



# “THE STUDY ON SCAM AND IT’S EFFECT ON COMPANIES STOCK PRICE WITH RESPECT TO PUNJAB NATIONAL BANK”

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**Abstract:** At a time when the government is aiming for bank recapitalization, the PNB scam comes as a huge blow to the entire banking sector. The magnitude of PNB scam is very exorbitant and it has been happening for more than 5 years undetected. Our study examines that the stock price of Punjab National Bank will be impacted or not during the scam arises. This study aims to find out the significance between news of scam and share price. The research applied correlation of Nifty PSU bank index and Punjab national bank.

**Keywords:** PNB, Scam, Stock Price, Nifty PSU bank index.

## **1. Introduction**

On April 12, 1895, Punjab National Bank, India's first Swadeshi Bank, began operations from Lahore, with a Rs 2 shortage of approved capital and Rs 20,000 working capital. The Bank was founded in the spirit of nationalism and was the first bank purely owned by Indian Capital. Throughout the long history of the bank, nine banks have merged with PNB. In view of the announcement of the merger of public sector banks in which the Oriental Bank of Commerce and the United Bank of India merged with the Punjab National Bank. The financial year 2019-20 was relevant with effect from 1 April 2020.

## How scam happened in PNB:-

The enforcement directorate took fresh action against Nirav Modi and attached assets worth Rs 11,356.84 crore of the absconding diamantire in connection with its money laundering probe in the over USD 2 billion **PNB fraud** case.

They said that under the Prevention of Money Laundering Act (PMLA), the central probe agency released a provisional order attaching a number of Nirav Modi, his associates and business-linked firms' bank accounts, immovable assets and share investments.

Last week, over 34,000 pieces of jewellery worth Rs 85 crore from the Gitanjali Company, owned by the uncle and jeweller Mehul Choksi of Nirav Modi, were also seized by the agency in this case.

Nirav Modi and Choksi are being investigated by the Enforcement Directorate (ED) for allegedly cheating Punjab National Bank, the country's second largest lender, to the tune of more than USD 2 billion or over Rs 13,000 crore.

At least four of Modi's family members, including his father, brother, sister and brother-in-law, and his US-based business partner, Mihir Bhansali, were also recently summoned by the Agency in this case.

The CBI and other enforcement agencies are also testing this case.

Such agencies now believe that Nirav Modi and Choksi might now be in the U.S. (US).

The ED had attached more than Rs 7,600 crore worth of assets of all the accused in this case until March, according to records. The duo and others are being investigated under various criminal laws after the fraud came to light this year following a complaint by PNB that they allegedly cheated the nationalized bank to the tune of more than Rs 13,000 crore, with the alleged involvement of a few bank employees.

The Central Bureau of Investigation and the ED have registered two first information reports each in the case.

In the case before a Mumbai court, the CBI filed two charge sheets last week, while the ED is expected to soon file its own prosecution complaint.

The ED complaint or charge sheet will concentrate on the aspect of money laundering and Nirav Modi, Choksi and others' role in perpetrating the alleged fraud.

It is said that both Nirav Modi and Choksi left the country before criminal cases were filed against them.

## **2. Literature review**

Paresh Wagh in (2019) studied to identification of scam and its analysis , what are the failure and internal processes and practices caused scam and analyzing comprehensively on Punjab National Bank scam. He identified that SWIFT transaction were held from last 7 years and there was no planning in risk management system. There was a new reform after this scam that was mandatory to be adapted by bank and it was been closely watched by RBI of its working.

Ashit and Ankur (2019) examine to understand the criminal liability of company and to knows the fines and penalties put on the company and its directors. The empirical result it is important to take some serious action in relation to the criminal liability of the company so that it would be stopped. If this will happen continuously then amount of investors will decreases.

NVR rajagopalan (2014) examine the satyam computer service limited scam in India. The share price of selected price of select IT companies were collected from process data base and NSE website and cross verified to confirm the same price data. They found the very high negative abnormal returns were observed in the case of satyam.

**Asst prof Divyang Joshi (2018)** stated to find the impact of earning news on stock price, and the corporate announcement have very important impact on the individual investor. He founded that they founded an abnormal change was observed when news was introduced. After the event volume goes down so earning news has impact on investor.

**Dhanraj, Ruchita and Shiney (2019)** investigate the concept of the reaction of stock price of Indian banks with respect to announcement of frauds. The empirical result indicates that announcement of frauds affect the stock price of banks. The study found negative abnormal loss on the event day which further increased in post- event period.

## **3. Objective**

- (1) To find out the significance between news of scam and share price.
- (2) To analyze trend and correlation of Nifty PSU bank index and Punjab National Bank.

## **4. Research methodology**

Research methodology is outline the plan and method that how the study is conduct. So, Mention below detail about it.

**Research Design:** Descriptive research design

**Source of data:** We collect data from secondary sources i.e. from NSE and Money control website about the stock prices of that particular period.

**Data collection method:** Secondary data

**Population:** In that research we have taken the population of NIFTY Banks.

**Sample size:** News of PNB scam before 15 days and after 15 days.

**Sampling method:** stratified random sampling method.

**Statistical tools for analysis:** Co-relation method, charts.

## **5. Data analysis**

In the analysis of the share price of PNB and Nifty PSU bank index we have been calculating of the time period from 29/01/2018 to 18/05/2018 for the PNB shares and we took the 2 years index of 2017 and 2018.

### **To prove the hypothesis of**

**H<sub>0</sub> (A):** There is no significant effect of the scam on share price of PNB in the short run.

**H<sub>1</sub> (A):** There is significant effect of the scam on share price of PNB in short run.

We have been first of all listed down the list of news of scam which were given the time period of 29/1/2018 to 18/05/2018.

We took the share price data and index data and calculated the return of the same by

I.e. **Return** = LN (present date share price and index /previous date share price and index) In –  
logarithm of number

Further to it we calculated the **Intercept** i.e. (alpha), **Slope** i.e. (beta), **Standard error** and **standard error** i.e. (square root)

**Intercept** = intercept of return of share price and index (start: end share price, start: end index)

**Slope** = Slope of return of share price and index (start: end share price, start: end index)

**Standard Error** = STEYX of return of share price and index (start: end share price, start: end index)

**R square** = RSQ of return of share price and index (start: end share price, start: end index).

We took the data of the PNB share price as per all the news headlines date by 15 before the headline and

15 days after news.

We calculated the **abnormal return, T test, and Significance and Cumulative average return.**

**Abnormal return** = (return of PNB on a date) – (intercept) + (slope \* return of nifty PSU bank date).

**T test** = (abnormal return / standard error)

**Significance** =IF(Value of T test<1.96,"yes","no")

**Cumulative abnormal return** = pervious date abnormal return + present date abnormal return.

We concluded the data calculation by seeing the news impact on stock price of PNB by the majority of significance and the chart of cumulative average return.

<b>Date</b>	<b>News</b>	<b>Significance</b>
<b>29/1/2018</b>	<b>Punjab National Bank (PNB) files police complaint</b> against Nirav Modi, Mehul Choksi and others accusing fraud to the tune of Rs 2.81 billion.	<b>Yes</b>
<b>5/2/2018</b>	<b>CBI Books Billionaire Nirav Modi In Rs 280 Cr Cheating Case.</b>  The CBI has booked diamond merchant Nirav Modi, his brother, wife and a business partner for allegedly cheating the Punjab National Bank (PNB) of over Rs 280.70 crore in 2017, officials said.	<b>Yes</b>
<b>14/2/2018</b>	<b>Punjab National Bank says detects \$1.77 billion worth of fraudulent transactions.</b>  The bank said in a statement the transactions were "for the benefit of a few select account holders with their apparent connivance" and that "based on these transactions other banks appear to have advanced money to these customers abroad."	<b>Yes</b>
<b>15/2/2018</b>	<b>Nobody will be spared: Finance Minister on PNB fraud case.</b>  Talking to reporters on the PNB fraud case, Financial Services Secretary Rajiv Kumar said the bank will make the required provisioning and it has "sufficient" funds for it.	<b>Yes</b>

15/2/2018	<p><b>Modus operandi of the \$1.8 billion PNB-Nirav Modi scam.</b></p> <p>The fraud came to light when the corrupt PNB official retired. When the Nirav Modi and Gitanjali firms requested for fresh LoUs, they were denied, since the records did not mention any such arrangement.</p>	Yes
15/2/2018	<p><b>PNB Scam: Bank's MD and CEO breaks silence on Rs 11,000 crore scam.</b></p> <p>The bank's top management spoke about how they uncovered the fraud and the steps it has taken to "punish the culprits", reiterating their resolve for clean banking.</p>	Yes
15/2/2018	<p><b>SWIFT and Tripping: How Punjab National Bank's Rs 11,000 cr scam was operated.</b></p> <p>Foreign branches of at least two Indian banks including Axis Bank and Allahabad Bank are likely to have been caught in the fraud with an alleged credit offering given based on letters of undertaking (LOUs) issued by PNB.</p>	Yes
17/2/2018	<p><b>Punjab National Bank scam: CBI arrests 3 accused including 2 former PNB employees</b></p> <p>First three arrests have been made in the Punjab National Bank (PNB) fraud case.</p>	Yes
21/2/2018	<p><b>CBI arrests PNB's GM-rank officer in fraud case</b></p> <p>Rajesh Jindal, who was the head of the Brady House, Mumbai, branch of the bank during 2009-11, was taken into custody last night, they said.</p>	Yes
23/2/2018	<p><b>PNB Fraud Case: Nirav Modi &amp; Mehul Choksi's web of LLP firms under scanner – Full List</b></p> <p>Over Rs 11,400 crore was siphoned-off through Punjab National Bank (PNB) issuing LOUs to Modi.</p>	Yes

25/2/2018	<p><b>PNB fraud case: Scam may cost banking sector much more than Rs 11,400 crore</b></p> <p>The final bill of the PNB fraud to the Indian banking system could well be in the vicinity of Rs 21,000 crore</p>	Yes
27/2/2018	<p><b>PNB fraud case: More unauthorized transactions at the bank</b></p> <p>The latest in the Punjab National Bank (PNB) fraud case --- the bank has revealed that the quantum of fraud in the Nirav Modi case could be larger than what they expected it to be.</p>	Yes
1/3/2018	<p><b>PNB fraud case: Nirav Modi offers payback plan</b></p> <p>Nirav Modi gives 'Concrete Proposal' to Punjab National Bank (PNB) to settle dues.</p>	Yes
5/3/2018	<p><b>PNB scam: Bank's business hit as clients await investigation reports</b></p> <p>PNB's current and savings' account (CASA) deposits stood at Rs 2.67 lakh crore.</p>	Yes
10/3/2018	<p><b>PNB incurred losses of Rs 2,808 cr due to frauds in 2016-17: Govt</b></p> <p>Enlisting the bank-wise details of cases of fraud reported by public sector banks (PSBs), involving an amount of Rs 1 lakh and above for 2016-17, Jaitley in a reply to the Lok Sabha said that Punjab National Bank encountered 158 such cases that caused loss of Rs 2,808.27 crore to the bank.</p>	No
13/3/2018	<p><b>PNB fraud quantum increases by Rs 942.18 crore to around Rs 13600 crore.</b></p> <p>The Punjab National Bank (PNB) fraud could be even bigger than the already revised estimate of Rs 12700 crore. The CBI has told the special court hearing the matter that PNB has filed a supplementary complaint with some additional findings</p>	Yes

15/3/2018	<p><b>Another scam unearthed at PNB as CBI detects fresh fraud worth Rs 9 crore</b></p> <p>In a FIR filed with BS&amp;FC, two LOUs were issued by PNB employees Gokulnath Shetty and Hemant Kharat, who were also named in the complaint filed against Nirav Modi's companies, to Chandri Papers and Allied Products worth Rs 9,000 crore.</p>	Yes
22/3/2018	<p><b>PNB issued over 41k LOUs since 2011: Finance Minister</b></p> <p>Fraudulent LOUs of the state-owned PNB were used by diamantine Nirav Modi and his associates to defraud the bank of about Rs 13,000 crore.</p>	No
4/4/2018	<p><b>PNB's FY18 domestic business turnover crosses Rs 10 trillion despite Rs 13,400-crore fraud.</b></p> <p>State-owned <u>Punjab National Bank</u> (PNB) has reported a 7.9 per cent increase in its domestic business, crossing Rs 10 trillion turnover for the first time ever in FY18, <u>reported Business Standard</u>.</p>	No
10/4/2018	<p><b>Scam-hit PNB refused CVC's advice against its corrupt staff</b></p> <p>The latest CVC report refers to a case in which the PNB sanctioned a Cash Credit (CC) limit of Rs 200 lakh and Term Loan (TL) of Rs 150 lakh to a firm for setting up a manufacturing unit in Dehradun against mortgage of property that was find unviable.</p>	Neutral
6/5/2018	<p><b>Big wilful defaulters owe PNB Rs 15,172 crore</b></p> <p>Big wilful defaulters owed Rs 15,171.91 crore in loans to <u>Punjab National Bank</u> at the end of March this year. The data from the bank relates to those wilful defaulters who have taken loans of Rs 25 lakh and above but did not repay despite the ability to do so.</p>	Yes



17/5/2018	<p><b>PNB case: ED seizes Rs 85-cr worth jewellery of Choksi's firm brought from Dubai</b></p> <p>It said the seizure of gold and silver jewellery was made on May 10 after the ED raided a strong-room belonging to Bharat Diamond Bourse.</p> <p>"The ED seized over 34,000 pieces of jewellery worth Rs 85 crore under the PMLA of Mehul Choksi-controlled Gitanjali Group brought from Dubai,"</p>	Neutral
28/5/2018	<p><b>21 PSBs lost Rs 25,775 crore in bank frauds in 2017-18: RTI</b></p> <p>The <u>Punjab National Bank</u> (PNB) had incurred the</p>	No
	<p>highest loss of Rs 6461.13 crore due to different cases of fraud during the fiscal that ended on March 31 this year, Chandrasekhar Gaud, who had filed the RTI with the Reserve Bank of India, told PTI.</p>	

For the above hypothesis we tested the impact of news on stock price of PNB bank where we found that the news which came during the period of 29/01/2018 to 18/05/2018 has the impact on the share very significantly. With every news in the market there is a downfall in the share price rapidly.

Therefore  $H_0$  is rejected that there is no significant effect of news on PNB bank share price.

### To prove the second hypothesis of

**H0(B):** There is no effect of PNB scam on PSU banks index.

**H1(B):** There is a effect of PNB scam on PSU banks index.

For this we would be using the correlation test to see the effect of scam on the index.

**CORRELATION** = correlation (return of PNB: return of PSU index)

$$= (0.8215)^2$$

$$= 0.6748 * 100$$

$$= 67.48\%$$

There is a very strong and positive correlation between PNB return and PSU bank index it is 67.48% of change in Y variable (PSU index return) due to change in X variable (PNB return). Due to the scam there is a very adverse effect in the on PSU bank index which states that the scam of PNB did effect the other PSU

banks as well in the stock market.

Therefore  $H_0$  is rejected that there is no significant impact of scam of PNB to the PSU bank index.

## **6. FINDINGS**

Through this research we deep understood about scam concepts and impact on stock price of Punjab national bank. In this research we use secondary data which was collected from money control and NSE website.

A scam in one sector also leads to the effect to other companies as well; majorly the company's which are engaged with that company. We found that the news which came during the period of 29<sup>th</sup> January 2018 to 18<sup>th</sup> May 2018 has the impact on the share very significantly. With every news in the market there is a downfall in the share price rapidly.

## **7. CONCLUSION**

There is always a significant impact on the share price of PNB bank due to scam arise, as the shareholders are very much afraid of the loss of money which leads to reduction of share price i.e. sale of shares and loss of shareholders trust on the PNB bank.

If the one bank share price goes down due to scam leads to positive correlation to the PSU bank index. There is always a affect of scam on other banks in PSU as well as we found the reduction in PSU index which states that banks which are associate with PNB bank are also in impact to it.

We found the actual pattern of the share price effect by testing the cumulative abnormal return through T test.

### **Reference**

- (1) N.v.R. Rajagopalan (2014), "Shocking news outbreak and stock market reactions: A study on satyam Scam Computer services limited Scam in India", Asia Pacific Journal of Research, Vol. 1, Issue 13, PP 137 – 150.
- (2) Pooja Gupta, Arti Mehta Sharma (2014), "A study of the impact of corporate governance practices on firm performance in Indian and south Korean companies", Procedia Social and Behavioral Sciences, 133, PP 4 – 11.
- (3) Gaurav Singh, Rohan Singh, Rakesh Patel (2018), "The Domination Effect of Bank Crisis & Exchange", International Journal of Research and Analytical Reviews, Vol. 5, Issue 4, PP 251 – 257.
- (4) R. Chitra (2011), "Technical Analysis on selected stocks of Energy Sector", International Journal of Management & Business Studies, Vol. 1, Issue 1, PP 42 -46.
- (5) Masoud Taherinia, Reza Talebi (2019), "Ability of Fraud Triangle, Fraud Diamond, Beneish M Score

and Altman z Score to predict Financial Statements Fraud, Journal of Economics and Social Research, Vol. 18, Issue 2, PP 213 – 226.

(6) Prof. A G Awan, K. Siddique, G. Sarwar (2014), “The effect of Economic Value added on stock returns: Evidence from selected companies of Karachi stock exchange, Research Journal of Finance and Accounting, Vol. 5, Issue 23, PP 140 – 152.

(7) Anup Agrawal and Shiba Chadha (2005), “Corporate governance and Accounting Scandals”, Journal of Law and Economics, Vol. XL VIII, PP 371 – 406.

(8) S. Gayathri and T. Mangaiyarkarasi (2018), “A critical Analysis of the Punjab National Bank Scam and its Implications”, International Journal of Pure and Applied Mathematics, Vol. 119, Issue 12, PP 14853 – 14866.

(9) Dr.Ritu Wadhwa And Mr. Kartik Ramaswamy (2020), “Impact of NPA on Profitability of Banks”, International Journal of Engineering Technology and Management Science, Vol. 4, Issue 3, PP 1 – 8.

(10) Amirsh Dogra and Manu Dogra (2019), “Sustainability and Ethical Banking: A case study of Punjab National Bank”, Amity Journal of Corporate Governance, Vol. 4, Issue 1, PP 15 – 27.

(11) Shreya Mazmudar (2018), “Investigating into the affairs of the company: Random Unnecessary Security?”, Journal of Corporate Governance & International Business Law, vol. 1, Issue 2, PP 1 – 9.

(12) Aashit Sharma and Ankur Jain (2019), “Criminal Liability of Company”, Journal of Corporate Governance & International Business Law, Vol. 2, Issue 1, PP 20 – 23.

(13) S. Bandivadekar and S. Gosh (2003), “Derivatives and volatility on Indian stock markets.”, Reserve Bank of India Occasional Papers, vol. 24, Issue 3, PP 187 – 201.

(14) HojatallahGoudarzi (2011), “Modeling asymmetric Volatility in the Indian stock market”, International Journal of Business and Management, Vol. 6, Issue 3, PP 221 – 231.

(15) Intaz Ali (2016), “Stock Market Volatility and Returns: A study of NSE & BSE in India”, International Journal of Humanities & Social Science Studies, Vol. II, Issue IV, PP 202 – 211.

(16) Dr.Satyantani Roy Choudhury (2020), “Impact of company news and consumer sentiments on stock price Fluctuation”, Journal of Economics and Finance, Vol. 10, Issue 3, PP 74 – 81.

(17) Ashutosh Kotle and Paresh Wagh (2019), “Analyzing Punjab National Bank scam”, Journal of Emerging Technologies and innovative Research, Vol.6, Issue 6, PP 585 – 592.

(18) Nikhil Vijay, Snimarpal Singh and Gyanesh Malhotra (2018), “Sentiment Analysis: Gauging the effect of news on stock prices in Indian stock market”, Vol. 9, Issue 4, PP 148 – 152.

(19) Spandan Ghose Chowdhury, Soham Routh and Satyajit chakarbarti (2014), “News Analytics and sentiments analysis to predict stock price”, international journal of computer science and information

technologies, Vol 5, Issue 3, PP 3595 – 3604.

(20) Dr.NalinipravaTrippathy (2011), “The Relation between price changes and trading volume: A study in Indian Stock Market”, Interdisciplinary Journal of Research in business, Vol. 1, Issue 7, PP 81 – 94.

(21) M V Pinto and K .Asnani (2011), “Stock price prediction using quotes and financial news”, international journal of soft computing and engineering, Vol. 1, Issue 5, PP 266 – 269.

### Websites

[https://www.moneycontrol.com/stocks/histstock.php?ex=N&sc\\_id=PNB05&mycomp=PNB](https://www.moneycontrol.com/stocks/histstock.php?ex=N&sc_id=PNB05&mycomp=PNB)

[https://www.moneycontrol.com/stocks/company\\_info/stock\\_news.php?sc\\_id=PNB05&scat=&pageno=13&next=1&durationType=Y&Year=2018&duration=1&news\\_type=](https://www.moneycontrol.com/stocks/company_info/stock_news.php?sc_id=PNB05&scat=&pageno=13&next=1&durationType=Y&Year=2018&duration=1&news_type=)

<https://www.pnbindia.in/>

<https://www.bankofbaroda.in/>

<https://www.onlinesbi.com/>

[https://craytheon.com/financials/fundamental\\_stock\\_analysis\\_cagr\\_annual\\_growth\\_rate\\_trend\\_chart.php?company=PNB](https://craytheon.com/financials/fundamental_stock_analysis_cagr_annual_growth_rate_trend_chart.php?company=PNB)

[https://m.economictimes.com/markets/stocks/news/view-take-a-rest-punjab-national-bank-youve-done-enough/amp\\_articleshow/64187831.cms](https://m.economictimes.com/markets/stocks/news/view-take-a-rest-punjab-national-bank-youve-done-enough/amp_articleshow/64187831.cms)

<https://timesofindia.indiatimes.com/business/india-business/pnb-hasnt-got-a-penny-from-fugitives-nirav-modi-mehul-choksi/articleshow/78760407.cms>