

# INVESTMENT PERFORMANCE LEVEL OF JSW STEEL IN DERIVATIVES MARKET

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## **Abstract**

The investment performance of every company depends upon the stability, facing of challenges, formulation of policies, etc. The company's need to have efficiency in their working performance of an investment in any avenues in order to earn more profits and bear less risk. The derivatives market is also one of the investment avenues where the company's invests. The present study focused on secondary data. The JSW steel how it operates in the derivatives market especially in futures and options market. The study revealed that the futures market settlement price is higher than the options market. So, the study stands with the operational activities and investment performance level of JSW Steel in derivatives market.

**Keywords:** Derivatives, Futures, Options, Performance level

## **Introduction**

Derivatives is basically financial security whose value is derived from an underlying asset in the form of Equity, Index, Foreign exchanges, Commodities or any other asset. There are three participants will come in derivatives market like Hedgers, Speculators and Arbitrageurs. The hedgers faces risk associated with the price of an asset and they use futures or options markets to reduce or eliminate their risk, the speculators bet on the futures movements in the price of an asset and the arbitrageurs makes profit by taking advantage of difference between prices of the same product across different markets. The financial derivatives market is also a type of contract where underlying asset is a financial asset like equity, interest rates and exchange rates.

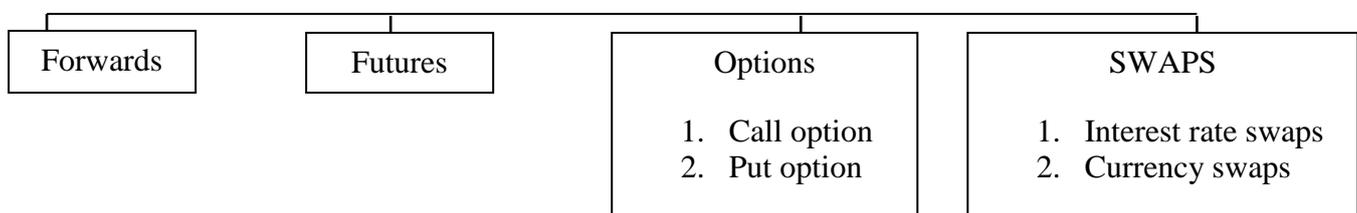
## **Background of the Study**

As the initial a step towards the introduction of derivatives trading in India, SEBI set up a 24 member committee under the chairmanship of Dr. L. C. Gupta on November 18, 1996 to develop an appropriate regulatory framework for derivatives trading in India. The committee submitted its report on March 17, 1998 recommending that derivatives should be declared as securities so that regulatory framework applicable to the trading of securities could also govern the trading of derivatives. Subsequently, SEBI set up a group in June 1998 under the chairmanship of Prof.J.R.Verma, to recommend submitted its report in October 1998. It worked out the operational details of the margining system, a methodology for charging initial margins, membership details and net-worth criterion, deposit

requirements and real-time monitoring of positions requirements. The exchange-traded derivatives started in India in June 2000 with SEBI permitting BSE and NSE to introduce the equity derivative segment. To begin with, SEBI approved trading in index futures contracts based on nifty and Senses, which commenced trading in June 2000. Later, trading in index options commenced in June 2001 and trading in options on individual stocks commenced in July 2001. Future contracts on individual stocks started in November 2001. Metropolitan Stock Exchange of India limited (MESI) started trading in derivative products in February 2013. Derivatives market in India has a history dating back in 1875. The Bombay Cotton Trading Association started future trading in this year. History suggests that by 1900 India became one of the world's largest futures trading industry. However after independence, in 1952, the government of India officially put a ban on cash settlement and options trading. This ban on commodities future trading was uplift in the year 2000. The creation of National Electronics Commodity Exchange made it possible. In 1993, the National stocks Exchange, an electronics based trading exchange came into existence. The Bombay stock exchange was already fully functional for over 100 years then. Over the BSE, forward trading was there in the form of Badla trading, but formally derivatives trading kicked started in its present form after 2001 only. The NSE started trading in CNX Nifty index futures on June 12, 2000, based on CNX Nifty 50 index

### Types of Derivatives Market

The type of derivatives market as follows:



#### Forwards

Forward contract is an agreement between parties to buy and sell underlying asset at a specified date and agreed rate in future. The contracts are customized and traded over the counter market that is there is no secondary market. The date of settlement will be on maturity date and risk is high. The chances of default risk will be high.

#### Futures

A contract in which the parties agree to exchange the asset for cash at a fixed price and at a future specified date is known as a futures contract. The contracts are standardized and traded on organized stock exchange. The date of settlement will be on a daily basis and risk is low.

#### Options

An option is a contract, which gives the right, but not an obligation to buy or sell the underlying asset at a stated date and at a stated price. While a buyer of an option pays the premium and buys the right to exercise his option, the writer of the option is the one who receives the option premium and therefore obliged to sell or buy the asset, if the buyer exercises it on him.

##### 1) Call option

Call option gives the buyer the right, but not an obligation to buy a given quantity of the underlying asset, at a given price on or before a given future date.

##### 2) Put option

Put option gives the buyer the right, but not an obligation to sell a given quantity of underlying asset at a given price on or before a given future date.

**European option:** It can be exercised only on the date of option expiry.

**American option:** It can be exercised at any time before the option expires.

#### SWAPS

These are private agreements between two parties to exchange cash flows in the future according to a formula.

##### 1) Interest rate swaps

These entail swapping only the interest related cash flows between the parties in the same currency.

## 2) Currency swaps

These entail swapping both principal and interest between the parties, with the cash flows in one direction being in a different currency than those in the opposite direction.

### Review of Literature

**Toopalli Sirisha and Dr. NallaBala Kalyan<sup>1</sup>**, in their article entitled “A study on the derivatives market in India”, they were mainly concentrated on statistical part of TCS Company and its stock futures, equity table, options price were tabulated. The researcher found that derivatives market will minimize the risk; it was found that options market is more reliable than futures market. The researcher suggested that, the margin of safety need to be high and if investor invested in options market, it will give more returns. So, the researcher was made comparison between the futures and options of TCS Company market.”

**Renson Tomy, et.al.<sup>2</sup>**, in their article entitled “Emerging trends and problems in Indian equity derivatives market”, they were gone through about finance derivatives may be a financial security with a worth derived from an underlying asset. It's a contract between two or more parties. During this paper they were taken a study on the new trends of equity derivatives. Equity derivatives are a financial instrument where the worth springs from an equity movement. There have been several studies conducted on the equity studies. Here they were specialized in the developments and benefits of equity derivatives and therefore the new trends therein field. For this the collected data from secondary sources and means the new trends. Derivatives play an important role within the development of Indian economy. So each and each study about derivatives is extremely relevant.”

### Need for the study

The study helps to know the diversified portfolio constructed by JSW Steel and by this one can easily understood about the different operations carried out with respect to futures and options derivatives market.

### Objectives

1. To study investment pattern in derivatives market of JSW Steel.
2. To know operational efficiency of JSW Steel in futures and operations market.
3. To offer suggestions based on findings.

### Scope of the study

The present study focus is on JSW Steel's investment performance of Stock futures and options market. The data derived from National Stock Exchange (NSE) website.

### Research framework

The study was done on secondary sources by visiting National Stock Exchange (NSE) website, articles, books and magazines.

**Results and Discussion****Table 1: Represents the Sock futures of JSW Steel**

Source: NSE website

DATE	EXPIRY DATE	STRIKE PRICE	OPEN PRICE	HIGH PRICE	LOW PRICE	CLOSE PRICE	LAST PRICE	SETTLE PRICE	Volume	VALUE	PREMIUM VALUE	OPEN INTEREST	CHANGE IN OI
23-12-20	31-12-20	300	360.8	368.65	358.5	367.9	368	367.9	17496000	6,361,317,045.00	6,361,317,045.00	24175800	-8996400
22-12-20	31-12-20	300	355	364.2	347.15	361.8	360.85	361.8	14658300	5,232,162,330.00	5,232,162,330.00	33172200	-1080000
21-12-20	31-12-20	300	361.45	369.5	344.6	353.25	350.5	353.25	15244200	5,469,301,710.00	5,469,301,710.00	34252200	-186300
18-12-20	31-12-20	300	368.65	369	358	365.25	364	365.25	10084500	3,678,175,170.00	3,678,175,170.00	34438500	-326700
17-12-20	31-12-20	300	370.95	373.8	365.75	367.25	367.2	367.25	6779700	2,508,159,060.00	2,508,159,060.00	34765200	-699300
16-12-20	31-12-20	300	369.9	373.5	365	371.3	371.45	371.3	12949200	4,778,794,800.00	4,778,794,800.00	35464500	-936900
15-12-20	31-12-20	300	357.9	368.3	354	367.3	367.95	367.3	11539800	4,179,703,275.00	4,179,703,275.00	36401400	-237600
14-12-20	31-12-20	300	364	365.75	357.5	358.4	358.35	358.4	9104400	3,288,333,510.00	3,288,333,510.00	36639000	874800
11-12-20	31-12-20	300	364.1	367.85	358.5	360.8	360.3	360.8	9309600	3,379,279,770.00	3,379,279,770.00	35764200	496800
10-12-20	31-12-20	300	362.85	368.05	357.3	364.3	364.5	364.3	12746700	4,624,254,360.00	4,624,254,360.00	35267400	-162000
9-12-20	31-12-20	300	369.55	369.55	359.55	362.45	362.45	362.45	9158400	3,327,159,375.00	3,327,159,375.00	35429400	-383400
8-12-20	31-12-20	300	366.25	369	358.3	364.3	364.15	364.3	10062900	3,658,183,290.00	3,658,183,290.00	35812800	-116100
7-12-20	31-12-20	300	372.25	374.45	363.05	366.1	366.05	366.1	10195200	3,750,871,860.00	3,750,871,860.00	35928900	604800
4-12-20	31-12-20	300	372.95	377.4	364	372.65	373	372.65	12708900	4,719,801,555.00	4,719,801,555.00	35324100	186300
3-12-20	31-12-20	300	370.45	375.3	368.5	372.45	372.45	372.45	10492200	3,905,277,030.00	3,905,277,030.00	35137800	-685800
2-12-20	31-12-20	300	358.4	372.7	358.4	370.45	369.55	370.45	18168300	6,676,837,965.00	6,676,837,965.00	35823600	-8100
1-12-20	31-12-20	300	355.5	360.75	353.15	359.6	358.95	359.6	9347400	3,337,572,870.00	3,337,572,870.00	35831700	-526500
27-11-20	31-12-20	300	361.4	362.9	350	352.3	351.95	352.3	20636100	7,373,971,350.00	7,373,971,350.00	36358200	-1077300
26-11-20	31-12-20	300	340.45	362.85	336.6	360.5	362.75	360.5	19404900	6,795,145,485.00	6,795,145,485.00	37435500	3601800
25-11-20	31-12-20	300	346	347.4	338.05	338.85	338.5	338.85	14123700	4,851,207,315.00	4,851,207,315.00	33833700	4055400
24-11-20	31-12-20	300	339.45	343.6	335.6	342.1	342.05	342.1	10292400	3,495,305,520.00	3,495,305,520.00	29778300	5821200

Figure 1: Represents the Sock futures of JSW Steel



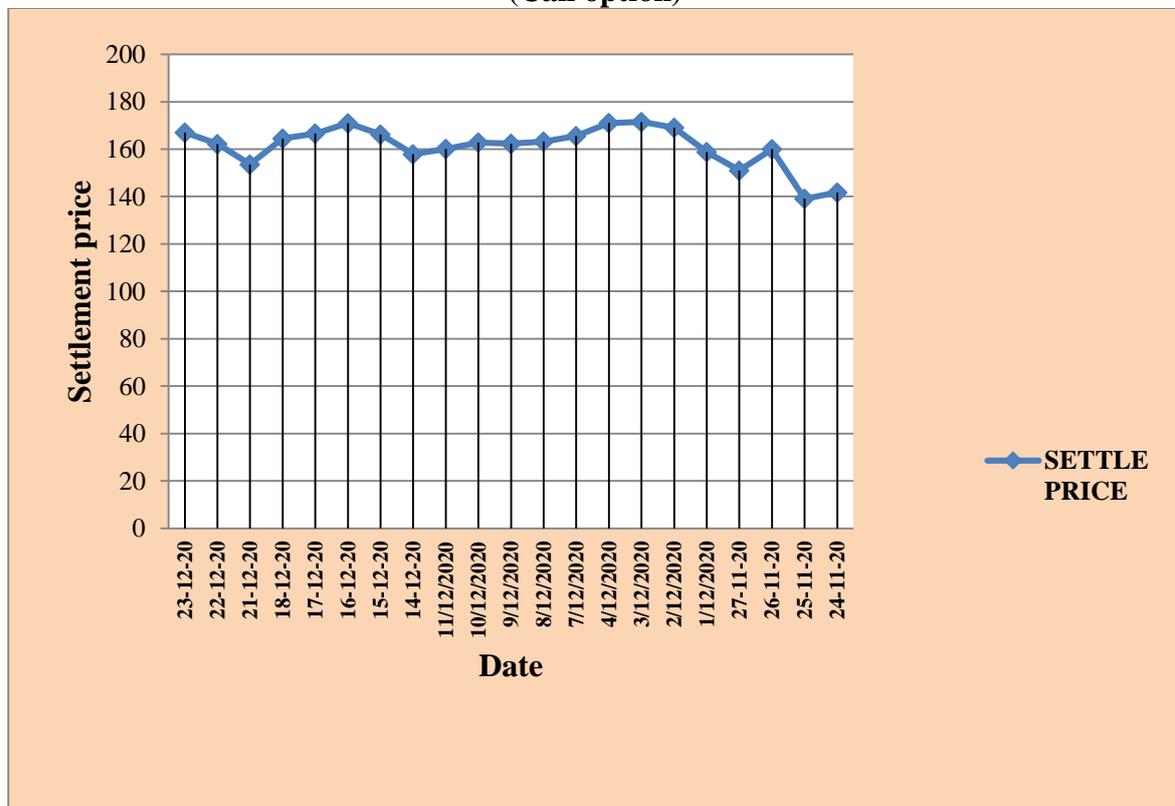
The above table and figure depicts that there is a higher rate of growth in settlement price when compared from 24<sup>th</sup> November, 2020 to 23<sup>rd</sup> December, 2020. The settlement price as on 24<sup>th</sup> November, 2020 is Rs. 342.10, on 10<sup>th</sup> December, 2020 is Rs. 364.3 and as on 23<sup>rd</sup> December, 2020 is Rs. 367.90. The premium value which is also increased from 3 million to 6 million between this duration. The percentage of changes in open interest shows the negative effect as on 23<sup>rd</sup> December, 2020 whereas, on 24<sup>th</sup> November, 2020 it was positive. So, if open interest means the outstanding contracts need to be clear as soon as possible in order to increase the efficiency of JSW Steel and if Open interest is negative, then it shows the number of outstanding contracts are become as not liquidity which is a biggest trouble for the company and if open interest is positive, then it shows the outstanding contracts will become liquidity in the near future that is the chance of probability of liquidity is high. So, JSW Steel had to increase the investment performance level in stock futures market in order to sustain in the market for a longer period.

**Table 2: Represents the Sock Options of JSW Steel  
(Call option)**

Source: NSE website

DATE	EXPIRY DATE	OPTION TYPE	STRIKE PRICE	CLOSE PRICE	SETTLE PRICE	VALUE	PREMIUM VALUE	OPEN INTEREST	CHANGE IN OI
23-12-20	31-12-20	CE	200	67.85	167.05	-	-	0	0
22-12-20	31-12-20	CE	200	67.85	162.2	-	-	0	0
21-12-20	31-12-20	CE	200	67.85	153.6	-	-	0	0
18-12-20	31-12-20	CE	200	67.85	164.5	-	-	0	0
17-12-20	31-12-20	CE	200	67.85	166.55	-	-	0	0
16-12-20	31-12-20	CE	200	67.85	170.95	-	-	0	0
15-12-20	31-12-20	CE	200	67.85	166.25	-	-	0	0
14-12-20	31-12-20	CE	200	67.85	157.9	-	-	0	0
11/12/2020	31-12-20	CE	200	67.85	160.1	-	-	0	0
10/12/2020	31-12-20	CE	200	67.85	162.8	-	-	0	0
9/12/2020	31-12-20	CE	200	67.85	162.35	-	-	0	0
8/12/2020	31-12-20	CE	200	67.85	163.2	-	-	0	0
7/12/2020	31-12-20	CE	200	67.85	165.55	-	-	0	0
4/12/2020	31-12-20	CE	200	67.85	171.05	-	-	0	0
3/12/2020	31-12-20	CE	200	67.85	171.5	-	-	0	0
2/12/2020	31-12-20	CE	200	67.85	169.05	-	-	0	0
1/12/2020	31-12-20	CE	200	67.85	158.85	-	-	0	0
27-11-20	31-12-20	CE	200	67.85	151	-	-	0	0
26-11-20	31-12-20	CE	200	67.85	160	-	-	0	0
25-11-20	31-12-20	CE	200	67.85	139.1	-	-	0	0
24-11-20	31-12-20	CE	200	67.85	141.7	-	-	0	0

**Figure 2: Represents the Sock Options of JSW Steel  
(Call option)**



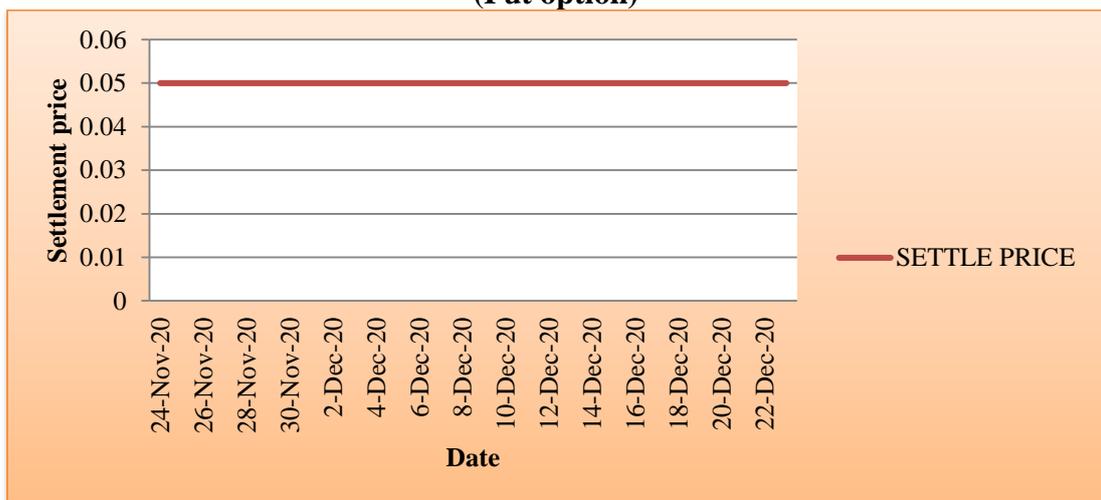
The above table and figure depicts that there is a higher rate of growth in settlement price of options market when compared from 24<sup>th</sup> November, 2020 to 23<sup>rd</sup> December, 2020. The settlement price as on 24<sup>th</sup> November, 2020 is Rs. 147.10, on 10<sup>th</sup> December, 2020 is Rs. 162.8 and as on 23<sup>rd</sup> December, 2020 is Rs. 167.05. So, JSW Steel had to increase the investment performance level in stock options (call option) market in order to sustain in the market for a longer period.

**Table 3: Represents the Sock Options of JSW Steel  
(Put option)**

DATE	EXPIRY DATE	OPTION TYPE	STRIKE PRICE	CLOSE PRICE	SETTLE PRICE	VALUE	PREMIUM VALUE	OPEN INTEREST	CHANGE IN OI
23-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
22-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
21-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
18-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
17-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
16-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
15-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
14-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
11-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
10-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
9-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
8-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
7-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
4-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
3-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
2-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
1-12-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
27-11-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
26-11-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
25-11-20	31-12-20	PE	200	7.2	0.05	-	-	0	0
24-11-20	31-12-20	PE	200	7.2	0.05	-	-	0	0

Source: NSE website

**Figure 3: Represents the Sock Options of JSW Steel  
(Put option)**



The above table and figure depicts that there is a higher rate of growth in settlement price of options market when compared from 24<sup>th</sup> November, 2020 to 23<sup>rd</sup> December, 2020. The settlement price as on 24<sup>th</sup> November, 2020 is Rs. 0.05, on 10<sup>th</sup> December, 2020 is Rs. 0.05 and as on 23<sup>rd</sup> December, 2020 is Rs. 0.05. So, JSW Steel had to increase the investment performance level in stock options (Put option) market in order to sustain in the market for a longer period.

#### Findings of the study

The findings of the study as follows:

1. The settlement price in stock futures and call options market raised from 24<sup>th</sup> November, 2020 to 23<sup>rd</sup> December, 2020 increased due to reasons like the number of contracts raised, premium value is high and open interest become as negative, etc.
2. The settlement price of put option market from 24<sup>th</sup> November, 2020 to 23<sup>rd</sup> December, 2020 not gets varied and it's stagnant.

#### Suggestions of the study

The suggestions of the study as follows:

1. The portion of open interest if positive then there will be chance of liquidity is high, so the open interest needs to be positive.
2. The settlement price of the contract

## Conclusion

From this study it is concluded that the future settlement price is high when compared to options settlement price. The stock market will give high returns to the investors who can bear high risk. Where derivatives are a instrument used to minimize the risk and covered the loss occurred in the stock market. The futures will give more returns and less risk when compared to options of JSW Steel market.

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