A STUDY ON PRE AND POST DEMONETISATION IMPACTS ON BANKING SECTORS (With reference to Indian Banking Sector)

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ABSTRACT: Demonetisation is the act of stripping a currency unit of its status as legal tender. Demonetisation is necessary whenever there is a change of national currency. The old unit of currency must be retired and replaced with a new currency unit. The idea of demonetisation is taken into consideration that most of the black money is kept in the form of land, buildings or gold is crackdown in the country. It is established to practice in monetary policies to tackle black money. In the past, demonetisation has taken place twice in the economy because the idea is to tackle the black money existing in circulation. The only way is to divert more funds into investment in various non performing assets. Such that the impacts in taken under nonperforming assets have certain impacts i.e. positively and negatively. This study shows the performances in the sector to form a valid information. The investors performance it is best to analyze the economy with basic indicators as a whole. NPA has affected largely on profitability, liquidity and competitive and it is very largely affected in private and public banks in respect of their positions under credit management. The NPA which creates a major impacts on profitability, on excessive credit risk, on funds, on outlook of bankers, on credit rating in assessing the risk of defaults. The NIFTY index is National Stock Exchange of India's benchmark stock market index for Indian equity market. The nifty bank index are calculated on the basis of certain line charts and with RSI indicators. It shows the project rating in assessing the risk of defaults. Therefore the process of this study demonetisation helps the investors to invest wisely with the minimum possible risk.

Key Words: Cashless transactions, Demonetisation, Non-performing assets (NPA), Pradhan Mantri Jan-Dhan Yojana (PMJDY), Relative Strength Index (RSI)

Introduction:
The study of this project is dealt with the process of demonetisation levels under the backing sectors for the further processing of the problems in the economy. Prime Minister has announced on November 8 that Rs.500 and Rs.1000 notes would be no longer legally tendered. The implications of such announcements have dawned on citizens where the black money have tackled. Black money has been a stumbling block to the Indian economy for a long time in India. To process such black money and arresting such counterfeit the current government came into the power and issued some of the limits of withdrawals. Such that the few developments taken under banks are non-performing assets, investments in social securities like retirement benefits, supplementary security income, black money curb, and defaults scrutinise with the impacts on banking sector. The problem of such investment is not only taken in the economy but also the rate of growth on capital formation.

The study of this project is depended on the banking sector before and after the demonetisation process. The process of this study shows the performances of the assets management on investment made in Nifty Bank Stocks, PMJDY, NPA. The analysis is taken in the technical part to show the real picture of the systematic study with the interpretations. The analysis is taken under the view to interpret the work in the above mentioned sectors and interpret whether it is a surplus or deficit to invest under such sectors. A bank is a financial institution that accepts deposits and lends loans to the public. Lending activities can be performed either directly or indirectly through capital markets. The importance in financial stability of a country, banks are highly regulated in most countries. The Bank of England was the first to begin the permanent issue of banknotes to the economy. There are two types of banks: Central banks and Special banks. The Central banks are classified has scheduled bank and non scheduled banks. The Special banks are classified under Development, Industrial and Investment.

REVIEW OF LITERATURE
excelled the courses on Banking to excel the potential in the relationship in bank deposits and other review of statistics. An assessment based on the introduction to banking sector measures the statistical view on the basis for bankers and researchers. This book shows the potential element in the assessment of the banking deposits and showing the basic review of statistics to the study.

2. Gilbert, R.A. [1984] in this study entitled as, “Bank Market Structure and Competition – A Survey, Journal of Money, Credit and Banking Process” shows the financial market structure which exhibits the financial markets regarding the technical proven factors. This study shows the introduction to the study with the components to the markets in the financial regions like RSI.

3. Lloyd-Williams, D.M, P. Molyneux, J. Thornton, [1994] in the study entitled as, “Market Structure and Performance in Spanish Banking, Journal of Banking & Finance”, describes that in the emerging competitive environment, IT era, Banking & Finance with little or no distinction in the speed of rendering services that sets apart one bank from another. Thus, the article have a Prompt service on equated with quality banking finance with performances under the banking sector for describing the related banking technologies.

4. Cetorelli, N. [1999] in this study entitled as, “Competitive Analysis in Banking: Appraisal of the methodologies, Economic Perspectives” shows the assessment based on the methodologies on the theory and practice which exhibits the basic factors to determine the process for assessment of banking techniques and interpret the quality of study in the banking services. This study shows the measures on introduction and the process of both the qualities with basic methodology of banking sectors.

5. Kamal.S [2005] in his article entitled as, “The use of Information Technology to transfer the Banking Sector in Developing Nations, Information Technology Development”, suggested that perceived level of services and the quality of importance under varied different markets with selected customer profiles and that the service provides a greater impact on quality of banks. There is a need that different market strategies for urban and rural customers are visualized. The occupation and income of the customer also play an important role for any policy implementation. The study also highlights the expectations of the customers.

Need Of The Study
To lower the cash circulation in the country which “is directly related to corruption in the country”. To eliminate the fake currency which have been used by terror group to fund terrorism in India. To tackle black money in the economy and to analyse the pre and post demonetisation activities in the banking sector.

Objectives
1. To study the work of demonetisation and its basic impacts in the banking sector with its future prospects.
2. To use the basic indicators like regression and correlation on Nifty Bank Stocks, and showing the basic line charts with Pradhan Mantri Jan-Dhan Yojana (PMDJY) to promote the impact in the economy.
3. To check the effects of nonperforming assets in the banking sector and to analyse the reluctant move on demonetisation.
4. To have a adverse affect on performance of banks before and after the demonetisation in India.
5. To analyse the advantages and disadvantages of demonetisation in India.

Methodology Of The Study
The design of the research is descriptive and theoretical in the nature. In turn it's under the view of the secondary data the collection of the information under the website and newspaper for the correct view of the project. The information stated in the financial indicators are future converted into the charts like line chart, bar chart with the help of Microsoft-Excel. The view states the demonetisation in Nonperforming assets, PMJDY, Nifty Banks whether there is any inflating or deflating in such indicators. The study is conducted in the period from October 2016 to December 2017. The research is selected under the banking sectors in rural as well as urban areas. The collected data is processed by the editing, tabulation and analysed with the help of statistical tools such has Correlation & Regression analysis whereas Technical analysis tools such as Line chart and Relative Strength Index (RSI) are used in the conduct of the study.

Analysis And Interpretation
Demonetisation Impact on Indian Bank Stocks
As a combined effect on Demonetisation, the stock indices depend on the NSE which was around six-month low in the week following the announcement. The day after the demonetisation announcement, NSE increased by nearly 0.45% for the period of December to January. NSE was mainly set up to bring in transparency in the markets. It also allows investors to hold and trade in as few as one share or bond. During October to January, NIFTY BANK Index share of NSE market capitalisation fell from 65% to 29% due to the rise of sectoral indices like NIFTY Bank, NIFTY IT, NIFTY Next 50, etc. The NIFTY BANK Index gives 32.50% weightage to financial services, 0.75% weightage to industrial manufacturing and nil weightage to agricultural sector. The performance of the banking sectors exhibits the major banking sectors in the firms to set a nifty bank stocks i.e. dependent on the nifty public sector units, nifty private bank.

Exhibit 1: Showing RSI chart for Nifty Bank Index

**Interpretation:**
- From the above chart it is understood that, in Pre-Demonetisation period, the level of RSI for Nifty Bank is said to be between 50-60 where maximum of the investors was holding their securities, i.e. neither bought nor sold.
- In the month of November (Post Demonetisation period), the level of RSI slumped between 40 to 50, where it shows the bullish selling trend of stock which is said to be overbought and the index is said to be technically strong. In case of RSI Nifty Banks and Nifty Private Bank Index it shows the positively indicated from 30-40 and said to be overbought and shows the good signal to the investors.

Exhibit 2: Showing the trend chart of Nifty bank, Nifty PSU & Nifty Private Indices

**Interpretation:**
- In pre-demonetisation period the stocks have experienced a stability in its share price under the Nifty Bank, PSU & Private Bank. After that the stock falls to 18000, 2900, 10000 respectively.
- In the post demonetisation period (From November 2016 to Mid-January), Nifty Bank Index shows the bearish (downward) trend in its share price. And in December 2016, the share price is experiencing bearish trend, which is a bad signal to the investors.
Exhibit 3: PSU (Public Sector Unit) for the period from 2006-2016

- The above graph shows the PSU bank deposits, % of total industry advance, shares of PSU banks markets capitalization as a % of total industry market capitalisation which shows the basic trends in the financial year from 2006-2016.
- The share of PSU bank deposits with total industry deposits, % of total industry advances, Percentage of total industry market capitalisation shows the decrease line from 80.17% to 78.66%, 79.22% to 75.41%, and from 48.87% to 29.02%.
- Thus the line shows there is a decrease in line trend for further processing under PSU Banks.

Exhibit 4: PSU and Private Bank of NSE (National Stock Exchange) on pre and post Demonetisation move

From the above graph it is clear that, most affected sectors by post demonetisation are Private Banks like Punjab National Bank, Canara Bank, Union Bank of India etc. Whereas, the most benefited sectors in post demonetisation are PSU Banks like Bajaj Finance, India bulls, Bajaj Finance etc.
Regression analysis

Exhibit 5: Regression Analysis between returns of Nifty Bank & Nifty PSU

![Graph showing regression analysis between Nifty Bank and Nifty PSU]

Source: Secondary data

Table 1: Showing the summary output for the regression analysis between Nifty Bank & Nifty PSU

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.782912279</td>
</tr>
<tr>
<td>R Square</td>
<td>0.612951636</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.60805229</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.01208147</td>
</tr>
<tr>
<td>Observations</td>
<td>81</td>
</tr>
</tbody>
</table>

Note: The regression analysis is calculated on the mean returns of Nifty Bank and Nifty PSU indices for the period October 2016 to January 2017.

Nifty Bank index returns (Independent variable) is plotted along x-axis and Nifty PSU index returns (Dependent variable) is plotted along y-axis. The regression line shows how Nifty PSU index returns vary with Nifty 50 index returns.

From the above table and graph, it is clear that, the regression line is sloping upwards that tells us that as Nifty Bank index returns increase along the x-axis, the Nifty PSU index returns also tend to increase along the y-axis. In the regression equation, for every increase of 1% point of Nifty Bank index returns which is x, there is a 1.33% of increase in Nifty PSU index returns. R square is 61% (0.612) on the variation in Nifty PSU (Y) is explained by Nifty Bank regression line. Hence there is a significant impact of Nifty Bank on Nifty PSU index.

Correlation Analysis

The correlation analysis is calculated between the mean returns of Nifty Bank and Nifty PSU for the period October 2016 to January 2017. The period before and after demonetisation process. The result of the analysis i.e. the correlation coefficient is **0.60** (60.01%), where positive correlations exists between the returns for Nifty Bank and Nifty PSU Banks.

Regression analysis

Exhibit 6: Regression Analysis between returns of Nifty Bank & Nifty Private Bank

![Graph showing regression analysis between Nifty Bank and Nifty Private Bank]

Source: Secondary data
Table 2: Showing the summary output for the regression analysis between Nifty Bank & Nifty Private Bank

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.979190405</td>
</tr>
<tr>
<td>R Square</td>
<td>0.958813849</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.958292505</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.002335574</td>
</tr>
<tr>
<td>Observations</td>
<td>81</td>
</tr>
</tbody>
</table>

**Note:** The regression analysis is calculated on the mean returns of Nifty Bank and Nifty PSU indices for the period October 2016 to January 2017. Nifty Bank index returns (Independent variable) in plotted along x-axis and Nifty Private Bank index returns (Dependent variable) is plotted along y-axis. The regression line shows how Nifty Private index returns varies with Nifty Bank index returns.

From the above table and graph, it is clear that, the regression line is sloping upwards that tells us that as Nifty Bank index returns increase along the x-axis, the Nifty Private Bank index returns also tend to increase along the y-axis. In the regression equation, for every increase of 1% point of Nifty Bank index returns which is x, there is a 0.98% of increase in Nifty Private Bank index returns. R square is 95% (0.95) on the variation in Nifty Private Bank (Y) is explained by Nifty Bank regression line. Hence there is a significant impact of Nifty Bank on Nifty Private index.

**Correlation Analysis**

The correlation analysis is calculated between the mean returns of Nifty Bank and Nifty Private Bank for the period October 2016 to January 2017. The period before and after demonetisation process. The result of the analysis i.e. the correlation coefficient is 0.99 (99.00%), where positive correlations exists between the returns for Nifty Bank and Nifty Private Bank.

**Exhibit 7: PMJDY With Zero Balance Accounts**

Interpretation:

- From the above chart during the pre-demonetisation step the total number of zero balance account opened in public sector bank, regional rural bank, private bank has almost crossed 6.5 Crore. It is however an unfortunate situation that a country with a population of more than 125 crores which has only 60% of its population with the necessity of their own bank account. The performance of the PMDJY has a uplift in the financial sector.
After the demonetisation process the PMJDY shows there is a major changes under opening of accounts. After 2016 the number of accounts opened under the PMDJY shows no decrease nor increase under banking sector for holding those zero balance accounts. This shows there is an increase in growth rate on holding of accounts in all the major sectors.

**Exhibit 10: Percentage of Gross and Net NPA of Indian Banks**

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross NPA (%)</th>
<th>Net NPA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>2014</td>
<td>2.5</td>
<td>3.5</td>
</tr>
<tr>
<td>2015</td>
<td>2.2</td>
<td>3.5</td>
</tr>
<tr>
<td>2016</td>
<td>2.6</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Interpretations:**
- From the above chart it is clear that the gross and net NPA in Indian banks shows the pre-demonetisation year wise, the Gross and Net NPA records the maximum in 2014 both the Gross and Net NPA, whereas minimum percentage shows in the period 2013.
- In post-demonetisation period, in November 2016 it shows the maximum increase in the commercial banks which has equal to Gross NPA under Indian Banking sectors, and Net NPA was recorded maximum in November 2016 which shows the fall in the prices of all the stocks listed in the stock exchanges.

**Findings**

**NIFTY BANK STOCK**
- The NIFTY index is National Stock Exchange of India’s benchmark stock market index for Indian equity market.
- NIFTY Bank is the world’s most actively traded contract in private banks.
- The NIFTY covers 22 sectors of the Indian economy and offers investment managers exposure to the Indian market in one portfolio.

**NON PERFORMING ASSETS**
- NPA has affected largely on profitability, liquidity and competitive and it is very largely affected in private and public banks. The impact on profitability is been recovering a substantial amount of NPA in 2015-2016 were more than the fresh changes.
- The impacts on the credit risk is certainly higher level of NPA which would be forced to incur carrying cost on a non-income yielding assets.
- This has affected adversely credit growth compared to growth of deposits, results a low cash deposit ratio around 50% in the industry.

**PMDJY**
- Members up to two of the family can apply for a zero balance account under Pradhan Mantri Jan Dhan Yojana. Members can deposit and withdraw money for free.
- Funds can be transferred for free without any charges. There are more than 10 crore of accounts which comes with mobile banking facility and free of any charges.
- The major advantage of being financially literate with the help of literacy programs under the scheme.
Conclusion

Thus, from the study the trading activities which gives the general ideas about the analysis of the stock prices, non performing assets, Pradhan mantri jandhan yojana, price indexes. This might move towards the digital economy. The study gives the role of price movements of shares and stocks with the annual performance in the NPA for past five years. From NPA it shows the progress of asset calculations with the help of charts and indicating the final interpretations with pre and post demonetisation process.

From the basic analysis and interpretations the performance of the financial indicators shows the levels in demonetisation. The level of the analysis shows the term investments in PMJDY indicating how many number of accounts opened with zero balance in rural as well as in urban areas. From the level of analysis taken shows the reason why many of the investments were badly affected in national level.

The analysis carried in technical analysis. The technical analysis shows the basic short term trend based on historical data which is helpful for the long term investments made by the investors. From the analysis found the charts which are prepared on the basis of the share price in the nifty stocks, with the support of technical tools shows all the trends and variations as interpreted in the theory. Therefore the process of demonetisation i.e. pre or post basically helps the investors to invest wisely with the minimum possible risk. Thus, the process of demonetisation will help to eradicate 5% of the Black Economy to put in cash which might push the bank to decrease interest rate by 0.5% in February/ March.

Reference

8. Banking and finance review (BFR) – Volume 3, Issue 2 , December 2011

Websites

3. https://www.rbi.org.in/
6. www.google.com