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   INTRODUCTION

   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

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- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS
- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES
- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS
- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES
- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES
- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES
- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

IMPACT OF OPTION INTEREST AND PUT- CALL RATIO INFORMATION IN DERIVATIVES MARKET: AN EMPIRICAL STUDY OF OPTION AND FUTURE MARKET, NSE (NATIONAL STOCK EXCHANGE OF INDIA)

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ABSTRACT
Generally, increase in open interest along with increase in price leads to bullish or say upward trend and increase in open interest along with decrease in price leads to bearish trend. This research paper is attempt to study the relationship between closing price and open interest in Indian stock index future and option market. The Granger causality seeks to find out how much of each variable can be explained by other. This research isalso an attempt tofind the efficiency of theall variables as indicators of financial derivatives in predicting the trend of the market (behaviour of NIFTY index). Participants in the stock markets believe that the amount of open interest (OI) in a particular contract has significant effect on the behaviour of the price of the contract. This perception is tried to test in this present research using historical data from January 2014 to February 2014, and examined the correlation between the open interest and the price of future contract of NIFTY index. In case of option contract, the put-call ratio (PCR) is majorly used by technical analysts as an indicator to predict index trends. In thepresent research paper, the value of the put-call ratio as an indicator of future stock market trend is also put in to the consideration for testing.

KEYWORDS
derivatives, put-call ratio, open interest, NIFTY, closing price, Granger causality, indicators.

JEL CLASSIFICATION
G13, G14, G15.

INTRODUCTION
Derivatives are becoming increasingly important in world markets as a tool for risk management. Derivatives instruments can be used to minimize risk. Derivatives are used to separate risks and transfer them to parties willing to bear these risks. The kind of hedging that can be obtained by using derivatives is cheaper and more convenient than what could be obtained by using cash instruments. It is so because, when we use derivatives for hedging, actual delivery of the underlying asset is not at all essential for settlement purposes.A futures contract is an agreement between two parties to buy or sell an asset at a certain period of time in the future at a certain price. Open interest is the total number of options and/or futures contracts that are not closed or delivered on a particular day. Open interest is a calculation of the number of active trades for a particular market. In this study, we are concerned about the open interest for futures and it has been evaluated against daily index future closing prices for the NIFTY Index. It is most often used as an indication of the strength behind the market. It is a common belief that the amount of open interest in a particular contract has a bearing on the behaviour of the price of the futures contract. So it is required to put to test in this research paper by using Granger causality for change in open interest in futures and the change in the futures prices. Study of future closing indices and open interest is important to determine future price trends. Increasing open interest means that new money is flowing in the market, while declining open interest means that the market isliquidating and implies that the prevailing price trend is coming to an end. So, knowledge of open interest can prove useful in determining the moves of the market. In case of option contract, the put-call ratio (PCR) is majorly used by technical analysts as an indicator to predict index trends. In the present research paper, the value of the put-call ratio as an indicator of future stock market trend is also put in to the consideration for testing.

REVIEW OF LITERATURE
Wen and Lin (2011) in their paper titled “Does the put-call Ratio Forecast Market Returns? Evidence from an Emerging Market” found the predictability of popular market-based sentiment indicator, the put-call ratio, for future stock price movements in emerging Taiwan Future Exchange. They investigated that the non-public open-buy put-call ratiocontain information content about future stock index movement, while the predictability of publicly observed put-call ratio is statistically insignificant. Gerg and Ramesh (2010) in their paper “Relation between future price and option in stock and index future in the Indian Stock Market: An Empirical Analysis” revealed that open interest change as and when the number of open position increase or decrease in a given contract. Thus, a change in open interest will not lead to change in future price in any direction.The conclusion is that open interest is a measure of liquidity in the future contract, and not a forbearer of the price direction of the future contract.Andy and Doran (2010) in their paper “Do Option Open-Interest Changes Predict Future Equity returns?” investigated that information is first revealed in option market. Specifically, change in call and put open interest level have predictive power for future equity returns. Large increase in put open interest are followed by poor equity returns call open interest increase precede relatively strong future return, but the relationship is considerably less pronounced.Maniar and Maniyar (2008) in their paper “Impact of Option Interest Information in Derivatives Market – An Empirical Study of Stock Option Market, NSE (National Stock Exchange of India)” found that the prediction of stock price movement based on the distribution of option open interest to have reasonably good accuracy. In the sample, the open interest-based active trading strategies generated better returns as compared with the passive benchmarks.Pan and Poteshman (2004) in their research paper work on the topic “The Information of option Volume for Future Stock Price” presented strong evidence that option trading volume contain information about future stock price movement. By using data from Chicago Board Option Exchange, it was found that on a risk adjust basis, stocks with low put-call ratios outperformed stock with high put-call ratio 40 basis points on the next day and more than 1% over the next week.

Mukherjee and mishra in their research work(2004) on the topic “Impact of Open Interest and Trading Volume in Option Market on Underlying Cash Market: Empirical Evidence from Indian Equity Option Market” found that the open interest based prediction are significant in predict the spot price index in the underlying cash market in both the periods, just after the initiation of the index in the market and in the later sub-period. However, as far as the volume-based predictions are concerned, it shows some changing evidence. Though being insignificant just after the initiation, the volume-based predictors showed significant explanatory power in the later sub-period. Again, though both the predictors in the option market sub-period were significant at 1% level of significance, the trading volume showed more impact as compared to open interest in the matter of price prediction in the cash market. The value of adjusted R-square and F-statistical in two sub-period also confirmed how the option market tends to improve its power in discovering the price index in the underlying cash market.

Christos Floros (2007) examines therelation between price and open interest in Greek stockindex futures market. Study focus on the GARCHeffects and the long-run information role of openinterest. Stephen P Ferris, Hun Y Park and KwangwooPark (2002) studies by using a vector autoregressive(VAR) approach, the dynamic interactions and causalrelationships among volatility, open interest, tradingvolume and arbitrage opportunities in the S&P 500 indexfutures market is examined. It is found that increasedvolatility lowers pricing error. This implies that as market volatility increases, investors sell off their equity and futures positions with relatively larger drops in futures prices.
Srivastava (2001) in his research work on the topic “Information Content Trading Volume of Open Interest-An Empirical Study of Stock Option Market in India” found that open interest based predictors are statistically more significant than volume-based predictore in the indian context.

OBJECTIVES OF STUDY

1. The objective of the study is to find out the relationship between closing future prices and open interest. Open interest is evaluated against daily index future closing prices.
2. To study the behaviour of the NIFTY index by examining the derivative contract.
3. To analyse the efficiency of sentimental indicators of future contracts in predicting the behaviour of the NIFTY index.
4. To analyse the efficiency of sentimental indicators of option contracts in predicting the NIFTY index.
5. To formulate and suggest suitable future and option strategies for different market.

RESEARCH METHODOLOGY

DATA COLLECTION AND SAMPLE SIZE

Collected 2 months data of NIFTY. Data includes open interest, index closing price, call and put option contract price of NIFTY index. Data has been collected from National stock exchange site (http://www.nseindia. com). Open interest and closing prices for closing futures price has been taken from historical data of contract wise volume data for futures and options data available on NSE site.

STATISTICAL TOOL APPLIED

In this study Granger Causality test has been used to develop a two way relationship between closing futures prices and open interest. According to the results obtained if significance level is greater than 0.05 than null hypothesis is not rejected else alternative hypothesis is accepted.E-Views 7 software is used for the analysis purpose. To find out Karl pearson’s coefficient of correlation , SPSS softeare is also used .

PERCENTAGE ANALYSIS

Percentage analysis is the method to represent raw streams of data as a percentage for better understand of collection data.

$$\text{Percentage change} = \frac{\text{New value} - \text{Old value}}{\text{old value}} \times 100$$

Percent increase and percent decrease are useful to understand change in a value over time.

$$\text{\% of carry forward contract} = \frac{\text{Change in open interest Contract}}{\text{No. of contract Treaded(volume)}} \times 100$$

Karl Pearson’s coefficient of correlation: Pearson’s coefficient related the linear relationship between two variables. If the correlation coefficient is +1, then there is a perfect linear relationship , and if there is -1, then there is a perfect negative linear relationship between the variables. 0 denotes that there is no relationship between the two variables. The degrees -1, +1, and 0 are theoretical result and not generally found in normal circumstance. That means that the result cannot be more than -1,+1.

Put-Call Ratio: The put/call ratio is popular sentiment indicator based upon the trading volume and open interest of put option compared to call option. The ratio attempts to gauge the prevailing level of bullishness or bearishness in the market.

$$\textbf{PCR} = \frac{\text{Open interest of put option to No. of put Contract traded}}{\text{Open interest of call option to No. of call contract traded}}$$

EMPIRICAL ANALYSIS AND RESULT

TABLE 1: GRANGER CAUSALITY RESULT FOR NIFTY INDEX

Pairwise Granger Causality Tests
Sample: 1/01/2014 2/21/2014
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
Open_interest does not Granger Cause closing_price	37	14.9947	2.E-06
Closing_price does not Granger Cause Open_interest		30.2674	4.E-10

Table 1 presents the results from Granger Causalitytests for NIFTY. For NIFTY we do reject the nullhythothesis (that open interest does not causesfuture closing price and second null hypothesis is also rejected, that future closing price does notcauses open interest. So, we find that there is a bidirectionaleffect from open interest to future closingprice and future closing price to open interest.
So, open interest can be a indicator for predicting movement of NIFTY Index.
Equation for the calculate % change in price

$$\text{\% change in price} = \frac{\text{current day's LTP} - \text{Previous day's LTP}}{\text{Previous day's LTP}} \times 100$$

Equation for the calculate % of carry forward contract

$$\text{\% of carry forward contract} = \frac{\text{Change in open interest Contract}}{\text{No. of contract Treaded(volume)}} \times 100$$

RELATIONSHIP BETWEEN THE BEHAVIOUR OF NIFTY AND THE SENTIMENTAL INDICATION OF FUTURE CONTRACTS FOR THE MONTH OF JANUARY & FEBRUARY'2014

Date	LTP (Future Contract)	%Change in price	Cumulative %change in price	No. of contract	Change in open interest contracts	% of carry forward contract	cumulative % of carry forward contract	Trend
01-Jan-14	6360.65			47960	67950	1.416805671	1.416805671	
02-Jan-14	6255.8	-1.64842	-1.64842	325504	-495350	-1.5217939	-0.10498822	Bearish
03-Jan-14	6258.4	0.041561	-1.6068586	242124	-1702450	-7.03131453	-7.13630276	Bullish
06-Jan-14	6228	-0.48575	-2.0926057	171361	155450	0.907149235	-6.22915352	Bearish
07-Jan-14	6196.05	-0.51301	-2.6056115	255943	-48750	-0.1904721	-6.41962562	Bearish
08-Jan-14	6197.9	0.029858	-2.5757538	164262	-448300	-2.72917656	-9.14880218	Bullish
09-Jan-14	6193.1	-0.07745	-2.6531994	174561	-193900	-1.11078649	-10.2595887	Bearish
10-Jan-14	6180	-0.21153	-2.8647251	328325	-27350	-0.08330161	-10.3428903	Bearish
13-Jan-14	6300	1.941748	-0.9229775	243680	528050	2.166981287	-8.17590899	Bullish
14-Jan-14	6262.05	-0.60238	-1.5253585	154520	170450	1.103093451	-7.07281554	Bearish
15-Jan-14	6328	1.053169	-0.472189	257092	460050	1.789437244	-5.28337829	Bullish
16-Jan-14	6331.35	0.052939	-0.4192497	175261	821450	4.68700966	-0.59636863	Bullish
17-Jan-14	6272.2	-0.93424	-1.3534896	236858	-1041500	-4.39714935	-4.99351798	Bearish
20-Jan-14	6317.9	0.728612	-0.6248776	217355	-897200	-4.12780934	-9.12132732	Bullish
21-Jan-14	6329	0.175691	-0.4491863	147116	569150	3.868715843	-5.25261148	Bullish
22-Jan-14	6344.9	0.251225	-0.1979618	171166	-144250	-0.84274914	-6.09536062	Bullish
23-Jan-14	6360	0.237986	0.0400246	133460	-340000	-2.5475798	-8.64294042	Bullish
24-Jan-14	6277.65	-1.29481	-1.2547867	246957	-1301450	-5.26994578	-13.9128862	Bearish
27-Jan-14	6152.5	-1.99358	-3.2483671	307063	-3218500	-10.4815624	-24.3944486	Bearish
28-Jan-14	6142.15	-0.16822	-3.4165914	361532	-1850300	-5.11794253	-29.5123912	Bearish
29-Jan-14	6126.5	-0.2548	-3.6713882	192087	-2109400	-10.9814823	-40.4938735	Bearish
30-Jan-14	6074.2	-0.85367	-4.5250567	291826	-2102900	-7.20600632	-47.6998798	Bearish
03-Feb-14	6036.7	-0.61737	-5.1424219	176743	-172700	-0.97712498	-48.6770048	Bearish
04-Feb-14	6045.85	0.151573	-4.9908491	254932	195900	0.768440212	-47.9085646	Bullish
05-Feb-14	6044	-0.0306	-5.0214486	222075	136950	0.616683553	-47.291881	Bearish
06-Feb-14	6054	0.165453	-4.8559952	246439	-341250	-1.38472401	-48.676605	Bullish
07-Feb-14	6078.2	0.399736	-4.4562595	211347	-654650	-3.09751262	-51.7741177	Bullish
10-Feb-14	6060.25	-0.29532	-4.7515772	127561	41650	0.326510454	-51.4476072	Bearish
11-Feb-14	6077	0.276391	-4.475186	133083	480200	3.608274535	-47.8393327	Bullish
12-Feb-14	6093.9	0.278098	-4.1970882	169287	-387900	-2.291375	-50.1307077	Bullish
13-Feb-14	5998.65	-1.56304	-5.7601267	229304	1130150	4.928610055	-45.2020976	Bearish
14-Feb-14	6061.75	1.051903	-4.7082233	227135	-451300	-1.98692408	-47.1890217	Bullish
17-Feb-14	6098	0.598012	-4.1102112	167030	48550	0.290666347	-46.8983553	Bullish
18-Feb-14	6131.25	0.545261	-3.5649504	210962	-570550	-2.70451551	-49.6028709	Bullish
19-Feb-14	6166	0.566769	-2.9981818	123480	8450	0.068432135	-49.5344387	Bullish
20-Feb-14	6108.15	-0.93821	-3.9363914	173973	-817600	-4.69957982	-54.2340185	Bearish
21-Feb-14	6161	0.865237	-3.071154	174281	-901300	-5.17153333	-59.4055519	Bullish

From the above table, after comparing the % change in price and % of carry forward contract using the following test and prediction the trend of the market, it was found that:

price	open interest	market trend
Rising(+)	Rising(+)	market is Strong (Bullish)
Rising(+)	Falling(-)	Short Covering (Bullish)
Falling(-)	Rising(+)	Market is Weak (Bearish)
Falling(-)	Falling(-)	Profit Booking (Bearish)

If the market trend is overall bullish, cumulate the % change in price and % of carry forward contract by adding the bullish trend and subtracting the bearish trends.If the market trend is overall bearish, cumulate the % change in price by adding the bullish trend and subtracting the bearish trend. Then, cumulative the % of carry forward contract by adding the bearish trend and subtracting the bullish trend.

The karlpearson's coefficient of correlation between LTP (last traded price) and % change in open interest.

CORRELATIONS

Descriptive Statistics

	Mean	Std. Deviation	N
LTP	6.181162E3	108.7662296	37
Open Interest	-2.716985E1	21.3023992	37

Correlations

		LTP	Open interest
LTP	Pearson Correlation	1	.872
	Sig. (2-tailed)		.000
	N	37	37
Open interest	Pearson Correlation	.872	1
	Sig. (2-tailed)	.000	
	N	37	37

source : Above table is formed using a statistical tool SPSS

The karl Pearson's coefficient of correlation between LTP (last traded price) and % change in open interest to the no of contract traded. i.e. the cumulative % of carry forward contract is 0.87.The last traded prices (LTP) and open interest are positively correlated and there is high level of significant between them.

The following inferences are for the option contract analysis:

Change in price = current day's price – previous day's price

The change in open interest of active strike price (in-the-money,at-the-money,and out-of-the-money)of call and put option are added instead of taking the open interest of all the strike price.

The total number of contract traded for the active strike price (in-the-money, at-the-money,and out-of-the-money) of call and put option are added instead of talking the volume of all the strike price.

$$\text{Total \% of call carry forward contract} = \frac{\text{Change in open interest Contract}}{\text{No. of call contracts Treaded}} \times 100$$

$$\text{Total \% of put carry forward contract} = \frac{\text{Change in open interest Contract}}{\text{No. of put contracts Treaded}} \times 100$$

Cumulate the % of call and put carry forward contract.

$$\text{Put Call Ratio} = \frac{\text{\% of put carry forward contract}}{\text{\% of Call carry forward contract}} \times 100$$

RELATIONSHIP BETWEEN PUT-CALL RATIO (PCR) AND THE BEHAVIOUR OF NIFTY FOR THE MONTH OF JANUARY AND FEBRUARY 2014

Date	Expiry date	LTP	Change in price	Call carry forward contract(CE)	Put carry forward contract(PE)	PCR (put-call ratio)
01-Jan-14	30-Jan-14	6360.65		7.26916	-48.3871	-6.6564952
02-Jan-14	30-Jan-14	6255.8	-104.85	-4.0258	1.32275	-0.3285714
03-Jan-14	30-Jan-14	6258.4	2.60	-9.7257	-25.5144	2.62340403
06-Jan-14	30-Jan-14	6228	-30.40	-0.8174	4.16667	-5.0972222
07-Jan-14	30-Jan-14	6196.05	-31.95	-1.153	-1.7045	1.47830579
08-Jan-14	30-Jan-14	6197.9	1.85	-16.29	3.82716	-0.2349451
09-Jan-14	30-Jan-14	6193.1	-4.80	-28.307	-44.485	1.5714845
10-Jan-14	30-Jan-14	6180	-13.10	-11.899	-30.357	2.55114017
13-Jan-14	30-Jan-14	6300	120.00	-3.3278	-15.5328	4.66260246
14-Jan-14	30-Jan-14	6262.05	-37.95	-19.054	-5.1724	0.27145734
15-Jan-14	30-Jan-14	6328	65.95	-14.986	-23.926	1.59654211
16-Jan-14	30-Jan-14	6331.35	3.35	-19.427	-21.8367	1.09454474
17-Jan-14	30-Jan-14	6272.2	-59.15	-12.319	-10.333	0.83882353
20-Jan-14	30-Jan-14	6317.9	45.70	3.64583	29.118	7.98655462
21-Jan-14	30-Jan-14	6329	11.10	-11.442	-11.345	0.99148152
22-Jan-14	30-Jan-14	6344.9	15.90	-30.117	-65.3443	2.16968226
23-Jan-14	30-Jan-14	6360	15.10	-38.889	-77.3899	1.99002012
24-Jan-14	30-Jan-14	6277.65	-82.35	-24.748	-21.382	0.86396496
27-Jan-14	30-Jan-14	6152.5	-125.15	-32.612	-0.00253	0.00007771
28-Jan-14	30-Jan-14	6142.15	-10.35	-44.551	-17.182	0.38567708
29-Jan-14	30-Jan-14	6126.5	-15.65	-45.521	-46.607	1.02383877
30-Jan-14	30-Jan-14	6074.2	-52.30	-45.544	23.7154	-0.5207177
03-Feb-14	26-Feb-14	6036.7	-37.50	-10.127	30.6818	-3.0298295
04-Feb-14	26-Feb-14	6045.85	9.15	-30.699	-31.356	1.02139621
05-Feb-14	26-Feb-14	6044	-1.85	-1.5385	12.8099	-8.3264463
06-Feb-14	26-Feb-14	6054	10.00	-21.629	-15.068	0.69667319
07-Feb-14	26-Feb-14	6078.2	24.20	14.2105	-13.492	-0.9494415
10-Feb-14	26-Feb-14	6060.25	-17.95	-24.272	28.7037	-1.1825926
11-Feb-14	26-Feb-14	6077	16.75	-42.308	-25.61	0.60532151
12-Feb-14	26-Feb-14	6093.9	16.90	6.66667	31.8792	4.7818792
13-Feb-14	26-Feb-14	5998.65	-95.25	-17.647	10.5	-0.595
14-Feb-14	26-Feb-14	6061.75	63.10	0.99206	-2.49612	-2.5160976
17-Feb-14	26-Feb-14	6098	36.25	-23.913	-30.496	1.27530625
18-Feb-14	26-Feb-14	6131.25	33.25	-30.307	-40.669	1.34191922
19-Feb-14	26-Feb-14	6166	34.75	-37.558	-46.481	1.23758743
20-Feb-14	26-Feb-14	6108.15	-57.85	-43.439	-44.092	1.01502793
21-Feb-14	26-Feb-14	6161	52.85	-46.133	-188.045	4.07615336

On January 2, 2014, when the market was down by -104.85 points, the put-call ratio -0.328571429 from -6.656495205. OnJanuary 15, 2014, when the market was up by 65.95 points, the put-call ratio rose to 1.59 from 0.27.During the months of January and February, the market was down by 200 points. It indicates that the put-call ratio is a constraint indicator, i.e. when there is an decrease in price of the underlying stock, the put-call ratio also decrease, similarly there is increase in price , the put-call ratio also increase. The Karl Pearson's coefficient of correlation between LTP(last traded price) and PCR (put-call Ratio)

CORRELATIONS

DESCRIPTIVE STATISTICS

	Mean	Std. Deviation	N
LTP	6.181162E3	108.7662296	37
put-call ratio	-1.42187001E0	7.629193059	37

CORRELATIONS

		LTP	put-call ratio
LTP	Pearson Correlation	1	.26
	Sig. (2-tailed)		.046
	N	37	37
put-call ratio	Pearson Correlation	.26	1
	Sig. (2-tailed)	.046	
	N	37	37

FINDINGS

Study found that there is a bi-directional effect from open interest to future closing price and future closing price to open interest. During the month of January & February 2014, when the NIFTY index was down by 200 points (6360-6161), there is positive correlation between the sentimental indicators of future and option contract to the last traded price (LTP) of the underlying stock.During the month of January 1, 2014 to January 30, 2014 NIFTY index was down by 300 points and the market trend was bearish.During the month of February 3 , 2014 to February 21, 2014 NIFTY index was up by 130 points, which is show that market is up as compare to the January 1, 2014 to January 30, 2014.There is correlation between LTP(last traded price) and cumulative % change in Open Interest of future contract for the month of January and February 2014 is positive (0.872).And correlation between LTP (last traded price) and PCR (put-call ratio)of call and put contract for the month of January and February 2014 is positive(0.26).

CONCLUSION

There are many reasons that market participants pay attention to price and open interest. Open interest, or the total number of open contracts, applies primarily to futures markets. It is generally used to confirm trends for futures contracts. An increase in open interest along with an increase in price is said to confirm an upward trend, while an increase in open interest along with a decrease in price confirms a downward trend. This study found the relationship between future closing price and open interest There are many indicators which can be used while trading in the derivative market, but the widely used and most effective are open interest & put call ratio. The findings of this study have strengthened the argument that open interest and volume based predictors are significant in prediction the future movement of the underlying index. This study also concludes that the sentimental indicators of index future (open interestand price) are efficient in predicting the future trend of the underlying (NIFTY). Where the sentimental indicator of option contract (index put/call ratio) is proved to be a contrarian indicator i.e. trading more put option are supposed to be the indication of bearishness, but in the present study, it was observed that more put option are traded when the market is bullish, which means when the market is bullish, the investors always take a long position in future contract and buy a put option to hedge their position. When the market is bearish, the investors always take a short position in the future contract, and buy a call option to hedge their position. Hence, it can be concluded that trading strategies based on sentimental indicators yield good result.

SUGGESTION

Average risk taker can adopt synthetic long call strategy when the market is bullish and synthetic long put strategy when the market is bearish.Aggressive risk taker can make money even when the market doses not show any movement by adopting short straddle strategy.Awareness programs on the benefit of using sentimental indicators in predicting the behaviour of the market can be conducted for equity dealers and client at stock broking firms.In cash market the profit/loss is limited but where in F& O an investor can enjoy unlimited profits/loss.

LIMITATION

This is a study conducted within a period of 37 days. During this limited period of study, the study may not be a detailed, Full – fledged and utilitarian one in all aspects. The study does not provide any predictions or forecast of the selected scripts. This research study was confined to conceptual understanding of Derivatives market in India.

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