

# Review on Credit Risk

DR. BHADRAPPA HARALAYYA

*Professor and HoD, Department of MBA, Lingaraj Appa Engineering College Bidar*

*Abstract- Lately, individuals are ending up more mindful about the administration of their assets. As the banks work together by loaning their contributors' cash, they are more capable to deal with their credit portfolio easily. Bank's notoriety is a basic factor for its prosperity and along these lines multinational banks must take after fitting rules, arrangements and significant manuals with respect to credit expansion and recuperation. The use of managing an account benefit for a money related exercises is expanding step by step. Individuals are taking advances to begin distinctive sorts of organizations and in addition different purposes. It is presently essential to know the inside credit procedures of the banks. Banking in India originated in the last decades of the 18th century. The first banks were The General Bank of India, which started in 1786, and Bank of Hindustan, which started in 1790; both are now defunct. The oldest bank in existence in India is the State Bank of India, which originated in the Bank of Calcutta in June 1806, which almost immediately became the Bank of Bengal. This was one of the three presidency banks, the other two being the Bank of Bombay and the Bank of Madras, all three of which were established under charters from the British East India Company. For many years the Presidency banks acted as quasi-central banks, as did their successors. The three banks merged in 1921 to form the Imperial Bank of India, which, upon India's independence, became the State Bank of India in 1955. Foreign banks too started to arrive, particularly in Calcutta, in the 1860s.*

## I. INTRODUCTION

The Comptoir d'Escompte de Paris opened a branch in Calcutta in 1860, and another in Bombay in 1862; branches in Madras and Pondicherry, then a French colony, followed. HSBC established itself in Bengal in 1869. Calcutta was the most active trading port in India, mainly due to the trade of

the British Empire, and so became a banking center. Around the turn of the 20th Century, the Indian economy was passing through a relative period of stability. Around five decades had elapsed since the Indian Mutiny, and the social, industrial and other infrastructure had improved. Indians had established small banks, most of which served particular ethnic and religious communities. The period between 1906 and 1911, saw the establishment of banks inspired by the Swadeshi movement. The Swadeshi movement inspired local businessmen and political figures to found banks of and for the Indian community. A number of banks established then have survived to the present such as Bank of India, Corporation Bank, Indian Bank, Bank of Baroda, Canara Bank and Central Bank of India. The fervor of Swadeshi movement led to establishing of many private banks in Dakshina Kannada and Udupi district which were unified earlier and known by the name South Canara (South Kanara) district. Four nationalized banks started in this district and also a leading private sector bank. Hence undivided Dakshina Kannada district is known as "Cradle of Indian Banking". The Government of India initiated measures to play an active role in the economic life of the nation, and the Industrial Policy Resolution adopted by the government in 1948 envisaged a mixed economy. This resulted into greater involvement of the state in different segments of the economy including banking and finance.

The major steps to regulate banking included:

- The Reserve Bank of India, India's central banking authority, was established

In April 1934, but was nationalized on January 1, 1949 under the terms of the Reserve Bank of India (Transfer to Public Ownership) Act, 1948.

- In 1949, the Banking Regulation Act was enacted which empowered the Reserve Bank of India (RBI) "to regulate, control, and inspect the banks in India."

Currently, banking in India is generally fairly mature in terms of supply, product range and reach-even though reach in rural India still remains a challenge for the private sector and foreign banks. In terms of quality of assets and capital adequacy, Indian banks are considered to have clean, strong and transparent balance sheets relative to other banks in comparable economies in its region. The Reserve Bank of India is an autonomous body, with minimal pressure from the government. The stated policy of the Bank on the Indian Rupee is to manage volatility but without any fixed exchange rate-and this has mostly been true. With the growth in the Indian economy expected to be strong for quite some time especially in its services sector-the demand for banking services, especially retail banking, mortgages and investment services are expected to be strong. The Rs. 64 trillion (US\$ 1.22 trillion) Indian banking industry has made exceptional progress in last few years, even during the times when the rest of the world was struggling with financial meltdown. Even today, financial institutions across the world are facing the repercussions of the turmoil but the Indian ones are standing stiff under the regulator's watchful eye and hence, have emerged stronger. Ratings agency Moody's believe that strong deposit base of Indian lenders and Government's persistent support to public sector and private banks would act as positive factors for the entire system amidst the negative global scenario. The sector has undergone significant developments and investments in the recent past. Some of them are discussed hereafter along with the key statistics and

Government initiatives pertaining to the same. Key Statistics

- According to the Reserve Bank of India's Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks', March 2011, Nationalized Banks, as a group, accounted for 53.0 per cent of the aggregate deposits, while State Bank of India (SBI) and its associates accounted for 21.6 per cent. The share of new private sector banks, old private sector banks, foreign banks and regional rural banks in aggregate deposits was 13.4 per cent, 4.6 per cent, 4.4 per cent and 3 per cent respectively. With respect to gross bank credit also, nationalized banks hold the highest share of 52.8 per cent in the total bank credit, with SBI and its associates at 22.1 per cent and New Private sector banks at 13.2 per cent. Foreign banks, Old private sector banks and Regional Rural banks held relatively lower shares in the total bank credit with 4.9 per cent, 4.6 per cent and 2.4 per cent respectively. Another statement from RBI has revealed that bank advances grew 17.08 per cent annually as on December 16, 2011 while bank deposits rose 18.03 per cent.
- RBI data shows that India raised US\$ 1.6 billion through External Commercial Borrowings (ECBs) in November 2011 for new projects. 78 companies raised US\$ 1.3 billion under automatic route and US\$ 253 million was raised under the approval route (it requires case-by-case approval by the regulator).
- India's foreign exchange reserves stood at US\$ 297 billion as on Dec 30, 2011.
- In recent years, deposits under Non-Resident Indians (NRI) schemes have witnessed an upsurge. There was an inflow Rs. 14,763 crores (US\$ 2.83 billion) under NRI deposits in 2010-11, which was 6.5 per cent higher from 2009-10. In 2011, the total of NRI deposits was Rs. 2,30,812 crores (US\$

44.2 billion), compared to Rs.2,27,078crores (US\$ 43.5 billion) in 2010.Recent Developments

- The US Export-Import Bank, with a commitment of US\$ 7 billion, is on a way to diversify its portfolio in India by financing projects in education, healthcare and agriculture. After Mexico, India is the second biggest investment destination for the bank as the entity anticipates the country to become the largest market in next 12-18 months.
- India Infrastructure Finance Company Ltd (IIFCL) and IDBI Bank have inked a five-year memorandum of understanding (MoU) to launch Infrastructure Debt Fund (IDF) schemes. The IDF, for which IDBI Bank and IIFCL would play strategic investors, is expected to get launched by the end of February 2012.
- With 'green power' projects getting highly popular in India, especially in the states of Gujarat and Rajasthan, banks are increasingly opening up to projects from nonconventional (solar and wind) energy space. After receiving project proposals that were meant for a particular industry/consumer or group of industries/consumers for their own use, banks are now getting projects that entail commercial viability (25-100 mega watts). Recently, depreciation of partially convertible Indian Rupee against US Dollar has left Indian importers high and dry, more particularly those who have not hedged their dollar exposures. The unexpected depreciation of Rupee against US Dollar this year by over 17 percent has caused a great concern for the Government, RBI and corporates of India. On November 22, 2011 Indian Rupee has touched historic low of 52.73 before recovering little in next sessions. Since late 2009, sovereign debt crisis brewed in Europe concerning some euro zone states and the situation became tense in early 2010 with the downgrading of Greek debt rating by global credit rating

agencies to 'Junk' status with hints of default by

RBI latest interest rate changes

change date	Percentage
October 25 2011	8.500 %
September 16 2011	8.250 %
July 26 2011	8.000 %
June 16 2011	7.500 %
May 03 2011	7.250 %
March 17 2011	6.750 %
January 25 2011	6.500 %
November 02 2010	6.250 %
September 16 2010	6.000 %
July 27 2010	5.750 %

• Credit Risk Management

Contemporary keeping money associations are presented to a different arrangement of market and non-showcase dangers, and the administration of hazard has as needs be turned into a center capacity inside banks. Banks have put resources into hazard administration for the great financial reason that their investors and loan bosses request it. Yet, bank directors, for example, the Bangladesh Bank, additionally have a conspicuous enthusiasm for advancing solid hazard administration at managing an account associations on the grounds that a protected and sound keeping money framework is basic to monetary development and to the security of budgetary markets. In reality, distinguishing, evaluating, and advancing sound hazard administration rehearses have turned out to be focal components of good supervisory practice.

• What is credit RISK

Hazard imply the opening to a possibility of misfortune or harm. Hazard is the factor of vulnerability or probability of misfortune that exist in any business exchange. Credit hazard is the probability that a borrower or

counter assembly will be unsuccessful to meet its NBLigation as per concur terms and conditions.

- PRINCIPLES FOR THE MANAGEMENT OF CREDIT RISK :
1. Even as budgetary foundations hasconfront challenges during the year for a high numeralmotive, actual basis for true Deposit money concern kept on living beingun complicatedly known with not careful credit gauges for borrower and counterparty, poor collection hazard administration, an absence of observe for change in financial or poles apart conditions that a breakdown credit left over of a bank's counterparty
  2. The stage of riskunwavering particular arrangements conclusion. factorplanning has a posture on recognitiondangercomprise: the time of the swap over of cost; expense/agreementdefiniteness; and the role of mediators and clearanceresidence.
  3. This documentbeforemyin print for discussion in July 1999. The board is appreciative to the inner banks, managerialauthorities, banking relations, and institution that providdcoments. This comment hasknowledgeable the making of laststory of the document.

Different types of Risk Management can be categorized as follows:

- Venture danger organization: a planned structure check possible risk that containunpleasant impact on the enterprise. These risks culd be in tems of rskassociatedwealth, proct and serces or the market situation in which the enterprise operates. entrprisedevelop risk managaement capability to deal with these risk a correct act **planned** enterprise must note down all the possible risks that may take place and arrange a set of action plans depending on the naturee of riskk.
- Operational danger Management: prepareddanger in attendance in venture. This danger take place duee to

tthe implementation the industrypurpose the enterprise. enterprise want to assessthisriskk and prepre action planed to meeting the crash of risk. mistake in execution

- scheme failure
- Policy violation
- not direct and expresseddangerwinning
- Financial Risk Management: The procedures of monetary risk organizationdefinite as minimizeexperience of a hard to bazaar riskk and crediting riiskuseda variety of financiial instrument.monetary risk managercontract with otheer risking relatee to foreiignexchangee, Attribute, price rises, non-expense of customers and augmentedcharge of attention.
- Credit Risk Management: Managing credit risk is the basic working of the financiial institute. Credit portfolio administration mostly become necessary for the venture to keep tsrack of riisk.It deal with the riisk linked probability of failure to pay from the debtors.
- Bank Risk Management: It deal with the management of different type of risks face by the bans, for examples, marketing risk, credit risk, liquiditting risk, ready riisk and reputational risk.

## II. LETRETURE REVIEW

1. SwaranjeetArora (2013)[1]Present investigation investigated the marvel from alternate points of view and uncovered that Credit Worthiness examination and Collateral necessities are the two imperative elements for dissecting Credit Risk. From the graphic and scientific outcomes, it inferred that Indian banks proficiently oversee credit hazard.

Conclusion:it presumed that Indian banks productively oversee credit chance. The outcomes additionally show that there is

critical contrast between the Indian Public and Private area banks in Analyzing Credit Risk.

2. T. VEERABHADRA RAO (2011)[2]in his examination surveyed the Risk administration, guideline and administration of the monetary part all in all and Bank Sectors specifically fundamental significance for the precise development of the economy. The present examination is attempted to evaluate the effect of such Risk organization and Risk Bases management measures presented by the Reserve Bank of India

Conclusion: It presumes that Sector savvy, the Public Sector Banks have indicated huge contrast in their working. Banks in all the three Sectors have additionally been positioned based on their execution on singular parameters.

3. Dr. Krishn A. Goyal (2010)[3]made an endeavor to talk about top to bottom, the significance of hazard administration process and tosses light on difficulties and openings in regards to usage of Basel-II in Indian Banking Industry. The quick changing money related condition opens the banks to different sorts of hazard. The idea of hazard and administration are center of money related undertaking.

4. Dr. Yogieta S. Mehra (2010)[4]analysed the result of size and liability for on the scope of operational hazard management rehearses utilized by the banks through execution of study including a survey. The examination planned to investigate the scope of practices utilize by Indian Banks in administration of operational hazard fundamental for of Advanced size Approach (from now on alluded to as AMA) for a cross – segment

Decision: The investigation gives an indisputable proof of increased mindfulness and due significance given to operational

hazard by Indian banks. Measure was seen to be an obstacle to gathering of outside misfortune information, more profound level of association of operational hazard functionaries, information accumulation and examination.

5. Bodla, B. S., Verma, Richa(2009)[5]designed a paper to ponder the usage of the Credit Risk Management Framework . The results show that the specialist for endorsement of Credit Risk vests with 'Directorate if there should be an occurrence of 94.4% and 62.5% of people in general area and private part banks, separately.

Conclusion: The study has drawn independent division and dimension of bank, Credit Risk organization system in India is in good shape and it is completely in light of the RBI's rules issued in this regard.

6. Usha, Janakiramani (2008)[6]assessed in detail the status of operational hazard administration in the Indian saving money framework with regards to Basel II. The normal scope of managing an account resources and the approach received for operational hazard capital calculation is contrasted extensively and the situation of the keeping money framework in Asia, Africa and the Middle East.

Determination: A greater part of the banks have likewise refered to absence of administrative clearness as a decently huge snag in moving over to the progressed approaches.

7. Word usage O.B. Sathish Kumar(2007)[7]in their examination assessed the monetary carrying out of Indian private section banks. Private part banks assume an imperative part being developed of Indian economy. After succession the saving money industry significant changes.

Conclusion: . It outlined That ICICI Bank workers are the individuals who create

more benefit. Additionally the working benefit is the most noteworthy among all private part banks.

8. NAJAF, GharachourlouAghjelou (2007)[8]investigated hazard examination and hazard administration in chose Co-Op banks in Pune . Destinations of this examination are checking the honesty of inner hazard administration frameworks. Amid the check procedure, the specialist test freely in extent to the hazard.

Conclusion: . At long last, the investigation demonstrates that more brokers cover just credit hazard by utilizing straightforward strategies, it speak to need of concentrate to create other sort of hazard examination techniques in helpful banks.

9. Ali Ataullah (2004) Concluded that there is still room for improvement in the efficiency of banks in both the countries. A step forward for the liberalization programmer , therefore, is not only to deregulate interest rates and enhance the level of competition but also to strengthen the instutional structure to support good practices in the banking industry .

10. Dr. Ibrahim Syed M (2011) concluded that this is diagnostic and exploratory in nature and makes use secondary data. The study finds and concludes that the scheduled commercial banks in India have significantly improved their operational performance.

11. Dr. Pardhan Kumar Tanmaya (2012) Concluded that-The study is based on primary data. The data has been analyzed by Percentage method. The tool used to collect data from the bank officials was a structured questionnaire. Responses obtained from the 50 Bank managers / senior officers.

12. Dr. Dhanabhakym M & Kavitha M. (2012) studied that banks have to re-orient their strategies in the light of their own strength and the kind of

market in which their likely to operate on. In the perspective of this domestic and international development, the banking sector has to chart perfect for development.

13. Gupta Shipra (2012) concluded that- Public and Private sector banks both are giving good service in India .Financial condition of any bank is measured by the help of financial ratio. A leverage ratio cannot do the job alone it needs to be complemented by other prudential tools or measures to ensure a comprehensive picture of the buildup of leverage in individual banks or banking groups as well as in the financial system.

14. Sharma Esha (2012) concluded that- The liberalized policy of the govt. of India permitted entry to the ICICI in the banking; the industry has witnessed a generation of private players. That's why the present paper special emphasis has been laid down on the financial analysis of the bank by using different research ant statistical tools.

15. Gejalakshami Sandanam & et.al (2012) , Cocluded that the public sector banks performed remarkably well during the period than that of the private sector banks the overall regression analysis show that the financial performance of the banking industries strongly .

16. Goel Cheenu & Rekhi Bhutani Chitwan (2013) concluded that the analysis supports that new banks are more efficient than old ones. The public sector banks are as not profitable as other sectors are. It means that efficiency and profitability are inter related.

17. Davda V. Nishit (2012) Concluded that a review of fundamental analysis research in accounting the paper has outlined the development of different accounting valuation model and reviewed related emperical work .

18. Dr. Koundal Virender (2012) concluded that although various Reforms have produced favorable effects on commercial banks in

India and because of this transformation is taking place almost in all categories of the banks.

19. Sai Naga Radha V & et.al. (2013) concluded that net profit margin, operating profit margin, return on capital employed, return on equity and debt equity ratio there is no significant difference in these ratios before after merger. Significant difference with respect to gross profit margin.
20. Mishra Kumar Aswini & et.al. (2013) Concluded that DEA provide significant insights on efficiency of different banks and places private sector ones at an advantage situation and there by hints out the possibility of further improvisation of most of the public sector banks.

#### CONCLUSION

The Banking Regulation Act also provided that no new bank or branch of an existing bank could be opened without a license from the RBI, and no two banks could have common directors. By the 1960s, the Indian banking industry had become an important tool to facilitate the development of the Indian economy. At the same time, it had emerged as a large employer, and a debate had ensued about the nationalization of the banking industry. Indira Gandhi, then Prime Minister of India, expressed the intention of the Government of India in the annual conference of the All India Congress Meeting in a paper entitled "Stray thoughts on Bank Nationalization." The meeting received the paper with enthusiasm. Thereafter, her move was swift and sudden. The Government of India issued an ordinance and nationalized the 14 largest commercial banks with effect from the midnight of July 19, 1969. A second dose of nationalization of 6 more commercial banks followed in 1980. The stated reason for the nationalization was to give the government more control of credit delivery. With the second dose of

nationalization, the Government of India controlled around 91% of the banking business of India. In the early 1990s, the then Narasimha Rao government embarked on a policy of liberalization, licensing a small number of private banks. These came to be known as New Generation tech-savvy banks, and included Global Trust Bank (the first of such new generation banks to be set up), which later amalgamated with Oriental Bank of Commerce, Axis Bank (earlier as UTI Bank), ICICI Bank and HDFC Bank. This move, along with the rapid growth in the economy of India, revitalized the banking sector in India, which has seen rapid growth with strong contribution from all the three sectors of banks, namely, government banks, private banks and foreign banks. In the private banking sector of India, FDI is allowed up to a maximum limit of 74% of the paid up capital of the Bank. On the other bank, FDI and Portfolio investment in the public or nationalized banks in India all subject to a limit of 20% of totality. This ceiling is also applicable to the investment in the SBI and its associates.

#### REFERENCES

- [1] BHADRAPPA HARALAYYA, P.S. AITHAL, PERFORMANCE AFFECTING FACTORS OF INDIAN BANKING SECTOR: AN EMPIRICAL ANALYSIS, George Washington International Law Review, Vol.- 07 Issue -01, April-June 2021, PAGE No : 607-621, Available at: <http://archive-gwilr.org/wp-content/uploads/2021/06/Bhadrappa-Haralayya.pdf>
- [2] BHADRAPPA HARALAYYA, P.S. AITHAL, TECHNICAL EFFICIENCY AFFECTING FACTORS IN INDIAN BANKING SECTOR: AN EMPIRICAL ANALYSIS, Turkish Online Journal of Qualitative Inquiry (TOJQI), Vol.- 12 Issue -03, June 2021, PAGE No : 603-620, Available at: <https://www.tojqi.net/index.php/journal/article/view/791/242>
- [3] BHADRAPPA HARALAYYA, P.S. AITHAL,

- IMPLICATIONS OF BANKING SECTOR ON ECONOMIC DEVELOPMENT IN INDIA, George Washington International Law Review, Vol.- 07 Issue -01, April-June 2021, PAGE No : 631-642 Available at:<http://archive-gwilr.org/wp-content/uploads/2021/06/Bhadrappa-Haralayya-1.pdf>
- [4] BHADRAPPA HARALAYYA , P.S.AITHAL ,STUDY ON PRODUCTIVE EFFICIENCY OF BANKS IN DEVELOPING COUNTRY, International Research Journal of Humanities and Interdisciplinary Studies ([www.irjhis.com](http://www.irjhis.com)) ,Volume: 2, Issue: 5, May 2021, Page No : 184-194.Available at : <http://irjhis.com/paper/IRJHIS2105025.pdf>
- [5] Bhadrappa Haralayya ; P. S. Aithal . "Study on Model and Camel Analysis of Banking" Iconic Research And Engineering Journals ,Volume 4 ,Issue 11 ,May 2021 Page 244-259. Available at <https://irejournals.com/paper-details/1702750>
- [6] Bhadrappa Haralayya and Aithal, P. S.. "Analysis of cost efficiency on scheduled commercial banks in India". International Journal of Current Research, Volume 13, Issue 06, June 2021, pp 17718-17725 Available at: <https://www.journalcra.com/sites/default/files/issue-pdf/41580.pdf>
- [7] Bhadrappa Haralayya and P. S. Aithal, "A Study On Structure and Growth of Banking Industry in India", International Journal of Research in Engineering, Science and Management ,Volume 4, Issue 5, May 2021.Page no 225–230. Available at:<https://www.journals.resaim.com/ijresm/article/view/778/749>.
- [8] Bhadrappa Haralayya, Retail Banking Trends in India ,International Journal of All Research Education and Scientific Methods (IJARESM), Volume: 9, Issue: 5, Year: May 2021, Page No : 3730-3732. Available At [http://www.ijaresm.com/uploaded\\_files/document\\_file/Bhadrappa\\_Haralayyaqscw.pdf](http://www.ijaresm.com/uploaded_files/document_file/Bhadrappa_Haralayyaqscw.pdf)
- [9] BHADRAPPA HARALAYYA, P.S.AITHAL, FACTORS DETERMINING THE EFFICIENCY IN INDIAN BANKING SECTOR : A TOBIT REGRESSION ANALYSIS", International Journal of Science & Engineering Development Research ([www.ijedr.org](http://www.ijedr.org)), Vol.6, Issue 6, June-2021, page no.1 - 6, , Available :<http://www.ijedr.org/papers/IJSDR2106001.pdf>
- [10] BHADRAPPA HARALAYYA , P.S.AITHAL , IMPLICATIONS OF BANKING SECTOR ON ECONOMIC DEVELOPMENT IN INDIA, flusserstudies, Volume 30, June 2021,Page No:1068-1080, Available at: <https://flusserstudies.org/archives/801>
- [11] BHADRAPPA HARALAYYA, P.S.AITHAL, STUDY ON PRODUCTIVE EFFICIENCY OF FINANCIAL INSTITUTIONS, International Journal of Innovative Research in Technology, Volume 8, Issue 1, June-2021 ,Page no: 159 – 164, Available: [http://ijirt.org/master/publishedpaper/IJIRT151514\\_PAPER.pdf](http://ijirt.org/master/publishedpaper/IJIRT151514_PAPER.pdf)
- [12] BHADRAPPA HARALAYYA , STUDY OF BANKING SERVICES PROVIDED BY BANKS IN INDIA, International Research Journal of Humanities and Interdisciplinary Studies ([www.irjhis.com](http://www.irjhis.com)), Volume: 2, Issue: 6, Year: June 2021,Page No : 06-12, Available at : <http://irjhis.com/paper/IRJHIS2106002.pdf>.
- [13] BHADRAPPA HARALAYYA, P.S.AITHAL , ANALYSIS OF BANK PERFORMANCE USING CAMEL APPROACH", International Journal of Emerging Technologies and Innovative Research ([www.jetir.org](http://www.jetir.org) | UGC and issn Approved), Vol.8, Issue 5, May-2021, page no 305-314
- [14] BHADRAPPA HARALAYYA, P.S.AITHAL, ANALYSIS OF BANK PRODUCTIVITY USING PANEL CAUSALITY TEST, Journal of Huazhong University of Science and Technology, Volume 50, Issue 6, June-2021 , Page no: 1 – 16, Available at: <https://app.box.com/s/o71lh776oepypauvzucp9e5ntjwur9zf>
- [15] BHADRAPPA HARALAYYA, P.S.AITHAL, INTER BANK ANALYSIS OF COST EFFICIENCY USING MEAN, International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Volume 10, Issue 6, June-2021 ,Page no: 6391-6397,
- [16] BHADRAPPA HARALAYYA, P.S.AITHAL , ANALYSIS OF TOTAL FACTOR PRODUCTIVITYAND PROFITABILITY



- MATRIX OF BANKS BY HMTFP AND FPTFP, Science, Technology and Development Journal, Volume 10, Issue 6, June-2021, Page no: 190-203, Available at: <http://journalstd.com/gallery/23-june2021.pdf>
- [17] BHADRAPPA HARALAYYA, P.S.AITHAL , ANALYSIS OF BANKS TOTAL FACTOR PRODUCTIVITY BY AGGREGATE LEVEL, Journal of Xi'an University of Architecture & Technology, Volume 13, Issue 6, June- 2021 ,Page no: 296-314, available at: <https://www.xajzkjdx.cn/gallery/28-june2021.pdf>
- [18] Bhadrappa Haralayya, P S Aithal, "ANALYSIS OF BANKS TOTAL FACTOR PRODUCTIVITY BY DISAGGREGATE LEVEL", International Journal of Creative Research Thoughts (IJCRT), Volume.9, Issue 6, June 2021, pp.b488-b502, Available at :<http://www.ijcrt.org/papers/IJCRT2106187.pdf>
- [19] Haralayya B. Importance of CRM in Banking and Financial Sectors Journal of Advanced Research in Quality Control and Management 2021, 6(1): 8-9
- [20] Haralayya B. How Digital Banking has Brought Innovative Products and Services to India. Journal of Advanced Research in Quality Control and Management 2021; 6(1): 16-18
- [21] Haralayya B. Top 5 Priorities That will Shape The Future of Retail Banking Industry in India. Journal of Advanced Research in HR and Organizational Management 2021; 8(1&2): 17-18.
- [22] Haralayya B. Millennials and Mobile-Savvy Consumers are Driving a Huge Shift in The Retail Banking Industry. Journal of Advanced Research in Operational and Marketing Management 2021; 4(1): 17-19
- [23] Haralayya B. Core Banking Technology and Its Top 6 Implementation Challenges. Journal of Advanced Research in Operational and Marketing Management 2021; 4(1): 25-27
- [24] Nitesh S Vibhute ; Dr. Chandrakant B. Jewargi ; Dr. Bhadrappa Haralayya . "Study on Non-Performing Assets of Public Sector Banks" Iconic Research And Engineering Journals Volume 4, Issue, 12 June 2021, Page 52-61 Available at <https://irejournals.com/formatedpaper/1702767.pdf>
- [25] Haralayya, Dr. Bhadrappa and Saini, Shrawan Kumar, An Overview on Productive Efficiency of Banks & Financial Institution (2018). International Journal of Research, Volume 05 Issue 12, April 2018, Available at SSRN: <https://ssrn.com/abstract=3837503>
- [26] Haralayya, Dr. Bhadrappa, Review on the Productive Efficiency of Banks in Developing Country (2018). Journal for Studies in Management and Planning, Volume 04 Issue 05, April 2018, Available at SSRN: <https://ssrn.com/abstract=3837496>
- [27] Basha, Jeelan and Haralayya, Dr. Bhadrappa, Performance Analysis of Financial Ratios - Indian Public Non-Life Insurance Sector (April 30, 2021). Available at SSRN: <https://ssrn.com/abstract=3837465>.
- [28] Haralayya, Dr. Bhadrappa, The Productive Efficiency of Banks in Developing Country With Special Reference to Banks & Financial Institution (april 30, 2019). Available at SSRN: <https://ssrn.com/abstract=3844432> or <http://dx.doi.org/10.2139/ssrn.3844432>
- [29] Haralayya, Dr. Bhadrappa, Study on Performance of Foreign Banks in India (APRIL 2, 2016). Available at SSRN: <https://ssrn.com/abstract=3844403> or <http://dx.doi.org/10.2139/ssrn.3844403>
- [30] Haralayya, Dr. Bhadrappa, E-Finance and the Financial Services Industry (MARCH 28, 2014). Available at SSRN: <https://ssrn.com/abstract=3844405> or <http://dx.doi.org/10.2139/ssrn.3844405>
- [31] Haralayya, Dr. Bhadrappa, E-payment - An Overview (MARCH 28, 2014). Available at SSRN: <https://ssrn.com/abstract=3844409> or <http://dx.doi.org/10.2139/ssrn.3844409> .
- [32] Bhadrappa Haralayya . "Customer Satisfaction at M/s Sindol Bajaj Bidar" Iconic Research And Engineering Journals, Volume 4 ,Issue 12, June 2021, Page 157-169 Available at: <https://irejournals.com/formatedpaper/1702792.pdf>
- [33] Bhadrappa Haralayya . "Ratio Analysis at NSSK, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 170-182
- [34] Bhadrappa Haralayya . "Financial Statement

- Analysis of Shri Ram City Union Finance" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 183-196 Available at:
- [35] Bhadrappa Haralayya . "Employee Job Satisfaction at Big Bazaar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 197-206
- [36] Bhadrappa Haralayya . "Effect of Branding on Consumer Buying Behaviour at Vijay Bharat Motors Pvt Ltd, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 207-222 Available at: <https://irejournals.com/formatedpaper/1702796.pdf>
- [37] Bhadrappa Haralayya . "Study on Customer Perceptions Guru Basava Motors, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 223-231 Available at: <https://irejournals.com/formatedpaper/1702792.pdf>
- [38] Bhadrappa Haralayya . "Study on Loans and Advances for DCC Bank Main Branch Nayakaman, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 232-242 Available at: <https://irejournals.com/formatedpaper/1702798.pdf>
- [39] Bhadrappa Haralayya . "Work Life Balance of Employees at Karanja Industries Pvt Ltd, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 243-254 Available at: <https://irejournals.com/formatedpaper/1702799.pdf>
- [40] Bhadrappa Haralayya . "Working Capital Management at TVS Motors, Bidar" Iconic Research And Engineering Journals, Volume 4, Issue 12, June 2021, Page 255-265 Available at: <https://irejournals.com/formatedpaper/1702800.pdf>
- [41] Haralayya, Dr. Bhadrappa, Testing Weak Form Efficiency of Indian Stock Market – An Empirical Study on NSE (April 30, 2021). Emerging Global Strategies for Indian Industry (ISBN: 978-81-910118-7-6), 2021, Available at SSRN: <https://ssrn.com/abstract=3837488>
- [42] Haralayya, Dr. Bhadrappa, Top 10 Ways to Improve the Communication Skills (JUNE 20, 2016). Available at SSRN: <https://ssrn.com/abstract=3844410> or <http://dx.doi.org/10.2139/ssrn.3844410>
- [43] Haralayya, Dr. Bhadrappa, Multi-Inter-Trans Disciplinary Research Towards Management and Commerce (July 25, 2016). Available at SSRN: <https://ssrn.com/abstract=3847404>
- [44] Bhadrappa Haralayya . "Advertising Effectiveness With Reference to Big Bazaar" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021, Page 101-110 Available at: <https://irejournals.com/formatedpaper/1702831.pdf>
- [45] Bhadrappa Haralayya . "Analysis of Non Performing Asset on Urban Cooperative Bank in India" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021, Page 111-121 Available at: <https://irejournals.com/formatedpaper/1702832.pdf>
- [46] Bhadrappa Haralayya . "Ration Analysis With Reference to DCC Bank" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021, Page 122-130 Available at: <https://irejournals.com/formatedpaper/1702833.pdf>
- [47] Bhadrappa Haralayya . "Consumer Buying Behavior With Reference to Bajaj Auto Ltd" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021, Page 131-140 Available at: <https://irejournals.com/formatedpaper/1702834.pdf>
- [48] Bhadrappa Haralayya . "Sales Promotion With Reference to Yamaha Motor" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021, Page 141-149 Available at: <https://irejournals.com/formatedpaper/1702835.pdf>
- [49] Bhadrappa Haralayya . "Financial Statement Analysis Using Common Size on Mahindra Sindol Motors" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021 , Page 150-159 Available at: <https://irejournals.com/formatedpaper/1702836.pdf>
- [50] Bhadrappa Haralayya . "Loans And Advances with Reference to PKGB Bank" Iconic Research

- And Engineering Journals, Volume 5, Issue 1, July 2021, Page 160-170 Available at: <https://irejournals.com/formatedpaper/1702837.pdf>
- [51] Bhadrappa Haralayya . "Study on Trend Analysis at John Deere" Iconic Research And Engineering Journals, Volume 5, Issue 1, July 2021, Page 171-181 Available at: <https://irejournals.com/formatedpaper/1702838.pdf>
- [52] Haralayya B, Aithal PS. Study on Cost Efficiency in Indian and Other Countries Experience. Journal of Advanced Research in HR and Organizational Management 2021; 8(1&2): 23-30.
- [53] Haralayya B, Aithal PS. Study on Theoretical Foundations of Bank Efficiency. . Journal of Advanced Research in Operational and Marketing Management 2021; 4(2): 12-23.
- [54] Haralayya B, Aithal PS. Study on Profitability Efficiency in Indian and Other Countries Experience. Journal of Advanced Research in Quality Control and Management 2021; 6(2): 1-10.
- [55] S. Vinoth, Hari Leela Vemula, Bhadrappa Haralayya, Pradeep Mamgain, Mohammed Faez Hasan, Mohd Naved, Application of cloud computing in banking and e-commerce and related security threats, Materials Today: Proceedings, 2021,ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2021.11.121>.(<https://www.sciencedirect.com/science/article/pii/S2214785321071285>).
- [56] Haralayya B, Jeelan BV, Vibhute NS. Capital Structure and Factors Affecting Capital Structure. J Adv Res Eco Busi Mgmt 2021; 4(2): 4-35.
- [57] Vibhute NS, Haralayya B, Jeelan BV. Performance Evaluation of Selected Banks using Ratio Analysis. J Adv Res Eco Busi Mgmt 2021; 4(2): 36-44
- [58] Jeelan BV, Haralayya B, Vibhute NS. A Study on Empirical Analysis of Relationship between FPI and NIFTY Returns. J Adv Res Acct Fin Mgmt 2021; 3(2): 3-22
- [59] Jeelan BV, Haralayya B, Vibhute NS. A Study on Performance Evaluation of Initial Public Offering (IPO). J Adv Res Pub Poli Admn 2021; 3(2): 12-26.
- [60] Basha VJ, Haralayya B, Vibhute NS. Analysis of Segment Reporting with Reference to Selected Software Companies. J Adv Res Entrep Innov SMES Mgmt 2021; 4(2): 9-26.
- [61] Jeelan BV, Haralayya B, Vibhute NS. Co-Movement and Integration among Stock Markets: A Study of 10 Countries. J Adv Res Acct Fin Mgmt 2021; 3(2): 23-38.
- [62] Jeelan BV, Haralayya B, Vibhute NS. A Comparative Study on Selected Foreign Currencies. J Adv Res Eco Busi Mgmt 2021; 4(2): 45-5
- [63] Bhadrappa Haralayya . "A Study on Customer Satisfaction at TVS Vanish Motors Bidar" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 117-127
- [64] Bhadrappa Haralayya . "Consumer Buying Behavior at Kailash Motors Bidar" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 128-137
- [65] Bhadrappa Haralayya . "Credit Risk of Canara Bank Bidar" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 138-149
- [66] Bhadrappa Haralayya . "Effect of Branding on Consumer Buying Behaviour in Bharat Ford Bidar" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 150-159
- [67] Bhadrappa Haralayya . "Employee Engagement at Kharanja Industry Pvt Ltd Humanbad" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 160-170
- [68] Bhadrappa Haralayya . "Employee Performance Appraisal at Sri Veerabhadreshwar Motors Bidar" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 171-183
- [69] Bhadrappa Haralayya . "Employees Training and Development at Mgssk Ltd Bhalki" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 184-196
- [70] Haralayya . "Impact of Financial Statement Analysis on Financial Performance in Lahoti Motors Bidar" Iconic Research And Engineering Journals Volume 5 Issue 9 2022 Page 197-206
- [71] Bhadrappa Haralayya . "Impact of Ratio Analysis on Financial Performance in Royal Enfield (Bhavani Motors) Bidar" Iconic Research And Engineering Journals Volume 5

- Issue 9 2022 Page 207-222
- [72] Bhadrappa Haralayya . "Sales Promotion at Keshva Enterprise Bidar" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 223-232
- [73] Bhadrappa Haralayya . "The Impact of Safety and Health Measures of Employees at KJD Pharma Bidar" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 233-242
- [74] Bhadrappa Haralayya . "Comparative Analysis of Mutual Funds in Geojit Financial Services Ltd Gulbarga" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 243-251
- [75] Bhadrappa Haralayya . "Cost Analysis at MGSSK Bhalki" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 252-258
- [76] Bhadrappa Haralayya . "Employee Compensation Management at Vani Organic Pvt Ltd Bidar" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 259-266
- [77] Bhadrappa Haralayya . "Employees Performance Appraisal of Chettinad Cement Gulbarga" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 267-277
- [78] Bhadrappa Haralayya . "Ratio Analysis in Muthoot Finance Ltd Aurad" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 278-284
- [79] Bhadrappa Haralayya . "Study on Promotion Mix Strategy Towards Big Bazaar Bidar" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 285-291
- [80] Bhadrappa Haralayya . "Study on Sales Promotion Techniques Used by VKG Bajaj at Kalaburagi" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 292-298
- [81] Bhadrappa Haralayya . "Working Capital Management in Hyundai Showroom Bidar" *Iconic Research And Engineering Journals* Volume 5 Issue 9 2022 Page 299-308
- [82] Bhadrappa Haralayya "Study on Performance Evaluation of Mutual Funds" *Iconic Research And Engineering Journals* Volume 5 Issue 10 2022 Page 29-36
- [83] Bhadrappa Haralayya . "The Performance of Mutual Fund Schemes in The Framework of Risk and Return" *Iconic Research And Engineering Journals* Volume 5 Issue 10 2022 Page 37-44
- [84] Bhadrappa Haralayya . "Risk And Return Analysis of Mutual Funds with Reference to Banks" *Iconic Research And Engineering Journals* Volume 5 Issue 10 2022 Page 45-55
- [85] Bhadrappa Haralayya . "Comparative Study on Performance Evaluation of Mutual Funds with Reference to Banking Funds" *Iconic Research And Engineering Journals* Volume 5 Issue 10 2022 Page 56-64
- [86] Bhadrappa Haralayya, Mamta "Review on Mutual Funds in Financial Services" *Quest Journal of Research in Business and Management* ,Volume 10,Issue 5 2022 Pages 77-82.
- [87] HARALAYYA, BHADRAPPA. "An Exploratory Investigation On Implications Of Corporate Governance On Financial Performance In India." *Journal of Positive School Psychology* 6.8 (2022): 633-647.
- [88] HARALAYYA, BHADRAPPA. "CHANGE IN CONSUMER BUYING BEHAVIOR: INCLINATION TOWARD E-COMMERCE COMPANIES." *International Journal of Early Childhood Special Education* 14.5 (2022).
- [89] Haralayya Bhadrappa, "Financial Management" KD Publication ,2022
- [90] Gowriswari, S., Raman, R., Haralayya, B., & Vibhute, N. S. (2022, October). Medical image learning by integrating image grade and kernel processing into feature extraction. In *AIP Conference Proceedings* (Vol. 2519, No. 1, p. 030012). AIP Publishing LLC.
- [91] Prasad, V., Haralayya, B., Jayashree, R. A., Prabavathy, A. K., & Selvarasu, S. (2023, January). Creating a cost-effective network of operational resources for wireless networks. In *AIP Conference Proceedings* (Vol. 2523, No. 1, p. 020087). AIP Publishing LLC.
- [92] V. S. Kumar, A. Alemran, S. K. Gupta, B. Hazela, C. K. Dixit and B. Haralayya, "Extraction of SIFT Features for Identifying Disaster Hit areas using Machine Learning Techniques," *2022 International Conference on Knowledge Engineering and Communication Systems (ICKES)*, Chickballapur, India, 2022, pp. 1-5, doi:

- 10.1109/ICKECS56523.2022.10060037.
- [93] M. Sakthivel, S. Kant Gupta, D. A. Karras, A. Khang, C. Kumar Dixit and B. Haralayya, "Solving Vehicle Routing Problem for Intelligent Systems using Delaunay Triangulation," *2022 International Conference on Knowledge Engineering and Communication Systems (ICKES)*, Chickballapur, India, 2022, pp. 1-5, doi: 10.1109/ICKECS56523.2022.10060807.
- [94] V. S. Kumar, A. Alemran, D. A. Karras, S. Kant Gupta, C. Kumar Dixit and B. Haralayya, "Natural Language Processing using Graph Neural Network for Text Classification," *2022 International Conference on Knowledge Engineering and Communication Systems (ICKES)*, Chickballapur, India, 2022, pp. 1-5, doi: 10.1109/ICKECS56523.2022.10060655.
- [95] S. Tahilyani, S. Saxena, D. A. Karras, S. Kant Gupta, C. Kumar Dixit and B. Haralayya, "Deployment of Autonomous Vehicles in Agricultural and using Voronoi Partitioning," *2022 International Conference on Knowledge Engineering and Communication Systems (ICKES)*, Chickballapur, India, 2022, pp. 1-5, doi: 10.1109/ICKECS56523.2022.10060773.
- [96] V. S. Kumar, M. Sakthivel, D. A. Karras, S. Kant Gupta, S. M. Parambil Gangadharan and B. Haralayya, "Drone Surveillance in Flood Affected Areas using Firefly Algorithm," *2022 International Conference on Knowledge Engineering and Communication Systems (ICKES)*, Chickballapur, India, 2022, pp. 1-5, doi: 10.1109/ICKECS56523.2022.10060857.
- [97] Haralayya, B. 5. The Impact of AI on Consumerism.
- [98] Khan, B., Kumar, P., Soubhari, T., Haralayya, B., & Priya, U. DATA PERFORMANCE ON COMPARATIVE STUDY OF PUBLIC SECTOR AND PRIVATE SECTOR BANKS IN INDIA.
- [99] Bhanu, M. V. V., Khan, B., Haralayya, B., Khan, S. A., Magdaline, J. M. S., & Jafersadhiq, A. SERVICE QUALITY AND CUSTOMER SATISFACTION FOR BANKING SYSTEM.
- [100] HARALAYYA, B., & AITHAL, P. S. (2022). BANKS AND FINANCIAL INSTITUTION.