

# A Study on Financial Derivatives (Futures) With Reference Karvy Stock Broking Ltd

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## Abstract:

*The emergence of the market for derivatives products, most notably forwards, futures and options, can be traced 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 Arbitrators. 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:** Securities, Financial Derivatives, Derivatives Market, Option Writer, Option Holder

## Introduction:

Derivative is a product whose value is derived from the value of one or more basic variables, called bases (underlying asset, index, or reference rate), in a contractual manner. The underlying asset can be equity, forex, commodity or any other asset. For example, wheat farmers may wish to sell their harvest at a future date to eliminate the risk of a change in prices by that date. Such a transaction is an example of a derivative. The price of this derivative is driven by the spot price of wheat which is the “underlying”.

In the Indian context the Securities Contracts (Regulation) Act, 1956 (SC(R)A) defines “derivative”. The emergence of the market for derivative products, most notably forwards, futures and options, can be traced back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. By their very nature, the financial markets are marked by a very high degree of volatility. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As instruments of risk management, these generally do not influence the fluctuations in the underlying asset prices. However, by locking-in asset prices, derivative products minimize the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors.

## Literature Review:

The emergence and growth of the market for derivative instruments is because of the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. By providing investors and issuers with a wider array of tools for managing risks and raising capital, derivatives improve the allocation of credit and the sharing of risk in the global economy, lowering the cost of capital formation and stimulating economic growth. Now that world markets for trade and finance have become more integrated, derivatives have strengthened these important linkages between global markets, increasing market liquidity and efficiency, and have facilitated the flow of trade and finance.

Naresh, G., (2006), studied the dynamic growth of the Derivatives market, particularly Futures & Options and the perceived risks to the financial sector continue to stimulate debate on the proper regulation of these instruments. Even though this market was initially fueled by various expert teams' survey, regulatory framework, recommendations bylaws and rules there is still a debate on the existing regulations such as why is regulation needed. When and where regulation needed. What are reasonable and attainable goals of these regulations. Therefore, this article critically examines the views of market participants on the existing regulatory issues in trading Derivative securities in Indian capital market conditions.

Anand (1999) opines derivatives as "A derivative is a synthetic construction designed to give the same profile of returns as some underlying investment or transaction, without requiring the principal cash outlay. They are called derivatives because they derive their value from the performance of the underlying instrument. Financial derivatives can be found in debt, equity, currency and commodity markets". The examples of derivatives include futures, forwards, options and swaps. In simple words derivatives is a financial model which includes a wide range of financial contracts including forwards, futures, options and swaps which helps corporation to achieve success in the market.

Sirisha (2001) opines derivatives allow financial institutions and other participants to identify, isolate and manage separately the market risks in financial instruments and commodities for the purpose of hedging, speculating, arbitraging price differences and adjusting portfolios risks.

Jiwa ajika (2000), "Derivatives are used as a tool of risk management; the risks are associated with derivatives including market risk, credit risk and liquidity risks. The risks are directly related to size and price volatility of the cash flows they represent they are to the size of the notional amounts on which the cash flows are based."

Volker (2004) defines derivatives as "financial instruments which can be traded (e.g. options, warrants, rights, futures contract, options on futures, etc.) on various markets. They are called derivatives because they are "derived" from some real, underlying item of value (such as company share or other real, tangible commodity.) A derivative is a tradable "contract", created by exchangers and dealers. A warrant or option is the simplest form of derivative. The most common usage relates to the trading of commodities futures and options on futures-where pre-defined contracts relating to a right to buy or sell and underlying commodity or security are traded as opposed to the actual commodity or security itself." NPV, APT and CAPM are few such financial

models which are part of derivatives; corporations use these models in addition with derivatives to achieve success. Thus, as mentioned above by diverse authors.

Bessembinder and Seguin (1992) examine whether greater futures trading activity (volume and open interest) is associated with greater equity volatility. Their findings are consistent with the theories predicting that active futures markets enhance the liquidity and depth of the equity markets. They provide additional evidence suggesting that active futures markets are associated with decreased rather than increased volatility.

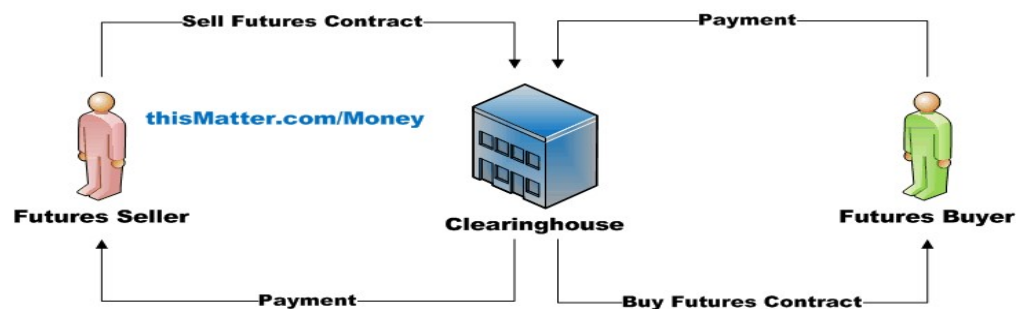
### Statement of The Problem

The recent activities of the stakeholders, have influenced many investors to trade in derivatives with help of intermediaries. A detailed enquiry among investors, experts and intermediaries gave an insight into the present situation. On this basis, the study focused on the investor 's preference in Futures segment and brought out the problems confronted by them. Therefore, a study on investor 's preference towards Futures was conducted in country among retail investors to find out the reasons for their preference towards Futures segment in derivatives market, their level of satisfaction, the rate of returns, and to find out the problems faced by the investors in derivative market segment.

### Objectives of the Study:

- 1) To study the Indian derivatives market and particularly NIFTY Index futures.
- 2) To examine and evaluate the profit & loss in long term and short-term futures trading strategies in NIFTY.
- 3) To Analyze the Payoff of futures and risk and returns analysis of trading NIFTY futures
- 4) To suggest better investment information of futures in NIFTY derivatives

### Conceptual Frame Work:



### Research Methodology:

Research design states that “a research design is the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” period of study is from 1st Nov 2018 to 26<sup>th</sup> Feb 2019. Primary Data: has been provided by the company where I am doing my project. And text books. Secondary Data: has been taken from various financial websites and NSE.

**Data Analysis & Interpretation:****Nifty Futures Mtm (Mark to Market Calculation for Long and Short Strategy 29 Jan 2019 Expiry)**

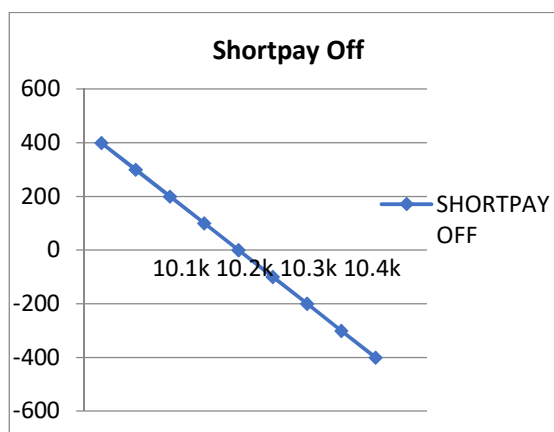
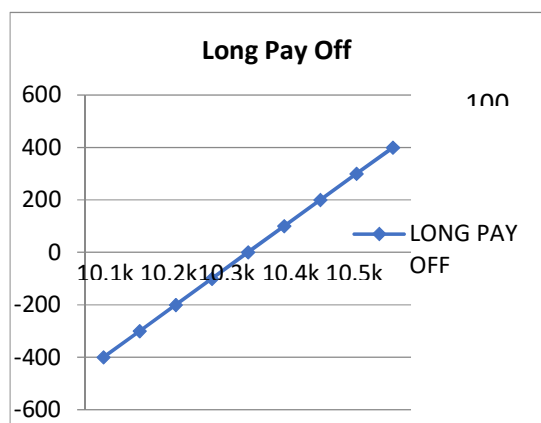
Symbol	Date	Expiry	Close	LONG FUTURES MTM	SHORT FUTURE S MTM
NIFTY	01-Nov-18	29-Jan-19	10451		
NIFTY	02-Nov-18	29-Jan-19	10463.1	12.1	-12.1
NIFTY	05-Nov-18	29-Jan-19	104108.6	25.5	-25.5
NIFTY	06-Nov-18	29-Jan-19	10486.75	-1.85	1.85
NIFTY	08-Nov-18	29-Jan-19	10485.4	-1.35	1.35
NIFTY	09-Nov-18	29-Jan-19	10497.1	11.7	-11.7
NIFTY	12-Nov-18	29-Jan-19	10519.35	22.25	-22.25
NIFTY	15-Nov-18	29-Jan-19	10552.4	36.7	-36.7
NIFTY	16-Nov-18	29-Jan-19	10552.65	0.25	-0.25
NIFTY	19-Nov-18	29-Jan-19	10510.4	-44.25	44.25
NIFTY	20-Nov-18	29-Jan-19	10520.95	12.55	-12.55
NIFTY	21-Nov-18	29-Jan-19	10596	75.05	-75.05
NIFTY	22-Nov-18	29-Jan-19	10634.75	38.75	-38.75
NIFTY	23-Nov-18	29-Jan-19	10566.3	-68.45	68.45
NIFTY	26-Nov-18	29-Jan-19	10583.25	19.95	-19.95
NIFTY	27-Nov-18	29-Jan-19	10598.55	18.3	-18.3
NIFTY	28-Nov-18	29-Jan-19	10689.9	91.35	-91.35
NIFTY	29-Nov-18	29-Jan-19	10648.95	-40.95	40.95
NIFTY	30-Nov-18	29-Jan-19	10629.1	-19.85	19.85
NIFTY	05-Dec-18	29-Jan-19	10635.05	-23.35	23.35
NIFTY	06-Dec-18	29-Jan-19	10548.45	-86.6	86.6
NIFTY	07-Dec-18	29-Jan-19	10452.4	-96.05	96.05
NIFTY	10-Dec-18	29-Jan-19	10466.7	14.3	-14.3
NIFTY	11-Dec-18	29-Jan-19	10402.45	-64.25	64.25
NIFTY	12-Dec-18	29-Jan-19	10339.35	-63.1	63.1
NIFTY	13-Dec-18	29-Jan-19	10330.1	-9.25	9.25
NIFTY	18-Dec-18	29-Jan-19	10247.45	119.35	-119.35
NIFTY	19-Dec-18	29-Jan-19	10310	62.55	-62.55
NIFTY	20-Dec-18	29-Jan-19	10402.55	92.55	-92.55
NIFTY	21-Dec-18	29-Jan-19	10340.4	-62.18	62.18
NIFTY	24-Dec-18	29-Jan-19	10277.3	-63.1	63.1
NIFTY	26-Dec-18	29-Jan-19	10273.75	-3.55	3.55
NIFTY	27-Dec-18	29-Jan-19	10319.45	42.7	-42.7
NIFTY	28-Dec-18	29-Jan-19	10317.95	1.5	-1.5
NIFTY	31-Dec-18	29-Jan-19	10337.85	19.9	-19.9
NIFTY	01-Jan-19	29-Jan-19	10343.8	5.95	-5.95

**Calculation of Profit/Loss**

Long futures profit =(selling Price-buying Price)	Buying Price	Selling Price
	10948.55	10451
Profit/Loss=	497.55	

Long futures strategy has made a profit of 497.55 per share

**Long Futures Pay Off Diagram For- 29-Jan-2019 Nifty Expiry Futures:**



**Findings& Suggestions:**

Long futures Profit/Loss is calculating by First day price = Buying Price & Last day price = Selling Price. In the 29 Jan expiry contract, long futures strategy is used and the trader has made a profit of 497. In the 26 Feb expiry contract, short future strategy is used and the trader has made a profit of 52. Long futures make profit from falling markets. Short futures make profits from upside markets. Short sell or use short futures trading strategies only in a down side markets. NIFTY futures trading will avoid company specific risk as the stock market index consists of basket of stocks. Trader should always keep stop loss to avoid losses. It is suggested that traders should book timely profits. It is also suggested to take analyst opinions before making a trade.

**Conclusions:**

Derivatives have existed and evolved over a long time, with roots in commodities market. In the recent year’s advances in financial markets and the technology have made derivatives easy for the investors. Derivatives market in India is growing rapidly unlike equity markets. Trading in derivatives require more than average understanding of finance. Being new to markets maximum number of investors have not yet understood the full implications of the trading in derivatives should take actions to create awareness in investors about the derivative market. Introduction of derivatives implies better risk management. These markets can give greater depth, stability and

liquidity to Indian capital markets. Successful risk management with derivatives requires a thorough understanding of principles that govern the pricing of financial derivatives.

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