

A Study on Awareness among Investors about the Risks in Derivative Market and Various Trading Strategies

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Abstract: Derivative is the market considered for making and losing million but there are some kinds of derivatives which are used when there is low initial investment and earn piles of money through it. This study is conducted to know how many investors are aware about the risks faced by them in derivative market and the trading strategies.

Keywords: Derivatives, risk, trading strategies, hedger, strangle.

I. Introduction

Risk is a wide concept when associated with derivative market. In this market we come across various investors broadly classified as hedger, speculators, arbitragers etc. Derivates markets consist of options, swaps, futures contract etc, which are very risky but can be used in booking good profits. As it remains true that the more risk always leads you to higher profit with the higher probability of making a mountain size of loss. But it could be great if we know to transfer or reduce it, because risk is something which cannot be removed from the economy, it can only be transferred or reduced.

Even after good management, bad luck can direct us towards huge losses because even a small event (unpredictable) can make a difference of millions and trillions. That's the reason trading is defined as, "it is not a play of kids, it's just play of timing and knowledge and part of luck too." The various types of risk involved in derivate market are market risk, correlation risk, settlement risk, strategic risk etc. There are also various pre-defined market strategies which may be used for profitable trade like calendar spread, straddle, strangle, bull spread, bear spread etc.

II. Need for study

As with growing world risk in each activity is increasing at an alarming rate. And in the market like derivatives which is highly uncertain, is now patched with uncertain world making a deadly combination and still there are many people who doesn't know about the risk faced by them and hedging process in spite of being traders. This study is basically conducted to know about the people who doesn't know about all this and to create awareness among them.

III. Some kinds of risks faced in derivative market: - (just a small list)

Usually derivative market includes of a big list and unending list of risk. Though, an attempt has been made to broadly classify the risk.

3.1 Market risk:

3.1.1 Interest risk: when ever interest rate increases or decreases the derivative bond markets move up and down

3.1.2 Equity price risk: As derivative is just a bet upon price of security. Equity price risk remain on the top

3.1.3 Foreign exchange risk: As some people even make use for currency option so some times may be because of crisis FII's just net of their trade and there will sudden fall in value of currency.

3.2 Correlation risk: if the person is trading with 2 derivative instrument that is buying of calls or puts one stock and shorting of calls or puts on another ignoring the correlation. Surely he has to pay for it (chance of huge losses)

3.3 Settlement risk: if there is a transaction between two counterparties. At the settlement date, one of them is in a net gain ("winning") position and the other is in a net loss ("losing") position. The position that is losing may refuse to pay and fulfill its obligation. It is known as settlement risk.

3.4 Strategic risk: if the strategy used for the trade isn't proper it will carry a strategic risk.

IV. Literature review

According to JOHN C. HULL “A derivatives can be defined as a financial instrument whose value depends on (or derives from) the values of other, more basic underlying variables.”

Bose, Suchismita conducted research on (2006) found that Derivatives products provide certain important economic benefits such as risk management or redistribution of risk away from risk-averse investors towards those more willing and able to bear risk. Derivatives also help price discovery, i.e. the process of determining the price level for any asset based on supply and demand. These functions of derivatives help in efficient capital allocation in the economy. At the same time their misuse also poses threat to the stability of the financial sector and the overall economy.

Kumar, R. and Chandra, A. (2000), had studied that Individuals often invest in securities based on approximate rule of thumb, not strictly in tune with market conditions. Their emotions drive their trading behavior, which in turn drives asset (stock) prices. Investors fall prey to their own mistakes and sometimes other’s mistakes, referred to as herd behavior. Markets are efficient, increasingly proving a theoretical concept as in practice they hardly move efficiently. The purely rational approach is being subsumed by a broader approach based upon the trading sentiments of investors. The present paper documents the role of emotional biases towards investment (or disinvestment) decisions of individuals, which in turn force stock prices to move.

Srivastava, S., Yadav, S. S., Jain, P. K. (2008), had conducted a survey of brokers in the recently introduced derivatives markets in India to examine the brokers’ assessment of market activity and their perception of benefits and costs of derivative 50 trading. The need for such a study was felt as previous studies relating to the impact of derivatives securities on Indian Stock market do not cover the perception of market participants who form an integral part of the functioning of derivatives markets. The issues covered in the survey included: perception of brokers about the attractiveness of different derivative securities for clients; profile of clients dealing in derivative securities; popularity of a particular derivative security out of the total set; different purposes for which the clients are using these securities in order of preference; issues concerning derivatives trading; reasons for non usage of derivatives by some investors.

INTERNATIONAL MONETARY FUND (2000), Legal uncertainties are another danger in derivatives markets. Sometimes counterparties enter into derivative contracts without the legal or regulatory authority to do so. This may result in large losses for banks. Legal risks also include compliance and regulatory risks, which concern activities that might breach government regulations, such as market manipulation, insider trading, and suitability restrictions.

Santomero, (1995), before derivatives markets were truly developed, the means for dealing with financial risks were few and financial risks were largely outside managerial control. Few exchange-traded derivatives did exist, but they allowed corporate users to hedge only against certain financial risks, in limited ways and over short time horizons. Companies were often forced to resort to operational alternatives like establishing plants abroad, in order to minimize exchange-rate risks, or to the natural hedging by trying to match currency structures of their assets and liabilities.

Allen and Santomero (1998) wrote that, during the 1980s and 1990s, commercial and investment banks introduced a broad selection of new products designed to help corporate managers in handling financial risks. At the same time, the derivatives exchanges, which successfully introduced interest rate and currency derivatives in the 1970s, have become vigorous innovators, continually adding new products, refining the existing ones, and finding new ways to increase their liquidity. Since then, markets for derivative instruments such as forwards and futures, swaps and options, and innovative combinations of these basic financial instruments, have been developing and growing at a breathtaking pace.

Studies that test the relevance of derivatives as risk management instruments generally support the expected relationships between the risks and firm’s characteristics. Stulz (1984), Smith and Stulz (1985) and Froot, Scharfstein and Stein (1993) constructed the models of financial risk management. These models predicted that firms attempted to reduce the risks arising from large costs of potential bankruptcy, or had funding needs for future investment projects in the face of strongly asymmetric information.

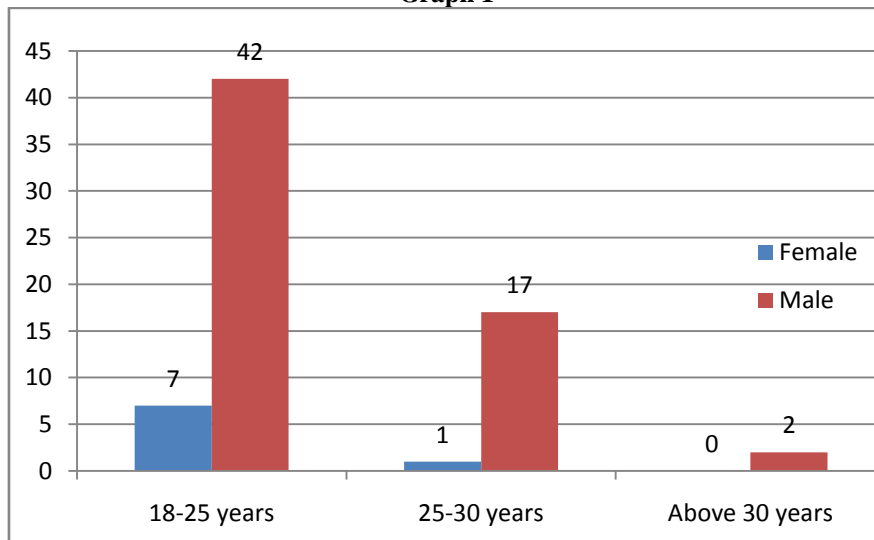
V. Interpretation

5.1 Interpretation of data

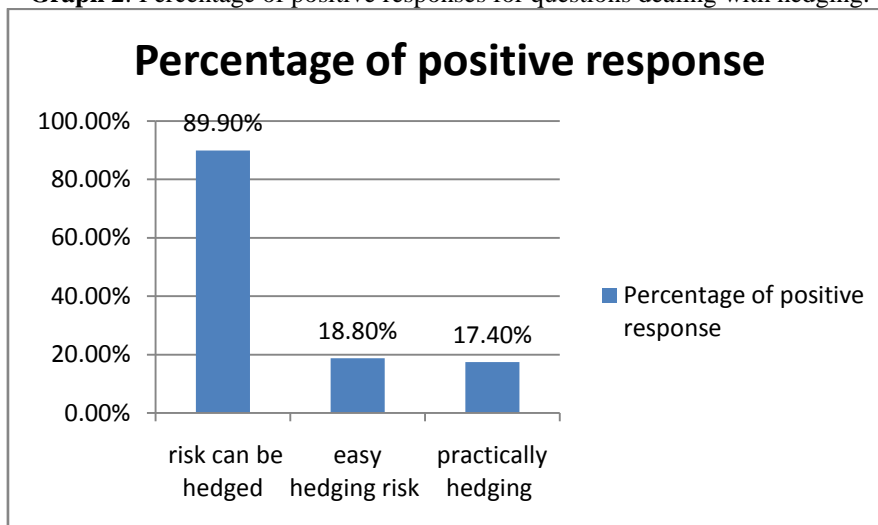
Table 1: Count of males and females with respect to age groups

Count of Name	Column Labels		
Row Labels	Female	Male	Grand Total
18-25 years	7	42	49
25-30 years	1	17	18
Above 30 years		02	02
Grand Total	08	61	69

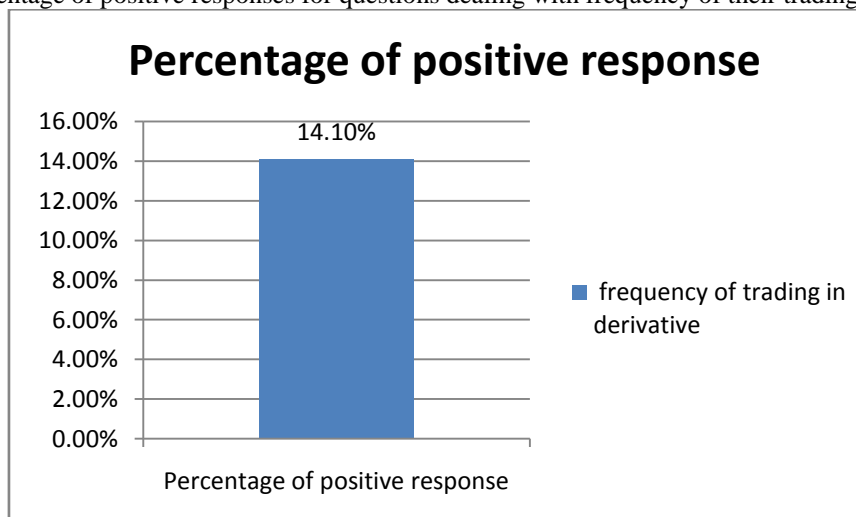
Graph 1



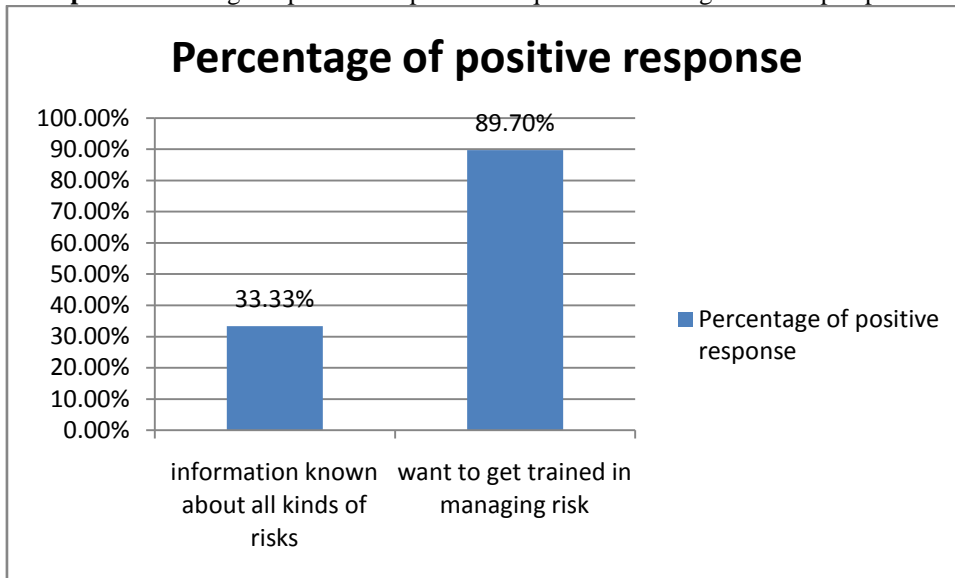
Graph 2: Percentage of positive responses for questions dealing with hedging.



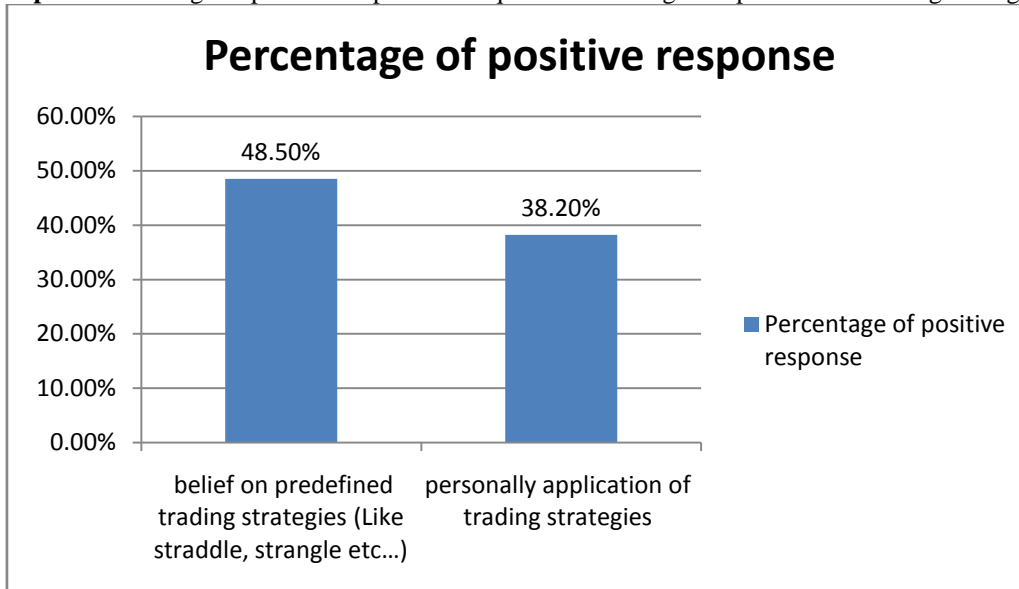
Graph 3: Percentage of positive responses for questions dealing with frequency of their trading.



Graph 4: Percentage of positive responses for questions dealing with risk perspective.



Graph 5: Percentage of positive responses for questions dealing with pre-defined trading strategies



5.2 Findings of the above

It is mostly seen that females trade in very least case. Investor’s usually think that risk can be hedged when the following question was asked (Table 2) Here, 89.9% Investor’s think that it can be hedged but other 10.1% thinks that they can’t hedge risk. Maybe they are also correct, because at times perfect hedging is not possible. And when they were asked about toughness to hedge risk, 18.8% Investor’s said that it’s easy to hedge the risk and the other 81.2% says that it’s very difficult to hedge risk maybe that’s the sole reason Investor’s rarely trade in derivatives. But derivatives are considered as fastest source to make or lose money.

When it was asked about practically hedging, 17.1% of people said that they do practically hedge but other 82.9% does not, maybe because it takes a lot of time and presence of mind. When Investor’s were asked about their frequency of trading in derivatives (Table 3) only 14.1% said that they trade frequently. (Table 4) it was known that only 33.33% of investors actually know the risk they are exposed to when trading in derivative market. All others that is 66.67% of investors are clueless about what’s the actually risk they are faced. 89.9% people investors actually showed interest to learn about risk management, which is actually a good number for the development of this field.

When it comes to trading strategies (Table 5) 48.5% of investors said that the trading strategies really work but where as another 51.5% did not agree to this point which is more than half. And there are only 38.2%

of investors who have applied the trading strategies by themselves. Another 61.8% haven't applied maybe because of fear or lack of confidence.

5.3 Various trading strategies (with examples)

PMS: Possible Maturity Spot.

L-lapse (contract not exercised)

E-Exercised (contract exercised)

5.3.1 Straddle (long)

Under low volatility condition we use this. Short straddle involves selling call and put

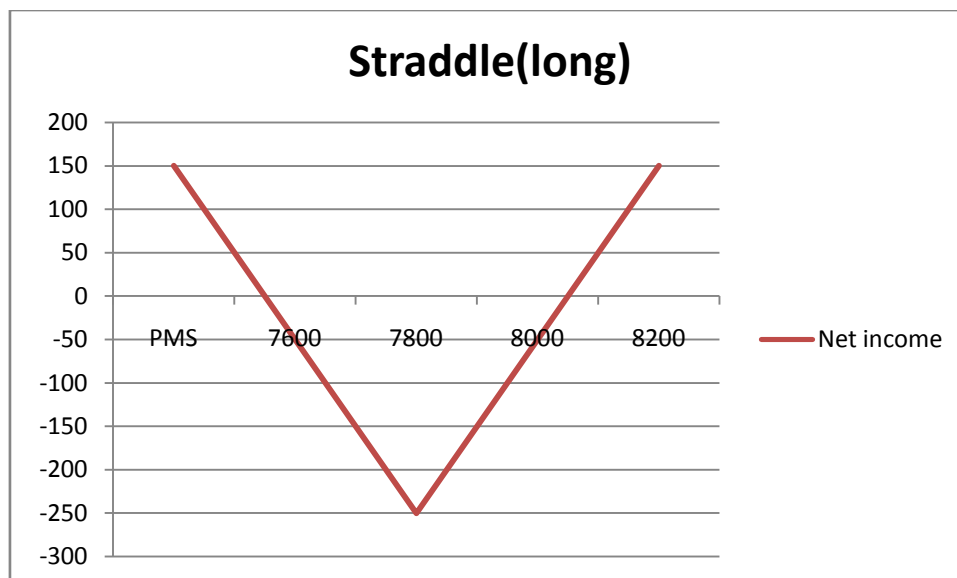
A- Buy 8000call @150 premium

B-buy 8000put@100 premium

Table 6: Straddle (long)

PMS	7600	7800	8000	8200	8400
option status of A	L	L	L	E	E
option status of B	E	E	L	L	L
gross income from A	0	0	0	200	400
gross income from B	400	200	0	0	0
Premium of A	-150	-150	-150	-150	-150
premium of B	-100	-100	-100	-100	-100
Net income	150	-50	-250	-50	150

Graph 5:



5.3.2 Butter fly spread

A-Buy 50call @4premium

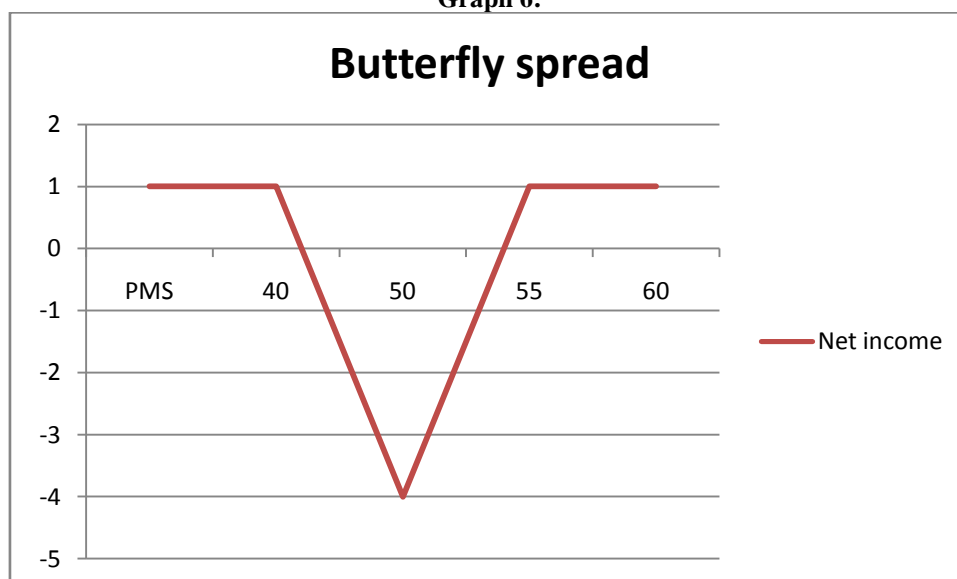
B-2*sell 55call @2 premium

C-buy 60call @1 premium

Table 7: Butterfly spread

PMS	40	50	55	60	70
option status of A	L	L	E	E	E
option status of B	L	L	L	E	E
option status of c	L	L	L	L	E
gross income from A	0	0	-5	-10	-20
gross income from B (multiple by 2 since 2 stocks)	0	0	0	10	30
gross income from C	0	0	0	0	-10
Premium of A	4	4	4	4	4
premium of B (multiple by 2)	-4	-4	-4	-4	-4
premium of C	1	1	1	1	1
Net income	1	1	-4	1	1

Graph 6:



5.3.3 Box spread

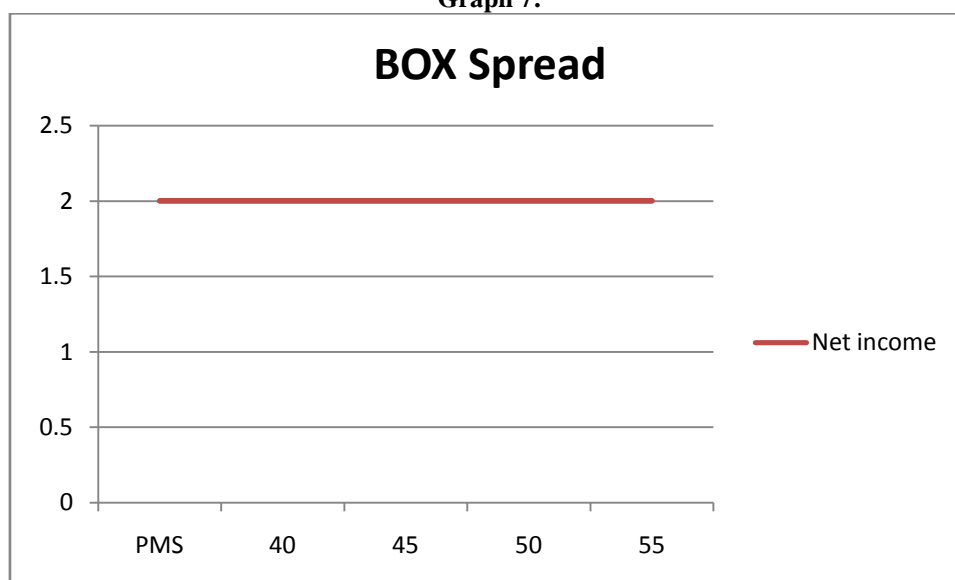
- A-buy45 call @5 premium
- B-sell50 call @3 premium
- C-sell45 put @3 premium
- D-buy50 put@4 premium

Table 8: Box spread

PMS	40	45	50	55	60
option status of A	L	L	E	E	E
option status of B	L	L	L	E	E
option status of C	E	L	L	L	L
option status of D	E	E	L	L	L
gross income from A	0	0	5	10	15

gross income from B	0	0	0	-5	-10
gross income from C	-5	0	0	0	0
gross income from D	10	5	0	0	0
Premium of A	-5	-5	-5	-5	-5
premium of B	3	3	3	3	3
premium of C	3	3	3	3	3
premium of D	-4	-4	-4	-4	-4
Net income	2	2	2	2	2

Graph 7:



VI. Suggestions

Females have to be encouraged to trade. Awareness programs have to be conducted for investors. Investor's have to be motivated to invest in derivative sector as a part of which many case studies are explained to them so that they learn from the mistakes done long back which lead them to remain as case study.

Many investors are ready to know about how to manage risk, but they are taking a back maybe because it is highly costly to learn and achieve a certificate in it or because maybe it too hard and hectic things included but simplified course or conference also can be attended to gain knowledge. Maybe they don't attend them because they aren't aware of them, so proper information is to be passed. Trading strategies have to be explained and spread among investors because under normal market conditions those strategies predefine the maximum amount of loss or gain, so that they can hedge against it.

VII. Conclusion

In the survey conducted. It was found that many investors are to learn and know about risk but they aren't doing so. It was also found that investors are very rarely trading into derivative markets. Very less percentage of investor's are aware regarding the risks faced by them in the derivative market which is proportionally adding on a difficult for them to hedge the risk. Whenever a fresh investor enter into the market he trade on buying and selling of stocks rather than going to derivative market. Actually it was said that 90% of fresh investor don't even know about the derivative market. Actually the terminology of derivative market is so high level that it makes very difficult for a fresh investor to understand it. But it's actually very simple when an investor understands with full attention.

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