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# A STUDY ON DERIVATIVES (FUTURE & OPTION) ANGEL ONE

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**ABSTRACT:**

The emergence of the market for derivatives products, most notably forwards, futures and options, can be tracked back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. Derivatives are risk management instruments, which derive their value from an underlying asset. The following are three broad categories of participants in the derivatives market Hedgers, Speculators and Arbitragers. Prices in an organized derivatives market reflect the perception of market participants about the future and lead the price of underlying to the perceived future level. In recent times the Derivative markets have gained importance in terms of their vital role in the economy. The increasing investments in stocks (domestic as well as overseas) have attracted my interest in this area. Numerous studies on the effects of futures and options listing on the underlying cash market volatility have been done in the developed markets. The derivative market is newly started in India and it is not known by every investor, so SEBI has to take steps to create awareness among the investors about the derivative segment. In cash market the profit/loss of the investor depends on the market price of the underlying asset. The investor may incur huge profit or he may incur huge loss. But in derivatives segment the investor enjoys huge profits with limited downside. Derivatives are mostly used for hedging purpose. In order to increase the derivatives market in India, SEBI should revise some of their regulations like contract size, participation of FII in the derivatives market. In a nutshell the study throws a light on the derivatives market.

**Keywords:** Future trading, Option Trading, Investment.

## INTRODUCTION OF DERIVATIVES

In order to protect themselves against uncertainties brought on by changes in asset values, risk-averse economic actors developed the market for derivative goods, most notably forwards, futures, and options. The financial markets are notorious for having very high levels of volatility by nature. By locking in asset prices, derivative products allow for the partial or complete transfer of price risks. These often have little impact on the fluctuations in the pricing of the underlying assets as risk management tools. However, derivative products reduce the effect of asset price changes on the profitability and cash flow condition of risk-averse investors by locking in asset prices.

While the exchange traded futures market and forward contracts have expanded rapidly, Indian stock markets have often been sluggish to adapt to these worldwide innovations. The securities market has, nevertheless, been operating much better during the last several years. Market and credit risks have been decreased as a result of requirements for market intermediaries to maintain proper capitalization, margining, and the creation of clearing organisations. However, the instruments for advanced risk management were insufficient. Additionally, after the ICE (Information, Communication, Entertainment) collapse, the market regulator considered that the cash market trading of derivatives like futures and options was essential for strengthening and deepening the market.

As long as the contract is active, an investor who owns options has the option—but not the obligation—to purchase (or sell) shares at a specified price at any time. In contrast, unless the holder's position is closed before to the expiry date, a futures contract mandates a buyer to buy shares and a seller to sell them on a certain future date.

Investors may utilise futures and options as financial instruments to increase their profits or protect their present assets. An investor may purchase a security at a certain price by a particular date by using both an option and a future. However, these two goods' marketplaces are fundamentally unlike in terms of how they operate and how dangerous they are for investors.

Options

The value of an underlying asset, such as a stock, serves as the foundation for options. An investor is given the chance, but not the duty, to purchase or sell an asset throughout the term of an options contract, as was previously said. If investors choose not to acquire or sell the item, they are under no obligation to.

## REVIEW OF LITERATURE

Dr. T. Sreelatha: Prices in a market for currency derivatives reflect market participants' expectations for the future and drive the price of the underlying to that level. The prominence of the derivative markets and its critical function in the economy have grown recently. My interest in this field has been piqued by the growing local and international investments in equities. In the developed markets, there have been several studies on the impact of futures and options listings on the underlying volatility of the cash market. Since the derivative market in India is still in its infancy and not all investors are aware of it, SEBI must take action to raise awareness of the derivative market among investors. The investor's gain or loss in the cash market is based on the market value of the underlying asset. The investor might make or lose a significant sum of money. However, the investor in the derivatives market experiences enormous rewards with little risk. The main application of derivatives is hedging. SEBI should change certain of its rules, such as those governing contract size and FII involvement in the derivatives market, in order to expand the derivatives market in India. The report sheds some insight on the derivatives market, to put it briefly.

S. T. P. Raghavan: The stock derivative industry has seen extraordinary expansion. The growth of derivatives trading in India was significantly influenced by institutional and ordinary investors. The majority of donors to equities derivatives are known to be retail investors, who have contributed 51.04% more than institutional investors (including small brokers trading for themselves). Retail investors contributed a larger part of the capital.

Paul M. McBride: The Dodd-Frank Wall Street Reform and Consumer Protection Act's passage signifies a sea change in the OTC derivatives markets' regulatory landscape. The Act is the first significant effort to control one of the most significant elements of the global financial system by imposing a number of new regulations on OTC derivatives and the international

marketplaces in which they are traded. However, the regulations that must be put in place by regulatory bodies in order to carry out the Act's objectives will unavoidably have an impact on the market's future growth and usefulness well beyond the borders of the United States. This article examines the potential effects of the Dodd-Frank Act's required central clearing provision on business end-users that regularly manage risk in the market for OTC derivatives. This essay ultimately cautions that the potential negative unintended effects associated with obligatory central clearing are likely to exceed the potential advantages via a review of OTC derivatives, risk management, and central clearing.

Robert E. Hoyt and Lee Lee Colquitt: The most difficult issue confronting insurance company executives and regulators is the recently discovered interest in investing assets of insurance companies in derivatives. This essay examines the economic justification for insurers' hedging of economic risk and outlines potential derivatives uses by insurers. The article then discusses the regulatory framework for insurers' use of derivatives and the restrictions imposed by this framework. The study analyses the actual usage of derivatives by these insurers and assesses the characteristics of firms employing futures and options by looking at how 571 life and health insurers utilise futures and options.

In this study, Ren-Raw Chen presents closed-form solutions for future and European futures options on pure discount bonds based on the Ornstein-Uhlenbeck(normal) process. The model used in this study for futures options and Black's model from 1976 vary significantly, as is explained.

## RESULTS AND DISCUSSION

Evaluation of the profit/loss position for futures and options is the goal of this examination. Based on sample data collected from BHEL and ONGC, this analysis. Scrip. This research took into account the BHEL&ONGC contract, which ran from 1 April 2021 to 30 April 2021. BHEL and ONGC each have a 1000 square foot lot. This study was performed between the dates of January 1, 2021, and April 30, 2021.

The DATE and FUTURE PRICES are described in the following table.

TRADING DATE is explained in the first column.

• The second column describes the cash segment's future market price on that day.

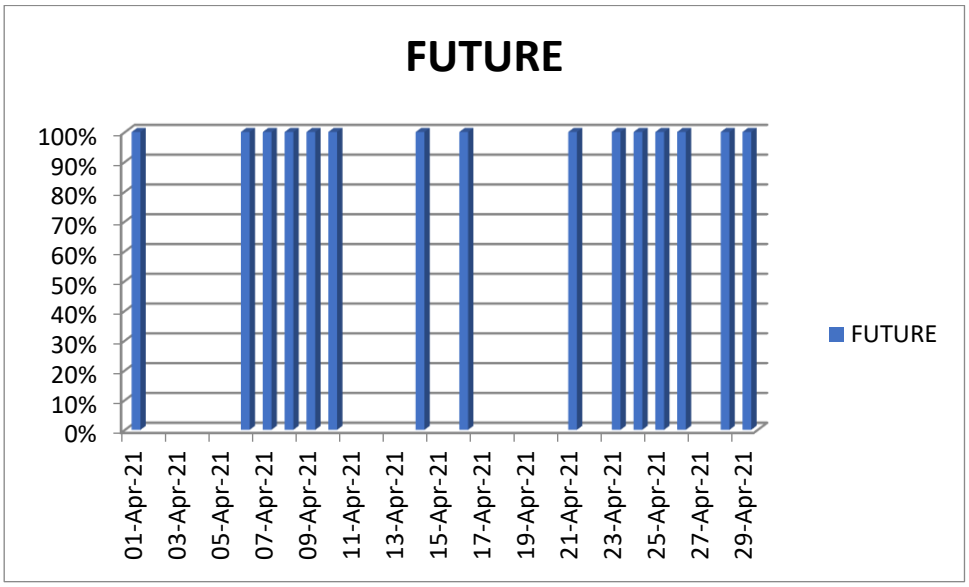
TABLE 4.1

BHEL FUTURE PRICE OF 1ST APR 2021TO 30TH APR 2021

| | **FUTURE** |
|---|---|
| 1-Apr-21 | 182.1 |
| 6-Apr-21 | 184.2 |
| 7-Apr-21 | 181.75 |
| 8-Apr-21 | 217.75 |
| 9-Apr-21 | 217.85 |
| 10-Apr-21 | 182.75 |
| 14-Apr-21 | 218 |
| 16-Apr-21 | 218.25 |
| 21-Apr-21 | 218.45 |
| 21-Apr-21 | 180.25 |
| 23-Apr-21 | 219 |
| 24-Apr-21 | 182.9 |
| 25-Apr-21 | 183.05 |
| 26-Apr-21 | 186.3 |
| 28-Apr-21 | 211.4 |

**GRAPH 4.1**

**GRAPH SHOWS MOVEMENT OF FUTURE PRICES**




**INTERPRETATION**:-

The future price curve in the previous graph shows a consistently varying pattern, and at the month's conclusion, future prices closed at a price of Rs. 212.21 with a profit of Rs. 10.05. (Rs.212.21-182.10). a loss of Rs. 10.05. Both the buyer (long) and the seller (short) would suffer losses.

**TABLE 4.2**

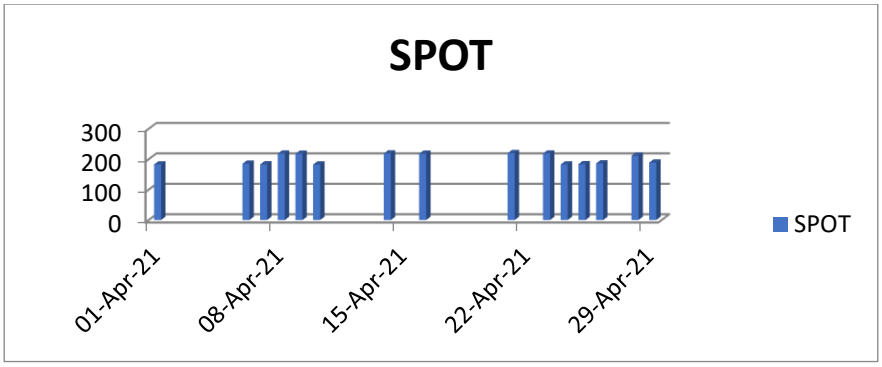
**BHEL SPOT PRICE 1ST APR 2021TO 30TH APR 2021**

| DATE | SPOT |
|---|---|
| 1-Apr-21 | 182.5 |
| 6-Apr-21 | 185.1 |
| 7-Apr-21 | 182.8 |
| 8-Apr-21 | 218.21 |
| 9-Apr-21 | 217.8 |
| 10-Apr-21 | 182.5 |
| 14-Apr-21 | 218.75 |
| 16-Apr-21 | 217.9 |

| | |
|---|---|
| 21-Apr-21 | 218.25 |
| 21-Apr-21 | 219.6 |
| 23-Apr-21 | 218.35 |
| 24-Apr-21 | 182.3 |
| 25-Apr-21 | 183.35 |
| 26-Apr-21 | 185.85 |
| 28-Apr-21 | 211.35 |
| 29-Apr-21 | 188.7 |

**GRAPH4.2**

**GRAPH SHOWS MOVEMENT OF SPOT PRICES**




**INTERPRETATION:-**

In the above graph the spot cost curve shows an increasing trend and at the end of the month Spot prices developed at the price of Rs.212.55 and buyer made a earnings of Rs.10.05.

**SPOT MARKET:-**

| | BUYER | SELLER |
|---|---|---|
| 01/04/2021(BUYING) | 182.5 | 182.5 |

| | | | |
|---|---|---|---|
| 30/04/2021(CLOSING PERIOD) | 212.55 | | 212.55 |
| LOSS | 10.05 | PROFIT | 10.05 |

LOSS 10.5*1000= 10500/- PROFIT 10.5*1000=10500/-

## CONCLUSION

While the put option holder suffers in a bullish market, it is advised that he write a put option, the call option writer suffers greater losses in a bullish market, therefore it is advised that the investor choose a call option to retain.

The investor is advised to write a call option in a bearish market because the call option holder would suffer more losses; nevertheless, the investor is advised to retain a put option because the put option writer will suffer greater losses.

The market price of BHEL and ONGC is very volatile in the study above, resulting in greater losses for call option writers than for holders.

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