

## Recent Fiscal and Monetary Change Affects the Indian Banking System: A Special Reference to Nifty Bank and S&P Bse Bankex

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**Abstract:** Policy of a nation like national ownership, the supply of money, EXIM policy, budget, the rate of interest and the taxation are crucial to deciding the supply and deficit of nation's monetary and fiscal element. For a developing nation like India, the two major changes faced during the year 2016-17 and 2017-18 were demonetization and GST (Goods and Service Tax). Demonetization is an act of considering the currency unit as illegal whereas GST states the single tax levy throughout the nation. The change has affected almost every business firm, corporate and individual nationally and globally. Any kind of such is reflected directly in the monetary system, especially to the banking sector. Hence, this paper will highlight the Demonetization and GST effect on Indian Banking sector. The performance of Indian banking sector will be measured from two sets of Indian stock market index i.e. Nifty Bank (NIFTY BANK) and S&P BSE Bankex (S&P BSE BANKEX). For the analysis, the JB test is used to test the data normality and for stationarity of data ADF & PP test is used while to understand the pre and post event paired sample t test is used.

**Keywords:** Economic Policy, GST, Demonetization, Banking Sector, Paired sample t-test, ADF test, JB test

**JEL Classification:** E00, E50, E60, E62, G02, G30, H30, M10, M20, N10.

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### I. Introduction

Economic Policy of the government controls the various economic behavior of the nation. The recent economic policy implemented in India is demonetization and GST (Goods and Service Tax). Various researchers and economist in India repeatedly commented that any change in economic policy leads to several uncertainties [Baker, Bloom, and Davis (2013) and Bhagat and Obreja (2013)]. For instance, if Indian economic uncertainty tends to fall today as it is observed in 2005, then the growth in GDP will be 0.56% and growth in fixed investment will be 1.36%. If we observe the Indian economic policy then the announcement of demonetization and introduction of GST affects every common man of the nation. The prime objective of implementing of these two major policies is to control corruption in unfair trade practices, maintain uniformity in taxation and bring the overall economic growth to the nation. Besides this two major changes in economic policies also have a positive impact on the distribution of wealth and income of the nation, export-import policy, taxation, and the rate of interest, budget, and a monetary deficit of the country.

#### Demonetisation- A divesting act for currency

Demonetization is an act of removing the legality of any currency from its daily usage or circulation. During 8<sup>th</sup> Nov 2016, India saw a dramatic decision taken by Central Government regarding demonetization of Rs. 500 and Rs. 1000. This change is not new for India. History says demonetization is experienced by India during the year 1938 and 1954 of the highest note i.e. Rs. 10,000 which was printed by RBI, followed with January 1946 and 1978 of Rs. 1,000. The main objective of demonetization during 2016 was to control black money, fake currency, and corruption in India. So as to supplement this deficiency government of India introduced new series of Rs 500 and Rs. 2000 notes by 10<sup>th</sup> Nov. 2016.

The various firm, corporate houses were affected differently as per the demand and supply of cash or on the cashless operation. Several researchers argued that demonetization affected Indian economy while few said it is a temporary effect which will come to normalcy.

#### Goods and Service Tax-The philosophy of one rate of Tax for all states in India

The biggest tax reforms said to be implemented in India after post-independence is GST (Goods and Service Tax). The introduction of such will reduce the tax complexity into a simplified tax structure. It's an Indirect tax at all the stages of production to streamline the taxation and maintain uniformity. According to several Tax experts, they support GST as it will change Indian economy to grow more efficiently in tax collection and will reduce the state tax barriers and maintain a single tax rate. GST concept was introduced by

France during 1954 which was then followed by several countries worldwide. In India, it came into existence from 1<sup>st</sup> July 2017 with two modes of tax levy i.e. (CGST) and another States and Union Territories (SGST/UTGST). Parliament holds the sole power to charge tax for inter-state trade or commerce (Import-Export) in goods and services by naming it as IGST. The idea was to have one nation-one tax for which few countries, say New Zealand and Singapore levy single tax rate while Indonesia made the separate ratings for separate categories starting from 0-30%.

**One Nation and One Tax: To Boost Indian Economy through Fair trade practices**

Central and State Government have the power to levy taxes on India. A product reached to the consumer after passing through different tax rates at different places by both Central and State Government. Here Central Government charges Direct and Indirect Tax while State Government charges Indirect Tax only.

**Table-1** Differences between Direct Tax and Indirect Tax

Direct tax	Indirect tax
It is a tax charged on Taxpayer directly and paid to Government. Few Direct Taxes are as follows: <ol style="list-style-type: none"> <li>1. Income Tax</li> <li>2. Corporation Tax</li> <li>3. Property Tax</li> <li>4. Estate Tax</li> <li>5. Gift Tax</li> </ol>	It is a tax charged on goods or services which are borne by the consumer. This is charged at various sources like from companies, dealer, and retailer and at the end, it is imposed on the end user. Some of the Indirect Taxes are as follows: <ol style="list-style-type: none"> <li>1. Custom Duty</li> <li>2. Central Excise Duty</li> <li>3. Service Tax</li> <li>4. VAT</li> <li>5. Entertainment Tax</li> <li>6. Octroi</li> </ol>

The impact of the above two economic policy can be observed through sales performances, financial performances or profit of any industry or firms. But this effect may come to normalcy within a financial year. So as to know the immediate impact of this, the best indicator will be the stock exchange. The stock exchange is based on investor’s sentiments which will immediately reflect on stock price or on return. However, in meanwhile no major events are observed either by the government or any listed companies in NSE or BSE.

**II. Review of Literature**

**A. Economic Policy:**

- Abdiweli (2001), economic policy’s volatility as a stability indicator. He found that the economic policy variables are significant and correlated negatively with the growth of the economy.
- Baker *et al.* (2013), states uncertainty in policy is tough to explain the recent USA economy firmness.
- Bloom *et al.* (2007), they tried to prove an indirect investment response of demand shock with a higher uncertainty. They found that companies are more sensible during investment and disinvestment due to increase in uncertainty of economic policy
- Kumar Arya (2018), Sustainability of firm depends on the economic policy, a continuous growth can be achieved through comparing the expected growth and sustainable growth.

**B. Demonetisation:**

- Bhardwaz *et al.* (2017), in their study, they analyzed the stock market effect due to demonetization by using efficient market hypothesis. They considered the data of NSE of 16 companies for the period of 2012-2016 and found the demonetization impact upon stock market significantly.
- P. Thilagavathi (2017) the author states that demonetization will bring accountability of all cash transactions with effective tax collection and maintain a transparency in the operation.
- Bansal, C. J. (2017), studied the effect on Indian economy due to demonetization. For the analysis, they have considered three sectors i.e. agriculture, service, and manufacturing and opined that the positive effect is observed in agricultural sector while service and manufacturing sector crashed down.
- Senthamizhselvi A (2017) the author highlights the government policies and strategies taken up for black money and corruption free society however it also has a negative side that the general public faced several difficulties but it is a fight for the betterment of the nation so everyone should cooperate together.
- P. Saravana Kumar (2017) the author states that the banking system will slowly move towards a cashless society, the authority can keep track on all kind of transaction however this will definitely bring a great move to boost Indian economy.
- Kaur, M.(2017), analyzed the effect on cashless payment system due to demonetization. The result shows that there is an immediate rise in the plastic currency i.e. debit card, credit card and a high use of net banking.
- K Bhavana Raj (2017) the author states about the demonetization impact on Indian economy. The author confirms that the agriculture sector has fallen down, there is a rise in labor turnover, almost 40-60

percent fall in the textile industry, drop of 50% in real estate sector, 20-30 percent fall in FMCG goods and in the service sector has observed the worst result.

- Mutulakshmi & Kalaimani (2017) it is a practice taken to eradicate the black money of India, however, such decision affects to the general public and nation as a whole. This decision may not fully curb the black money but it will put the impact in a large.
- Mahajan, P., & Singla, A. (2017), the effect of financial inclusion due to demonetization. A significant impact is found in several financial intermediaries like common people, informal sectors, MSME, NBFC, Electronic- wallet companies.
- Nandini and Kalaimani (2017) the author elucidates the demonetization effect on the Indian economy. They state that it was implemented to destroy black money while it was observed people are making queue at ATM and Bank, they also state that the practice of electronic transaction or practice has grown too high.
- Veerakumar, K. (2017), studied the public perception on demonetization. The study compiles gender, age, occupation and annual income which has impacted significantly due to demonetization. The study also states demonetization will assist in putting an end to black money, terrorism, and the most corruption.

#### C. GST:

- Agogo Mawuli (May 2014) in her study, "Goods and Service Tax-An Appraisal" opined that introduction of GST in India will not support lower income group nor it will give a high contribution to poor countries. If still it will be introduced then the rate should be quote less than 10% of growth
- Nishita Gupta (2014) in her study stated that GST will be a boon to Indian economy which is not coined in VAT system. This introduction will put a positive impact on the industry, trade, agriculture, and common people and along with Central and State Government.
- Nitin Kumar (2014) in his study opined that GST implementation in India will remove the barriers of the present Indirect Tax system and abolish the unbiased tax in different geographical locations.
- Saravanan Venkadasalam (2014) in his study opined that common people and Government consumption and expenditure are positively significant like in Singapore. While in some countries like Philippines and Thailand it is negatively significant.
- Geetanjali & Miriam (2017) the authors try to focus on the function of GST on India, implication, and impact on Indian economy. They conclude that GST will help to raise the GDP and also bring transparency in the tax system.
- Dr. R. Vasanthagopal (2011) in his study, he concluded that Indian economy will rise if GST will be introduced abolishing VAT system. More than 130 countries supported GST because of its successful result.
- K. Prabhu Sahai (2017) the author tries to highlight the implications of GST and states about the industries that are affected more due to GST. The author states that this will bring sufficient revenue.
- Amol Agarwal (2011) in his study, he stated that Dr. Kelkar, Chairman of the 13<sup>th</sup> Finance Commission pre-conceive major six features of GST by Prof. Charles McLure are mentioned below
  1. Imposing Uniform tax rate under a single jurisdiction
  2. Sales would be taxed to end user.
  3. The administration will be charged low.
  4. Each Government will quote its tax rate at the defined forum.
  5. Central and State Government produce a feasible Tax Rate.
  6. Tax administration and every level of Government must reciprocate each other.
- M. Govinda Rao, (2009) in his study Feasibility of Introducing GST in April 2010, found that GST is not new to taxation. Rather it is an addition to the existing tax system, in which the Central and State Government will charge in the form of GST.
- Anushuya and Narwal (2014), as per the introduction of GST and CGE at international level is widely accepted, but GST is much power in the context of indirect tax.
- Ch. Venugopal Reddy (2017) the author highlights the prospects and challenges in executing GST in India. The author states that GST brings positive impact on several industry and sectors, however, GST needs to be paid more effort for the implementation by the government through training, seminars, and workshop.

This two events which affected several sectors, firms and Indian economy which motivated the authors to test the impact of demonetization and GST on NIFTY BANK and BSE BANK.

### **III. Objective of the Study**

- To study the impact of demonetization on NIFTY BANK and BSE BANK.
- To study the impact of GST on NIFTY BANK and BSE BANK.

#### IV. Research Methodology

##### A. Data and Data Sources

The data used are secondary, collected from NIFTY BANK and BSE BANK. The average closing price is considered for the event study. The period considered for analysis is as follows:

- Demonetization: 1<sup>st</sup> August 2016- 11<sup>th</sup> February 2017
- GST: 1<sup>st</sup> April 2017- 30<sup>th</sup> September 2017

##### B. Hypothesis:

To satisfy the objective of the study following Hypothesis are formulated to be proved

H<sub>0</sub>1: There is a no significant impact of demonetization and GST on prices of NIFTY BANK and BSE BANK(independent).

H<sub>0</sub>2: The return series of NIFTY BANK and BSE BANK are normally distributed.

H<sub>0</sub>3: The return series of NIFTY BANK and BSE BANK has a unit root.

The condition for Hypothesis 1

If  $p > 0.05$ , Null Hypothesis is accepted and Alternative Hypothesis is rejected.

If  $p < 0.05$ , Null Hypothesis is rejected and Alternative Hypothesis is accepted.

The condition for Hypothesis 2 & 3

If  $p > 0.01$ , Null Hypothesis is accepted and Alternative Hypothesis is rejected.

If  $p < 0.01$ , Null Hypothesis is rejected and Alternative Hypothesis is accepted.

#### V. Analysis of Data

When any two similar set of object or related unit compared to its mean, then it is called as Paired Sample t-Test. The two means are used of two different times (i.e. Pre-test and post-test) or any two related conditions or units (i.e. left and right ears, twins). The main objective of such test is to analyze the difference of mean observed has zero significance statistically. One of the parametric tests is Paired samples t-test.

Note: Paired t-test will only compare two means (and only 2) units on a continuous outcome that are distributed normally. t-test is not useful for following reasons:

- Data that is unpaired.
- The comparison was done between more than two groups or units.
- A continuous outcome that is not distributed normally.
- Any outcome that is ordinal/ ranked.

The paired Samples  $t$  test, can statistically formulate as

$$t = \frac{\bar{x}_{diff} - 0}{s_{\bar{x}}}$$

Where,

$$s_{\bar{x}} = \frac{s_{diff}}{\sqrt{n}}$$

Where,

$\bar{x}_{diff}$  = Sample mean of the differences

$n$  = Sample size (i.e., number of observations)

$s_{diff}$  = Sample standard deviation of the differences

$s_{\bar{x}}$  = Estimated standard error of the mean ( $s/\sqrt{n}$ )

The result of  $t$  value will be compared with the critical  $t$  value where  $df = n-1$ , where the confidence level will be chosen. In case it is observed that  $t$  value is more than the critical value of  $t$ , then the null hypothesis is rejected. (This will be concluded that the mean is different significantly).

**Jarque-Bera Test:** It is a tool for the measurement of normality. This tool measures kurtosis and skewness which is supposed to be 3 and 0 respectively for normality.

The formula is:

$$JB = n [(\sqrt{b_1})^2 / 6 + (b_2 - 3)^2 / 24].$$

Where:

$n$  is the sample size,

$\sqrt{b_1}$  is the sample skewness coefficient,

$b_2$  is the kurtosis coefficient.

**Augmented Dickey-Fuller:** it is an advanced tool to Dickey-Fuller Test which is used to measure complex model for series correlation.

**VI. Results and Discussion**

Table-1&2 shows a result i.e. the impact of demonetization i.e. on dated 8<sup>th</sup> Nov. 2016 on S&P BSE BANKEX and NIFTY BANK respectively where the paired sample t test gives an output considering the daily average prices before demonetization and prices after demonetization. Graph-1 & 2 is also drawn get a clear picture of how the prices are moving.

**Table-1- Impact of Demonetization on S&P BSE BANKEX**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Before - After	737.30	1179.71	144.12	449.54	1025.05	5.116	.000	

**Table-2 Impact of Demonetization on NIFTY BANK**

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Before - After	633.90	997.65	121.88	390.55	877.244	5.201	.000	

From the above two table, we can find t test result on the impact of demonetization on the stock market, which shows the statistically significant result for both S&P BSE BANKEX and NIFTY BANK as .000. Both of the results are observed at 5% level of significance. So, these results reject our null hypothesis (H<sub>0</sub>) and accept our Alternative Hypothesis (H<sub>1</sub>) i.e. demonetization has a statistically significant effect on prices of S&P BSE BANKEX and NIFTY BANK.

**Graph-1- Impact of Demonetization on S&P BSE BANKEX and NIFTY BANK**

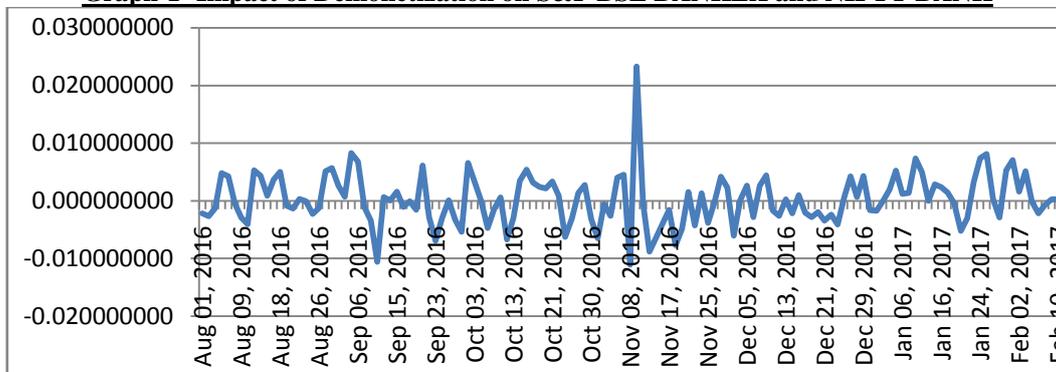


Figure 1 S&P BSE BANKEX Return (Pre & Post Demonetization)

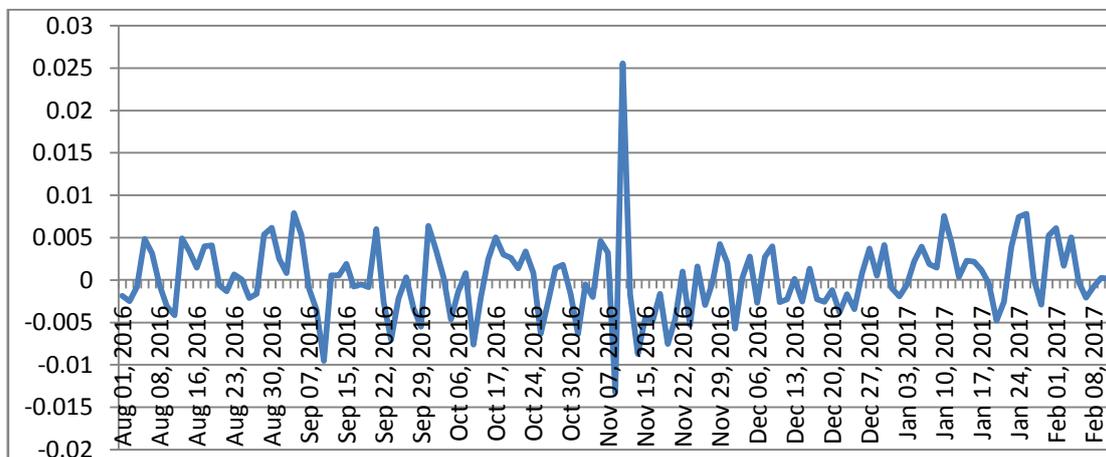


Figure 2NIFTY BANK Return (Pre & Post Demonetization)

**Findings:**

From the above graph 1& 2, we can see a clear picture of the rise in price just immediately after the demonetization. It can be said that Demonetization i.e. on dated 8<sup>th</sup> Nov. 2016 put a positive impact on the prices of S&P BSE Bankex

and NIFTY BANK. However, it is also visible a balance trend after two months in both S&P BSE BANKEX and NIFTY BANK that means the effect of demonetization was for a shorter duration, while there are other factors which are not taken into consideration so the change may be for other factors also.

Table- 3& 4, It shows the result of paired sample t test i.e. the impact of GST i.e. on dated 1<sup>st</sup> July 2017 on the prices of S&P BSE BANKEX and NIFTY BANK respectively. The daily average prices before GST and prices after GST are considered. Graph-3 & 4 is also drawn to analyze the graphical trend.

Table-3 Impact of GST on S&P BSE BANKEX

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Before - After	-1683.62	654.13	83.75	-1851.15	-1516.09	-20.10	60	.000

Table-4 Impact of GST on NIFTY BANK

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Before - After	-1590.95	576.99	73.87	-1738.72	-1443.17	-21.53	60	.000

The results from the above table 3& 4 show the significance value at 5% level is .000 for both S&P BSE BANKEX & NIFTY BANK as statistically significant. Therefore, we reject the null hypothesis ( $H_0$ ) and accept the alternative hypothesis ( $H_2$ ). The series is not random. Thus, it means that the price of S&P BSE BANKEX & NIFTY BANK follow some predictable patterns which are due to the implementation of GST.

**Graph-2- Impact of GST on S&P BSE BANKEX and NIFTY BANK**

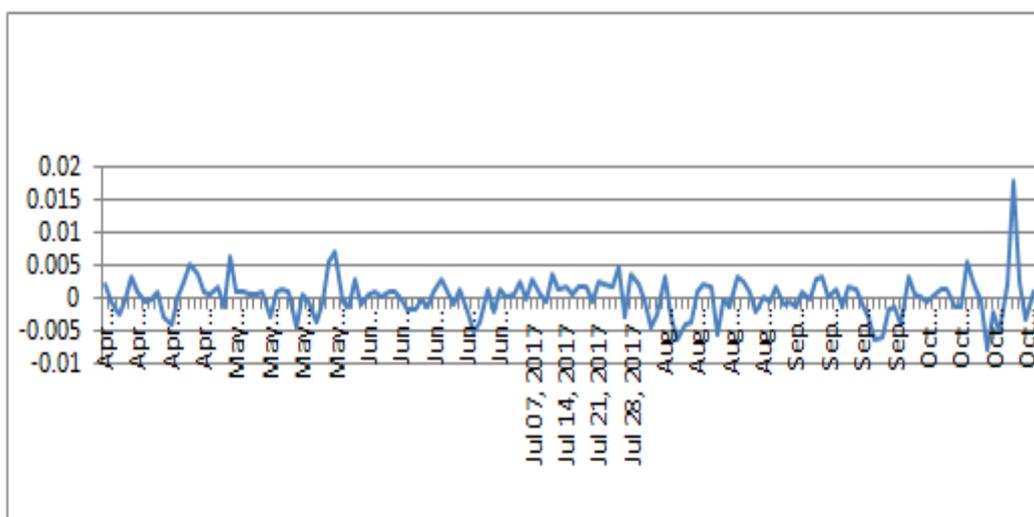


Figure 3 S&P BSE BANKEX (Pre and Post GST)

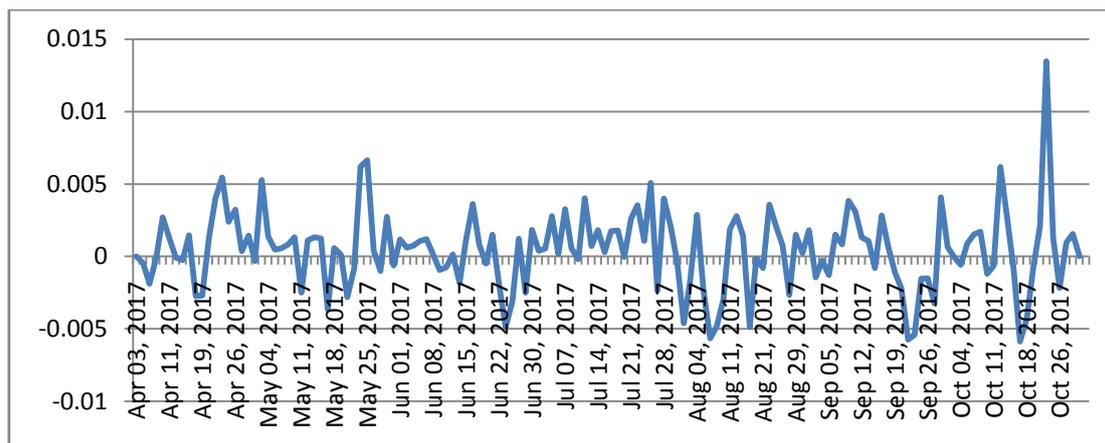


Figure 3NIFTY BANK (Pre and Post GST)

**Findings:**

From the above graph 3 & 4, it is clearly visible a slight fall in the rising trend of the prices of S&P BSE BANKEX and NIFTY BANK after the introduction of GST. However it was not as low as it is observed during the month of April, but it will not be wrong to say that introduction of GST affected the S&P BSE BANKEX and NIFTY BANK negatively. Although the depression was not continued for the long term.

**Testing the Normality of return Series:**

Table-5-Jarque Bera Test

Variables	Demonetization		GST	
	S&P BSE BANKEX	NIFTY BANK	S&P BSE BANKEX	NIFTY BANK
Jarque-Bera	4.127693	4.874290	6.566242	6.923176
Probability	0.126965	0.087410	0.037511	0.031380
Observation	134	134	122	122
Skewness	-0.075527	-0.097486	-0.450894	-0.474544
Kurtosis	2.153554	2.086220	2.308265	2.320905
Minimum	20244.01	17737.20	24440.72	21466.43
Maximum	23555.19	20466.31	28413.83	25114.01
Average	21909.25	19133.75	26639.67	23523.61
Median	21960.27	19194.22	26740.27	23609.17
Std. Dev.	803.6662	685.2415	1073.889	1013.396
Graph				

**Findings:**

**S&P BSE BANKEX Demonetization:** The average price shows a result as 21909.25 which is a positive value throughout the period, it defines nominal profit even the standard deviation shows 803.6662. The result states about negatively skewed short left tail from the normal distribution as the Skewness shows -0.075527 which is supposed to be 0 and the price shows lighter tailed as kurtosis gives a result as 2.153554 while it is expected to be 3.

**NIFTY BANK Demonetization:** The mean value is 19133.75 which maintain a positive result throughout the period. The standard deviation states 685.2415 still it shows a nominal profit. The result of skewness should be 0 for normal distribution series, while we get the result as -0.097486 for skewness that implies a negatively skewed left tail and far from normality. We get a result of 2.086220 which is less than normal kurtosis value 3, which implies the price is light tailed.

**S&P BSE BANKEX GST:** The average return shows a result as 26639.67 which is a positive value throughout the period, it defines nominal profit and the standard deviation shows 1073.889. The result states about

negatively skewed left tail from the normal distribution as the of Skewness shows -0.450894 the price shows lighter tailed as kurtosis gives a result as 2.308265.

**NIFTY BANK GST:**The mean value is 23523.61 which maintain a positive result throughout the period. The standard deviation states 1013.396 still it shows a nominal profit. The result of skewness should be 0 for normal distribution series, while we get the result as -0.474544 for skewness that implies a negatively skewed left tail and far from normality. We get a result of 2.320905 which is high than normal kurtosis value 3, which implies the return is tailed light.

By using JB test (JarqueBera) for normality at 1 % level of significance shows the acceptance of null hypothesis and rejection of the alternative hypothesis. It suggests that the return series is normally distributed.

This can be interpreted that the result of normality states about less effect of demonetization and GST on return series even it sustains for a shorter period.

**Testing the Unit Root of return Series:**

**Table-6- S&P BSE BANKEX Demonetization- Stationarity Test**

Variables	Augmented Dickey-Fuller			Phillips Perron Test		
	Intercept	Intercept and trend	None	Intercept	Intercept and trend	None
<i>t- Statistics</i>	-1.22243	-1.088133	0.601315	-1.374095	-1.236535	0.557701
<i>*Probability</i>	0.6636	0.9264	0.8451	0.5932	0.8983	0.8355
1% level	-3.48003	-4.028496	-2.582465	-3.480038	-4.028496	-2.582465
5% level	-2.88323	-3.443961	-1.943247	-2.883239	-3.443961	-1.943247
10% level	-2.57842	-3.146755	-1.615122	-2.578420	-3.146755	-1.615122

\*MacKinnon (1996) one-sided p-values.

Table-6, states about the test of unit root or stationary of prices of S&P BSE BANKEX during demonetization through ADF test and Philips perron test. The findings show significant at level 1%. Here we get the probability higher than 1% for S&P BSE BANKEX. This defines that the alternative hypothesis is rejected and accepted the null hypothesis i.e. the return series is non-stationary in nature. Which conclude that there exists autocorrelation.

**Table-7- NIFTY BANK Demonetization- Stationarity Test**

Variables	Augmented Dickey-Fuller			Phillips Perron Test		
	Intercept	Intercept and trend	None	Intercept	Intercept and trend	None
<i>t- Statistics</i>	-1.27442	-1.146699	0.577059	-1.326927	-1.200432	0.577059
<i>*Probability</i>	0.6402	0.9163	0.8398	0.6158	0.9059	0.8398
1% level	-3.48003	-4.028496	-2.582465	-3.480038	-4.028496	-2.582465
5% level	-2.88323	-3.443961	-1.943247	-2.883239	-3.443961	-1.943247
10% level	-2.57842	-3.146755	-1.615122	-2.578420	-3.146755	-1.615122

\*MacKinnon (1996) one-sided p-values

Table-7, states about the test of unit root or stationary of prices of NIFTY BANK during demonetization through ADF test and Philips perron test. At 1% level of significant we get the result of probability more than 1% which states that there exist autocorrelation, in general, our null hypothesis is accepted and rejects the alternative hypothesis.

**Table-8- NIFTY BANK GST- Stationarity Test**

Variables	Augmented Dickey-Fuller			Phillips Perron Test		
	Intercept	Intercept and trend	None	Intercept	Intercept and trend	None
<i>t- Statistics</i>	-1.85453	-1.836289	1.062484	-1.933686	-1.601803	1.286803
<i>*Probability</i>	0.3528	0.6809	0.9242	0.3160	0.7868	0.9493
1% level	-3.48558	-4.036310	-2.584375	-3.485115	-4.035648	-2.584214
5% level	-2.88565	-3.447699	-1.943516	-2.885450	-3.447383	-1.943494
10% level	-2.57970	-3.148946	-1.614956	-2.579598	-3.148761	-1.614970

\*MacKinnon (1996) one-sided p-values.

Table-8, states about the test of unit root or stationary of prices of S&P BSE BANKEX during GST through ADF test and Philips perron test. The findings of ADF show significant at level 1%. Here we get the probability higher than 1% for S&P BSE BANKEX. This defines that the alternative hypothesis is rejected and accepted the null hypothesis i.e. the return series is non- stationary in nature. Which conclude that there exists autocorrelation.

Table-9- S&P BSE BANKEX GST- Stationarity Test

Variables	Augmented Dickey-Fuller			Phillips Perron Test		
	Intercept	Intercept and trend	None	Intercept	Intercept and trend	None
t- Statistics	-1.83123	-1.805309	0.946508	-1.930453	-1.532908	1.155855
*Probability	0.3639	0.6962	0.9079	0.3175	0.8129	0.9356
1% level	-3.48558	-4.036310	-2.584375	-3.485115	-4.035648	-2.584214
5% level	-2.88565	-3.447699	-1.943516	-2.885450	-3.447383	-1.943494
10% level	-2.57970	-3.148946	-1.614956	-2.579598	-3.148761	-1.614970

\*MacKinnon (1996) one-sided p-values.

Table-9, states about the test of unit root or stationary of prices of NIFTY BANK during GST through ADF test and Philips perron test. At 1% level of significant we get the result of probability more than 1% which states that there exist autocorrelation, in general, our null hypothesis is accepted and rejects the alternative hypothesis

## VII. Conclusion

The study was made to analyze the impact of Demonetisation and GST on Indian Economy. For analysis, the paper considered the S&P BSE BANKEX and NIFTY BANK as it defines the economic condition of India; in general, banking industry is one which was observed to be highly disturbed due to cash crunch and change in taxation policy. It is witnessed from the past literature that any changes in Indian economy affect the Indian stock market. Hence, the analysis was done by using paired sample t test, and the result shows a significant impact on the stock market before the event and after the event. The paper also used ADF test for stationary of data which states that the data are non-stationary. However, the JB test shows normality of return series. So this result shows a mixed effect of demonetization and GST on banking sector, however, it did not last for long and it recovered within a short time. So, this study finds a significant impact of demonetization and GST on Indian bank index i.e. the implementation of recent Economic Policy has affected the Indian economy for a shorter period of time as India was not victimized of any other economic changes in last two years.

## VIII. Scope for Future Research

This is the area which has a wide scope for analysis because any economic event will affect the Indian Economy. The analysis considered the Equity index of two indices i.e. S&P BSE BANKEX and NIFTY BANK, while further research can be done by considering recent news or events on the derivative segment, an impact study on different sectors can also be considered and identify which type of sector is highly affected due to any economic changes.

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