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From the Desk of Editor

It gives me an immense pleasure to release the Volume 3 Second Issue (July – Dec 2020) of Amity Journal of Insurance Banking and Actuarial Science. (AJIBAS). This issue of AJIBAS consists of seven papers and one case study on the recent developments in Banking and Insurance Industry. Themes of these research papers are: .Insurance Operations , Importance of Credit Ratings , Bank Liquidity , Comparative Study of Bank under various business parameters , Motor Insurance , Drone Technology and Mudra Loan I hope the readers will enjoy reading these articles while learning the new concepts and procedures being followed by the corporate houses in achieving customer satisfaction and Business enhancement.

We would like to express our gratitude to Honorable Founder President D. Ashok K Chauhan for his constant motivation and inspiration. We are grateful to our respectable Chancellor Dr. Atul Chauhan for his continuous guidance. Our sincere thanks to Vice Chancellor Dr. Balvinder Shukla for continuous guidance and motivating in publication of compendium of papers.

Editor

A. P. Singh

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Insurance Company Operations in the Indian Context

Amitava Banik, Area Manager, Commercial Underwriting
Reliance General Insurance Limited, Kolkatta

The insurance sector is a colossal one and is growing at a steady rate of 15-20% annually. Together with banking, insurance services add to about 7% to the country's GDP. The insurance like any other financial services has got its own science. It works on a risk pooling mechanism. The risk is assumed on an appropriate risk rating. The operation of the insurance company involves interactions between various functions inside the company – sales, underwriting, distribution, claims, operations, HR, Finance, etc as well as with external stakeholders like rating agencies, investment bankers, other insurers, reinsurers, regulators, etc. The use of disruptive technologies in various forms is also becoming an important part in the operation of insurance companies.

This paper is intended to discuss the operations of the company and study about the role of the broad functions in an insurance company keeping in view primarily the Indian context and try to bring out the interconnections and understand the insurance company ecosystem and industry environment as a whole.

Keywords: Operation, Interactions, Functions, Stakeholders, Insurance

Introduction

Insurance Industry in India

The insurance sector is a colossal one and is growing at a steady rate of 15-20% annually. Together with banking, insurance services add about 7% to the country's GDP. A well-developed and evolved insurance sector is a boon for economic development as it provides long- term funds for infrastructure development at the same time strengthening the risk taking ability of the country. At the end of March 2019, there are 70 insurers operating in India; of which 24 are life insurers, 27 are general insurers, 7 are stand alone health insurers and 12 are re-insurers including foreign reinsurer's branches and Lloyd's India.

Table 1 – Number of Insurers

REGISTERED INSURERS INCLUDINGFOREIGN REINSURERS' BRANCHES / LLOYD'S INDIA			
Type of Insurer	**Public Sector**	**Private Sector**	**Total**
Life	1	23	24
General	6	21	27
Standalone Health	0	7	7
Re-insurers (including Foreign Reinsurers Branches/ Lloyd's India)	1	11	12
Total	**8**	**62**	**70**

Note: *List of registered insurers is given in Annexure 1*

Source: IRDA Report 2018-19

The general insurance industry underwrote total direct premium of INR 169448 crore in India for the year 2018-19 as against INR150662 crore in 2017-18, registering a growth rate of 12.47 percent as against 17.59 percent growth rate recorded in the previous year. Life insurance industry recorded a premium income of INR 508132.03

crore during 2018-19 as against INR 458809.44 crore in the previous financial year, registering growth of 10.75 percent (9.64 percent growth in previous year).

Table 2

Penetration (premium as percentage of GDP)	World	India
Life	3.31	2.74
Non Life	2.78	0.97
Overall	6.09	3.7

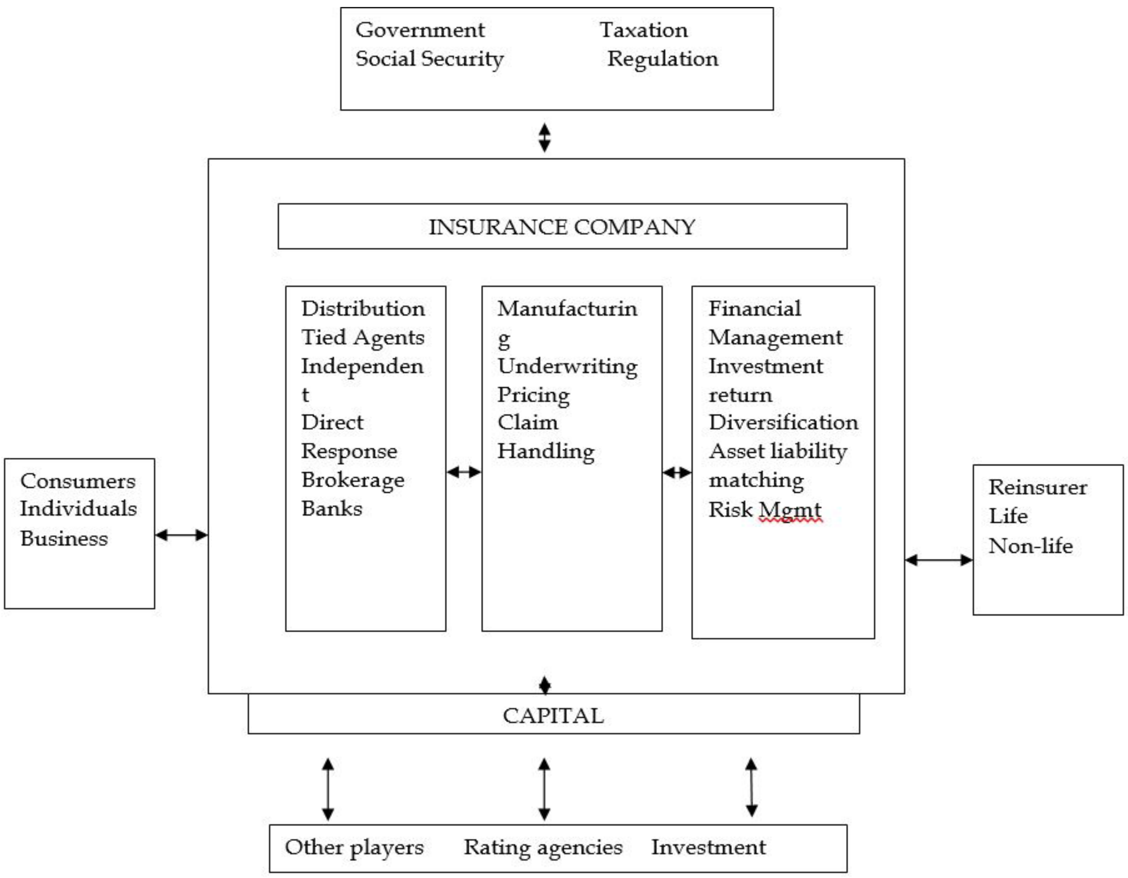
Source: Swiss Re (2017) report

With the increased competition in the Industry, it is very important to work out strategies for efficient and profitable operations.

Insurance Company Operations – Roles of Various Stakeholders

There are core functions in insurance company are Distribution, Underwriting and Pricing, Claim handling and Financial Management. Also the company needs to interface with several players-the Consumers, the Government, the other players like Rating agencies, investment bankers, etc and also the other insurers, Reinsurers, etc.

Block diagram - 1



The structure of an insurance company can be analyzed under the following broad heads

1. Marketing
2. Underwriting
3. Claims and Customer service

4. Operations
5. Human Resources
6. Financial Management
7. MIS and IT
8. External stakeholders

1. Marketing

Marketing is the heart of any organization and particularly the Insurance organization which is considered to be a Sales organization. Marketing is to understand the needs of the Customer and to make appropriate value offering to the customer.

Thus, on one hand there is the need to have a formidable distribution system consisting of efficient Agency force, Brokers, Corporate Agents, Banc assurance channels, Tied agents and also direct sales force. On the other hand, the company wishing to make a permanent mark in this sector should work considerably on the intangible areas of Brand building and brand management, Public relations, advertising and innovative product development delivering value to the Customer.

Intellectual property, software investments, staff and managerial expertise, Marketing research, advertising, business processes, organizational structures are the real stuff out of which 21st Century companies are made and Insurance companies are no alien to the system.

Table 3 – Top Indian insurers

	Insurance	
	Life	**Non Life**
Largest Insurer	Life Insurance Corporation of India Ltd	New India Assurance Co Ltd
National Reinsurer	General Insurance Corporation of India (GIC) Ltd	
Regulator	Insurance Regulatory and Development Authority (IRDA)	
India's GDP	Rs. 190.1 Lac Crs	

Source – IRDA Report 2018-19

2. Underwriting, Product development, Actuarial and risk management aspects

Underwriting is the gate keeping function in an insurance company. It is the crucial stage where the client's risk is analyzed and a particular decision is taken regarding the acceptance and decline of the risk. Hence a proper process of selection and classification of risk and an appropriate pricing of the risk are necessary to earn underwriting profit which goes to the Profit Centre.

The other segments which are closely related to underwriting are actuarial, product development, risk engineering and.

The major product lines are as below:

1. Life insurance – Life insurance is the protection of life which is invaluable. Life insurance is of various types – Term plan, endowment plant, ULIPs, etc. The term plan is the real life protection that provides relief to the family in the event of the death of the breadwinner or near and dear ones. The other plans of endowment and ULIP are basically hybrid plans that take into account both risk and investment aspects

2. Health insurance – With burgeoning healthcare expenditure, health insurance has become indispensable part of personal financial protection. Health is the most valuable asset and so in today's world health

insurance is a must

3. Home and property insurance – The financial protection in case of any accidental loss to property due to fire, burglary, machinery breakdown, electronic equipments, etc are becoming increasingly important

4. Personal accident insurance – The personal accidents can cause loss of earning capacity for individuals. The personal accident insurance has also become a must have in the personal financial protection plan of individuals

5. Professional indemnity – Error and omissions by professionals can cause loss of fortunes. So professional indemnity policy should form a part of the insurance portfolio for professionals

6. Travel policy, motor policy, etc – These are some other policies required for people owning motor vehicle or going abroad on trips.

These are some basic financial products offered by insurers and government and other companies to meet the financial needs of protection and savings. However, depending on particular needs of individuals, there may be other products customized to meet individual needs.

Insurance company has two types of profit – Investment profit and underwriting profit. The investment profit is earned by virtue of the cash rich nature of insurance business which is the profit earned out of the readily available cash premium money in their books invested in the market as the claim liability arises later. The other profit is the underwriting profit which is nothing but the profit earned out of the core operation of an insurance company. This the real concern as almost none of the insurance companies in India are making underwriting profit. For any industry or company not making profits from core operations in the long run may make the business unviable.

Here there is tremendous need for the sharing of industry wide data. For major risks such as large manufacturing plants, etc the insurance company does a risk inspection to understand the good and bad points about a particular asset (risk) prior to underwriting it. It may be a good industry practice to share the data through a common platform so that the data about a particular risk is available to all the companies who may be approached with proposal for insurance of the particular risk. Similarly, the companies should share the data on past claims, cause of the losses and the loss ratios of the accounts. Also it may be a good idea to improve the nature of the risks and make the industry viable by way of the insurance companies carrying out value addition measures in terms of recommending and helping the clients implement risk control measures.

3. Claims and Customer services

An equally important point is the Claim administration. Operational efficiency should be increased by prompt settlement and which also is an important index for Customer Satisfaction thus adding to Profitability of the profit centre.

Table 4 - The incurred claims in the different lines of non life insurance business

INCURRED CLAIMS RATIO: GENERAL AND HEALTH INSURERS

(in percent)

Segment	Public Sector Insurers		Private Sector Insurers		Standalone Health Insurers		Specialised Insurers		Total	
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Fire	98.34	91.31	64.81	47.19	NA	NA	NA	NA	90.48	82.35
Health	107.12	109.86	75.85	71.32	60.68	59.58	NA	NA	89.34	92.21
Marine	83.71	64.06	85.33	66.93	NA	NA	NA	NA	84.48	65.30
Motor	107.73	89.48	76.22	77.77	NA	NA	NA	NA	90.60	83.45
Others	77.24	64.65	77.68	76.95	NA	NA	106.33	112.95	82.88	78.90
Total	**103.46**	**93.73**	**76.20**	**75.46**	**60.68**	**59.58**	**106.33**	**112.95**	**89.16**	**85.26**

Note: *Health includes Personal Accident NA:- Not Applicable*
Reclassification/Regrouping in the previous year's figures, if any, by the insurer has not been considered.

Source – IRDA Report 2018-19

Table 5 - Snapshot of death claims in life insurance for the year 2018-19

INDIVIDUAL DEATH CLAIMS OF LIFE INSURERS DURING 2018-19

(Figures in percent)

Life Insurer	Total Claims	Claims paid	Claims repudiated	Claims rejected	Unclaimed	Claims pending at end of year	Break up of claims pending duration wise			
							< 3 mths	3-< 6 mths	6 - < 1 yr	>1 yr
Private Total	100.00	96.64	2.83	0.23	0.10	0.20	59.73	18.58	8.85	12.83
LIC	100.00	97.79	0.43	0.46	1.22	0.11	46.78	36.03	11.25	5.94
Industry Total	**100.00**	**97.64**	**0.74**	**0.43**	**1.08**	**0.12**	**49.66**	**32.15**	**10.72**	**7.47**

Source – IRDA Report 2018-19

4. Operations

Operational efficiency is an important factor to productivity and that should be a prime concern in the operation of Insurance Company.

Labor productivity=No of policies processed/no of employee's X hrs of work/employee

Total Quality Management standards and procedures should be included in the system in the processes should also be carried out.

Table 6 – Spread of Life Insurance offices in India

TIER WISE DISTRIBUTION OF OFFICES* OF LIFE INSURERS NUMBER OF LIFE OFFICES
(As on 31st March 2019)

Insurer	Tier I	Tier II	Tier III	Tier IV	Tier V	Tier VI	Total
Private	4881	801	500	107	29	29	6347
LIC	1829	556	1350	1026	117	54	4932
Industry	**6710**	**1357**	**1850**	**1133**	**146**	**83**	**11279**

** Offices opened after seeking approval of the Authority.*
*****As per the following classification:***
Tier I - Population 1,00,000 & Above. Tier II - Population of 50,000 to 99,999.
Tier III - Population of 20,000 to 49,999 Tier IV - Population of 10,000 to 19,999.
Tier V - Population of 5,000 to 9,999. Tier VI - Population less than 5,000.

Source – IRDA Report 2018-19

Table 7 – Spread of Non Life Insurance offices in India

NUMBER OF GENERAL INSURERS' OFFICES TIER WISE (As on 31st MARCH)								
Category of Insurers	Year	Tier I	Tier II	Tier III	Tier IV	Tier V	Tier VI	Total
Public sector	2018	4087	1107	1693	1256	92	61	8296
	2019	4247	967	1607	968	292	69	8150
Private sector	2018	1982	55	4	2	0	0	2043
	2019	2301	118	28	9	3	0	2459
Specialized sector	2018	86	0	0	0	0	0	86
	2019	86	0	0	0	0	0	86
Total	**2018**	**6155**	**1162**	**1697**	**1258**	**92**	**61**	**10425**
	2019	**6634**	**1085**	**1635**	**977**	**295**	**69**	**10695**

Note: *Tier I - Population 1,00,000& Above. Tier II - Population of 50,000 to 99,999, Tier III - Population of 20,000 to 49,999 Tier IV - Population of 10,000 to 19,999, Tier V - Population of 5,000 to 9,999. Tier VI - Population less than 5,000.*

Source – IRDA Report 2018-19

5. Human Resources

Human Resources can contribute significantly as a profit centre by implementing proper recruitment processes, innovative human resources strategies and tactics, reward and appraisal systems, fair practices, etc. Motivating the huge agency force is a prime factor in Business development in this sector.

All these can lead to lower attrition, increased employee moral contributing to profit.

HR lacks the same kind of standard widely accepted and process methodologies that finance and marketing enjoys and hence there is a large scope of innovation in this area.

6. Financial Management

The most important reason for a company to exist is to earn profit for the shareholder, owner and promoters. The different dimensions of Financial Management in an Insurance company include-accounting functions to prepare financial and cost accounting information that aids the running of the company as well as the management of cash flow, capital investments, decision on diversification and expansion strategies, asset liability matching, risk management, etc., also the other aspects such as Investment return, Diversification, Asset liability matching, Risk Management, expansion strategies, etc. The company's operations must also generate social capital in the form of CSR (Corporate Social Responsibility).

Table 8 – Investment of insurance sector in India in India

TOTAL INVESTMENTS OF THE INSURANCE SECTOR (As on 31st MARCH) (₹ crore)						
SECTOR	LIFE		GENERAL, HEALTH & RE-INSURANCE		TOTAL	
	2018	2019	2018	2019	2018	2019
Public	2526923	2760658	162503	178977	2689426	2939635
	(11.06)	(9.25)	(16.94)	(10.14)	(11.40)	(9.30)
Private	662137	772485	106426	135354	768563	907839
	(14.37)	(16.67)	(27.64)	(27.18)	(16.04)	(18.12)
Total	**3189060**	**3533143**	**268929**	**314331**	**3457989**	**3847474**
	(11.74)	**(10.79)**	**(20.95)**	**(16.88)**	**(12.41)**	**(11.26)**

Note: *Figures in brackets represent growth in percentage over the previous year*

Source – IRDA Report 2018-19

7. MIS & IT-

This is concerned with the development of information systems and decision support systems. It forms the backbone of an Insurance company and contributes significantly to the profit of the company and earning revenues for the company.

The Data warehousing (Insurance Statistics), web-based tools on Risk management are the possible value additions. The insurance companies are now a days turning to disruptive technologies such as Internet of Things, Artificial intelligence, insurtech for customer services, risk management, etc.

At the same time, data security, cyber security issues are becoming very important as companies need to preserve and secure their data in the face of hardware crashes, malwares, cyber threats and increasingly complex digital environment.

8. External stakeholders –

The insurance company has to continuously interact with various other stake holders –

i. Regulatory bodies – IRDA, IIB, RBI, Tax authorities

ii. Industry, Market bodies and think tanks like General Insurance Council, FICCI, CII,etc

iii. Reinsurer – General Insurance Corporation of India and many reinsurers in India and abroad

iv. Other insurers

v. Legal bodies – Consumer courts, Courts, etc

Operating Environment of Insurance Companies In India

The financial services industry forms the backbone of a country's economy. It serves the industry and the common people. The people's money is parked with them and this calls for a great discipline.

The same is deserved of other industries such as the Insurance industry. The mis-selling of insurance products is a common problem across the industry particularly in the Life Insurance industry, especially while selling to retail customers. The products such as ULIP might be suitable for a section of the customer but not for everyone. The risk profile of the customer should be judged prudently before offering such products. But, unfortunately, that is not done and many companies use these products as a means for siphoning common men's wealth with false promises of high return while bypassing the very essence of Insurance as a means of risk coverage.

Similarly, in the general insurance business, high discounting in the de-tariff regime and unhealthy competition among the insurers to mop up more premium from the market is resulting in the ignorance of underwriting and proper risk assessment. This is resulting in burgeoning losses for the insurers, taking all general insurers to red especially the private ones as they don't have the adequate reserves like the Government ones to take care of the huge losses. Thus looking at the deteriorating health of the insurers it is necessary for the policy makers and regulators to take a re-look at the need to put a cap on the rates and discounts being offered by the insurers. Ignoring this may affect the health of the sector further and the companies may not see profitability in the near future, which will in the long run affect the insured, both the retail and the commercial customers as the insurers may resort to unfair claim practices and may even move to insolvency. This may even lead to the failure of insurance companies in India.

Also there is a need to devise a benchmarking mechanism for the insurance companies in terms of their performance parameters. The premium and claim figures may not be the only parameters to benchmark insurance companies. Being in the service industry it is required to benchmark companies on the basis of their ability to provide better service. The customer service quality benchmarks should be set up. This is true for both the retail and commercial line of products.

When these aspects will be looked into, obviously the rating will be more comprehensive and scientific. The risk features, claim history, the service quality, cost aspects to provide the benchmark service quality and mitigation and control cost will help to arrive at the cost at which the insurance should be sold after retaining the margin.

This will help in both better servicing to the client as well as increasing the profitability of the companies. These will also create the background for more liberalized regime and help in creating the atmosphere for attracting greater FDI in the insurance space when the sector is opened up more.

Conclusion

The Insurance companies are mammoth organizations which need sophisticated methods to run into profits thereby fulfilling its commitment to society and the shareholders. Hence the need to revamp the underlying processes in all the centers of activities (Profit Centers).

With increasing competition in the Indian Insurance space, there is the need to do things differently and innovatively for firms to achieve the competitive edge thus paving the growth path for the Insurance sector.

We must understand that Insurance like several other sectors being opened up does not have any readily available resource that the companies of the world will readily jump into cornering right away. No one will be willing to invest in an unknown market reeling under heavy losses from pricing pressure and adverse experiences. The atmosphere should be conducive to doing profitable and enriching business.

Insurance, worldwide is a huge area with a lot of sophistication. It is about 20 years that the market had been opened up in India. Further liberalization has been done by increasing the FDI cap to 49%. It is high time for the consolidation of the industry on all aspects, be it profitability, rating mechanism, customer services, systems and processes as well as human resources. The industry needs to mature on all areas to turn into a viable value adding proposition for the investor as well as all the stake holders of the industry.

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Importance of Credit Rating

Tara Prasad Misra

DyGM and Principal, Baroda Apex Academy, Bank of Baroda.

In the wake of globalization and liberalization, the banking environment in India has undergone major changes. The Indian Banking scenario has witnessed progressive deregulation (such as in entry norms, lending rates, deposit rates, mergers & acquisitions, products and services offered, branch opening etc.), introduction of prudential norms and adoption of international supervisory best practices such as Basel II. Today, banking is quite different from the earlier years on account of fast transformation process coupled with the degree of expectation of new generation customers. The customer expects the things to be delivered on yesterday date without having time to wait and waste. Banking transactions and profit are quiet independent of bank branches, this additional job has attracted the attention of the banker in terms of offsite and onsite surveillance and also focused and subjective priority of the banks to identify and manage the risk. Notwithstanding the fact mentioned above, banks at present are additionally burdened with responsibility of managing quality of assets, arresting slippage, identifying avenues of cheaper source of funds, ancillary activities to keep engaged its work force and fullest capacity utilization of its service outlets, finding new ways to keep its customer engaged, service force engaged and challenged and many other activities to stay relevant in earning profits and remain productive. Again in an era of uncertainty, ambiguity, volatility and complexity environment banks feel to go way forward in their process of searching excellence and endeavour to resort for diversified business activity to reinforce the viability of the organization in a longer run. Hence, banks need to revitalise its core functionof accepting deposits for the purpose of lending more effectively as ever to remain relevant in banking business on sustainable basis. In this context Banks demands for good appraisal followed by equally good monitoring and control of the credit which are considered as the key to containing healthy assets on sustainable basis, which results in profitability of the bank. Hence, in the present scenario of acute and increasing competition and of reducing spreads, it is imperative for banks to manage the risks, particularly credit risk arising from their activities to ensure a healthy credit portfolio.

Key Words: Credit rating scale, Credit risk rating frame work, Investment Grade,Credit enhancements, Industry risk, risk return trade-off, NAV, NIM

Introduction

Credit risk is defined as the possibility of losses associated with default in repayment or diminution in the credit quality of borrowers or counterparties or diminution in the value of primary and/or collateral assets. In the bank's portfolio, losses stem from outright default due to inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, settlement and other financial transactions. Alternatively, losses result from reduction in portfolio value arising from actual or perceived deterioration in credit quality. Credit risk can stem from on and off-balance sheet exposures in bank's banking & trading book. The goal of credit risk management is to ensure that it is within the acceptable risk appetite & tolerance limit set by the management. Bank needs to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Bank shall also consider the relationships between credit risk and other risks. Bank shall identify and manage credit risk inherent in all products & services and ensure that the credit risks of products & services new to it are subject to adequate risk management procedures & controls before being introduced or undertaken, and approved in advance by the board of directors or its appropriate committee. Credit risk management encompasses identification, assessment, measurement, monitoring, control and reporting of the credit risk exposures.

The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of the bank.

The following are the types of credit risks

- Principal/and or interest amount may not be repaid.
- Guarantees or Letters of Credit: funds may not be forthcoming from the constituents upon crystallization of the liability.

- Payments due from the counter parties under the respective contracts may not be forthcoming or ceases.
- The availability and free transfer of foreign currency funds may either cease or restrictions may be imposed by the sovereign-Cross border exposure
- Deterioration in the quality of primary and/or collateral assets.

Credit risk simply means the risk of default being made by a customer owing to non-repayment of the credit obtained by him from a bank. Proper evaluation of the customer measures the financial condition and the ability of the customer to repay loan in future.

Therefore, the bank shall seek to maintain a low risk profile with due flexibility, enabling the bank to capture remunerative business at all points of time. Accordingly, the lending channel shall be mended to suit its risk–return trade-off in order to meet its business needs. A sound, well-defined credit-granting criteria is essential for approving credit in a safe and sound manner. The criteria shall set out who is eligible for credit, for how much, for what types of credit and under what terms& conditions the credits are to be granted.

Credit granting requirements supported by credit rating system are important tools in assessing and monitoring the quality of individual credits, as well as the total portfolio. Credit rating system includes both credit rating models and score cards.

Credit appraisal is simply an exercise of risk assessment by the bank prior providing of any loans & also checks the technical, economical & financial viability of the project proposed. It also includes verification of quality of primary & collateral security available for recovery of such funds being lent to the customer. Lending being the core banking function, banks should not deter from financing merely because of risks in credit. A banker's task is to identify the risk parameters & to mitigate them on a continuous basis. It is prudent to have some idea about the degree of risk associated with any credit proposal and banker should take calculated risk, based on risk-absorption & hedging capacity of the Bank. The following factors need to be emphasized while assessing the credit risk:

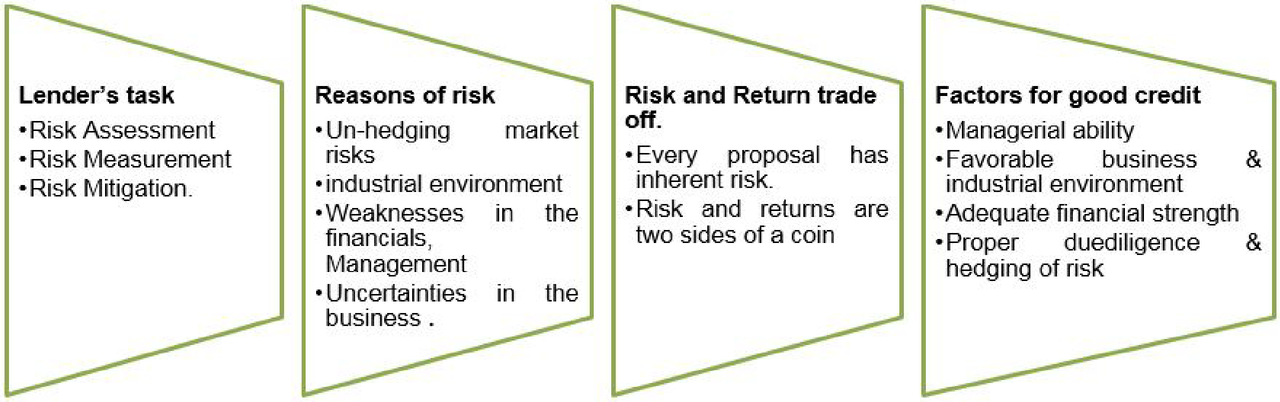
Credit Risk

The fact is that bankers are in the business of managing risk. Pure and simple, that is the business of banking. Most bankers understands the relationship between risk and reward. But a second relationship is equally important: the relationship between risk and awareness. Taking risks is not in itself a problem but ignorance of the potential consequences is an entirely different matter.Risk management cannot be static, but has to generate procedures and controls which can adapt to sudden shifts in the market, new products, and alterations in the customer base.The primary goal of risk management is not to avoid or minimize risks which are inherent in banking business, but rather to steer them consciously and actively to ensure that the

bank generates income adequate to the assumption of risk.The way that risk is managed in any particular institution reflects its position in the marketplace, the products it

delivers and perhaps, above all, its culture. Risk management should at least ensure that the institution's bottom line is not affected by nasty surprises. Even if you put your eggs in different baskets, as long as you are long in eggs you cannot escape systematic risk. Amongst all risk managed by banker, credit risk is considered as an important risk because credit is considered as an important and integral function of banking. Ships are always safer at harbors but they are not meant for harbor. It has to undergo a voyage. It has to take risk. Similarly banks are to lend to the customers and take calculated risk. Credit Risk is the potential of loss arising out of the inability or unwillingness of a customer or counterparty to meet its commitments in relation to lending, trading, hedging, settlement and other financial transactions.Philosophy behind Credit Risk Management: Higher the risk, higher the expected reward. The goal of credit risk management is to maximize a bank's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. Banks should also consider the relationships between credit risk and other risks. The effective management of credit risk is a critical component of a comprehensive approach to risk management and essential to the long-term success of any banking organization.

A credit rating is an evaluation of the credit risk of a prospective debtor (an individual, a business, company or a government), predicting their ability to pay back the debt, and an implicit forecast of the likelihood of the debtor defaulting. A Credit-risk rating model/frame work (CRF) is necessary to avoid the limitations associated with a simplistic and broad classification of loans/exposures into a "good" or a "bad" category. It gives an indication of risks associated with a credit exposure. These rating models are primarily driven by a need to standardize and uniformly communicate the "judgement" in credit selection procedures and are not a substitute to the vast lending experience of the banker. The credit risk rating model should include following broad parameters.



Credit Rating Scale

There are a few important credit rating agencies companies approach to get rated. These include CRISIL, CARE Ratings, ICRA, India Ratings and Research, and Brickworks Ratings. Here is a look at the ratings symbols used by the credit rating agencies for long-term debt and short term debt instruments.

Rating Scale Long Term Debt Instrument	**CRISIL**	**CARE**	**ICRA**	**India Rating and research**	**Brickwork**
Highest Safety: Lowest risk	CRISIL-AAA	CARE-AAA	ICRA-AAA	IND-AAA	BWR-AAA
High Safety- Very low Risk	CRISIL-AA	CARE-AA	ICRA-AA	IND-AA	BWR-AA
Low Credit Risk	CRISIL-A	CARE-A	ICRA-A	IND-A	BWR-A
Moderately Safety-Moderate degree of safety	CRISIL-BBB	CARE-BBB	ICRA-BBB	IND-BBB	BWR-BBB
Moderate Credit Risk	CRISIL-BB	CARE-BB	ICRA-BB	IND-BB	BWR-BB
High Credit risk	CRISIL-B	CARE-B	ICRA-B	IND-B	BWR-B
Very High Credit Risk	CRISIL-C	CARE-C	ICRA-C	IND-C	BWR-C
Default	CRISIL-D	CARE-D	ICRA-D	IND-D	BWR-D
Rating Scale Short Term Debt Instrument					
Lowest Credit Risk	CRISIL-A1	CARE-A1	ICRA-A1	IND-A1	BWR-A1
Low Credit Risk	CRISIL-A2	CARE-A2	ICRA-A2	IND-A2	BWR-A2
Moderate degree of safety	CRISIL-A3	Care-A3	ICRA-A3	IND-A3	BWR-A3
High Risk	CRISIL-A4	Care-A1	ICRA-A4	IND-A4	BWR-A4
Default on maturity	CRISIL-D	Care-A1	ICRA-D	IND-D	BWR-D

The number of grades used in the CRF depends on the anticipated spread in credit quality of the exposures taken by the bank. This, in turn, is dependent on the present and the future business profile of the bank & the anticipated level of specialization/ diversification in the credit portfolio. CRFs with a large number of levels/ grades on the rating scale are, as evident, more expensive to operate as the costs of additional information for fine gradation of credit-quality increase sharply. A bank can initiate the risk-grading activity on a relative smaller scale and introduce new categories as the risk-gradation improves.

Credit Rating

Credit rating is an analysis of the credit risks associated with a financial instrument or a financial entity. A rating is assigned to an instrument by a credit rating agency after a comprehensive analysis of business risks, financial risks, management quality and ability to service debt.

It is a detailed report based on the financial history of borrowing or lending and credit worthiness. It helps in assessing the solvency of the entity. These ratings are assigned by credit rating agency.

A credit rating is an evaluation report about how good or bad a company is performing in absolute terms in a particular industry or market. Such evaluation report is useful in comparing the credit worthiness of the company with that of other companies operating in similar market conditions. It is considered as an important report besides the external auditor's report which provides the stake holders a detailed view of the financial standings of the commercial entity. The report provides both quantitative and qualitative information.

Credit Rating refers to the expression of opinion concerning debt instrument, based on credit risk evaluation, given by rating agency as on a particular date, indicating the probability of principal plus interest to be met by the borrower in a timely manner. Credit rating also signifies the likelihood a debtor will default. Essentially, it is representative of the credit risk carried by a debt instrument – whether a loan or a bond issuance. Credit rating report means the following:

- Assesses the credit worthiness of business(company)
- Based on Financial history and current Assets and Liabilities
- Determined by Credit Rating Agencies
- Tells a lender or Investor the probability of the subject being able to pay back a loan

Types of Credit Rating

Each credit agency uses its own terminology to determine credit ratings.

Generally, the ratings are bracketed into two groups: investment grade and speculative grade.

1.Investment Grade	Considered solid by the rating agency, and the issuer is likely to honor the terms of repayment. Such investments are typically less competitively priced.
2.Speculative grade	Investments are high risk and, therefore, offer higher interest rate upfront to reflect the quality of the investments.

Credit Risk Rating Assessment Model

Each credit risk assessment models have 3 distinctive features:

1. Measuring Credit Risk
2. Pricing the Credit Risk
3. Provide triggers for action on portfolio management.

Risk is inability or unwillingness of borrower- customer or counter -party to meet theirrepayment obligations/ honor their commitments, as per the stipulated terms. The risk evaluation of loan assets have various parameters which are needed to be incorporated while designing a risk assessment model for a credit institution. These are necessarily should include:

- Borrower relationship in credit quality determination
- Effect of economy and industry need to be factored.

- "Point-In-Time" philosophy be the base in designing the model (It tries to evaluate the current situation of a customer by taking into account both cyclical and permanent effect)
- Tenure risk is to be incorporated.
- Separate models for retail and commercial loan be designed.
- Relatively large number of grades be advocated.
- Adoption of cash flow based lending be the highlights of the model.
- Emphasis on fundamental analysis
- Use of projections and stress testing
- Gradual shift towards "Through-the-Cycle" philosophy(Focus mainly on the permanent component of default risk and are nearly independent from cyclical changes in the creditworthiness of a customer
- Use of "Facility rating"
- Incorporation of macro-economic inputs shall provide a long term vision.

Based on the foregoing inputs a credit risk assessment model has been designed which is as under:

1. **Industry risk**: These parameter includesvarying degrees of risk which are built into Bank's risk assessment model such as competition, industry outlook, regulatory risks, statutory risk and contemporary other issues. The assessment of this part is external to the borrower and is done through assessment of Industry related macroeconomic parameters.
2. **Business risk:** The assessment of this factor is based on internal working of the borrower and relates to parameters such as after sales service, Concentration of sales distribution set up, Market competition, Product profile, technology, quality control, CIBIL Status, qualification in audit report etc. The parameters, which are only relevant to a particular industry, are selected for scoring having different risk weights.
3. **Financial Risk:** It is the appraisal of the financial strength of the borrower based on performance & financial indicators.It includes various elements to assess the financial risk such as:

   - Trend analysis(internal working of the borrower and relates to parameters such as past (not in case of a green field / infrastructure company under implementation stage)
   - Concentration of sales
   - Diversion of funds
   - Projected financials
   - Strength and standing of the unit based on financial ratios.
   - Margin level in the business.

- ➢ Future prospects & risk mitigation (collateral security / financial standing).

4. Management Quality: It is very much relevant to mention that 'a first class borrower is better than a first class security" or "a low rated project in the hands of a high rate entrepreneur is better than the high rated project in the hands of the low rated entrepreneur" Therefore, a well begun is half done. In credit decision, appraisal of the borrower is very important and if selection of borrower is done properly at the beginning; then the monitoring part will also be easy. The management of an enterprise / group is rated onthe parameters related to the management such as integrity (corporate governance), track record, managerial competence / commitment, expertise, structure & systems, experience in the industry, credibility - ability to meet sales projections, ability to meet profit (PAT) projections, Payment record, Strategic initiatives, Length of relationship with the Bank and many more.

5. Credit enhancements- Risk mitigating covenants available to us e.g. by way of personal guarantees, Collaterals, Insurance or guarantee by CGTSME/ECGC/ etc. have been captured in the Rating Model which will enable the borrower to score marks for providing cushion against the risk involved.

6. Other qualitative Parameters:

    i. Long lasting relations with the Bank.

    ii. Risk adjusted return on capital/Value statement/yield sheet.

    iii. Credit discipline

    iv. Market report/banker's opinion report.

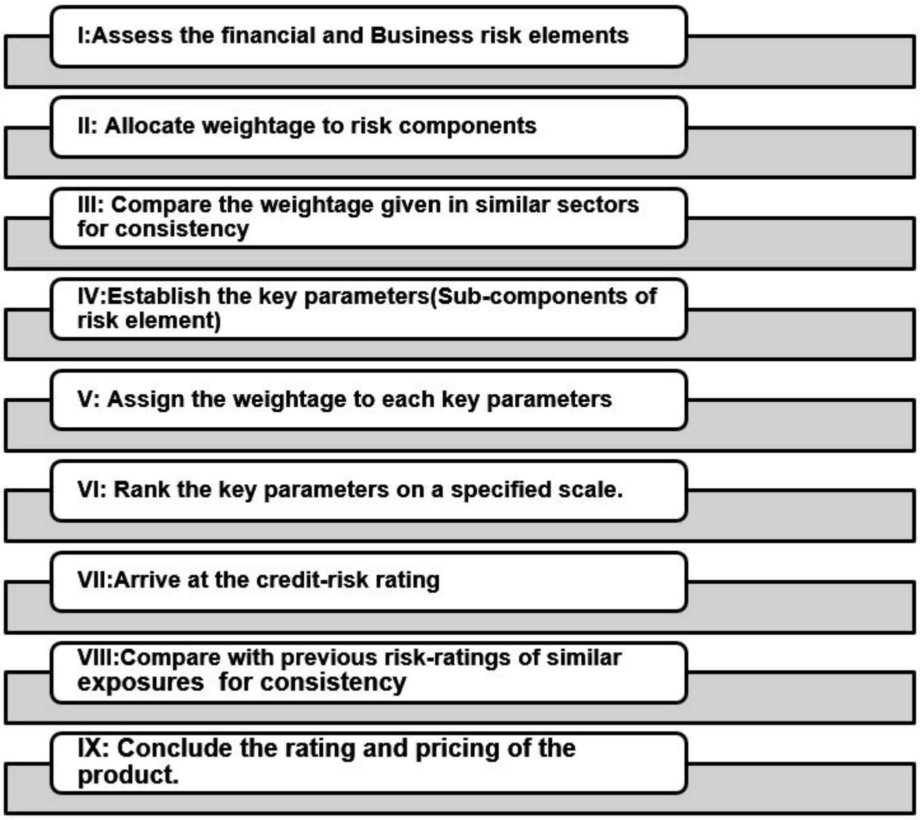
    v. Value of collateral higher than required

    vi. Third party business provided by the borrower.

    vii. Other important points that are worth mentioning should be enumerated for e.g. corporate guarantees provided etc.

In order to ensure effective credit risk management in banks, it is necessary to develop the kinds of terms and conditions for those bank clients who take loans that would both attract potential borrowers and guarantee loan repayment. It would not be expedient, however, to develop a separate set of terms and conditions for every individual borrower. Instead, existing and potential bank clients should be grouped according to their similarities and differences. After that, a separate set of terms and conditions needs to be worked out for each group in accordance with the characteristic features of the group members. The classification of bank clients into distinct groups should proceed according to the method of classification that unites disparate system elements into homogeneous groups on the basis of the similarities of the elements in question.

Steps in Credit Risk rating: A separate credit risk rating model be framed based on peculiarity of businesses like banking, finance companies, real-estate developers, etc. For all industries (manufacturing sector), a common CRF may be used. A risk rating model needs to have following steps:



Importance of Credit Rating

A rating downgrade essentially means that the company's ability to service/repay that particular financial instrument has declined which in turn hampers the company's ability to borrow further. Lenders may hesitate lending to such companies and may not even roll-over (refinance) existing debt.

For instance, when selecting a company deposit to invest in, you should go for one with a high credit rating. If investing in company deposits, it is advisable to go for a deposit with a rating of AAA or at least AA, nothing lower. And if the credit rating of your deposit falls after you have invested in it, it is advisable to get out even if it means you have to pay a penalty for premature withdrawal. If the debt mutual fund scheme you have invested in holds a security whose rating has been downgraded, the immediate fallout will be that the NAV of the scheme will be negatively impacted. However, the quantum of the impact will depend on the percentage of that particular security in the scheme's portfolio. Obviously, the higher the exposure to the downgraded security, the stronger the negative impact on the scheme's NAV. However, one should not base one's investment decision solely on the credit rating of an instrument or company. This is because ratings are not constant and, there is every possibility that it can change during your investment period. Credit rating should be used as one of the parameters in your decision. .

The following are the importance of Credit Rating:

- Credit rating does a qualitative and quantitative assessment of a borrower's creditworthiness.
- Important in brand building, improves image.
- Lowers cost of borrowing and in fact increases NIM (Net interest margin) with wider audience for borrowings.
- It helps in growth and expansion more important for startups and non-popular companies.
- It allows investors to make a sound investment decision after taking into consideration the risk factor and past repayment behavior. In other words, it establishes a relationship between risk and return.

- In the case of the companies, credit ratings help them improve their corporate image. It is useful especially for companies that are not popular.
- The credit rating acts as a marketing tool for companies and also as a resource that is helpful at the time of raising money. It reduces the cost of borrowing and helps in the company's expansion.
- Lenders such as banks and financial institutions will offer loans at a lower interest rate if the entity has a higher credit rating.
- Long-term loan rating is a primary device for credit screening for banks. It also has regulatory implications as the capital adequacy of banks is directly linked to external long-term ratings that they are exposed to.
- The issue of possible rating shopping behavior on the part of obligors clearly requires serious attention. This is particularly relevant as some of the rating agencies have a much greater share in ratings assigned compared to their share in ratings withdrawn.
- Credit rating encourages better accounting standards, detailed information disclosure, and improved financial information.
- Banks to boost capital adequacy through optimistic external ratings,
- Banks at the same time can control aggregate credit risks by way of observing the movements in external credit ratings.
- Assurance of Safety and easy decision making.

Conclusion

Needless to say that credit rating determines the decision of the investors to invest money/to give loan in/to that particular company. Conservative investors or some banks may not be willing to give money to a risky customer with low credit rating. The lenders always feel that high credit rating means an assurance about the safety of the invested amount and that the amount will be paid back with the stipulated rate of interest on time. However, it must also be remembered that if the credit rating of a company is high, the rate of interest offered by such company will be comparatively low, and vice versa. Apropos to the principles of safety first speed next principle lenders shall always prefer to lend to a unit having strength and rating is high. for its sustainability and profitability.

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Banking System Liquidity in India : Present Position, Expedient Issues and Emerging Challenges

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The liquidity of the banking system is important because adequate liquidity fosters growth, investment and stability of interest rates and exchange rate. Liquidity is a pre-requisite to smooth operation of banking businesses. Infact liquidity is an important determinant of growth, development and survival of banks. This has been starkly brought to the fore repeatedly, including the global financial crisis of October 2008.

Excess liquidity leads to appreciation in asset prices or inflation; deficit mutes demand and leads to contraction of economic activities. Therefore, adroit management of system liquidity is crucial for all economies. This responsibility is assigned to the Central Bank, being the monetary authority. In India, the Reserve Bank of India (RBI), which is the sole monetary authority, has been managing the system liquidity well even in challenging situations. The RBI has been ensuring that the banking system in India is well positioned in terms of liquidity for providing adequate resources for growth in all productive sectors of the economy.

The RBI has been announcing a bi-monthly monetary policy statement based on the decision of the Monetary Policy Committee (MPC). This decision is factored on the prevailing and expected liquidity conditions vis-à-vis inflation expectations and changes in regulatory interest rates to achieve the targeted inflation corridor. The RBI also announces Statement of Developmental and Regulatory Policies as part of the Monetary Policy statement for modulating liquidity flow to the desired sectors.

Frictional (Transient) Liquidity Vs Durable (Structural) Liquidity

On any given day, the systemic liquidity can be in deficit (banking system is a net borrower from RBI) or in surplus (banking system is a net lender to RBI) through its liquidity windows. The deficit or surplus can be frictional (transient) or durable (structural). According to the RBI, the optimal liquidity in the system shall range between 0.25per cent to -0.50per cent of the NDTL of banks.

The changes in system liquidity are caused by the following factors:

1. The pace of growth of deposits & credit
2. Foreign Exchange flows
3. Cash in circulation
4. Government balances with RBI
5. Government Securities held by RBI (Open Market Operations)
6. Change in Reserve Requirement (CRR)

While changes in cash in circulation during festive seasons, tax payment at quarter end and government balances with the RBI create transient liquidity demand, there are other structural factors. The structural liquidity demand is more durable in nature as the factors driving this demand are considered to be more persistent. The RBI manages these changes in liquidity demands through various tools.

A bank's liquidity holdings are a function of both specific and macroeconomic factors . While the bank specific determinants include bank-size, deposit rate, profitability, asset quality, funding cost and the rate of capitalization in a bank; the macroeconomic determinants relate to the growth rate of Gross Domestic Product (GDP) and the inflation rate. Banks can shore up their liquidity level by various important mechanisms. Such mechanisms relate to shortening of asset maturities, improving the average liquidity of assets, lengthening liability maturities, issuing more equity, reducing contingent liabilities and obtaining liquidity protection. There are, however, competing choices to be made between the safety of greater liquidity and its concomitant cost. In view thereof, it is difficult to answer the apparently simple but practically baffling question how much liquidity is enough? A rough rule of thumb for banks is to hold sufficient liquidity to cover all regulatory requirements together with a buffer to reduce the exigency that liquidity is insufficient to meet the prescribed benchmarks. This could lead to a regulatory or market response or constrain the functions and working of the bank. This is why the Basle III liquidity rules prescribe a "Liquidity Coverage Ratio" and "Net Stable Funding Ratio" for sound and effective functioning of banks.

Given the macro-economic concerns, financial stability in the context of stronger linkages between various segments of the financial markets, including money, Government securities and forex markets has now emerged as an important concern of monetary policy .

Post the global financial meltdown of October 2008, the run on the banks and the rapidity of collapse of even iconic banking institutions, the issues of liquidity risk and prudent and effective risk management have increasingly come to the fore. Accordingly, regulatory authorities across the development spectrum have attempted to establish formal, quantitative requirements for the liquidity level necessary for banks.

In simple terms, banking liquidity means the capacity of a bank to fund asset growth and meet both expected and unexpected cash and collateral obligations at reasonable cost and without incurring unacceptable losses . Liquidity risk implies the bank's inability to meet such obligations as they become due, without adversely affecting the bank's financial condition .

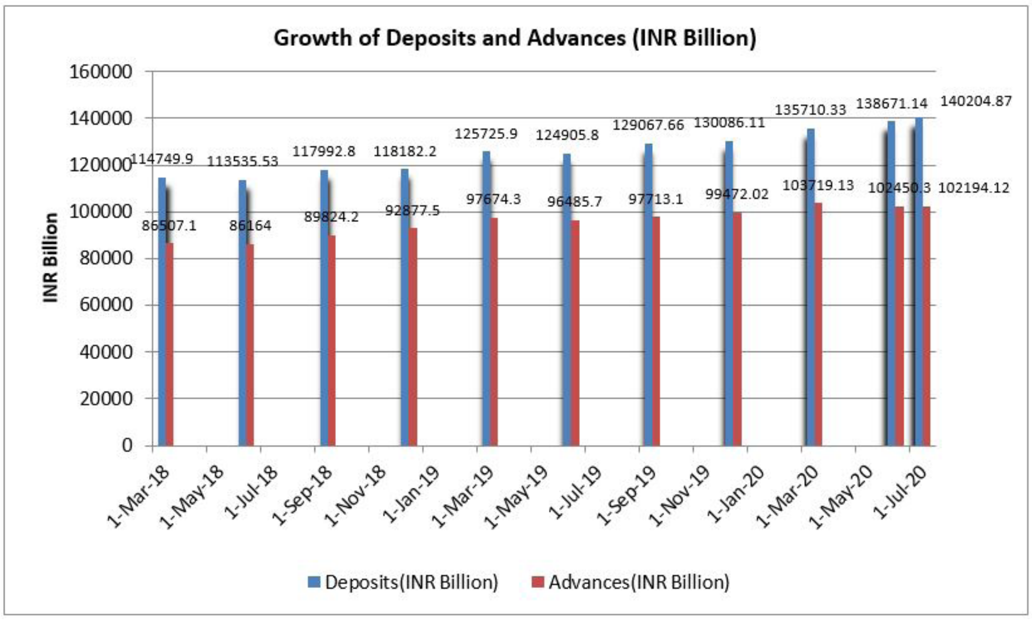
Recent Liquidity Changes in India

Credit & Deposit Growth

India stood next to China in terms of the GDP growth in the last three years, in some quarters even overtaking the dragon country. India's savings, both household and corporate, have grown with macro-economic growth. Credit disbursement by banks / shadow banks has also been keeping pace with the economic growth, notwithstanding the increasing toxic assets.

The position of aggregate deposits & aggregate credit is shown in Chart 1. The excess deposit creation over credit growth infuses liquidity into the system. The total liquidity created from this is about Rs.10 lakh crore in the past 3 years, of which Rs.6 lakh core is in the four-month period of the current financial year. Withdrawals from the volatile financial markets to safe haven of bank deposits despite declining interest rates and lack of credit demand substantiate this position.

Chart 1: Trend of Aggregate Deposit and Advances (INR Billion)



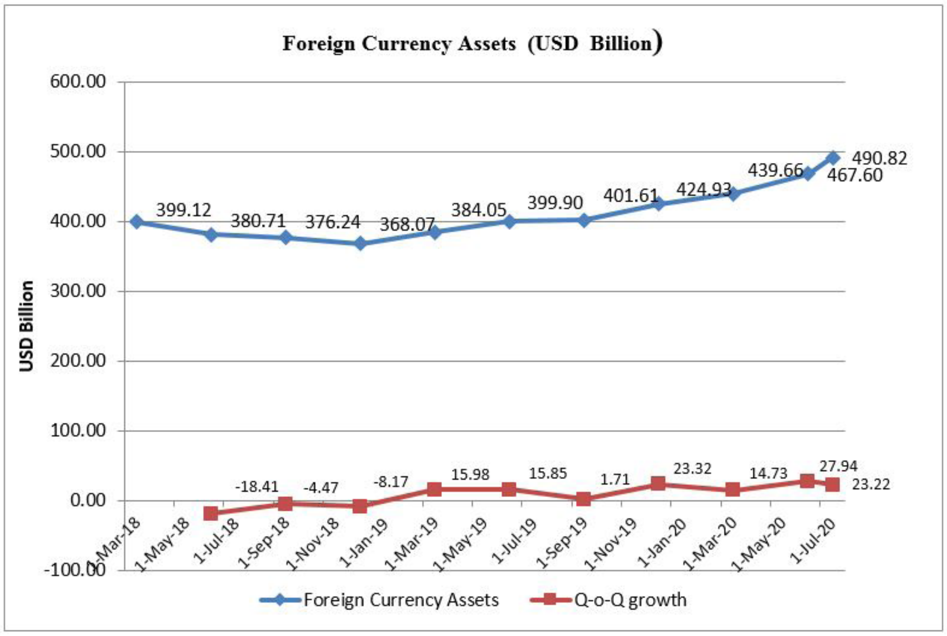
Foreign Exchange Flows

India has been a significant net foreign exchange earner through FDI, FPI, ECB and remittance flows since 2002. India's international trade flows continues to be in the negative. These forex flows impact the exchange rate of the local currency as net inflows result in appreciation and the outflows, depreciation in the exchange value. To obviate bouts of volatility in the exchange rates, Central Banks intervene in the foreign exchange market by buying or selling the foreign currency against the local currency. But it needs to be borne in mind that the RBI has repeatedly stressed that it does not target any exchange rate but intervenes in the forex markets only to curb volatility and prevent disruption of macroeconomic stability.

While buying of foreign exchange infuses liquidity, sale of foreign exchange results in liquidity contraction of the domestic or local currency. The RBI may also do simultaneous swap transactions to buy/sell forex without affecting the system's liquidity. As a measure of keeping the exchange rate of Indian Rupee against major foreign currencies, the RBI has been intervening in the market by buying/selling of foreign currency. Since India has been a net recipient of forex flows, the RBI's forex reserves position swelled to over USD 534 billion and India has now the world's 5th largest forex reserves. Foreign Currency Assets (excluding gold, SDR & IMF reserve) constitutes more than 95 per cent of the reserves, which has come from the intervention operations of RBI.

Chart 2 shows the growth of forex currency assets since March 2018. At current exchange rate of Rs.75 to a USD, the liquidity created by RBI from the forex operations is close to Rs.7 lakh crore. Of this, close to Rs.4 lakh crore has been added during the 4 months of the current financial year that witnessed buoyant FDI flows into Reliance Jio Platform, favourable balance of trade.

Chart 2: Foreign Currency Assets (USD Billion)

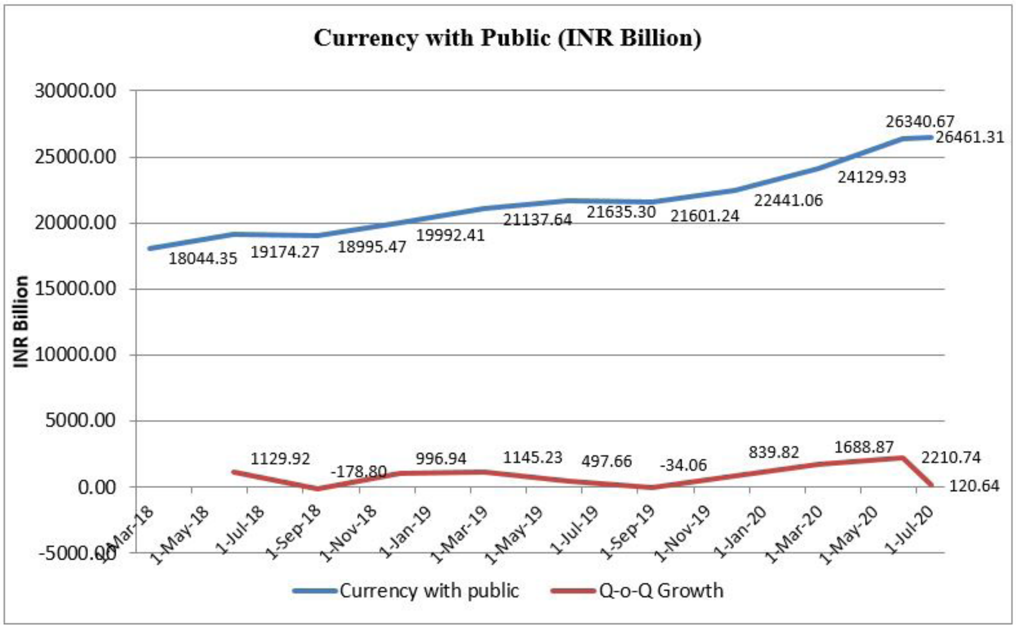


Currency with Public or in Circulation (CIC)

Cash is used for payment and as a store of value. While low denomination currency is used for payments, higher denomination is seen to be used for storage. In India, digital payment systems are evolving and the evidence of its increased usage was seen post demonetization of currencies in November 2016 and during the current COVID 19 pandemic period. However, the currency in circulation is on the rise as currency still rules as a predominant means of payment despite strict regulatory limits for cash transactions. Earlier, substantial increase in CiC could be observed in festive seasons but the rise has been agnostic in recent years. Therefore, in the Indian context, liquidity demand created by increase in CiC can be considered structural. Increase in CiC results in compression of bank liquidity.

The increase in CiC in India is one of the steepest in the world, closely followed by China . Since 2014-15, the CAGR of CiC is in excess of 10per cent and as a percentage of GDP also, it remains above 10per cent, as against negative growth in countries like Australia & Japan and low single digit increase in Korea & Singapore, the study shows. China's growth of CiC is close to 10per cent. Only during 2016-17, the increase was lower on account of demonetization of currencies. Chart 3 shows the increase in CiC in the last 3 years. Close to Rs.8.5 lakhs liquidity has been drained by the CiC.

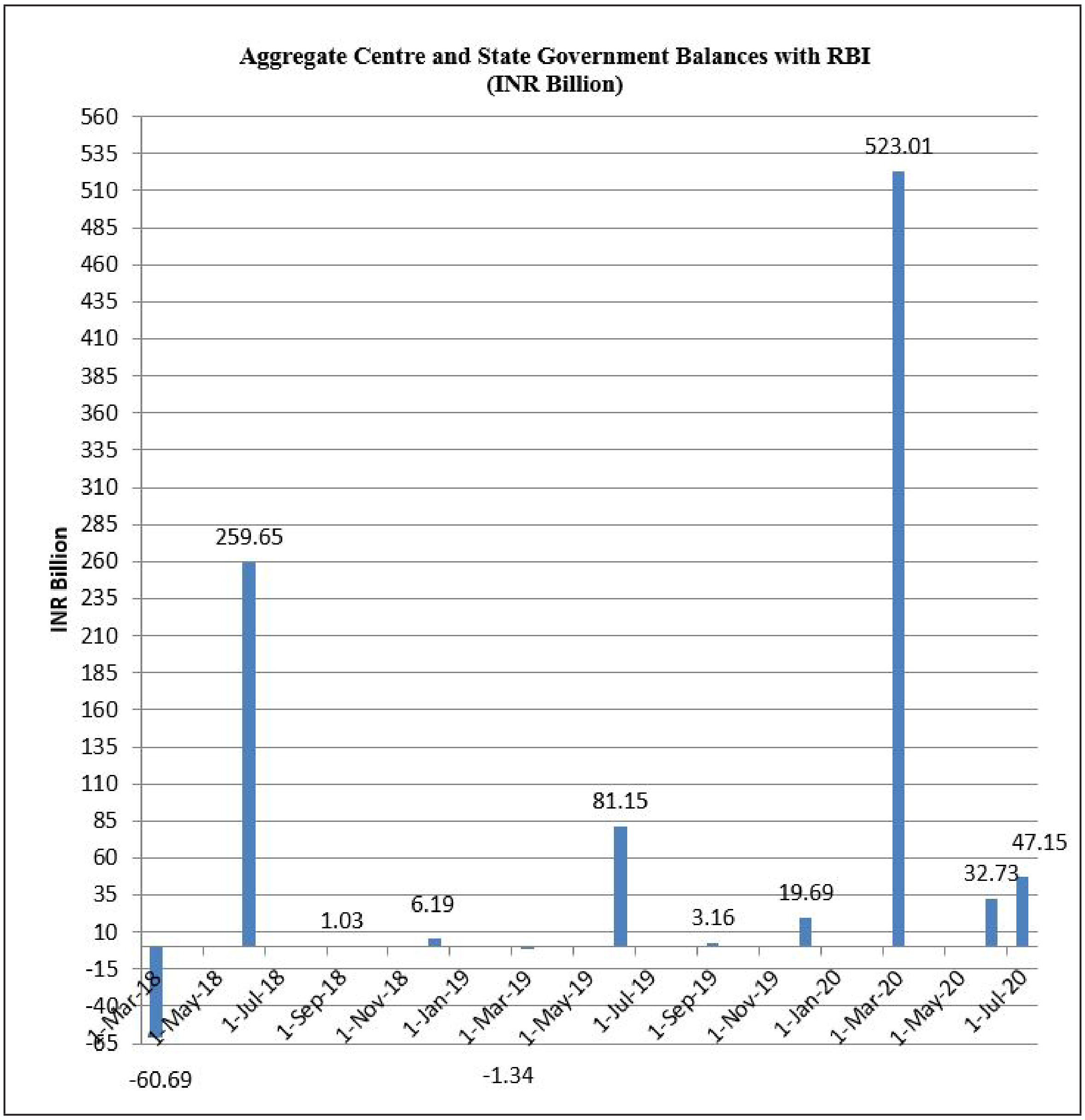
Chart 3: Currency with Public (INR Billion)



Government Balances with RBI

Fiscal deficits are met in India by the Central Government & State Governments through a pre-announced domestic borrowing program in consultation with the RBI. With the formation of Primary Dealers (PD) in 1996, the RBI moved away from monetizing Government borrowing programmes. Un/under subscribed portion of the Central Government borrowing programmes are now devolved on and subscribed by the PDs that underwrite these programmes. Though the subscription to these borrowings temporarily affects the system liquidity, as and when these funds are utilized by the Government, the liquidity is released to the system. Hence, as a measure of transient liquidity assessment, the balances held by the RBI in Government Accounts are taken into account. Higher balances with RBI indicate squeeze on liquidity while an overdraft position (Ways & Means Advance) or a low balance in Current Account will indicate liquidity release. It is observed that the Central/ State Governments keep minimal balances in their current account with RBI and therefore, does not normally create stress on system liquidity. Chart 4 indicates the Government balances with RBI.

Chart 4: Government Balances with RBI (INR Billion)



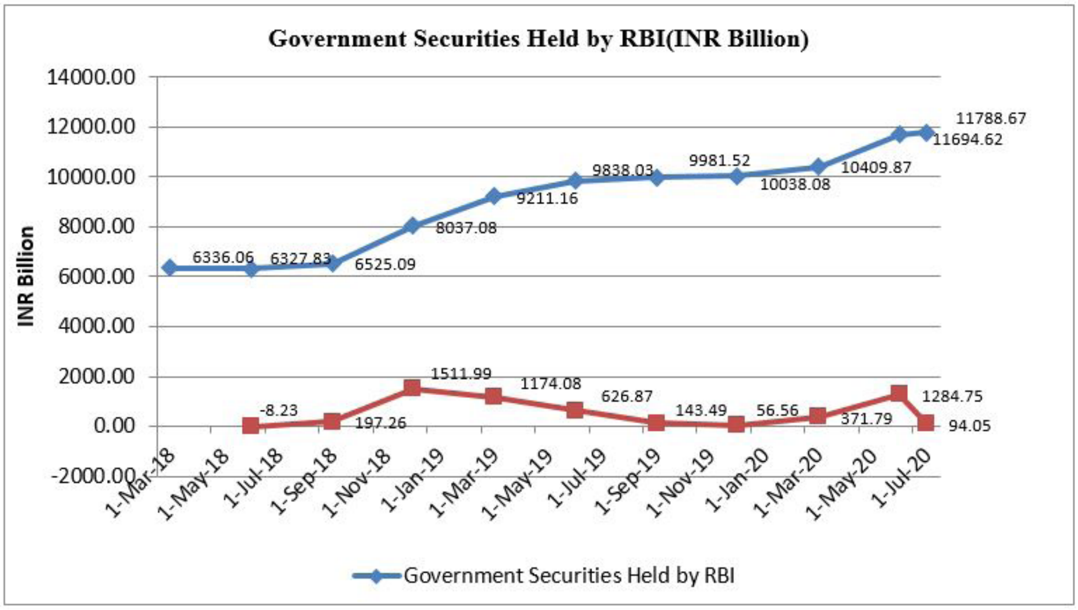
Open Market Operations by Reserve Bank of India

Purchase or sale of Government Securities by the RBI from market participants is called Open Market Operations (OMOs). Besides being used as a tool to signal the desired market yield curve for the sovereigns, it is also used to infuse / drain liquidity from the system. In the liquidity context, the RBI infuses liquidity by undertaking these operations through notified programmes or through intervention in the Government Securities market. Further, RBI also requires adequate stock of Government Securities to collateralize the reverse repo transactions. (RBI needs to sell Government Securities to the lenders under reverse repo with a buy back arrangement).

It is observed that RBI has been regularly infusing liquidity into the system through OMOs. The position of Government Securities held by RBI is a reflection of the OMOs of RBI. During 2020-21 (up to July 31), ₹1,24,154 crore was injected through open market operation (OMO) purchases.

Chart 5 gives data on Government Securities held by RBI at quarter ends::

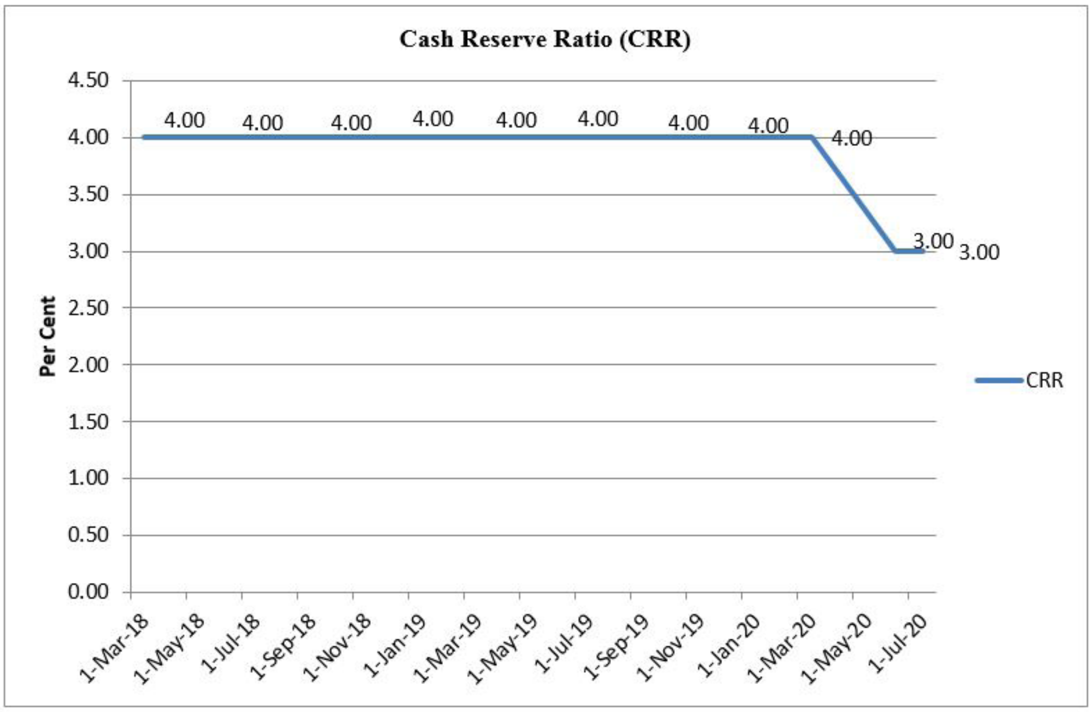
Chart 5: Government Securities held by RBI (INR Billion)



Cash Reserve Ratio (CRR)

Under Section 42(1) of the RBI Act, 1934, a specified proportion of deposits & liabilities of Commercial Banks are to be kept with RBI in current accounts, which is at present 3per cent.These balances are interest free and therefore, have no cost for the RBI. These balances are to be maintained on an average basis, with a minimum prescription of 80per cent till September 2020. An increase or decrease in CRR drains or infuses liquidity. On 27th March 2020, the RBI announced reduction of CRR from 4per cent to 3per cent which released about Rs.1.37 lakh crore of liquidity to the system. The RBI uses CRR to infuse/drain liquidity on a durable basis.

Chart 6: Cash Reserve Ratio (CRR) (in Percent)



Tools of Liquidity Management by RBI

Liquidity Adjustment Facility (LAF)

The best measure of the liquidity demand of the banking system is central bank liquidity because any surplus/deficit in the banking system liquidity is ultimately reflected in borrowing from or lending to the RBI.

Liquidity Adjustment Facility (LAF) is the primary instrument of the RBI for modulating liquidity and transmitting interest rate signals to the market. It absorbs the excess liquidity through reverse repo & infuses liquidity through repo at regulatory interest rates. These regulatory rates are announced periodically as part of the monetary policy statement which are called the repo or reverse repo rates. 'Corridor' refers to the difference between the two key rates, viz., repo rate and reverse repo rate. In a liquidity surplus scenario, the operative rate will be reverse repo rate and in a deficit situation, the repo rate will be operative. Weighted average call rates (market rates) move closely to these operative rates.

It is seen that the variations in these regulatory rates are immediately transmitted to money market instruments and later to other Debt Market instruments & Bank Lending Rates. Since February 2020, Money markets have remained flush with surplus liquidity due to the Reserve Bank's support. The net LAF position, which was around Rs.3.0 lakh crore on an average during Jan – March 20 quarter, increased to an average of Rs.4.7 lakh crore during April – June 2020. In July 2020 it has moderated to Rs.4 lakhs as Government spending subdued. On some days, RBI absorbed excess liquidity up to Rs.7 lakhs crore. Due to abundant surplus liquidity, the weighted average overnight money market rate (WAMM) has been languishing at the bottom of the policy corridor, i.e., reverse repo rate rather than the repo rate.

Term Repo & Targeted Long-Term Repo (TLTRO)

Systemic liquidity remains in large surplus, due to the conventional and unconventional measures by the Reserve Bank since February 2020 attempted to push money via banks at the current repo rate to the "sectors and entities experiencing liquidity constraints and/or hindrances to market access". Cumulatively, these measures infused liquidity of the order of ₹9.57 lakh crore. The unconventional tools included Targeted Long Term Repo Operations whereby RBI provided liquidity to banks for specific operations like investment in primary & secondary corporate bonds, debt of NBFCs including micro finance institutions. The liquidity infusion gave a lifeline to the corporate bond market which was reeling under pressure in the later half of March 2020.

The spreads of 3-year AAA rated corporate bonds over G-Secs of similar maturity declined from 276 bps on March 26, 2020 to 50 bps by end-July 2020. Even for the lowest investment grade bonds (BBB-), spreads have come down by 125 bps by end-July 2020. Lower borrowing costs have led to record primary issuance of corporate bonds of ₹2.1 lakh crore in the first quarter of 2020-21.

RBI has been regularly conducting term reverse repo / repo operations to modulate the excess / deficit frictional liquidity depending upon its assessment of future liquidity expectations.

Market Stabilisation Scheme

Market Stabilization scheme (MSS) is a monetary policy intervention by the RBI to withdraw excess liquidity (or money supply) by selling government securities – namely Market Stabilization Bonds (MSB) in the economy. The MSS was introduced in April 2004. Since the only objective of the scheme is to sterilize the excess liquidity in the system, the proceeds are kept in a separate account and will not be available to the Government for utilization. The cost of issuing these bonds is met from Union Budget. As of now, there is no outstanding under MSS.

Monetary Transmission

The easy liquidity stance of the RBI benefitted the private sector entities. RBI measures, which were adopted with deep rate cuts, have also ensured faster transmission of the policy rates into the actual lending by banks, in turn helping the economy. At present, the overall excess liquidity is at over Rs 5 lakh crore.

Transmission of the rate cuts by the MPC would not have been possible to the extent achieved so far without creating comfortable liquidity conditions

The RBI since February 2019 has slashed benchmark lending rate by 250 basis points (bps). Of this, 115 bps cut has taken place this year. “Monetary transmission has also improved considerably. The weighted average lending rate (WALR) on fresh rupee loans sanctioned by banks declined by 162 bps during February 2019-June 2020, of which 91 bps transmission was witnessed during March-June 2020”, RBI Governor said.

While non-food bank credit slowed to 5.6 per cent (as on July 17), credit to NBFCs grew at 25.7 per cent in June, loans to services at 10.7 per cent, and to housing at 12.5 per cent. With regards liquidity infusion to the tune of 3.9 per cent of the GDP, the Governor said that “the overriding objective was to prevent financial markets from freezing up; ensure normal functioning of financial intermediaries; ease the stress faced by households and businesses; and keep the life-blood of finance flowing”. In the process, the easing of financial conditions actually enhanced monetary transmission and, thereby, the effectiveness of the MPC’s accommodative stance and actions. The excess liquidity framework helps lower the cost of borrowing for the government as the yields on bonds go down. Among others, former Deputy Governor Viral Acharya had, therefore, recently suggested keeping the system in small liquidity deficit.

“What is more, the injections of liquidity, including through open market operations, special operations and forex interventions, are being fully sterilised by absorptions through the reverse repo, while preventing a seizure of money markets under extreme risk aversion and uncertainty”, Governor said. Comfortable liquidity condition reduced the cost of raising capital. Abundant liquidity supported other segments of financial markets too.

Lower borrowing costs led to record primary issuance of corporate bonds of Rs 2.09 lakh crore in the first quarter of (April-June) 2020-21.In particular, market financing conditions for NBFCs, which had become challenging, largely stabilised in the wake of targeted policy measures. For AA+ rated 3-year NBFC bonds, spreads over similar tenor G-secs narrowed from 360 bps on March 26 to 139 bps on July 31, 2020. The Governor stressed, “Assets under management of debt MFs, which fell to Rs 12.20 lakh crore as on April 29, 2020, recovered and improved to Rs 13.89 lakh crore as on July 31, 2020”.

Conclusion

Repeated Repo reductions with the clear downward bias of the interest rate spelt out by the RBI have failed to nudge the banks sufficiently forward to lend aggressively to the productive sectors of the economy. The issue of bankers becoming risk-averse is quite complex and multilayered because of mounting NPAs, weak demand, pending wages, and economic uncertainty and defies a naïve and simplistic solution. The RBI’s Financial Stability Report (FSR) for July 2020 brought into focus that post-pandemic issues, including the prolonged national lockdown are likely to significantly increase bad loans for the banking sector. In a “very severe stressed scenario”, the gross non-performing assets (GNPAs) of the banking sector could rise to even 14.7per cent of total loans by March 2021 .

The RBI’s stress test covering 53 scheduled commercial banks revealed that under the baseline scenario, the gross NPA ratio could rise to 12.5per cent. This projected surge in NPAs needs to be viewed against the NPAs as of March 2020, when the ratio stood at 8.5per cent of total advances . The results of the RBI stress tests show that public sector banks (PSBs) could see their gross NPAs rise to 15.2per cent by March 2021 from 11.3per cent a year earlier in the baseline scenario. In the “very severe stress” scenario, this could even reach 16.3per cent . Private banks and foreign banks would also see a spike in their bad loans because of the worsening macroeconomic factors.

A detailed discussion would also involve aspects like Asset Quality Review (AQR), absence of deterrent action against wilful defaulters, policy paralysis because of the humongous 2 G, 3G and 4G issues, the fear of the 4 Cs-CVC, CBI, CIC and the Courts and the use of several dreaded words in the commercial banking segment. Some such words are accountability, due diligence, fixing of responsibility, systems and procedures, vigilance angle, reopening NPA cases even after a gap of 10–15 years. Hence, we cannot have a simplistic solution to a complex multidimensional issue.

The system liquidity in India presently has a huge surplus which is being absorbed through LAF window of RBI. The easy liquidity conditions, as a result of extra ordinary measures taken under extra ordinary circumstances has paved way of easy transmission of policy rates to the short term money market instruments. Commercial Paper & Certificate of Deposit rates have fallen below repo rate. The cut off of recent T Bills auction have been below the prevailing repo rate and in the case of 91 days T Bills it is lower than the reverse repo rate anchoring expectations of further rate cuts and continuing easy liquidity conditions. The transmission to bank lending rates has improved further, with the weighted average lending rate (WALR) on fresh rupee loans declining by 91 bps during March-June 2020.

On May 08, 2020 the Government of India revised its budgeted estimate and announced that it would borrow Rs.12 lakh crore instead of Rs. 7.80 lakh crore in 2020-21. The borrowing limits for the States for the year were also raised to 5 per cent of GSDP from 3 per cent. Despite the increase in government borrowings 3-year yields have dropped by 188 bps, the 7-year yield by 92 bps, the 10-year yield 86 bps and the 15-year yield has dropped by around 68 bps.

In the corporate bonds market, the fall in the spread of AAA-rated NBFCs has been the maximum at 170 bps, followed by PSUs, FIs and banks (147 bps) and corporates (146 bps). For AA-rated entities, the fall in spreads was 156 bps for NBFCs, 143 bps for PSUs, FIs and banks and 138 bps for corporates. Spreads on the instruments issued by the PSUs, FIs and banks category have reverted to the pre-COVID levels .

The abundance of liquidity was experienced by the Indian economy from 2002 onwards when India started receiving higher allocation from overseas entities. Interest rates fell across spectrums. The abundance led to banks, with least regard to its ALM mismatches started funding long gestation infrastructure projects & low rated entities. The culmination has been the baggage of non-performing assets accumulated over a period that is having a heavy burden on the public sector banks. Despite having adequate liquidity, they are not willing to take credit risks. They are also finding it difficult to raise the required growth capital. Their risk aversion is aided by lower credit demand as many industries are yet to come back to heels as their supply chain / labour are severely hit by the pandemic.

In this process, the banking system is losing on an average Rs.22,600 crore per annum (calculated at an average lending rate of 9.00per cent vs reverse repo rate of 3.35per cent on Rs.4 lakh crore). But the RBI has also to incur a cost of Rs.13,400 crore to manage this excess liquidity.

To sum up, the Government of India is the ultimate loser as the owner of both RBI and Public Sector banks. It is high time that the Government of India utilized the current liquidity situation as an opportunity to revive the sagging fortunes of the real sectors and resuscitate the economy. An incentive linked bank credit to fast track the incomplete infrastructure projects, relaxation of conditions regarding utilization of enhanced borrowing limit of the state governments, review of the GST regime to examine a reduction in tax slabs of core sectors, increase in farm credit in the lines of Emergency Credit Line Guarantee Scheme (ECLGS) for stressed Micro, Small and Medium Enterprises (MSMEs) are some of the measures the Government of India could examine at this point in time.

Comparative Study of Major Banks under various Business Parameters for the financial year 2019-2020

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This paper aims to analysis the relationship between the major 8 bank (public and private) of our country which plays a major role in the development of our economy. It shows that how these banks are totally different from each other in some aspects whether it is in the total assets, no. of employees, total deposits, Credit deposit ratio, and market capitalization and in other aspects as well. The data has been taken from the published audited balance sheets of these major banks and through the reports of the last consecutive three years i.e. 2018, 2019 and 2020. In this paper secondary research has been done. Even major consideration has also put on the BASEL-3 norms as stipulated by RBI. According to which the capital adequacy ratio of any banks should not be less than 9.00% plus additional CAR for capital conservation buffer as per BASEL – 3 norms. It is also seen that due to the amalgamation and merger of two major public sector banks that are Dena bank and Vijya bank in Bank of Baroda, major positive changes has been seen like improvement in the total business of the bank, term deposits and many more but the 5 year CAGR under deposits was only 8.90%, whereas for SBI it was 15.50%. State bank of India is the biggest bank in India with the highest no. of branches, no. of staffs and total business as compare to all the other banks in India. Even now SBI has also called the leader of all the banks due to its highest performance in various parameters. In 2019-2020, HDFC bank has also shown the significant growth under net revenue, net profit, and deposits. Bank of India has faced a major loss of 2957 crore due to the large amount of NPA. Various challenges are there which were faced by the banks and to overcome those challenges government of India and Reserve bank of India have taken various initiatives such as merger and amalgamation of small banks into the bigger banks, reduction of CRR, SLR, repo rate and reserve repo rate which directly and indirectly affects the banks. Recently RBI has also done major regulatory measures which will help the banks to improve their business in 2020-2021 such as Expert committee for debt resolution plans, reduction capital charges for the market risk, green energy sector will help in the higher lending and many more.

Keywords- Public and Private sector Banks, BASEL-3 norms, CAGR, Capital adequacy ratio and Amalgamation

Introduction

The financial system is the backbone of the country. A sound financial environment is compulsory for the growth and success of the economy. In India the financial system is regulated by the self- governing regulators in the various sectors such as banking, insurance and various other service sectors. Department of Financial Services (DFS), Government of India and RBI look after the Banking sector in our country. A financial system is a system that allows the collecting of surplus by way of deposits & other investment from public, borrowing and lending of the funds to all the individuals, organizations, governments and companies as per their requirements. It is not only operating at the national level whereas it is also operated at the global level. It consists of the financial market (money market or capital market), financial instruments (Direct, indirect and derivative instruments) and financial intermediaries. Banking is one of the very important Financial Intermediaries and if the Banking system of a country is not strong then there can't be the increase in consumption, investment, production of various goods & services and Government expenditure which lead to economic growth.,

India banking system provides a large amount of products and services to its customers which are as per their requirements. There are various functions which are performed by the banking system such as pooling of funds by way of deposits, facilitate payments, short and long- term needs of public by way of lending and other services, which leads to economic development. The banking system helps in forming a link between the depositor and one who require funds for investment and productive purposes. The main aim of any country financial system is the governing the mechanism of production, distribution and exchange of the financial assets. Mainly there are four components of Indian financial system that are financial institutions, financial assets, financial services and financial markets.

In view of utmost importance of banking system, we have made the comparative study of 8 major banks of the country which are under private sector and public sector. There are various challenges which faced by the banking sector and main challenges are higher NPA's of various public sector as well as private sector banks, higher amount of capital requirements to meet BASEL – 3 norms, productivity and profitability, retention of valued customers due to tough competition, lac of skilled & experienced human resources and meeting various regulator & government guidelines in various areas of banking. COVID-19 pandemic could be one of the most serious challenges faced by the banking industry as there would be the fall in demand, production shutdown and lower income which will adversely affect all the banks under various business parameters particularly their assets quality. There are some of the following initiatives taken by the government and RBI and it has directly and indirectly affected all the banks of our country

- RBI has permitted loan moratorium period due to COVID-19.
- Reduction in the CRR, SLR, Repo rate and Reserve repo rates, due to which there is a reduction in the lending rates and credits become comparatively cheaper.
- Infused more liquidity in banking system, which enable the banks to have more funds to lend by reducing CRR 7 SLR
- Prompt corrective actions against those banks that were having higher NPA.
- Major thrust of MSME and agricultural lending, especially to micro enterprises, small & marginal farmers.
- Restriction on the PMC bank, YES banks and some of the cooperative banks due to higher NPA level and mismanagement.
- More thrust on capital infusion. Government of India infused substantial amount of capital in public sector banks.
- Insolvency and Bankruptcy Code 2016 postponed for one year due to COVID-19.
- Merger and amalgamation of week/ small banks in bigger banks for example Vijaya bank & Dena bank merged with Bank of Baroda, Oriental bank of Commerce and United bank of India merged into Punjab national bank, Syndicate bank merged with Canara bank, Andhra bank and corporation bank with Union bank of India
- Now RBI will regulate all the cooperative banks

There are mainly big eight banks whose total business is more than Rs. 10 Lakhs Crores as on March 2020 and we have done comparative study of these banks under various business parameters. These eight banks are State Bank of India, Bank of Baroda, Punjab National bank, Canara bank and Bank of India under Public sector and HDFC bank. ICICI bank and Axis bank under Private sector. The total balance sheet of these entire banks is Rs 1,530,511 crore. These banks play a very crucial role in the development of our economy and fulfilling all the financial needs of all the individuals, government and business and general public at large.

Objective

1. To study the profitability and productivity of the major private and public sector banks.
2. To see the efficiency of major eight banks of India under various business parameters

Research Methodology

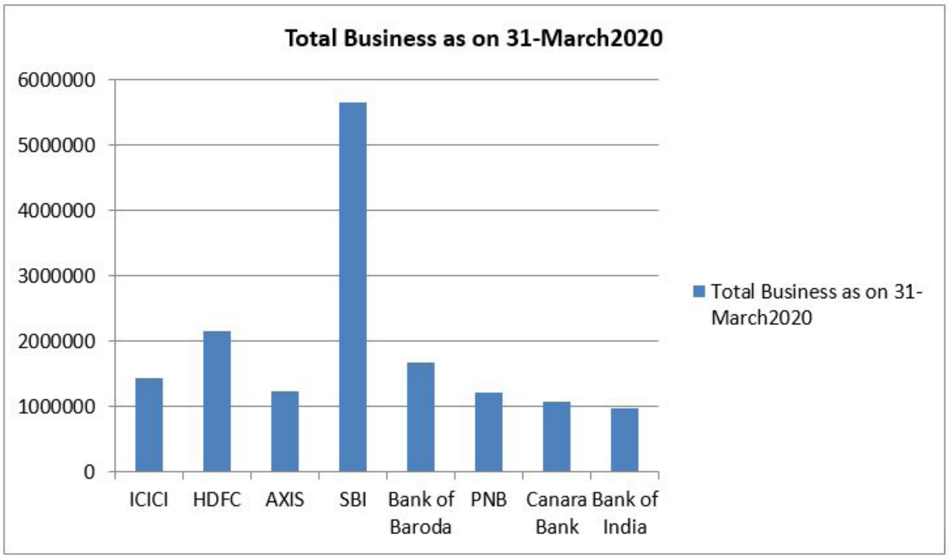
Comparative study of big eight banks of India under various business parameters undertaken on the basis of their published Audited Balance Sheets as on 31-03-2020 and taken 3 years data for these banks

Total Business (Amount in Lakh crores)

Private Banks						
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	14,47,159	2	12,71,793	2	10,98,786	2
HDFC Bank	21,50,313	1	17,50,551	1	14,53,110	1
AXIS Bank	12,32,403	3	10,61,782	3	9,10,930	3
Total	48,29,875		40,84,126		34,62,826	
Public Banks						
SBI	56,64,132	1	52,04,118	1	47,53,795	1
Bank of Baroda	16,83,909	2	11,25,704	3	10,26,543	3
PNB	12,21,934	3	11,82,714	2	11,13,897	2
Canara Bank	10,76,316	4	10,43,029	4	9,25,401	4
Bank of India	9,71,627	5	9,03,410	5	8,96,355	5
Total	1,06,17,918		94,58,975		87,15,991	

Total Business

Among all the banks, SBI is having highest business and it is ranked number one in Indian Banking Industry. Among Private sector banks, HDFC is ranked number one bank with total business of 21.50 Lakh Crores. Bank of Baroda improved the total business due to merger and amalgamation of Dena bank and Vijya bank and ranked third position among all the banks. During this financial year i.e. 2020 -2021, PNB and Canara Bank will also increase their total business due to merger of another public sector banks as on 01-04-2020. Bank of Baroda improved its ranking under total business due to merger and amalgamation of Dena and Vijaya Banks. Bank of India total business is lowest among all of these banks.

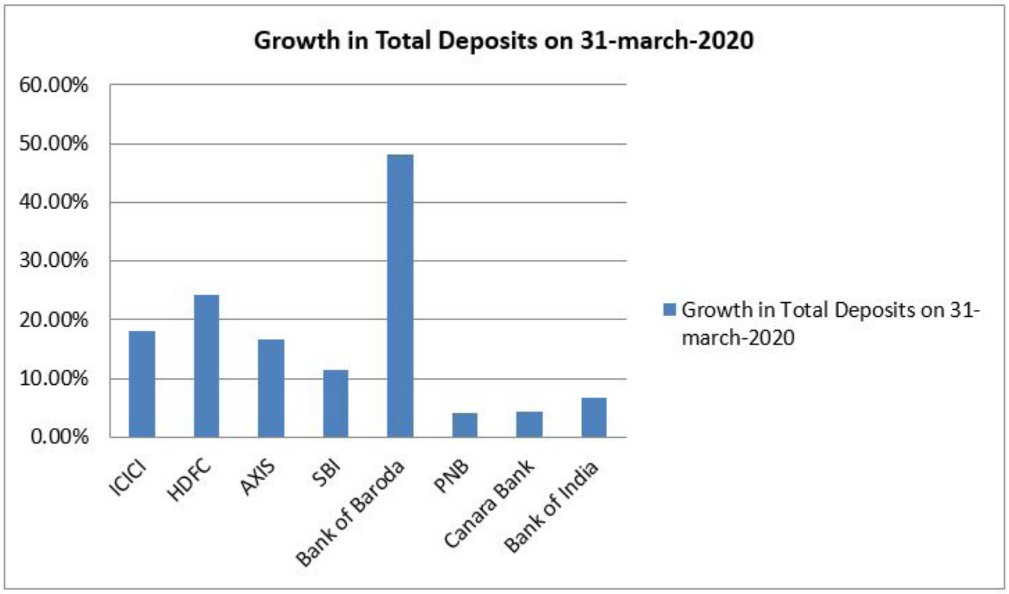


Total Deposits

Private Banks					Rs. Cr.	
Ranking Highest to Lowest	As on 31-March-20	Rank	As on 31-March-19	Rank	As on 31-March-18	Rank
ICICI	7,70,969	2	6,52,920	2	5,60,975	2
HDFC Bank	11,47,502	1	9,23,141	1	7,88,771	1
AXIS Bank	6,40,105	3	5,48,471	3	4,53,623	3
Total	2,558,576		2,124,532		1,803,369	
Public Banks						
SBI	32,41,621	1	29,11,386	1	27,06,343	1
Bank of Baroda	9,45,984	2	6,38,690	3	5,91,315	3
PNB	7,03,846	3	6,76,030	2	6,42,226	2
Canara Bank	6,25,351	4	5,99,033	4	5,24,772	4
Bank of India	5,55,505	5	5,20,862	5	5,20,854	5
Total	6,072,307		5,346,001		29,342,601	

Growth in Total Deposits

Private Banks					%	
Ranking Highest to Lowest	For FY ending 31-March-20	Rank	For FY ending 31-March-19	Rank	For FY ending 31-March-18	Rank
ICICI	18.01%	2	16.39%	3	14.48%	2
HDFC Bank	24.30%	1	17.04%	2	22.55%	1
AXIS Bank	16.71%	3	20.91%	1	9.47%	3
Public Banks						
SBI	11.34%	2	7.58%	3	32.36%	1
Bank of Baroda	48.11%	1	8.01%	2	-1.72%	4
PNB	4.11%	5	5.26%	4	3.30%	3
Canara Bank	4.39%	4	14.15%	1	5.96%	2
Bank of India	6.65%	3	0.00%	5	-3.55%	5



5 Years Cagr In Deposits

	Private Banks				%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	16.35%	2	14.49%	2	13.90%	2
HDFC Bank	20.55%	1	20.24%	1	21.64%	1
AXIS Bank	14.70%	3	14.32%	3	12.42%	3
Public Banks						
SBI	15.50%	1	15.86%	1	17.61%	1
Bank of Baroda	8.90%	2	2.34%	4	4.53%	5
PNB	7.02%	3	8.41%	2	10.40%	2
Canara Bank	5.71%	4	7.32%	3	8.08%	3
Bank of India	0.87%	5	1.78%	5	6.41%	4

Total Deposits – During the year Bank of Baroda recorded highest growth of 48% under total deposits due to merger and amalgamation of 2 public sector banks i.e. Dena and Vijya banks. HDFC bank recorded highest compounded annual growth rate of more than 20%, whereas among public sector banks, SBI recorded highest CAGR of 15.50%. Bank of India CAGR was limited to only less than 1% due to slipping the bank under Prompt Corrective Action by RBI, which has lost the depositor confidence in Bank of India. However for Bank of Baroda various financials are not comparable as eDena Bank and eVijaya Bank merged into BOB w.e.f. 1st April 2019.

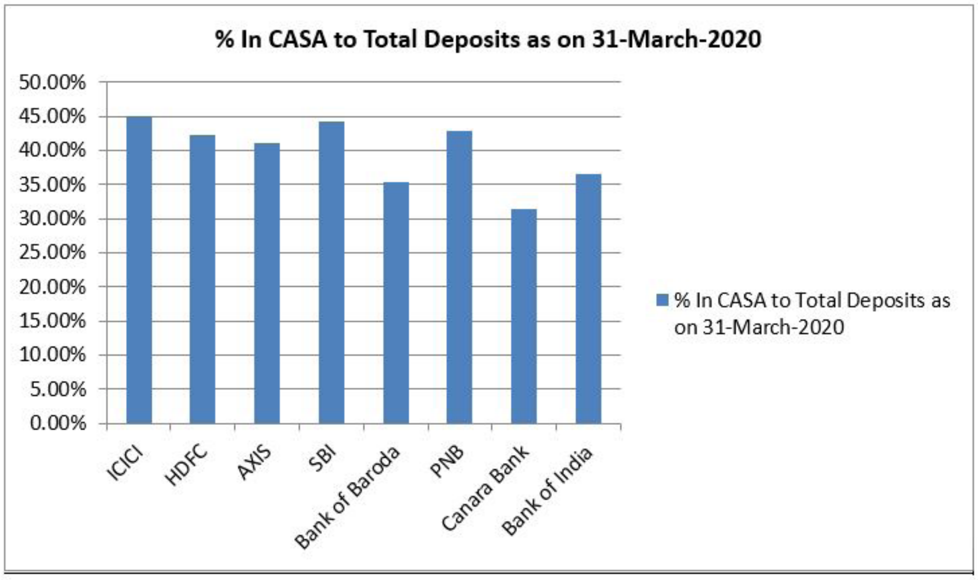
Total CASA

	Private Banks					
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	3,47,819	2	3,23,940	2	2,89,925	2
HDFC Bank	4,84,625	1	3,91,198	1	3,43,093	1
AXIS Bank	2,63,706	3	2,43,394	3	2,43,852	3
Total	**10,96,150**		**9,58,532**		**8,76,870**	
Public Banks						
SBI	14,33,708	1	12,97,627	1	10,32,788	1
Bank of Baroda	3,33,824	2	2,23,795	3	2,11,779	3
PNB	3,02,474	3	2,85,040	2	2,63,247	2
Canara Bank	1,96,207	5	1,74,809	5	1,67,035	5
Bank of India	2,02,829	4	1,86,999	4	1,77,662	4
Total	**24,49,042**		**21,68,270**		**16,92,615**	

% In Casa to Total Deposits

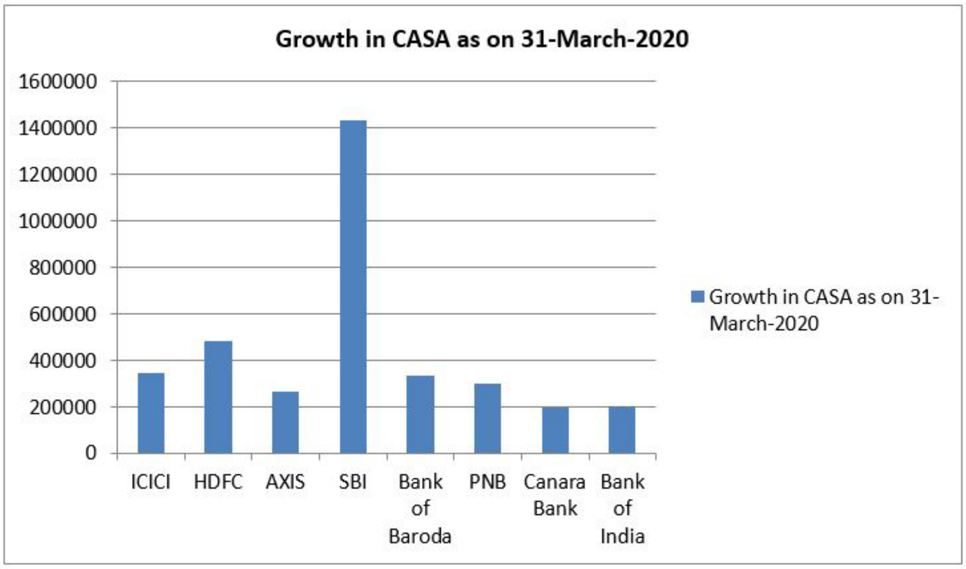
	Private Banks			%		
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	45.11%	1	49.61%	1	51.68%	2
HDFC	42.23%	2	42.38%	3	43.50%	3
AXIS	41.20%	3	44.38%	2	53.76%	1
Public Banks						
SBI	44.23%	1	44.57%	1	44.49%	1

Bank of Baroda	35.29%	4	35.04%	4	35.81%	3
PNB	42.97%	2	42.16%	2	40.99%	2
Canara Bank	31.38%	5	29.18%	5	31.83%	5
Bank of India	36.51%	3	35.90%	3	34.11%	4



Growth in CASA

			Private Banks			Rs. Cr.
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	3,47,818	2	3,23,940	2	2,89,928	2
HDFC Bank	4,84,625	1	3,91,198	1	3,43,093	1
AXIS Bank	2,63,706	3	2,43,394	3	2,43,852	3
Total	10,96,149		9,58,532		8,76,873	
			Public Banks			
SBI	14,33,708	1	12,97,627	1	12,03,948	1
Bank of Baroda	3,33,824	2	2,23,794	3	2,11,779	3
PNB	3,02,475	3	2,85,040	2	2,63,247	2
Canara Bank	1,96,207	5	1,74,809	5	1,67,035	5
Bank of India	2,02,829	4	1,86,999	4	1,77,662	4
Total	**24,69,043**		**21,68,269**		**41,91,940**	



Current Accounts to Total Deposts

			Private Banks		%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	13.26%	3	14.74%	3	5.67%	2
HDFC Bank	15.18%	1	15.44%	2	5.67%	2
AXIS Bank	14.08%	2	16.28%	1	21.09%	1
			Public Banks			
SBI	7.01%	1	7.07%	2	5.67%	2
Bank of Baroda	6.83%	2	7.34%	1	7.79%	1
PNB	6.49%	3	6.56%	3	5.67%	2
Canara Bank	4.23%	5	3.89%	5	5.67%	2
Bank of India	5.42%	4	5.28%	4	5.67%	2

Saving Deposits to Total Deposits

		Private Banks		%		
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	31.85%	1	34.87%	1	28.44%	2
HDFC Bank	27.05%	2	26.94%	3	28.44%	2
AXIS Bank	27.12%	3	28.10%	2	32.67%	1
			Public Banks			
SBI	37.22%	1	37.50%	1	28.44%	1
Bank of Baroda	28.4%	4	27.70%	4	28.03%	2
PNB	36.48%	2	35.60%	2	28.44%	1
Canara Bank	27.14%	5	25.30%	5	28.44%	1
Bank of India	31.09%	3	30.62%	3	28.44%	1

Casa Deposit (Low Cost Deposit)

CASA deposits are very important for any bank for its profitability. SBI is having highest amount of Casa Deposits as well as highest % of CASA of about 45%, whereas under private sector bank HDFC bank is having highest amount of 4.85 Lakh crore under CASA but on % term ICICI bank is having higher % of CASA to the level of 45%. Canara Bank is having lowest % of CASA to the level of 31% only and this is also one of the reason for loss reported by Canara Bank. PNB is also having good CASA share of 43%.and their profitability is better than other public sector bank in spite of significant fraud case of Neerav Modi case. Higher proportion of CASA leads to higher profitability as interest paid cost will be less with higher CASA ratio.

Term Deposits

			Private Banks		Rs. Cr.	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	4,23,151	2	3,28,979	2	2,71,050	2
HDFC Bank	6,62,877	1	5,31,943	1	4,45,678	1
AXIS Bank	3,76,399	3	3,05,077	3	2,09,771	3
Total	**14,62,427**		**11,65,999**		**9,26,499**	
			Public Banks			
SBI	18,07,913	1	16,13,759	1	15,02,395	1
Bank of Baroda	6,12,161	2	4,14,895	3	3,79,536	2
PNB	4,01,372	4	3,90,990	4	3,78,979	3
Canara Bank	4,29,145	3	4,24,224	2	3,57,737	4
Bank of India	3,52,676	5	3,33,863	5	3,43,192	5
Total	**36,03,267**		**31,77,731**		**29,61,839**	

Growth in Term Deposits

			Private Banks		%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	28.36%	1	21.37%	2	-6.69%	2
HDFC Bank	24.61%	2	19.36%	3	-6.69%	2
AXIS Bank	23.38%	3	45.43%	1	4.19%	1
			Public Banks			
SBI	12.03%	2	7.41%	3	-6.69%	1
Bank of Baroda	47.55%	1	9.32%	2	-7.02%	2
PNB	2.66%	4	3.17%	4	-6.69%	1
Canara Bank	1.16%	5	18.59%	1	-6.69%	1
Bank of India	5.64%	3	-2.72%	5	-6.69%	1

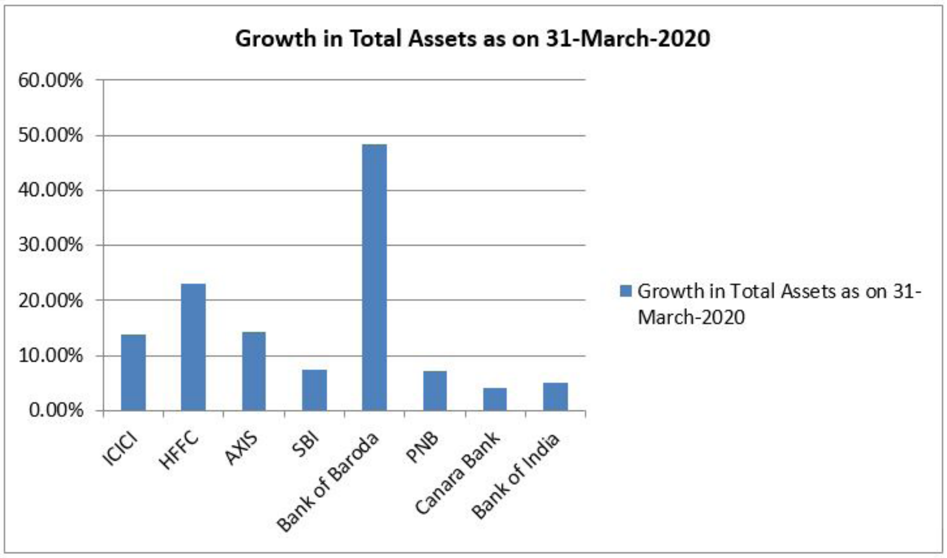
Term Deposits – Bank of Baroda has shown highest growth rate of 47.55% under term deposits due to merger of Dena and Vijaya bank. Under private sector bank, ICICI bank recorded higher growth of 28% under term deposit, whereas during 2018 -2019 Axis Bank recorded higher growth of 45% among all the major banks. PNB and Canara Bank have shown very less growth as their rate of interest on term deposits were less as compare to private sector banks. However in absolute term SBI and HDFC are leader under term deposits. Now all the banks are trying to improve their Retail Term Deposits (term deposits less than 200 lakhs) to increase their liquidity coverage ratio as per BASEL – 3 norms.

Total Assets

Private Banks			Rs. Cr			
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	10,98,365	2	9,64,459	2	8,79,189	2
HDFC Bank	15,30,511	1	12,44,541	1	10,63,934	1
AXIS Bank	9,15,165	3	8,00,997	3	6,91,330	3
Total	35,44,041		30,09,997		26,34,453	
Public Banks						
SBI	39,51,394	1	36,80,914	1	34,54,752	1
Bank of Baroda	11,57,916	2	7,80,987	2	7,20,000	3
PNB	8,30,666	3	7,74,949	3	7,65,830	2
Canara Bank	7,23,875	4	6,94,767	4	6,16,886	4
Bank of India	6,56,995	5	6,25,223	5	6,09,575	5
Total	73,20,846		65,56,840		61,67,043	

Growth In Total Assets

Private Banks					%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	13.88%	3	9.70%	3	13.92%	3
HDFC Bank	22.98%	1	16.98%	1	23.16%	1
AXIS Bank	14.25%	2	15.86%	2	14.94%	2
Public Banks						
SBI	7.35%	2	6.55%	3	27.67%	1
Bank of Baroda	48.26%	1	8.47%	2	3.62%	4
PNB	7.19%	3	1.19%	5	6.32%	2
Canara Bank	4.19%	5	12.62%	1	5.72%	3
Bank of India	5.08%	4	2.57%	4	-2.67%	5



5 Year Cagr in Total Assets

			Private Banks		%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	11.20%	3	10.16%	3	10.37%	3
HDFC Bank	20.98%	1	20.41%	1	21.59%	1
AXIS Bank	14.65%	2	15.89%	2	15.21%	2
Public Banks						
SBI	14.05%	1	15.47%	1	17.14%	1
Bank of Baroda	10.12%	2	3.44%	4	5.64%	5
PNB	6.60%	3	7.08%	3	9.85%	2
Canara Bank	5.72%	4	7.15%	2	8.39%	3
Bank of India	1.21%	5	1.75%	5	6.14%	4

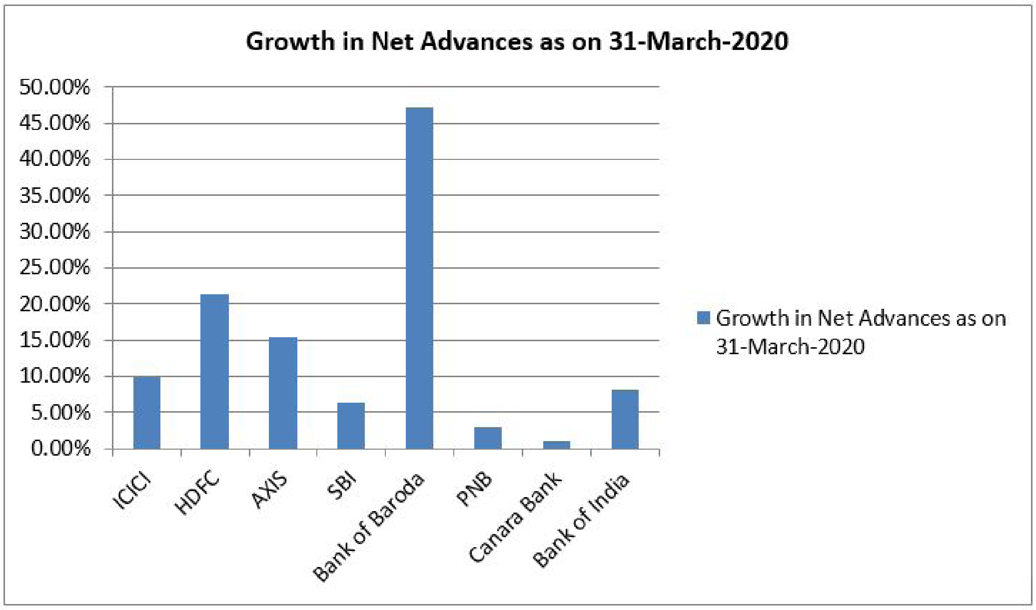
Total Assets – SBI is having highest amount of total assets followed by HDFC. Bank of Baroda recorded highest growth of 48% under total assets due to merger of Dena and Vijaya banks; otherwise HDFC bank has shown highest growth of 23% due to aggressive marketing and better deployment of deposits. Compounded annual growth rate is also highest for HDFC bank (23%) among all of these banks, which shows it higher efficiency in their working. Bank of India recorded least CAGR due to prompt corrective action taken by RBI due to higher gross NPA and net NPA level. Among public sector banks, SBI recorded higher CAGR of 14% and it has further helped the bank to improve its balance sheet size.

Net Loans and Advances

			Private Banks		Rs. Cr	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	6,45,290	2	5,86,647	2	5,12,395	2
HDFC Bank	9,93,703	1	8,19,401	1	6,58,333	1
AXIS Bank	5,71,424	3	4,94,798	3	4,39,650	3
Total	22,10,417		19,00,846		16,10,378	
Public Banks						
SBI	23,25,290	1	21,85,877	1	19,34,880	1
Bank of Baroda	6,90,121	2	4,68,819	2	4,27,432	2
PNB	4,71,828	3	4,58,249	3	4,33,735	3
Canara Bank	4,32,175	4	4,27,727	4	3,81,703	4
Bank of India	3,68,883	5	3,41,006	5	3,41,380	5
Total	42,88,297		38,81,678		35,19,130	

Growth in Advance

Private Banks					%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	10.00%	3	14.49%	2	10.37%	3
HDFC Bank	21.27%	1	24.47%	1	18.71%	1
AXIS Bank	15.49%	2	12.54%	3	17.85%	2
Public Banks						
SBI	6.38%	3	12.97%	1	23.16%	1
Bank of Baroda	47.20%	1	9.68%	3	11.53%	3
PNB	2.96%	4	5.65%	4	3.39%	4
Canara Bank	1.04%	5	12.06%	2	11.61%	2
Bank of India	8.18%	2	-0.11%	5	11.61%	2



5 Year CAGR in Advances

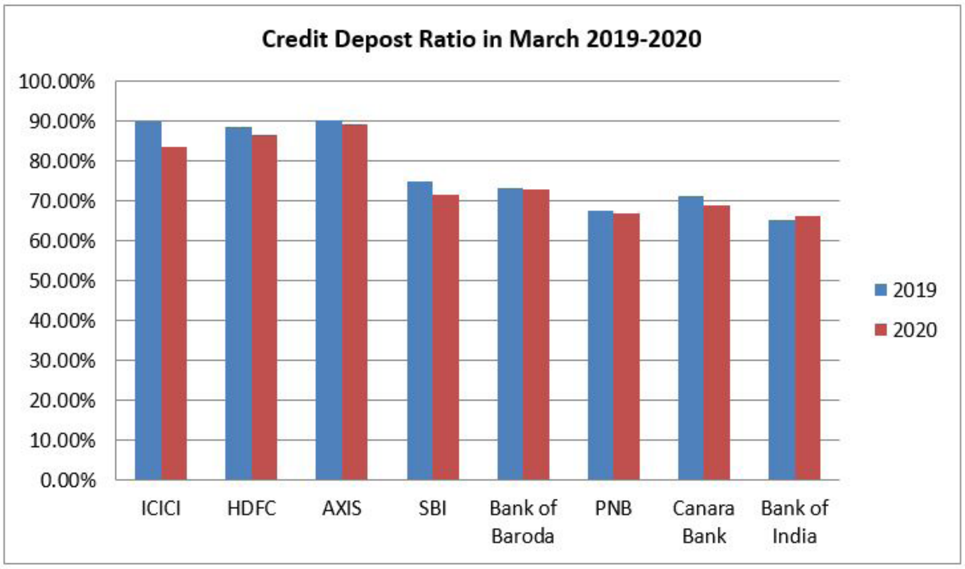
Private Banks					%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	10.74%	3	11.61%	3	12.04%	3
HDFC Bank	22.14%	1	22.01%	1	22.39%	1
AXIS Bank	15.25%	2	16.55%	2	17.42%	2
Public Banks						
SBI	12.33%	1	12.56%	1	13.10%	1
Bank of Baroda	10.02%	2	3.38%	4	5.43%	4
PNB	4.39%	4	5.58%	3	7.04%	3
Canara Bank	5.54%	3	7.28%	2	9.53%	2
Bank of India	-ve	NA	-ve	NA	3.36%	5

Credit Deposit Ratio

Private Banks					%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	83.70%	3	89.85%	2	91.34%	2
HDFC Bank	86.60%	2	88.76%	3	83.46%	3
AXIS Bank	89.27%	1	90.21%	1	96.92%	1
Public Banks						
SBI	71.73%	2	75.08%	1	71.49%	3
Bank of Baroda	72.95%	1	73.40%	2	72.28%	2
PNB	67.04%	4	67.79%	4	67.54%	4
Canara Bank	69.11%	3	71.40%	3	72.74%	1
Bank of India	66.41%	5	65.47%	5	65.54%	5

Net Loan and Advances and Credit Deposit Ratio – SBI is having highest amount of net loan and advances followed by HDFC. During the year Bank of Baroda has shown the highest growth of 47% under advances due to merger of Dena and Vijya bank whereas HDFC Bank has recorded highest growth of 21% under advances. Performance of Canara bank is not satisfactory as their growth rate is lowest (only 1.04%) during 2019-2020. 5 Years CAGR in advances was highest for HDFC bank (22%), whereas for Bank of India, it was negative due to restrictions imposed by RBI on fresh lending under prompt corrective actions. Among Public sector banks, SBI CAGR was highest and it helped the bank to increase their advances portfolio.

Credit Deposit Ratio is one of the important business parameter for any commercial bank and it will speak about the better utilization of funds collected by way of deposits. Axis bank is having highest CD ratio of 89%, whereas among public sector banks, Bank of Baroda was having higher CD ratio of 73%. Bank of India is having lowest CD ratio of 66.41% only among all the major banks as they have restricted their lending due to PCA.



Tier 1 Ratio

Private Banks					%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	14.72%	2	15.09%	2	15.92%	1
HDFC Bank	17.23%	1	15.78%	1	13.25%	2
AXIS Bank	14.49%	3	12.54%	3	13.04%	3
Public Banks						
SBI	11.00%	2	10.65%	3	10.36%	2
Bank of Baroda	10.71%	3	11.55%	1	10.46%	1
PNB	11.90%	1	7.49%	5	7.12%	5
Canara Bank	10.12%	4	9.04%	4	10.30%	3
Bank of India	9.90%	5	11.07%	2	9.73%	4

CET 1 RATIO

Private Banks					%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	13.39%	3	13.63%	2	14.43%	1
HDFC Bank	16.43%	1	14.93%	1	12.25%	2
AXIS Bank	13.34%	2	11.27%	3	11.68%	3
Public Banks						
SBI	9.77%	3	9.62%	3	9.68%	1
Bank of Baroda	9.44%	4	10.38%	2	9.23%	3
PNB	10.69%	1	6.21%	5	5.95%	5
Canara Bank	9.39%	5	8.31%	4	9.51%	2
Bank of India	9.88%	2	11.01%	1	7.87%	4

Risk Weighted Assets

Private Banks					Rs. Cr.	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	7,59,490	2	6,87,375	2	6,34,908	2
HDFC Bank	9,94,716	1	9,31,930	1	8,00,126	1
AXIS Bank	6,10,527	3	5,52,048	3	5,17,631	3
Total	23,64,733		21,71,353		19,52,665	
Public Banks						
SBI	20,98,000	1	19,27,500	1	19,45,152	1
Bank of Baroda	6,08,200	2	4,10,300	2	4,07,900	2
PNB	4,12,628	3	4,04,622	3	4,53,070	3
Canara Bank	3,60,906	4	3,52,456	4	3,51,698	4
Bank of India	2,94,189	5	3,05,953	5	3,17,546	5
Total	37,73,923		34,00,831		34,75,366	

Captal Adequacy Ratios

Private Banks						%
Rating- Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	16.11%	3	16.89%	2	18.42%	1
HDFC	18.9%	1	17.1%	1	14.8%	3
AXIS	17.53%	2	15.84%	3	16.57%	2
Public Banks						
SBI	13.06%	5	13.06%	3	13.06%	2
Bank of Baroda	13.30%	4	13.48%	2	12.13%	4
PNB	14.14%	2	9.73%	5	9.20%	5
Canara Bank	13.65%	3	11.90%	4	12.21%	3
Bank of India	17.9%	1	14.19%	1	14.19%	1

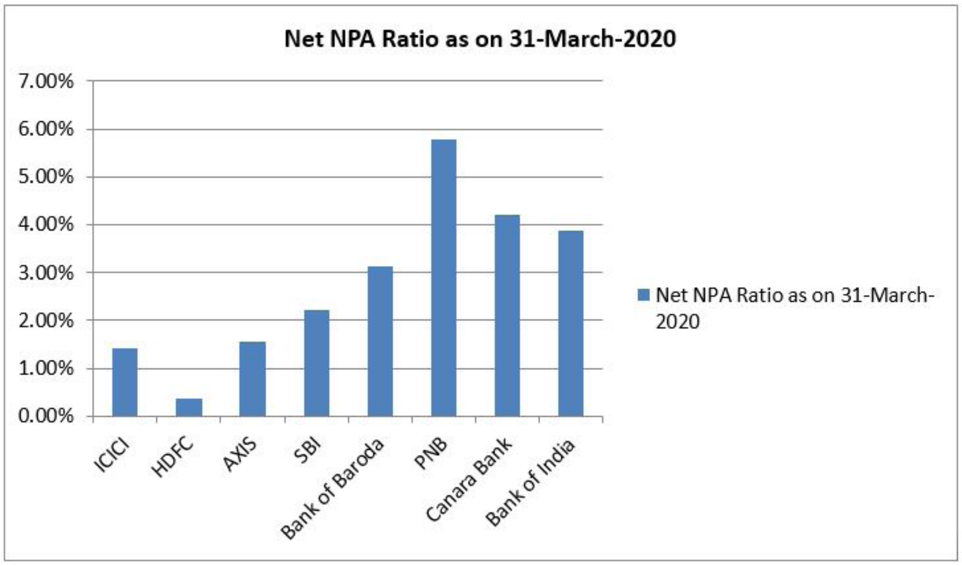
Capital and Capital Adequacy Ratios – As per BASEL- 3 norms all the banks are supposed to have capital adequacy ratio to more than 9.00% with additional CAR for capital conservation buffer and capital plays a very significant role for business development. CAR is the ratio of a bank capital in relation to its risk weighted assets and current liabilities. TIER 1 Capital is very important for all the banks as it is core capital and minimum tier 1 capital should be 7 %. All the major banks were able to maintain tier 1 capital to more than 7% as on 31-03-2020. As per BASEL – 3 norms, Minimum common equity tier 1 capital should be more than 8% including capital conservation buffer and all the banks were having more than that for the financial year 2019-2020. Capital Adequacy Ratio is one of the major business parameter and all the banks should ensure for maintaining sufficient CAR as per the guidelines issued by RBI. Among all the major banks, HDFC bank is having highest CAR of 18.90% in spite of good growth in their business and it give good cushion to bank to further increase their business with same amount of capital. Among public sector banks, Bank of India was having better CAR as they have restricted their lending due to PCA by RBI. Public sector banks were able to maintain CAR to more than 11.5% due to capital infusion by government of India. All the banks were able to maintain good CAR as per BASEL – 3 norms and as prescribed by RBI.

Gross NPA- Amount

Private Banks				Rs. CR.		
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	40,829	1	45,676	1	53,240	1
HDFC Bank	12,650	3	11,224	3	8,607	3
AXIS Bank	30,234	2	29,789	2	34,249	2
Total	83,713		86,689		96,096	
Public Banks						
SBI	1,49,092	1	1,72,750	1	2,23,427	1
Bank of Baroda	69,381	3	48,233	4	56,480	4
PNB	73,479	2	78,473	2	86,620	2
Canara Bank	37,041	5	39,224	5	47,468	5
Bank of India	61,550	4	60,661	3	62,328	3
Total	3,90,543		3,99,341		4,76,323	

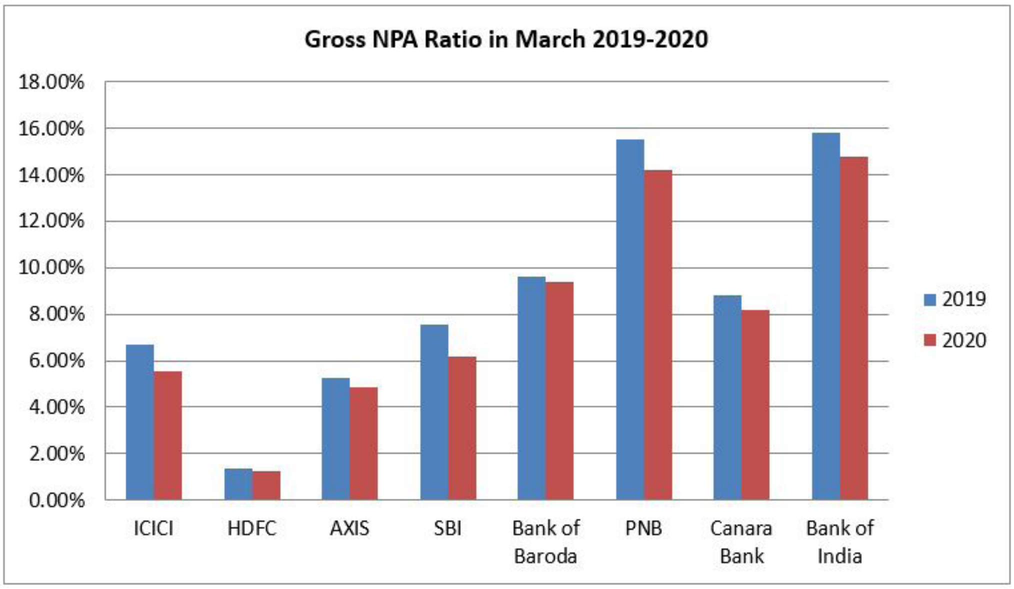
Net NPA Ratio

Private Banks					%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	1.41%	2	2.06%	2	4.77%	1
HDFC Bank	0.36%	3	0.39%	3	0.40%	3
AXIS Bank	1.56%	1	2.06%	1	3.40%	2
Public Banks						
SBI	2.23%	5	3.01%	1	5.73%	1
Bank of Baroda	3.13%	4	3.33%	5	5.49%	5
PNB	5.78%	1	6.56%	2	11.24%	2
Canara Bank	4.22%	2	5.37%	4	7.48%	4
Bank of India	3.88%	3	5.61%	3	8.26%	3



Gross NPA Ratio

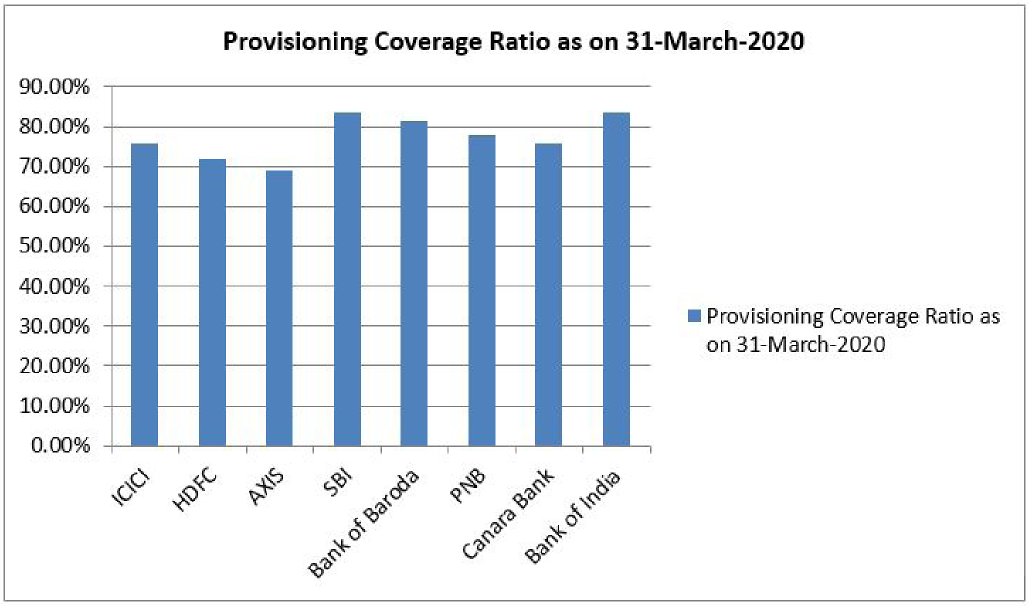
Private Banks					%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	5.53%	1	6.70%	1	8.84%	1
HDFC Bank	1.26%	3	1.36%	3	1.30%	3
AXIS Bank	4.86%	2	5.26%	2	6.77%	2
Public Banks						
SBI	6.15%	5	7.53%	5	10.91%	5
Bank of Baroda	9.40%	3	9.61%	3	12.26%	3
PNB	14.21%	2	15.50%	2	18.38%	1
Canara Bank	8.21%	4	8.83%	4	11.84%	4
Bank of India	14.78%	1	15.84%	1	16.58%	2



Provisioning Coverage Ratio

			Private Banks		**%**	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	75.70%	1	70.60%	2	60.50%	3
HDFC Bank	72.00%	2	71.36%	1	69.78%	1
AXIS Bank	69.00%	3	62.00%	3	65.05%	2
			Public Banks			
SBI	83.62%	5	78.73%	1	66.17%	2
Bank of Baroda	81.33%	2	78.68%	2	67.21%	1
PNB	77.79%	3	74.50%	4	58.42%	5
Canara Bank	75.86%	4	68.13%	5	58.06%	4
Bank of India	83.75%	1	76.95%	3	65.85%	3

Asset Quality in Terms of Gross NPA, Net NPA and Provision Coverage Ratio – Asset quality is very important for any bank and every bank has to put all possible best efforts to contain their NPA level. Profitability of any bank is having direct relation with its NPA level and with increase in NPA profitability will adversely reduce as bank will not be able to recognize the income on NPA accounts. Among all the banks, HDFC bank is having lowest amount of gross as well as net NPA, and due to that HDFC Bank was able to show higher profit as compare to other banks. Among the public sector banks, SBI gross as well as net NPA ratio is lowest whereas for PNB it is comparatively higher due to substantial fraud case of Nirav Modi. Bank of India gross NPA % is higher but net NPA % is comparatively less due to higher provision coverage ratio, which is 83.75% against the RBI norms of 70%. All the major banks were able to maintain their provision coverage ratio to more than 70% except to Axis Bank (69%) due to disclosure of higher NPA during recent years. All the major banks were able to keep their Net NPA level less than to 6% and saved themselves from prompt corrective action of RBI. All the banks have increased their provision coverage ratio during this financial year as compare to 2018 – 2019.

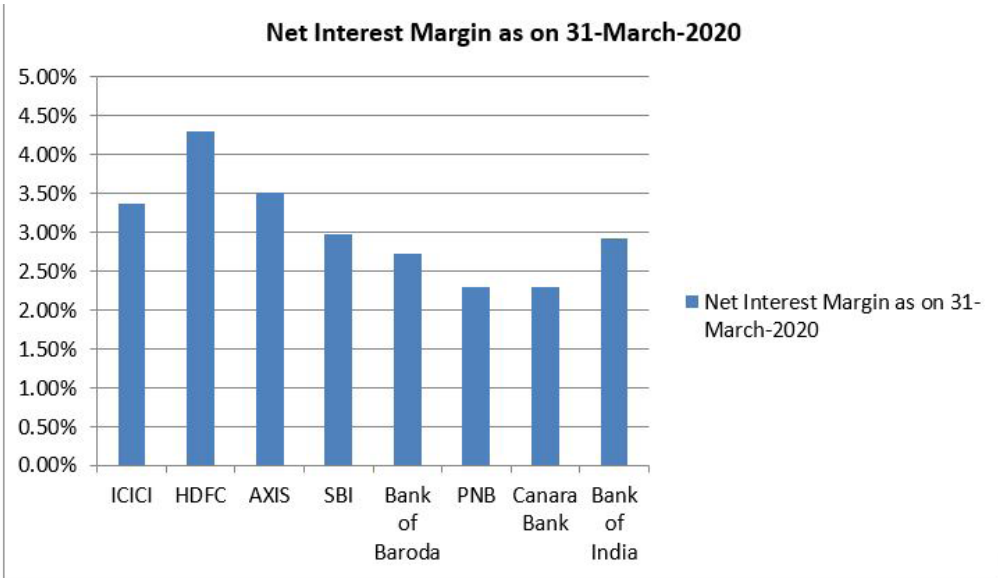


Net Interest Income

			Private Banks		Rs. Cr.	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending31-March-19**	**Rank**	**For FY ending31-March-18**	**Rank**
ICICI	33,267	2	27,015	2	23,026	2
HDFC Bank	56,186	1	48,243	1	40,095	1
AXIS Bank	25,206	3	21,708	3	18,618	3
Total	1,14,659		96,966		81,739	
			Public Banks			
SBI	98,085	1	88,349	1	74,854	1
Bank of Baroda	27,451	2	18,684	2	15,522	2
PNB	17,438	3	17,156	3	14,922	3
Canara Bank	13,124	4	14,478	4	12,163	4
Bank of India	15,257	5	13,658	5	10,506	5
Total	1,71,355		1,52,325		1,27,967	

Net Interest Margin

			Private Banks		%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending31-March-18**	**Rank**
ICICI	3.73%	2	3.42%	3	3.23%	3
HDFC Bank	4.30%	1	4.30%	1	4.30%	1
AXIS Bank	3.51%	3	3.43%	2	3.44%	2
			Public Banks			
SBI	2.97%	1	2.78%	1	2.50%	1
Bank of Baroda	2.72%	3	2.72%	2	2.43%	2
PNB	2.30%	4	2.41%	5	2.16%	4
Canara Bank	2.29%	5	2.63%	3	2.42%	3
Bank of India	2.93%	2	2.56%	4	1.92%	5



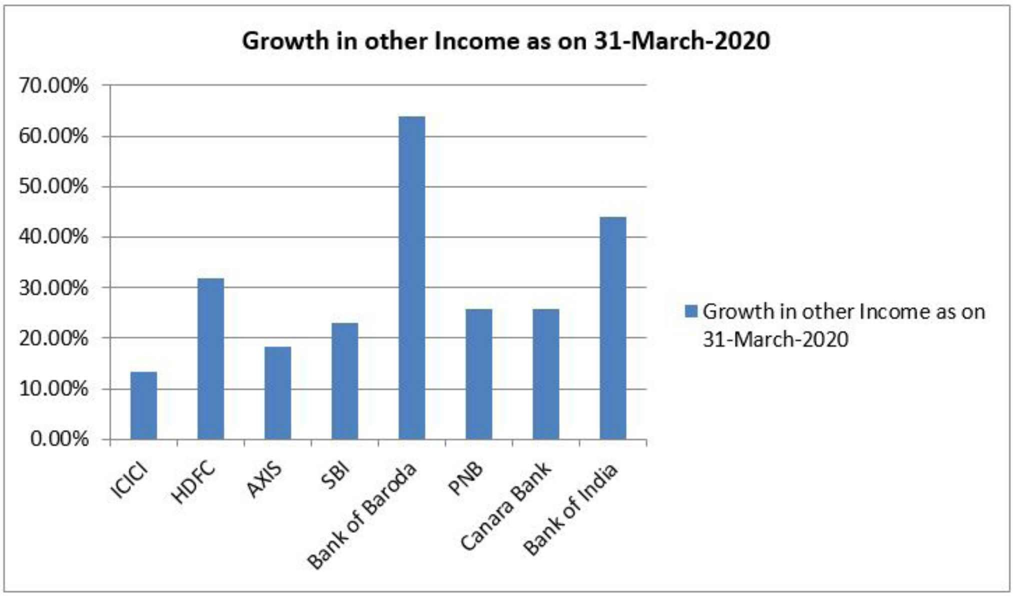
Other Income

Private Banks				Rs. Cr.		
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending31-March-18**	**Rank**
ICICI	16,449	2	14,512	2	17,420	1
HDFC Bank	23,261	1	17,626	1	15,220	2
AXIS Bank	15,537	3	13,130	3	10,967	3
Total	55,247		45,268		43,607	

Public Banks						
SBI	45,221	1	36,775	1	44,601	1
Bank of Baroda	10,317	2	6,294	4	6,294	4
PNB	9,274	3	7,377	2	8,881	2
Canara Bank	7,813	4	6,575	3	6,943	3
Bank of India	6,713	5	4,659	5	5,734	5
Total	79,338	61,680	72,453			

Growth in Other Income

Private Banks					%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	13.34%	3	-16.69%	3	-10.69%	2
HDFC Bank	31.97%	1	15.80%	2	23.78%	1
AXIS Bank	18.33%	2	19.72%	1	-6.19%	3
Public Banks						
SBI	22.97%	4	-17.55%	4	25.77%	1
Bank of Baroda	63.91%	1	-8.50%	1	-1.49%	3
PNB	25.71%	3	-16.93%	2	-0.79%	2
Canara Bank	25.71%	3	-16.93%	3	-0.79%	2
Bank of India	44.09%	2	-18.75%	5	-15.34%	4

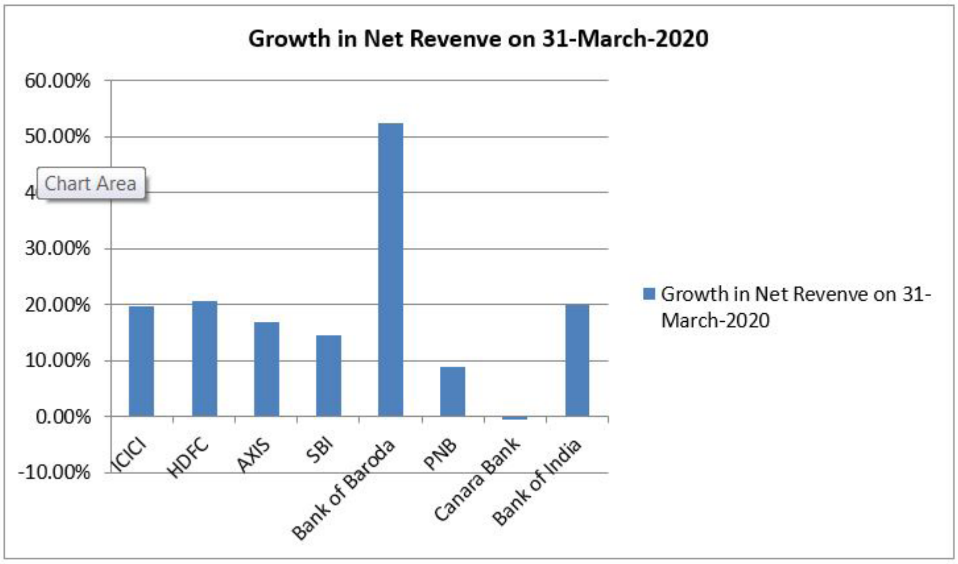


Net Revenue

			Private Banks		Rs. Cr.	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	49,716	2	41,527	2	40,445	2
HDFC Bank	79,447	1	65,869	1	55,315	1
AXIS Bank	40,743	3	34,839	3	29,585	3
Total	1,69,906		1,42,235		1,25,345	
Public Banks						
SBI	1,43,306	1	1,25,124	1	1,19,454	1
Bank of Baroda	37,769	2	24,775	2	22,179	3
PNB	26,712	3	24,534	3	23,803	2
Canara Bank	20,937	5	21,053	4	19,106	4
Bank of India	21,970	4	18,317	5	16,240	5
Total	2,50,694		2,13,803		2,00,782	

Growth in Net Revenue

		Private Banks		%		
Ranking Highest to Lowest	**For FY ending 31- March-20**	**Rank**	**For FY ending31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	19.72%	2	2.67%	3	-1.93%	3
HDFC Bank	20.61%	1	19.08%	1	21.74%	1
AXIS Bank	16.95%	3	17.76%	2	-0.67%	2
Public Banks						
SBI	14.53%	3	4.75%	4	22.74%	1
Bank of Baroda	52.45%	1	11.70%	2	9.41%	3
PNB	8.88%	4	3.07%	5	0.59%	4
Canara Bank	-0.55%	5	10.19%	3	9.64%	2
Bank of India	19.95%	2	12.79%	1	-12.68%	5



Operating Cost

		Private Banks			Rs. Cr.	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending31-March-19**	**Rank**	**For FY ending31-March-18**	**Rank**
ICICI	21,614	2	18,089	2	15,704	2
HDFC Bank	30,698	1	26,119	1	22,690	1
AXIS Bank	17,305	3	15,833	3	13,990	3
Total	69,617		60,041		52,384	
Public Banks						
SBI	75,174	1	69,688	1	59,943	1
Bank of Baroda	18,077	2	11,288	3	10,173	3
PNB	11,973	3	11,538	2	13,509	2
Canara Bank	11,577	4	10,462	4	9,558	4
Bank of India	10,451	5	10,224	5	9,101	5
Total	1,27,252		1,13,200		1,02,284	

Cost to Income Ratio

		Private Banks			%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending31-March-19**	**Rank**	**For FY ending31-March-18**	**Rank**
ICICI	43.48%	1	43.56%	2	38.83%	3
HDFC Bank	38.64%	3	39.65%	3	41.02%	2
AXIS Bank	42.47%	2	45.45%	1	47.29%	1
Public Banks						
SBI	52.46%	2	55.70%	2	50.18%	3
Bank of Baroda	47.86%	3	45.56%	5	45.87%	5
PNB	44.82%	5	47.03%	4	56.75%	1
Canara Bank	55.30%	1	49.69%	3	50.03%	4
Bank of India	47.57%	4	55.82%	1	56.04%	2

Profit Before Tax

			Private Banks		Rs. Cr.	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY Ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	14,048	2	3,777	3	7,435	2
HDFC Bank	36,607	1	32,200	1	26,697	1
AXIS Bank	4,904	3	6,074	2	122	3
Total	55,559		42,051		34,254	
Public Banks						
SBI	25,063	1	1,607	1	-15,528	4
Bank of Baroda	-1,802	4	698	2	-2,791	1
PNB	739	2	-15,346	5	-19,575	5
Canara Bank	-1,756	3	-2,327	3	-6,561	2
Bank of India	-4,603	5	-8,713	4	-8,634	3
Total	17,641		-24,081		-53,089	

Growth in Profit Before Tax

			Private Banks		%	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	271.96%	1	-49.20%	2	-34.08%	2
HDFC Bank	13.69%	2	20.61%	1	20.59%	1
AXIS Bank	-29.68%	3	Na	NA	-97.78%	3
			Public Banks			
SBI	1459.17%	1	Na	NA	Loss	NA
Bank of Baroda	Loss	NA	Na	NA	Loss	NA
PNB	Na	NA	Loss	NA	Loss	NA
Canara Bank	Loss	NA	Loss	NA	Loss	NA
Bank of India	Loss	NA	Loss	NA	Loss	NA

Five Year Cagr- Profit Before Tax

		Private Banks		%		
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	-ve	NA	-ve	NA	-ve	NA
HDFC Bank	19.02%	1	20.31%	1	22.32%	1
AXIS Bank	-ve	NA	-ve	NA	-ve	NA
			Public Banks			
SBI	5.35%	1	-ve	NA	Loss	NA
Bank of Baroda	Loss	NA	-ve	NA	Loss	NA
PNB	-ve	NA	Loss	NA	Loss	NA
Canara Bank	Loss	NA	Loss	NA	Loss	NA
Bank of India	Loss	NA	Loss	NA	Loss	NA

Net Profit

			Private Banks		Rs. Cr.	
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending 31-March-18**	**Rank**
ICICI	7,931	2	3,363	3	6,777	2
HDFC Bank	26,257	1	21,078	1	17,487	1
AXIS Bank	1,627	3	4,677	2	276	3
Total	35,815		29,118		24,540	
Public Banks						
SBI	14,488	1	862	1	-6,547	4
Bank of Baroda	546	2	434	2	-2,432	1
PNB	336	3	-9,975	5	-12,283	5
Canara Bank	-2,236	4	347	3	-4,222	2
Bank of India	-2,957	5	-5,547	4	-6044	3
Total	10,177		-13,879		-31,528	

Growth in Net Profit

		Private Banks		%		
Ranking Highest to Lowest	**For FY ending 31-March-20**	**Rank**	**For FY ending 31-March-19**	**Rank**	**For FY ending1-March-18**	**Rank**
ICICI	135.81%	1	-50.38%	3	-30.85%	2
HDFC Bank	24.57%	2	20.54%	2	20.19%	1
AXIS Bank	-65.20%	3	1596.39%	1	-92.51%	3
Public Banks						
SBI	1580.38%	1	Na	NA	Loss	NA
Bank of Baroda	25.99%	2	Na	NA	Loss	NA
PNB	Na	NA	Loss	NA	Loss	NA
Canara Bank	Loss	NA	Na	NA	Loss	NA
Bank of India	Loss	NA	Loss	NA	Loss	NA

Five Year Cagr In Net Profit

		Private Banks		%		
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	-ve	NA	-ve	NA	-ve	NA
HDFC Bank	20.78%	1	19.98%	1	21.06%	1
AXIS Bank	-ve	NA	-ve	NA	-ve	NA
Public Banks						
SBI	2.03%	1	-ve	NA	Loss	NA
Bank of Baroda	-ve	NA	-ve	NA	Loss	NA
PNB	-ve	NA	Loss	NA	Loss	NA
Canara Bank	Loss	NA	-ve	NA	Loss	NA
Bank of India	Loss	NA	Loss	NA	Loss	NA

Profitability – SBI has recorded highest amount of net interest income of 98085 crores followed by HDFC bank with 56186 crores, but net interest income for Canara bank was lowest (only 13124 crore) due to comparatively lesser interest margin, which is only 2.29%. Net interest margin is one of the major business parameter for any bank towards its profitability. Among private sector banks, HDFC Bank is having highest NIM of 4.30%, whereas among public sector banks, SBI NIM (2.97%) is better than other public sector banks.

SBI is having highest amount of other income to the level of 45221 crores, whereas HDFC Bank is having 23261 crores, which is highest among all the private sector banks and it has also recorded higher growth of 31.97% under other income. Bank of Baroda recorded highest growth of 63.91% under other income due to merger of 2 PSB. HDFC Bank recorded highest growth (20.61%) in net revenue whereas for Canara Bank it was negative and due to that Canara Bank incurred losses during this year. Among all the banks, HDFC Bank was having lowest cost to income ratio (38.64%) which has given more profit to HDFC Bank whereas for Canara Bank it is as high as 55.30%.

Profit before taxes was highest for HDFC Bank (36607 crores), whereas for Bank of Baroda, Canara Bank and Bank of India, it was negative. 5 Years CAGR for HDFC Bank is highest (19.02%) and for Bank of Baroda, PNB, Canara Bank and Bank of India, it is negative. Net Profit is also higher for HDFC bank (26257 crores) followed by SBI (14488 crores). Net Profit for Canara Bank and Bank of India was negative. 5 years CAGR in Net Profit for HDFC Bank is highest among all the banks and for SBI it is only 2.03%. All other banks have shown negative CAGR in Net Profit for last 5 years. Due to that some of these banks have reported losses for the financial year 2019-2020.

Earning Per Share

			Private Banks		Rs.	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	12.28	2	5.23	3	10.56	2
HDFC Bank	48.00	1	39.30	1	33.88	1
AXIS Bank	5.99	3	18.20	2	1.13	3
			Public Banks			
SBI	16.23	1	0.97	3	-ve	NA
Bank of Baroda	1.36	2	1.64	2	-ve	NA
PNB	0.62	3	-ve	NA	-ve	NA
Canara Bank	-ve	NA	4.71	1	-ve	NA
Bank of India	-ve	NA	-ve	NA	-ve	NA

Return on Average Assets

	Private Banks			%		
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	0.81%	2	0.39%	3	0.87%	2
HDFC Bank	2.01%	1	1.90%	1	1.93%	1
AXIS Bank	0.20%	3	0.63%	2	0.04%	3
Public Banks						
SBI	0.38%	1	0.02%	2	-ve	NA
Bank of Baroda	0.06%	2	0.06%	1	-ve	NA
PNB	0.04%	3	-ve	NA	-ve	NA
Canara Bank	-ve	NA	0.06%	1	-ve	NA
Bank of India	-ve	NA	-ve	NA	-ve	NA

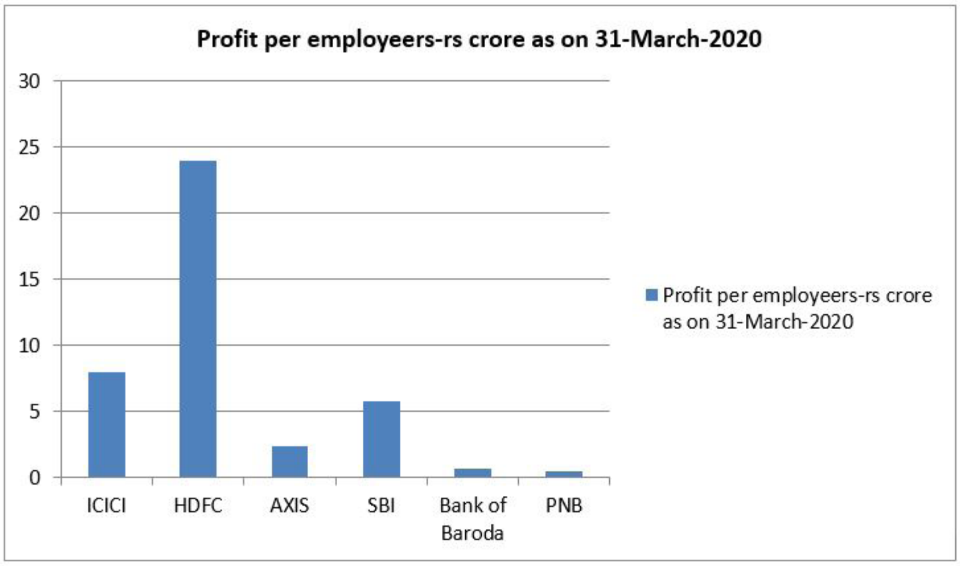
Return on Equity

		Private Banks			%	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	7.07%	2	3.16%	3	6.60%	2
HDFC Bank	16.76%	1	16.30%	1	18.22%	1
AXIS Bank	2.34%	3	8.09%	2	0.53%	3
Public Banks						
SBI	7.74%	1	0.48%	3	-ve	NA
Bank of Baroda	1.23%	2	1.18%	2	-ve	NA
PNB	0.59%	3	-ve	NA	-ve	NA
Canara Bank	-ve	NA	1.40%	1	-ve	NA
Bank of India	-ve	NA	-ve	NA	-ve	NA

Other Efficiency Parameters – During the year HDFC Bank has further improved its Earning Per share to Rs. 48 and for Axis bank it has declined from Rs. 18.20 to Rs. 5.99. SBI has also improved the earning per share from 0.97 to 16.23. Canara Bank and Bank of India have reported negative earnings per share due to losses. Return on average assets for HDFC Bank is 2.01% followed by ICICI Bank 0.81%. For SBI return on average assets was 0.38% and same was negative for Canara Bank and Bank of India. Similarly return on equity was highest for HDFC Bank (16.76%) followed by SBI, which was improved to 7.74% from 0.48%. For Canara Bank and Bank of India, return on equity was negative due to losses.

Profit Per Employee-Rs Crore

		Private Banks			Rs. Lakh	
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	8.00	2	4.00	3	8.00	2
HDFC Bank	24.00	1	23.00	1	20.00	1
AXIS Bank	2.40	3	7.61	2	0.47	3
Public Banks						
SBI	5.79	1	0.33	3	-ve	NA
Bank of Baroda	0.65	2	0.78	2	-ve	NA
PNB	0.53	3	-ve	NA	-ve	NA
Canara Bank	-ve	NA	1.00	1	-ve	NA
Bank of India	-ve	NA	-ve	NA	-ve	NA

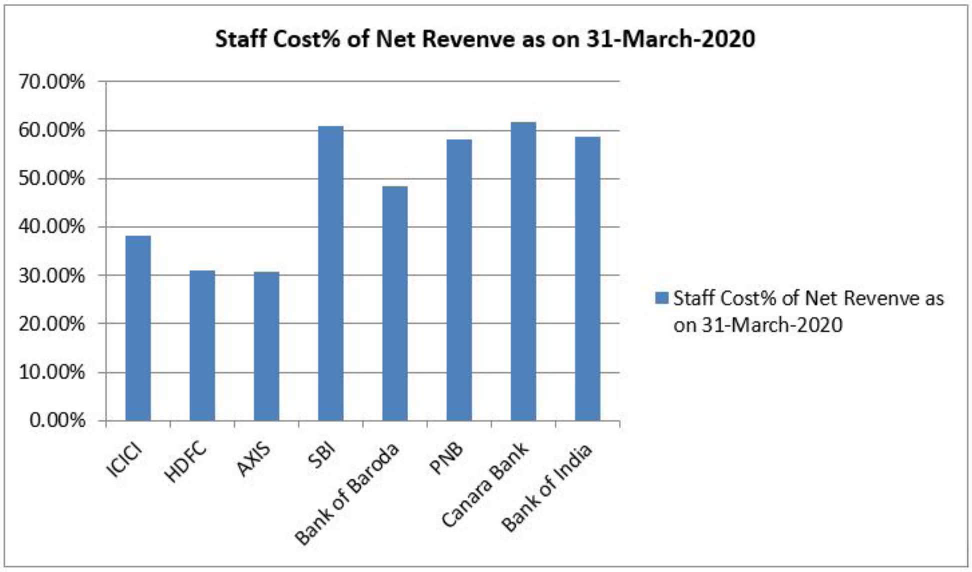


No. of Employees

			Private Banks			No.
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	99,319	2	86,763	2	81,548	2
HDFC Bank	1,16,971	1	98,061	1	88,253	1
AXIS Bank	74,140	3	61,940	3	59,614	3
Total	2,90,430		2,46,764		2,29,415	
			Public Banks			
SBI	2,49,448	1	2,57,252	1	2,64,041	1
Bank of Baroda	84,283	2	55,754	4	55,662	4
PNB	68,781	3	70,810	2	74,897	2
Canara Bank	58,632	4	58,350	3	58,855	3
Bank of India	49,767	5	48,807	5	48,680	5
Total	5,10,911		4,90,973		5,02,135	

Staff Cost As % of Net Revenue

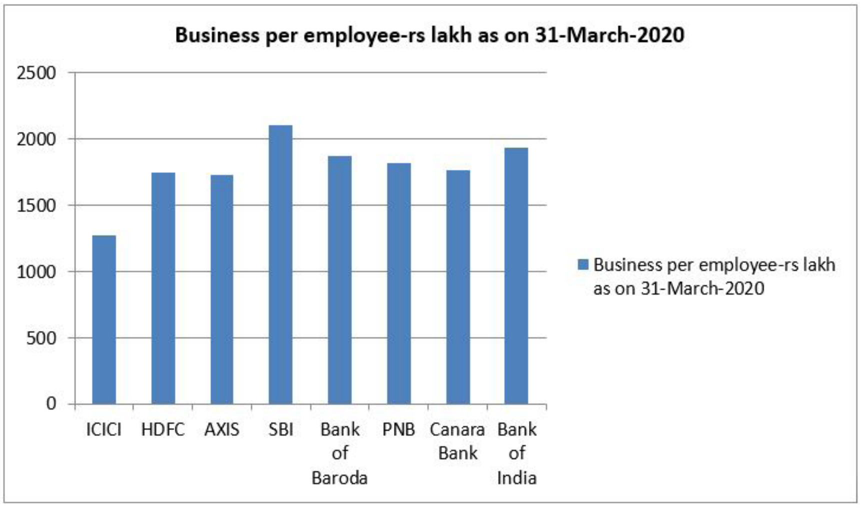
			Private Banks		%	
Ranking Highest to Lowest	For FY ending 31-March-20	Rank	For FY ending 31-March-19	Rank	For FY ending 31-March-18	Rank
ICICI	38.27%	1	37.64%	1	37.66%	1
HDFC Bank	31.03%	2	29.72%	3	29.99%	3
AXIS Bank	30.75%	3	29.98%	2	30.83%	2
			Public Banks			
SBI	60.81%	2	58.91%	2	55.35%	3
Bank of Baroda	48.51%	5	44.64%	5	45.28%	5
PNB	58.14%	4	60.35%	1	67.87%	1
Canara Bank	61.62%	1	57.73%	4	56.96%	2
Bank of India	58.76%	3	58.89%	3	53.88%	4



Business Per Employee- Rs Lakh

			Private Banks			Rs. Lakh
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	1,275	3	1,222	4	1,078	3
HDFC Bank	1,749	1	1,687	1	1,508	1
AXIS Bank	1,727	2	1,653	2	1,484	2
Total	4,751		4,562		4,070	
Public Banks						
SBI	2,105	1	1,877	2	1,670	3
Bank of Baroda	1,877	3	1,888	1	1,766	2
PNB	1,821	4	1,680	5	1,474	5
Canara Bank	1,763	5	1,707	4	1,481	4
Bank of India	1,940	2	1,839	3	1,829	1
Total	9,506		8,991		8,220	

Productivity – Profit per employee for HDFC Bank was 24 Lakhs followed by ICICI Bank (8 lakhs). Among public sector banks, SBI was having highest profit per employee (5.79 lakhs), whereas for Canara Bank and Bank of Baroda, it was negative. Staff cost as % of revenue was lowest for Axis Bank (30.75%) followed by HDFC Bank (31.03%). Among public sector banks, Canara Bank was having highest staff cost to % of revenue as their revenue was very less compare to other major banks. For SBI also it is comparatively higher (60.81%) compare to other banks. Among private sector banks, HDFC Bank has recorded highest amount of business Rs. 1749 Lakhs and among public sector banks, SBI business per employee is 2105 lakhs, which is higher than any other bank.



No. of Branches

Private Banks						No.
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	5,324	2	4,874	2	4,867	1
HDFC Bank	5,416	1	5,103	1	4,787	2
AXIS Bank	4,533	3	4,055	3	3,703	3
Total	15,273		14,032		13,357	
Public Banks						
SBI	22,374	1	22,218	1	22,620	1
Bank of Baroda	9,528	2	5,598	4	5,526	4
PNB	7,043	3	6,991	2	6,987	2
Canara Bank	6,329	4	6,310	3	6,204	3
Bank of India	5,107	5	5,119	5	5,186	5
Total	50,381		46,236		46,523	

No. of Total ATM

Private Banks			No.			
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	15,688	2	14,987	1	14,367	1
HDFC Bank	14,901	3	13,160	2	12,635	3
AXIS Bank	17,477	1	11,801	3	13,814	2
Total	48,066		39,948		40,816	
Public Banks						
SBI	58,555	1	58,415	1	59,541	1
Bank of Baroda	13,193	2	9,572	2	9,704	2
PNB	9,168	3	9,255	3	9,668	3
Canara Bank	8,850	4	8,851	4	9,395	4
Bank of India	5,750	5	6,154	5	7,435	5
Total	95,516		92,247		95,743	

No. of Credit Cards

			Private Banks		Lakhs	
Ranking Highest to Lowest	As on 31-March-20	Rank	As on 31-March-19	Rank	As on 31-March-18	Rank
ICICI	91.11	2	66.46	2	49.98	2
HDFC Bank	145.00	1	124.87	1	106.86	1
AXIS Bank	69.86	3	59.60	3	44.86	3
Total	305.97		250.93		201.7	
Public Banks						
SBI	105.48	1	82.71	1	62.58	1
Bank of Baroda	5.37	2	3.69	2	2.23	3
PNB	3.47	3	3.34	3	3.20	2
Canara Bank	5.37	2	3.69	2	2.23	3
Bank of India	1.64	4	1.84	4	2.09	4
Total	121.33		95.27		72.33	

No. of Debit Cards

			Private Banks		Lakhs	
Ranking Highest to Lowest	As on 31-March-20	Rank	As on 31-March-19	Rank	As on 31-March-18	Rank
ICICI	460.88	1	447.88	1	415.00	1
HDFC Bank	321.13	2	269.97	2	243.19	2
AXIS Bank	244.88	3	245.11	3	223.41	3
Total	1026.89		962.96		881.6	
Public Banks						
SBI	2,781.34	1	3,162.63	1	2,784.68	1
Bank of Baroda	540.45	2	607.58	3	519.48	4
PNB	244.03	4	736.13	2	619.63	2
Canara Bank	243.70	5	281.47	5	429.97	5
Bank of India	400.63	3	597.17	4	531.06	3
Total	4,210.15		5366.98		4884.82	

No. of Pos Terminals

	Private Banks			No.		
Ranking Highest to Lowest	As on 31-March-20	Rank	As on 31-March-19	Rank	As on 31-March-18	Rank
ICICI	4,83,538	3	3,91,625	3	3,25,358	3
HDFC Bank	8,72,912	1	4,90,180	2	4,03,567	2
AXIS Bank	5,22,523	2	5,07,409	1	5,02,226	1
Total	18,78,973		13,89,214		12,31,151	
Public Banks						
SBI	6,72,862	1	5,75,358	1	6,09,789	1
Bank of Baroda	59,959	3	63,250	4	77,253	3
PNB	80,318	2	64,865	3	50,241	4
Canara Bank	24,881	5	21,363	5	18,398	5
Bank of India	48,361	4	65,372	2	85,980	2
Total	8,86,381		7,90,208		8,41,661	

Alternate Delivery Channels – SBI is having highest number of bank branches (22374) and highest number of ATMs (58555) in the country and among private sector banks; HDFC Bank is having the more number of branches (5416) compare to other private sector banks but Axis bank is leading in number of ATMS with 17477 ATMS among all the private sector banks.

HDFC Bank is leading under credit cards (145lakhs) followed by SBI with 105.48 credit cards, whereas other PSBs are having less than 6 lakhs credit cards. Under debit card segment, SBI has issued maximum number 2782.34 lakhs debit card. Among private sector banks, ICICI Bank is having 460.88 lakhs debit card which is more than to HDFC Bank (321.13 lakhs). Under the segment of POS Terminals, HDFC Bank is leading with 872912 POS Terminals followed by SBI with 672862 POS terminals. Other public sector banks issued less than 1 lakh POS terminals.

Market Price to Book Value Ratio

Private Banks			**Times**			
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	1.80	2	2.38	3	1.70	3
HDFC Bank	2.76	1	4.23	1	4.71	1
AXIS Bank	1.26	3	3.00	2	2.07	2
Total	5.82		9.61		8.48	
Public Banks						
SBI	0.90	1	1.60	3	1.26	1
Bank of Baroda	0.56	3	0.93	1	1.18	2
PNB	0.61	2	1.07	5	0.70	5
Canara Bank	0.32	5	0.84	2	0.84	4
Bank of India	0.51	4	1.31	4	0.95	3
Total	2.9		5.75		4.93	

Market Capitalization

Private Banks			**Rs. Cr.**			
Ranking Highest to Lowest	**As on 31-March-20**	**Rank**	**As on 31-March-19**	**Rank**	**As on 31-March-18**	**Rank**
ICICI	2,09,555	2	2,58,172	2	1,78,923	2
HDFC Bank	4,72,604	1	6,31,508	1	5,00,593	1
AXIS Bank	1,06,942	3	1,99,881	3	1,31,022	3
Total	7,89,101		10,89,561		8,10,538	
Public Banks						
SBI	1,75,681	1	2,86,257	1	2,23,025	1
Bank of Baroda	25,113	2	34,035	3	37,646	2
PNB	22,537	3	43,969	2	26,308	3
Canara Bank	9,277	5	21,942	5	19,350	4
Bank of India	10,896	4	28,766	4	12,266	5
Total	2,43504		4,14,969		3,18,595	

Government share in major public sector banks as on March 2020-

SBI-57.64%

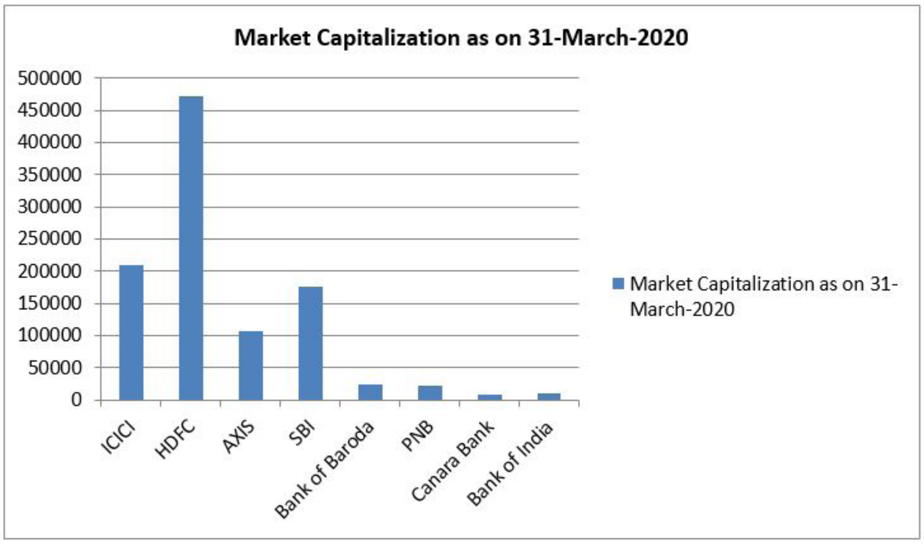
Bank of Baroda- 71.60%

PNB- 85.59%

Canara Bank- 78.55%

Bank of India- 89.10%

Market Capitalization – Market price to book value ratio is highest for HDFC bank (2.76) followed by ICICI Bank (1.80). Among public sector banks, SBI is having higher market price to book value ratio of 0.90 whereas Canara Bank is having lowest 0.32. HDFC Bank is having the highest amount 472604 crores of market capitalization among all the banks followed by ICICI Bank with 209555 crores. Among public sector banks, SBI is leading in terms of market capitalization with 175681 crores, whereas other public sector banks are having lesser market capitalization due to Government share in all of these banks. Government share in Bank of India is highest with 89.10%, followed by PNB with 85.59%, Canara Bank with 78.55% and Bank of Baroda with 71.60%.



Conclusion

Banking sector plays a very crucial role in every aspect of the economy. In this paper comparative study on major banks are done on various parameters and after seeing that it is observed that how the banks are totally different in each aspect and what is there financial condition in the last consecutive three years. In public sector banks, SBI bank is having the highest business and ranked no. one in the banking industry of India with total business of 79.31 lakh crores and has highest number of branches (22374) and highest number of ATMs (58555).

In private sector banks, HDFC bank ranked number one bank with total business of 26.78 lakh crores and highest number of branches (5416) as compare to other private banks.

After the merger and amalgamation of bank of Baroda with the two public banks i.e. Dena bank and Vijya bank, this bank is also developing in almost every aspect such as highest growth of 48% under the total deposits, highest growth of 48% in total assets and 47% in advances.

Net interest margin is one of the major business parameter for any bank towards its probability. Among the private banks, HDFC Bank is having the highest net interest margin of 4.30% and in public sector banks; SBI bank is having the highest net interest margin of 2.97%.

The HDFC bank has improved its earnings per share to Rs. 48 and Axis bank has decline from Rs 18.20 to 5.99. According to the BASEL-3 norms all the banks are supposed to have the capital adequate ratio to more than 11.5% including 2.5% of capital conservation buffer. The government has a major share in public sector banks as on march that is in SBI- 57.64%, Bank of Baroda-71.60% and etc. HDFC Bank has recorded an improvement in all key business parameters namely NIM, Deposits, Advances, Asset quality and profitability. It was achieved by them on diversifying across customer segments and their constant efforts to deliver superior customer experiences have resulted in this healthy and consistent growth.

Some of the highlights of all of these banks are as follows –

HDFC Bank – During the financial year 2019 -2020, HDFC Bank was able to show significant growth under net revenue 20.6%, advances 21.3%, deposits 24.3%, and net profit 24.6%. Other income was 28.4% of net revenue, cost to income ratio 38.6%, CASA 42.2%, Liquidity coverage ratio 132%, capital adequacy ratio 18.5%, net interest margin 4.3% and gross NPA only 1.26%.

ICICI Bank – Overall performance of ICICI bank was satisfactory but it was below to HDFC Bank. ICICI Bank has reported the growth under fee income 13%, profit after tax 26%, term deposits 29%, and advances 13%. Performance under other business parameters were NPA 1.41%, provision coverage ratio 75.7% and capital adequacy ratio 16.11%. CASA ratio to total deposits was highest among all the banks which were 45.1%.

Axis Bank – Performance of Axis bank was not satisfactory compared to other major private sector banks i.e. HDFC and ICICI Bank, as growth under major business parameters were less than these banks. Growth under deposits was 17% and advances 15%. Provision coverage ratio was 69% against the RBI Expectation of 70%. Gross NPA 4.86%, capital adequacy ratio 17.53% and net interest margin were 3.51%.

State Bank of India – SBI is biggest bank in terms of total business, number of branches and number of staff among all the banks. SBI is also having highest market share of 22.84% under deposits, 19.69% under advances and 29.42% under debit cards. Among all the public sector banks, SBI has recorded better performance under various business parameters and due to that it is also called as Leader of Indian Banks.

Bank of Baroda – During the financial year 2019-2020, due to merger and amalgamation of Dena bank and Vijya Bank into Bank of Baroda, BOB has recorded higher growth in most of the parameters such as total business, total deposits and total advances. But 5 years CAGR under deposits was only 8.90 %, whereas for SBI it was 15.50%. 5 years CAGR under net profit is also negative due to higher NPA ratio of 8.90%

Punjab National bank – Overall performance of Punjab national bank is not satisfactory due to high level of NPA (Gross NPA 14.21%) because of Nirav Modi fraud case. Bank business has grown by about 3.2% only with deposit at 4.9% and advances 1.1%. However bank was able to maintain very good CASA Ratio of 44%. Provision coverage ratio was only 62.96% against the required PCR of 70%. Capital adequacy ratio was 14.14% and 5 years CAGR under net profit was negative due to higher level of NPA and huge fraud amount.

Canara Bank – Performance of Canara bank was satisfactory in some business parameters but it was also not good under remaining business parameters. During the year bank total business grows for only 3.16% with growth in deposit at 4.4%, CASA 12.2% advances 1.8% and net interest income by 18.8%. Bank has incurred loss of 3259 crores due to higher provisions towards NPA with PCR at 75.86%. Capital adequacy ratio was 13.65%. Bank was able to curtail net NPA to 4.22% after providing the significant provisions.

Bank of India – Performance of bank of India was not satisfactory due to higher amount of NPA (14.78%) and net loss of 2957 crores. However net interest income increased to 14.13% due to rise in treasury income. Global business of Bank of India was lowest 972026 crores among all of these 8 banks. Bank provision coverage ratio increased to 83.75% and due to that net NPA declined to the level of 3.88%

Recently RBI unveils developmental and regulatory measures which will further improve the business of all the banks during 2020 – 2021 in various business parameters. Some of these measures are –

1. Loans for non – agricultural purposes to be granted by banks up to 90% by of pledged value of gold ornaments till 31-03-2020
2. Banks will now be incentivized to address regional disparities in flow of priority sector lending
3. Start – ups too will now get credit support from banks
4. Green energy sectors will get higher lending
5. A special liquidity facility of rs.5000 crores to NHB to improve funds flow to the housing sector
6. Rs. 5000 crore funds earmarked for NABARD to improve fund availability

7. Lenders to implement a debt resolution plan for eligible corporate debts and personal loans
8. Expert committee for debt resolution plans
9. Stressed MSME borrowers to be made eligible for restructuring their debt under existing framework to be implemented by 31-03-2020
10. Reduced capital charge for market risk
11. Banks get more flexibility in managing liquidity and cash reserve
12. Safeguard to bring in better credit discipline by putting restriction on opening current accounts by cash credit / overdraft borrowers

In view of above and due to COVID 19 businesses of all the major banks are going to effect during this financial year of 2020 -2021. Moreover due to merger and amalgamation of some of the public sector banks into bigger public sector banks, position of major banks are going to change during 2020 – 2021.

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7. Audited balance sheet as on 31-03-2020 of Punjab National Bank
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Impact of Recent Development in Banking Sector - Pre and Post COVID-19

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The Banking industry of any country is the backbone of their financial system. The banking sector plays a very important role in the development of the economy and the country. In this Globalized, era technology support becomes a major part for the successful functioning of the banking industry. The development of the banking sector is depending upon the services which are provided by the them to the customers and how the customers react to those new services. In today's time various developments has been seen in this sector and technological up gradation has also adopted to make the work easy. India has the well developed banking industry with different classes of banks like foreign banks, regional rural banks etc. Even in the serious challenge of COVID-19 various reforms are made by them to satisfy the customer's needs and demand.

Key words: Banking sector, Reforms, technological up gradation and COVID-19

Introduction

Meaning of Bank

A bank is a financial institution which accepts the deposit from customers and lends money to the households, firms, and businessman and to the government. Bank is those institutions which deal in money, stocks and gold. The banks are not the trader of money where as they create credits. The banking business refers to receiving the money on current account and collecting the cheques which are paid by the customers. Bank is also a place where the customer can keep their money without taking any tension. It also provides loans to the customers whenever they are wanted.

General Banking Scenario in India

There were two views on origin of the word bank out of which one was originated from Italian "banca" which means bench and the other opinion that was originated from German was "bank" which means a joint stock fund .The origin of banking was seen in the Kautaliya Arthasastra.

The Reserve Bank of India was nationalized on January 1, 1949 under the Reserve Bank of India act 1948. India bank has become important for developing the economy of the country. Then the ordinance was passed by the government and Nationalization of 14 banks was done in 1969. After the 14 nationalization 6 more banks were nationalized in 1980. This nationalization was done to control the credit delivery.

In 1990, Narasimha Rao government has embarked on the policy of Liberalization and small number of private banks got licensed. Then the foreign investors directly started investing in our country economy. These investors were also given the voting rights.

Various Banks in the Indian Banking Industry

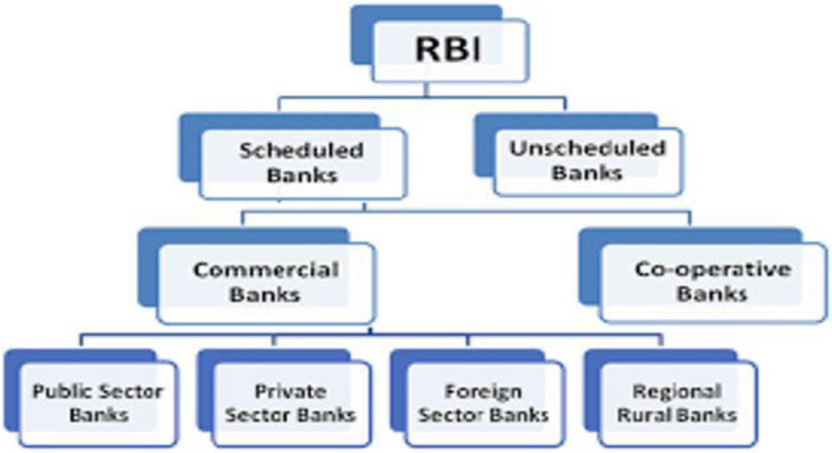


Figure 1- Structure of Indian Banking System

Reserve Bank of India – RBI was set up on 1st April 1935. This was set up under the RBI act 1934. RBI has the power to direct and control the banking sector. All the credit policy is formulated and regulated by them. RBI has the sole authority to issue and supply the notes in the country. All the banks are regulated by them and plays an important role in formulating and development strategy of Government of India

Scheduled banks – These are those banks whose minimum paid up capital is Rs 5 lakhs and they do not harm the interest of the depositors. There cash reserve ratio are maintained with the RBI. They can also become the member of the clearing house.

Commercial Banks – Commercial banks are the financial institution that accepts deposits, lending loans and advances to the public and business man. They offer the various financial products like saving accounts to individuals and businesses. These banks earn money by providing loan to their customers and earning interest from those loans.

Public Sector Banks – Public sector banks are those banks which are owned by the government or has share of more than 51% in the bank. These include State bank of India, 7 associated banks and 19 nationalized banks. In term of volume state bank of India is the largest commercial bank. Example of public sector bank area Punjab National Bank, Indian Bank, Canara Bank.

Private Sector Banks – These banks are those whose equity is holded by the shareholders of the bank. They play very important role in the development of the Indian banking system. Examples of private banks in India are ICICI, HDFC and many more.

Foreign Banks – Foreign banks are those banks which are set up in some other countries and perform the functions of both the host and their home countries. They are situated in India as well in the form of representative offices or as branches. Example of foreign banks is Citi bank, HSBC bank, and Royal Bank of Scotland etc.

Regional Rural Banks – Regional Rural Banks are the Indian scheduled commercial banks which are operating in different states at a regional level. These banks provide facilities to rural and urban areas. They also involve in carrying the government operations like distribution of wages MGNREGA, distribution of pension etc. Example of regional rural banks is Andhra Pradesh Grameena Vikas Bank, Uttar Bihar Gramin Bank.

Co- operative Bank – The co-operative banks are those whose customers are also its owner. These financial institutions provide various services to their customers like financial services and other regular banking services. Their main objective is to provide the rural credit to its customers. There is a three tier structure of these banks – state cooperative banks than central cooperative banks and then at last primary cooperative banks. The example of co- operative banks is Rajkot Nagrik Sahakari Bank Ltd., Surat Peoples Coop Banks Ltd. and many more.

Non Schedule Banks – These are those financial institutions whose paid up capital is less than Rs 5 lakh. They cannot borrow money from Reserve Bank of India for performing the normal banking activities. In urban areas these banks mainly finance small businesses, industries, educational loan etc. The example of non –schedule Banks are Akhand Anand co-operative Bank ltd, Amod Nagrik Sahakari Bank ltd.

Adoption of Technology in Banking Sector

Technology has brought complete change in the functions of the banks and the delivery of the banking services. Earlier the customer has to visit to the bank branch even for the smallest banking transactions. But today, people can do the transactions even by sitting at their homes and even at their offices and there is no need to go to the bank branch. The growth of the interest of the internet and communication technology has added a different dimension to the banking sector. The growth of the digital banking has made the work of the banking earlier and customers are also getting benefits. Online banking also help in cost saving and time saves. Due to the technology, new customers are also attracted to the banks and it is also increases the productivity of the transactions. Technology plays a major role in the banking sector.

COVID - 19 and Indian Banking Industry

The COVID – 19 pandemic which has arrived in our country in March 2020 is a heath crisis and well a great shock for the world as well as the economies of the countries. This is one of the biggest challenges that are faced by the banking industry in nearly a century. After arising of covid banking sector will face various problem like fall in demand, production shutdowns and lower income of the people etc. Even the banks do not want to increase their lending's as the industries do not have much money to repay the banks loans. Before COVID -19 the banking sector was at its peak and technological upgrade was also done. Various developments were also done in this sector like internet banking, online banking and many more.

Impact of COVID-19 on Digital Banking

The COVID-19 will also test the banks which are running the digital transformation programmes as now a day's digital banking has become primary options for the customers. There will be high demand of digital banking and this will be the challenge for the banks and even advantage to most of the banks. The banks must keep offering their best services to their customers at this time to stay alive as the clients are not going to the branches. The fraudulent activities will also increase and may take advantage of this serious problem. The main threats are the cyber crimes and AML.

Objectives

1. To study the recent development and reforms in Indian banking sector .
2. To analyze the recent trends in adoption and usage of banking technology and payment systems.
3.. To understand the impact of COVID-19 on the banking strategies focusing on the customer`s shift from cash / paper banking to digital banking . .

Purpose of the Study

Banking Industry plays a Vitol role in the development of economy of the country. So people should know what the changes are done by the banks to improve the condition of the economy. Hence, there is a need to study the recent development in the banking sector in pre and post COVID-19 and its impact.

Review of Literature

K. Saravanan, K. Muthu Lakshmi (2016) – The article entitled "A Study on Banking Services of new Generation Banking in the Indian Banking sector". In this article they wanted to say in the upcoming days the bank will play a major role the economic development. The innovated and developed facilities will attract the customers and this will increase the customer base in the banks. They both have discussed about various recent trends and development in the banking sector such as electronic payment system, RTGS, NEFT, ATM and many more.

Shanbhogue Girish. Kumar, A Prashanth Bhat, Swathi and Shettigar, Chethan (2016) the article entitled "A study on Demonetization" In this article they said that the currency was ban to stop the counterfeit banknotes as the notes were used to increase the negative activities like corruption in the country. Due to demonetization there was a large amount of harm to the small business and transportation as shortage of cash was there. It encourages the digital banking. Even people faced lot of problem in exchanging their Rs 500 and Rs 1000 notes from the banks and post offices.

Anthony Rahul Golden S. (2017) the article entitled "An Overview of Digitalization of Indian Banking Sector" In this article he has tried to make an overview of the digitalization in our banking sector. Banks plays a very important role in our life. Therefore banks always try to adopt the latest technology so that their customer can be satisfied. It is seen that after adopting digitalization banks faced many challenges as well as hurdles.

Santiago Carbo- Valverde (2017) -"The impact of Digitalization on Banking and Financial Stability". In this article he wanted to say that what will be the impact of digitalization in the banking sector and its services. The study concluded that the digitalization has given the opportunities to bank to reduce their cost and to increase their productivity in the financial services of the banks. The study also found that the digitalization has made the work of banks little bit easy and it is also comfortable for the customers of the banks.

Dr. Narinder Kumar Bhasin (October-December 2019) – The article entitled "Study of increasing Digital Banking and Financial Technological Trends, Challenges and Opportunities in Indian Banking System. In this article he has describe the study and focus on the evolution and the changing digital scenario, the challenges and opportunities in the digital banking. There are various digital banking funds transfer system were introduced and there has been a continuous growth in the segments of electric payments systems like RTGS, ECS, NEFT, card payment system and many more. There are various challenges in digital banking like customer retention, cyber security risk and many more even there are various opportunities like better regulatory environment, increasing the power of social media.

Recent Developments in Banking Sector of India

Dr. S.M Jawed Akhtar*, N.P. Abdul Azeez**

Dr. S.M. Jawed Akhtar, N.P. Abdul Azeez (January 2020) - The article entitles "Recent development in Indian banking sector". In this article they have describe the recent development which are done in banking sector such as banking computerization, Core banking solutions ,ATM services etc. This also shows the new products which are developed such as General credit cards, Opening of no- frill accounts. Various supportive measures are included in their paper.

Research Methodology

Research- Research refers to the doing your own study on any topic and then explain that work to the public and also publish that work online.

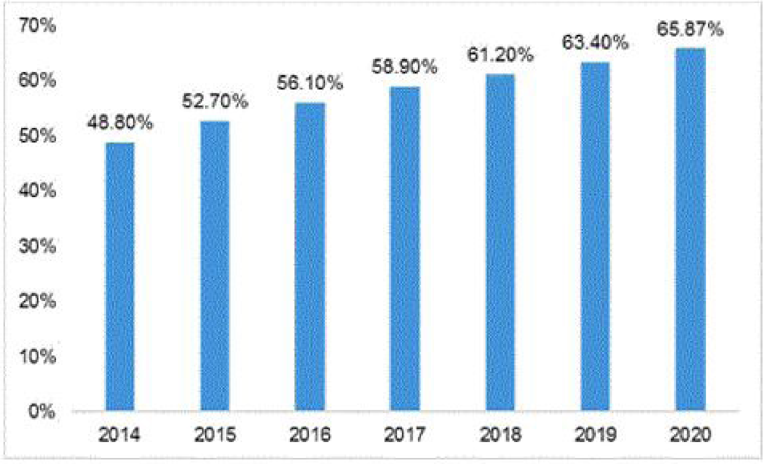
Seconary Data Research

In the British era, banking sector was not much developed as there was no much focus was given to other sectors. But today's as we have a great upgraded technology in our country. So, government is also focusing on banking sector. From last many years various technological developments is being watched. So that this sector can be upgraded and can be more for consumers. Development in this sector is very important as banking plays a very crucial and Vitol role in boosting up the economy.

Recent Development (2014-2019) in banking sector in Pre- covid-19

- **Demonetization-** In India demonetization was announced on 9. November.2016 by the government of India for the very first time. The demonetization was done for all the 500 and 1000 banknotes. The issuance of 500 and 2000 notes was announced in exchange of the old notes. The old notes can be exchanged through post offices and banks till 30th December. The 500 and 1000 notes will not be remaining in the legal tender. The reason for demonetization was to curb the black money from the public and to fight tax evasion. This will also encourage the digital banking. Before India many countries has adopted demonetization for example European Monetary Union Nations (2002) to adopt euro, Government of Zimbabwe (2015).In banks liquidity was increase which could be utilized for the lending purpose. Even banks cut their deposits and lending rates.

Figure -2: Demonetization effect on common public from 2014-2020

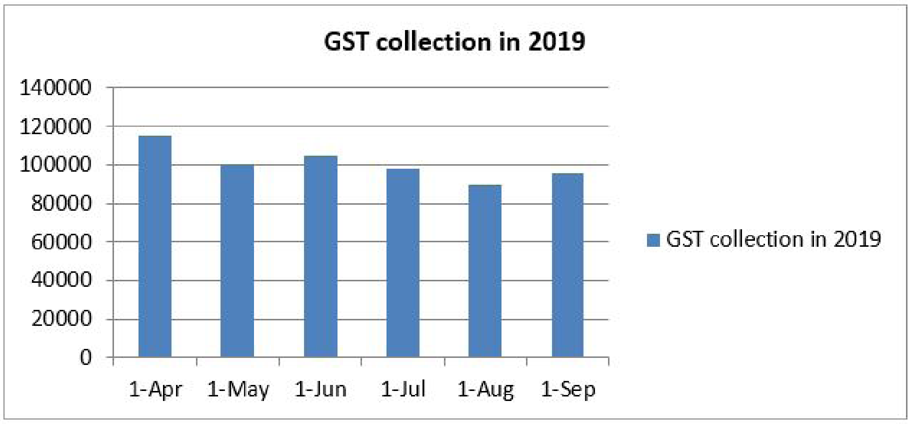


Source- RBI

- **Goods and Service Act**- GST is an indirect tax which is levied in India on the sale of goods and services. It is a unified tax. After that also many times suggestions was given to implement GST. At last it was implemented on 1st April 2017. After implementation many people were rolled out to get register under it, so that they can come under ambit of tax. This tax replaced multiple taxes (excise duty, VAT etc) which were initially levied by the state government. There was large impact of GST on banking sector. Under GST banks has to register itself in each state in which they work into. The service tax was also changed from 15% to 18%. In GST the loan and the loan charges on loan were also exempted.

Month	April	May	June	July	August	Sep
GST collection in 2019(Rs in cr)	115000	1000000	105000	98000	90000	96000

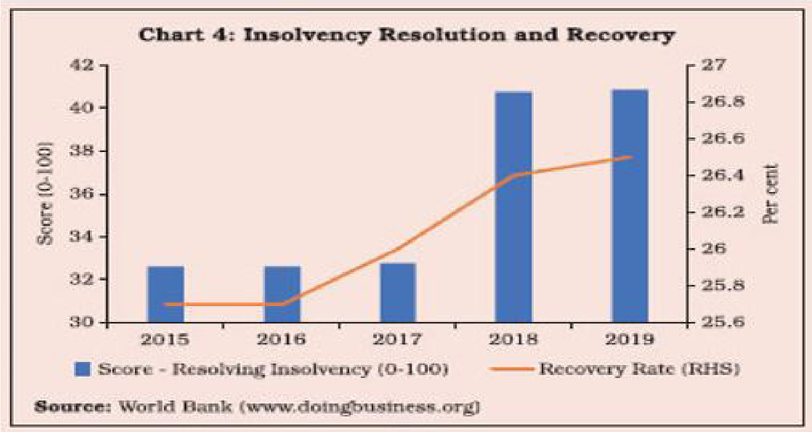
CHART 1- GST Collection in 2019



Source- RBI

- Insolvency and Bankruptcy Code- IBC was introducing in 2016 by the government of our country. After the goods and service act this insolvency and bankruptcy was the second most crucial reform in India. This act was introduced to address the shortcomings in current insolvency law of India. This act was also making India powerful in legal environment. According to the current data of World Bank in 2016, insolvency resolution took 4.3 years on an average. Even the government has increase the salary or wages from Rs 1 lakh to Rs 1 crore.

Figure-3: Insolvency Resolution and Recovery



Source - RBI

- Consolidation of Public Sector Banks- The finance minister of our country announced the further plan of government for the consolidation of public sector banks on 30 august 2019. In this the six PSU'S were merged into four banks so that they can competitive globally. Oriental bank of Commerce and United bank of India was merged into Punjab national bank, Syndicate bank merged in Canara bank, Andhra bank and corporation bank into Union bank of India and Allahabad bank into Indian bank. The total number of PSB's come down from 18 to 12. The shares of these all PSB's bank are listed on stock exchanges.

Figure-4: Merger of Public sector banks 2020

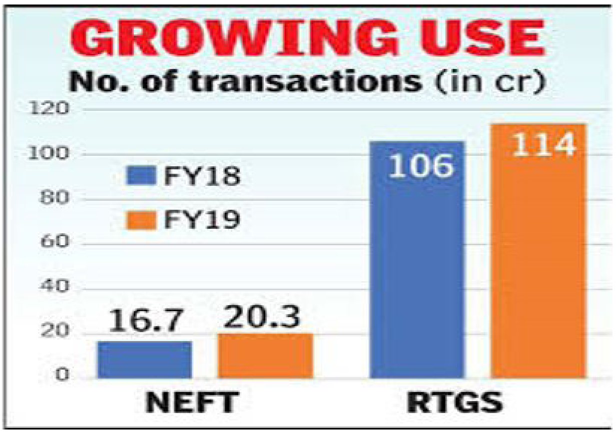
Source- RBI

- Digital Banking- Digital banking refers to the moving from tradition banking to online banking which are deliver through internet to its customers. It is a new concept in the era of electronic banking. In this modern age of technology, it is very difficult for banking industry to work without digitalization. Digital banking help the banks to cut their costs, increase customer satisfaction and increase profitability. It leads to the cashless or paperless economy. Various digital banking products are -:

- Real Time Gross Settlement (RTGS) - RTGS is a fund transfer method in which the money is transfer without any delay in time. The least amount that can be transfer through RTGS is rs two lakh and mostly huge amount of money is transfer through RTGS. RTGS is very reliable and is controlled by the RBI. The transactions that are done through RTGS are very safe. A person can do transactions at any time when they want to do the transactions.

- National Electronic Funds Transfer (NEFT) - NEFT is a payment system which is used by the customers to transfer fund from one bank account to another. There is no minimum amount but there is limit on the maximum amount. So any amount can be transfer from one bank account to another bank account. They are mainly meant for the small and medium range of transactions. The transactions which are done in this are done in batched not in immediate. The transactions can only be done in the working days.

Figure-5: Comparative study of NEFT and RTGS in year 2018-2019



Source- RBI

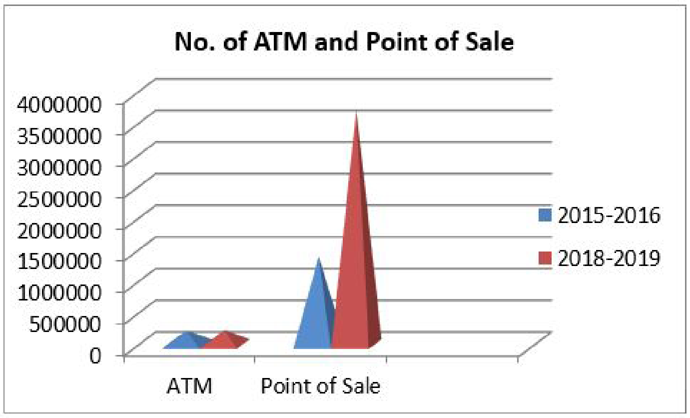
Cheque Truncation System (CTS) - CTS is a cheque clearing system which is handling by the Reserve Bank of India which was commenced in 2010. This help in fastest clearing of cheques. CTS bring the smoothness to all the activities of the cheques processing and clearance of the cheques. CTS provide various benefits to the banks like cost and time savings, cost effectiveness and also enhance the customer services. Even RBI has also asked banks to create a special clearing window for maintaining the government accounts on 31 March 2018.

Electronic KYC- KYC refers to the Know your customer and sometimes also knows as know your client. In KYC the customer's identity and address are verified electronically through Aadhaar. It is a very important element that fights against the financial crises and money laundering and customer identification. Now a day's KYC has become compulsory for a customer while opening an account. If the client fails to meet the minimum requirements of KYC than the banks can refuse to open an account. Immediate Payment Service (IMPS) – IMPS was initiated in 2010 by the NPCI. It is a real time payment service that is available 24*7 and 365 days in a year to their customers. They are also available when there is a public holiday. IMPS provide inter- bank as well as account to account transfer of funds. IMPS are available on multiple platforms such as mobile, internet banking, ATM and branch.

Automated Teller Machine (ATM) - ATM is an automatic teller machine that helps the customers to complete the basic transaction without the help of the banks. This machine consists of two input devices and four output devices. It helps in easy and safe management of the customer money. Even when the banks are closed the person can withdraw money by using its debit card. They can also check the balance of their account and can deposit the money in their account. The parson carrying ATM card can withdraw their money whenever they want to.

Year	ATM	Point of Sale
2015-2016	212061	1385668
2018-2019	221703	3722229

Chart -2: Comparative Study of no. of ATM & Point of sale in 2015-2016 and 2018-2019

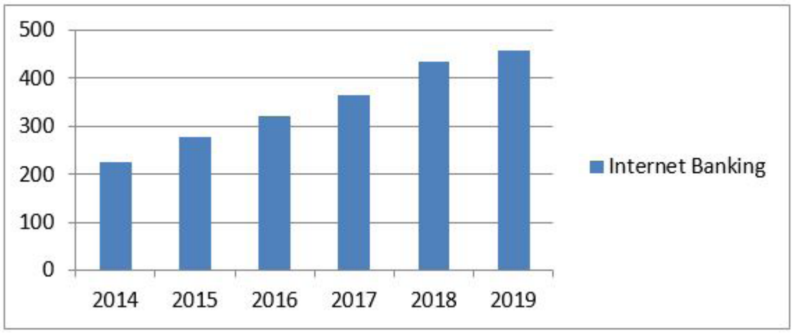


Source-RBI Bulletin

Internet Banking- Internet banking refers to that all the financial banking are conducted through the bank website or laptop or computer. In internet banking funds are transfer through RTGS, NEFT and IMPS. It is one of the most convenient online banking methods. The customers can access their accounts whenever they want that is 24*7. The customers can pay their bills or transfer fund from one account to another account. Internet banking is very easy to use and the person can use it anytime and anywhere whenever they want. It also has made the work of banks and its customers easy and it also attract many new customers towards it.

Years	2014	2015	2016	2017	2018	2019
No. of users in million	226.3	277.4	321.8	365.1	433.2	459

Chart-3: No. of users of Internet banking in 2014-2019

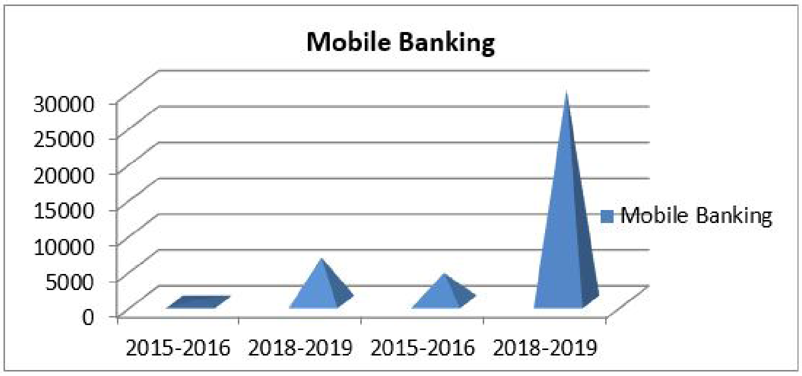


Source- RBI

Mobile Banking- Mobile banking refers to performing the same activities as online banking by using a Smartphone or a laptop. The services that a customer received from mobile banking is paying bills, transfer money, checking their bank account and many more. This banking system is very easy to use online the customer has to login their bank website on their mobile phones. This can be done at any time wherever custom feels to do.

Year	Volume in million	Value in Billions
2015-2016	389.49	4040.91
2018-2019	6200.32	29584.07

Chart-4: Comparative Study of Mobile Banking Volume & Value For the Period 2015-2016 and 2018-2019

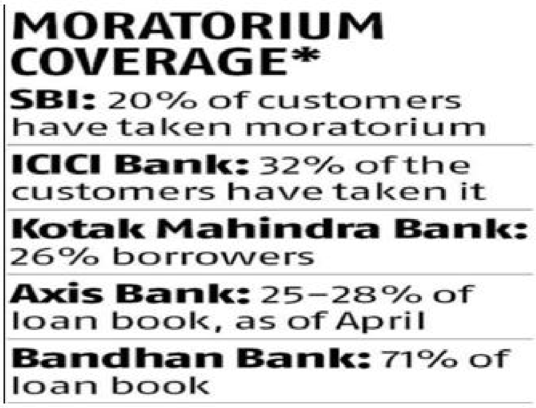


Source- RBI Bulletin

Recent Development in Banking Sector in Post COVID-19

- **Loan Moratorium**- RBI has extended the loan moratorium by three months that is until August 2020. Even RBI has also announced the three months moratorium on payment of all the term loans which were due between March 1, 2020 and March31, 2020 to help the borrowers. They have also allowed lending institutions to convert the accumulated interest on working capital facilities over the deferment period of 6 months. That has to be repaid during the course of financial year. The loan moratorium will reduce the financial burden on the borrower. Initially in the first phase this was done to benefit both the commercial borrowers and retail borrower but it was seen that only the commercial borrowers availed the benefit where as the majority of retail borrowers has not adopted moratorium in the first phase. The extension for another 3 months will help retain borrowers as well as they will retain this facility as they might be retaining their repaying capacity. This loan moratorium is not a loan waiver only the postponed of loan repayment.

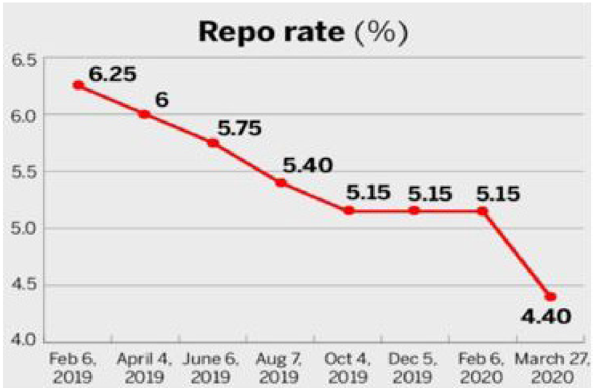
Figure-6: Moratorium Coverage 2020



Source- RBI

- **Repo rate cut down to 4%**- The monetary reserve policy of RBI has announced a fresh set of monetary policy in order to help the Indian economy to overcome fall down of covid-19 pandemic in lockdown. The repo has cut down to 20 bps rate, which brings down the repo rate from 4.4% to 4 %. This reduction in repo rate will bring down the borrowings in the bank and will be expected to give cheaper loan to their customers which can help in the growth in the economy. This was the second time that RBI has deducted the repo rate. It was necessary to cut down the repo rate as due to lockdown our GDP is falling into negative territory and it can lead to the recession for a long period. This rate cut will increase the liquidity cheap loans so, the economy growth can revive.

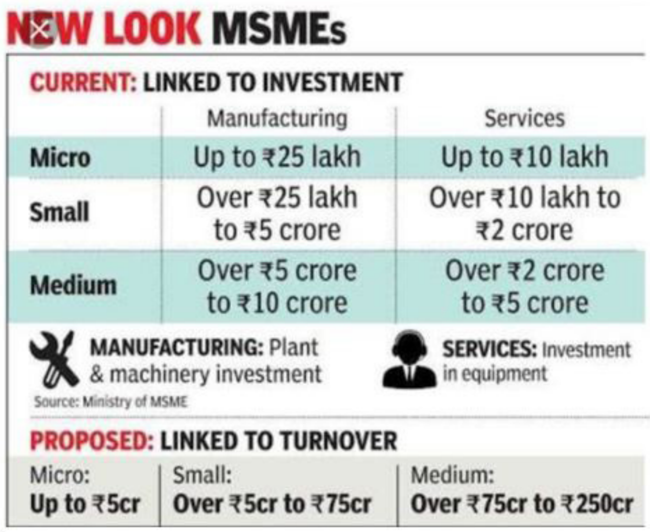
Figure-7: Repo rate done by RBI 2019-2020



Source- RBI

- **Increase in the group exposure limit**- The RBI has taken a step to increase the bank exposure limit of bank loans from existing 25% to 30%. This will allow banks to give more loans to corporate entities and also provide alternative borrowing options for corporate houses which otherwise a struggling to recapitalize from the market.
- **Support for MSME**- Businesses has been hit due to Covid-19 lockdown. The MSME has been the biggest hit due to hit. MSME has faced many problems like low liquidity and lack of workforce. RBI has taken various steps for MSME. RBI has recently intruded Long term repo operations worth Rs 100000 crore to the help the banks to lend the money at cheap interest rates. Even our finance minister has announced the extension of the last date to file the Income Tax Return. The income tax return now can be file till June 30. For the businessman who is into exports can get help from the inventory management as now they can build warehouses at the blocks level. The contractors also got relief as their extension has been done for up to 6 months.

Figure - 8: New MSME Guidelines in 2020


NEW LOOK MSMEs

CURRENT: LINKED TO INVESTMENT

	Manufacturing	Services
Micro	Up to ₹25 lakh	Up to ₹10 lakh
Small	Over ₹25 lakh to ₹5 crore	Over ₹10 lakh to ₹2 crore
Medium	Over ₹5 crore to ₹10 crore	Over ₹2 crore to ₹5 crore

MANUFACTURING: Plant & machinery investment

SERVICES: Investment in equipment

Source: Ministry of MSME

PROPOSED: LINKED TO TURNOVER

Micro:	Small:	Medium:
Up to ₹5cr	Over ₹5cr to ₹75cr	Over ₹75cr to ₹250cr

Source- RBI

Primary Research –

The primary research refers to the research in which the research is conducted by a person or a team and direct information is collected by them. This research can also know as an original work of a person. This research can be quantitative as well as qualitative. The disadvantage of this research is that it takes long time and is include more cost.

Research Design- Casual Research Design for Questionnaire

1. **Sample Design-**

Sample Frame- Database from the filled Questionnaire through Google forms and through personal interview.

Sample Units- Individuals

Sample Size- 150 Members from different age group

Sampling Method- Convenience Sampling is used

2. **Data Collection**- Data collection refers to the systematic approach to gather the information and then measure that information from the variety of sources to get the complete analysis of that area.

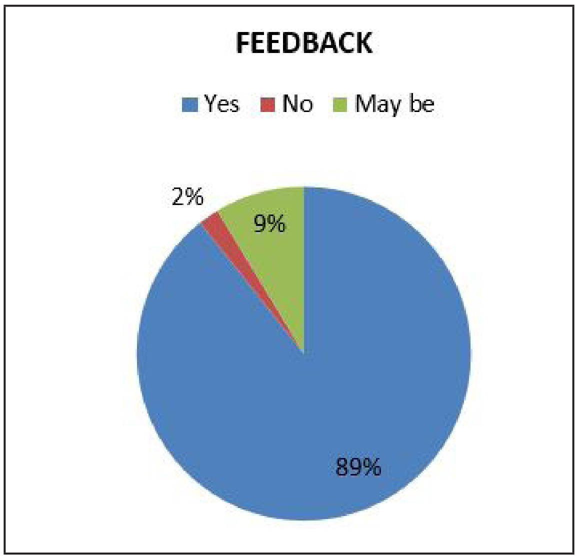
In this project data is collected through Primary and Secondary methods.

The feedback from the people is taken through the questionnaires which was send through Google Forms.

Questionnaire and Data Analysis

Question1 Does digital banking provides more frequency than the traditional banking?

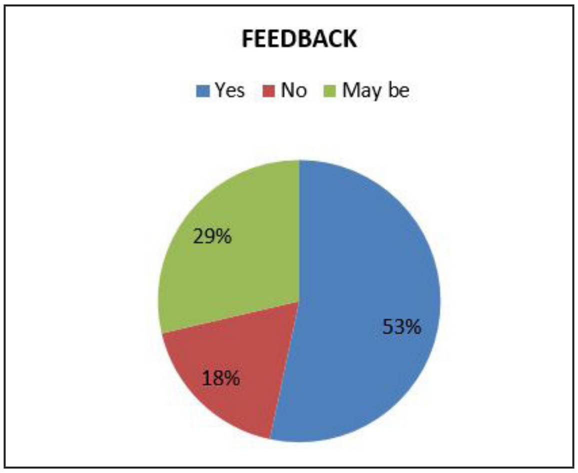
Options	Feedback
1- Yes	134 (89%)
2- No	03 (2%)
3- May be	13 (9 %)
Total	150 (100%)



Out of 150 people majority of the people i.e. 134(89%) people are agree that digital banking provides more frequency than the traditional banking as they are comfortable in doing their banking work through online where as 13(9%) people are not sure whether digital banking provide more frequency than traditional banking and only 3(2%) people think that traditional banking was much better than digital banking as they may have face some issues in the past while using internet banking

Question 2 Do you think that GST has increased the various legal formalities?

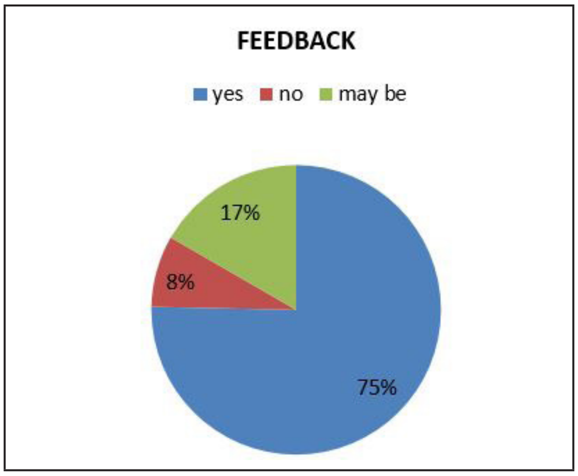
Options	Feedback
1- Yes	80 (53%)
2- No	27 (18%)
3- May be	43 (29%)
Total	150 (100%)



Out of 150 people majority of the people i.e. 80(53%) people think that GST has increased the various legal formalities on them where as 43(29%) people are not sure whether GST has increased the legal formalities on them or not and only 27(18%) people think that GST has not increased the legal formalities.

Question 3 Are you satisfied with the recent changes done by RBI in post covid-19?

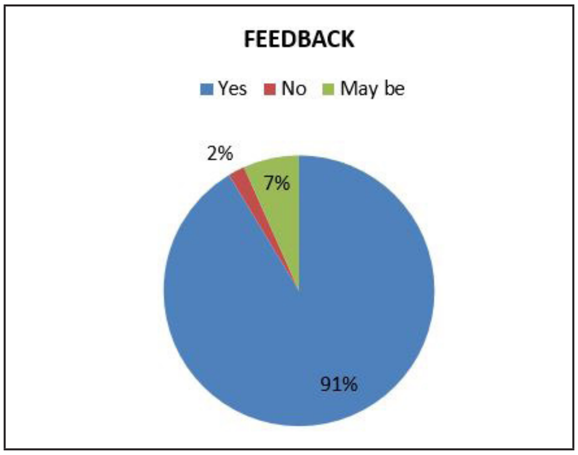
Option	Feedback
1- Yes	72 (75%)
2- No	31 (8%)
3- May be	47 (17%)
Total	150 (100%)



Out of 150 people majority of the people i.e. 72(75%) people are fully satisfied with the changes done by the RBI in post covid-19 as these people get various benefits in their business whereas 47(17%) people may be or may not be satisfied with the recent changes done by the RBI and only 31(8%) people are not satisfied with the recent changed made by the RBI in post COVID-19.

Question 4 Are you satisfied with the working of digital payments such as Paytm and Credit cards?

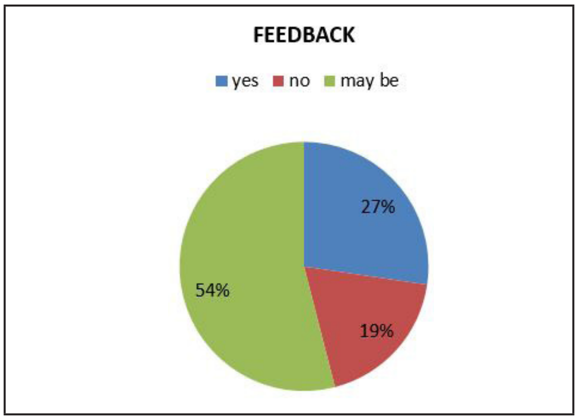
Option	Feedback
1- Yes	137 (91%)
2- No	03 (2%)
3- May be	10 (7%)
Total	150(100%)



Out of the 150 people majority of the people i.e. 137(91%) people are completely satisfied with the working of digital payments such as pay tm and credit cards as it saved their time and cost where as 10(7%) people may be or may not be satisfied with the working of digital payments like paytm and credit cards and only 3(2%) people are not satisfied with the working of these digital payments as it may be possible that they find difficulty in using them.

Question 5 Do you think that the IBC (Insolvency and Bankruptcy regarding) act regarding no fresh insolvency for the next 1 year will be beneficial for banks or restrain?

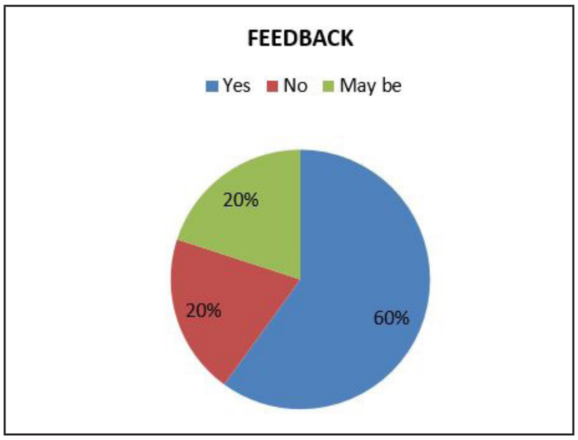
Option	Feedback
1- Yes	41 (27%)
2- No	28 (19%)
3- May be	81 (54%)
Total	150(100%)



Out of 150 people 41(27%) people are agree with the bank decision of IBC act regarding no fresh insolvency for the next 1 year whereas majority of people i.e. 81(54%) people may be or may not be sure about this no fresh insolvency and only 28(19%) people are disagree with the decision of no fresh insolvency for the next 1 year.

Question 6 According to you did GST has increased the burden on the common man and business man?

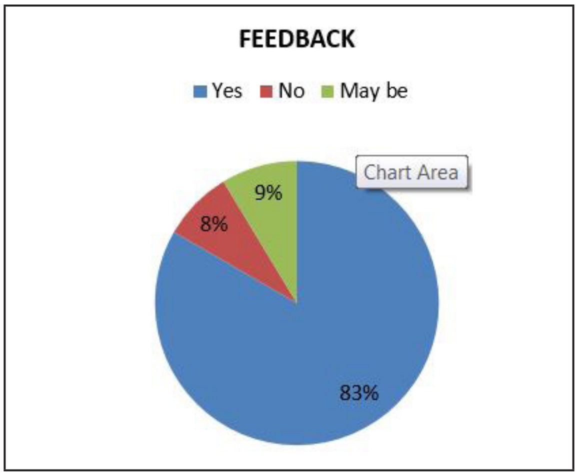
Option	Feedback
1- Yes	90 (60%)
2- No	30 (20%)
3- May be	30 (20%)
Total	150 (100%)



Out of 150 people majority of the people i.e. 90(60%) people agree that GST has increased the burden on them as these people think that now they have to do various legal formalities whereas 30(20%) people think that may be or may not be GST has increased the burden on them and only 30(20%) people disagree that GST has not increased any burden on them.

Question 7 Does online banking does well according to your needs and expectations?

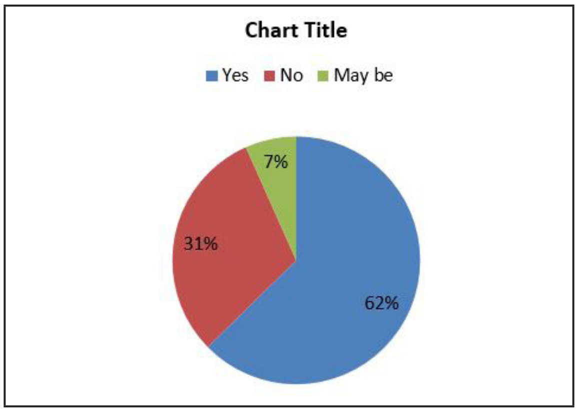
Option	Feedback
1- Yes	125 (83%)
2- No	12 (8%)
3- May be	13 (9%)
Total	150 (100%)



Out of 150 people majority of the people i.e. 125(83%) people think that online banking is doing well according to their needs and expectations as now the people has not to go their bank branch for small transactions again and again whereas 13(9%) people think that may be or may not be online banking is doing well according to their needs and 12 (8%) people think that online banking is not doing well according to their needs and expectations as these people are expecting more from the banks.

Question 8 Have you ever been visited to your bank branch since you are using online banking?

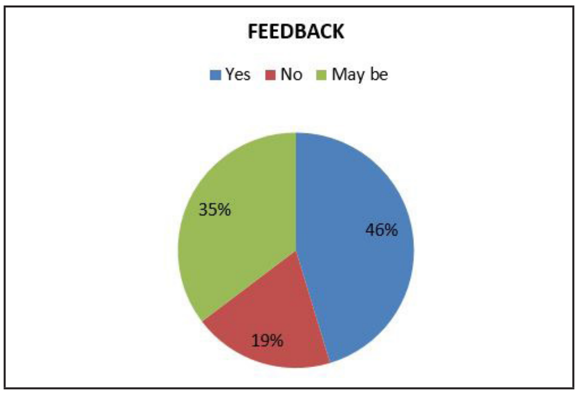
Option	Feedback
1- Yes	**94 (62%)**
2- No	**46 (31%)**
3- May be	**10 (7%)**
Total	**150 (100%)**



Out of 150 people majority of the people i.e. 94(62%) people have visited to their bank branch since they are using online banking whereas 10(7%) people are not sure whether they have ever visited to their bank branch since they are using online banking and 46(31%) people have not visited to their bank branch till now since they are using online banking.

Question 9 Are you satisfied with the new guidelines released by RBI on Loan Moratorium?

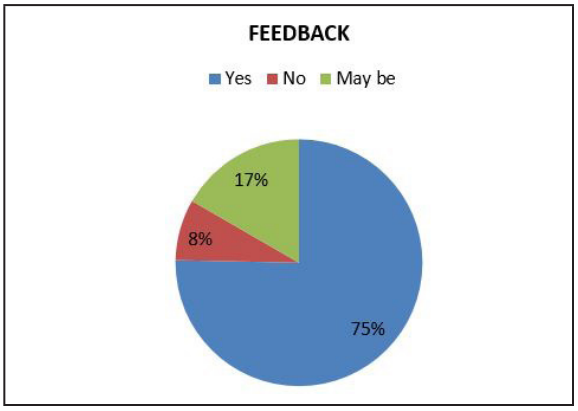
Option	Feedback
1- Yes	68 (46%)
2- No	29 (19%)
3- May be	53 (35%)
Total	150 (100%)



Out of 150 people majority of the people i.e. 68(46%) people are satisfied with the new guidelines released by RBI on loan moratorium as they might not have enough money to repay the banks loans as there is pandemic in the world whereas 53(35%) people may be or may not be satisfied with these guidelines and 29(19%) people are not satisfied with the new guideline released by RBI on Loan Moratorium.

Question 10 Do you think that there should be certain more changes in banking sector according to your needs?

Option	Feedback
1- Yes	113 (75%)
2- No	12 (8%)
3- May be	25 (17%)
Total	150 (100%)



Out of 150 people majority of the people i.e. 113(75%) people want that there should be more changes in the banking sector whereas 25(17%) people are not sure about this and 12(17%) people do not want any changes in the current banking sector as they are satisfied with the current banking system.

Suggestions

1. RBI should extend the Loan Moratorium for the 1 year and allow banks to restructure the loans by relaxing the norms in order to reduce financial burden on borrowers.

2. Banks and government has launched many apps and schemes like "MYAPPS" by HDFC bank, 1% cash back on debit card purchase and many more for the benefit of the people, but majority of the people are not aware of these apps and even they don't have any idea related to these apps. This means that the government and banks has to go a very loan way to make their apps and schemes popular.

3. As now also many people are unaware about the online banking and many people do not know how to do online banking, hence various programmes should be conducted through media, newspapers to guide the people and to aware them about the importance and benefits of digital banking.

4. The commercial banks must be asked for the more schemes of technological up gradation in the MSME units and even some funds should be provided by the banks to these units.

5. Now also customer feels that there is lack of security in online banking transactions as the accounts and transactions can be hacked, hence more security system should be increased to avoid these activities.

6. The bank should extend loan payment period for short term credit facilities by 3-6 months, existing loan while restructuring terms for longer-term instruments.

7. The bank should update their policies, plannings and procedure according to the recent development.

8. The banks which are providing the digital banking services should try to launch the new products and they should also revisit their priorities.

Limitations

1. As there is a pandemic in the world so proper personal interview of the people is not taken, which may not provide the perfect complete picture of recent development in Banking sector and its impact.
2. Moreover covid -19 is a very latest topic, due to which enough research papers are not available on this topic i.e. recent development in banking sector in post Covid-19.
3. Even some of the respondents have not shown their interest in filling the questionnaire as they might hesitate in filling that as they may have lack of knowledge about this topic.
4. This topic required a very depth research whereas here only 150 respondents have been taken so it may not be sufficient for this study.
5. The time period which we have got to do this research is very less.

Conclusion

Today, the Indian Banking sector is very organized and provides various services to their customers. It tries to supply its services in every part of the country whether it is rural area or urban area. The Government of India plays a very important role in the development of banks, as the banks also plays a Vitol role in carrying out the various government programmers'. There are various developments done which shows that our Indian banks are moving and adopting the modern banking system and eliminating the traditional banking system. The changes are done in this sector as there is a huge competition in the world and new technologies are developing day by day due to which are demand of the customers are also changing and increasing. Now the services which are provided by the banks are through online products like automatic teller machines, NEFT, RTGS CBS and many more. Development and adoption of these products are the key for the banking sector for attracting more customers and earning more profit. The technologies offer various opportunities, cost- effective and also provide fast and systematic services to their customers.

Even the primary research which is conducted above in this paper shows that majority of the people are satisfied with the new online banking system and are very happy with the digitalization in this sector. Even the people are adopting the banking products so that their work can be easily done in very less time. Even in this critical situation like pandemic COVID-19 Indian banking sector is trying its best to fulfill its customer needs and demand on time. Various changes are done in post COVID-19 in the banking sector such as loan moratorium, support form MSME and many more. Banks are also reaching to the customers doorsteps to satisfy their customer needs.

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Recent Developments in Motor Insurance & its Impact on Customers

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This study aims at critically reviewing the changes that took place in Motor Insurance and its impact on various stakeholders particularly customers. While conducting the study a questionnaire designed to get response from the general public living in different areas. In this study, the efforts have been made to classify the impact of recent developments in motor insurance industry as 'negative' or 'positive' on the basis of totality of response/ scores of the respondents. The concept and the effect of these developments in the motor insurance policies will also be explained. This paper aims at looking into the matter at hand from the multi perspective – the customer, the insurance company and other stakeholders. This research paper also provides some valuable suggestions and recommendations to strengthen the bond between insurance companies and their customers, which would go a long way in to gain much wider customer base in future.

Keywords: Motor Insurance, Motor Third Party, Own Damage, vehicles, long term motor insurance, Developments & Amendments, Impact, Customer.

Introduction

Recent Developments in Motor Insurance

On July 20 2018, the Supreme Court ordered that third-party insurance cover for new cars be for a period of three years, and five years for two-wheelers. The order would apply to all policies sold from 1st September,2018. The apex court of India directed insurers to offer long-term, third-party covers.

The annual premium rates as well as long-term premium rates for Motor TP policy and two-wheeler policy declared were as follows:

TABLE 1: Premium Rates for Motor TP Policy - Private cars and two-wheelers

Type of Vehicle and Engine Capacity	Annual Third-Party Rates Before (₹)	Long-Term Third -Party Rate Now (₹)
PRIVATE CARS		
Not exceeding 1,000cc	1,850	5,286
Exceeding 1,000cc but not exceeding 1,500cc	2,863	9,534
Exceeding 1,500cc	7,890	21,305
Two-Wheelers		
Not exceeding 75cc	427	1,045
Exceeding 75cc but not exceeding 150cc	720	3,285
Exceeding 150cc but not exceeding 350cc	985	5,453
Exceeding 350cc	2,323	13,034

Afterward the IRDAI also proposed amendments to various existing regulations of the India Motor Tariff.

1) Obligation of Third parties Towards Premium

IRDAI has announced premium rate which updates for compulsory liability insurance for the 2019-2020 fiscal year and has been in active since June16, 2019. For the first time, the premium liability of electric and classic cars was introduced, with 15% and 50% discounts on premium passenger cars.

2) Transfer of Vehicles

When selling or moving a vehicle, the instructions are used in accordance with the common regulations of the national High ways of India. The new owner can either take out another liability insurance or cancel the current liability of TP but must provide evidence of new insurance coverage to the previous insurance company.

3) Circular Announcement

On October 16, 2019, the main course of the insurance announcement was issued based on the norms governing insurance ads. That is, MISPs (Motor Insurance Service Providers) have to ensure that all communications with the owners or the public concerning car insurance products or similar ads made to solicit insurance business must comply with the criteria set out in the master circular.

4) Linkage of Traffic Violations to Premium

IRDAI has set up a task force which will implement a system to access each vehicle's traffic violation data – for linking motor insurance premium accordingly.

5) Claim for Compensation

IRDAI has now advised all the non-life insurers to cancel the RC of all vehicles involved in loss of total damage to avoid documentation from such destroyed vehicles being forged to provide new identity to stolen vehicles.

Motor Vehicle Amendment Act (2019)

Motor Vehicles (Amendment) Act 2019 is being implemented in the country since September 1, 2019. This new act has increased fine for many offence to check the road accidents and improve the road safety in the country. The revisions of this act are as follows:

- A special road accident fund has been set up to provide road insurance to users. It is also used to treat heirs and victims in the event of death.
- The insurance company must submit the offer to the complainant for the accident within 30 days of the submission of the claim. Also, if the offer gets accepted, the payment should be made within 30 days.
- If the driver does not have a driver's license or the insured has not paid the premium, the insurance company is entitled to waive the claim for TP compensation.
- Insurers must supply cashless medication to road accident victims.

Here are 10 IRDAI recommendations which may have some impact on the customers and other stakeholders:

1) Calculation of sum insured for personal cars made easier.

The proposal suggests that, "For any new car which is under 3 years of age, the sum insured must be calculated on the basis of :

- the on-road vehicle price of the car
- including the cost of all components installed on the car by the manufacturer; and
- the road tax and registration number.

According to the recommendations, sum insured for the vehicles expiring 3-yr policy term will be subjected to depreciation between 40 to 60 percent. After 8yrs, the amount of sum-insured and depreciation will be based on the agreement which was mutually decided between the insurance company and the insured.

It simply means that the value insured will be same for 3 years for the new cars and no depreciation will be applied thereon. It further implies that the policyholder has to pay premiums for the 2nd & 3rd year which will be higher. Although, it will be profitable for him in case of a total loss. Also, in case of any larceny, the policyholder will be able to get reinstatement of the vehicle insured with a new vehicle of similar make, model, variant, colour, etc.

2) Fewer complications in the event of OD policy renewal

According to this, the expiry of the standalone OD cover will coincide with the expiry of the liability policy. It means that if you buy OD cover later on but not along with Third party cover, the issuer will issue the OD policy on pro-rata basis to ensure that the OD policy's expiry doesn't outpace the TP policy.

This will simplify the process of renewal of motor insurance through which the insured can now renew multiple policies at once instead of renewing different types of motor insurance policies with different expiry dates for the similar vehicle.

3) Premium amount will be based on your driving habits

The regulator consulted the Insurance Information Bureau of India (IIBI) to set up and manage a central data warehouse, as it is possible to obtain data from various sources to create a joint team.

From now on, your driving habits and patterns will be the determining factors for the policy premium amount. It is also called as "Pay as You Drive" scheme. According to this, the premium amount will not be supported by the IDV of the vehicle or its model, make, engine capacity, etc.

4) Standardised grid for no claims bonus (NCB)

IRDAI has counselled a standardised NCB grid for long-period motor insurance policies.

NCB is offered only on Own Damage policy cover. It means if you don't request any claim, the NCB can be earned ranging from 20% to 50%. However, your NCB will be lost if you opt for longer-term comprehensive policy.

5) Surrender Registration Certificate (RC) to induce stealing claim

As per this amendment, the Registration Certificate (RC) of the vehicle should be revoked or cancelled in all cases of total / probable loss and theft claims. Also, the claim will be resolved solely once the cancelled RC is surrendered by the insured.

This, coupled with the Motor vehicle act fines/penalties, will make it more troublesome for fraudsters / blackmailers to work on stolen cars. Further, this will eliminate the chance of taken automobiles to find an area back on the roads to a considerable length. Consequently, this may facilitate cut back losses for insurers and within the end of the day, can see the profit return to policyholders in the shape of reduced premiums."

6) Mandatory Deductibles can currently be customary Deductibles

The working group recommended renaming 'compulsory deductibles' as 'standard deductibles'. Additionally, it has recommended that there shall be no relinquishing of the quality deductibles and has instructed a revised deductible ruling.

According to this, the deductible can get connected to the vehicle's worth that may be an honest valuation mechanism. People who tend to drive carelessly are bound to pay more such deductibles at the time of taking the claim. Hence, these deductibles reduce uncertainty between policies. Thus, it further results in promoting concerned driving to an extent.

7) Vehicle age-based depreciation rule for claim settlement

According to this guideline, depreciation shall be charged on the basis of vehicle's age to take away all the uncertainty and subjectivity in claim settlement.

Old rules of depreciation for varied parts of the automobile tend to confuse the customer. As per the new rules of depreciation, a typical grid has been planned for depreciation on all components of the vehicle (in case of partial losses) which can be supported by the age of the vehicle and consequently, the rate of depreciation which will be charged at the event of subsidence of the claim. The standardization of depreciation calculation at the time of claim settlement goes to get rid of several complexities from the merchandise additionally.

8) Passengers' Insurance

The IRDAI has counselled that all the occupants traveling in motorcars shall have Rs 25,000 medical expenses coverage arising out of an accident to the insured vehicle covered under the fundamental policy and correct premium for this shall be charged by the insurers.

It is continuously nice to own such coverage however, it'll find yourself creating the vehicle owner's motor insurance costlier. Earlier there was no coverage for the passengers traveling in the vehicle within the base policy. Although this could increase the price of insurance, it is believed that, vehicle owners will benefit from this provision.

9) Named driver policy

According to this guideline issued by IRDAI, the policy will not provide any coverage to any of the individual residing in insured's house until his/her name is listed in the policy as 'Named Driver'.

This will lead to reduction in the amount of premium due to the reduced risk as only specific qualified drivers will only be using the vehicle.

10) Separate third-liability insurance for EVs

According to this, there is a separate third-liability insurance was issued for electric vehicles (EVs)

To promote increase in sale of these vehicles, the TP motor insurance premium for EVs will be issued at a discount of 15%.

Impact of Amendments in Motor Insurance on Insurance Industry

- There is a rise in sale of Motor insurance because of new rules imposed under Motor Vehicles Act, which proves to be beneficial for insurers.
- According to some insurers, it is a positive move as many customers forget to renew their policy after the initial years. Thus, with the compliance of these rules, there will be more certainty in terms of price and convenience.
- Moreover, the presence of non-insured vehicles in the market will be drastically reduced.

Literature Review

According to Litman (2010) Vehicle insurance is generally considered a fixed cost with respect to vehicle use. A driver has to look out on financial loss if his car is impaired. Similarly, Anderson and Brown (2005) found there exists a greater possibility of economic risk with reference to probable damages that a driver might have to pay in case, if he accidentally injures any third party in a car accident and for which he is at a fault. B.R. Singh (2018) in his article explained all the developments and amendments that has recently been happened in Motor Insurance Industry. He referred to the various measures taken by IRDAI to introduce technological innovations in the field of motor insurance. According to him, IRDAI provided the necessary transparency regarding the coverage of third-part liability cover on the occasion of transport of vehicles as well as claims for total loss. S. K Gamage, S. L Perera, (2019), "Determinants of Customer Satisfaction in Motor Insurance", analysed the factors and impact of customer satisfaction and behavioural intent of customers to continue in motor insurance industry. According to him, it is dominant to verify the factors of service quality of motor insurance products and also to scrutinize the impact of satisfaction consumers' behaviour intentions.

Objectives of The Study

The main objectives of this paper are:

- To understand the developments and amendments that have recently taken place in Motor Insurance Industry,
- To focus on the impact of recent developments on customers and other stakeholders.

Research Design and Methodology

The nature of this study is descriptive and exploratory, wherein relevant data have been collected on secondary basis from various sources such as published research papers in national and international journals, published reports, newspapers and websites. From the study, the findings identified from the responses of individuals, were based on Likert Scale. Scores were calculated for each respondent to know the overall impact from the amendments on customers. Data entry and cleaning were carried out using Excel charts and functions for the analysis and interpretation of results.

Data Analysis and Interpretations

Variables Identification

- The dependent variable of this study is a categorical dichotomous variable i.e. "Impact On Customers" which has two binary outcomes – if the impact is "negative on customers" () coded as 0 and if the impact is "positive on customers" () coded as 1. The predictor variables consider: compulsory TP cover, personal accident cover, rules of fines and penalties, sum insured to Rs.15Lakhs, pay as you drive scheme, new premium rates for motor TP policy, standalone OD policy on pro-rata basis, cancelled RC in total loss and theft claims, named driver policy and amendments are favourable or not.
- The dependent variable i.e. "Impact on Customers" is recorded based on the total scores of respondents. The total number of questions are 10, out of which 7 are 5-scale Likert type and 3 are Yes-No type. Likert scale questions are coded as '1' being "strongly disagree" and '5' being "strongly agree" whereas Yes-No are coded as '5'='Yes' and '1'='No'. This type of coding is done so that all the questions have same weightage in determining the total score on the index. (Grandjean, 2017)
- The total score is (7x5) +(3x5) =50. Now, the dependent variable is dichotomous. Thus, 50/2=25. Based on this, the overall impact is recoded. Any respondent who scored more than 25 is considered to have positive impact whereas if the score is less than 25, he/she is considered to have negative impact due to the amendments in motor insurance.

Results

- Results show that out of 200 respondents, 173 people are positively impacted, only 27 people are negatively impacted as a whole, due to the recent amendments in motor insurance.

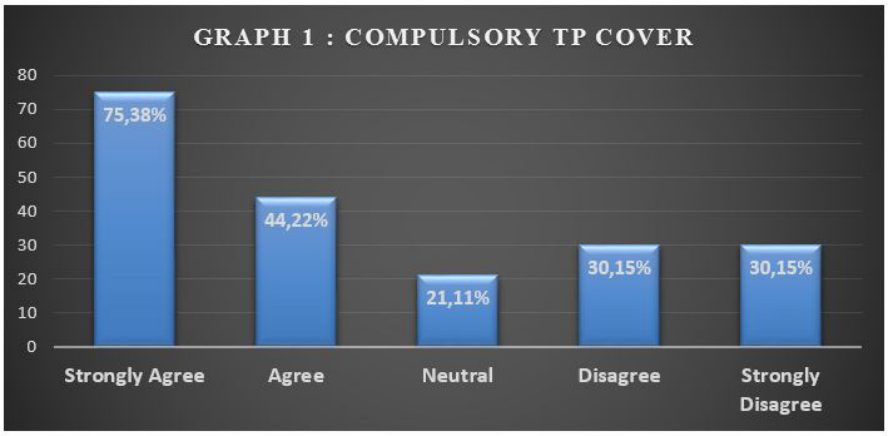
  [See Annexure1]

Results and Discussion

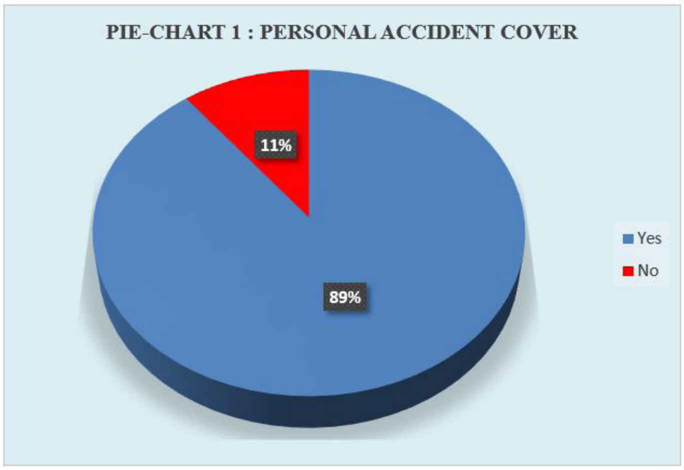
Following are the interpretations/analysis of each question asked:

1. Out of 200 respondents surveyed, 75 (38%) people strongly agreed and 44 (22%) people agrees on the order of Supreme Court for Compulsory Third-Party Insurance cover for new cars for a period of 3 years and 5 years for two-wheeler, 30(15%) amongst them voted for strongly disagree.

We can see that majority of people agrees to this amendment.

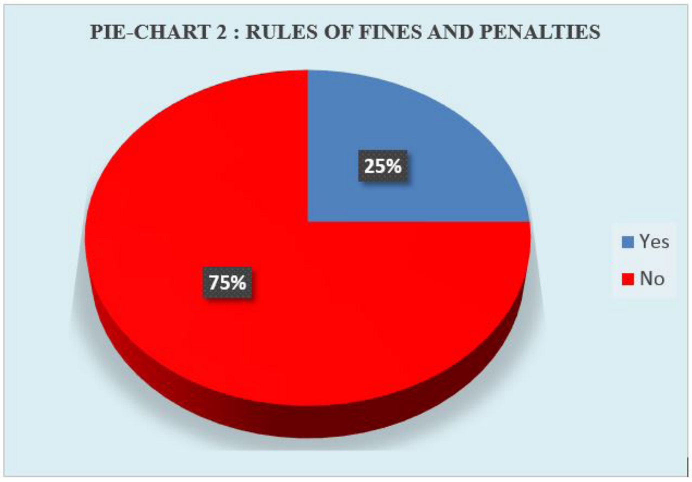


2. According to 89% of the people, Personal Accident coverage under Comprehensive Motor Insurance Policy is beneficial for them whereas only 11% thinks the opposite.



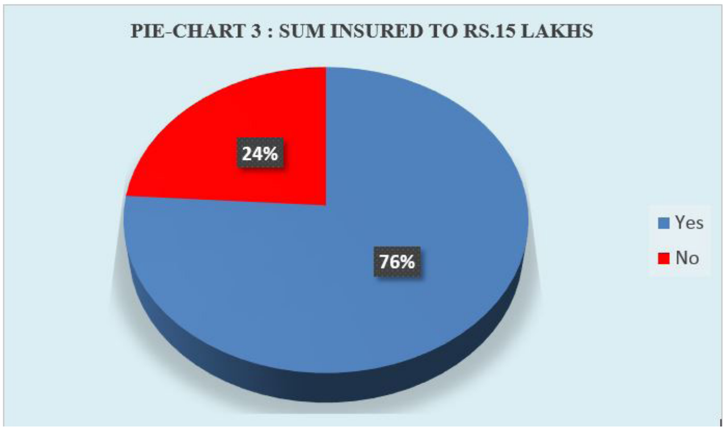
3. 75% of the total people are not satisfied with the rules of fines and penalties which have recently been imposed under Motor Vehicles Act,2019. Only 25% of the people are satisfied.

   Thus, major portion of the people in the sample are not satisfied with the heavy fines and penalties imposed.



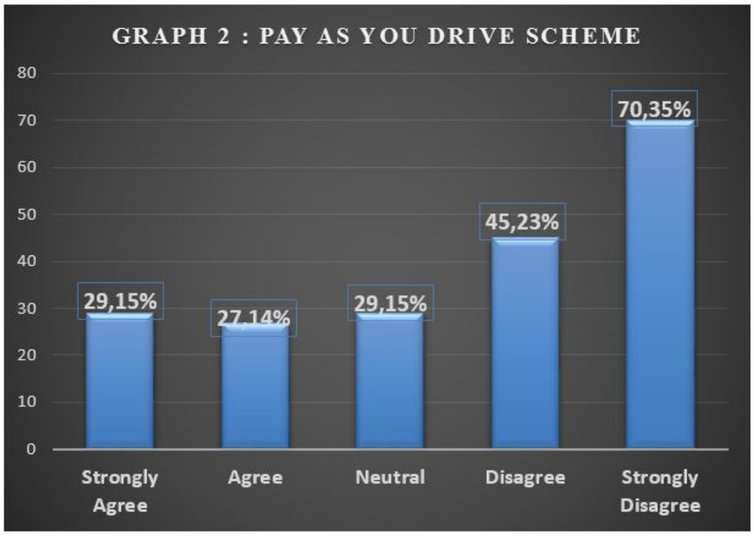
4. For 76% of the people, guidelines issued by IRDAI to increase sum insured to Rs.15 Lakhs under compulsory accident cover is profitable.

   Just 24% of the total think that it was not profitable for them.

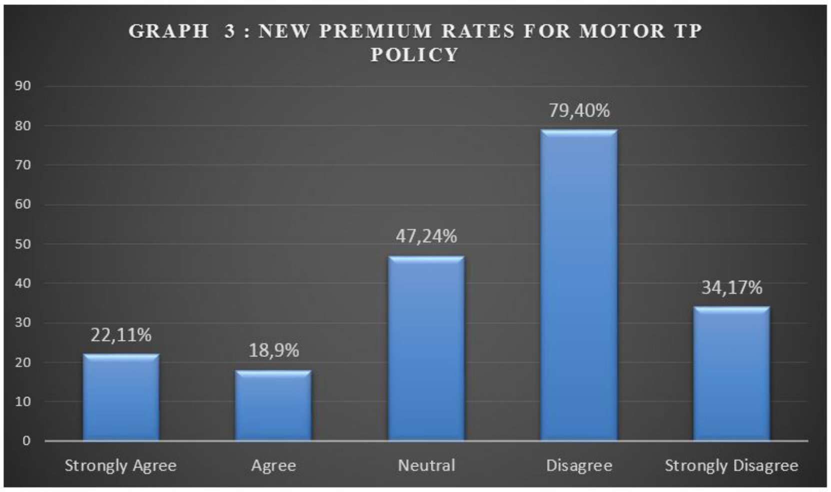


5. As the above bar graph depicts, 70 (35%) people strongly disagree and 45(23%) people disagree with "Pay as you drive" scheme. Out of 200 people, only 56(29%) people agrees with the scheme proposed to check the driving habits of people.

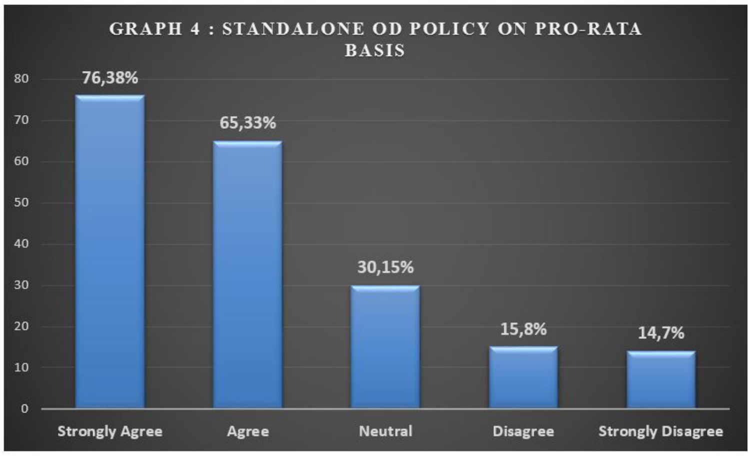
   Thus, most of the people do not agree with this scheme.



6. Out of 200, 79 (40%) of the people think that the new premium rates proposed for Motor TP Policy for private cars and two-wheelers are not appropriate for them. 47 (24%) of the people have neutral approach whereas 34 (17%) strongly disagree for new premium rates. Thus, majority of the people are not satisfied with the new premium rates.

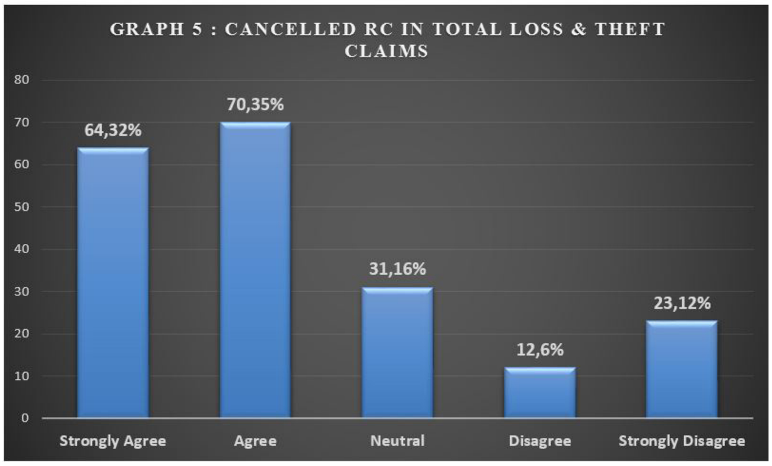


7. As seen in the above depicted bar chart, majority of the people (i.e. 76 out of 200 strongly agrees and 65 people agrees) think that issuance of OD policy on pro-rata basis is advantageous for them. Only a proportionate people think the opposite of the same.

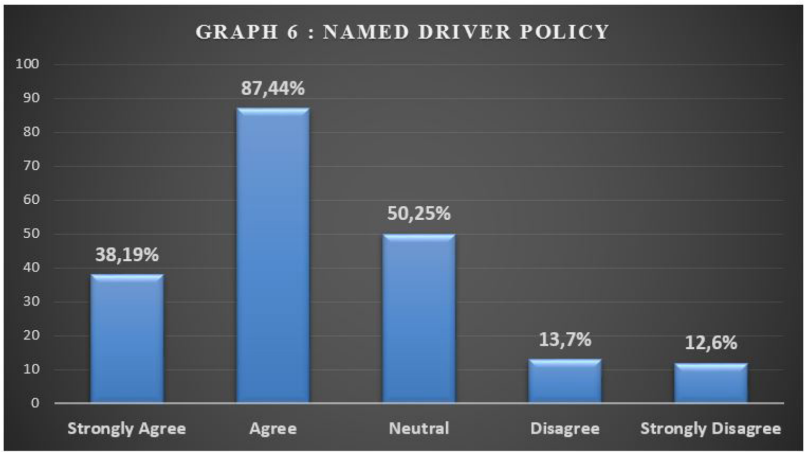


8. As evident by the bar graph, majority of the people agrees that the claim which will be settled only after the cancelled RC is surrendered in cases of Total Loss & Theft Claims is a productive move for them.

35 (18%) people out of 200 do not take it as a productive move.

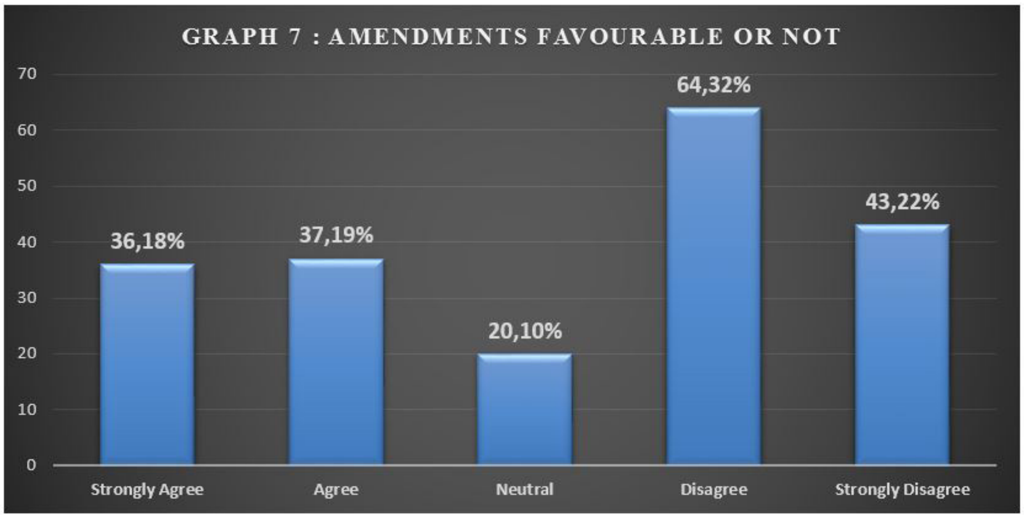


9. The "Named Driver Policy" which provides coverage only for the drivers whose names are there on the policy and not to any other person driving the vehicle is effective for 125(63%) of the people. Only 25(13%) of the total disagree to this development whereas 50(25%) are neutral in opinion.



10. According to 64(32%) people who disagree and 43(22%) people who strongly disagree, the amendments that have recently been introduced in Motor Insurance Industry are not favourable. 20 (10%) people have neutral approach whereas 73 (37%) people think that the amendments were favourable for them.

    Majority of people think that amendments are not convenient for them.



Recommendations

- As per findings of this research and overall study on the topic, it was found that most of the people do not have adequate knowledge regarding the various amendments and schemes that have been introduced over the past few years in the motor insurance sector. At the time of conducting the survey, most of the people were unaware and wanted to know about the "Pay as You Drive" scheme as well as the new guidelines for the standalone OD policy, etc. The main reason for this is no dispersion of information and knowledge to the general public. Laws are only effective if public is made aware of the reasons and benefits behind. Ways should be implemented to make people aware of the changes that have taken place and the reasons of doing so in appropriate methods. This will help in gaining their opinions and understanding their requirements to have their full cooperation on the matter.
- A new plan should be devised for traffic education, road safety, engineering and enforcement in rural areas as well.
- Timely surveys should be conducted to seek the viewpoints of the customers and proper measures should be taken accordingly. If majority of people seems to be not satisfied with a certain scheme or act, changes should be made thereafter.
- Social media platforms can be effectively utilized for this purpose. Since internet access is practically available to all now, the insurers can use it to their benefit to capture the audience across varying ranges via a single tool. Online forums can be of great help where discussions and conversations in the form of posted messages can be held. People can discuss about the developments as well as their outlook towards these changes. This will ultimately help in the future application as new ideas from the people can be of use.
- Moreover, to reduce Hit & Run cases, people saving the accident victim should be rewarded for their humanistic act.
- Compulsory long-term Third-Party insurance which is 3 years for 4-wheelers and 5 years for 2-wheelers should be withdrawn by IRDAI as it seems to be incredibly challenging and also unaffordable for majority of vehicle-owners.
- IRDAI should provide options to their customers to select between one-year and multi-year OD plans.

Conclusion

The paper studies the impact of recent amendments of Motor Insurance on the general public. Data was collected from 200 individuals of different age groups and qualifications and accordingly the report is prepared. During the research, the respondents' positive response helped to do the research effectively. This research helped us to give an insight on the various developments and amendments that has been recently occurred in Motor Insurance Industry of India and its consecutive impact from two frames of reference – one from the customer's perspective and the other from the insurer's, but the customers being the main focal point of the study.

Motor Insurance has a long way to go as more developments in the implementation of various guidelines and acts need attention to cater customer satisfaction in this field.

As suggested by the sample into consideration, the overall impact from the implementation of amendments on the people is seen to be as positive. Out of 200 respondents, 173 are satisfied with the changes as a whole and the remaining 23 are still not satisfied.

If we observe the amendments individually, we can see that few changes have negative impact on the people. This is due to the heavy fines and penalties which have been imposed for gross violations of traffic rules, the scheme implemented to check driving habits of the people namely "Pay as you Drive" scheme and the new premium rates for the motor TP policy.

According to this research, people still lack a lot of awareness about the changes happening in Insurance sector as many people at the time of taking the survey, were not aware of certain guidelines and schemes. Insurance companies should use more innovative approaches to promote these developments over social media to gain customer's perception as well as acknowledgement and accordingly issue guidelines to fulfil the overall objective.

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A Case Study of Credit Risk and Challenges in Repayment of Mudra Loan

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Pradhan Mantri Mudra Yojana (PMMY) is a lead plan of Government of India to “uphold the unfunded” via conveying such endeavors to the proper cash related structure and loosening up moderate credit to them. It engages a little borrower to get from all Public Sector Banks, for instance, PSU Banks, Regional Rural Banks and Cooperative Banks, Private Sector Banks, Foreign Banks, Micro Finance Institutions (MFI) and Non-Banking Finance Companies (NBFC) for progresses up to Rs 10 lakh for non-farm pay making works out. The arrangement was moved on eighth April, 2015 by the fair Prime Minister. This paper clarifies the significant highlights, achievement, difficulties and credit hazard being looked by the brokers in execution of PMMY

Key Words: Uphold the unfunded, Advances up to Rs. 10 lakhs, MFIs, NBFCs. PMMY

Introduction

The Micro Units Development and Refinance Agency Ltd.(Mudra) was set up in 2015 under the Pradhan Mantri Mudra Yojana(PMMY) to help create and renegotiate the ‘non-corporate business’ area by supporting account organizations that loan to miniature/private venture substances occupied with assembling, exchanging and administration exercises. It is pointed toward utilizing miniature account as a financial improvement instrument that assists with turning out revenue creating occasions to the individuals at the lower part of the pyramid, focusing on limited scope fabricating units, retailers, products of the soil sellers, truck and cabbies, food administration units, craftsmans and food processors.

Attributable to the significant level of NPAs in this fragment, concerns have been raised over MUDRA turning into the possible hotspot for the following terrible credit emergency. “MUDRA is a valid example. While a particularly monstrous push would have lifted numerous recipients out of neediness, there has been some worry at the developing degree of non-performing resources among these borrowers,” said MK Jain, representative legislative leader of RBI. “Banks need to zero in on reimbursement limit at the evaluation stage and screen the credits through their life cycle significantly more intently.” MUDRA advances are given with no insurance. The RBI’s concern is likewise on the grounds that a panel headed by previous Securities and Exchange Board of India Chairman, Mr. UK Sinha recommended multiplying the security free advance cutoff to Rs. 20 lakhs. The proposals have not been acknowledged by the public authority yet, yet whenever acknowledged, they may add to the difficulty.

Objectives of The Study

1. To understand the features and importance of Pradhan Mantri Mudra Yojana(PMMY).
2. To analyze the performance of Mudra Loan by Public Sector Bank Vs Private Sector Banks
3. To identify the challenges and issue faced by the banks in successful implementation of PMMY scheme
4. To study the credit and various potential risk involved in PMMY scheme and suggest solution for preventing them into NPA.

Research Methdology

Secondary Data was used for research methodology by studying various newspapers articles related to Mudra Loan Schemes, banking websites, journals, research papers and official website https://www.pradhanmantriyojana.co.in/mudra-loan-bank-yojna-apply/ .

Average Loan Size in Mudra

Advances under the MUDRA conspire are dispersed under three heads (Shishu, Kishore and Tarun), beginning from advances up to Rs. 50,000 and going up to Rs.10 lakhs. About Rs.2.53 lakh crore had been endorsed for about 4.81 crore PMMY credits under each of the three heads in the monetary year of 2017-18. The normal size of an authorized credit remained at Rs, 52,706 for the year. The State Bank of India as of late said it had dispensed Rs. 28,556 crores under the PMMY plot in FY18. Non-performing resources emerging out of this plan is about 5.2% for India's biggest bank, a figure that the bank sees as being under "satisfactory cutoff points". The site committed to PMMY doesn't demonstrate the quantum of advances that have soured or subtleties of assortments. In May, the public authority said a sum of Rs. 6 lakh crore had been dispensed to 12 crore recipients under the MUDRA conspire since it's origin in 2015. Of these, 3.25 crore were first-time business visionaries and 9 crore borrowers were ladies.

Facility for on Application of Mudra Loan

Mudra Loan under PMMY can be availed online or offline by contacting the eligible lenders, such as Private Sector Banks, NBFCs, Commercial and Co-operative banks, small finances banks, Regional Rural Banks(RRBs) and MFIs.

Interested applicants can apply for Mudra loan online by visiting the official website of any bank which is eligible to offer Mudra loan by RBI, by following the following simple steps: -

STEP 1- Download the loan application from the bank's official website.

STEP 2- Fill the application form with the required details.

STEP 3- Submit the application form along with all the required documents.

STEP 4- Wait for the bank's representative to call and further proceed with the loan formalities from the desired bank.

STEP 5- Once the loan application form and attached documents are processed and verified, loan shall be approved and further disbursed by the bank.

Borrowers can also now file online application for Mudra Loans on Udyamimitra portal(www.udyamimitra.in).

As directed by RBI, only 29 banks are eligible to offer the Mudra Loan to their customers. They are: -

Allahabad Bank	Andhra Bank	Axis Bank	Bank of Baroda
Bank of India	Bank of Maharashtra	Canara Bank	Central Bank of India
Corporation Bank	Dena Bank	Federal Bank	HDFC Bank
ICICI Bank	IDBI Bank	Indian Bank	Indian Overseas Bank
J&K Bank	Karnataka Bank	Kotak Mahindra Bank	Oriental Bank of Commerce
Punjab and Sind Bank	Punjab National Bank	Saraswat Bank	State Bank of India
Syndicate Bank	Tamilnad Mercantile Bank	UCO Bank	Union Bank of India
United Bank of India			

Performance on Mudra Loan: Psbs v/s Private Banks

In September 2018, previous Reserve Bank of India Governor, Mr. Raghuram Rajan had hailed the potential acknowledge hazard plans, for example, Pradhan Mantri Mudra Yojana(PMMY), prominently known as Mudra plot. In a note to the government administrators, Dr. Rajan may have been the first to feature these dangers, yet he isn't the one and only one.

Previous Central Bank Governor Mr. Urjit Patel, in his first open comments in the wake of leaving Mint Road, cautioned the public authority in June this year against pushing Public Sector Banks to over loan and siphon prepare and support favored areas, expressing that doing so would prompt higher awful credits and financial shortfall. He had said in his introduction at Stanford's yearly meeting India Economic Policy on June 3-4, "The Union Budget typically has declaration of 'credit financial plans' for the benefit of banks. These are generally for semi monetary reasons, most as of late the Mudra plot for MSMEs".

At that point, in July, Governor Mr. Shaktikanta Das in a gathering with the state-run bank bosses had informed them regarding helpless credit evaluations and high. extent of non-performing credits in Mudra plot. In any case, every one of these alerts appear to have failed to attract anyone's attention.

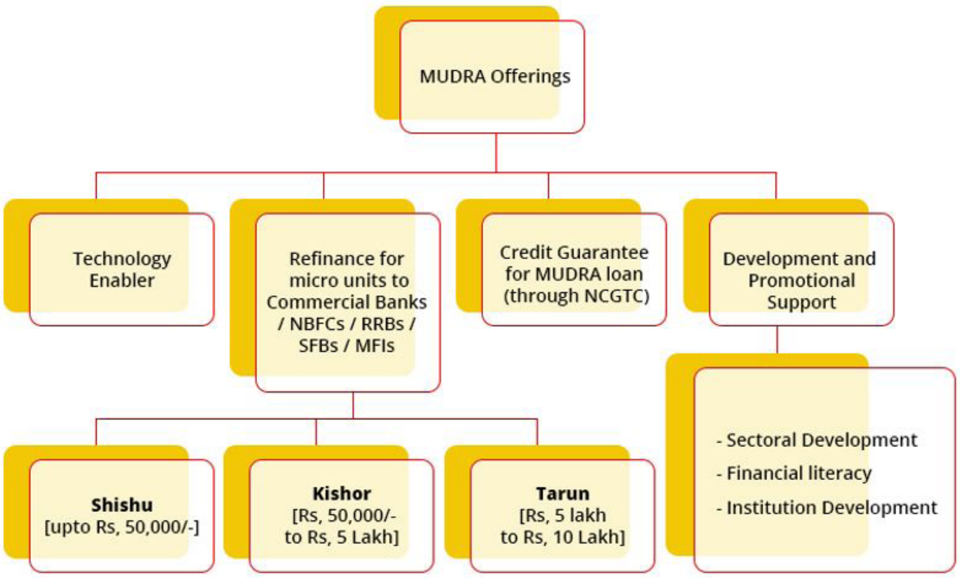

Figure 1: MUDRA Loans Offerings; Source: Paisabazar .com

Challenges And Issues

Poor Underwriting

Indeed, even before, push by the public authority, unpredictable loaning, poor guaranteeing principles and need to meet targets have prompted banks taking helpless business choices. "I don't think private area banks are experiencing difficulty with Mudra advances. In the event that you have better guaranteeing, you won't face such issues." Mr. . Amitabh Chaudhry, MD, Axis Bank. Pivot Bank has a Mudra credit arrangement of around '5,500 crore with a wrongdoing of 60 bps. Yet, state-run banks feel that separated from solid credit disbursal guidelines, ideal rollover of receivables and the condition of the SME business are additionally key components. "In the event that we take care at the phase of the ID of the borrower, I don't see that the space will hurl curiously high terrible obligation. On the off chance that installment from huge public and private area elements moves through, if these installment delays are diminished, the issues of the borrowers could be effectively arranged," says Karnam Sekar, MD, Indian Overseas Bank. "In the event that the receivables, which are relied upon to come in 30-90 days come in 200-270 days, it has a gigantic conveying cost; that is the fundamental issue."

The rush to meet targets

According to information accessible with the Ministry of Finance, toward the finish of FY19, a sum of Rs 3.11 lakh crore was dispensed under the MUDRA plot. While Rs 1.3 lakh crore was dispensed under the Shishu plot, Rs 99,868 crore was given under the Kishore plan and Rs 72,291 crore under the Tarun conspire. In the last three financial years, the aggregate sum dispensed under the plan has been Rs 7.33 lakh crore. The Center had set yearly credit focuses for the financial business under MUDRA. “The public authority should zero in on wellsprings of the following emergency, not simply the last one,” Raghuram Rajan.”In specific, the public authority should cease from setting aspiring credit targets or deferring advances. Credit targets are here and there accomplished by surrendering proper due perseverance, establishing the climate for future NPAs. Both MUDRA advances and the Kisan Credit Card, while mainstream, must be analyzed all the more intently for potential credit hazards.”

Repayment of loan

MUDRA advances are looked for by entrepreneurs really looking for development and financiers dispense them with an eye on monetary turn of events, guaranteeing reimbursement is as yet a test. To begin with, these advances are unstable an insurance that could ensure the interests of the bank isn’t needed, except if a resource that is bought would itself be able to fill in as guarantee. The plan is intended for the individuals who need modest quantities, yet don’t approach such assets, however the very idea of the matter of such borrowers is vulnerable to unpredictability and yearly cycles, also the vagrant methods of some entrepreneurs, for example, vegetable sellers. They may pick one area for their business environment on a day, and another somewhere else in their city the following day. Further, the public financial framework may not be staffed for work this may involve. With regards to assortment, bank staff may decide to follow one advance with exceptional of Rs.10 lakhs, for instance, as opposed to 10 credits of Rs.1 lakh each.

Rating Agencies Views on Risk Management in PMMY

Pradhan Mantri Mudra Yojana(PMMY) could be turning destructive, rating offices and investors stated, making concern loan specialists with openness to this getting portion that falls in a classification fitting the bill for need admittance to reserves. Mudra advances are little ticket propels dispensed to elements or people under the little and medium endeavors class. These advances are focused to improve the working capital access and bring the generally under banked SME area under the conventional credit structure. These advances are unstable, frequently without security and lower valued to diminish the entrance boundary since most candidates are first-time borrowers and with no record of loan repayment. Rating organizations state wrongdoings in this fragment are higher for Public Sector Banks than Private Sector Banks, given the attention on need loaning focuses at the previous arrangement of lenders.Indian banks should obligatorily advance 40% of their advances to classifications assigned as need. Most Private Sector Banks utilize the non-banking financing course to meet the objectives.

“Despite the fact that the NPAs are high in all openings, private banks have been more mindful in their loaning,” said Mr. Prakash Agarwal, chief and head of monetary foundations, India Ratings, “PSBs have target loaning orders; thus there is restricted mobility on controlling the resource quality while looking after openness.” RBI’s 90-day advance rebuilding arrangement, which permits non-grouping of defaults as NPAs for credits of ticket-size not as much as Rs 25 crore, may let these wrongdoings ponder less advance books, yet spikes will be clear once this arrangement closes in March 2020, Agarwal said. SME advances under Rs 10 lakh dispensed by the banks can be renegotiated in the Mudra conspire under three classes ‘Shishu’, ‘Kishore’ and ‘Tarun’- contingent upon the ticket size. “These advances are likewise hazardous in light of the fact that they are taken for utilization as opposed to creation purposes. Be that as it may, what PSBs characteristically need is to build up a superior recuperation system.” Since the dispatch of this program in 2015, in excess of 35 million Mudra credits, worth about Rs 7 lakh crore, have been authorized. They represent around 10% of all extraordinary credit at miniature, little and medium undertakings.

Loan in Seconds, Yet Another Vulnerability

Industry members accept that plans like the 59-minute advances, and helpless selection of borrowers by open area partners have carried the financial business to its current wreck. Dissimilar to a MFI advance, in which the borrower is even genuinely known to the nearby specialist co-ops, an unadulterated computerized item might be a helpless decision in such little ticket advances.

Examination via CARE Ratings indicated that public area banks performed drearily as contrasted and their private companions when it came to need area credit portfolio execution investigation. Toward the finish of FY19, in the farming area, PSBs recorded 11.36% credits turning sour while the number was a lot of lower at 3.78% for private banks. For the business advances falling under the need area, state-run banks' terrible credit proportion was at 16.45% versus 1.5% in private friends. In need administration area advances, PSBs recorded NPAs at 10.57% versus 1.56% of private companions. This makes one wonder: Why can't PSUs perform on a standard with private friends?

In the light of ongoing worries over resource quality, there is no huge danger in the close to term on the grounds that regarding singular openness, Mudra disbursals have been in the scope of 0.5-2% of remarkable advances of banks, Bank of America wrote in a report. Disregarding the size and the sort of advances, Mudra NPAs so far have stayed moderate at 2.86%(FY19), while for singular banks, Mudra NPAs as level of complete banks credits remain range bound inside 0.1-0.4%. Nonetheless, given the size and profundity of infiltration of these advances, it is basic to watch them with alert, as this section might be the most powerless against full scale vulnerabilities, it added.

1. Lack of due-diligence to meet targets: As featured by ongoing critique by RBI authorities, a critical worry with MUDRA advances has been the chance of selection of settle for less or absence of due-ingenuity with respect to PSBs to meet MUDRA disbursal focuses on that can essentially affect credit quality.
2. Loan profile: The normal MUDRA advance dispensed in 2018 was of Rs. 45,034 , according to India Today, with Shishu accounts involving 86% of the aggregate—insufficient funding to begin organizations. All things considered, these credits might be utilized for guaranteed financing/individual necessities, putting them at higher danger of default.
3. Inadequate refinancing: MUDRA was changed over into a keep money with a corpus of Rs. 20,000 crore in 2016 to give renegotiating to MUDRA advances. There are anyway two issues here : Inadequate money to renegotiate credits that are presently remarkable at Rs. 7.4 lakh cr; and provisos to banks' capacity to renegotiate. It necessitates that banks loan at the base/MCLR rate to profit these advantages.
4. No collateral: The absence of guarantee in MUDRA advances in itself makes critical danger for loaning foundations, with no cradle against expected defaults.
5. Credit Guarantee Fund- With corpus of Rs. 3,000 cr may not be adequate inclusion: Even however the Center established the framework of a credit ensure conspire, meaning to conceal to half of the default measure of the arrangement of banks, in the light of NPA proportions perhaps extending to high teenagers, from the Rs. 7.4 lakh cr extraordinary sum, the asset won't demonstrate sufficient.

According to the most recent numbers detailed because of an inquiry presented in the Rajya Sabha, MUDRA NPAs remained at 2.86% of complete credits dispensed, up from 2.52% in FY18; 30.57 lakh MUDRA accounts were announced NPA as of FY19. For individual PSBs, these numbers went from 2.7% for SBI to 8.1% for PNB.

Credit Risk in Mudra Loan

Previous RBI Governor Mr. Raghuram Rajan, in his report to Parliament as of late said that while non-performing resources coming from corporate advances are a current issue, the public authority should zero in on wellsprings of the following emergency. Specifically, he cautioned, the public authority should cease from setting aggressive credit targets or forgoing advances. He got down on Mudra advance as those with potential credit hazard. He especially hailed the way of life of meeting focuses by hurrying through fair treatment and afterward offering, libertarian sops, for example, mass waiver of credit. "Credit targets are now and again accomplished by forsaking fitting due constancy, establishing the climate for future NPAs. Both Mudra advance just as the Kisan Credit Card, while being mainstream, must be analyzed all the more intently for likely danger.

The Credit Card Guarantee Scheme for the MSME run by SIDBI is developing unforeseen obligation and should be analyzed with desperation.", he said in his note.

Dispatched in 2015, the Pradhan Mantri Mudra Yojana (PMMY) was drifted with the particular mean to ease credit admittance to non-corporate, non-ranch little/miniature endeavors by giving little ticket advances (up to Rs. 10 lakh) at different phases of business advancement. The plan works by straightforwardly giving advances through Mudra Bank (fused with a corpus of Rs. 20,000 crore) and by giving renegotiating to in excess of 150 Member Lending Institutions (counting banks and NBFCs). Until FY19, advances worth Rs. 8.6 lakh crore were dispensed, 45% of which are of ticket size < Rs. 50,000, across business portions. During FY16-19, MUDRA credits disbursals have developed at a CAGR of 33%, and little ticket advances contained 86% of the all out MUDRA accounts. Among MLIs, PSBs have driven disbursals, contributing 36% of the all out disbursals till date (Rs. 3 lakh crore), drove by SBI, Canara Bank, and Allahabad Bank. Nonetheless, NBFCs and MFIs have progressively caught a bigger portion of complete disbursals, from 2% in FY16, to 25% in FY19. Among private banks, IIB has had the most noteworthy absolute MUDRA advance disbursal at Rs. 27,100 crore.

Notwithstanding huge development in MUDRA disbursals, all out disbursals are in the scope of 0.5-2% of extraordinary advances for banks (barring IIB), while the NPA as of FY19 remained at 2.86% of complete credits dispensed. The NPA range for PSBs shifted between 2.7-8.1%, however MUDRA NPAs as a level of absolute remarkable advances keeps on leftover in the 0.1-0.4% territory. Our affectability analys proposes, a 20% default from MUDRA disbursals can expand NPAs in the scope of 0.7-1.2 rate focuses for PSBs and 0.2-2.9% for private banks. Subsequently, while at current levels, MUDRA NPAs don't seem, by all accounts, to be an important danger for banks, a serious decay in the resource quality might have critical effect on banks if full scale hazards go up.

Extraordinary advances as of March 2019 remained at Rs. 7.4 lakh cr. MUDRA disbursals in FY19 were 29% of extraordinary MSME advances and 3.6% of absolute remarkable advances. Curiously, MUDRA advance disbursals as a level of MSME advances has expanded from 19.4% in FY17 to 29.2% in FY19, while the disbursals as a level of absolute framework credit was up to 3.6% from 2% in FY16, inferring huge development in these portions.

Bank	₹mn	% of MUDRA loans*	% of total loans**	% of total NPA
SBI	26,942	2.7	0.12	1.64
PNB	16,051	8.1	0.35	2.26
Bank of India	9,658	5.1	0.28	1.79
Canara Bank	9,215	3.1	0.22	2.44
Syndicate Bank	8,451	7.3	0.41	3.63
Union Bank of India	5,467	4.6	0.18	1.23
BoB	5,230	3.3	0.11	1.16
Bank of Maharashtra	4,497	6.6	0.54	3.32
Allahabad Bank	3,822	4.0	0.27	1.53
Total MUDRA NPA	172,515	2.86		

Source: Written answer to queries in Rajya Sabha, MUDRA
*Disbursed, **outstanding

While PSBs keep on overwhelming the loaning of MUDRA advances, SFBs and NBFCs have had the option to assume control over a huge bit of that, presently up to 25% of the absolute disbursals MUDRA Loan disbursal as % of complete remarkable advances for PSBs fell in FY19, while the pattern remained flattish for private banks, except for IIB, whose offer has moved upwards, and will be additionally floated by the procurement of BHAFIN. While the plan was promoted as a huge advance to guarantee simplicity of credit to MSMEs, concerns with respect to the advances have been featured by banks and RBI as referenced previously.

Conclusion

Its over a long time since the Mudra Loan Scheme has been in activities and this plan was imperative to accomplish the Government missions and vision of Make in India and Start Ups. In spite of the fact that the plan has part of focal points yet at same time different difficulties going about as an impediment in the achievement of the plan. During Coved 19 , Indian Government has taken imitative to give a sponsorship of 2 % on premium to the little borrowers on Shishu Loan borrowers which are not proclaimed as NPA and extraordinary till 31st Match , 2020. Significant target of Mudra Loan conspire was to offer insurance free credits yet because of nonattendance of suitable strategy or absence of involvement with maintaining the business, the borrowers can't pay the advances which become NPA. Investors should be stricter in embracing the loaning strategy and observe the fundamental guidelines of loaning and credit checking post dispensing of such advances. Banks need to consistently screen resource quality, improve guaranteeing norms, make granular examination of MIDRA NPA and keep in touch with MUDRA borrowers.

A Study of Drone Technology - Disrupting the Insurance Industry

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Of late there has been emergence of a number of major technology trends impacting the insurance industry, one of these is the increasing use of commercial drones technically called unmanned air vehicles for various purposes. Insurers are keen to improve customer service and also considering innovative ways to reduce costs. The insurers have started doing thing more economically by using drone technologies benefits thereby can be then passed on to their customers with reduced premium.

The use of commercial drones has been hailed by insurance companies as an efficient and safe way to do expensive inspections for not only for claims but risk evaluations also.Drones are proving to very useful for the insurer from both an underwriting perspective, helping to determine property values and conditions before issuing policies, as well as for claim and risk control after an incident has occurred. Drones can go into situations more safely, like a chemical spill or burned-out home than surveyor or claims staff can.

Insurance companies are adopting the drone technology to reduce the risk to employees. With the help of drones it can be a much easier and safer to have a bird's-eye view of extensive damage rather than having a front-line insurance surveyor inspecting and assessing the damage from the ground.

This paper suggests that use of drone technology can be used by the Insurance Industry for not only reducing operating cost but also the incurred claim ratio. To conduct this study, researcher has extracted secondary data from various national and international journals, reports, newspaper articles and websites

Keywords: Drone, Unmanned Aerial Vehicles, UAV, Risk assessment, disruptive technology

Introduction

Harvard Business School professor Clayton M. Christensen coined the term disruptive technology way back in the mid-1990s. He divided new technology into two categories: sustaining and disruptive. Sustaining technologies are those technologies which are improvements on an already established technology that improve product performance. Disruptive technology lacks refinement, often has performance problems because of its being at the nascent stage and may not yet have a proven practical application. Several Insurers started experimenting with unmanned aerial vehicles (UAVs) about seven years ago and found them useful for adjusting property claims. Since 2016, when the Federal Aviation Administration (FAA), a governmental body of the United States and the civil aviation regulator relaxed the regulations on drones used for commercial purpose, a large number of insurers have adopted the drone technology. Soon drones may be as pervasive at insurance companies as computers and cell phones. The insurance industry is now one of the earliest adopters of drones because of the numerous benefits including cost effectiveness, improved safety, efficiency, faster turnaround time, integration technology and reduced costs. Goldman Sachs estimates the global drone industry should be around $100 billion by the end of 2020. As most of insurance companies are struggling with an increasing amount of loss/damage from natural disasters and fraud, plenty of insurance companies are aspiring to be data-driven organizations. According to PwC drone technology can help the insurance industry save to tune of 7 billion USD annually.

According to an estimate Insurance companies are employing 17% of all commercial drones manufactured till date. Drones have proved to be very useful for insurance providers, especially in claims management and fraud prevention. Drones also help insurers in risk monitoring, risk assessment, prudent underwriting, taking more informed decisions as well as improving customer experience during catastrophes.

Literature Review

The study was conducted by means of the structured literature approach technique, wherein there are three-step approach in order to cover as much literature as possible with regard to this particular field of interest. The first step was to identify a list of literature, based on a certain amount of keywords, in an online database. The articles found are reviewed based on their relevance and a list is made of relevant articles to proceed further. Relevant literature in this case, involves literature that describes the use of social media in insurance business context within the organization. The second step was to select the relevant articles, and search through their references to see whether there are any more relevant articles to be found on the subject. The third step was to take all the literature collected so far, and check how often they have been cited. The last step was to compile final list containing literature from all three steps.

Objectives

The main objective of this paper is to spotlight the increasing adoption of drone technology in insurance sector. The paper also aims at highlighting the future of drones in insurance business, advantages and challenges of use of drones.

Research Design & Methdology

The nature of this study is descriptive and exploratory, wherein data has been collected on secondary basis from various sources such as published research papers in national and international journals; published reports, newspapers and websites. Researcher has used content analysis technique to analyse the collected secondary data. To conduct this study, researcher applied his own experience of more than 30 years in the field while working as an Insurance executive for 25 years and thereafter as insurance teacher till date.

What Is Drone

A drone is an unmanned aircraft/ aerial device that is not controlled by a human being while flying. Unmanned Aerial Vehicles (UAV) are air devices controlled by an operator on the ground. An Unmanned Aerial System (UAS) is the entire system - aircraft, controller, camera systems and software. This has initiated a debate on regulations of their use, especially as it relates to the safety and privacy of the public at large. Drones are controlled by using a smartphone or remote operating system. It is also possible to programme a drone to execute its mission autonomously before deploying it on a specific mission.

Rough or inclement weather and difficult to reach locations, make it incommodious for insurers to reach the site of accident/ damage, which eventually results in delay and failure to resolve a large number of claims in a given time. Hurricanes and tropical storms make up around 40% of insured catastrophic losses. Another advantage of drones is better customer satisfaction. Drones can take a much larger number of photos in less time than a surveyor can take. By using drones in capturing images of damages and loss data, insurers can accelerate claims settlement process. Policyholders feel more satisfied with their insurers when claims are settled promptly.

Advantages of Drone Technology

Drones offer insurers a number of potential benefits for example reduction in the amount of workers compensation claims. By utilizing drones, instead of human resources, in hazardous situations, insurers can avert some on-the-job injuries. Use of drones can also reduce the cost of roof inspections.

Drone technology can also help insurers save money after a disaster. By using drone insurer can reduce the number of adjusters needed to inspect damage at the disaster site. Thus, the insurer can reap the benefit of substantial savings on travel and lodging costs. Besides, more human resources can be utilized in the office to review the loss data and process claims. Drones help insurers in saving time and enable them to deploy their resources where they are most required. For example, when a huge flood occurs which results in destruction across several square miles, Insurers can deploy drones to conduct survey of the affected area and get a birds'-eye view of the extensive damages caused by flood.

While inspecting and assessing property claims, the surveyors or claim adjusters usually encounter hazardous situations. Drone-mapping is a safer inspection method. Some Insurers are making drone roof inspection more efficient and safer by reducing exposure to hazardous conditions. Drone technology can enhance inspection efficiency of any insurer by up to 80%. The images and other data captured by insurers with the help of drones are especially valuable when combined with other technologies, such as Artificial Intelligence (AI). Several Insurers are using Artificial Intelligence to analyze data, assess loss/damage and calculate repair costs.

Challenges

Insurers using drones may face a risk of third-party lawsuits against them. An equipment malfunction or an operator error can result in drone hitting someone or his property. Consequently, the insurer may face public liability case for bodily injury or property damage.

Insurance companies may also face a risk of a suit filed against them in the court of law alleging invasion of privacy. Insurers use drones to collect data, but in case they fail to secure that data properly and the information is stolen or misused, insurers could be vulnerable to lawsuits.

Drone Use in India

Drones are now widely used by Indian insurers, but this should change as drone use grows in developed markets. The well-known forecaster - Skymetwether, started using low-cost drones in 2015 to assess drought crop losses in Marathwada. In October 2015, the Central Government commenced using drones to collect crop yield data and assess damage for settling insurance claims.

The centre launched the pilot programme Kisan, which encourage utilising satellite and drone-based imaging and other geospatial technology to get the specific data on crop produce. This scheme will accelerate the payment of crop insurance claims to the farmers. This programme was successfully started in Haryana, Karnataka, Maharashtra and Madhya Pradesh. The government also launched an android-based application for gathering data of hailstorm to check the large-scale destruction to standing crops

Conclusion

Several Insurance companies have started discovering the benefits of drone technology and the new possibilities it offers, especially for risk assessment and claims settlement. If the insurance industry is able to embrace the potential of the drone technology this will accelerate various processes, facilitate quality inspections and checks. Optimum use of this technology will reduce workloads, save cost and improve the efficiency of human resources. It is expected that drone technology has very bright prospects specially in insurance industry and its progress will be watched closely in the future. If issues relating to regulations and system integration can be handled aptly, sky’s the limit.