastructure, Application, IT process, IT policies etc., to better equip itself with latest security features in IT Systems.

Introduction of candidate life cycle management will go a long way in enhancing the experience of candidates.

The Institute has successfully shifted to Remote Proctored Examinations in respect of certain courses for the benefit of candidates.

15. Social Media

The Institute is on Facebook and YouTube. The Facebook page has got more than 1.33 lakh likes on various types of posts uploaded by the Institute. The Facebook posts cover IIBF and regulatory notifications, Quote of the day, Opinion Poll, Greetings, Photos etc. The posts also cover various events/seminars/conferences conducted by the Institute. The YouTube channel of the Institute, which covers various videos of seminars, conferences, workshops, etc, has got 78,73,825 views and 74,500 people have subscribed to the Institute's YouTube channel.

16. Corporate Social Responsibility

The Institute has taken voluntary Corporate Social Responsibility (CSR) Initiatives, as a measure of good governance. An amount of Rs. 109.04 lakhs have been spent by the Institute towards various CSR activities.

17. Future Outlook

Even during the pandemic, the Institute has taken several steps to ensure that its operations run smoothly.

Going forward, IIBF will take the following steps:

- Continue to work closely with Banks, Financial Institutions, Regulators, IBA to revise the contents of its various courses and training programmes to make them more relevant.
- Roll out new courses/programmes in future on emerging topics.
- Initiate steps to revamp the syllabi of its flagship programmes, JAIIB & CAIIB completely to make the flagship courses of the Institute more contemporary.
- Revision of courseware in respect of other certificate courses particularly capacity building courses will be taken up for creating more value add for the professionals in the respective specialised fields.
- Develop e-learning on new topics and enrich the contents for those subjects for which e-learning is presently available.
- More customised training programmes will be designed and programme curriculum will be co-created to add value to the programmes.

With all these initiatives, the Indian Institute of Banking & Finance is well poised to become the preferred learning partner for Banks and Financial Institutions in the coming years.

Proposal

Now I propose that the Report of the Council and audited statement of Accounts of the Institute for the year ended 31st March 2021 be adopted and passed.

Thank you for your kind attention.

Evolution and Future of Fiscal Policy in India

Jashvant Raval*

The word ''fiscal'' means relating to finance particularly public finance. It includes revenues and expenses of the government. A fiscal policy therefore means the policy which decides about ways and means of raising finances and determining the disbursements. India is having a federal structure and therefore, fiscal planning is done at national level as well as state level. The Central Government or the Government of India prepares the fiscal policy of the country as a whole and each state also, based on its own geographical and economic conditions, follows a particular fiscal policy.

Background and Brief History

In 1947, India became Independent and the financial planning and annual budget system began in 1950 when Planning Commission was set up. The Planning Commission was dissolved in 2014 to be replaced by NITI Aayog. NITI stands for National Institution for Transforming India. Our country also adopted 5 Year plan pattern to take care of cyclical pattern and medium to long term economic and social objectives.

During the initial periods, our planning and development strategies were based on conservative fiscal policy. This means the fiscal deficit was kept under control on the popular concept of spend as much as you earn. This obviously leads to slow growth. Probably our planners in those days had not taken a leaf out of New Deal Policy (NDP) enacted during the presidency of Franklin D. Roosevelt of the USA in the post-depression period (1930s). This author believes that the 3 "Rs" of the NDP namely Relief, Recovery and Reform are relevant even today. India has seen good recovery post liberalization in 1991 when the third "R" namely Reform was put into practice. It's a public knowledge that our liberalization process in 1991 was almost involuntary and was due to unparalleled balance of payment crisis. Since liberalization, the Tax reform system commenced and fiscal deficit was brought under control to some extent. It is not that we have smooth sailing since then. The deficit and debt situation once again worsened in early 2000 leading to more regulations and legislation to control the deficit and bringing in more discipline. It took nearly 5 to 7 years to achieve a comfort level. Once the economy was liberalized, we realized that we were no longer insulated from the external factors and off and on, we started to become victim of global turbulence.

What Constitutes the Policy?

As explained earlier, the basics of the policy are ways and means of raising funds and allocating the same for various types of disbursements based on economic needs like relief to poverty, provisions for disaster and political objectives of party in power. However, in order that the politics does not take precedence over economic interests, there are checks and balances in the form of various regulations and commissions such as the Finance Commission and committees to take care of central and state government dealings inter-se and setting standards for distribution of wealth among the needy (people or states). India carries out extensive exercise of annual budget to be placed by the Finance Minister every year which represents the estimates of Government Revenue and Expenditure for the approval of Parliament. An extract from the Annual Budget reproduced below gives a Bird's- eye view of Revenue gathering and disbursement exercise.

*Principal Partner, JCR & Co.

Sources of Revenue

Revenue Receipts

A. Gross Tax Revenue

(i) Taxes on Income and Expenditure

(ii) Taxes on Property and Capital Transactions

(iii) Taxes on Commodities and Services

B. Gross Non - Tax Revenue

(i) Fiscal Services

(ii) Interest Receipts, Dividends and Profits

(iii) Other Non-tax Revenue (includes General Services, Defence Services, Social & Community Services, Economic Services & Non Tax Revenue of Union Territories)

C. Grants-in-aid and contributions (includes internal & external)

Revenue Disbursements/Expenditure

A. General Services

i. Organs of State

ii. Tax Collection

iii. Other Fiscal Services

iv. Interest Payment and Servicing of Debt

v. Administrative Services

vi. Pensions and Miscellaneous General Services

vii. Defence Services

B. Social Services

C. Economic Services

i. Agriculture and Allied Activities

ii. Rural Development

iii. Special Areas Programmes

iv. Irrigation and Flood Control

v. Energy

vi. Industry and Minerals

vii. Transport

viii. Communications

ix. Science Technology and Environment

x. General Economic Services

D. Grants-in-Aid and Contributions

The difference between the Revenue and Disbursements is Fiscal Deficit, if the Expenditure is higher than the income.

Capital Receipts

A. Public debt

Internal Debt recoveries by Central Government

B. Recoveries of loans and advances

C. Miscellaneous capital receipts

Capital Disbursements/Expenditure

A. Capital Account of General Services

B. Capital Account of Social Services

C. Capital Account of Economic Services

a. Capital Account of Agriculture and allied activities

b. Capital Account of Special Areas Programmes

c. Capital account of Irrigation and Flood Control

d. Capital Account of Energy

e. Capital Account of Industry and Minerals

f. Capital Account of Transport

g. Capital Account of Communications

h. Capital Account of Science Technology and Environment

i. Capital Account of General Economic Services

Outside the Revenue Account

Public Debt

a. Internal Debt of Central Government

Loans and Advances

A. Loans for Social Services

B. Loans for Economic Services

a. Loans for Agriculture and allied activities

b. Loans for Special Area Programme

c. Loans for Energy

d. Loans for Industry and Minerals

e. Loans for Transport

f. Loans for Science Technology and Environment

g. Loans for General Economic Services

C. Other Loans

D. Transfer to Contingency Fund

The above statements of Receipts and Disbursements (Revenue & Capital) are known as Consolidated Fund of India.

Important Features of our Fiscal Policy

1. The Constitution of India provides that every year the Government shall place before the legislature a proposal for taxes and spending for debate and approval.
2. Our country has a federal structure of governance.
3. This leads to devolution of rights to Central Government (CG) as well as State Governments (SGs).
4. We also have a third tier of governance namely Local Bodies. (From Municipal Corporations to Gram Panchayats).
5. These local bodies also have right to collect certain levies at local level like octroi etc. (abolished since introduction of GST).
6. The Constitution provides for setting-up of Finance Commission every 5 years basically to take care of needs of states that are unable to raise revenue to meet their expenditure due to geographical and social conditions. The commission holds discussion with every State to finalize devolvement of funds from Central Government (CG) to State Government(SG).
7. In the federal structure, the CG is expected to take care of areas of national importance such as Railways, National Highways, Shipping, Defence, Post & telegram, Airways, Foreign Policy, and Foreign Trade & Banking.
8. The SGs are responsible for Law & Order, water supply, fisheries, agriculture & public health.
9. Certain activities and responsibilities are allowed and cast upon CG & SGs simultaneously. These are stated in the Concurrent list.
10. CG has right to levy income taxes on wealth except agriculture income.
11. SGs are authorised to levy taxes on Agriculture, Sale of Goods (other than interstate). Land & Building and Excise on alcohol.
12. The Expenditure part of the budget includes Revenue Expenditure and Capital Expenditure. It also includes Planned and Unplanned Expenditure. The Planned expenditure covers subject of long term goals of socio economic nature which are planned from year to year. Non planned Expenditure includes government expenditure for administration. Planned expenditure is considered to be growth enhancing.
13. As stated earlier, the fiscal deficit keeps fluctuating from year to year having impact on finances of the country. When the Fiscal Deficit and debts sore, the country faces financial problems. To control and streamline the level of fiscal deficit, the parliament has passed in the year 2003 a law named Fiscal Responsibility & Budget Management Act. Although limit of fiscal deficit as a percentage to GDP was fixed as also the time line, it has been reviewed and postponed from time to time. It has been debated endlessly that such limit in a country like India is impractical where the government has to continue to spend for uplifting of the masses.
14. Taxes are the main sources of Revenue and there are two types of taxes namely Direct and Indirect taxes. Direct Taxes like Income Tax are borne by the payees. On the other hand, indirect taxes are levied on intermediaries from manufacturers to last retailers and form part of final price(MRP) to the customers. These taxes are recoverable from the buyer. GST is the example of Indirect Tax. Of Late, many indirect taxes have been merged after passing CGST Act, 2017.
15. There are various principles which are invoked or followed while determining level of taxes, the subject matter of taxes and the target audience.

16. Various principles like tax the rich and exempt the poor, higher tax for luxuries and low taxes for common men's basic requirement, lower taxes on life saving drugs and higher taxes on cigarettes are a few examples.

17. With introduction of GST, the tax net has been widened extensively.

18. To raise additional revenues, a surcharge is collected by CG on many taxes. These surcharges are generally not shared with states.

19. Compared to developed countries, tax paying population in Direct taxes is very low (3% of total population) in India.

20. Our Fiscal Year starts on 1st April and ends on 31st March.

Major Turns & Twists

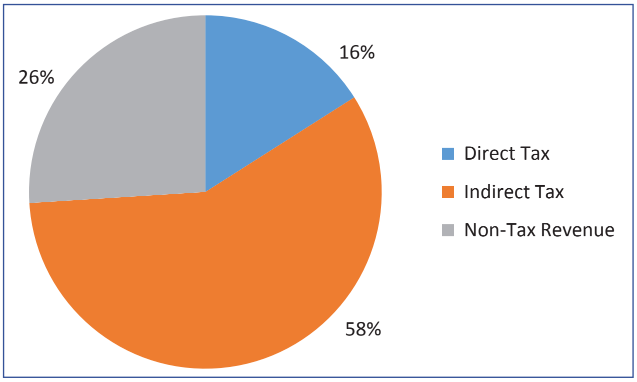
1. Soon upon setting up Planning Commission in the Year 1950, the planning process favoured Soviet model whereby, public sector participation was encouraged and strengthened. Therefore, to encourage the public sector, our policy framework imposed numerous administrative controls on various industries and a rigorous system of licensing and quotas evolved. This suffocated the private sector. This resulted into transfer of private savings and resources to meet the expanding investment and consumption needs of public sector. Over the years, the Public Sector turned out to be inefficient and many units turned white elephants. Of course there are a few examples of certain capital goods industry which did make India self-reliant in some technologies. One more goal to adopt socialistic pattern was to reduce wealth inequalities resulting into higher taxes on rich and productive people which proved to be a dis incentive for the wealth creators.

2. The Government of India realised quite early in 1956 about reforms when British Economist Nicholas Kaldor was appointed to examine the Indian Tax System and recommend steps for reforming. It was found by him that Indian personal income tax rates were very high (92% - Maximum Marginal Rate) and he recommended reduction of the rate to 45%. Despite his recommendation, the taxation rates continued to be high till 1973-74 when the maximum marginal rate including surcharge was 97.5% on annual income over Rs. 2 lakhs.

3. Thereafter, many tax inquiry committees and commissions where formed by the Government of India but unfortunately the recommendations were either not implemented or implemented partially.

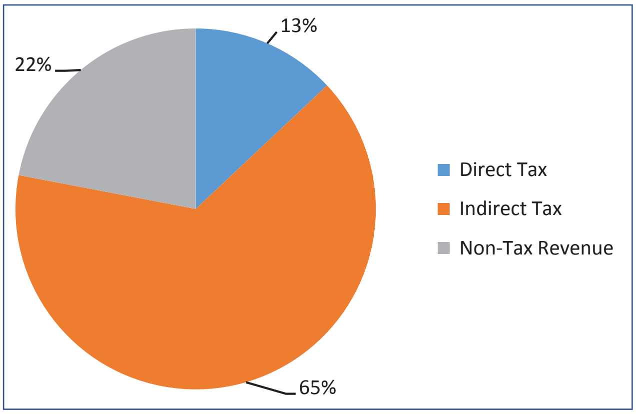
4. (a) During a span of 20 Years from 1970-71 to 1990-91 there was hardly any progress as far as growth in tax revenues was concerned which increased from 76% to 78% of the total revenues as explained by the chart below.

Composition of central government revenues (1970-71)



Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

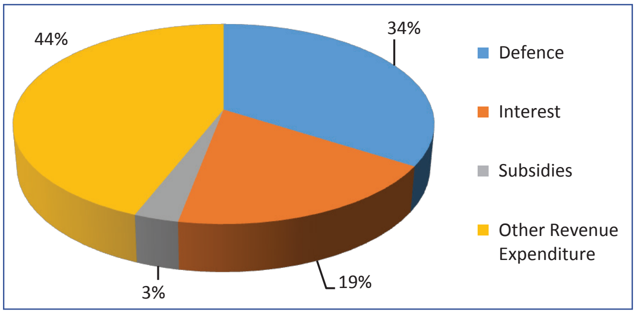
Composition of central government revenues (1990-91)



Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

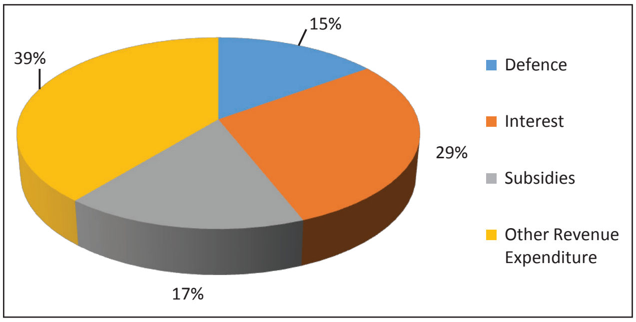
(b) The meagre growth of tax revenue during this period left no money with the government for capital expenditure and achieving social objectives including education and health. Allocation to Defence got reduced from 34% to 15% during a time when China was building up its defences. The cost of interest payments went up from 19% to 29% and the subsidies mounted from 3% to 17% of the total Government expenditure. This led to the final days of crises in 1991. The following pie chart explains the above situation.

Composition of central government revenue expenditure (1970-71)



Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

Composition of central government revenues (1990-91)



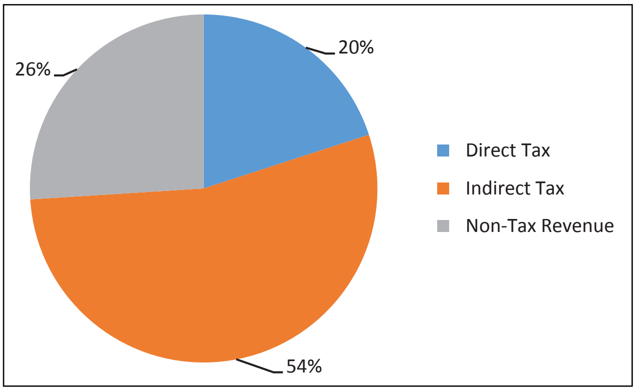
Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

(c) During this period of 20 Years, the gross fiscal deficit increased from 3% to 7% of GDP and Revenue deficit increased from 0 % to 3%.

5. Meanwhile, India saw GDP contractions in years 1965-66, 1972-73, and 1979-1980. The first two contractions came in the backdrop of wars combined with monsoon failures. The contraction in 1979-80 was result of drought conditions in the country when we saw 19% rainfall deficiency.

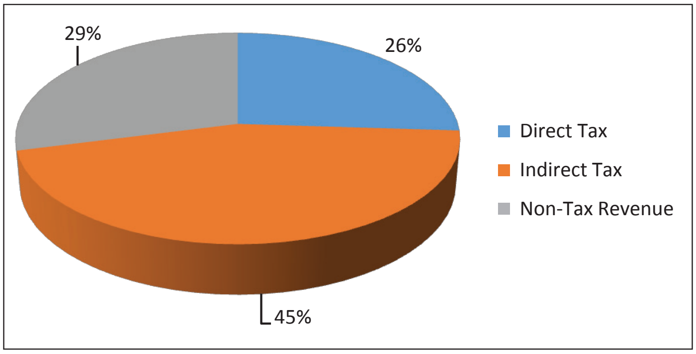
6. (a) India faced unparalleled balance of payment crises in 1991 leaving the government with no alternative but to open up the economy and chart out a plan to liberalise the system. The objective was to reduce the proportion of Indirect taxes to total tax revenue and simultaneously enhance the share of direct taxes to total taxes. Rates of all major taxes were reduced, deductions and exemptions were minimised and laws and procedures were rationalised to improve tax administration and introduce computerisation. MAT was introduced in 1996-97 to avoid misuse of tax incentives. New taxes such as Securities Transaction Tax (STT) and Fringe Benefit Tax(FBT) were introduced in the budget of 2005-06. Even in the state Tax Management, VAT and Mod Vat were resorted to improve the Tax administration and collection. Within a few years we saw contribution of Direct Tax going up from 20% (1995-96) to 26%(2000-01). It took another 5 years for the Direct taxes to climb to 35% from 26%.

Composition of central government revenues (1995-96)



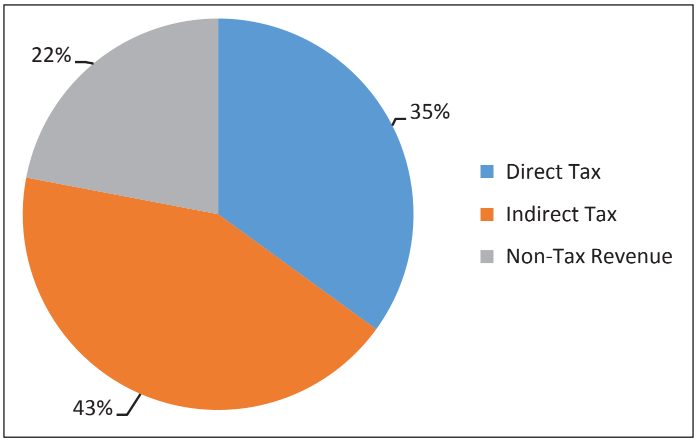
Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

Composition of central government revenues (2000-01)



Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

Composition of central government revenues (2005-06)



Data source: Database on the Indian Economy, http://dbie.rbi.org.in (Reserve Bank of India, 2011)

(b) During the period from 1991 to 2009-10, we were able to control the Gross Fiscal Deficit by slightly lowering from 7% to 6.5%. However, the revenue deficit increased from 3% to 5%.

7. The result of Liberalisation and better fiscal management since 1991 helped India come out with minor scratches during the global crisis 2008 when India's GDP growth went down to 5.8% to bounce back to 8.5% in 2009-10.

Historical Movements

In a democracy like in India, the change in government every 5 years particularly led by different party or group of parties from the previous government results into, more often than not, major changes in the micro-management though goals at the macro level may remain more or less same. Therefore, steps taken by previous government may bring fruits to next government and this cannot be avoided. For example, good economic progress during five-year rule of UPA 1 (2004-2009) is believed by many to be the fall out of reforms during Vajpayee government. Thereafter UPA 2 was bogged down to be followed by change in government in 2014. In the same context, the comparative performance varies due to uncontrollable factors like Wars and Droughts and planned efforts like structural reforms. An interesting data of movement in GDP Growth, Receipts Growth, Expenditure Growth and Fiscal Deficit Ratio is succinctly explained in the following line charts (Source RBI Bulletin March 2021). The charts cover three periods of post contraction explained earlier which took place in the years 1965-66, 1972-73 and 1979-80. The purpose of reproducing these charts is to explain relation between the four important components (GDP, Receipts, and Expenditure & Deficit) as well as the recovery time to bounce back. For example, fall in revenue brings down the GDP growth; rise in expenditure is coupled with rise in fiscal deficit.

Chart 1: An Event Study of Post-Contraction Budgets in India

Note: Dotted line indicates budget estimates.
Source: Union budget documents of various years.

Source: RBI Bulletin March 2021

Fiscal Year 2020-21 was severely affected by pandemic leading to contraction in the Direct Tax collection by 13.8%, Assignment to states by 15.5% and almost doubling the fiscal deficit by 98%.

Recommendations of 15th Finance Commission (Report Dated 30/10/2020)

1. Resource Mobilisation

a. Need for sizeable resources.

b. Increased demands for health intervention.

c. Provision for Sufficient Medical Infrastructure.

d. Income Generation Programmes and support for economic revival.

e. Sharp Economic activity contraction has adversely affected revenue collection.

f. Improving governance of Tax administration across the three tiers of government.

Key Fiscal Indicators of Budget 2021-22

Annex I: Union Budget 2021-22: Key Fiscal Indicators

	in ₹ crore					Per cent of GDP		Growth Rate	
	2018-19	2019-20	2020-21 (BE)	2020-21 (RE)	2021-22 (BE)	2020-21 (RE)	2021-22 (BE)	2020-21 (RE)	2021-22 (BE)
1	2	3	4	5	6	7	8	9	10
1. Direct Tax	**11,36,615**	**10,49,549**	**13,19,000**	**9,05,000**	**11,08,000**	**4.6**	**5.0**	**-13.8**	**22.4**
(i) Corporation	6,63,572	5,56,876	6,81,000	4,46,000	5,47,000	2.3	2.5	-19.9	22.6
(ii) Income	4,61,488	4,80,398	6,25,000	4,47,000	5,48,500	2.3	2.5	-7.0	22.7
2. Indirect Tax	**9,43,850**	**9,60,510**	**11,04,020**	**9,95,280**	**11,09,059**	**5.1**	**5.0**	**3.6**	**11.4**
(i) GST	5,81,559	5,98,749	6,90,500	5,15,100	6,30,000	2.6	2.8	-14.0	22.3
(ii) Customs	1,17,813	1,09,283	1,38,000	1,12,000	1,36,000	0.6	0.6	2.5	21.4
(iii) Excise	2,31,982	2,40,615	2,67,000	3,61,000	3,35,000	1.9	1.5	50.0	-7.2
3. Gross Tax Revenue (1+2)	**20,80,465**	**20,10,059**	**24,23,020**	**19,00,280**	**22,17,059**	**9.8**	**9.9**	**-5.5**	**16.7**
4. Assignment to States	**7,61,454**	**6,50,677**	**7,84,181**	**5,49,959**	**6,65,563**	**2.8**	**3.0**	**-15.5**	**21.0**
5. NCCD Transfers	**1,800**	**2,480**	**2,930**	**5,820**	**6,100**	**0.0**	**0.0**	**134.7**	**4.8**
6. Net Tax Revenue (3-4-5)	**13,17,211**	**13,56,902**	**16,35,909**	**13,44,501**	**15,45,397**	**6.9**	**6.9**	**-0.9**	**14.9**
7. Non-Tax Revenue	**2,35,705**	**3,27,157**	**3,85,017**	**2,10,653**	**2,43,028**	**1.1**	**1.1**	**-35.6**	**15.4**
(i) Dividends and Profits	1,13,421	1,86,133	1,55,395	96,544	1,03,538	0.5	0.5	-48.1	7.2
(ii) Interest Receipts	12,145	12,349	11,042	14,005	11,541	0.1	0.1	13.4	-17.6
8. Revenue Receipts (6+7)	**15,52,916**	**16,84,059**	**20,20,926**	**15,55,153**	**17,88,424**	**8.0**	**8.0**	**-7.7**	**15.0**
9. Non-Debt Capital Receipts	**1,12,779**	**68,620**	**2,24,967**	**46,497**	**1,88,000**	**0.2**	**0.8**	**-32.2**	**304.3**
(i) Disinvestment receipts	94,727	50,304	2,10,000	32,000	1,75,000	0.2	0.8	-36.4	446.9
(ii) Recovery of Loans	18,052	18,316	14,967	14,497	13,000	0.1	0.1	-20.9	-10.3
10. Total Receipts (excluding borrowings) (8+9)	**16,65,695**	**17,52,680**	**22,45,893**	**16,01,650**	**19,76,424**	**8.2**	**8.9**	**-8.6**	**23.4**
11. Revenue Expenditure	**20,07,399**	**23,50,604**	**26,30,145**	**30,11,142**	**29,29,000**	**15.5**	**13.1**	**28.1**	**-2.7**
(i) Interest Payments	5,82,648	6,12,070	7,08,203	6,92,900	8,09,701	3.6	3.6	13.2	16.9
(ii) Major Subsidies	1,96,769	2,28,341	2,27,794	5,95,620	3,36,439	3.1	1.5	160.8	-43.5
Food	1,01,327	1,08,688	1,15,570	4,22,618	2,42,836	2.2	1.1	288.8	-42.5
Fertilizer	70,605	81,124	71,309	1,33,947	79,530	0.7	0.4	65.1	-40.6
Petroleum	24,837	38,529	40,915	39,055	14,073	0.2	0.1	1.4	-64.0
12. Capital Expenditure (i + ii)	**3,07,714**	**3,35,726**	**4,12,085**	**4,39,163**	**5,54,236**	**2.3**	**2.5**	**30.8**	**26.2**
(i) Capital Outlay	2,79,492	3,11,312	3,80,322	3,32,247	5,13,862	1.7	2.3	6.7	54.7
(ii) Loans & Advances	28,221	24,414	31,763	1,06,916	40,374	0.5	0.2	337.9	-62.2
13. Total Expenditure (11+12)	**23,15,113**	**26,86,330**	**30,42,230**	**34,50,305**	**34,83,236**	**17.7**	**15.6**	**28.4**	**1.0**
14. Fiscal Deficit (13-10)	**6,49,417**	**9,33,651**	**7,96,337**	**18,48,655**	**15,06,812**	**9.5**	**6.8**	**98.0**	**-18.5**

Source: Union budget documents of various years.

Source: RBI Bulletin March 2021

2. Administrative/Operational Changes

a. Improvement of Tax Portals.

b. Expand provisions relating to TDS, TCS to more transactions.

c. Reduce pendency of disputed transaction.

d. States to integrate computerised property records with registration documents and capture market value of property for efficient property taxation.

3. Tax Policy Changes

a. Rationalise GST Rate Structure (For example 3 Rates).

b. Rationalise multi-rate custom duty structure.

c. Review of Exemptions, Concessions and Deductions.

d. Constitutional amendment allowing periodic revision of limits of Profession Tax.

4. Institutional and tax policy changes that will help achieve the full potential

a. Reduce over reliance on Indirect Tax and widen the net for Income and Asset Based Taxation.

5. Towards Cooperative Federalism: Balancing Equity & Efficiency

a. States which have done better on the demographic front have been assigned 12.5% weight to the demographic performance criteria.

6. Empowering Local Governments

a. Let the Grants to local governments be a fixed amount rather than a proportion of a divisible pool of the taxes to ensure greater predictability of the quantum and timing of fund flow.

b. States, who have not done so, must constitute State Finance Commission (SFC).

c. States will receive grants for those rural and urban local bodies that have their provisional accounts for the previous year and audited accounts for the year before the previous year, available online.

d. Sixty per cent of the grants to rural local bodies to be tied to:

   i. Sanitation and Maintenance of ODF (Open Defecation Free) Status.

   ii. Drinking water, Rainwater harvesting and water recycling.

e. MoHFW (Ministry of Health and Family Welfare) shall closely coordinate with respective states to work out a mechanism for the flow and utilisation of health grants.

7. Disaster Risk Management

a. States to contribute 25% of funds to SDRF (State Disaster Response Fund) & SDMF (State Disaster Management Fund).

8. Pandemic and Beyond: Building Resilience in Health Sector

a. States to increase health spending to more than 8% of their budget by 2022.

b. Public Health expenditure of Union and States together should be increase in progressive manner to reach 2.5% of GDP by 2025.

c. The Asymmetric distribution of medical colleges needs to be corrected as most of them are situated in western & southern parts of India.

9. Performance Based Incentive and Grants

a. Incentives based on educational outcomes, amendment in land related laws, ground water stock, agriculture exports target, increase in production of oil seed, pulses etc., agriculture infrastructure etc.

10. Defence and Internal Security

a. Capital investment for modernization of defence services & police forces.

11. Fiscal Consolidation Roadmap

a. Help states to overcome current crisis by prudently supporting state budgets.

b. Strict discipline in revenue expenditure.

c. Borrowing limits sanctioned to states can be utilised in subsequent years if remain unutilised.

d. Disclosures of Financial positions of states and their credit rating will help in broadening the investor base.

e. States and Union should define contingent liabilities transparently, estimate them and assess the risk associated with them.

f. States may explore formation of Independent Public Debt Management cells.

g. States should have more avenues for short term borrowings other than ways and means advances and the overdraft facility provided by RBI.

12. Fiscal Artichеture for Twenty First Centuary India: Fiscal Rules, Financial Management & Institutions

a. Appropriate amendments to be taken up by states in their respective Fiscal Responsibility Legislations to ensure consistency with amended union government FRBM Act and in particular definition of debt.

b. Government Accounting Standards and Advisory Board to develop accounting standards for Financial Reporting and Disclosures of Broader Public Debt.

c. Governments to try to improve the accuracy and consistency of micro economic and fiscal forecasting.

d. Strengthen cash management practices.

e. All the data and information be made available to public in a reliable, timely and comparable manner.

f. Improve timeliness of Audited Financial Reports within 9 month of Year end.

g. Time bound plan for standard based accounting and financial reporting.

h. Establishment of an Independent Fiscal council with powers to access records as required from Union as well as states.

i. Launch a process of stakeholder consultations and prepare a time bound plan for implementation of comprehensive public financial management reforms at all levels of government.

Conclusion

We can safely conclude that the Fiscal Policy framed and the measures taken by successive Governments in India have started bearing fruits which has seen our country climb several places in various global indices be it in transparency, ease of doing business etc. India today is one of the fastest growing economies in the world despite mounting population and lack of resources. Generating resources from a few, however, may run into long term problem of resistance. Therefore, raising the income standards of the population and broad basing the tax system may partly solve the problems. Use of technology and improving the tax collection efficiency in the recent times has yielded results though the stakeholders have sometimes complained of high handedness and insensitivity on the part of tax collectors. Recent amendment to Tax law removing the retrospective amendment of 2012 is a right step in the direction displaying transparency and fair practices. What is further needed is efficient, complete but fair implementation of existing laws. Speed in settlement of disputes may be more through alternate mechanism may relieve the much overloaded judiciary. Even on the judicial side, we need to overhaul to speed up trials, reduce pendency and open Supreme Court benches in at least four more centres. The side effect of more such benches may be reduction of concentration of litigation in the hands of a few selected lawyers which may surely benefit other stake holders. It is observed that the Courts are kept fully busy with urgent matters relegating other important cases. Quick dispensation of justice by the top courts may put fear in the minds of litigants who otherwise feel comfortable if litigation continues endlessly. Lengthy and costly litigations keep big investors particularly foreign based ones away from investing in India. Last but not the least, fast tracking of economic reforms and implementing as soon as possible will go a long way in fulfilling the aspirations of millions of poor when more wealth is not only generated but also distributed fairly among the population. We have to mind the Gap the uncontrolled capitalism may create!

India's Fiscal Policy during the COVID-19 Pandemic

Dr. Manas R. Das*

Aradhana Shukla**

"In general, the longer the pandemic lasts, the larger the challenge for the public finances." – IMF Fiscal Monitor, April 2021

The World Health Organisation declared the coronavirus (COVID-19) that has reportedly originated from the Wuhan province of China as a pandemic on March 11, 2020. The virus spread rapidly to every nook and corner of the world. As of September 1, 2021, globally, there have been nearly 218 million confirmed COVID-19 cases including over 4.5 million deaths. Countries across the world imposed shutdowns with a view to containing the contagion of the virus and later its variants. Thus, both 'lives and livelihoods' have been severely affected from which the world is yet to recover fully. The economies, both developed and developing, have been hit hard, and in order to ameliorate the adverse impacts, a host of economic and health and sanitation-related measures have been implemented by them.

This article focuses on the fiscal policy and the associated measures that the governments, including the Indian government, in particular, adopted to control the economic shocks and restore normalcy with minimal pain. Working towards this, the paper is structured as follows: Section 1 deals with the macroeconomic impact of COVID-19 on the Indian economy, especially, in terms of growth and employment; Section 2 discusses, in brief, the objectives of the fiscal policy during the pandemic; Section 3 analyzes the fiscal response to the pandemic around the world; Section 4 delves into the fiscal measures implemented by the Indian government and their impact on the deficits and public debt; and Section 5 concludes.

Section 1: Macroeconomic Impact on the Indian Economy

Real Gross Domestic Product (GDP) of India grew by just four percent in 2019-20 (1st Revised Estimates – RE) followed by a contraction of 7.3% in 2020-21 (Provisional Estimates - PE). Similarly, real Gross Value Added (GVA) at basic prices (at 2011-12 prices) shrank 6.2% in 2020-21 compared to 4.1% growth recorded in 2019-20.

Table 1 presents GVA growth rates for the three constituting sectors. It may be observed that compared to 2019-20, all the sectoral growth rates are likely to decline in 2020-21 with industry and services in negative territory.

Table 1: Sector-wise GVA Growth Rates

Segments	Y-o-Y Change	
	2019-20 (1st RE)	*2020-21 (PE)*
Agriculture, Forestry & Fishing	4.3%	3.6%
Industry	-2.0%	-6.4%
Services	6.4%	-8.4%
GVA	4.1%	-6.2%

Computed based on National Statistical Office data.

Demand side analysis of GDP revealed that growth in Private Final Consumption Expenditure (PFCE) during 2020-21 will likely remain in negative territory, implying continued weak demand conditions. Government Final Consumption Expenditure growth rate, albeit positive, is estimated to remain low indicating inadequate public expenditure. Large contraction in Gross Fixed Capital Formation (GFCF) or investment is not heartening.

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The surveys conducted by the Centre for Monitoring Indian Economy revealed steep rise in unemployment rates. For instance, during 2021-22 Q_1, the unemployment rate ranged between 7.9% and 12.0%. The economy is having knock-on effects with Micro, Small and Medium Enterprise (MSMEs) shutting their businesses. Millions of jobs have been lost permanently, and this has decelerated consumption.

Section 2: Objectives of Fiscal Policy during COVID-19

Fiscal policy is an important component of any government's economic policy, especially so after the Great Depression of the 1930s. It refers to the policy of a government in regard to taxation, spending and borrowing. The objectives of fiscal policy at crisis moments like recession or depression are to uplift the aggregate demand in the economy, induce more investment and accomplish rapid economic growth.

The fiscal policy response to the pandemic aims at fulfilling the following objectives:

- The urgent policy objective is to reduce the "health crisis" emanating from the pandemic;
- The subsequent objective is to curb the deleterious impacts of "containment" and alleviation measures on "households and businesses";
- The further test for the government is to buttress *rapid* economic recovery;
- Thereafter, the major objective is to intensify the durability and resilience of economic and health systems. (OECD, n.d.)

In a word, the current fiscal policy aims at protecting 'lives and livelihoods' on a sustained basis, keeping the economic cost, which may spread over several years, as low as possible and reversing the economic time lost. As the *IMF Fiscal Monitor* April 2021 states, "Until the pandemic is brought under control globally, fiscal policies must remain flexible and supportive, while keeping debt at a manageable level over the long-term."

Section 3: Global Position

The *IMF Fiscal Monitor* classifies fiscal measures in response to the COVID-19 pandemic since January 2020 into two main categories: (A) 'Above-the-line' measures and (B) Liquidity support. The former includes: (Ai) Additional spending or foregone revenues on health and non-health sectors and (Aii) Accelerated spending/deferred revenue. The latter includes: (Bi) 'Below-the-line'; measures including equity injections, loans, asset purchase or debt assumptions and (Bii) Contingent liabilities comprising guarantees and quasi-fiscal operations.

Globally, as of June 5, 2021, taking 191 countries into account, 9.7% of GDP was spent as (Ai) [USD 10,417 billion] and 0.9% as (Aii) [USD 772 billion]. Similarly, 6.2% of GDP was spent on B [USD 6,132 billion] – 0.4% on (Bi) [USD 388 billion] and 5.7% on (Bii) [USD 5,744 billion]. Table 2 presents the economy group-wise fiscal expenditure since January 2020, as ratio to GDP.

Table 2: Economy Group-wise Fiscal Expenditure as Ratio to GDP:

Median and Range

Economy Group	A		B	
	(Ai)	(Aii)	(Bi)	(Bii)
G20: Advanced Economies (11)	13.6% [3.8% - 25.4%]	0.5% [0.0% - 3.9%]	0.3% [0.0% - 6.2%]	14.3% [0.6% - 35.1%]
G20: Emerging Markets (10)	4.5% [0.7% - 9.2%]	0.9% [0.0% - 3.1%]	0.4% [0.1% - 1.1%]	1.6% [0.0% - 9.1%]
Other Selected Advanced Economies (27)	8.3% [0.8% - 27.4%]	0.9% [0.0% - 13.7%]	0.9% [0.0% - 12.1%]	3.5% [0.0% - 15.5%]
Other Selected Emerging Markets (84)	3.3% [0.0% - 19.6%]	0.5% [0.0% - 12.6%]	0.6% [0.0% - 5.5%]	1.0% [0.0% - 33.9%]
Selected Low-Income Developing Countries (59)	2.6% [0.0% - 15.8%]	0.4% [0.0% - 3.7%]	0.5% [0.0% - 1.8%]	0.1% [0.0% - 2.3%]

Based on data in IMF Fiscal Monitor, July 2021. Figures in ( ) are numbers of constituting countries. Figures in [ ] are ranges.

By and large, the fiscal measures were relatively strong in the advanced and emerging market economies. Further, within (A), more importance was accorded to (Ai) than (Aii), and within (B), (Bii) exceeded (Bi)

Table 3 presents the fiscal expenditure details pertaining to BRICS countries of which India is a member.

Table 3: Fiscal Expenditure - BRICS Countries

Country	Amount (USD billion)				Ratio to GDP			
	(Ai)	(Aii)	(Bi)	(Bii)	(Ai)	(Aii)	(Bi)	(Bii)
Brazil	132	44	15	73	9.2%	3.1%	1.1%	5.1%
Russian Fed.	67	6	8	14	4.5%	0.4%	0.5%	1.0%
India	93	18	9	130	3.5%	0.7%	0.3%	4.9%
China	711	232	0	193	4.8%	1.6%	0.0%	1.3%
South Africa	18	3	0	12	5.9%	0.9%	0.0%	4.1%
Total	**1,021**	**303**	**32**	**422**				

Based on IMF Fiscal Monitor, July 2021.

Amount-wise, China was the highest spender. In (Ai), (Aii) and (Bii), it accounted for 70%, 76% and 46% respectively of the corresponding BRICS totals. India remained modest in (Ai), but was next to China in (Bii). China and South Africa did not engage in (Bi). In terms of ratio to GDP, Brazil was at the top and India at the bottom by (Ai). However, India was second to Brazil in terms of (Bii).

Impact on Government Finances

Due to GDP deceleration and expenditure acceleration, fiscal deficits and debt levels increased phenomenally around the globe in 2020. Average overall deficit as percentage of GDP scaled 11.7, 9.8 and 5.5 for advanced economies, emerging market economies and low-income developing countries, respectively. Average public debt in the world shot up to an all-time high of 97% of GDP in 2020. In 2021 also, fiscal deficits are projected to remain high, but may moderate from peak levels with part recovery in revenues and reduction in temporary pandemic-related expenditures. (RBI, 2021)

Section 4: India's Response

Following the declaration of COVID-19 as a pandemic, the central government immediately announced several economic measures which cumulatively amounted to ₹17.2 trillion (Table 4).

Table 4: Fiscal Package Announced by the Union Government

Sr. No.	Scheme	Amount (₹ billion)	Ratio to Total
1	Pradhan Mantri Garib Kalyan Package (PMGKP) – (March 26, 2000)	1,700.00	9.9%
2	PM's Health Package	150.00	0.9%
3	Revenue Loss due to Tax Relief Measures	78.00	0.5%
4	AatmaNirbhar Bharat Abhiyan 1.0 (May 13-17)	11,026.50	64.2%
5	PMGKP Anna Yojana Extension	829.11	4.8%
6	AatmaNirbhar Bharat Abhiyan 2.0 – (October 12)	730.00	4.3%
7	AatmaNirbhar Bharat Abhiyan 3.0 – (November 12)	2,650.80	15.4%
	Total	**17,164.41**	**100.0%**

Based on RBI (2021).

The pivotal programme is the *AatmaNirbhar Bharat Abhiyan 1.0, 2.0 and 3.0.* The *AatmaNirbhar Bharat Abhiyan* has been popularized by the Prime Minister, Narendra Modi, with a view to making the country economically more progressive during the pandemic and thereafter. The three versions of the *AatmaNirbhar Bharat* Abhiyan together accounted for 83.9% of the total outlay. *PMGKP* along with its *Anna Yojana* Extension constituted another 14.7% of the total.

Specific Measures

In order to appreciate the qualitative significance of the government's fiscal program, it is necessary to look into the specific measures, which are listed below (sourcing from *IMF Fiscal Monitor)*:

A. 'Above-the-Line' Measures

Additional Spending and Foregone Revenue in the Health Sector

Additional spending (Rs. 710 billion):

- Additional spending on health infrastructure, including for COVID-19 testing facilities, Personal Protective Equipment, isolation and Intensive Care Unit beds, ventilators and medical screening.
- The Budget for 2020-21 provided Rs. 350 billion for the vaccination program and its possible enhancement.

Additional Spending and Foregone Revenue in the Non-Health Sector

Additional spending (Rs.6,217 billion):

- On March 26, 2020, provision of insurance cover for healthcare workers, food and cooking gas, and cash transfers and wages to vulnerable households (₹1.49 trillion) was announced.
- During May 13 - 17, 2020, this initial package was expanded focusing on the government's existing rural employment guarantee scheme (additional ₹400 billion), extension of food support to migrants (₹35 billion) and other measures (about ₹93 billion).
- On June 30, 2020, the provision of food rations to poor households was extended (₹829 billion).
- On August 20, 2020, extension and expansion of unemployment benefits for workers covered under the Employees State Insurance Corporation scheme was announced.
- On October 12, 2020, measures were announced targeting consumption and public investment. On the consumption side: (i) public sector employees were offered a cash payment which could be used to purchase (through digital mode) goods that attract Goods & Services Tax (GST) of 12% or more (₹56.8 billion); (ii) a Special Festive Interest-free Advance Scheme was offered to the central government employees (₹40 billion). As far as public investment is concerned, additional expenditure by the central government (₹250 billion) and a lending scheme for State governments, involving a 50-year interest free loan (₹120 billion), were launched.
- On November 12, 2020, a new package (₹2,651 billion) was announced which included: (i) a Production Linked Incentive scheme for 13 priority sectors (₹1,460 billion) to be disbursed over five years; (ii) additional expenditure on fertilizer subsidies (₹650 billion); (iii) expenditure on urban housing projects (₹180 billion); (iv) additional capital expenditure on industrial infrastructure and incentives (₹102 billion); (v) funding for rural employment (₹100 billion) and (vi) funding for employment in the formal sector (₹60 billion).
- In April 2021, as infections increased, free food grains to individuals was announced in May and June (₹260 billion). A scheme for providing interest-free loans to States for capital expenditure in FY22 (₹150 billion) was extended. The release of Disaster Response Fund to State governments was accelerated.

Accelerated Spending and Deferred Revenue in the Non-Health Sector

Accelerated Spending (₹660 bn):

- On March 26, 2020, the first instalment payment to lower income farmers under PM KISAN (₹160 billion) was expedited.
- As part of the scheme announced on June 20, 2020, the government expedited the implementation of public works projects involving 12 different ministries with a view to increasing employment and livelihood prospects for migrant workers going back to villages (₹500 billion).

Deferred revenue (₹680 billion):

- Extension of income tax filing deadline (three months); reduction of penalty for late payments; extension of date for filing FY2019 GST tax (three months); miscellaneous relaxations of tax regulatory/administrative requirements.
- Reduction in 'at source' deductions of tax for workers (₹500 billion).

B. 'Below-the-line' Measures

Equity injections, asset purchases, loans, debt assumptions, including through extra-budgetary funds (₹641 billion)

- Equity infusion for MSMEs (₹500 billion).
- A viability-gap funding scheme for private sector investment in social infrastructure (₹81 billion). (Both announced in May 2020).
- Equity infusion in infrastructure financing funds and platforms (₹60 billion) announced in November, 2020.

C. Contingent Liabilities

Guarantees (on loans, deposits, etc.) (₹8,450 billion)

- Full guarantees for a collateral-free lending program (₹3 trillion).
- Liquidity provision and partial credit-guarantee schemes for non-bank financial companies (₹750 billion).
- Subordinate debt provision for MSMEs (₹200 billion).
- Credit provisions to be guaranteed by the government to farmers on concessional terms (₹3 trillion) and for street vendors and miscellaneous measures (₹160 billion).
- Guarantee provision for credit under a new infrastructure fund for agriculture (₹1 trillion) and for micro-food enterprises (₹100 billion).
- Numerous miscellaneous guarantee items (₹321 billion).
- On November 12, 2020, the collateral-free lending program was extended to March 31, 2021 and expanded to support to 26 troubled sectors.

Quasi-fiscal operations (non-commercial activity of public corporations on behalf of government) (₹1,200 billion)

- Loans to companies in the electricity distribution sector (initially ₹900 billion but later enhanced to ₹1,200 billion), carried out by the Power Finance Corporation and the Rural Electrification Corporation under State Government guarantees.
- One-time relaxation in the borrowing limits of electricity distribution companies and allowing more such companies to avail of the borrowing scheme.

The specific measures demonstrate that the approach has been broad-based and comprehensive. The focus has been on the vulnerable sections of the society. It takes on the challenges of today as well as tomorrow by boosting the level of aggregate demand.

Impact on Deficits

As observed globally, sharp contraction in GDP and phenomenal increase in expenditure led to increase in the central government deficits. During 2020-21 (RE), gross fiscal deficit and revenue deficit surged to 9.4% and 7.4% of GDP respectively from 4.6% and 3.3% of GDP in that order in 2019-20.

Based on data from Controller General of Accounts, Ministry of Finance, during the current fiscal, up to July-end 2021, the fiscal deficit stood at ₹3,211.43 billion, 60.9% lower than that in the similar period last year. At this level, it accounted for 21.3% of 2021-22 BE, indicating good management of the Budget 2021-22 hitherto. This also looks quite favourable when compared with the pre-pandemic year, i.e., July 2019 when it stood at 77.8% of the FY20 BE. Deficit has been financed mostly through market borrowings.

The revenue deficit at July-end 2021 stood at ₹2,068.63 billion or 18.1% of the FY22 BE. At this level, the revenue deficit was 71.1% below that in the similar period last year. This also looks quite favourable when compared with the pre-pandemic year, i.e., July 2019 when it stood at 94.1% of the FY20 BE.

Impact on Public Debt

As of March 2021, India's public debt rose by 19.0% over the previous year to ₹1,02,393.07 billion due to pandemic-induced borrowings. As ratio to GDP, it rose to 51.9% from 42.3%. While internal debt rose by 19.5%, external debt by 12.1%. Table 5 presents the details.

Table 5: Impact on Public Debt

(Amount in ₹ billion)

	March-end 2020	March-end 2021	Variation
1. Internal Debt	80,199.59 (39.4%)	95,833.66 (48.5%)	19.5%
2. External Debt	5,853.25 (2.9%)	6,559.41 (3.3%)	12.1%
3. Public Debt (1+2)	86,052.84 (42.3%)	1,02,393.07 (51.9%)	19.0%

Figures in brackets give % to GDP. Based on Quarterly Report on Public Debt Management, Department of Economic Affairs.

Section 5: Concluding Remarks

As observed globally and as the circumstances merited, India adopted an expansionary fiscal policy. The policy was not over-expansionary; rather it was optimal. The fiscal policy was supported by an "accommodative" monetary policy which kept liquidity at quite comfortable level and interest rates low. The combination of both policies has begun to produce salubrious impact on aggregate demand which will help revive growth. Real PFCE growth in 2021-22:Q_1 has jumped to 19.3% from -26.2% a year ago.

Besides the on-going capital expenditure programs of the government, the recently announced National Monetisation Pipeline and *Gati Shakti* project worth estimated ₹6 trillion and ₹100 trillion, respectively, will further push the growth and revenue trajectory, besides augmenting employment, in the medium-term. Real GFCF has made a solid comeback to positive territory in 2021-22:Q_1 compared to similar period last year.

There is some sign of discomfort about inflationary pressures. However, the current situation demands more attention to be paid to growth rejuvenation than inflation which, again, seems to be transient.

Real GDP growth in 2021-22:Q_1 has vaulted to 20.1% from - 24.4% a year ago. As growth consolidates, the government's revenues will improve, and with 'unnecessary' expenditure under leash, deficits will reduce. Keeping this in view, the Budget 2021-22 targets fiscal deficit and revenue deficit to come down to 6.8% and 5.1% of GDP respectively.

However, imponderables such as the truancy of monsoon, geopolitical tensions and last but not least the much-apprehended third wave of COVID-19 cannot be wished away.

References

1. Department of Economic Affairs, Ministry of Finance, "Quarterly Report on Public Debt Management for the Quarter" (various issues).
2. https://cga.nic.in/index.aspx
3. https://www.who.int/
4. IMF (April 2021), "Fiscal Monitor: A Fair Shot".
5. International Monetary Fund (July 2021), "Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic".
6. National Statistical Office (August 31, 2021), "Press Note on Estimates of Gross Domestic Product for the First Quarter (April-June) 2021-2022".
7. OECD (n.d.). Retrieved from www.oecd.org: https://www.oecd.org/coronavirus/policy-responses/tax-and-fiscal-policy-in-response-to-the-coronavirus-crisis-strengthening-confidence-and-resilience-60f640a8/
8. RBI (2021), "Annual Report 2020-21"

ग्राहक संरक्षण की दृष्टि से शिक्षा के लिए फ्रेमवर्क

आर्थिक सहयोग और विकास संगठन- वित्तीय शिक्षा पर अंतर्राष्ट्रीय नेटवर्क (ओईसीडी-आईएनएफई) के वित्तीय शिक्षा के लिए राष्ट्रीय कार्यनीति पर आधारित एचएलपी ; और विद्यालयों में वित्तीय शिक्षा पर ओईसीडी-आईएनएफई के दिशा-निर्देशों के अनुसार वित्तीय ग्राहक संरक्षण पर जी-20 उच्च स्तरीय सिद्धान्तों (एचएलपी) (सिद्धान्त 5 : वित्तीय शिक्षण और जागरूकता) के मार्गदर्शन के आधार पर ग्राहक संरक्षण पर विशेष फोकस के साथ वित्तीय शिक्षा के लिए एक फ्रेमवर्क विकसित किया गया है।

यह फ्रेमवर्क विनियमित संस्थाओं (आरई) ग्राहकों के सशक्तिकरण के लिए एक कार्यनीति निर्धारित करता है जिसमें निम्नलिखित पहलुओं को शामिल किया गया है, नामतः (i) लक्षित समूहों को उनकी संवेदनशीलता और सूचना की कमी के आधार पर वर्गीकृत किया गया है; (ii) ग्राहक संरक्षण पर वित्तीय शिक्षा को लक्षित समूहों की आवश्यकता के अनुसार तैयार किया जा सके; (iii) अभीष्ट व्यक्तियों तक अधिकतम पहुंच के साथ बहु-आयामी डिलीवरी चैनल; (iv) ग्राहक संरक्षण की दृष्टि से वित्तीय जागरूकता फैलाने के लिए विभिन्न संस्थानों / विभागों / स्टेकहोल्डरों के साथ समन्वय स्थापित करना ; और (vi) उठाए गए कदमों की प्रभावकारिता का पूर्वानुमान लगाने, सुधार किए जाने वाले क्षेत्रों की पहचान और यह निर्धारित करना कि फ्रेमवर्क किस स्तर तक अपने उद्देश्य प्राप्त किए, पर एक मल्टी मोड मैपिंग की गई है।

स्रोत: वार्षिक रिपोर्ट (2020-21), भारतीय रिज़र्व बैंक।

Monetary Policy Transmission in India: Analysing the framework and impediments with special focus on financial inclusion

Pramod Kumar Ojha*

Monetary Policy is an important instrument for Economic management of the country. Reserve Bank of India is the central authority and responsible for maintaining price stability and economic growth of the country. This paper will analyse the mechanisms and channels through which monetary policy transmission works in India and will also study the framework under which monetary policy is working currently, its recent performance and the factors that are challenging swift and adequate transmission of monetary policy in India. This paper has also focused on the role of financial inclusion in monetary policy transmission and its effectiveness.

Introduction

Today, when hospitals and doctors in India are at ease relatively as the vaccination has started reaching to the masses, however, the dent which the pandemic has left on the Indian economy in form of price instability, unemployment, and decline in economic growth rate will take some time to fill. The institutions and economic warriors are storming their brains to bring back the Indian economy on track. It has become the priority for the government agencies, institutions and economic warriors to recentre their agenda and planning which was disturbed by the pandemic. Stakeholder are trying their best to bring back the economy back on track.

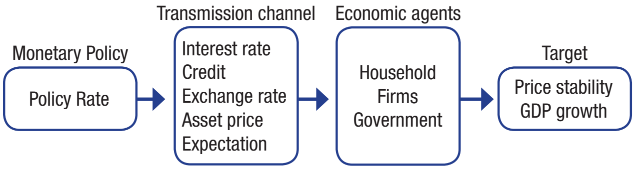
The pandemic was no less than a dissolution for the Indian economy which resulted in high unemployment, GDP decline and price instability (Ojha and Singh, 2020). These are the real situations for what the Reserve Bank of India (RBI) Act was amended in 2016 to establish Monetary Policy Committee (MPC) with primary objective of price stability and growth (Acharya, 2017). The Reserve Bank's Monetary Policy Department (MPD) assists MPC in framing monetary policy and deciding policy repo rate. Monetary policy is the action taken by the RBI to regulate money supply, achieve macroeconomic goals and sustain economic growth. As per the RBI Act 1934, the Apex bank is set to regulate issue of bank notes and keeping reserve to secure monetary stability. As per Mohan, (2016) though it is not mentioned in this Act but the twin objective of monetary policy is price stability and provisioning adequate credit to productive sector of economy to support sustainable economic growth and among this, the former has been given more priority as it is the low inflation that creates environment for sustainable growth. Monetary policy transmission is the process through which the monetary policy action of the RBI is transmitted to the final objective of price stability and sustainable economic growth (Acharya, 2016). This paper will discuss the mechanism, trend, impediments in monetary policy transmission in India and also attempt to find a role of financial inclusion in monetary policy transmission.

Monetary policy transmission mechanism

Monetary transmission is the entire process (Fig:1) from changing of the policy rate by RBI to adoption of the rate by money market to disseminating it to economic agents like households, firms and government, finally resulting in price stability, economic growth and employment. The changes in policy rates reaches to various economic agents through various channels. It is very important for the transmission that how these economic agents react to these changes. The economy is impacted by the change in policy rate through various channels, five major among them are interest rate, credit, exchange rate, asset price and expectation (Acharya, 2016).

*SWO 'A', Punjab National Bank.

Figure 1: Monetary Policy transmission



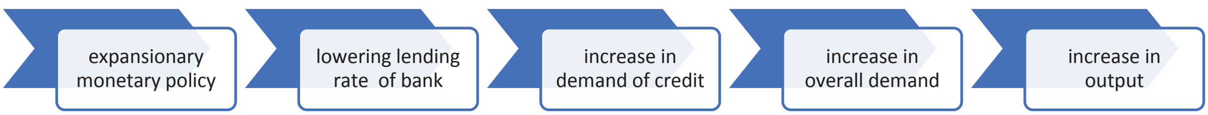
Interest rate channel

The impact of change in policy rate is instantly felt in short-term money market instruments such as call money rate, treasury bill, commercial paper, certificate of deposit etc and with little lag in medium and long-term money market instrument like government securities, commercial bonds. Interest rate channel is the key transmission mechanism that follows the basic Keynesian ISLM model.

Expansionary monetary policy will lead to fall in real interest rate, which will lower the cost of capital, leading to rise in investment thereby resulting in increase in demand and subsequently resulting in rising output.

Credit channel

The credit approach is not mutually exclusive from interest channel. In fact, they can be said as the two faces of the same coin. The interest rate channel in monetary transmission refers to the liability side of credit system while credit channel stresses on the asset side of financial institutions.



For example, when the apex bank follows expansionary monetary policy by lowering policy rate, this will be followed by the banks by lowering their lending rates that will boost the demand for credit from economic agents which will result in increase in overall demand in the economy, finally culminating in increase in output. But this will not work so smoothly as stated, as increase in demand may also give rise to increase in cost of inputs that may lead to inflation. In such situation Apex bank has to decide the trade-off between inflation and economic growth. In addition to this, the bank balance sheet also plays an important role in transmitting the policy rate. It is a matter of separate discussion that will be covered in a different heading - challenges in monetary policy transmission.

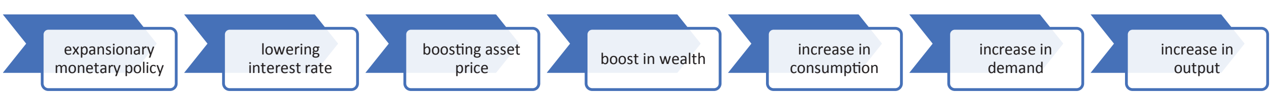
Exchange rate channel

In the present scenario of increased globalisation of economies and prevailing flexible exchange rate, this channel plays significant role in monetary policy transmission through its effect on net export. This approach also gets impacted with the interest rate effect (Mishkin, 1996).

Lowering of policy rate will lower the domestic interest rate that will result in depreciation of inland currency, this will make import more expensive and export more competitive that will finally boost the economy by raising its output.

Asset price channel

Another vital channel that plays a significant role in impacting macro variables is asset price channel.



Expansionary monetary policy will lower the interest rate, which will boost the price of asset like housing and equity as the cost of fund to buy these assets become cheap. This will indirectly boost the wealth of the household and firms. This will lead to high consumption as the economic agent perceive that their wealth is high. This will lead to increase in aggregate demand which finally increases the output of the economy.

Expectation and communication channel

Communication and creative engagement with the economic agents have emerged as an important approach in monetary policy transmission as it gives signal to these agents on the basis of which they form expectations about the economy. Expectation approach is one of the usual transmission mechanisms of monetary policy and managing expectation of economic agent is key to success of monetary policy (Guler, 2016). In the present scenario of market-oriented economy, it is expected that the participant should be well informed and no other than the Apex Bank can provide the useful information to the economic participants, as disseminating information helps in shaping expectations (Mohan, 2016).

The central bank should take appropriate steps in designing the communication policy as it will still be a dilemma for the Apex bank to decide what, when and how much information should be disseminated so that it should positively impact the financial market and help in smooth transmission of monetary policy. Nowadays, monetary policy functions mostly through expectation approach. Communication and transparency are the backbone of this channel, in absence of which markets get entangled in uncertainties. The market with full of uncertainties is most likely to have wrong expectations that may result in wrong calculation regarding intention of Apex bank. Hence it is the obligation of the Central Bank to reduce the uncertainties, if not eliminate completely by communicating with the economic agents in a transparent manner that makes the monetary policy more effective (Guler, 2016).

It is more complicated for RBI to disseminate information among economic agents due to differing perception among the audience. RBI uses various channels like research publication, speeches by Governor and Deputy Governor, seminar, policy meeting, policy statement, review of macroeconomic development, periodic reports etc to transmit signals among the economic agents that helps in expectation building in market that directly influences the transmission (Mohan,2016). Setting up of Technical Advisory Committee on Monetary Policy (TACMP) in 2005 by the RBI, which includes representation from market participants, experts and regulators is an effort and practice of international standard. It also strengthens the consultative process in monetary policy (Mohan, 2016). The efforts of RBI regarding monetary policy so far has made it participative, consultative and transparent and has also helped in stabilizing the expectations and building a credibility among market participants. These efforts have been strengthened by various reforms in financial market and a visible coordination between RBI, government and various regulators. There is no doubt that the future course of monetary policy transmission will prevail by expectation approach.

The economy can be impacted by the monetary policy through various channels. These channels are not totally mutually exclusive, rather these work simultaneously and interact with each other. It is not so easy to separate the strength of impact of these channels as we have studied it separately. The strength and speed of these channels depend on factors like degree of openness of economy, fiscal policy, structural characterises, depth of financial market and instrument available in it (Kundrakpam and Jain, 2012).

Monetary Policy - How it works in India?

Monetary policy framework in India

The Reserve Bank of India (RBI) is the sole authority to look after the monetary policy transmission in India. The primary objective of monetary policy is to maintain price stability while keeping economic growth in mind, for which, controlling inflation is crucial. The current framework which India has adopted for its monetary policy is Flexible Inflation Targeting Framework (FITF), under which, a flexible inflation target for five years is set by Government of India. The current inflation target is 4 percent with a flexibility of plus or minus 2 percent. In fact, the process of monetary policy starts with setting of FITF and keeping in mind the current and evolving macroeconomic situation and inflation target, the Monetary Policy Committee (MPC) works out its policy rates. The decision of MPC is published in the form of a resolution. The MPC is assisted by Monetary Policy Department (MPD) and views of key stakeholders are also considered to arrive at the policy rate. The operationalisation of monetary policy is done by the Financial Market Operational Department (FMOD) of RBI through day-to-day liquidity management operation. To ensure the close alignment of operating target-weighted average call money rate (WACR) with policy rate, the Financial Market Committee (FMC) meets daily to review liquidity conditions (RBI, 2020).

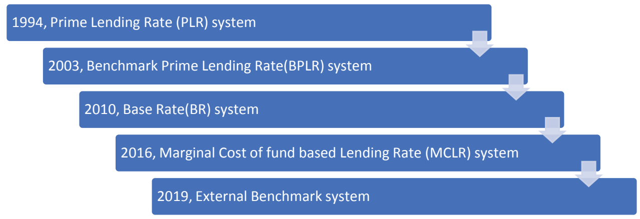
The Reserve Bank of India uses various instruments like Repo rate, Reverse repo rate, Liquidity Adjustment Facility (LAF), Marginal Standing Facility (MSF), Bank rate, Cash Reserve Ratio (CRR), Statutory Liquidity Ratio (SLR), Open market operations, Market Stabilisation Scheme etc to steer the economy towards the environment where, price, exchange rate and interest rate are stable and lead to sufficient credit availability for productive sectors, resulting in economic growth.

From Policy Rate to Lending Rates

After the monetary policy formulation and its announcement by the monetary authority, now comes the role of financial market to disseminate this rate change to the economic agents in the country.

In India, the banking sector predominates on the large portion of financial market. Therefore, the overall effectiveness of monetary transmission depends on role played by banks. It is very crucial for the transmission, that to what extent and pace banks adjust their deposit and lending rates and fulfill the demands of economic agents. This section of the paper will focus on the role played by banks in transmission. Since the economic reforms of 1990s, RBI has taken many steps to bring transparency and flexibility in interest rate setting by banks (Acharya, 2016).

Figure 2: Transient phase of Interest rate setting



Source: Acharya, 2016

Till now, we have travelled a long distance in refining and making lending rate more flexible and transparent (Fig- 2). Until 2019, we were using different versions of lending rate that were based on the internal benchmark and were under the control of banks like their cost of fund. Though the successive benchmark lending rates were better than the previous, but as they were based in internal factors, they were not able to transmit the policy rate up to the expectation. External benchmark will be based on market determined rate like Certificate of Deposit (CD) rate or Treasury Bill (TB) etc. The external benchmark is more transparent, common across banks and are more helpful in transmitting policy rate quickly. As the market rate moves in line with the central bank's policy rate, so external benchmark is considered to be most suitable for conveying monetary policy signals.

As per the latest notification of RBI (Feb, 2020), it is mandatory from 1 April 2020 for the all scheduled commercial banks except Regional Rural Banks (RRB) to apply external benchmarks like RBI policy rate, government 3-month and 6-month Treasury Bill or any other financial benchmark published by Financial Benchmarks India Private Ltd. (FBIL) to all personal or retail loan (housing, auto, etc.) and loans given to Medium enterprises and this facility can also be extended to other types of borrower. To make the lending process more transparent, standard and understandable to borrower RBI has made it mandatory to use uniform external benchmark within loan category.

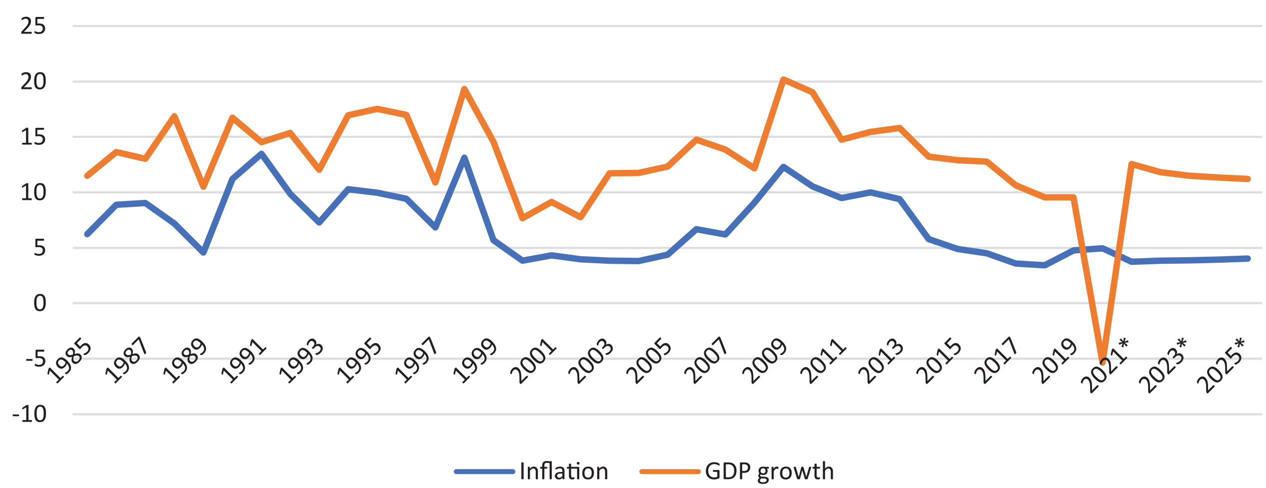
Impact lag of Monetary policy

The transmission of monetary policy is not so swift as it is mentioned in various channels. Change in the policy generally takes some time to create its impact on economy. Various evidences from India shows that impact of monetary policy actions is felt with a lag of 6-9 months on output and 9-12 months on inflation and the impact on economy persist for 24-36 months (Acharya,2016). Among all the channels of transmission, interest rate channel is quite fast and strong, but this too works with lag, so it becomes important for the framer of monetary policy to be forward looking. Reason for the lag in transmission of monetary policy differ in economies but some general cause of the lags is delay in observation of policy rate into financial market, gradual response to the investment by consumer and business, lack of confidence and building of positive expectation for future growth prospect, fixed rate mortgage etc. The delay in impact of monetary policy on the economy and its evaluation keeps the whole environment in uncertainties and this makes the job of apex bank more complex and challenging.

Is transmission working well?

The quality and pace of the monetary policy transmission from policy rate to the real economy depends on the factors like state of financial system and structure of economy. It has been observed that the lag in transmission from policy rate to lending rate has reduced in the recent period as compared to earlier decades. It would not be an overstatement if it is said that the monetary policy transmission has done quite well post reform period. There has been fall in and stability of inflation in post-reform period and it has also established inflation expectations. It is also noticeable that GDP growth has been sustainable in post-reform period excluding some major economic crisis like 1997 Asian financial crisis, Financial Crisis of 2007-08 and presently crisis due to COVID pandemic (Fig: 3).

Figure 3: Inflation rate and GDP rate in india 1985-2025



Source: Statista, * Expected value

Transmission of monetary policy in rate structure has been satisfactory in recent period (Economic survey, 2021). In total policy rate cut of 250 bps has been transmitted to fresh rupee loans with reduction of 165 bps (Table: 1). Private sector banks have shown greater transmission on fresh loans as compared to public sector banks. However, performance of public sector banks in outstanding loans are quite impressive in comparison to private sector banks (Table:2). It is also impressive that recently banks have also reduced their saving deposit interest rate which is a rare phenomenon in a decade except during demonetisation.

Table1: Transmission from Repo Rate to Banks' Deposit and Lending Rates (bps)

Period	Repo Rate	Term Deposit Rates		Lending Rates		
		Median Term Deposit Rate	WADTDR	1 Year Median MCLR	WALR - Outstanding Rupee Loans	WALR - Fresh Rupee Loans
Mar 20 - Dec 20*	–115	–146	–81	–95	–67	–94
Feb 19 - Dec 20*	–250	–210	–127	–145	–83	–165

Source: RBI
Note: WALR: Weighted Average Lending Rate. WADTDR: Weighted Average Domestic Term Deposit Rate; MCLR: Marginal Cost of Funds based Lending Rate.
* Latest data on WALR and WADTR pertain to November 2020.

Source: Economic Survey 2020-21

Table 2: Transmission across bank groups during easing cycles (bps)

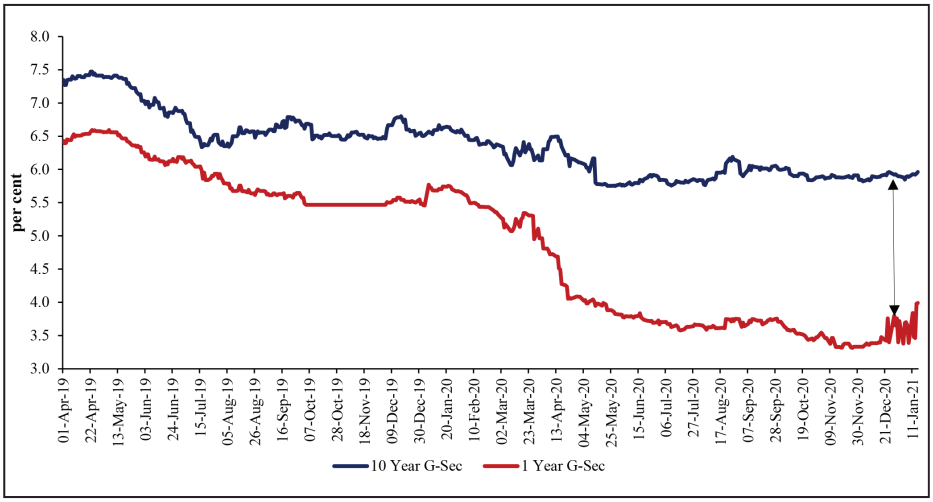
	February 2019 to November 2020			March 2020 to November 2020		
	WALR-Outstanding loans	WALR-Fresh loans	WADTDR	WALR-Outstanding loans	WALR-Fresh loans	WADTDR
Public sector banks	–94	–151	–108	–69	–68	–71
Private sector banks	–59	–176	–149	–59	–134	–94
SCBs#	–83	–165	–127	–67	–94	–81

Source: RBI
Note: #: Include public sector, private sector and foreign banks.

Source: Economic Survey 2020-21

Monetary policy transmission has also been satisfactory in case of term structure. It has brought down both long-term and short-term interest rates. However, impact has been felt more on short-term interest rate as compared to long-term interest rate. (Fig:4). The policy rate has also been transmitted to the corporate bonds and yield in the same spirit.

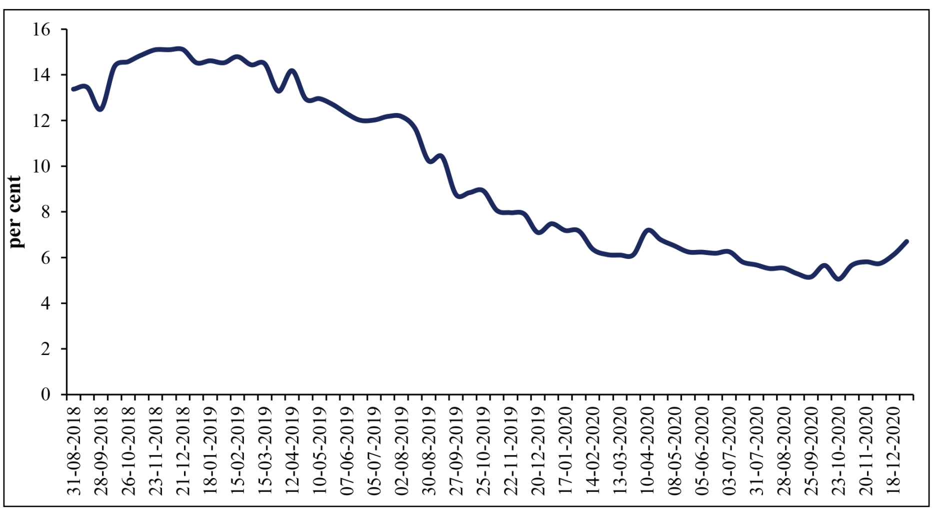
Figure 4: Government Bond yields in India (per cent)



Source: Economic Survey 2020-21

Despite reduction in policy rate and good transmission of it to lending rate, the growth in credit has declined from 14.8 percent in February 2019 to 5.1 percent in October 2020 with a little acceleration in January 2021 (Economic Survey 2020-21).

Figure 5: Bank Credit growth (YoY) (per cent)



Source: Economic Survey 2020-21

Challenges to transmission

Monetary policy transmissions through the financial market are unable to reach the economic agent as per the expectation. There are several factors that are acting against the transmission mechanism.

As per the RBI, asset quality of banks is one of the prime factors that is hindering the smooth transmission of monetary policy. This factor plays an important role in India where the banks play a dominant role in financial market. As per an estimation, total NPA is looming around 8.5 percent in March 2020 which may aggravate to 12.5 percent due to pandemic. The banks having large NPA will be reluctant to issue fresh loans despite ease in monetary policy.

Long and fixed maturity rates of the deposits deter the transmission of policy rates. As per the RBI, bulletin of March 2020, about half of the deposit of commercial banks are in maturity slot of one year and above and 20 percent are in maturity slot of five years and above. Such funds are totally out of preview of the transmission mechanism until they are matured or renewed.

Saving deposit interest rate rigidity is another reason that stops the transmission up to its full potential. As per RBI, the Apex Bank has deregulated the saving bank deposit rates since 2011 but most banks keep it at 4 percent, but not a single public sector bank changed it till 2017 and that is not due to monetary policy but due to demonetisation, which inflexed surplus fund in saving deposits. This rigidity of saving deposit and lack of willpower of banks create a hurdle in monetary transmission.

Though we have shifted to MCLR and applied external benchmark lending rate to some extent however, large amount of loans are still linked to the base rate. Though the borrowers are allowed to switch their loan from base rate to MCLR, but due to lack of banks publicity and reluctance of borrower to avoid fee charges and also ignorance of borrower are creating problems in monetary transmission (RBI bulletin, Mar 2020).

Mutual funds and small saving schemes like Public Provident Fund (PPF), Senior Citizen Saving Scheme (SCSS), Sukanya Samridhi Accounts (SSA) and National Saving Certificate (NSC) are creating a competitive pressure on the bank deposits which indirectly prevent the transmission to reach its objective, interest rate on small saving are decided by the government and are linked to secondary market. It has been observed that generally interest rate on small saving are quite high than the bank deposit rates. Administering interest rate disturbs the equilibrium of saving-investment system impacting transmission.

Monetary policy - Is it working for financial *Antyodaya*?

Policies are made for the benefits of the people and so is the monetary policy. It is apparent that reducing inflation and accelerating economic growth will benefit the whole country. However, this benefit should be inclusive and should help in upliftment of the people who lag behind in getting the benefit of development in the country. The concept of financial *''Antyodaya''* upliftment of last person financially through monetary policy can be understood by understanding the relation between monetary policy transmission and financial inclusion.

The study in India relating to financial inclusion and monetary policy transmission are limited. There are very few literatures available that investigates the relation of financial inclusion and monetary policy transmission in India. There are many definitions of financial inclusion but their crux is to provide adequate and appropriate financial service to the excluded group in the society at affordable cost, on time and in transparent manner through formal financial institutions (Srivastava and Ojha, 2020). There are many literature evidences that highlight the importance of financial inclusion leading to increase in welfare distribution, saving, credit availability and poverty elimination. Expanding financial inclusion increases investment, intensifies purchasing power parity, lower inflation rate finally leading to monetary stability (Yetman, 2018).

Monetary transmission can work only through those area where access to financial institution and usage of financial instrument are good. However, country like India with different terrain of hills, forests, deserts and islands supports large chunk of population without these facilities. According to Lenka and Bairwa (2016), association between inflation and financial inclusion is negative and statistically significant symbolising that financial inclusion can help in price stability and in fact, it contributes to about 21 percent in effectiveness of monetary policy. As per Agoba et al, (2017) the Central Bank smoothly stabilises inflation in highly financially included area in comparison to low inclusion where it has to wait longer for price stability and also financially included have smooth consumption as they have easy access to saving and borrowing. According to Mehrotra and Nadhanael, (2016) interest rate sensitivity is more in the area with high financial inclusion as compare to the financially excluded area. According to Srivastava and Ojha, (2020) financial inclusion reduce poverty, mitigate economic shocks, create a base for large financial institutions. There is a bidirectional relation between financial inclusion and monetary policy transmission which compel the framers of monetary policy to think of a new approach to monetary transmission.

Way forward

The monetary policy transmission has improved much in comparison to what it was a decade earlier. However, in comparison to the developed countries, we still lag behind. We have seen that Indian financial market is dominated by the banking sector; hence it is crucial to have robust banking structure and its balance sheet to have effective monetary policy transmission (Prabhu and Ray, 2019). It has been found that there is robust credit channel in India but they lack better asset quality. The asset quality of banks has become worse after 2013 due rise in NPA and it needs to be addressed soon for effective transmission.

India is an expanding economy; it needs timely credit for its sectors to invest in, for which the need of the hour is a sound financial market and effective transmission channel that can only be generated with robust banks. The two steps taken by the government, (1) Insolvency and Bankruptcy code (IBC) and (2) Recapitalisation of Bank are expected to solve the present problems of banks, former will resolve the problem in time bound manner and latter will raise the capital of bank which is also the requirement of Basel III norms.

India is a vast country with distinct geography, there are many that have not been tapped financially. There are evidences from the literature that relation between monetary transmission and financial inclusion is bidirectional. Hence it is required to go extra mile to bring these financially excluded people in formal financial system to increase their financial wellbeing and to improve the financial bases of our banks, so that monetary transmission can work swiftly.

It is matter of research to study the impact of privatisation of Indian banks on the monetary policy transmission in India. There is requirement of studies to find the correlation between privatisation of banks, financial inclusion and monetary transmission.

Conclusion

Efficient monetary transmission is a prerequisite for the successful pursuit to novel objectives of central bank. We have almost a century old monetary institution which has strengthen the monetary transmission process, so far by its appropriate and effective policy action. We have travelled a long distance with vast experience of economic ups and downs and extensive reforms. However, our hard work has not yet produced the desired result, as we lag behind many countries in the monetary policy transmission. We still have to go a long distance with extra effort and with double pace. There is a large scope of research in new dimensions of monetary transmission like financial inclusion, expectation building, etc. and thereof reform to make the transmission more transparent, standardise, consultative, inclusive and effective without compromising the credibility and autonomous of the central bank.

References

Acharya, V., 2016. *Monetary Transmission in India: Why is it important and why hasn't it worked well?* [online] Rbidocs.rbi.org.in. Available at: <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/01SP111217CBEF9077A25C48329B484120A3EF9B2F.PDF> [Accessed 15 February 2021].

Agoba, A. M., Sare, Y. A., & Bugri-Anarfo, E. (2017). Financial inclusion and monetary policy: a review of recent studies. *Ghana Journal of Development Studies*, *14*(1), 231-254.

2021. *Economic Survey 2020-21*. [online] Available at: <https://www.indiabudget.gov.in/economicsurvey/> [Accessed 21 February 2021].

Güler, A. (2016). Effectiveness of expectation channel of monetary transmission mechanism in inflation targeting system: An empirical study for Turkey. *Global Journal of Business, Economics and Management: Current Issues*, *6*(2), 222-231.

Khundrakpam, J. K., & Jain, R. (2012). Monetary policy transmission in India: A peep inside the black box.

Lenka, S. K., & Bairwa, A. K. (2016). Does financial inclusion affect monetary policy in SAARC countries? *Cogent Economics & Finance*, *4*(1), 1127011.

Mehrotra, A., & Nadhanael, G. V. (2016). Financial inclusion and monetary policy in emerging Asia. In *Financial inclusion in Asia* (pp. 93-127). Palgrave Macmillan, London.

Mishkin, F. S. (1996). *The channels of monetary transmission: lessons for monetary policy* (No. w5464). National Bureau of Economic Research.

Mohan, R., 2016. *Monetary Policy Transmission in India*. [online] Rbidocs.rbi.org.in. Available at: <https://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/76575.pdf> [Accessed 13 February 2021].

Mohanty, D., 2013. *Efficacy of Monetary Policy Rules in India*. [online] Rbidocs.rbi.org.in. Available at: <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/08SP_B080413.pdf> [Accessed 20 February 2021].

Ojha, P. and Singh, S., 2020. Covid-19 and its impact on aggregate financial well-being: An analysis in context of economic factors in India. *Shodh Sanchar Bulletin*, 10(40).

Prabhu A, E. and Ray, P., 2019. *Monetary Policy Transmission in Financial Markets*. [online] Economic and Political Weekly. Available at: <https://www.epw.in/journal/2019/13/money-banking-and-finance/monetary-policy-transmission-financial-markets.html> [Accessed 15 February 2021].

Rbi.org.in. 2019. *Reserve Bank of India - Notifications*. [online] Available at: <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11677> [Accessed 21 February 2021].

Rbidocs.rbi.org.in. 2020. *Functions and working of RBI*. [online] Available at: <https://rbidocs.rbi.org.in/rdocs/Publications/PDFs/RWF15012018_FCD40172EE58946BAA647A765DC942BD5.PDF> [Accessed 24 February 2021].

Rbidocs.rbi.org.in. 2021. *Monetary Policy Transmission in India – Recent Trends and Impediments**. [online] Available at: <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/01AR_110320208E84F02F54BC4AA08A9231CC141124A9.PDF> [Accessed 13 February 2021].

Srivastav, V. and Ojha, P., 2020. *Emerging Trend in Business and Economics*. 1st ed. Delhi: Laxmi Publication, pp.28-37.

Swamy, V., 2016. *A Study on the Effectiveness of Transmission of Monetary Policy Rates in India*. [online] www.iibf.org.in/. [Accessed 17 February 2021].

Yetman, J. (2018). Adapting monetary policy to increasing financial inclusion. *IFC Bulletins chapters*, *47*.

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I Prize: Micro Research 2020-21

Role of Artificial Intelligence and Analytics in Banking

Ishan Katyal*

Indian banking and financial sector has, and is still undergoing a major transformation with the advent of information technology. Of all the IT domains that are impacting this industry, Artificial Intelligence (AI) and Analytics are the top-contenders. In the present banking scenario, these stand out to be the solution to a plethora of problems – increasing competition, fraud and cyber security threats, regulatory compliances, improving efficiency of the revenue stream, etc. The present paper highlights the role that can be played by artificial intelligence and analytics in the banking sector. Various literatures have been used in the compilation of what business value can be added by these domains. This paper also mentions the current status of implementation with some examples of banks, challenges involved and recommendations for the banks for its adoption.

Introduction

The past decade has witnessed a widespread acceptance of digital technologies in India. Business verticals across industries are turning to a plethora of modern technologies to streamline their operations. According to PwC's report titled 'Industry 4.0: Building the Digital Enterprise report'[1], nearly 39% of companies in India plan to invest 8% of their annual revenues in digital programmes by 2021. As the Indian government pushes for India to become a USD 5 trillion economy by 2024, it also wants India's digital economy to become USD 1 trillion by 2025[2].

The banking industry in India is no exception to this radical transformation. It has witnessed major digital alterations in recent years. Most conventional banks have started partnering with financial technology companies in order to enhance customer experience, manage uncertainty, hedge risk, minimize frauds and thus create business value.

There are various type of technologies that are impacting the Indian financial sector, however artificial intelligence (AI) and data analytics are emerging to be the top-contenders. Both are being used by organizations and governments to improve upon areas such as customer experience, operational efficiency, fraud detection, cybersecurity, risk minimization, among other things.

Developing AI and data analytics infrastructure in India is also a key priority for the Indian Government. NITI Aayog formulated the 'National Strategy for AI' in 2018, to position India as a global leader in AI. The Government has stated that for banks to fulfill India's growing needs, they must harness technologies such as AI and Big Data.

Research Elaborations

There is a growing trend of using data analytics in the financial services industry. Banks are using Artificial Intelligence, analytics and machine learning to improve their operational capabilities, to create new ways of revenue generation and for making data-driven business decisions.[3]

As per the Top Global Trends for Retail Banking Industry 2019 by the Financial Brand[4], use of big data, AI and advanced analytics & cognitive computing topped the chart with 54% of the respondents highlighting it as a top trend.

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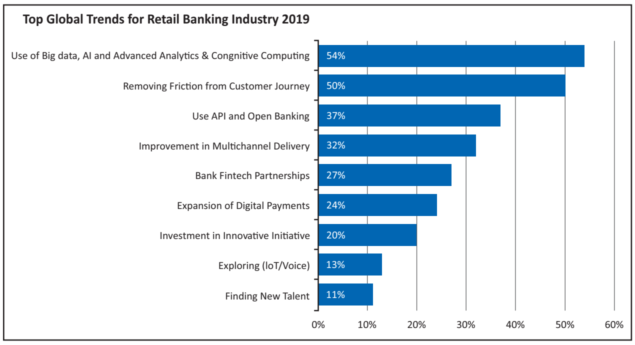
[1]https://www.pwc.com/gx/en/industries/industries-4.0/landing-page/industry-4.0-building-your-digital-enterprise-april-2016.pdf

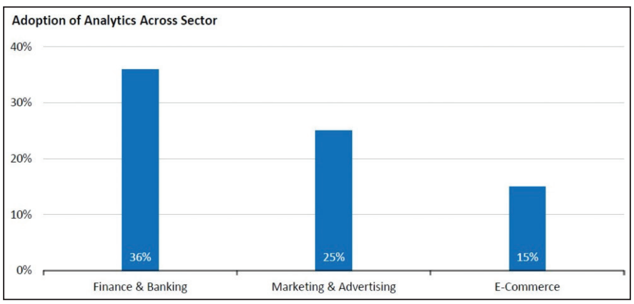
[2]https://meity.gov.in/ writereaddata/files/india_trillion-dollar_digital_opportunity.pdf

[3]https://www.decimalpointanalytics.com/resources/insight-detail/361

[4]https://thefinancialbrand.com/78423/2019-top-banking-trends-predictions-outlook-digital-fintech-data-ai-cx-payments-tech/



The concurrence of several technology trends is moving the progress of advanced data analytics forward. The data volume doubles every two years[5] as information pours in from various channels. The capacity to store data has increased and the cost has decreased. In India, BFSI sector has been at the forefront in the adoption of analytics which has captured around 36% of the market size, according to a study by IVY school.[6]



Artificial Intelligence (AI)

AI is the collection of data, algorithms, and computing power to enable machines to mimic human capabilities and act with higher intelligence. The ability to learn from patterns in text, speech, images, videos and any other data to provide recommendations has made AI ubiquitous in research and industry, including financial services.

Countries across the globe are coming up with national strategies on developing AI, involving guidelines on its usage and identifying changes/introduction of laws. Prominent examples being of countries such as UK, China, USA, Singapore etc.

In the United States of America, the AI strategy has favored innovation over regulation, with big technology corporations rapidly developing technology and introducing self-regulation. The American AI initiative is guided by five principles, which include the following[7]: 1. Steering technological break-through, 2. Steering the progress of technical standards, 3. Training workers with the skills relevant to AI technologies, 4. Protecting American values and promoting public trust in AI technologies, 5. Strengthening US technological advantage in Artificial Intelligence, while advancing an international environment that supports innovation. It is estimated that the US Government has spent USD 1.2 billion in 2020 for non-classified AI research.

In April 2018, the government of the United Kingdom (UK) published their national AI strategy entitled 'AI Sector Deal (United Kingdom, 2018)'[8]. The objective of the AI Sector Deal is to prepare the economy and society for the transformations that AI brings along. It provides the foundations to foster UK's global position as a leader in developing AI technologies. For this purpose, the strategy is focusing on improving UK's position in the following five key areas: Ideas, People, Infrastructure, Business environment, Places. The government has earmarked a budget of £0.95 billion for the implementation of the AI Sector Deal, which is supplemented with £1.7 billion[9] coming from the Industrial Strategy Challenge Fund.

In March 2017, Japan released its 'Artificial Intelligence Technology Strategy'[10] that includes a roadmap for industrialization and AI development, which is in three phases: (i) the use and application of data-driven AI developed across domains (through 2020); (ii) public use of AI (from 2025-2030); and (iii) creating AI ecosystem of multiplying domains.

Expressing its intent to invest in AI, the Indian government, in its 2018 Union Budget, doubled its past allocation to the Digital India initiative (USD 480 million or Rs 3,703 crore) for the growth of digital technologies. The Government's commitment includes extensive investment in research, training,

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[5]https://www.emc.com/leadership/digital-universe/2014iview/executive-summary.htm#:~:text=It%20is%20doubling%20in%20size,zettabytes%2C%20or%2044%20trillion%20gigabytes.
[6]http://ivyproschool.com/blog/2019/06/19/an-overview-on-analytics-data-science-industry-india-2019/
[7]https://futureoflife.org/ai-policy-united-states/
[8]https://www.gov.uk/government/publications/artificial-intelligence-sector-deal/ai-sector-deal
[9]https://www.gov.uk/government/collections/industrial-strategy-challenge-fund-joint-research-and-innovation
[10]https://www.rvo.nl/sites/default/files/2020/12/Artificial-Intelligence-in-Japan-final-IAN.pdf

and skill development in areas such as AI, big data intelligence, robotics, digital manufacturing, and quantum communications. While most initiatives relate to implementation beyond AI, there are many initiatives that specifically or indirectly impact the banking and finance industry.

The AI Task Force: The Ministry of Commerce & Industry set up the AI Task Force to carve the path forward for use of AI in the country; the Task Force includes members from the private sector, including banking and finance. In March 2018, the Task Force released its report that identified 10 key domains where AI could play a crucial role in India's socio-economic development. The fintech industry is part of the 10 identified domains.

The Ministry of Electronics and Information Technology report on AI: MeitY has set up the following committees to suggest a policy framework for AI: 1. Platforms and Data on AI, 2. Leveraging AI for identifying national missions in key sectors, 3. Mapping technological capabilities, key policy enablers required across sectors, skilling, reskilling, and research and development, 4. Cybersecurity, safety, legal, and ethical issues.

NITI Aayog - National AI Strategy: In the 2018-19 Budget, NITI Aayog was tasked to chart out a National Program on AI. Towards this, the think tank released a discussion paper on National Strategy for AI. The 'AI for All' strategy was focused on leveraging AI for inclusive growth aligned with the Government's aim of development for everyone.

AI in banking

As per the Autonomous Next research by Business Insider Intelligence[11], the aggregate potential cost savings for banks from AI applications is estimated at $447 billion by 2023, with the front and middle offices accounting for $416 billion of that total. Many banks are planning to deploy solutions enabled by AI, 75% of respondents at banks with over $100 billion in assets say they're currently implementing AI strategies, compared with 46% at banks with less than $100 billion in assets, as per UBS Evidence Lab report[12] seen by Business Insider Intelligence. A Microsoft Asia and IDC Asia/Pacific study specific to the Financial Services Industry (FSI)[13] found that organizations in the Asia-Pacific that deploy AI expect to see 41% improvement in competitiveness in three years. Certain AI uses[14] have gained importance across banks' operations, with chatbots in the front office and anti-fraud initiatives in the middle office being the top use cases.

According to business insider, the three main channels[15] where banks use artificial intelligence for cost-saving are front office or conversational banking, middle office or anti-fraud and back office or better known as underwriting. Front and middle office applications offer the greatest cost saving opportunities across banks.

At the front end, AI is being used to smoothen customer identification and authentication by mimicking employees through chat bots and voice assistants. AI is also being implemented by banks within middle office functions to detect and prevent payment frauds and to improve anti money laundering and KYC checks. It can be used in the back office to provide business and strategy insights, simplifying the backend process and for regulatory compliance.

In a survey conducted by UBS Evidence lab, bank executives recognized the four most beneficial uses of AI[16] as 1. Automating processes and helping improve efficiency 2. Helps to identify and capitalize on revenue opportunities 3. Fraud detection and security (KYC, AML, cybersecurity) 4. Customer service.

AI enhances customer service: Automated AI powered customer service representatives gather the data from the user's devices and process it through machine learning to provide relevant information. It is easier to show offers, services, and insights which are in line with the user's behavior. It is estimated that by 2022, conversational assistants could help cut operational costs by over USD eight billion across global banks, compared to only USD 20 million in 2017.[15] A key contributor to this will be the reduction in costs in terms of hiring personnel.

[11]https://www.businessinsider.in/finance/news/the-impact-of-artificial-intelligence-in-the-banking-sector-how-ai-is-being-used-in-2020/articleshow/72860899.cms

[12]https://www.businessinsider.in/finance/news/ai-in-banking-artificial-intelligence-could-be-a-near-450-billion-opportunity-for-banks-here-are-the-strategies-the-winners-are-using/articleshow/74784610.cms

[13]https://news.microsoft.com/apac/2019/09/24/asia-pacifics-fsi-organizations-with-ai-expect-41-improvement-in-competitiveness-by-2021/

[14]https://elexonic.com/2019/12/17/artificial-intelligence-in-banking-2020-how-banks-use-ai/

[15]https://www.businessinsider.com/ai-in-banking-report

[16]https://www.businessinsider.in/finance/news/the-impact-of-artificial-intelligence-in-the-banking-sector-how-ai-is-being-used-in-2020/

AI provides business and strategy insights: AI technology has the potential to analyze and process large amounts of data to drive informed decision making. Based on assessment of data trends using AI, banks can create their portfolio strategies to boost growth. Additionally, transaction data mining of digital payments (including transaction insights, searches and needs) can help in deriving actionable insights.

Fraud detection and Risk management: AI can be used to proactively monitor and identify frauds, cases of money laundering through identifying irregular transaction behavior of individuals, data analysis of spending patterns among others. Online payment fraud losses are expected to jump to USD 48 billion per annum by 2023, compared to an estimated USD 22 billion per annum in 2018. The ability of technology to decode patterns and continuously adapt to recognize new fraud tactics will help banks bolster fraud detection and prevention efficiency and significantly cut costs.

Credit rating and loaning[17]: AI enables fintech companies to use alternate sources of information to create a credit score for individuals, like data from earning and spending habits, family history, mobile data usage, etc. For existing customer base, loaning decisions can be made through insights drawn from data entries of banking transactions, financial decisions, social media usage, and web usage to determine creditworthiness.

Regulatory compliance[18]: Financial reporting for the purpose of compliance is a complex task, with significant repercussions in case of errors, thus banks invest extensive resources to undertake this activity[19]. AI technology can however be harnessed to automate complicated compliance procedures, process and report vast amounts of data for better and a closer oversight, that too at a lesser cost.

Personalized insights: Using chat bots and virtual assistants to attend to customer queries, personalized insights related to wealth management, portfolio management, and financial management can be provided. Use of AI over time can help in anticipating customer needs more effectively by gathering and processing digital profiles and transaction histories. As a result, personalized product offerings and recommendations can be enabled for maximizing business and also to create better relationships with the customers.

KYC and AML: Non-compliance with sanctions, Know Your Customer (KYC), and Anti Money Laundering (AML) has resulted in global financial regulators issuing fines worth USD 26 billion to financial institutions, including banks in the past decade. To reduce the resource utilization on compliance, banks are investing in AI to streamline their KYC processes and detect AML activities.

Identity Protection: AI systems can analyze biometrics such as fingertips, iris, voice, behavioral and rhythmic patterns to authenticate the users. ATMs can be a useful point of operation to detect frauds through real time identity recognition through AI's deep learning algorithm.

Wealth management: AI helps in understanding customer needs and their risk taking appetite to customize products to cater to their portfolio and wealth management needs. It also makes identification of market trends easier to give insights about the future trends and thus help the potential investor to choose the right portfolio. AI systems can analyze salary, savings, and spending data of customers and draw patterns to formulate customized financial plans catering to a specific individual's needs.

Simplify operations: AI can be used to automate back end operations such as extracting financial information from the relevant financial documents, customer onboarding, compliance monitoring, automating reports for reference, etc. In mobile banking services, credit and debit card management system can be made safer and simpler by operationalizing through AI. It helps the customer to get rid of long authentication processes, saving time and efforts of the customer, along with improving the service.

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[17]https://www.netguru.com/blog/ai-and-machine-learning-in-fintech.-five-areas-which-artificial-intelli

[18]https://mk.eos-solutions.com/en/magazine/ RegTechs.html

[19]https://www.fintechfutures.com/2018/12/how-technology-and-ai-are-set-to-transform-compliance/

Current State in India for AI in banking

Banks can mine the financial transaction data to better monitor, predict and respond to consumer behavior. The rising demand for online banking and financial information offerings has created opportunities for AI implementation in India's banking sector. In 2019, an inter-ministerial panel on fintech suggested increasing the levels of automation using AI, cognitive analytics, and ML in their backend processes[20].

In Feb 2018, Reserve Bank of India's (RBI) inter-regulatory working group released a report[21] categorizing the use of AI and robotics in data analytics and risk management as one of the major fintech innovations. The report states that the digital transformation of the banking and financial sector would ride on three pillars: Blockchain, AI and the Internet of Things (IoT).

Analytics

Data analytics (DA) is the science of examining the unstructured data with the aim of extracting meaningful information to suppport decision making. As the role of technology increases in every sector, it generates huge amounts of data[22] that can yield to valuable insights about the field. Data analytics is an integral component of making strategies in all major organizations as it supports them to predict customer trends, increase productivity of business, and make decisions backed on data evidences[23].

Various countries all over the world are investing in analytics. In Singapore, Pulse of the Economy[24], an initiative by the Government Technology Agency of Singapore (GovTech) in collaboration with various government economic agencies, uses high-frequency big data to develop new indicators to "nowcast" the economy. It draws from varied non-traditional sources of data, from Ez-link taps on the rail system to electricity consumption information, and even social media sentiments, to "nowcast" the economy.

The market of data in the United Kingdom (i.e. capital gained from products or services derived from digital data) is the largest in Europe. Tech in UK grew aggressively in 2019, with the UK securing 33% of European technical investment. The national data strategy of UK builds upon initiatives such as the Industrial Strategy, the AI Review, the AI Sector Deal and the Research and Development Roadmap.[25]

The Indian government reached out data experts to create policy interventions for economic reforms relying on data analytics. Project Insight[26] is one such example, where a data mining platform to catch tax evaders was created, through which ~50,000 entities were recognized[27], which were acting as black money enablers. Another example is of GSTN, which gives detailed insights into how the trade is getting conducted in India. The Reserve Bank of India has also announced the setup of a data analytics lab for in-house analysis.[28]

Analytics in Banking

The banking industry uses intensive data with typically massive amounts of processing inputs. As banks face pressure to stay profitable, comprehending data and using it for better performance becomes a critical factor. New methods of proactive risk management are being increasingly embraced by major banks and financial institutions, especially in the coming around of Basel accord. Through Data mining and advanced analytics, banks are better decked to manage market unpredictability, minimize fraud, and control risk[29].

According to IBM's 2010 Global CEO Study[30], 89% of financial markets and banking CEOs say their priority is to understand, envisage and provide customers what they want. But to discover the set of success factors that will enable banks to reach their strategic goals, they require application of data mining and analytics to extract actionable and intelligent insights. Banks can gather insights that include all types of

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[20]https://government.economictimes.indiatimes.com/news/digital-payments/fintech-panel-suggest-legal-framework-to-protect-digital-services-consumers/70948919
[21]https://m.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=892
[22]http://www.intelligenthq.com/importance-data-analytics-modern-world/
[23]https://worldscholarshipforum.com/best-online-masters-data-analytics/
[24]https://www.tech.gov.sg/media/media-releases/newly-launched-govtech-to-transform-public-service-delivery-with-citizen-centric-digital-services-and-products
[25]https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy
[26]https://report.insight.gov.in/reporting-webapp/portal/recentArticle
[27]https://www.analyticsinsight.net/how-indian-government-is-using-big-data-analytics-to-improve-economy-and-public-policy/
[28]https://yourstory.com/2018/04/rbi-set-data-sciences-lab-december2018#:~:text=The%20Reserve%20Bank%20of%20India,will%20aid%20in%20policy%20formulation.
[29]https://www.ibmbigdatahub.com/blog/analytics-banking-services
[30]https://www-03.ibm.com/press/us/en/pressrelease/31670.wss

customer trends. It can be done through multivariate, predictive and banking analytics amongst others. The importance of these have been put up in the Basel II accords that emphasize the requirement to accept credit management methodologies in order to manage market unpredictability and minimize risk.

As per Deloitte research, there are 3 major business drivers which increase the importance of analytics within the banking industry:

1. ***Regulatory Reform:*** Major legislations such as the Basel III, have changed the business environment for banks. Given the attention towards systemic risk, regulators are aggressively pushing banks to exhibit better understanding of data they possess, convert data into actionable information that supports business, and manage risk better. Each request has major effect on data governance and reporting. Regulations will be modified in due time, however, banks need to start transforming their business structures today to comply with radically different regulatory policies.
2. ***Customer profitability:*** Customized offerings according to the customer are expected to play a huge role in attracting and keeping profitable customers.
3. ***Operational efficiency:*** While banks have trimmed a lot of excess resources over the past few years, there is still plenty of area for improving further, including reducing duplicate systems, manual reconciliation and IT costs.

Analytics can be used in Banking in various capacities:

Fraud analysis: The Association of Certified Fraud Examiners' 2010 Global Fraud Study[31] found that the banking/financial services industry had the most cases among all industries – accounting for more than 16% of frauds. Fraud detection in banking is a critical activity that includes fraudulent activity from customers to bank employees.[32] Since banking is one of the most regulated industry, there are also a plethora of external compliance regulations that banks must adhere to fight against frauds. In the sample study conducted by ACFE, which was quoted above, it was seen that most of the frauds happened due to Cash in hand and corruption.

Calculation of statistical parameters to identify outliers that could indicate fraud, classification of patterns among data elements, stratification of numbers to identify unusual entries, digital analysis using Benford's law, duplicate testing, gap testing to identify missing values in sequential data and validating data entries can be some of the methods which can be enabled through data analytics.

Customer analytics: Banks and credit unions are constantly at risk of losing customers, due to plethora of options and ever evolving offerings. In order to stem the flow, they may offer their best customers better rates, waive annual fees and provide priority treatments. However, these retention strategies have costs[33] and it is difficult to customize it at the customer level. The success of these strategies is dependent on devising the right action plan for the right customer. As we move forward towards a cashless economy, the future of banking will be made by how the virtual and physical worlds of banking come together. More adept banks will increasingly invest in customer analytics to gather new customer insights and effectively segment them. The data can be analyzed to reveal habits, preferences and needs, which will help the banks in determining pricing, new products and services, the right customer approaches and marketing methods, like which channels customers are most probable to utilize and how probable are customers to have more than one provider or even change providers. Using Big Data analytics, banks can segregate their set of clients[34] based as per their demography, including investment or buying patterns. Such segmentation benefits the banks when it comes to marketing to target audiences, and to help improve customer relationships.

Risk Analytics: Accenture conducted a study which synthesized the insights from more than 450 risk management analytics professionals in three industries[35] to examine how they used risk analytics to counter industry challenges and volatility of the

[31]https://www.acfe.com/uploadedFiles/ACFE_Website/Content/documents/rttn-2010.pdf
[32]https://www.ibmbigdatahub.com/blog/analytics-banking-services
[33]https://www.ibmbigdatahub.com/blog/analytics-banking-services
[34]https://expressanalytics.com/blog/growing-role-of-finance-analytics-in-banking-5222018/
[35]https://www.accenture.com/us-en/insights/financial-services/global-risk-study

market. The study was supposed to assess the current level of maturity of their risk analytics—their qualitative and quantitative techniques formulated to estimate the frequency and corresponding impacts of risks, as well as their ability to use analytics to drive business outcomes and manage rewards. Across the industries which were studied, banking industry is predicting the highest increase in investment in risk analytics, with 73 percent of respondents predicting rise in expenditure of greater than 10%. In terms of specific capabilities, risk analytics spending is expected to increase mostly in areas of data quality, modelling and systems integration. Risks come in various forms – bad loans, investments that have not worked out, fraudulent activities, etc. Of late, global banks are under great pressure because of competition[36] from non-banking entities, yields of low asset and increased commercial borrowings. All these factors represent a risk percentage for the bank, and early detection of these can make sure that the bank doesn't undergo major losses. As the competition for customers intensifies, a greater number of loans tend to get underwritten by the banks (with lenient lending restrictions). Analytics can help in mitigating this.

Case Study of Indian Banks

State Bank of India: It had collaborated with IIM-B, IIM-C, IDBRT and Manipal University to further strengthen their pursuit of analytics and AI in 2014-16. Today, the bank has a comprehensive organizational structure in place to integrate AI, Machine Learning (ML) and Analytics to address a variety of business and operational problems. They are using python and R, using techniques such as collaborative filtering, natural language processing, string matching, K means clustering, network analytics, XG boost among others to develop models to identify frauds, early warning systems and recommendation engines. Using SPSS and techniques such as logistical regression, linear prediction, random forest, they are developing models to issue prepaid credit cards (project Shikhar), pre-approve personal loans, business loans, car loans, generate new leads, takeover loans among other initiatives.

Punjab National Bank: They have set up an in-house data analytics center to operationalize analytics. The bank embarked on a mission to leverage Big Data, AI and ML models to deploy end-to-end solutions in: (i) product, sales and customer acquisition, (ii) channel and campaign management, (iii) customer lifetime value, (iv) sentiment analysis for improving customer satisfaction,(v) adoption of digital services across the customer lifecycle journey, (vi) branch performance management, (vii) operations, customer service and processes, (viii) risk, collections and compliance, and (ix) fraud detection and prevention.

They have also utilized AI/ML and data analytics tools to address credit card default prediction, review customer credit ratings, slippages in Mudra loan, identifying next best offers for various customer segments, and identifying fraudulent transactions through various channels.

Bank of Baroda: Analytics and ML have been at the core of the bank's revenue programmes over the past two years. The bank's cross-selling and upselling opportunities in Retail, MSME, Liability and Wealth Management are driven by a significant number of ML and predictive models to deliver cross-channel go-to-market strategies. Self-service campaign tracking dashboards provide near real-time updates on different campaigns. Several initiatives are being planned for the coming years. These include multiple new use-cases in complex areas of digital enablement of stakeholders; hyper-personalization of offers and activities; automation of decision making; uptake of digital channels; and the continued integration of internal and external data sources to power these.

ICICI Bank: Some of ICICI Bank's use cases for AI and ML include Zero credit touch strategies, where without any credit intervention and additional information, credit facilities can be provided; Portfolio management, for prudent debt service management, where the bank uses segmentation models to identify potential defaulters. They also use Fuzzy matching logic employed for finding additional contact details of the non-contactable customers. They have also developed an in-house BI solution which includes components of SAS, Sybase, TRIAD, Posidex, Data Clean, and Blaze Advisor that factored in several parameters such as efficiency of collector, customer profile, risk behaviour and exposure.

[36]https://expressanalytics.com/blog/growing-role-of-finance-analytics-in-banking-5222018/

HDFC Bank: It has created an AI-based chat bot, "Eva"[37], made by Senseforth AI Research. Eva can collate data from thousands of sources and provide answers within 0.4 seconds. Going forward, real banking transactions[38] would be handled by Eva as well. HDFC has also launched a prototype robot IRA ("Intelligent Robotic Assistant"). It is working on implementing Artificial intelligence to handle data, security purposes and computing scalability.

Citi Bank: Citi Bank uses logistic regression models that are part of AI and ML to identify high propensity customers to target their products. The bank also uses similar models to estimate prices for eligible customers by taking care of propensity and risk-based pricing. The ML models are being used for cash optimization at the ATM level to identify cash demand and optimize the idle cash level in the ATM network, thereby bringing down the idle cash in ATMs by around 15%.

Axis Bank: Axis Bank also uses analytics to increase customer loyalty and reduce loan prepayments due to refinancing with other institutions. It also uses SAS to provide customer intelligence across the organization. The SAS tool also helps the bank to improve risk management throughout the organization by giving them early warning signals.

Challenges in adoption of AI and Analytics

According to a joint research conducted by the National Business Research Institute and Narrative Science[39], about 32% of financial service providers in India are already using AI technologies such as voice recognition and predictive analytics. Banks such as BoB, SBI, ICICI, HDFC, Yes Bank and others are already deploying artificial intelligence to streamline their day-to-day processes. According to a Accenture banking technology vision report[40], 83% of Indian bankers believe that AI will work alongside humans in the next couple of years. However, the report also noted that 77% of Indian bankers agreed that they have to develop and implement AI tools in banking services. The adoption of AI in the Indian banking system can be further enhanced by addressing the following challenges:

1. ***Trained manpower:*** Due to the unavailability of professionals with requisite data science skills and trained human resources, the banking industry needs to work with the top Indian universities to develop skilled data scientists. Universities in various countries, including the USA and UK, are beginning to adapt to the changes that AI is bringing about in the finance sector by offering undergraduate and masters programmes in fintech. In India, HDFC Bank has launched a programme in partnership with engineering and MBA colleges to educate students on emerging banking technologies.
2. ***Data standardization:*** Non-uniform digitisation of data will lead to issues on interoperability of the individual services as well as their usability.
3. ***Different approaches of enforcement:*** Differing enforcement approaches make it hard for firms to adopt effective global standards and to quantify their risk of rolling out AI innovations internationally.
4. ***Data protection and privacy:*** According to a report by the Data Security Council of India, India faced the second-highest number of cyber-attacks between 2016 and 2018. AI systems require huge amounts of training data as inputs. Consumer data is continuously collected by tracking online and offline consumer behavior to generate big data sets and extract further information about consumers through profiling. This creates a huge risk to data privacy.
5. ***Languages:*** Given multiplicity of languages in India, it becomes a challenge to create a system to enable communication services in vernacular languages while simultaneously training the machine to read the same.

Recommendations for banks to adopt AI/ analytics

Pre adoption: There should be organizational readiness to accept the adoption by the bank by communicating the workforce that the system will complement the work and will help improve productivity.

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[37] https://www.fintechnews.org/how-will-artificial-intelligence-change-the-banking-idustry/

[38] https://www.livemint.com/Industry/k81A1gYOEHKhv3TutKs5TN/HDFC-Bank-launches-chatbot-Eva-for-customer-services.html

[39] https://narrativescience.com/wp-content/uploads/2018/11/Research-Report_The-Rise-of-AI-in-Financial-Services_2018.pdf

[40] https://www.accenture.com/gb-en/_acnmedia/PDF-78/Accenture-Banking-Technology-Vision-2018.pdf

An impact study pre-adoption will also be beneficial as it is a huge investment in terms of data storage, talent hiring, security, etc.

During adoption: High priority should be given to data privacy and security, and data protection becomes of paramount importance.

Sound training should be given to the involved stakeholders.

The design of the system should be ethical as deep learning capabilities can do unintentional harm. There should be transparency built into the system.

The data presented can create a bias to a particular section of human activity, thus fairness, accountability and transparency should be given high importance.

Conclusion

India's digital banking and finance sector, has witnessed huge growth in the last decade. This transformation has primarily been driven by the proliferation of digital banking initiatives – which has helped to generate data that banks can use to monitor, predict, and respond better, thus opening up opportunities for AI and analytics implementation in banking. Data-driven decision-making use of AI and analytics can help banks across a range of functions for improving overall customer experience, making more informed decisions on credit underwriting, detecting frauds and defaults early, improving collections and increasing employee efficiency. However, there are still some challenges that need to be addressed to increase the adoption in the Indian banking and finance industry.

Talent Management in Emerging Banking Scenario

Rakesh Mamodia*

Vivek Jarolia**

"Talent is like a flower it needs watering"...

Moduwa Thaba

The attrition rate of the talented professionals from the organisation is a great challenge for all HR managers around the world. Banking job requires specialised skill sets, hence employees are trained after their recruitment to perform the specialised tasks. But, lately, it has been observed that not only it is difficult to attract talented employees but also to retain them for a longer term. The growth in attrition rate from banking institutions is at alarming levels. It is more so challenging in the present banking scenario, where changes are happening so fast. Now, it is necessary for banks to attract and retain the talented and skilled manpower. This exploratory research is aimed at deliberating the steps of talent management specifically in emerging banking scenario and further analysing the measures promoting the Talent retention.

Background

As said by Moduwa Thaba, a flower will remain to be a flower only if water is made available to the plant. It means flower with its beauty and fragrance can remain a flower if the required water is provided to it.

So, it turns out to be that a garden is not possible without flowers and flowers cannot be there until and unless they're nurtured with care. Similarly, it goes for an organization wanting to be a successful business giant. Success of an organisation is not possible without talent and talent cannot be there until and unless it is managed properly.

Similar will be the case in banking industry of future. The flowers (employees) will have to be nurtured with care to create a beautiful garden (successful organisation). Why? Because the answer to the question "What is the driving factor behind a successful bank in the emerging banking scenario?" is one and only...

"Talent"

History is filled with examples of success of kingdoms only based on the selection and nurturing of talent. May it be the efforts of Kaurvas and Pandavas to have Lord Krishna by their side in Mahabharat, or may it be the role of the gems in the Kingdom of Akbar. Organizational history is also filled with examples of how talent plays an important role in the growth of any organization and what happens to it once the organization is not able to manage its talent and they leave the organization.

The article published on *peoplematters.in,* says that "With global work patterns evolving, 'change is the only constant' that defines today's talent landscape. For young professionals, flexibility, work-life balance, office environment are as vital as an attractive remuneration package and growth opportunities. The new-age workforce needs to be heard, and an open-door policy – adopted by many organizations – will encourage them to share their thinking, thoughts and ideas. Predictive Analytics can be used to strengthen objective appraisal and talent review systems along with recruitment & retention. This will lead to better HR practices and eliminate bias in decision-making."

Banking Scenario Vs Emerging Banking Scenario

After realizing the importance of talent in the success of any Bank/organisation, let's figure out the changes

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in banking which we are witnessing. Let's try to differentiate existing banking scenario vs emerging banking scenario.

EXISTING SCENERIO	EMERGING SCENERIO
Face to face interactions	Digital interactions
Bounded Timings	Round the clock touch points
Physical Debit/Credit Cards	Virtual Cards
Lengthy account opening process	App-based account opening
Manual cash transactions	Robotics enabled cash transactions
ATM/CDM	Multiple cash dispensers in the form of existing business customers
Manual decision making	AI based decision making
Bank branches	Neo banks

The journey of banking is same like global transition from…

Agriculture Revolution → Industrial Revolution → Information Revolution → Fusion Revolution

All the above said revolutions were possible only because of the hard work and genius of human mankind, but the dependence has gradually been moving from the talent of having a set of skills to the talent of innovation/creativity/change management.

Similar is the case with banking where the emerging scenario will be a fusion of emerging technology breakthroughs in fields such as Artificial Intelligence(AI), robotics, the Internet of Things(IOT), energy storage and quantum computing which will result in unlimited possibilities to the future of banking and disruptions of the existing ways. This changed environment will require the talent to survive for any banking company.

What do you mean by Talent?

Talent can be defined for a layman as "Natural aptitude or skill"

But, Researchers have defined Talent as

Talent = Capacity to Learn + Capacity to think+ Capacity to relate + Capacity to Act accordingly and the values of the organisation

Naqvi (2009) states that *talent is a natural aptitude, an innate outstanding capability, a natural endowment, a genius, and a gift.* Hartmann, Feisel, and Schober (2010) said that "Either way, talent is a strategic balance between performance and potential." Lewis and Heckman 2006 says that "It is the certain knowledge and high value-added skills which are required by any organisation".

So, it is quite evident by the definitions of the Researchers that talent is a combination of knowledge, skill and the right mind-set.

Importance of Talent Management in Emerging Banking Scenario

Talent Management is defined as the ability to attract, develop, and retain the right people (or talents).

One thing which we are sure about the future of banking scenario is that talent more than capital will represent the critical factor of success of a bank. Market will give more valuation to banks having good human capital in comparison to banks having more financial capital. The demand for highly talented employees will increase while the demand for employees with average and low level of skills will decrease.

In such a scenario, Talent Management will be of utmost importance for the success as well as survival of the banks. We will now discuss the factors which will be critical in the Management of Talent in the banks.

How to do it: The Big Question

In this changing scenario when banking balance sheets are getting deconstructed globally, how to do the Talent Management for survival as well as success is a big question. What will be the first step in this direction? Let's explore.

STEPS FOR TALENT MANAGEMENT

First Step Qualitative Manpower Planning

The speed of current breakthroughs in the banking industry has no historical precedent. When compared with previous changes, the emerging scenario is evolving at an exponential rather than a linear pace. In such a scenario, it becomes very important for the banks to ask…

"What is the future?"

It becomes important to paint a future picture of the bank may be 5 years from now or may be 10 years from now. The first and foremost step for the bank to have an effective Talent Management process will be to create an image of themselves after a span of 5 years/10 years. What will be the Bank in terms of its portfolio composition, asset composition, liability composition and marketing strategy etc. based on the journey the bank has undertaken and the technological changes which have come or are anticipated to come in future. Based on this future picture of the bank, the bank need to do Talent allocation. The bank need to know some qualitative aspects like…

"What type of workforce is required for the bank to be like the picture it has painted for itself in future?"

"What type of skills are required in their workforce?"

The answer to these questions will act as a base for effective Manpower planning. This planning for the future set of roles and responsibilities will create a clear projection of the manpower requirements of future.

Second Step Quantitative Manpower Planning

After getting the answer to the qualitative aspects of Talent Management, the bank needs to know the quantitative aspects like

"How many people are required in different areas of Banking?"

"How many people in Data Analytics?"

"How many in Marketing?"

"How many people in IT?"

"How many people in decision making?"

"How many people in Administration?"

"How many people in Human Resource?"

"How many people in Treasury?"

It is extremely important to make an allocation of workforce in various areas and once you allocate the people in various jobs, you must look for right Talent suitable for that work and here comes the third step which is recruiting "Right person for the Right job" in the desired number.

Third Step: Recruitment

Existing Practice

The current process of recruitment involves written test and interview which filters out the candidates who perform better in the test consisting mental ability, quantitative ability, English language and general awareness. For years the recruitment process in banking industry has been same. Some prominent factors of existing recruitment process are as under:

i. The minimum qualification to join banks is Graduation in any field.

ii. The examination pattern has remained same for years which usually filters talented graduates out of the lot.

After selection these graduates are given a common training to equip them for banking work and then they are assigned different banking jobs in various areas such as marketing, credit, risk, branch operations, foreign exchange etc. Over a period, the assumption behind this process has been “Jack of all trade and Master of none”. Banks assume that once a person is assigned some work, automatically he/she will learn it through on the job training even at the cost of minor errors committed during such initial period. The person is selected first and then the role is assigned to them. What is suggested in emerging banking scenario is as follows:

Suggested Measures

The roles for which the recruitment is to be made should be identified first and then people with required skill set and academic knowledge should be recruited for those positions. This will not only enhance the productivity of the organisation and employee but also result in job satisfaction of the employee, which will further result in stronger bonding with organisation.

It is high time to accept the fact that there are some people who are good in communication and hence for jobs requiring face to face interactions. There are some people who are good at reasoning and programming and hence better for jobs in IT departments, there are some people who are good in decision making hence more suitable for jobs requiring decision making skills, there are some minds having analytical skills and hence more suitable to works in fields involving data analytics, there are some people who can understand businesses and they should be used to design the products for the emerging new businesses of future. As of now our banks are not able to design the products which big enterprises need and therefore, we need people who can understand the requirements of future businesses and design the products accordingly.

Some specific positions which are created in the first step by the banks will require some people with high level skills to work in top notch positions and the recruitment of talent should be done specifically for these positions from best in the industry.

When the recruitment is done for a specific position based on specific experience and skill set, such recruitment results in high rate of retention, employee satisfaction and productivity. Additionally, it also saves on training cost as the recruitment was done based on already acquired skills. For example, there are people working in financial BPOs and are dealing with global clients, such people who are having some minimum years of experience in BPOs, if recruited by banks can be assets for positions which require interactions with their clients like marketing and selling.

Fourth Step Retention

Existing Practices

With the rapidly developing economic conditions and exponentially increasing number of job opportunities across the globe, personnel retention is already a challenge…

Strategic HR Review June 2013

It has been observed that there is no such planning for retention of talented employees in existing scenario in Banking industry. Even, there are no such HR practices to assess the existing talent the organisation possesses. This existing practice of not giving due importance to the retention policy in an organization was passable in the existing banking scenario but in the emerging banking scenario, the success of the bank will depend on the retention of the Talent and amount of innovation within the bank. Brain Drain from the banks will have lasting effect on the survival of the banks.

Suggested Measures

Train people well enough so they can leave,

treat them well enough so they don’t want to….

Sir Richard Bronson

As suggested by Sir Richard Bronson, the best and the only way to retain the talent in any organisation is by treating them well so that they fall in love with the organisation and never want to leave. There should be an unbreakable bond between the talent and the organisation.

But the question is…

How to create such a Bond?

The answer lies in some measures which act as a catalyst in creation of such a bonding between the employee and the employer. Now, we will discuss in detail those measures.

Measures to promote Talent Retention

A. Learning & Development

CFO asked CEO: "What happens if we invest in developing our people and then they leave us?"

CEO: "What happens if we don't and they stay"

The importance of training in nurturing the Talent in the bank is of utmost importance as evident from the above conversation. The roadmap of training structure in the bank should be based on the type of future workforce bank want to have. The training programs should be directed towards the preparation of the workforce of the future bank they have painted. The bank should evaluate what type of soft skills bank wants in its future employees, what types of areas it wants its employees to be groomed etc.

Existing Practices

As of now the newly recruited officers are given common training. Sometimes the existing training system tries to impart marketing skills to a person who is excellent in data analytics and therefore the training does not prove fruitful for that person.

Suggested Measures

Effective training system will not be an option in future but will be a necessity. Banks should have professional trainers who can not only integrate learning with the banking operations, but also create personal engagement of employees towards the organisational goals. There should be a continuous connect program between the trainers and the trainees. Trainers should also be in connect with the supervisors of the trainees to measure the outcome of the trainings.

The effectiveness of the Trainers of future should be evaluated by the degree of improvement in performance and employee retention.

There should be two sets of training programs in the bank:

i) *Common Programmes:* Few areas of training like Customer Centricity and Behavioural Science should be common to all the workforce of the banks as these skills are required by everybody working as bank is a service provider industry. Banks should evaluate what types of soft skills should be found the future workforce and training should directed to impart those skills in Behavioural Science areas.

ii) *Role Specific Programmes:* As the workforce will be recruited for specific roles, role based trainings should be imparted to the people like people who are working in Credit areas will be provided training in credit related areas, people who are working in marketing will be imparted training in marketing concepts and people who are working in technological fronts in the bank will be imparted training in new emerging technologies.

B. Rewards & Compensation

Existing Practices

Despite the fact that an attractive compensation package plays the most critical role in the retention of the Talent, the existing compensation in banking, specifically in Public sector banks are not based on the productivity of their work force rather it is same for all employees which results in brain drain of talent as well the desire of the workforce to perform also gets diminished. Existing compensation in banks is based on the bi-partite settlements, which is being done among bank employees associations/ unions and Bank's Management with the mediation of IBA (Indian Banks' Association) with approval of the Government of India. It is revised every 5 years and based on cadre wise, scale wise pay structure and allowances associated with that. As Pay and most of these Allowances are uniform for that cadre of employees, whether performer or non-performer, such common salary structure finds it impossible to create any difference between talented or less skilled employees. Though certain Banks reward its employees with Pre-paid cards, Coveted assignments, Foreign training at premier institutions but still a lot is required to be done.

Situation in private sector banks is little different, where salary and other allowances are having a mixed bag of some minimum fixed pay + flexible pay based on performance of the employee. It motivates the employee to perform better to receive more in flexible pay component as a part of total compensation.

Suggested Measures

Fixed salary structure encourages an employee to work at the initial level that is required of him to keep their job, whereas the flexible component linked with performance can motivate employees to work beyond the boundaries of the initial level and getting rewarded for the extra work done in comparison to its peers and thus can increase employee satisfaction which leads to employee retention.

Second step which banking industry desperately needs in the emerging banking scenario is the autonomy given to the banks to decide their salary and compensation individually rather in a group through All India Banks Associations so that good performing banks can reward their employees suitably.

Thirdly, a smart compensation package may be offered to the employees where they have the option of monetising various perks as per their requirement.

C. Motivation

Existing Practices

Motivation plays an important role in the job satisfaction which eventually leads to retention of the employee. It will not be wrong to say that nothing works better than motivation as motivation acts as a catalyst in their success. The superiors should always motivate the employees to sustain the talent in the bank. If the employee has done some good work, there should be a mechanism to appreciate and motivate such work. But despite these known facts, there is no clear-cut boundaries for performing and non-performing employees in terms of the non-monetary rewards like motivation. It is very difficult, practically impossible for the talent to sustain in such atmosphere which does not promote motivation for its employees to do good work.

Suggested Measures

Though the impact of Monetary rewards can never be neglected, but the appreciation from superiors / felicitation in front of other colleagues, executives and family always acts as best form of motivation, therefore the culture to use simple and motivating words like "Well done", "Good work" etc. should be encouraged. These learnings should be the part of soft skills training programs.

Motivating letters/mails should be sent to the performing employees to sustain Talent. Photographs of performing employees should be published on the banks' website and internal magazines. Incentive, perks and prizes are also an important tool to motivate the employees.

Without motivation, it is not appropriate to expect the best out of the work force.

D. Acknowledgement

Existing Practices

It is very hard to find the acknowledgement of good work done by the employees in Indian Banks. Though the completion of work is a part of the duties and responsibilities, but the work done with quality and perfection never gets acknowledged. It is assumed that as it was the duty of the employee. The extra pains taking by the employees to complete quality work within time or with perfection are ignored without acknowledgment.

Suggested Measures

There should be a defined structure to showcase the quality work, acknowledging it along with the word of appreciation attached to it so that it goes a long way with the employee, and they try to excel. Some of the organisation do have the structure to select "Employee of the Month", but it is not being done by all in true spirit and with same zeal and enthusiasm.

The photo of the "Employee of the month" may be displayed on the notice board or on the website which may result in a healthy competition among employees to perform better.

E. Working Culture

Existing Practices

It is possible that the displacement of workers by technology will result in a net increase in safe and rewarding jobs, but the long working hours with no clear definition of role and responsibilities, insufficient staff, improper allotment of duties makes it impossible for any employee to engage himself/herself constructively.

Suggested Measures

The positivity in the working culture of the bank is crucial for nurturing of talent. No individuals should be neglected or criticized. The sense of belonging to a workplace is crucial for productivity of any organisation. Ownership of work, ownership of the workplace leads to increased efficiency which leads to job satisfaction which ultimately leads to Talent retention.

F. Growth Opportunities

Existing Practices

Growth opportunities within the bank will be major factors affecting talent retention in future. Talent is naturally inclined towards further growth. The organisation needs to provide appropriate opportunities to them to satisfy their inbuilt desire to grow or else the talent will look for growth opportunities outside the organisation. Present banking system has time bound promotion policy which acts as a hurdle in employee retention. Once talent is identified and found suitable to take higher responsibilities, it needs immediate deployment in the position of higher responsibility or else the time gap gives chance of talent decay or attrition to other organisation.

Suggested Measures

Career growth is an important way to retain the talented employees. Once Talent is identified in the employees, delegation of decision-making powers to them is essential to fully utilize their Talent to achieve the organisational goals.

Banks of future should create personal growth process for their talented employees by way of mentoring, coaching and training. Coaching and mentoring will have the effect of learning and growing together by investing time on each other's development. This process helps in creating the bond responsible for Talent retention.

G. Performance Management

Existing Practices

Presently, the performance management in the banks is subjective in nature which is the main reason of creating dissatisfaction among the employees.

Suggested Measures

The Performance Management should be made objective in nature, if an organisation wants to retain talent in future. The responsibilities, targets and achievement of Key Result Area (KRAs) should be system generated without manual intervention.

The role and the responsibilities must be clear and should be communicated to everyone at the beginning of the year. The clearly defined KRAs with objective assessment with transparency will create a cohesive and all-inclusive growth oriented and focussed employees.

Certain banks have come up with some system driven KRA allotment and monthly assessment which makes it possible for the employees as well as organisations to evaluate the individual performance and create a positive work environment.

H. Generalisation to Specialization

Existing Practices

Presently, the banks work on the principle of generalization, considering all employees can do all work, once they are assigned that job. The drawback of such assumption is that the job may be done but the desired quality of the job done is not achieved. In the emerging scenario in the banks, the quality of services offered will be the surviving factor as customers will be having more and more choices to avail financial services, therefore we suggest a shift from generalization to specialization.

Suggested Measures

Specialization will be the need of hour in future. Just like, it is neither expected nor desirable from a doctor who specializes in heart surgery to perform a knee surgery, the expectations from the banking employees to be efficient in credit as well as treasury will act as hindrance to achieve best of efficiencies. The person doing the job should have in-depth knowledge of the way the work is to be done and the necessary skill set to perform that job so that the efficiency as well as productivity increases. This will also add to the job satisfaction which will ultimately lead to retention of the Talent.

1.7 Conclusion

Banking scenarios are changing at the lightning speed and only talented employees will be able adapt to these changes smoothly. Hence, with their updated skills, they will be looking for the better horizons in open market.

In this exploratory research, we have devised the step by step process of Talent Management in emerging banking scenario, which are:

i) Qualitative Manpower Planning

ii) Quantitative Manpower Planning

iii) Recruitment

iv) Retention

These steps are vital for survival of banks in emerging banking scenario. While the first three steps of Talent Management deal with the process of bringing the right person for the right job, the fourth step focusses on the measures which will promote the retention of these right persons within the bank. Apart from the steps, the research paper also discusses the measures which will promote the talent retention in future along with the existing practices and suggested measures. Some of the important measures in promoting the talent retention are explored in the paper along with the suggestions are: Training & Development of the employee, Reward and compensation policies, Constant Motivation, Acknowledgement of quality and good work, improvement in the working culture, providing suitable growth opportunities and Performance Management and are relevant in creating the value for the organisation.

The future of banking industry lies in managing fast changes, Talent Management is going to be the biggest challenge for HR Managers in future because of the nature of changes which will come in banking scenario and create high demand for talented work force. The organisations which will attract the talented person for the required job and are able to retain them by using the tools as discussed in the micro research paper will flourish, else may perish.

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Monetary Policy Transmission through Banking Channel

Rama Krishna Reddy Danda*

Anjali Pandey**

Introduction

The primary objective of RBI's monetary policy is to maintain price stability while keeping in mind the objective of growth. Price stability is a necessary precondition to the sustainable growth of a country/ economy.

In an extraordinary scenario like COVID and Financial Crisis, Central Banks and Governments take growth oriented measures rather than concentrating on inflation pressures.

As per the literature review and earlier research, changes in policy interest rates directly impact short-term money market rates which then transmit across financial markets and maturity spectrum, including banks' deposit and lending rates.

As per Mishkin (2012), policy transmission happens in two legs. In the first phase, effects of policy changes can be seen in different segments of the financial markets. Later, it transmits to the real economy.

Monetary Policy Transmission

The policy transmission aims at increasing demand from households and firms and supply of credit to the system through the financial intermediaries mainly banks.

In a bank-dominated system like India, the transmission of policy interest rates to banks' lending and deposit rates is the key to the successful implementation of monetary policy. The efficacy of monetary policy depends on the magnitude and the speed with which policy rate transmission leads to the ultimate objectives of RBI viz., controlling inflation and achieving high growth.

The RBI's Monetary Policy framework aims at setting the policy (repo) rate based on an assessment of the current and evolving macroeconomic situation, and modulation of liquidity conditions to anchor money market rates at or around the repo rate.

Repo rate changes transmit through the money market to the entire financial system, which, in turn, influences aggregate demand – a key determinant of inflation and growth. Since last few years, RBI is using 'Repo Rate' as a key tool to influence the Interest rates in the financial system especially lending rates of the Banks.

Relation of Repo Rate, GDP Growth and CPI

RBI brings changes in the Repo rates considering domestic, global and liquidity factors. Growth and inflation are the major factors RBI considers in taking decision regarding policy rates.

We have taken Quarterly data from Dec-2014 to Sep-2020 of Repo Rate, GDP growth and Consumer Price Index (combined) to see whether any relation exists among them.

- To support the growth, RBI has cut repo rate by 250 bps during the period of December 2018 to September 2020. Also, RBI has cut benchmark repo rate by 115 bps since March 2020 with 75 bps cut in first Monetary Policy Committee (MPC) meeting in March 2020 and 40 bps cut in second meeting in May 2020.

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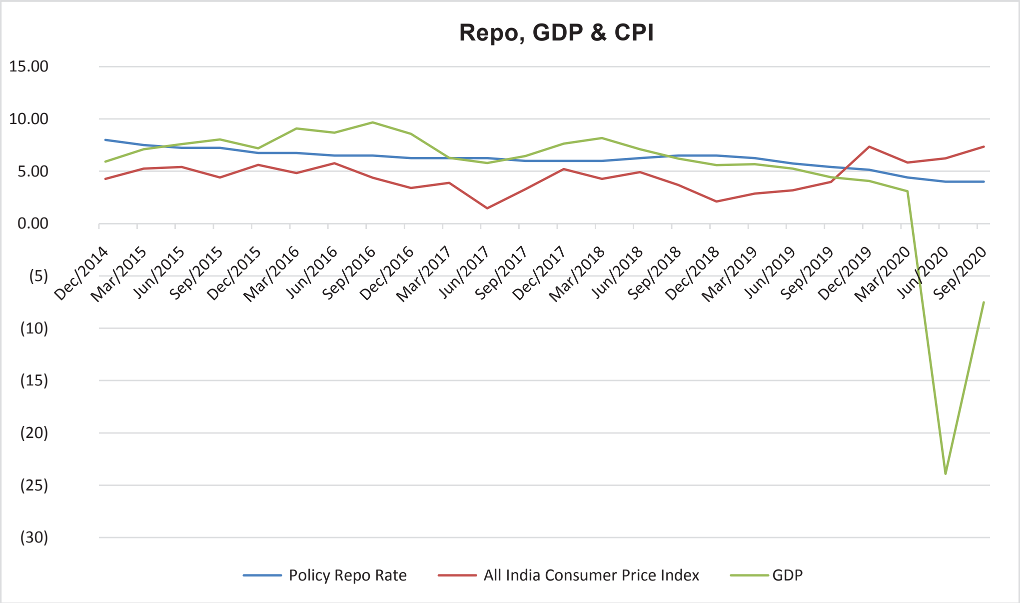

- RBI kept policy rates lowest, since May 2020, to support the growth even when inflation is above the tolerance level. This stance is a rare scenario which is led by the phase of pandemic.

Monetary Policy Transmission through different channels

Several researches around the world identified few important channels for transmission viz.

- Interest rate channel
- Credit channel
- Exchange rate channel and
- Asset price channel.

i. Interest Rate Channel

- The interest rate channel of monetary transmission is basically how the changes in the policy rates of the RBI/ Central Bank bring the changes in the interest rates in the system and in turn, creates aggregate demand and supply in the economy.
- Expansionary Monetary policy leads to lower nominal interest rates which translate into lower real interest rates. Contractionary Monetary policy leads to higher nominal interest rates which translate into higher real interest rates.
- Interest rates influence economic activity by changing the incentives for saving and investment. This channel typically affects consumption, housing investment and business investment.
- A reduction in deposit rates reduces the incentive for households to save their money. Instead, there is an increased incentive for households to spend their money on goods and services.
- Lower lending rates can encourage households to increase their borrowing as they face lower repayments and because banks will generally lend more to them. Because of this, lower lending rates support higher demand for housing assets.
- Lower lending rates can increase investment spending by businesses (on capital goods like new equipment or buildings). This is because the returns on these projects are now more likely to be higher than the cost of borrowing, which helps justify going ahead with the projects. This will have a more direct effect on businesses that fund their projects with debt rather than those that use shareholders' funds.

ii. Credit Channel

- Banks play major role in transmission through credit channel in India. Any changes made in the policy rates by the central banks/ RBI is transmitted through the bank lending and deposit rates.

iii. Asset Prices and Wealth Channel

- Asset prices and people's wealth influence how much they can borrow and how much they spend in the economy. The asset prices and wealth channel typically affects consumption and investment.
- Lower interest rates support asset prices (such as housing and equities) by encouraging demand for assets. One reason for this is the present discounted value of future income, which is higher when interest rates are lower.
- Higher asset prices also increase the equity (collateral) of an asset that is available for banks to lend against. This can make it easier for households and businesses to borrow.
- An increase in asset prices increases people's wealth. This can lead to higher consumption and housing investment as households generally spend some share of any increase in their wealth.

iv. Exchange Rate Channel

- The exchange rate channel postulates that when the economy is open, a monetary contraction will increase the domestic interest rate up to the foreign one and, thereby, appreciates domestic currency in nominal and/or real terms. Accordingly, this appreciation impacts the economy through international competitiveness and the costs of imported goods.

PLR, BPLR, Base Rate and MCLR system in India

- Monetary transmission in India happens majorly through the banking channel, more particularly through the lending channel.
- RBI from time to time has taken steps to pass on benefits of policy rate changes through Bank lending Channel.
- Following are the steps initiated by RBI over the time to bring changes in the lending rates in the system.

a) Prime Lending Rates and Benchmark Prime Lending Rates

- In 1994, when the lending interest rates were deregulated, the Reserve Bank prescribed that banks should disclose their prime lending rates (PLRs), which will be the interest rate charged for the most creditworthy borrowers. Keeping in view the request from banks that the PLR should be converted into a reference or benchmark rate for banks, the Reserve Bank advised banks in April 2003 to announce a Benchmark PLR (BPLR) with the approval of their boards. The purpose of BPLR system was defeated by the dominance of sub- BPLR lending.

b) Benchmark Prime Lending Rates to Base Rate

- The Reserve Bank replaced the BPLR system with the base rate system in July 2010 under which the real lending rate charged to borrowers was the base rate plus borrower specific charges. However, the flexibility given to banks in the determination of cost of funds – average, marginal or blended cost – caused opacity in the determination of lending rates by different banks and rendered the assessment of monetary transmission difficult.

c) Marginal Cost of Funds Based Lending Rate

- The Reserve Bank instituted a new lending rate system for banks – the Marginal Cost of funds based Lending Rate (MCLR) system – affective ***April 1, 2016*** to improve transmission. The BPLR, the base rate and the MCLR were internal benchmarks set by each bank for pricing of credit. However, unlike the BPLR and the base rate, the formula for computing the MCLR was prescribed by the Reserve Bank.

d) External Benchmark Lending Rates

- The Reserve Bank of India has made it mandatory for all banks to link all new floating rate loans (i.e. personal/retail loans, loans to MSMEs) to an external benchmark with effect from 1st October 2019. The move is aimed at faster transmission of monetary policy rates.
- Banks can choose from one of the four external benchmarks — repo rate, three-month treasury bill yield, six-month treasury bill yield or any other benchmark interest rate published by Financial Benchmarks India Private Ltd.

Transmission During Base Rate Regime

Table 1: Policy Rates & Base Rate

Date	Policy Repo Rate	Statutory Liquidity Ratio	Base Rate Lowest	Base Rate Highest	WALR Outstanding Loan	WALR Fresh Loan	Call Money Rate (Weighted Average)	10-Year G-Sec Par Yield (FBIL)
Mar-2013	7.50	23.00	9.70	10.25	12.19	11.46	8.30	7.95
Jun-2013	7.25	23.00	9.70	10.25	12.12	11.40	7.19	7.39
Sep-2013	7.50	23.00	9.80	10.25	12.25	11.96	9.46	8.54
Dec-2013	7.75	23.00	10.00	10.25	12.18	11.70	8.72	8.84
Mar-2014	8.00	23.00	10.00	10.25	12.11	11.57	8.59	8.84
Jun-2014	8.00	23.00	10.00	10.25	12.10	11.60	8.11	8.72
Sep-2014	8.00	22.00	10.00	10.25	11.90	11.52	7.85	8.52
Dec-2014	8.00	22.00	10.00	10.25	11.84	11.45	8.10	7.90
Mar-2015	7.50	21.50	5.40	10.25	11.76	11.07	7.36	7.80
Jun-2015	7.25	21.50	9.70	10.00	11.61	11.03	7.08	7.87
Sep-2015	7.25	21.50	9.70	10.00	11.53	10.77	7.05	7.53
Dec-2015	6.75	21.50	9.30	9.70	11.31	10.59	6.76	7.82
Mar-2016	6.75	21.50	9.30	9.70	11.20	10.47	6.91	7.34
	0.75	1.50	0.40	0.55	0.99	0.99	1.39	0.61

- We have collected quarterly data from March 2013 to March 2016 of Policy Repo Rate, SLR, Base Rate (Lowest/Highest), Weighted Average Lending Rates on Outstanding/fresh rupee loans, Call Money Rate (Weighted Average), 10-Year G-Sec Par Yield (FBIL).
- MCLR System started from April 2016.
- The transmission of policy rates can be seen in call money market rates with greater pace than others, as we can observe from above table during the sample period, RBI reduced Repo rate by 75 basis points and SLR by 150 bps led to 139bps change in Call Money Rate (Weighted Average)
- The change in policy rates of 70bps (repo rate) and 150bps (SLR) brought a change of 40bps (Base Rate lowest) and 55 bps (Base Rate Highest). In this case, transmission of rates happens but not in the same proportion.
- The change in policy rates of 70bps (repo rate) and 150bps (SLR) brought a change of 99bps in both (WALR Outstanding and Fresh Rupee Loans). In this case, transmission of rates happens in the same proportion.

Transmission During MCLR Rate Regime

To speed up transmission process, RBI replaced Based Rate with Marginal Cost of Funds Based Lending Rate in April 2016 onwards.

Table 2: Policy Rates & MCLR

Quarterly	Policy Repo Rate	Statutory Liquidity Ratio	MCLR Lowest	MCLR highest	WALR Outstanding LOAN	WALR FRESH LOAN	Weighted Lending Rate	Call Money Rate (Weighted Average)	10-Year G-Sec Par Yield (FBIL)
Jun-2016	6.50	21.25	8.90	9.15	11.23	10.43	11.28	6.33	7.51
Sep-2016	6.50	21.00	8.85	9.15	11.17	10.35	11.26	6.43	6.81
Dec-2016	6.25	20.75	8.65	9.00	11.09	10.12	11.20	6.12	6.63
Mar-2017	6.25	20.50	7.75	8.20	10.80	9.74	10.89	5.97	7.08
Jun-2017	6.25	20.00	7.75	8.10	10.67	9.50	10.78	6.07	6.57
Sep-2017	6.00	20.00	7.75	8.10	10.48	9.42	10.62	5.88	6.83
Dec-2017	6.00	19.50	7.65	8.05	10.36	9.41	10.44	5.99	7.51
Mar-2018	6.00	19.50	7.80	7.95	10.25	9.34	10.35	6.15	7.42

Quarterly	Policy Repo Rate	Statutory Liquidity Ratio	MCLR Lowest	MCLR highest	WALR Outstanding LOAN	WALR FRESH LOAN	Weighted Lending Rate	Call Money Rate (Weighted Average)	10-Year G-Sec Par Yield (FBIL)
Jun-2018	6.25	19.50	7.80	8.05	10.26	9.45	10.34	6.17	7.98
Sep-2018	6.50	19.50	7.90	8.30	10.32	9.67	10.33	6.49	8.00
Dec-2018	6.50	19.50	8.15	8.55	10.35	9.79	10.43	6.57	7.41
Mar-2019	6.25	19.25	8.05	8.55	10.25	9.73	10.46	6.35	7.34
Jun-2019	5.75	19.00	8.05	8.50	10.31	9.68	10.53	5.78	6.93
Sep-2019	5.40	18.75	7.80	8.30	10.29	9.57	10.55	5.31	6.85
Dec-2019	5.15	18.50	7.65	8.00	10.14	9.29	10.40	5.11	6.74
Mar-2020	4.40	18.25	7.40	7.90	10.00	8.82	10.23	5.05	6.71
Jun-2020	4.00	18.00	6.70	7.45	9.72	8.37	9.97	3.54	5.90
Sep-2020	4.00	18.00	6.65	7.15	9.59	8.29	9.76	3.41	6.04
	2.50	3.00	2.20	2.00	1.58	2.06	1.49	3.02	0.77

- We have collected data quarterly data from June 2016 to September 2020 of Policy Repo Rate, SLR, MCLR (Lowest/Highest), Weighted Average Lending Rates on Outstanding/ Fresh rupee loans, Call Money Rate (Weighted Average), 10-Year G-Sec Par Yield (FBIL).
- The transmission of policy rates can be seen in call money market rates with greater pace than others, as we can observe from above table during the sample period that RBI reduced Repo rate by 250 basis points and SLR by 300 bps which led to 302 bps change in Call Money Rate (Weighted Average)
- The change in policy rates of 250bps (repo rate) and 300bps (SLR) brought a change of 220bps in both (MCLR Lowest Bracket) and 200bps (MCLR Highest Bracket).
- The change in policy rates of 250bps (repo rate) and 300bps (SLR) brought a change of 158bps in WALR Outstanding Rupee Loans and 206 bps in WALR Fresh Rupee Loans
- By observing the data in table 1& 2, we can say that transmission of policy rates happened better in MCLR regime as compared to the base rate regime.

Transmission of Policy rates according to Occupation

Table 3: Policy Rates & Changes in WALR of SCBs according to Occupation.

Quarter	Policy Repo Rate	SLR	Agriculture	Industry	Personal Loans	Housing Loans	Trade	Total Advances
Dec-2014	8.00	22.00	10.62	12.07	12.22	10.55	12.06	11.85
Mar-2015	7.50	21.50	10.66	12.02	12.17	10.51	11.96	11.79
Jun-2015	7.30	21.50	10.59	11.96	11.99	10.28	11.73	11.69
Sep-2015	7.30	21.50	10.54	11.83	11.93	10.18	11.80	11.59
Dec-2015	6.80	21.50	10.45	11.60	11.69	9.85	11.67	11.39
Mar-2016	6.80	21.50	10.51	11.54	11.67	9.82	11.64	11.34
Jun-2016	6.50	21.25	10.49	11.44	11.62	9.77	11.51	11.28
Sep-2016	6.50	21.00	10.53	11.42	11.55	9.71	11.52	11.26
Dec-2016	6.30	20.75	10.48	11.35	11.59	9.65	11.42	11.20
Mar-2017	6.30	20.50	10.40	11.03	11.37	9.45	10.87	10.89
Jun-2017	6.30	20.00	10.31	10.92	11.18	9.22	10.83	10.78
Sep-2017	6.00	20.00	10.25	10.74	10.99	9.06	10.73	10.62
Dec-2017	6.00	19.50	10.10	10.56	10.91	8.91	10.54	10.44
Mar-2018	6.00	19.50	10.15	10.41	10.87	8.80	10.42	10.35

Quarter	Policy Repo Rate	SLR	Agriculture	Industry	Personal Loans	Housing Loans	Trade	Total Advances
Jun-2018	6.30	19.50	10.14	10.33	10.96	8.79	10.46	10.34
Sep-2018	6.50	19.50	10.09	10.27	11.00	8.85	10.56	10.33
Dec-2018	6.50	19.50	10.14	10.26	11.17	8.91	10.60	10.43
Mar-2019	6.30	19.25	10.27	10.20	11.27	8.96	10.55	10.46
Jun-2019	5.80	19.00	10.39	10.19	11.40	8.99	10.66	10.53
Sep-2019	5.40	18.75	10.42	10.22	11.36	8.92	10.74	10.55
Dec-2019	5.20	18.50	10.38	9.94	11.31	8.80	10.45	10.40
Mar-2020	4.40	18.25	10.47	9.79	11.14	8.62	10.27	10.23
Jun-2020	4.00	18.00	10.23	9.57	10.78	8.24	9.87	9.97
Sep-2020	4.00	18.00	10.11	9.37	10.61	7.92	9.61	9.76
Difference	4.00	4.00	0.51	2.70	1.61	2.63	2.45	2.09

- To check how the changes made by the RBI in policy rates transferred to the real economy, we have collected quarterly data from December 2014 to September 2020 of Policy Repo Rate, SLR, SCBs weighted average lending rates of occupations like Agriculture, Industry, Personal Loan, Housing Loan and Trade.
- The change in policy rates of 400bps (repo rate) and 400bps (SLR) brought a change of 55 bps, 270 bps, 161 bps, 263 bps, 245 bps and 209 bps in weighted average lending rates of Agriculture, Industry, Personal Loan, Housing Loan, Trade and Total advances.
- The transmission of policy rates is high in Housing Loan and Industry segment.

Policy Rates & External Benchmark Lending Rates

- RBI brought in External Benchmark Lending Rate mechanism to quick transmission of policy rates to retail and MSME Loans. The mechanism expected to

Marginal Cost of Lending Rate	Repo-Linked Loan
Linked to banks' cost of funds	Linked to RBI's lending rate
Takes 4-6 months to move after RBI rate cut	Responds immediately to RBI rate cut
RBI rate cuts not fully passed on to borrowers	Rate cuts are automatically passed on
Resets annually for most banks	Reset every three months
Changes by 5-10 bps	Usually changes 25bps or more
Revised every month	Reviewed bi-monthly
Low volatility	Higher volatility
100bps=1% Repo - RBI's lending rate to banks	

Source: drishtiias.com

Conclusion

RBI creates different mechanisms for transmission of rates enabling banking system to pass the benefits of changes in policy rates to the borrower.

References

www.rbi.org.in, www.rba.gov.au

Summary of Macro Research Report

Title: Financial Intervention for Sustainable Tribal Livelihoods: A study to understand the Objectives Vs Outcomes of Microfinance and SHG's (Women) Empowerment.

Researcher/s: Dr. Bhaskar Garimella, IDBI Bank Ltd. and Ms. Alice Rachel, Andhra Pradesh Grameena Vikas Bank.

Year: 2019-20

The major finding of the research work are as follows:

1. A methodical analysis of Bank Funds (Bank Linkage) Utilization and their integration with prevalent Government Projects like NRLM for realizing Sustainable Livelihoods was done.
2. The research has explored and researched qualitatively & quantitatively apart from substantiating the need for Policy changes (Tribal Women Groups) in NRLM and other Economic Policies in India.
3. The research paradigm has chosen purposely as "Tribal Women" in lieu of the Indian Micro-finance Portfolio, and its integral output for Women Empowerment.
4. The research suggested better ways to leverage Banks as the Institutions of the Poor for building Capacity to participate in the welfare activities for the purpose of poverty reduction.
5. The research conducted a methodical analysis of Bank Funds Utilization and their integration with prevalent NRLM Government Project.
6. The research emphasized that a Parallel Policy for Tribal Women Capacity Development along with Financial Intervention can be integrated using Information Communication Technologies for better operating and easily implementable systems.
7. The research also concluded that, diversification of activity based lending (in Tribal Hamlets) to absorb local economic developmental project parameters by engaging the tribal members in income generating activities (Micro Credit Plan linked Economic Support Schemes with Forward Integration) and ensuring stable bank asset portfolios in this otherwise non-collateralized debt.
8. Active Monitoring Mechanism by Banking Branches where the groups are incubated and compliance submitted locally about the operationalization of the group and its Social objectives are being met.
9. A Government committee may be constituted for deliberating that in Tribal territories, only PSU Bank's be permitted to incubate and extend financial intervention given the coupon of 12.5% (Covered by Interest Subvention by Central and State Government). The rationale is that, MFI's, NBFC's and any other financial operator would necessarily have to add spread component, making the available finance at a much higher interest rate than the present 12.5% (the incremental rate from non-PSB's is not offered any Interest Incentive). Tribal Women Borrowers are subjected to limited opportunities to engage in MSME (MUDRA) activities given the social-geographic barriers. This results in the finance being employed for consumption purposes and the group is rendered powerless in terms of repayment capacity effectively leaving them in "Debt Traps", and the advance becomes a "non-performer" socially and economically. Recovery activities are initiated and the poor tribal women are then subjected to the law of the land for recovery, with no respite on the horizon.

BOOK REVIEW

Name of the Book: Differentiated by Mission – Small Finance Banks in India.
Author: Dr. R. Bhaskaran, Former CEO, Indian Institute of Banking & Finance.
Publisher: Access Development Services, New Delhi
Pages: 182, Price: ₹500/-

Reviewed by: Sugata K. Datta, former Chief General Manager, Bank of India

"Poverty is the worst form of violence" - Mahatma Gandhi

Financial inclusion is the route to alleviation of poverty and over the past several decades, the Government and Reserve Bank of India have taken a number of measures towards achieving this objective. These include nationalisation of banks, mandating priority sector targets, implementing the Lead Bank Scheme, providing door-step banking through the medium of Business Correspondents and Business Facilitators, etc. In terms of the National Sample Survey (59th Round) report of December 2003, 73% of farmer household had no access to formal sources of credit.

The large gap, between the extent of financial inclusion that existed and that which was desired, led to the Government setting up the Raghuram Rajan Committee on Financial Sector Norms in 2009, which was the first entity to recommend setting up of Small Finance Banks (SFBs). In its report, the Committee observed that there was a need for a paradigm shift in the approach towards financial inclusion because "the poor need efficiency, innovation and value for money". Thereafter, the Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households, headed by Nachiket Mor in 2013 advocated Horizontally Differentiated Banking Systems and Vertically Differentiated Banking Systems and visualized that SFBs would fall within the Vertically Differentiated Banks.

These thought processes culminated in RBI formulating a framework for establishing SFBs and other differentiated banks (like Payments Banks). Resultantly, 72 applications were received in 2016-17 for setting up SFBs out of which 10 applications were finally approved. As on 31st March, 2020 these 10 SFBs had total capital of Rs 15,000 crores and deposits and advances totaling Rs 72,900 crores and Rs 90,600 crores respectively. With a branch network of 4,452 branches, all the SFBs were in profit and had achieved the 75% priority sector target that was mandated of them.

The book under review, Differentiated by Mission – Small Finance Banks in India, is quite unique in that, while it is topical and deals with Small Finance Banks, the contents are not restricted to narratives with respect to their operations, expanse and results. The USP of the book is that a whole section – which is, in fact, half of the book – is devoted to the opinions of the CEOs of the banks with respect to various aspects, ranging from concrete parameters like performance and regulations to philosophical angles like governance and vision for the future. The book is divided into five sections, including the exhaustive section on CEO Speak.

The first section - *The Beginning* – traces the events that led up to the realisation that Small Finance Banks were an ideal vehicle for furthering India's strive towards Financial Inclusion – tracing its origins to the Committee on Financial Sector Norms of 2009 and the Nachiket Mor Committee of 2013. It details the various characteristics of earlier differentiated banks like Regional Rural Banks and Local Area Banks. It also dwells on the issue of how-whereas initially it was felt that operations of SFBs should be restricted to certain contagious geographical regions only, it was later agreed to permit them operate without geographical restrictions. Another important aspect that has been deliberated is the initial perception that Small Finance Banks would be small in their operations – which was followed by a realisation that the word 'small' relates to the size of the individual loans and not the size of their balance sheets. This realisation was important in order to build the required faith and trust in these institutions. This section also compares SFBs with other differentiated banks like RRBs, LABs, District Cooperative and Urban Cooperative Banks.

Section 2 of the book is named *"The Journey"*. This is because, unlike the new Private Sector Banks that were licensed by RBI in the late 1990s and early 2000s and were established without any precursor institutions, the SFBs did arise from existing entities. Thus, whereas 9 out of the 10 newly licensed SFBs existed earlier as NBFCs (8 were NBFC-MFIs), one was earlier an LAB. The customers of the existing entities, who were only exposed to a small range of financial products (principally credit products) could now avail almost all the services that a traditional universal bank could offer. The author likens the transition being from one which was earlier terminating in a blind road to one similar to travelling on a small road which led to a highway (the highway meaning universal banks). The NBFC origins of the SFBs made it easy for them to achieve their target for small loans, even though the priority sector target set for them was a steep 75% of their total advances.

This section of the book deals with the growth of these banks in several key parameters like business mix, branch network, capital, deposits, advances and small loans. It reveals that in all these parameters, the growth has been impressive. The section also brings out the fact that, out of individual depositors, the percentage of women depositors is high compared to that in other types of banks, a phenomenon stemming from the reason that since most of the SFBs originated from NBFC-MFIs, they have a legacy of high proportion of women customers (borrowers). Certain unique loan products extended by SFBs have also been identified. These include School Fees Loans and ODs for small businessmen to tide over their cash flow positions.

Section 3 of the book is devoted to efforts of SFBs to achieve financial inclusion. The section is very informative with separate boxes provided for each SFB, containing statistics that reveal their performance in this segment. It is reported that the banks have extended financial services to over 15 million people, while complying with all regulatory norms. And since financial inclusion does not stop at credit inclusion, these banks have extended various deposit and other non-credit products and have extended the reach of their customers by extensive use of digital banking channels – whilst resorting to branch expansion at the same time.

Section 4 of the book is titled *"CEO Speak"*. This section is, surely, the piece de resistance of the book and quite unique in that it contains the views of the CEOs of each of the 10 SFBs. This piece, in my opinion, separates this book from most other books as it gives a deep insight into the functioning and aspirations of the different SFBs and provides the reader with a ring-side experience of what it feels like to sit in the Corner Room.

In this section, the CEOs are asked to provide their views on 12 aspects, viz., Regulation, Risk Management, Credit Access to Small Entities, Deposits, Margins, Priority Sector Lending, Human Resources, Credit products, Governance, Vision, Market Share and Strategies. Spanning almost half the entire book, this section contains the individual perspective of the CEOs into each of the foregoing critical areas although in some instances, there is an element of "What I did for the Bank" also. Most of the views are, however, incisive and objective.

The fifth and final section of the book – *"Through the Looking Glass"* is a peep into the future. Various important aspects for sustained existence and growth of SFBs are covered and these include balance sheet size, financial inclusion, risk management, compliance, branch expansion and governance. It is opined that even if the SFBs move towards transitioning into universal banks, their DNA will remain to be one of small finance. It has been stated that during the last decade, whereas 600.4 million basic Saving Bank accounts were opened, only 6.4 million accounts were credit linked. The scope for credit inclusion, therefore, remains vast. Another important aspect that has been debated is whether NPA norms, which are currently uniform for all banks, irrespective of size, requires a re-visit and be made more flexible for institutions which have large number of smaller accounts like SFBs.

In conclusion, the book is a valuable source for getting granular inputs on SFBs. In addition to that, the exhaustive views of the CEOs lend a different colour to the book, giving the reader a very unique experience. The book is also replete with statistics, tables, charts and boxes of information and will be very useful to anyone who wants to have in-depth appreciation into the working of Small Finance Banks and their role in contributing to growth of the economy.

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The Editor,

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