## Chapter – 2

## **Review of Literature**

An overview of prior research on the current study is provided in this chapter. The term "demonetization" was not widely known in the Indian economy before November 8, 2016, hence there are few research conducted in national and international journals regarding the evaluation of financial performance of Indian commercial banks during demonetization period. However, a number of studies regarding the impact of demonetization over banks have been published since the implementation.

## 2.1 STUDIES RELATED TO IMPACT OF DEMONETIZATION OVER BANKS

Chandra & Srivastva (2021) attempted to analyze the impact of demonetization over banks performance. This analysis was conducted on primary data that was gathered from selected employees of public and private sector banks through the completion an organized questionnaire. Three public sector banks—SBI, PNB, and BOB—as well as three private sector banks—HDFC, ICICI, and Axis—have been chosen as the study's sample. The researcher chosen six districts from the state of Uttarakhand, including three from the Kumauni division (Almora, Udham Singh Nagar, Nainital) and three from the Garhwal division (Haridwar, Dehradun, and Uttarkashi). The respondents were the banks employee with whom different questions were asked. As per the study, researcher found that demonetization brought about multiple changes in all economic sectors, but the banking industry being the most significantly impacted. It grew the liquidity of the banks, and the banks invested the surplus money in different bonds to increase their income. Demonetization had encouraged customers to move to electronic banking services, which helped the banks to handle the crowd and the extra

workload also. It increased operating profit which helped to maintain a low CASA ratio of the banks. During that period, stressed assets of the banks also increased.

Meghani (2020) did a comparative analysis to look at the variables affecting the financial performance of Indian banks. The data was chosen from 20 banks and the study time period was five-year. GDP growth rate and inflation rate were considered as macro-level variables, whereas net interest margin, liquidity, credit risk, bank size, cost to income, and capital adequacy were chosen as bank level variables. ROA was used as a metric for profitability and as a dependent variable. According to the study's findings, credit risk, capital sufficiency, net interest margin, and inflation were the major factors that affect a bank's profitability. In the matter of private banks, bank size and cost to income were found highly significant variables, whereas they had no bearing on public-sector banks. Liquidity and GDP growth rate were regarded as insignificant in this study. The study recommended that banks management pay special attention to these factors in order to boost performance. Author suggested that prudent credit risk management strategies should be developed to improve bank performance.

Saleem (2020) studied the NPA status during the time of demonetization. Researcher analyzed the status of NPA in public sector banks for the year 2015, 2017, 2018 and 2019. As per the study, it was found that the government could not properly implement this plan, and as a result there was suddenly liquidity crunch. Many business owners who obtained bank loans found themselves unable to cover their costs, including the bank loans, as a result of the economic slowdown by this note ban. Because of this situation banks NPAs increased. However, many people could purposefully or inadvertently default on a bank loan. Researchers gave some suggestions also for resolving this issue. It was suggested that under these circumstances, banks must adhere to best practices advised by statutory agencies overseeing the banking and financial sector. Banks must be proactive and sincere in order to develop effective rules in order to control NPAs.

Bansal (2019) looked into the impact of demonetization on the banking industry. This investigation was based on secondary data which was taken from journals, banks websites etc. The study period was Nov 2016 to March 2017. Researcher analyzed the variation in asset liability of scheduled commercial banks, amount deposits in PMJDY, currency in circulation (CIC) and GDP (%). It was found that demonetization enhanced the scheduled commercial bank's liquidity position and banks invested the surplus money in a variety of investment options, which helped the banking industry to improve its profitability position. The purpose of opening the P.M.J.D.Y (Pradhan Mantri Jan Dhan Yojna) account was attained and that people used those accounts during the demonetization period. It was also observed that people switched to digital banking services which would be beneficial to both the banking industry and customers. Demonetization would assist the banking industry to minimize the non-performing assets, retain appropriate liquidity and maximize digital banking services, all of which will elevate the profitability.

Hebbar & Mahale (2019) studied the impact of demonetization on green banking. It analyzed that how green banking was being used in Bhatkal Taluq after demonetization. For the study, primary as well as secondary data sources were used to gather the study's necessary information. Primary data was collected from Bhatkal Taluq. Around 120 respondents were chosen for the primary data collection, which was conducted through direct interviews and questionnaires. Secondary data was gathered from books, papers, and websites. Respondents were chosen based on the random sample technique. Questions were asked related to usage and awareness of green banking before and after demonetization. As per the study, it was found that before demonetization, respondents were aware of green banking services however they found it difficult and unsafe due to their lack of knowledge. But after demonetization, it pushed them to use it as there was lesser availability of cash. It was suggested by the researcher that

Bhatkal Taluq banks should use green banking technology and bank needs to launch a creative campaign to raise awareness of the advantages of using green banking service.

Survase (2019) has conducted a comparative study entitled "Financial inclusion in India: A comparison between pre- and post-demonetization". The purpose of the study was to evaluate the effects of demonetization in India on banking payments, online payments, financial inclusion, and transition between before and after demonetization. The analysis was divided into two parts. In first part, all pre- and post-demonetization banking payments and transactions were analyzed. The second part the number of Jan Dhan account users and beneficiaries both before and after demonetization were discussed. The author revealed that there was an unexpected rise in bank deposits and a sudden fall in the circulation of notes following the sudden announcement of demonetization. According to the analysis, Demonetization affected banking payments and transactions in India. There was a huge increase in internet, electronic, and digital transactions. Beside this, prepaid payment systems (E-Wallets) became increasingly popular since demonetization. It was also noticed that following demonetization, the amount of money deposited into Jan Dhan accounts surged significantly. The researcher concluded that post-demonetization; financial inclusion in India was more prevalent than it was before the demonetization.

**Duraiarasan** (2019) investigated that how much the demonetization process in India impacted the e-banking services of public sector banks, private sector banks, SBI and its associate banks Researchers looked at the volume of e-banking product transactions before demonetization and the post-demonetization period. The researcher considered five variables which were compared in before and after demonetization. These included NEFT, RTGs, mobile banking, ATMs, and points of sale. When compared to private banks, SBI and its affiliate banks, and public sector banks, the report showed that public sector banks' Point of Sale, Mobile Banking, and RTGs products performed well. Furthermore, it was discovered that, as compared to public sector

banks, the NEFT of private sector banks and the ATM of SBI and its associate banks had registered the highest percentages of variance. The investigation showed that following the adoption of demonetization, customer usage of e-banking products has increased, with the exception of consumer usage of ATMs (negative trends) items.

Somani (2019) attempted to understand how GST and demonetization affected India's banking industry. The analysis was conducted using the pre- and post-demonetization stock prices of a few selected banks that were listed on the BSE. Six private banks and three public sector banks listed on the Bombay Stock Exchange were selected for the study. Six private banks were HDFC, Kotak Mahindra, ICICI, AXIS, IndusInd, Yes bank. Three public sector banks were SBI, IDBI, and Bank of Baroda. According to the study's findings, neither GST nor demonetization significantly affected India's public or private sector banks. There was an extremely short-term impact of the announcement on the stock price behavior. In most cases, the stock prices noticed a change only within the first two days after the announcement.

Agarwal & Reddy (2018) studied about the demonetization and its impact on banking sector. In this study, impact of demonetization in banking sector were discussed. Additionally, the researcher discussed the results of post demonetization in which the positive and negative effect of demonetization were analyzed. In the study, it was found that the government employed the demonetization as a tool to combat corruption and illicit financial activity. At the same time, it changed every aspect of the economy. Banks were severely impacted by demonetization. The government took back all the banned currency notes by allowing people to exchange money with banks. It briefly disrupted and impacted banks routine activities as they were engaged in exchanging notes. Researcher opined that although it had a stronger impact it opened the door for future economic growth.

**Dutta & Das (2018)** studied the perception and acceptance of public about Digital Banking Services (DBS) during demonetization period. The Burdwan District of West Bengal, which

includes both urban and rural areas, was the place of this study. The information was gathered from the primary sources. The surveys were distributed at random to 500 respondents. The study found that even while there was a considerable level of public knowledge of the demonetization operation, the extent of DBS usage and the growth rate of DBS adoption were very low among respondents. Additionally, it was discovered that respondents from rural areas began using online banking but they were not trained of using other DBS methods and the same outcome was seen for women and housewives. It revealed that men were more familiar to utilize digital devices than women. Urban respondents were significantly more familiar with all kinds of DBS than rural respondents with respect to adoption of new generation banking services. Demonetization and the adoption of DBS were also unimportant for the elderly. The adoption of internet and mobile banking services were more difficult for older generations.

Rastogi (2018) studied the demonetization decision of Indian government. Researcher looked into the decision to demonetize and its effects in a variety of nations from 1982 to 2016. Although it was discovered that it was not effective in every nation, but people in India supported government decisions.

into the decision to demonetize and its effects in a variety of nations from 1982 to 2016. Although it was discovered that it was not effective in every nation, but people in India supported government decisions. Researcher also explained about objectives and impact of demonetization in India. It was revealed that the objectives of the demonetization were to Crackdown on Black Money, Limiting terrorist activities and hawala transactions, Countering False Currency. Although it could not attain fully its objectives but it cannot be said that it was failed as 97% money came back to bank accounts and the demonetization would be remembered as prudent actions made by the government in an effort to encourage higher economic growth and transparency.

**Srivastava** (2018) analyzed the positive and negative impact of demonetization. To analyze the effect of demonetization on banks, a comparative analysis of SBI and AXIS bank was made. Researcher did the analysis of income statement of both the banks and some variables like operating incomes, total revenue, gross profit, other expenses, and other income were

examined. After this, return on assets, earning per share, net profit margin and gross profit margin of both the banks were evaluated and compared. As per the study, it was found that demonetization had some positive and some adverse effects. Positive effect was that it helped to remove black money from the economy and negative effect was that it affected badly to informal sectors. It also affected to work life balance of bank employee as they worked for long duty hours. Additionally, it was found that demonetization affected all sectors; whether they were public or private. Researcher concluded on the basis of comparative analysis that demonetization affected both the banks financial performance.

Sarkodie (2018) analyzed how demonetization has affected society's lower classes. The author of this research conducted numerous informal interviews and interactions with the public during the execution of demonetization in India in order to develop conclusions. The lower layers of society were the primary source for this article. However, the author had also taken opinions on the subject from academics and members of the working class at Lovely Professional University. The author revealed that people suffered more in many ways as they had to wait for long hour in the queue of ATM also paying for necessities like food, health care, and education became difficult as a result. The target group, which was the lower strata of society, was negatively impacted by demonetization. Since there were few ATMs and banking facilities in rural regions, which made life very difficult owing to the lengthy lines at ATMs and banks, this was the biggest worry. Researcher concluded that although the impoverished strata's overall experience was negative but they felt that demonetization was a smart decision to stop the underground market and it would boost the country's economy overall in the long run.

Nazhat & Saleem (2018) evaluated the banking sector's response to demonetization. Total twelve banks of Raipur city were selected for the investigation and sample of 50 bank employees was taken to get the feedback. On the basis of examination, it was found that

demonetization helped India to reduce terrorism, bribery, and black money. People faced inconvenience because of demonetization. Work life balance of bank employees got affected because of their long duty hour. Demonetization pushed the general populace to visit banks and complete transactions. It encouraged even those from low-income groups to visit the bank and open an account. Due to demonetization, more people moved to use the plastic cards, online banking and new accounts opened. Additionally, it was found that most of the people believed that demonetization positively affected the banking sector.

**Kaur** (2018) studied how demonetization affected the banking industry. A set of questionnaire was given to hundreds bank employee and different questions related to impact of demonetization on banks were asked. In the study, thirteen banks from Chandigarh City were considered. On the basis of response received, it was determined that the current demonetization was found more fruitful than the last two. It was also found that bank employees also supported demonetization. Their perception toward demonetization was that it positively affected to bank performance as it moved to customers to use online banking. Additionally, their opinion was that the government was not entirely ready to implement this plan as suddenly, bank personnel had to do lot of work to accomplish. Even while the government was not successful to recover all of the black money but it was successful to create fear among those who possess it. It was crucial to combat dark money, and the government did a very good job of it by enacting demonetization.

Jain (2018) did his study on digital payments and demonetization. The purpose of this study was to investigate the relationship between age factor and interest in using digital payments. The data was attained from the 50 respondents from Ajmer City. Researcher also explained about the different way of digital payment. In the study, researcher found that middle age groups of 18 to 25 years and 26 to 45 years were using digital payment methods more frequently as their primary mode of payments. The senior age range of 45 to 70 was a little

hesitant to use digital payment methods. Despite this, respondents in the 45- to 70-year-old age range reported change in their payment method after demonetization. People between the ages of 45 and 70 would need more time to learn or break previous habits of just making cash payments. Researcher suggested that for this age group, banks can conduct specialized digital promotion programs.

**Kumar** (2017) analyzed the demonetization and cashless banking transaction in India. The study's data and information came from secondary sources. In the study, researcher discussed about the advantage and drawback of cashless transactions and challenges of making India cashless. As per the study, in the demonetization period, there was the liquidity crunch so the number of people moved from cash to cashless transactions. This increased the use of credit cards, bank transfers, cheques without banknotes, and coins passed from one person to another in cashless transactions. Three methods were used to conduct cashless transactions: mobile, Wallet, plastic money and net banking. As these electronic payments were more widely used, e-commerce and mobile commerce also grew.

Ashish & Kurian (2017), made an effort to compare how customers perceived to the quality of banks' services in Kerala during demonetization period. Three cities from Kerala were selected for analysis which were Thrissur, Kochi, Kozhikode. For collection of the primary data, an organized questionnaire was designed and distributed to 600 respondents. There were 200 responders total from each of the three cities. The questionnaire had two sections. First section had 22 statements based on 5 dimensions. These statements were measured on five points Likert scale. The five dimensions of this tool were tangible, reliable, responsive, assured, and empathic. Second section had demographic details of respondents. After the analysis, it was found that, customers felt that that bank performed poorly in some area in the post-demonetization period. Those areas were like fulfilling the promise, using modern equipment, possessing appealing physical characteristics, and providing quick service. The researcher

suggested that although banks also have some significant constraints, but it should perform well under all conditions.

**Kumar & Chaubey** (2017) conducted a study on demonetization's impact on the adoption of digital payment. Researchers strived to evaluate the public perceptions toward the digital payment system during demonetization. The authors did a survey to acquire the information from 300 sample respondents. For analytical reasons, descriptive statistical methods were used. The study's findings showed that 33.9% of people had used debit cards as their most likely mode of payment, followed by 20.5% of people who used cash, 16.2% of people who chose credit cards and just 13.4% of people who preferred checks. The analysis found that the Indian economy had a severe cash shortage because of demonetization. Before demonetization period, the majority of individuals were not using cashless transactions. However, 83% of consumers switched from using cash to digital transactions after the sudden demonetization.

**Kumari & Zaidi** (2017) explored how demonetization affected banks. For the analysis, primary data was gathered from the thirty respondents of Meerut city. A set of Questionnaire was filled by the population. On the basis of their response, researcher found that Demonetization has contributed to a decrease in black money, bribery, and terrorism in India. Demonetization caused inconveniences for people as people were made to stand in lengthy lines for many hours or even days. The work life balance of bank employee affected from it because it had increased their workload. The decline in interest rates and money lending declined the bank cash flow. The creation of new accounts and the use of online banking, plastic cards and ATM usage had all increased as a result of the demonetization.

**Patel** (2017) put an effort to analyze the sharp rise in digital payment activity following demonetization. On the basis of his study from secondary data, the author discussed the benefits and drawbacks of a cashless system as well as the numerous cashless payment methods available, including plastic cards, wallets, UPI. The author also emphasized that

demonetization had both favorable and unfavorable impact on the Indian economy. Nevertheless, since the demonetization, more individuals are aware of the use of different digital payment methods. The author praised the RBI and the government of India for their important contributions to the advancement of the cashless system. Additionally, he described that demonetization was the right decision of Indian government, which would assist to make economy full digitalized.

Frederick & Nithya (2017) attempted to determine whether traders in the Kancheepuram district, Tamil Nadu found it smooth or hard to adjust to different types of cashless truncations. This study focused on how demonetization affected the silk traders in Kancheepuram district, Tamil Nadu. The Kancheepuram district was chosen for the study because it is home to many traders who specialize in the silk industry. From the Kancheepuram district, 240 respondents were chosen as the sample. Only 216 out of the total 240 were obtained for the study. Various shopkeepers in the Kancheepuram District were given a structured questionnaire. Researchers used a 7-point scale in this study to assess how easy or difficult it was for merchants to adopt various forms of cashless transactions in their trading activities. The scale ranged from extremely simple (very easy) to very difficult (very tough). Finally, the authors asserted with optimism that there is a discernible improvement in the traders' attitudes toward the cashless system. The results of the study reported that around 63 percent of the business owners considered it simple to embrace cashless transactions and only 37 percent of the merchants found it challenging to embrace to cashless deals at their place of business.

**Rajini & Shanthini** (2017) studied the benefits and drawbacks of demonetization as well as its effect on different sectors like banking, real estate, gems and jewelry, retail markets, educational institutions, medical institution etc. Authors also studied demonetization impact on rural economy. From the study, it was found that most of the sectors got affected by demonetization. In the rural area, majority of the population were not having bank account as

well as they didn't want to use digital services because they didn't have much faith in that. Entire rural economy was depending on cash that's why they suffered more.

Negi &Pant (2017) investigated the level of satisfaction and dissatisfaction with demonetization among Indian nationals living in Delhi and the NCR. The study used both primary and secondary sources of data collection. Primary sources include survey questions distributed to Delhi and NCR individuals who were 18 years of age and older. A total of 177 responses were received from the 200 questionnaires that were distributed. As per study, the researcher found that digital payment methods like payment wallets, credit and debit cards, checks, demand draughts, and other electronic and mobile transactions have emerged as a result of demonetization. A very robust and transparent flow of money across the economy would strengthen the cashless economy. Also, it was said that transparency and accountability would increase the number of tax payers. The researchers' suggestion was that the government needs to launch a particular awareness campaign in panchayats, colleges, and schools so that many individuals should use digital platforms. Financial literacy is necessary to attract more individuals to digital platforms. Banks also should make a robust security system.

**Dhar k** (2017) wrote a research paper entitled "A study on the impact of demonetization over the banking sector with reference to Veraval city". This study looked into how the banking industry was affected by the demonetization. In order to collect data, the author chose 100 bank employees from 13 different banks in Veraval city and used structured questionnaires. After analyzing the data, the author discovered that 55% of bank employees thought that demonetization had a favorable influence on the economy. In addition to the above, the author emphasized that the most recent demonetization, which took place on the 8th November 2016, was more successful than the first two demonetizations of India. According to the study's findings, the author said that it was impossible to completely remove all black money in just one or two months. However, black money holders and those operating parallel economies

experienced great fear as a result of the sudden demonetization. The author concluded by suggesting that the government should implement more mandatory measures, such as demonetization, to combat corruption, terrorism, black money, and other societal ills.

Sujata (2017) carried out a study and examined the factors that influenced the e-banking in pre and post demonetization period. In order to examine the factors that influence e banking, researcher created a structured questionnaire with 27 questions. The respondents were questioned about their awareness about online banking as well as their willingness to use it. The data obtained responses from adult women in Hyderabad. The survey was constructed with a dimension to gauge adult Indian customer's familiarity with online banking. The responses were recorded in Likert scale and it was found that before the demonetization, banks were already making an effort to inform their customers about the new channels by holding seminars and other events. Additionally, many people were aware of and even used e-banking before but after demonetization, the use of internet banking increased and people are now more concerned about privacy issues. As per researcher, customers in India require better services that are tailored to their needs.

Bala ji & Balaji (2017) studied the trend of cashless transactions after demonetization. In the study, the history of demonetization in all over the word was explained including India's recent demonetization. This conceptual study analyzed India's demonetization process and how it affected cashless transactions. The study found that cashless transactions enhanced post-demonetization. Five modes of payments were popular at those times which were e wallet, UPI, Plastic money, Net banking, and Adhaar card. Cashless system fulfilled both the needs of the individual and the community. The use of cashless transactions is expanding at a rapid pace. People were increasingly using cashless purchases. It was also suggested that as all transactions are being made online, the risk of cybercrime is substantially larger. Debit and credit card

security, as well as safe internet banking practices and the use of digital wallets, must therefore be properly communicated to the general public.

Antony et al (2017) examined how demonetization affected banks. For this, comparative analysis of some public sector banks (SBI, Allahabad, Canara, UCO, PNB, Indian, Central bank of India, Catholic Syrian bank, UCO bank, Syndicate, Union, corporation, Dena, etc.) had done. Some variables like asset quality demand for credit, Total deposits were examined. As per researcher, the government's decision to implement demonetization would undoubtedly boost liquidity position of banks. Banks would use that fund to generate the income. Additionally, it negatively affected the banks performance as that time stressed assets increased. Then eventually, bank would suffer as a result of nonpayment of interest. Another negative impact of stressed assets is that banks would be reluctant to make loans, particularly to key sectors.

Singhal (2017) examined the awareness of e banking in the public who were living in village and cities. To ascertain their knowledge and use of e-banking, fifty families from Bangalore city and fifty families from its village area were contacted through one-to-one interviews and online questionnaires. On the scale, their responses were categorized. In order to assess the usage of the e-banking service provided by four private and four public sector banks in city and village areas of India. The study period was divided in pre and post demonetization period. In pre demonetization period, the study period is from 26 SEP 2016 to 8 NOV 2016 (45 days) and same in post demonetization period as from NOV 9 2016 to 23 NOV 2016. The finding of the study was that 73% of rural residents didn't have knowledge of digital transactions and 61% of rural residents do not have an ATM. Their ability to use online financial services was limited. The researcher concluded that in urban area young male youth was more aware about use the e-banking service while in rural areas women were more aware about it but level of usage was very low. Additionally, the utilization rate had increased since smart phones and

mobile applications were introduced but rural population still needs more awareness as they afraid of doing any mistake.

Prabhu et al. (2017) analyzed the performance of banks after demonetization. As per the study, the banking industry, more than any other sector in India, benefited the most from demonetization. There was a significant increase in deposits, customer base, demand for government bonds and the quality of digital interface in banks. This study also highlighted a variety of negative consequences that the banks experienced as a result of demonetization, including a high merchant discount rate, high employee stress levels, a decline in SME firm sales, and a rise in bank NPAs. The authors also noted that banks were unable to market any loan products in the early days after demonetization since they were only focused on exchanging currency notes.

Uke (2017) explored how demonetization affected to Indian economy. The study was based on the views of great economists, financial analysts, and wise politicians over demonetization. Researcher looked into how demonetization affected different sectors like Indian financial market, real estate, FMCG industry and over all on Indian economy. Demonetization presented numerous challenges to Indian residents including long lines at ATMs and banks for cash deposits and withdrawals. India's citizens experienced an issue with reduced consumer spending as a result of restricted cash flow. Due to a lack of liquidity, many firms were affected, and both business owners and consumers had several issues. The Indian financial market including real estate, FMCG sector etc. all temporarily declined. In spite of this, researcher found that it was a brave move on the part of the government. Demonetization's primary goals were to exterminate black money and eliminate corruption. The Indian administration made some achievements. The majority of black money was destroyed.

Gupta & Gupta (2017) expressed their view about cashless society and banking sector. In this, the contribution of demonetization toward the development of cashless society in India was discussed. The authors of this study expressed their strong views on the decision to implement demonetization. According to author, the primary objective of demonetization shifted from the "fight against corruption" to the "digital transformation". From the survey, it was revealed that only 13.3% of respondents were using mobile e-wallets for cashless transactions, while 53.3% of respondents preferred plastic cards among customers. Additionally, this study made a number of recommendations to the government and RBI to encourage the use of cashless payments, including "abolishing government fees on credit card transactions," "reducing interchange fees on card transactions," and "increasing taxes on ATM withdrawals."

Mali (2016) studied the effect of demonetization on economy in the article "Demonetization: A step towards modified India". Researcher used secondary data sources and explained about the reason of demonetization in India and effect of demonetization on some sectors like retail stores, microfinance institute. The investigation revealed that online merchants including Flipkart, Amazon, Snapdeal, and other online retailers temporarily halted their cash oriented services during the initial phase of demonetization. Small and tiny enterprises also experienced a severe digital gap. The study also discovered that E-wallet companies were the greatest winners from the demonetization. In the author opinion Demonetization had both positive and negative short-term effects on many industries. But in the long run, demonetization would help to combat illegal and fraudulent currency.

## 2.2 STUDIES RELATED TO FINANCIAL PERFORMANCE OF PUBLIC SECTOR & PRIVATE SECTOR BANKS

**Mohanty** (2021) attempted to analyze the performance of selected banks. The comparison is made between one private and one public sector bank. The public sector bank considered for

the study was Indian Overseas bank. The private sector bank considered for the study was ICICI bank. The study period was five-year from 2016–17 to 2020–21. To evaluate the financial performance some parameters were selected which were profitability, liquidity and asset quality. To analyze the profitability, different ratios like net interest margin, net profit margin, roe, and roa were considered. To analyze the liquidity, some ratios like capital adequacy, CASA, current ratio and credit to deposits ratio were selected. To analyze the asset quality, gross NPA and net NPA were chosen. Researcher concluded that on the basis of ratios like net interest margin, net profit margin, roe, roa, and credit to deposit, ICICI performed well than Indian Overseas Bank. However, the ratios like CASA, gross NPA and net NPA, Indian Overseas Bank performed well than ICICI bank.

Amene & Alemu (2019) empirically evaluated the key determinants of financial performance of Ethiopian commercial banks. The study period was ten years. Economic value added (EVA), return on equity (ROE), and return on assets (ROA) were used to analyze the performance. By using the multiple regression technique, it was found that asset quality had a bad relationship with ROA, EVA, and ROE. While capital adequacy exhibited a negative correlation with ROE and EVA, it had a positive correlation with return on assets. On all three performance indicators, the impact of bank size and liquidity was shown large and favorable. Another big component that affected the profitability was management effectiveness. EVA and ROE were positively impacted by the macro level variable GDP; however ROA was negatively impacted. The study suggested that policymakers and bank management should place a strong emphasis on these performance measures in order to strengthen the financial condition of Ethiopian private banks.

Meenakshi, & Alam (2019) examined the financial health of Indian public sector banks. The CAMEL Approach was used for the analysis. The financial performance of thirteen nationalized banks was analyzed. The study period was from 2005 to 2017. The Capital

Adequacy Ratio, Net NPA Ratio, Return on Asset, Credit Deposit Ratio, and Cash Deposit Ratio were some of the criteria taken into account by CAMEL analysis. In this study, secondary information from the Reserve Bank of India's annual report was utilized. There were panel data analyses, pooled OLS, used in this study. But because of the Hausman test, fixed effect was ignored in the study. The results of the survey showed that Punjab National Bank, Indian overseas bank, Syndicate Bank, United Bank of India, and Bank of Baroda were at the good position. The weakest banks were Bank of Baroda and United Bank of India. Researcher concluded that the combined regression results demonstrated that the net NPA predictor variable and capital adequacy ratio played significant roles in affecting the profitability indicator, or ROA. Due to capital adequacy and Net Non-Performing assets (NPA), Indian nationalized banks turned profitable. Author suggested that, if bank management wants to boost profitability, they should pay attention to these factors.

M. Sukanya, (2019) examined a few Indian public and private sector banks' financial performance. The primary duties of the banks are to accept deposits and disburse loans to those in need with accepted banking practices. As per author, an important method for evaluating financial performance of banks and other economic institutions as well as suggesting the essential instrument to improve it when necessary is the CAMEL model examination. This study examined five public and private Indian banks, respectively, based on total assets. The time period of the study was five years between the years 2012 to 2017. This study looked at a select few banks' financial health. The five CAMEL criteria as capital adequacy, asset quality, managerial effectiveness, and earnings capabilities including liquidity was used to assess a bank's performance. As per study, Kotak Mahindra bank did better than all other banks, and Punjab National Bank come in last position. Overall, private sector banks have outperformed public sector banks.

Vadrale & Katti (2018) examined the profitability performance of Indian commercial banks. For the study five public and five private banks were compared. Five public banks were SBI, PNB, BOB, CAN, BOI and five private banks were ICICI.HDFC, AXIS, FED and J&K. For the profitability assessment, annual reports of banks were studied from the year 2001 to 2015. Financial measures such Return on investment, return on funds, return on advances, cost of fund, cost of deposits, cost of borrowings, SPREAD was used in the study to analyze the profitability. The study took into account the net profit for the most recent five years, from 2007 to 2011, for both public and private sector banks while choosing the banks. Researcher gave ranking to all the banks. This research indicated that the spread is the most crucial indicator for assessing the performance of selected public and private sector. The findings of the study were that even if both banks' cost of funds was equal, private sector banks had a wider spread since their return on advances was satisfactory. It led to a marginally high return on investment in private sector banks. Author suggested that, public sector banks must widen the difference between return on investment and cost of capital in order to enhance the spread. According to the ranking of banks, during the study period, private sector banks were more profitable and public sector banks were more stable. Therefore, private sector banks' total performance was better than public sector banks as private sector banks offer greater benefits than public sector banks.

Nataraja et al (2018) examined the financial performance of three significant private sector banks in India that are listed on the BSE and NSE: HDFC, ICICI, and AXIS banks. During the study period, the three private sector banks in India that were chosen had high asset sizes, market capitalizations, and profits, which are regarded as performance metrics of banks (Source: Bloomberg data base, financial statements as of March 2017). The data was obtained from secondary sources, namely Bloomberg and bank annual reports for the 12-year period from 2006 to 2017. To achieve the aforementioned goals, three regression models were taken

into consideration in the analysis. These models used to assess the financial performance of the chosen private commercial banks in India. To determine the relationship between variables in each situation, correlation was used. In the first model, the internal based performance, often known as the profitability or productivity ratio, was examined using ROA. It was found that, in terms of asset management and bank size, ROA was positively correlated, however in credit risk, operational effectiveness, and debt ratio, it was negatively correlated which revealed that bank performance or ROA increased along with increased asset management and bank size. The second model was determination of Tobin Q. From the analysis, it revealed that the Tobin' Q was significantly influenced by bank size and debt ratio. From the third model, it was found that credit risk and bank size were inversely correlated with ROE, and operational efficiency and asset management were positively correlated.

Khan (2018) examined the financial performance of public and private sector banks with the help of CAMEL model. Public along with private sector banks such as Canara Bank, Allahabad Bank, Bank of Baroda, and Bank of India together with other hand Axis Bank, HDFC Bank as well as ICICI Bank were examined and compared. Researcher has chosen 18 ratios under five heads in this model. Capital Adequacy Ratio, Gross non-performing asset ratio, Total advance to total deposit ratio, return on asset along with Liquidity asset to total asset ratio were calculated. The study time period was five years, i.e., 2013 to 2017. The finding of the study was that in every way, private sector banks' financial performance has been found to be superior to that of public sector banks.

Rosette & Hussein (2018) did investigation of the financial performance of private sector banks. The study's goal was to assess how ICICI Bank performed against other top-tier private institutions like AXIS, HDFC, and Kotak Mahindra. The research methodologies used were experimental and descriptive. Interest spread, net profit margin, return on net worth, total asset turnover ratio, return on assets, credit deposit ratio, cash deposit ratio, and liquid assets to

demand deposit were the ratios that were measured in this study. Financial statements from the five years between 2012 and 2017 were the sample data used. The study used the following statistical tools: Mean, Standard deviation, Coefficient of Variance, and ANOVA analysis. Based on the analysis, it was determined that ICICI Bank had performed very well in comparison of few selected private banks in terms of net profit margin and debt coverage ratio and liquid asset demand ratio. Additionally, it had struggled in terms of total assets ratio, return on net worth, and return on assets but still got satisfactory financial position.

Murugesan (2017) examined the financial health of some Indian banks by analyzing the balance sheet and Income statement. The study's intended coverage span was ten years, from 2005 to 2014. Axis, Kotak Mahindra, HDFC, Karur Vysya, and ICICI Banks were the major private banking institutions from which the sample data was taken. In order to assess a company's health, researcher used ratio analysis technique. Ratios selected for the analysis were current ratio, net profit ratio and operating profit per share ratio. This study discovered that in terms of current ratio, Axis Bank achieved lower ranges in 2011 while ICICI obtained larger ranges in 2010. Additionally, in terms of net profit ratio, ICICI Bank obtained lower ranges in 2009 and Kotak Mahindra obtained better ranges in 2012. It was also observed that the Indian banking business have changed due to banking sector reforms. Author concluded that although these reforms have increased resource productivity, level of deposits, availability of credit, and profitability but due to the shifting banking environment, the profitability, which is a crucial criterion to measure the performance of banks in addition to productivity, financial efficiency, and operational efficiency, came under pressure. Therefore, every bank should strive to improve their performance both for their own survival as well as to make money by offering consumers the greatest and highest-quality goods and services.

**Thangam & Salini (2016)** sought to investigate the association between the profitability and productivity of Indian commercial banks. In order to examine the relative profitability,

productivity of chosen banks, a sample size of five commercial banks was used in this research. The study period was five years from 2010 to 2015. The samples, including Bank of Baroda, Allahabad Bank, Central Bank of India, Union Bank of India, and Axis Bank, were chosen using a random sampling technique. Secondary data was selected for the study. Secondary data was collected from RBI Yearly publications, banks websites, Magazines. The study's findings revealed that both public and private sector banks were profitable based on their overall profitability and productivity indexes. As per author, profitability and productivity have emerged as main challenges for Indian commercial banks. Author suggested that banks should look into all options to boost productivity and profitability. There should be an effort to keep costs under control, and resources should be used more effectively.

Srinivasan & Priya S (2016) evaluated the performance of public, private, and foreign sector banks in India by using the CAMEL Model approach. This approach was used by the researcher to rank the chosen Indian commercial banks. Total 25 public sector banks, 18 private sector banks, and 8 foreign banks were chosen for the study. Yearly data from 2012 to 2014 were included in this analysis. Public sector banks including Bank of Baroda, Andhra Bank, Punjab National Bank, Allahabad Bank, State Bank of Bikaner & Jaipur, and IDBI, together with UCO banks, took the top five positions out of the 25 public sector banks based on their financial performance. ICICI Bank, Tamil Nadu Mercantile, Citi Union Banks IndusInd, Kotak Mahindra, HDFC, and Karur Vysya Banks made up the top five private sector banks on the list. The top five international banks over the same study period were HSBC Bank (HSBC), Bank of Bahrain & Kuwait (BBK), The Royal Bank of Scotland (RBS), Deutche, CITI, and CTBS.