

# Asia-Pacific Journal of Management and Technology

Online ISSN: 2652-6840

journal homepage www.ajmt.org



Original Article

# Impact of Lock-Down on Banking Sector in India

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#### **Abstract**

As we all are living in lock-down situation due to COVID-19, we have witnessed many ups and downs in Indian economy, especially in banking sector. However, finance sector is backbone for the growth of any country developing as well as developed economy. During last five years Indian banking sector has been facing many problems and challenges. Banks are basic necessity for any human-being irrespective of his economic class. Thus, here, researcher has tried to find out impact of lock-down on two important banking indices; S & P BSE Bankex and Nifty Bank in respect of banking returns by using paired t-test one month pre and post lock-down period. The findings will be useful to many investors as well as banks and policy makers. No doubt, there are many reforms in banking industry since last five years due to demonetisation and various scamps, such study will give insight about performance of Indian Banking Industry.

Keywords: Lock-down; COVID-19; Banking sector; Banking Indices; demonetisation

# Introduction

In India, banks are performing very significant role during lock-down period by providing necessary services to people which otherwise was not possible. In financial sector of India banks are contributing more than any other segment. Indian banks are also facing various changes brought about by financial sector reforms, which are being implemented in a phased manner. Since last decade Indian banking sector has witnessed many reforms and still it is in transition phase in Industry 4.0 era and VUCA economy.

Mehta K. & Jha S. (2020) reported in their study that "the banking analyst, the RBI ,the Finance ministry all are stressed with the scare of contracting the virus but more than

that they are worried about the percentage increase in the NPA's due to the immense negative impact of Covid 19 on the different sectors of industries. Various factors such as lock down, lower consumption rate, higher casualties, higher job erosion higher expenses on health, reduction of imports and exports etc are undoubtedly going to lower the financial health of the companies, firms and individuals. This will result in lower repaying capacity of borrowers and further creating an long term impact on the level of NPA in banks."

#### **Review of Literature:**

In literature very few studies are there which indicate performance of banking sector in India

with respect to average daily return and comparison of this with Indian benchmark indices especially during lock down. Thus, researcher got idea to conduct the present study in the light of current scenario. The following are some of the literatures considered for the study.

The study done by Duraj B, 2015, found out that though there are various studies available on the profitability of banks, among them some studies specify return on assets and return on equity as vital profitability criteria. He has also reported that though the return on asset is one of the important parameters for analysing bank profitability but it is not unanimously accepted by bank's equity holders. The owners of bank are more interested about the return on equity (ROE) rather than the return on asset (ROA).

On the other hand Singh, Makkar, 2016 have undergone research on performance of banks in India, exclaimed that there is no significant difference in the financial performance of both the private and public sector banks in India, but still they have recommended public sector banks to improve to make their position strong in the competitive banking market.

The study by Bhasin, 2018 on digitisation in the Indian banking propagated that digitization in the Indian banking sector provides various opportunities to reduce expenditures on physical structures which is necessary in a developing country like India. He also suggested that digitisation increases the performances in banks by sinking financial hindrances.

The study carried out by Vijayalakshmi B, 2016, seems to be true during lock down period. She stated that various banking facilities like internet banking, mobile banking, and credit and debit cards makes it easier for customers to access banking services using mobile or computer and no need to run to banks for assistance. She has also added that the evolution of internet based banking services provide more flexibility in banking services and increase operational efficiencies in sales and promotion of banking products which is also relevant in present situation.

In his study Vardhan 2015 concluded that banking index played an important role in affecting other indices during post subprime period in India. He has analysed relationships between eight selected sector indices and Sensex for the post subprime period in Indian industry and he noticed only limited lead-lag short-run relationships in some of the selected sector indices.

#### Result & Discussion:

# 1. Objectives of the Study

This study has been conducted to achieve the following objectives:

- To study the impact of first lock down on Nifty Bank Index.
- To study the impact of first lock down on S&P BSE Bankex Index.
- To compare average daily return of Nifty Bank Index with Nifty 50 and S&P BSE Bankex Index with BSE Sensex during first lock down period.

## 2. Hypotheses

- 1 There is no significant difference between one month pre and post lock down 1.0 average daily return of Nifty Bank Index.
- 2 There is no significant difference between one month pre and post lock down 1.0 average daily return of S&P BSE Bankex Index.
- 3 There is no significant difference between average daily return of Nifty Bank Index and Nifty 50 during lock down 1.0.
- 4 There is no significant difference between average daily return of S&P BSE Bankex Index and BSE Sensex during lock down 1.0.

## 3. Sampling and Source of Data

This present study is descriptive and analytical study based on secondary data source. In order to examine the performance of Indian banking sector during first lock down the secondary data has been collected from sources like National Stock Exchange and Bombay Stock Exchange websites for a period of February 24, 2020 to April 24, 2020. The selected Indian Banking Sector indices for the study are Nifty Bank and S&P BSE Bankex, Nifty 50 and BSE Sensex.

# 4. Statistical Tools Used for Analysis

The data has been analyzed with the help of SPSS. To evaluate the performance of indices average daily return mean, median, standard

deviation, minimum and maximum have been calculated for selected series. Paired t test and Independent samples t test were used for the analysis.

#### Results

Table 1: Descriptive statistics of calculated daily return of Nifty Bank, S&P BSE Bankex, BSE Sensex and Nifty 50 during Lockdown 1.0

Parameters		Mean	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
Nifty Bank		1.333	10.512	-5.942	5.638	.188	-1.229
S&P	BSE	1.367	10.704	-5.845	5.876	.232	-1.334
Bankex	(						
BSE Sensex		1.377	8.97	-4.61	4.586	.287	-1.247
Nifty 50		1.384	8.76	-4.38	4.334	.270	-1.051

Source: Author's Calculation

Table 1 contained descriptive statistics such as average mean return, standard deviation, skewness, and kurtosis, etc. of Nifty Bank, S&P BSE Bankex, BSE Sensex and Nifty 50 during Lockdown 1.0. From the table, it can be inferred that the Nifty 50 was generated the highest average daily return with a mean value of 1.384. On the other hand, the Nifty Bank contributes the lowest average return of 1.333 among all the indices. Nifty 50 (1.384) and BSE Sensex (1.377) were out-performed in comparison to S&P BSE Bankex (1.367) and Nifty Bank (1.333) were under-performed respectively.

Standard deviation measured the magnitude of fluctuations (Volatility) which are considered as a degree of risk of assets. The Nifty 50 has recorded the lowest value of standard deviation (4.334) which means that Nifty 50 was less volatile in comparison to other indices. Whereas S&P BSE Bankex (5.876) sector has recorded the highest value of standard deviation. Skewness and Kurtosis shows the distribution of the data. All the indices were positively skewed. Kurtosis (which refers to the degree of flatness at the top of the distribution) of all the indices series is negative.

Table 2: Paired t-test of Nifty Bank and S&P BSE Bankex

Hypothesis	P Value
There is no significant difference between one month pre and post lock down 1.0	.012
average daily return of Nifty Bank Index.	
There is no significant difference between one month pre and post lock down 1.0	.014
average daily return of S&P BSE Bankex Index.	

Source: Author's Calculation

At 95% confidence level, we fail to accept both the null hypothesis mentioned in Table 2 with significant values 0.012 and 0.014 respectively. Thus, we can interpret that there

is a statistically significant difference between one month pre and post first lock down period average daily return of Nifty Bank Index and S&P BSE Bankex Index.

Table 3: Independent Samples t-test of Nifty 50 and BSE Sensex

Hypothesis	P Value
There is no significant difference between average daily return of Nifty Bank Index	.981
and Nifty 50 during lock down 1.0.	
There is no significant difference between average daily return of S&P BSE Bankex	.996
Index and BSE Sensex during lock down 1.0.	

Source: Author's Calculation

At 95% confidence level, we accept both the null hypothesis mentioned in Table 3 with significant values 0.981 and 0.996 respectively. Thus, we can interpret that there is no significant difference between average daily return of Nifty Bank Index and Nifty 50 as well as S&P BSE Bankex Index and BSE Sensex during lock down 1.0.

#### Conclusion:

The present study has contributed in the accomplish of the objectives to study the impact of first lock down on Nifty Bank Index and S&P BSE Bankex as well as to compare average daily return of Nifty Bank Index with Nifty 50 and S&P BSE Bankex Index with BSE Sensex during first lock down period. Based on analysis it was found out that one month pre and post first lock down period average daily return of Nifty Bank Index and S&P BSE Bankex Index differ significantly. Thus, it can be said that lock down has major impact on Indian banking sector. In addition, it was also found out that during lock down 1.0 the average daily return of Nifty Bank Index and Nifty 50 was same and there is no significant difference between average daily return of S&P BSE Bankex Index and BSE Sensex during lock down 1.0. That means during first lock down investors were indifferent between banking index and overall index in respect of average daily return. This research will be supportive to potential investors, corporates and policy makers to determine future investment strategies.

#### **Conflicts of Interest:**

The authors declare that the research review was conducted in the absence of any commercial or economic associations that could be construed as a potential conflict of interest.

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