

# Analysis on Monitoring Indian Stock Market Regarding the Union Budget of 2020 in Negative Angle

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## **Abstract**

*This research paper points on union budget is the step or the budgete of the Govt. to take better incentives for providing better allocation of funds to all the existing industries. The union budget will play a key role for the stock market on the day of budget session. Because if the union budget is affordable to the industries it will be on positive if not it will be negative. The proposed paper tells about the budget impact of 2020 which is negative on stock market. The main purpose of this research is to find out the fluctuations of the stock market over pre and post trading day respective to union budget presentation in parliament. In this research regression statistics tools are used in methodology.*

**Keywords:** *Union Budget, Sensex, Volatility, Return*

## **1. Introduction**

National Stock Market is called as NSE established in 1990 at Bombay. The NSE has indices called NIFTY 50 because it comprises of top 50 companies that contributes the major role. The market capitalization was US\$3.4 trillion dollars. The NSE makes the transparency transition to all the traders who are involved in it. To safeguard the rights of the investors the NSE was under the SEBI supervision. The NIFTY 50 is a place where all the contracts will be bought and sold. If the top 50 companies use to increase the share market then automatically the BSE also tends to increase. In this paper want to show the difference that how much extent of the share market is affecting on the day of the budget. NSE offers trading, equity derivatives, debt, commodity derivatives. NSE improved the prettiness on the Indian stock market to domestic and worldwide investors. Budget was the main source of the Indian stock market if the budget is mainly comprising of the economic reforms then the stock market will also tend to positive way if not it be negative.

## **2. Review of Literature**

Many research discussions are conducted on the impact of budget declaration in stock market for upcoming constructive results. Some of them are discussed here as

As per Singh and Dhamija (2019), the economic structure belonging to a country is closely linked with the stock market as found in that nation. Thus it becomes imperative that the fundamentals of a stock market should be an indicator of the budget as presented.

Saraswat and Banga (2012) analyzed those impact of union budget 2020 on the stock market By quell by Nifty As far as returns also instability. Those periods were isolated under short-term, medium-term, and long term. That outcome demonstrated that budgets required the greatest impact in the transient period, for exactly effect extending under that medium-term also no noteworthy effect in the least on the long term Normal returns. For respects on instability those result shown that those long term time following the budget has a tendency with a chance to be that's only the tip of the iceberg unstable over those medium-term and the fleeting periods when contrasted with comparable long term in the recent past the budget.

Verma Also Agarwal (2005) investigated that effect about budget once stock returns to 4 a considerable length of time. Those ponder compared the profit on the CNX Nifty list previously, and then following the budget should right the off chance. Those discoveries inferred starting with those contemplate were that the off chance need set a momentous impact on the stock market.

Gakhar et al (2015) need broke down that effect for union budget around NSE's CNX Nifty list. That impact might have been measured As far as every day Normal returns Furthermore instability in that short term, medium term Furthermore in length term phasefor pre Furthermore post budget period. The study might have been to five budget periods starting with 2011 should 2015. Measurable instruments for example, such that matched T-test Furthermore F-test were utilized. Matched T-test might have been directed on normal returns and the F-test might have been directed for variances In the period, i. E. , 3, 10 And 30 days On pre Also post budget time. The effects demonstrated that the effect of the budget might have been seen most extreme in the transient which after that bit by bit diminished throughout that medium term Furthermore At last reduced in the long term. Thusly the paper inferred that the mogul ought to alarm with put resources into those share trading system around the budget time.

Babu and Venkateswarlu (2013) analyzed the contact of the Unit budgets with respect to Indian stock prices, similarly as spoken to by Sensex, the leading list by Bombay stock trade. That nineteen-year phasestarting with 1991 with 2009 might have been utilized to the investigation. Those measurable tests were connected once returns around those phaseby budget Also three, fifteen And thirty days' Normal proceeds about the budget indicated that In the years, a budget exerted the most extreme effect As far as outright return promptly looking into And around the budget day which bit by bit lessened By one moves further away from the budget day.

P. Varadharajan et al (2011) the stock market will be seeing heightened exercises and will be progressively picking up vitality. In the present connection of globalization and the resulting integrative of the worldwide businesses this paper arrests those tendency, similitude's Furthermore designs in the exercises and developments of the Indian stock market from 2002 should 2011. Present paper investigates that crash about budget for stock market instability also investigation how proceeds change with it. An alternate essential Investigation finished is on find that instability for diverse months to a phaseby ten quite some time for four significant indices to India. The principle point will be will help moguls pick up information

around instability display in distinctive months, thereby they could contribute carefully. Thus, this examines aides the moguls should minimize their in general danger and boost that profit for their financing through whatever time of time.

SisiraKanti Mishra (2015) for those budget timings harmonizing by those advertise And for the entire budget gazing at it with incredible enthusiasm and the following networking hype, business sectors bring off reacting should budgets ahead a constant foundation. Those Growth of innovation organization need included of the result in for an incredible approach. Those union budget makes gigantic advertise instability Furthermore turnover in the share trading system former should budget as separate desires prevails with admiration to duties impact around individuals, organizations Furthermore Generally speaking economy. Following the budget publication also instability proceeds by showcase movers for example, FIIS, DIIS, common finances, trade investor, also how conform their portfolio similarly as for every the budget effects.

Vadalisri ram datta et al (2015) to their study pointed on the occasion budget effect once Indian markets, the Investigation phaseneed been acknowledged starting with 2004-05 will 2013-14. Increased dickey more full test need been connected for the stationery of the information. Budget will be acknowledged by a standout amongst the significant monetary off chance which takes spot consistently. That course of the Indian economy is sketched by that administration for India throughout union budget. Instability of the equity business sector might have been watched health throughout the discourse chance by budget in assembly. Sharpe discrepancy compute shown that the execution by businesses were superior then afterward the budget publication. Relapse weight judgment begin that Indian Growth will be impacted toward those financial deficiency. This examination may be functional for the equity moguls to be specific DII, FII, regulators, mf managers, etc....

Gupta Furthermore Kundu (2006) investigated the effect of Uni budgets with respect to share trading system acknowledging those returns and instability done Sensex. They found that budgets need most extreme effect for short-term post-budget period, as contrasted with medium term Furthermore long term Normal returns and instability doesn't by and large increment previously, a post-budget circumstance Likewise those time phase increments.

#### Union budget 2015-16

That Narendra Modi government's initially full-year budget might have been a volatile of unstable undertaking stocks that rose 141 points on the budget day. Nifty 50, on the other hand it goes down 12 points on the day shutting toward 8,901 points however recuperated in the Emulating week to close at 8,937 points.

#### Union Budget 2016-17

2016-17 budgets might have been a touch of a curveball for the businesses as soon as that index drooped on the budget day in any case demonstrated critical proceeds in the next week. Sensex required at initial go down from 23,238 with 23,002 toward those end of the day yet come back in the advancing week and finished In 24,646 points. likewise, Nifty 50 go down 63 points and finished the budget day at 6,987 points

however might have been equipped on recuperate from those misfortune and end the following week during 7,485 points.

#### Union Budget 2017-18

On the day for 2017-18 budget statement, Sensex unlocked at 27,669 points Furthermore shut toward 28,141. Alternatively, more extensive Nifty 50 list unlocked at 8,570 and shut toward 8,716, bouncing 146 points on the budget day. The pattern proceeded in the Emulating week also At Sensex bounced on 28,334 and Nifty touched 8,793 points.

#### Union Budget 2018-19

On what might have been Arun Jaitley's keep going budget appearance Sensex lost 142 points on the day of the budget same time Nifty 50 fall 28 points. A week after the fact those index be at a halt unabated will disregard the effect Similarly as Sensex lost 2,043 points Furthermore Nifty 50 shut beneath those 11,000 Stamps. Separated starting with these 2 instance, Sensex and Nifty need been instead sprightly post-budget bring in certain proceeds for moguls.

#### Union Budget 2019-20

On July 5, 2019, The point when Nirmala Sitharaman exhibited the parliament for NDA's 1st budget Previously, its 2<sup>nd</sup> time the Sensex required unlocked at 39,990 Also Nifty 50 might have been In 11964. By Sitharaman laid crazy her budget will settle on India a \$5 trillion economy gurus were not content. Obviously S&P bse Sensex shut In 39,513 Also Nifty 50 toward 11,811, together drop position. In the week then afterward those budget Sensex shut at 38,736 Also Nifty 50 closed In 11,552. An proposition that searched should expand base government funded shareholding done recorded organizations with 35 percent starting with 25 percent hit the business sector diligent.

#### Short-term Budget 2019

In the short-term budget in front of the 2019 universal elections, Piyush Goyal exhibited the budget assuming control the wheel starting with Arun Jaitley for An concise time. For trusts of a populist budget ahead of the all races with woo voters those business sector hopped starting with 36,311 will wind the day during 36,469 points. Those Nifty 50 list a really went from 10,851 with 10,893 points on the budget day.

#### Union Budget 2020-21

Household value benchmarks Sensex and Nifty stopped through 2.5 percentage every, By union budget frustrated the gurus in the profession nowadays. In the last hour of the trade, S&P BSE Sensex stopped approximately at 1,100 points, same time those more extensive Nifty 50 list go down 318 points alternately 2.67% and slipped beneath the significant level of 11,650 points. In close, Sensex finished 988 points or 2.43 percentage at 39,735.53 same time those NSE's Nifty 50 done 318 points or 2.66 percentage toward 11,643.80 points.

Sl.no	date	Presenters
1	28 FEB 2015	Arun Jaitley's budget
2	29 FEB 2016	Arun Jaitley's budget
3	1 FEB 2017	Arun Jaitley's budget

4	1 FEB 2018	Arun Jaitely's budget
5	1 FEB 2019	Piyush Goyal's budget (interim)
6	1 FEB 2020	Nirmala Sitharaman's budget

Table.1. Budget Covered list

### 3. Purpose of the study

- a. To analyse the impact of the union budget 2020 on proceeds and volatility of NIFTY 50 of NSE
- b. Analysis on the crash of declarations in union budget into pre and post budget phase.

#### 3.1 Scope

The investigation is highlighted to compute the instability, average returns and crash of budget. Here investigation of 5 budgets assembly are measured as 2015 - 2020 year together with one short-term budget statement

### 4. Methodology

Our main objective is that to show the differences between on day of the budget or not. The budget was commenced on the 1<sup>st</sup> February 2020 Saturday. Though Saturday was holiday to the global markets but the budget was taken place. The budget shows the impact on the top 50 companies is impacting on day of budget. The 50 companies I have chosen are bank nifty, automobile industry, fast moving consumer goods, infrastructure, information & technology, pharmaceutical these are main industries which I have pointed. I have used the statistical tools like t-test to find the difference. The data I have taken is the day before the budget, on the date of budget, and post date of the budget.

In order to understand abnormal returns on the selected scripts caused by the selected event, the estimated return was calculated considering data for 60 days using regression analysis. Abnormal return (AR) was calculated by deducting estimated return from actual return. It is considered as an abnormal return caused by the event. Average abnormal return (AAR) was calculated by averaging the irregular come back of the chosen companies. The study also calculated a cumulative average abnormal return (CAAR) in order to know the sustainability effect of the event. Return on a specific company is calculated as,

The day by day shutting costs of NIFTY and SENSEX list is gathered by yahoo money site for a phase of 2015 to 2020 that incorporates an aggregate of 7 Union Budgets and 1 short-term Budget. The time span of the examination has been grouped into pre-spending plan and post spending phase. An aggregate of 60 exchanging days' information around the spending time frame is in use. The occasion window is isolated into present moment (3 days), medium term (15 days), long time (30 days) when the presentation of the association spending plan.

The auxiliary information is investigated utilizing the accompanying measurable instruments:  
 First, the logarithmic day by day proceeds to be establish over the earlier day's end an incentive throughout the whole 5 years time frame.

Second, the normal proceeds in pre-spending plan and post-spending phase, throughout the past and the following 3, 10 and 30 days are determined.

Third, the standard deviation and differences throughout the past and next 3, 10, and 30 days of the spending plan is determined.

After this, the factual devices, a combined T-test utilizing SPSS is functional on normal returns.

#### 4.1 Phase of Study

Pre 30 days (X3)	Pre 15 days (X2)	Pre 3 days (X1)	Budget Day End (Z)	Post 3 days (Y1)	Post 15 days (Y2)	Post 30 days (Y3)
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Table.2. Statistical Information

The statistical information has been broke down utilizing the accompanying measurable devices:

The logarithmic day by day proceeds have been found by scientists over investigation period.

The normal returns in pre and post spending phase, throughout when 3, 15 and 30 days are determined.

The return is determined utilizing following recipe.

$$R_t = \log(P_t) - \log(P_{t-1}) * 100$$

Where  $R_t$  = Market Return at the period t  
 $P_t$  = Closing Price of file at day t  
 $P_{t-1}$  = Closing Price of file at day t-1  
 Log = Natural log  
 Here, X1 and Y1 are two same time spans.

After that, factual matched T-test have been applied on normal returns of Sensex and Nifty.

DATE	X3	X2	X1	Z	Y1	Y2	Y3
2015	8914.30	8805.50	8767.25	8901.85	8922.65	8633.15	8492.30
2016	7563.55	7162.95	7018.70	6987.05	7475.60	7498.75	7597.00
2017	8179.50	8400.35	8641.25	8716.40	8801.05	8724.70	8945.80
2018	10435.55	10788.55	11130.40	11016.90	10498.25	10452.30	10458.35
2019	10910.10	10890.30	10652.20	10893.65	11062.45	10724.40	10792.50
2020	12182.50	12343.30	12129.50	11661.85	12089.15	12045.80	11132.75

Table.3. Points of NIFTY 50

## 5. Analyses and Discussion

DATE	X3	X2	X1	Z	Y1	Y2	Y3
2015	0.5310	-0.1088	0.4111	0.2802	-0.0448	-0.0140	-0.1284
2016	-0.0389	-0.6758	-0.0957	-0.2646	1.0314	0.0582	0.1814
2017	0.0792	0.5626	-0.0835	0.7797	0.1932	-0.0345	0.0456
2018	0.0547	-0.0418	0.0756	-0.0425	-0.8564	0.1808	-0.0273
2019	-0.0981	-0.2946	0.3431	0.2507	0.2899	0.0172	0.2443
2020	0.0501	-0.0678	0.2646	-1.1039	0.3952	-0.2432	-0.2683

Table.4. Table: Average Returns of NIFTY 50

Table represents the average daily returns of Nifty over the study period. The figures indicates that in short term post budget there are three positive returns in 2016, 2017 and 2019 and for pre-budget year 2015, 2018 and 2019 (interim) show positive returns. In average expression has 3 positive returns for post phase compared to pre phase with four negative returns. In long term budget has no significant impact on prices

X3&Z	X2&Z	X1&Z	Y1&Z	Y2&Z	Y3&Z
0.6356	0.0294	0.7402	0.8440	0.4788	0.5320
>0.05 accept HO	<0.05 not accept HO	>0.05 accept HO	>0.05 accept HO	>0.05 accept HO	>0.05 accept HO

Table.5. Budget Day Effect on NIFTY

From The table 4, it was seen that the significance values are 0.6356 and 0.5320 which was greater than 0.05 (chosen value) respectively, consequently we recognize null hypothesis that has no important impact of Union Budget on Nifty for long term phase before and after budget. It was seen that the significance values is 0.0294 which is less than 0.05 (chosen value), therefore we did not recognize null hypothesis that there is important crash of Union Budget on Nifty for moderate term phasebefore budget while after budget it was 0.4788 which is greater than 0.05 (chosen value), therefore we recognize null hypothesis that there is no important impact of Union Budget on Nifty for moderate term phaseafter budget. It was seen that the significance values are 0.7402 and 0.8440 which was greater than 0.05 (chosen value) respectively, therefore to recognize null hypothesis has no important contact of Union Budget on Nifty for less phase before and after budget.

## 6. Conclusion

The result shown has spending plan does not consider the influence of the NIFTY. Subsequent to using the matched T-Test, here we originate the result of expenditure plan on normal proceeds isn't huge

whether in pre or post spending phase, for present moment, medium term and long time. Here additionally experimented about the financial plan with huge crash in current instant where as less in medium and even less in long term spending declaration by investing the H2 assumption. Finally in the same manner financial researchers contribute the prediction of market assumptions whether it is high in current moment or makes an examination by using speculation techniques during the declaration days.

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