

DERIVATIVE STOCK FUTURES: INSIGHTS FROM FULLERTON SECURITIES

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ABSTRACT

A financial contract whose value is based on an underlying asset, set of underlying assets, or benchmark is referred to as a derivative. A derivative is an agreement between two or more participants that can transact over-the-counter (OTC) or on an exchange. These contracts have their own risks and can be used to trade any number of assets. Derivatives prices are based on changes in the underlying asset. These financial instruments can be traded as a risk hedge and are frequently utilized to get access to specific markets. A complicated kind of financial security that is established between two or more parties is called a derivative. Derivatives allow traders to trade a variety of assets on particular markets. Stocks, bonds, commodities, currencies, interest rates, and market indices are the most often used underlying assets for derivatives. Contract values are subject to variations in the underlying asset's price. Derivatives can be used to lend leverage to holdings, speculate on the direction of an underlying asset's movement, or hedge a position. These assets are bought through brokerages and are frequently exchanged over-the-counter (OTC) or on exchanges.

Keywords: options, futures, derivatives, and derivative market

INTRODUCTION

Financial contracts known as derivatives get their value from an underlying asset. These could include interest rates, equities, indexes, commodities, currencies, and exchange rates. By speculating on the potential appreciation of the underlying asset, these financial products enable you to profit. Therefore, the value of the underlying asset determines their value. They are named "Derivatives" for this reason.

An agreement between two or more parties that bases the value of the contract on an agreed-upon underlying financial instrument (such as a securities) or group of assets (such as an index) is known as a derivative. Bonds, commodities, currencies, interest rates, market indices, and stocks are examples of common underlying instruments.

The value of secondary securities known as derivatives is entirely derived from the

value of the primary security to which they are tied, sometimes referred to as the underlying. Derivatives are usually seen as sophisticated investing.

Derivative items fall into two categories: "lock" and "option." Lock products (such as futures, forwards, or swaps) obligate the parties involved from the beginning to the terms specified for the duration of the contract. On the other hand, option products, such as stock options, give the holder the choice—but not the obligation—to purchase or sell the underlying securities at a given price on or before the options' expiration date. Even though an asset serves as the basis for a derivative's value, owning a derivative does not equate to owning the asset. Common derivatives include warrants, options, swaps, futures contracts, and forward contracts.

Description of the Issue

Investors can trade derivatives for a range of purposes on the Indian stock market, which offers a variety of instruments. By establishing positions in derivatives markets that balance any losses in the underlying or Spot market, it allows a trader to hedge some pre-existing risk. The majority of derivatives users in India identify as hedgers, and the country's laws often restrict the use of derivatives to hedging. Speculation is another reason people trade derivatives; they take positions in hopes of profiting from future price changes. In reality, it could be challenging to determine if a certain trade was made for speculating or hedging, because active markets necessitate the involvement of both.

Research Deficit

Despite the researcher's extensive reading of numerous articles and publications, Fullerton Securities has not yet produced a thorough analysis on derivative stock futures. When there are abrupt increases and decreases in the markets within a little period of time, the stock market is deemed to be volatile. The volatility of the stock market has been a source of anxiety for investors and policy authorities worldwide, including in India. Given that a stock is riskier when it is more volatile, an investor wants to know how much risk or volatility they are exposed to. Derivatives are the most sought-after tools in today's securities trading because they let players control risk. Because of this, the researcher has limited his work to "Derivative Stock futures at Fullerton Securities."

The study aims to investigate the workings of the derivative market and conduct a comparison analysis with the cash market.

To evaluate the advantages and hazards of the derivative market
In summary, the derivative market offers both futures and options.

THE STUDY'S HYPOTHESES

Ho1: The call options of a chosen business do not significantly differ from one another.

Ho2: The put options of a certain company do not differ much from one another.

RESEARCH DESIGNATION

"Data" is a term used to describe facts expressed in numerical form. Data can be categorized as follows: i. Primary data; ii. Secondary data

The workers will provide the primary data for this project. A questionnaire may also be

used to collect this data, and some statistical methods may then be used. Numerous sources, including research agencies, libraries, and statistics departments, can be used to collect secondary data.

TOOLS USED: For the research project, straightforward and practical tools like table and bar charts are employed.

REVIEW OF LITERATURE

In 2014, Bhatt, Dr. Babaraju carried out research on the "Perception of Investors Towards Derivatives as an Investment Avenue." The derivatives are a technique for risk management that helps different stakeholders manage risk in an efficient manner. With the help of derivatives, one can transfer risk from one who wants to avoid it to another who wants to accept it. The establishment of the equity derivatives market in India has proven to be a very positive and successful experience. The NSE's turnover in derivatives has outpaced that of the equities market. The primary goal of this study is to determine the variables that influence derivatives investment decisions.

In 2015, Prakash Yalavatti studied "A Study on Strategic Growth in Indian Financial Derivatives Market." Due to globalization and liberalization's widespread adoption, the volume of international trade and business has increased numerous times during the last two decades. As a result, there was a notable global surge in demand for foreign currency and financial instruments. In this regard, fluctuations in interest rates, stock prices, and currency rates across various financial markets have raised the global financial risk for investors and corporations. This study is the result of certain unfavorable trends that have put the business world's survival in jeopardy. Thus, in order to control this kind of risk,

New financial products, also referred to as financial derivatives in the national and international financial markets, have been established there.

In 2013, study was done on the evolution and trading of the derivatives market in India by Dr. Kamlesh Gakhar and Ms. Meetu. Over time, the Indian derivatives market has grown to be worth several trillions of dollars. With the capacity to transfer risk both entirely and partially through asset price security, derivatives are becoming more and more well-liked among investors. Since the 1991 economic reforms, every attempt has been made to improve investor trust by streamlining the trading process. However, there are particular problems in this industry. Thus, the goal of this research is to examine the development of the Indian derivative market, trading instruments used in its range of goods, and the industry's potential going forward.

Study by Dr. Rishi Manrai on Indian Investors' Attitude Towards Derivative Markets. The capital market is seeing a rapid expansion of the behavioral finance idea; its applications are nearly universal. In order for the derivative market to function well, better understand investor preferences, and identify the variables influencing investors' risk tolerance, it is necessary to pay closer attention to how investors behave and to the way they view the derivative market. In other words, the study's main contribution will be a quantitative model that the researcher may use to reflect the variables influencing investor behavior in the derivatives market with load factors. The goal of this study is to investigate the many elements influencing investment behavior in the derivatives market by the researchers.

BUSINESS SUMMARY

With a network of more than 526 branches and more than 1.5 million clients, Fullerton India has effectively and firmly established itself since its founding in January 2007 and is now a prominent player in the nation's financial landscape.

Our main services include financing small and medium-sized businesses (SME) for working capital and expansion; loans for commercial and two-wheeler vehicles; home improvement loans; loans secured by real estate; personal loans; working capital loans for urban self-employed individuals; loans for the advancement of rural livelihoods; financing for rural housing; and financing for various rural micro enterprises.

Collaborating with more than 9,946 workers, we engage with millions of clients, whether they live in cities, towns, or villages, directly at their doorstep to reach our market. With over 528 branches, we reach a significant portion of the market, encompassing over 600 towns and about 51,000 villages.

Temasek Holdings Pvt. Ltd. is the parent company of Fullerton India Credit Company Limited, a wholly owned subsidiary of Fullerton Financial Holdings Pvt. Ltd.

Singapore. Fullerton Financial Holdings primarily focuses on business and consumer banking when investing in financial institutions in emerging economies.

VISION

Collaboration, diversity, and cooperation are the foundations of the company's success. Our principles are centered on inclusivity and diversity. They are an essential component of our culture and a long-term goal in our quest to be the greatest international bank in the world.

VALUES: Adaptable, Reliable, Creative, and Courageous

GOAL

- Competitive positioning: combining global capability, in-depth local knowledge, and creativity to outperform our competitors;
- Participation: concentrating on appealing, expanding markets where we can leverage our relationships and expertise;
- Management discipline: consistently enhancing our operations while striking a balance between the pursuit of growth and strict control over costs and risks. dedication to stakeholders

- Clients: We are enthusiastic about our clients' success and delight them with the caliber of our work.

Our People: fostering personal development, empowering individuals to make a difference, and facilitating team victories; Communities: dependable and compassionate, committed to changing the world; Regulators: exemplary ethics and governance wherever we are

DATA ANALYSIS
HISTORICAL DATA OF NIFTY

Date	Open	High	Low	Close
1-Apr-21	5698.45	5840.95	5685.9	5804.4
2-Apr-21	5801.8	5854.6	5688.15	5848.1

3-Apr-21	5840.4	5844.95	5650.1	5684.9
4-Apr-21	5640.65	5644.45	5565.65	5584.85
5-Apr-21	5568.1	5588.4	5544.8	5554.45
8-Apr-21	5550.5	5569.4	5548.05	5544.95
9-Apr-21	5568.85	5604.05	5488	5495.1
10-Apr-21	5546.45	5569.45	5488.4	5558.8
11-Apr-21	5601.65	5610.65	5544.85	5594
12-Apr-21	5540.8	5544.5	5494.9	5548.55
15-Apr-21	5508.5	5594.85	5500.4	5568.4
20-Apr-21	5564.45	5699.45	5555.85	5688.95
20-Apr-21	5808.65	5844.15	5669	5688.8
20-Apr-21	5684.8	5894.45	5681.85	5884.1
22-Apr-21	5889.85	5844.85	5889.8	5844.4
23-Apr-21	5844.1	5844.4	5891.55	5846.9
25-Apr-21	5856.1	5944.6	5854.4	5940.4
26-Apr-21	5899.85	5908.05	5860.5	5881.45
29-Apr-21	5888.6	5940.65	5868.8	5904.1
30-Apr-21	5944.6	5964.4	5868.8	5940.4
2-May-21	5911.4	6040.45	5910.95	5999.45
3-May-21	5994.5	6000.4	5940.15	5944
6-May-21	5944.9	5986.5	5948.45	5981.05
7-May-21	5984.45	6050.5	5984.95	6044.55
8-May-21	6064.15	6084.55	6044.95	6069.4
9-May-21	6088.45	6084.8	6040.45	6050.15
10-May-21	6046.45	6105.4	6045.6	6094.85
11-May-21	6088.4	6114.55	6084.15	6108.45

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15-May-21	6098.4	6104.95	5984.9	5980.45
14-May-21	5989.8	6046.4	5980.05	5995.4
15-May-21	6040.85	6158.1	6040.85	6146.85
17-May-21	6148.45	6408.4	6148.45	6409.9
20-May-21	6404.95	6409.95	6146.15	6408.4
20-May-21	6408	6449.45	6146.05	6156.9
21-May-21	6154.45	6400.45	6104.45	6114.1
22-May-21	6148.05	6148.6	6084.45	6094.5

23-May-21	6050.4	6081.45	5955.8	5968.05
24-May-21	6010.8	6015.4	5946.8	5984.55
27-May-21	5989.4	6099.9	5985.55	6084.15
28-May-21	6086.45	6148.65	6055.4	6111.45
29-May-21	6140.45	6145.05	6069.8	6104.4
30-May-21	6084.15	6154.85	6084.15	6144.05

NIFTY April 2021 to May 2021

The above graphs and tabulations indicating performance of index from the April 2021 to May2021

PERFORMANCE OF TCS

Symbol	Date	Open Price	High Price	Low Price	Close Price
TCS	1-Apr-21	1565	1584.8	1551.45	1556.85
TCS	2-Apr-21	1556	1581.4	1541.45	1568.45
TCS	3-Apr-21	1580	1585	1541	1544.4
TCS	4-Apr-21	1540.1	1540.1	1501	1508.8
TCS	5-Apr-21	1505	1509.45	1484.1	1498.45
TCS	8-Apr-21	1498.9	1498.9	1485	1480.85
TCS	9-Apr-21	1480	1515	1488.6	1498.4
TCS	10-Apr-21	1509.9	1548.9	1501	1540.45
TCS	11-Apr-21	1540	1550.1	1540.8	1546.9
TCS	12-Apr-21	1481.9	1544.5	1488.45	1511.85
TCS	15-Apr-21	1515.5	1514	1448.45	1484.45

TCS	17-Apr-21	1480	1494.45	1458.95	1484.15
TCS	20-Apr-21	1495	1499	1441	1456.65
TCS	20-Apr-21	1488.95	1494.9	1448.45	1454.85
TCS	22-Apr-21	1446	1459.8	1445	1445.4
TCS	23-Apr-21	1444.45	1448	1444	1440.55
TCS	25-Apr-21	1440.55	1440.55	1598.65	1404.4
TCS	26-Apr-21	1594	1594.45	1565.1	1569.45
TCS	29-Apr-21	1565	1584.8	1565	1580.85

TCS	30-Apr-21	1568	1584	1565	1588.4
TCS	2-May-21	1584.5	1448.8	1584.5	1444.9
TCS	3-May-21	1446	1448.45	1408.9	1440.5
TCS	6-May-21	1440	1484.4	1440	1468.4
TCS	7-May-21	1468.1	1488.85	1458.4	1481.6
TCS	8-May-21	1484	1488.8	1480	1480.1
TCS	9-May-21	1484.4	1504.45	1484	1498.45
TCS	10-May-21	1498.45	1510.9	1491.1	1495.9
TCS	11-May-21	1495	1495	1486.1	1489.65
TCS	15-May-21	1480	1481	1445.8	1451.6
TCS	14-May-21	1455.1	1480.55	1444.85	1458.95
TCS	15-May-21	1458.1	1488.4	1450	1481.55
TCS	20-May-21	1469	1469	1448.45	1454.05
TCS	20-May-21	1455	1488.5	1454.1	1484.8
TCS	20-May-21	1481.45	1488	1461	1484.4
TCS	21-May-21	1465	1504	1465	1494.85
TCS	22-May-21	1498	1509.15	1494.4	1498.4
TCS	23-May-21	1495	1546.85	1488.45	1494.8
TCS	24-May-21	1500	1504.95	1464.6	1469.55
TCS	27-May-21	1469.5	1500	1460	1498
TCS	28-May-21	1498	1540.5	1490.4	1514.1
TCS	29-May-21	1540	1548.5	1485.1	1498.45
TCS	30-May-21	1500	1514	1488	1499.4

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TCS	31-May-21	1491	1509.45	1486.85	1498.45
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The above graph indicating the performance of TCS for February and March 2021 with high volatility performance towards ups and downs explaining straddle strategy in volatility market condition.

PERFORMANCE OF 2000 CALL OPTION

Symbol	Date	Expiry	Strike Price	Open	High	Low	Close
TCS	1-Apr-21	25-Apr-21	3000	30.8	33.5	36.55	38.3
TCS	2-Apr-21	25-Apr-21	3000	35.55	31.45	33.85	30.5
TCS	3-Apr-21	25-Apr-21	3000	30.35	30.4	30.3	33.9
TCS	4-Apr-21	25-Apr-21	3000	30.85	30.85	13.4	15.85
TCS	5-Apr-21	25-Apr-21	3000	14	14	10	13.35
TCS	8-Apr-21	25-Apr-21	3000	10.8	11.8	9	9.85
TCS	9-Apr-21	25-Apr-21	3000	9.85	14.8	9.8	11
TCS	10-Apr-21	25-Apr-21	3000	15.65	33.05	15.65	30.4
TCS	11-Apr-21	25-Apr-21	3000	30.05	35.9	30.05	34.05
TCS	12-Apr-21	25-Apr-21	3000	34	34	11.05	30.45
TCS	15-Apr-21	25-Apr-21	3000	30.55	33.55	15.65	30.85
TCS	17-Apr-21	25-Apr-21	3000	30	33.6	30	31.35
TCS	20-Apr-21	25-Apr-21	3000	33	33	6.1	8.55
TCS	20-Apr-21	25-Apr-21	3000	5.55	5.55	0.8	0.9
TCS	22-Apr-21	25-Apr-21	3000	0.35	0.6	0.35	0.35
TCS	23-Apr-21	25-Apr-21	3000	0.5	0.5	0.15	0.3
TCS	25-Apr-21	25-Apr-21	3000	0.05	0.1	0.05	0.05

PERFROMANCE OF TCS 2000 PUT OPTION

Symbol	Date	Expiry	Strike Price	Open	High	Low	Close
TCS	1-Apr-21	25-Apr-21	3000	63	66.5	58.6	63.3
TCS	2-Apr-21	25-Apr-21	3000	69	84.9	58.65	59.8
TCS	3-Apr-21	25-Apr-21	3000	55	80.9	55	83.45
TCS	4-Apr-21	25-Apr-21	3000	83.5	105.4	83.5	100.3
TCS	5-Apr-21	25-Apr-21	3000	100	111	100	110.55

TCS	8-Apr-21	25-Apr-21	3000	131	131	131	131
TCS	9-Apr-21	25-Apr-21	3000	111.3	111.3	99	99
TCS	10-Apr-21	25-Apr-21	3000	94.65	98.5	85.95	85.95
TCS	11-Apr-21	25-Apr-21	3000	80	88.9	80	83.6
TCS	12-Apr-21	25-Apr-21	3000	101.55	130	100.8	106.85
TCS	15-Apr-21	25-Apr-21	3000	130.3	153	130.3	140
TCS	17-Apr-21	25-Apr-21	3000	145	153.1	158.3	146.55
TCS	20-Apr-21	25-Apr-21	3000	0	0	0	146.55
TCS	20-Apr-21	25-Apr-21	3000	144.15	303.65	144.15	145

TCS	22-Apr-21	25-Apr-21	3000	305	303	305	303
TCS	23-Apr-21	25-Apr-21	3000	308	300.55	305	306.45
TCS	25-Apr-21	25-Apr-21	3000	309	353.45	300.55	353.45

TCS 1400 CALL OPTION

Symbol	Date	Expiry	Strike Price	Open	High	Low	Close
TCS	2-May-21	30-May-21	1500	30.65	50.8	30.2	58.95
TCS	3-May-21	30-May-21	1500	58.55	58.55	38.55	53.8
TCS	6-May-21	30-May-21	1500	55	83.05	55	69.85
TCS	7-May-21	30-May-21	1500	88.5	88.5	66.5	85.65
TCS	8-May-21	30-May-21	1500	89	86	85.6	80.55
TCS	9-May-21	30-May-21	1500	89.8	101	89.8	95
TCS	10-May-21	30-May-21	1500	101	105.55	95.2	95.2
TCS	11-May-21	30-May-21	1500	88.65	88.65	88.65	88.65
TCS	15-May-21	30-May-21	1500	69.85	80	60.5	62
TCS	14-May-21	30-May-21	1500	80.85	80.8	50.8	58
TCS	15-May-21	30-May-21	1500	55.8	81	55.8	68.55
TCS	17-May-21	30-May-21	1500	58	62.5	53.5	59.25
TCS	20-May-21	30-May-21	1500	66	82	61	66.3
TCS	20-May-21	30-May-21	1500	68.65	85.5	61.1	81.85
TCS	21-May-21	30-May-21	1500	91.35	93.35	81	88.9

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TCS	22-May-21	30-May-21	1500	95.85	103	93	96.55
TCS	23-May-21	30-May-21	1500	96.15	102.5	86.25	88.95
TCS	24-May-21	30-May-21	1500	81.35	81.9	66	68.8
TCS	27-May-21	30-May-21	1500	66	98.85	66	98.95
TCS	28-May-21	30-May-21	1500	105	108	100	108
TCS	29-May-21	30-May-21	1500	123	125.5	85	93.5
TCS	30-May-21	30-May-21	1500	92	105.15	92	105.95

Conclusion: in volatility market conditions straddle gives profit, because both the products doesn't have obligation.

Explaining theoretically about one side positions with above practical straddle examples of TCS with two different contracts i.e. April and May 2021:

Example: The below future table explains risk associated with TCS future.

t-Test: Two-Sample Assuming Unequal Variances		
	<i>Open</i>	<i>Close</i>
Mean	7.697727273	5.4772727
Variance	146.9486851	34.543983
Observations	22	22
Hypothesized Mean Difference	0	
df	30	
t Stat	0.77307866	
P(T<=t) one-tail	0.222762336	
t Critical one-tail	1.697260887	
P(T<=t) two-tail	0.445524673	
t Critical two-tail	2.042272456	

The Table depicts that the calculated t value (0.7730) is less than the table value (2.0422) of t-test so null hypothesis has been accepted and it is concluded that there is no significant difference in put option of Fullerton securities Ltd at 5% level of significant

SUMMARY

The Indian economy is experiencing a severe shortage in the derivatives market. The largest inventory exchange in India, NSE, is witnessing a gradual increase in the turnover of its derivative market. The quantity of agreements has increased dramatically due to file future. Even so, there has been a significant drop in turnover. A sluggish increase in the number of agreements was observed due to stock destiny, while a decrease in its turnover was also

observed. The number of agreements and turnover both significantly increased as a result of file alternative.

CONCLUSION

Still, a lot of people in the field are fervently convinced that followers highlight volatility in the financial markets. Conversely, the presentation of subordinates reduces instability in the hidden money market.

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