# **INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT**



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar, Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)].

The American Economic Association's electronic bibliography, EconLit, U.S.A.,

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world. Circulated all over the world & Google has verified that scholars of more than 4767 Cities in 180 countries/territories are visiting our journal on regular basis. Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

ii

# **CONTENTS**

Sr.		Page
No.	TITLE & NAME OF THE AUTHOR (S)	No.
1.	A DIAGNOSTIC STUDY ON SOCIO-ECONOMIC STATUS OF FISHERMEN: AN INSIGHT OF	1
	KARNATAKA STATE	
	KIRANKUMAR BANNIGOL & S. G. HUNDEKAR	
<b>2</b> .	POPULATION GROWTH AND ECONOMIC DEPENDENCY IN INDIA	5
	DR. REJI B, PINKI & ANURADHA KUMARI RAI	
3.	AN ASSESSMENT OF LEADERSHIP STYLE OF PROJECT MANAGERS ASSOCIATED WITH PROJECT	9
	SUCCESS IN COMMERCIAL CONSTRUCTION	
	COLLINS MUDENDA	
4.	PERFORMANCE OF MGNREGA SCHEME IN PURULIA AND BIRBHUM DISTRICTS: AN EMPIRICAL	14
-		
5.	VENDOR DEVELOPMENT PROCESS: AN EMPIRICAL STUDY	23
-	DR. R. K. KUSHWAHA, SHTAW SUNDER PARASHAR & DR. ALOK SINGH	20
б.	COMBATORE CITY	30
	DR = SWARI M & DR MEERA C	
7	PROBLEMS AND MARKETING STRATEGY OF HANDLOOM SECTOR	3/1
7.	R. VINAYAGAMOORTHY & DR. B. BASKARAN	34
8	A STUDY ON TYPE OF POLICY-HOLDING AND POLICY HOLDERS SATISFACTION ON THE POLICIES	36
0.	OF SELECTED PRIVATE LIFE INSURANCE COMPANIES	50
	D. INDHUMATHI & DR. B. SEKAR	
9.	A STUDY OF PERCEPTION OF CUSTOMER TOWARDS PLASTIC MONEY WITH SPECIAL REFERENCE	40
	TO HDFC BANK	
	ANAND TRIVEDI, NAND KISHORE SHARMA & VANDANA SHARMA	
10.	PRODUCTION FUNCTION ANALYSIS OF MEMBERS DAIRY COOPERATIVE SOCIETY FOR MILCH	48
	BUFFALO IN DISTRICT ETAWAH, INDIA	
	ASHISH CHANDRA & DR. ARUN BAHADAURIA	
11.	ROLE OF GROWTH IN MONEY MARKET WITH CONTEXT TO INDIAN ECONOMY	52
	M. SUGANYA & R. BHUVANESHWARI	
12.	SOCIAL MEDIA IMPACT ON CONSUMER PURCHASING DECISION: STUDY OF AMU CENTER	54
	MURSHIDABAD	
13.	SKILL DEVELOPMENT: THE KEY TO ECONOMIC PROSPERITY	62
	ANJALI JAIN	64
14.	INCLUSION (THE SUCCESS BATES AND AN OVEDVIEW OF DEODIES ACCEDIANCE)	64
	SINDLI AKII FSH	
15	STANDARDIZATION OF PERCEIVED PROFESSIONAL SUCCESS SCALE FOR POLICE PERSONNEL	69
13.	RASMITA DAS SWAIN & SHIV MANGAL SINGH	05
16.	REDEFINING MANAGEMENT PRINCIPLES FOR THE 'DIGICAL' GENERATION	73
20.	DR. DEEPIKA DABKE	
17.	QUALITY OF WORK LIFE AND EMPLOYEE PERFORMANCE: A THEORETICAL FRAMEWORK	79
	SHAHNEYAZ A BHAT, SUHAIL A BHAT & MUNEER A KHAN	-
18.	TECHNICAL ANALYSIS OF BONUS ISSUES: A STUDY OF INDIAN STOCK MARKET	83
	NEHA ROHRA & SHWETA JAIN	
<b>19</b> .	ON THE NEOCLASSICAL AND KALDORIAN PERSPECTIVES	94
	MERTER MERT	
<b>20</b> .	PUNJAB Vs. HARYANA: EMPIRICAL EVIDENCE ON ECONOMIC GROWTH & DEVELOPMENT	99
	SHILPI SALWAN	
	REQUEST FOR FEEDBACK & DISCLAIMER	103

## <u>CHIEF PATRON</u>

**PROF. K. K. AGGARWAL** 

Chairman, Malaviya National Institute of Technology, Jaipur (An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India) Chancellor, K. R. Mangalam University, Gurgaon Chancellor, Lingaya's University, Faridabad Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar



LATE SH. RAM BHAJAN AGGARWAL

Former State Minister for Home & Tourism, Government of Haryana Former Vice-President, Dadri Education Society, Charkhi Dadri Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

### CO-ORDINATOR

**DR. BHAVET** Faculty, Shree Ram Institute of Engineering & Technology, Urjani

## <u>ADVISORS</u>

PROF. M. S. SENAM RAJU Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi PROF. M. N. SHARMA Chairman, M.B.A., Haryana College of Technology & Management, Kaithal PROF. S. L. MAHANDRU Principal (Retd.), Maharaja Agrasen College, Jagadhri

### <u>EDITOR</u>

PROF. R. K. SHARMA Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

### FORMER CO-EDITOR

DR. S. GARG Faculty, Shree Ram Institute of Business & Management, Urjani

## EDITORIAL ADVISORY BOARD

DR. RAJESH MODI Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia PROF. SIKANDER KUMAR Chairman, Department of Economics, Himachal Pradesh University, Shimla, Himachal Pradesh PROF. SANJIV MITTAL University School of Management Studies, Guru Gobind Singh I. P. University, Delhi PROF. RAJENDER GUPTA Convener, Board of Studies in Economics, University of Jammu, Jammu PROF. NAWAB ALI KHAN Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

**INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT** 

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

iv

### **PROF. S. P. TIWARI**

Head, Department of Economics & Rural Development, Dr. Ram Manohar Lohia Avadh University, Faizabad

**DR. ANIL CHANDHOK** 

Professor, Faculty of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana

### **DR. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**DR. SAMBHAVNA** 

Faculty, I.I.T.M., Delhi

**DR. MOHENDER KUMAR GUPTA** 

Associate Professor, P. J. L. N. Government College, Faridabad

**DR. VIVEK CHAWLA** 

Associate Professor, Kurukshetra University, Kurukshetra

### **DR. SHIVAKUMAR DEENE**

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

### ASSOCIATE EDITORS

PROF. ABHAY BANSAL Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida PARVEEN KHURANA

Associate Professor, Mukand Lal National College, Yamuna Nagar

SHASHI KHURANA

Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala

SUNIL KUMAR KARWASRA

Principal, Aakash College of Education, ChanderKalan, Tohana, Fatehabad DR. VIKAS CHOUDHARY

Asst. Professor, N.I.T. (University), Kurukshetra

### FORMER TECHNICAL ADVISOR

**AMITA** Faculty, Government M. S., Mohali

### FINANCIAL ADVISORS

DICKIN GOYAL Advocate & Tax Adviser, Panchkula NEENA Investment Consultant, Chambaghat, Solan, Himachal Pradesh

### LEGAL ADVISORS

JITENDER S. CHAHAL Advocate, Punjab & Haryana High Court, Chandigarh U.T. CHANDER BHUSHAN SHARMA Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

### SUPERINTENDENT

SURENDER KUMAR POONIA

## CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography: Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript anytime** in <u>M.S. Word format</u> after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. <u>infoijrcm@gmail.com</u> or online by clicking the link **online submission** as given on our website (<u>FOR ONLINE SUBMISSION</u>, <u>CLICK HERE</u>).

### GUIDELINES FOR SUBMISSION OF MANUSCRIPT

#### 1. COVERING LETTER FOR SUBMISSION:

DATED: \_\_\_\_\_

#### THE EDITOR

IJRCM

#### Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF.

#### (e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

#### DEAR SIR/MADAM

Please find my submission of manuscript entitled '\_\_\_\_\_' for possible publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to their inclusion of names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

NAME OF CORRESPONDING AUTHOR	:
Designation	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

- NOTES:
  - a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. <u>**pdf.**</u> <u>**version**</u> is liable to be rejected without any consideration.
  - b) The sender is required to mention the following in the SUBJECT COLUMN of the mail:

**New Manuscript for Review in the area of** (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

- c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is expected to be below 1000 KB.
- e) Abstract alone will not be considered for review and the author is required to submit the complete manuscript in the first instance.
- f) The journal gives acknowledgement w.r.t. the receipt of every email within twenty four hours and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
- g) The author (s) name or details should not appear anywhere on the body of the manuscript, except the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.
- 2. **MANUSCRIPT TITLE**: The title of the paper should be **bold typed**, **centered** and **fully capitalised**.
- 3. **AUTHOR NAME (S) & AFFILIATIONS**: Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.
- 4. ACKNOWLEDGMENTS: Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
- 5. **ABSTRACT**: Abstract should be in **fully italicized text**, ranging between **150** to **300 words**. The abstract must be informative and explain the background, aims, methods, results & conclusion in a **SINGLE PARA**. *Abbreviations must be mentioned in full*.
- 6. **KEYWORDS**: Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations.
- 7. **JEL CODE**: Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aeaweb.org/econlit/jelCodes.php, however, mentioning JEL Code is not mandatory.
- 8. **MANUSCRIPT**: Manuscript must be in <u>BRITISH ENGLISH</u> prepared on a standard A4 size <u>PORTRAIT SETTING PAPER</u>. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.
- 9. **HEADINGS**: All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
- 10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
- 11. MAIN TEXT:

#### THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

INTRODUCTION REVIEW OF LITERATURE NEED/IMPORTANCE OF THE STUDY STATEMENT OF THE PROBLEM OBJECTIVES HYPOTHESIS (ES) RESEARCH METHODOLOGY RESULTS & DISCUSSION FINDINGS RECOMMENDATIONS/SUGGESTIONS CONCLUSIONS LIMITATIONS SCOPE FOR FURTHER RESEARCH REFERENCES APPENDIX/ANNEXURE

The manuscript should preferably range from 2000 to 5000 WORDS.

- 12. **FIGURES & TABLES**: These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self explained, and **titles must be above the table/figure**. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.
- 13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, horizontally centered with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word should be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
- 14. **ACRONYMS**: These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section: Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
- 15. **REFERENCES:** The list of all references should be alphabetically arranged. *The author (s) should mention only the actually utilised references in the preparation of manuscript* and they are supposed to follow Harvard Style of Referencing. Also check to make sure that everything that you are including in the reference section is duly cited in the paper. The author (s) are supposed to follow the references as per the following:
- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (ed.) for one editor, and (ed.s) for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parenthesis.
- *Headers, footers, endnotes and footnotes should not be used in the document.* However, you can mention short notes to elucidate some specific point, which may be placed in number orders after the references.

#### PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

#### BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- 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, 19–23

#### UNPUBLISHED DISSERTATIONS

• 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 Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

### **TECHNICAL ANALYSIS OF BONUS ISSUES: A STUDY OF INDIAN STOCK MARKET**

### NEHA ROHRA RESEARCH SCHOLAR DEPARTMENT OF COMMERCE DELHI SCHOOL OF ECONOMICS UNIVERSITY OF DELHI DELHI

SHWETA JAIN RESEARCH SCHOLAR DEPARTMENT OF COMMERCE DELHI SCHOOL OF ECONOMICS UNIVERSITY OF DELHI DELHI

#### ABSTRACT

Bonus Issues are generally regarded as cosmetic events as they simply involve a change in the number of outstanding shares. However, many researchers have found numerous stock market effects associated with bonus issues. This paper examines the impacts of bonus issue for the Indian stock market. To capture short run/immediate effect of bonus issue announcement on the stock price and shareholders return, this study has used Market Model to calculate abnormal returns and employed both parametric and non-parametric tests on it to check the significant differences in two sample (pre- and post-announcement) data set. Further, semi-log regression equations have been estimated to support the analysis. Out of total 3 cases of bonus issues studied, two cases have shown that stock price increases significantly in the post- announcement period and, one case has shown no significant change. Moreover, we have observed increase in abnormal returns in the post period in case of two sample firms while a decrease in abnormal returns in post- announcement period has been observed for one sample firm, but these changes were found to be statistically insignificant at 5% level. Overall on the basis of majority of bonus issue results, the study concludes that bonus issue announcements have a positive effect on share price which ultimately increases the returns in the short run. We have also investigated the efficiency of Indian stock market in semi-strong form in the case of bonus issue announcements. Both, parametric and non-parametric test have been used to test for market efficiency. The finding from this research is that Indian stock market is efficient in semi-strong form in the case of bonus issue announcements.

#### **KEYWORDS**

abnormal return, event- study, bonus issue, announcement effect, market efficiency.

#### INTRODUCTION

The onus issue refers to distribution of additional stocks to the existing shareholders. It is a "free" issue of shares, without a subscription price, made to existing shareholders in proportion to their current investment. A firm can distribute bonus shares by using retained earnings or accumulated capital reserves.

The relationship between the bonus issues and stock prices has been a matter of empirical discussion since past many years. Theoretically speaking, a bonus issue increases the number of equity shares outstanding but the proportional ownership of shareholders remains unchanged. Empirical research, particularly in US has shown that the market generally reacts positively to the announcement of a bonus issue. But in developing countries like India, not much research has been undertaken on this topic. This makes it all the more important to study about the impact of bonus issues, as such an exercise will help us in understanding why managers of firms undertake such (potentially costly) cosmetic decisions.

Since the main goal of a firm is to achieve the objective of shareholder's wealth maximization, we must evaluate the performance of a company making a bonus issue in stock market as well. Moreover, the studies which have focused on the impact on firm value are not comprehensive in nature and results are not consistent. Some studies have documented significant increase in abnormal returns of companies after bonus issue, while others have given negative results. Therefore, there is a need to scrutinize it more.

It is important to examine the short run effect of bonus issue on the firm and its shareholders; such an approach helps us to capture the immediate stock market reaction which highlights the true benefits and real economic effect due to issue announcement. This can be done through technical analysis. Technical analysis is based on apparent trends in share prices and these trends are generated as short run phenomenon, not reflecting the long term fundamentals of the company. Further, we have investigated the efficiency of Indian stock market in semi- strong form in case of bonus issue announcements (i.e. publicly available information).

In an efficient market, security prices fully reflect all available information. "Thus, an information regarding the prospect of the company will affect the stock price to react quickly, which makes it impossible for the investors to earn excess return or abnormal return". On the other hand, if market is not efficient, it will not be able to discount the event/ available information therefore there will be some kink in the price or return trend.

Thus through this paper, we intend to study the effect of bonus issue announcement on issuing firm value in the short run and examine market efficiency. A sincere attempt has been made to capture the effect of bonus issue announcement on stock price and returns for the immediate time after the event has occurred. This exercise will provide useful information about the effects of bonus issue to the investors of stock markets and to the management of business firms who makes such costly decisions.

#### **OBJECTIVES OF THE STUDY**

The main objectives of this study are to determine the impact of Bonus Issue announcements on the wealth of shareholders of issuing firms in the short run and to examine market efficiency. To put it differently, the objectives are as follows:

- 1. To find out whether there are any differences in stock prices before and after bonus issue announcement.
- 2. To find out whether there are differences in the abnormal returns in pre-announcement and post-announcement periods.
- 3. To analyze if the Indian stock market is efficient in semi-strong form in the case of bonus issue announcements.

#### **CONCEPTUAL FRAMEWORK**

#### MEANING OF BONUS SHARES

Bonus shares are extra free shares given to existing shareholders in proportion to their current investment. When bonus shares are issued, there is an increase in the total number of shares issued and owned. But, it does not increase the value of the company. And the ratio of number of shares held by each shareholder

remains constant. A bonus issue is a stock split in which a company issues new shares without any cost so as to bring its issued capital in line with its employed capital. Thus, a bonus issue can be viewed as an alternative to dividends.

#### CIRCUMSTANCES FOR ISSUING BONUS SHARES

A company can issue bonus shares if it does not want to depict large amount of distributable income on the balance sheet and wants to plough back its profits to capital. Even if payment of dividend is not compulsory for the company, investors may demand for dividend in case company has huge accumulated profits. Hence, in case of large profits to avoid high dividend payments, company can issue bonus shares by converting its accumulated profits. This also improves market image of the company.

#### BONUS SHARES ISSUED IN THE RATIO

When the bonus shares are issued in the ratio of 1:1, it implies that one share would be allocated for one existing share in the company. Similarly, a ratio of 2:1 means that two shares would be allocated for every share already held in the company. As the date is announced, in order to get useful benefits, the investors wait for the required date. The holders of the shares will be entitled to the bonus shares on this particular day.

There is one more date on which the shares go 'ex-bonus', i.e. the share prices adjust in the bonus ratio to reflect the actual situation on the ground on this day. IS IT ACTUALLY FREE?

Technically, bonus shares don't cost to shareholders but their issue is not completely free of cost. Generally, entire profits are not distributed by the companies to the stockholders as dividends. Large part of the profit is retained and then added to the reserves of the company. Companies keep reserves to meet unforeseen increases in expenditure, and to finance its future expansion or diversification programs. In case, reserves have more cash than what is required for the reinvestment, the companies use these free cash reserves to issue bonus shares.

As shareholders are not required to pay; the company's profits are also not affected by this issue of bonus shares. Due to bonus shares, the total no. of shares of the company increases in the market. The earnings of the company would now have to be divided by the increased number of the shares. As a result, the EPS will decline.

#### EFFECT OF BONUS SHARES ON INVESTORS

"Immediately, it doesn't affect investments anyway. Post the bonus issue, the EPS falls and hence the share price should fall in proportion to the bonus issue, thereby making no difference to the personal wealth of the shareholder. However, a bonus is perceived to be a strong signal given out by the company and the consequent demand push for the shares causes the price to move up. So, when stock prices move up in the long run, there will be a dramatic increase in the wealth of shareholders."

#### EFFECT OF BONUS ISSUE ON SHARE PRICE

"Since the profits remain the same after the bonus issue, but the total number of shares increases, the EPS will decline. Theoretically, when EPS falls, the stock price should also decline proportionately. But in reality, this may not happen because of the following reasons-

- 1.) The stock becomes more liquid now. As a result, it becomes easier to buy and sell as now there are so many more shares.
- 2.) A bonus issue gives a signal that the company is in a position to service its larger equity, i.e., it is confident of being able to increase its profits and distribute dividends on all these shares in the future."

#### CONDITIONS TO BE SATISFIED BEFORE ISSUING BONUS SHARES

- If the Articles of Association of the company authorize a bonus issue, only then bonus shares can be issued. If it is not present in the articles, then a special resolution should be passed at the general meeting of the company.
- On the recommendations of the board of directors of the company, the shareholders should approve in the general meeting.
- The guidelines given thereby must be followed. It must be ensured that bonus shares do not lead to total share capital in excess of the authorized share capital. Otherwise, the capital clause of Memorandum of Association must be amended to increase the authorized capital.

#### LITERATURE REVIEW ON ANNOUNCEMENT EFFECT OF BONUS ISSUES

Balachandran (2001) analysed the stock price reaction to the announcement of bonus share issues by Australian companies. As per the study, the magnitude of price reaction to bonus issue announcement is statistically related to the pre-announcement effect and size of bonus issues.

Ball, Brown and Finn (1977) analyzed stock price reaction around the announcement of 'Stock Capitalization changes' in Australia during 1960 and 1969. They found abnormal returns for certain months.

Malhotra Madhuri et al. (2003) in a study of Indian companies concluded that there is a negative reaction of the bonus issue announcement on the stock price. Standard event study methodology has been used for the purpose of studying the Bonus Issue announcement reaction.

Mishra (2005) conducted a study to identify the stock price reaction to information content of bonus issue and the results of the study reported significant positive abnormal returns for a five-day period prior to bonus announcement.

Barnes and Ma (2001) have found that issues with a high bonus ratio, i.e., number of bonus shares in the issue/number of existing shares, usually are rewarded with positive returns and the issues with a low bonus ratio attract negative returns.

Travlos and Vafeas (2001) examined the stock market reaction to the announcements of bonus issues (stock dividends) and cash dividends in the stock market of Cyprus. The results of the study showed that significantly positive returns were earned by the investors.

Srinivas (2008) in the paper titled as "Dilemma of Corporate Action: Empirical Evidences of Bonus Issue vs. Stock Split" has reported that top management of the companies decides to issue bonus shares when the investors undervalue the company.

Dhar and Chhaochharia (2009) have suggested that the bonus issue and the stock splits are associated with significantly positive announcement effect, i.e., these two events provide abnormal returns to the investors. The sample of the study consisted of 82 bonus issues announced by companies listed on BSE 500 index during April, 2001 to 31<sup>st</sup> March 2007.

Ghatak (2011) analysed the impact of bonus issue and stock split on the stock market. He stated that market reacts positively on the declaration of these two events on the announcement date and there after it follows mixed trend.

Foster and Vickery (1978) examined the signaling hypothesis using daily returns data. They investigated and reported the information content of 82 stock dividend announcements and reported significant positive abnormal returns around announcement dates.

Grinblatt, Masulis & Titman (1984) analysed the ex-dates of stock dividends which were distributed from 1967 to 1976 and reported an average abnormal returns of 1.1% earned by the investors.

Obaidullah (1992) & Rao (1994) confirmed a positive stock market reaction to equity bonus announcements.

Budhraja et al. (2004) have suggested abnormal returns to the investors and increase in stock prices around the bonus announcement date. It also said that much of the information in the bonus announcement gets impounded into stocks by the time of announcement.

#### **RESEARCH HYPOTHESES**

Based on research objectives, the hypotheses are as follows:

- 0: There is no significant difference in stock price of issuing company before and after bonus issue announcement.
- 1: There is significant difference in stock price of issuing company before and after bonus issue announcement.
- 0: There is no significant difference in Abnormal Returns in pre announcement periods and post announcement periods.
- 1: There is significant difference in Abnormal Returns in pre announcement periods and post announcement periods.
- 0: The Indian stock market is efficient in semi-strong form in case of bonus issue announcement.
- 1: The Indian stock market is not efficient in semi-strong form in case of bonus issue announcement.

#### DATA AND METHODOLOGY

We have used daily adjusted closing stock prices of the sample companies and BSE SENSEX historical prices to calculate the abnormal return around the bonus issue announcement date from the year 2013 to 2015. Stock prices of sample companies and BSE Sensex prices have been obtained from yahoo finance website (http://finance.yahoo.com). The dates of formal announcements of bonus issue to be made by sample companies have been obtained from BSE website. In this study, we have studied three cases of bonus issues made by Indian firms. They are chosen through the following criteria:

a. The stock price and index price are available in yahoo finance.

- b. The stock price and index price of each firm are available for the duration of the event study, which is from -180 to +20 days.
- c. The stock is actively traded, meaning that there are not much zero returns.

Based on the above criteria, table 1 consists of the companies that are chosen for analysis.

	TABLE 1: LIST OF SAMPLE COMPANIES									
NO.	COMPANY NAME	BONUS ISSUE RATIO	ANNOUNCEMENT DATE							
1.	GODREJ INDUSTRIES	1:1250	07.02.2014							
2.	HCL TECHNOLOGIES	1:1	30.01.2015							
3.	LOOKS HEALTHCARE	3:4	13.10.2015							

#### EVENT STUDY METHODOLOGY

To analyze the impact of bonus issue announcements on the wealth of shareholders of issuing company, event study method is being used. This study uses this method because it can directly measure the capital gain earned by shareholders resulting from any event of bonus issue.

Event study uses abnormal return over the event window to test for market efficiency. An abnormal return, which implies the difference between actual return and expected return will be positive or negative - depends on the information if the market is not efficient. In an efficient market, it is not possible to find abnormal returns because it is impossible for investors to earn excess return. There are many approaches to find abnormal return. In this paper, we have used statistical model of market model. The steps of conducting event study are as follows:

The first step is to define the event and the event window. The event in this research is announcements of bonus issue. The event window in our study is 20 1. days prior and after the announcement day (-20 to +20). The day of official announcement of bonus issue is known as the event day, denoted as 0. Since market model is used, there is a need to establish estimation window as well. Figure 1 depicts the timeline of event window which uses day -180 to -20 as the estimation window.

#### ESTIMATION WINDOW EVENT WINDOW

-180 -20 0 20

Gather the daily closing adjusted historical prices of stocks and BSE SENSEX from yahoo finance and calculate the daily stock return (R) and daily market 2. return (Rm). The returns of each stock along the estimation and event window is calculated using the formula below:

$$R_{it} = ln\left(\frac{P_{it}}{P_{it-1}}\right) = ln(P_{it}) - ln(P_{it-1})$$

Where R<sub>it</sub> is the log return of stock i at day t, and P<sub>it</sub> and P<sub>it-1</sub> is the closing adjusted price of stock i at day t and the closing adjusted price of stock i at day t-1 respectively.

Then calculate the market return using BSE SENSEX daily price. The corresponding market return is also calculated along the estimation and event window using the formula:

$$R_{mt} = ln\left(\frac{P_{mt}}{P_{mt-1}}\right) = ln(P_{mt}) - ln(P_{mt-1})$$

Where R<sub>mt</sub> is the market log return at day t, P<sub>mt</sub> and P<sub>mt-1</sub> is the closing price of market index at day t and the closing price of market index at day t-1 respectively.

3. A regression analysis is conducted using the actual daily log return of each stock (R) as dependent variable and the corresponding daily market log return (Rm) of BSE SENSEX as independent variable over the estimation window (180 days prior to the event window) to obtain the intercept - alpha and slope beta for each stock separately. Table 2 shows alpha and beta that are used for each stock.

TABLE 2: ALPHA AND DETA		STUCK
ISSUING COMPANY/ STOCK	ALPHA	BETA
GODREJ INDUSTRIES	-0.0009	0.9253
HCL TECHNOLOGIES	0.0004	0.3956
LOOKS HEALTHCARE	-0.0126	0 4 3 5

Calculate the expected return of each stock for each day during the event window (day -20 to +20) using the formula:

 $\hat{R}_{it} = \hat{\alpha}_i + \hat{\beta}_i R_{mt}$  (AS PER MARKET MODEL APPROACH)

Where  $\hat{R}_{it}$  is the expected return on stock i at time t,  $R_{mt}$  is the corresponding market return i.e. BSE SENSEX,  $\hat{\alpha}_{l}$  and  $\hat{\beta}_{l}$  are OLS parameters estimated through regression equation.

Then, the Abnormal Return is calculated as: 5.

$$AR_{it} = R_{it} - \hat{R}_{it}$$

Where  $R_{it}$  is the actual log return on stock i at time t.

The significance of Abnormal Returns has been checked through t- statistics as follows:

 $t_{AR,t} = \frac{AR_t}{\sigma}$ 

Where  $\sigma_{AR}$  is the standard error of Abnormal Returns over the estimation period from t= -180 to t= -20.

The cumulative abnormal return (CAR) for a given security is simply the sum of daily returns over the event window.

To see the movement of Abnormal return over time, AR is then plotted through time during the event window (day -20 to +20). 6.

To test for the impact of bonus issue announcement on the wealth of shareholders of issuing companies and for market efficiency, both parametric and non-7. parametric tests have been used, such as independent samples T-test, paired samples t-test and Mann- Whitney test and Wilcoxon matched-pairs signed rank test

#### SEMI-LOG REGRESSION MODEL

Apart from the statistical tests mentioned above, we have used also used linear and semi- log regression equations to test the effect of time on closing adjusted stock prices, and abnormal returns. We have tried to find out in what time phase these dependent variables are significant. The time phases are namely preannouncement and post- announcement.

The general form of semi- log regression equation used (including time dummy) is as follows:

Ln (Dependent Variable) =  $\beta$ 0 +  $\beta$ 1D +  $\beta$ 2t +  $\beta$ 3 (tD)

Where,

Ln (Dependent Variable) = Natural log of Dependent Variable values

 $\beta 0$  = Intercept for Pre-announcement period

 $\beta$ 0 +  $\beta$ 1 = Intercept for Post-announcement period (provided  $\beta$ 1 is significant)

#### INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

86

 $\beta$ 2 = Growth rate of variable for Pre-announcement period

 $\beta 2 + \beta 3 =$  Growth rate of variable for Post-announcement period (provided  $\beta 3$  is significant)

D = 1, If announcement period is post announcement, otherwise 0

t = Time Period (1 for day -20, 2 for day -19 ...... 40 for day 20)

So in this model, the intercepts and slopes vary with the time period- pre and post announcement.  $\beta$ 1 i.e. differential intercept coefficient gives the difference in intercepts between pre and post announcement period and  $\beta$ 3 i.e. differential slope coefficient gives the difference in slopes between the two periods.

#### **EMPIRICAL ANALYSIS AND RESULTS**

This section deals with the empirical analysis and results for the sample issuing companies viz., Godrej Industries, HCL Technologies, Looks Healthcare in that order.

- A) GODREJ INDUSTRIES:
- ✤ DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation
PRE PERIOD CLOSING PRICE	20	262.1900	290.4100	275.882500	8.9171992
POST PERIOD CLOSING PRICE	20	265.1100	295.0800	273.456500	7.8105915
PRE PERIOD ACTUAL RETURN	20	0616	.0490	.001289	.0264608
POST PERIOD ACTUAL RETURN	20	0386	.0403	.003033	.0169216
PRE PERIOD ABNORMAL RETURN	20	0540	.0515	.003097	.0243688
POST PERIOD ABNORMAL RETURN	20	0358	.0406	.000524	.0174981
Valid N (listwise)	20				

The mean adjusted closing price for the pre- announcement period is Rs. 275.88 (with the standard deviation of 8.91%). On the other hand, the mean adjusted closing price for the post- announcement period is Rs. 273.45 (with a standard deviation of 7.81%). The mean value of return series in the pre-announcement period is 0.12% (with a standard deviation of 2.64%) while that in post- announcement period is 0.30% (with a standard deviation of 1.69%). The mean value of abnormal return series in the pre-announcement period is 0.30% (with standard deviation of 2.43%) while that in post-announcement period is 0.05% (with a standard deviation of 1.74%).

#### ✤ DISTRIBUTION OF ABNORMAL RETURNS AROUND THE ANNOUNCEMENT DATE FOR DAYS -20 to 20





#### TABLE 3: SHOWS ANNOUNCEMENT PERIOD ABNORMAL RETURNS OF THE COMPANY FOR DAYS -20 TO 20

DAY	ABNORMAL RETURN	t-VALUE	DAY	ABNORMAL RETURN	t-VALUE
-20	0.029735672	1.619855	1	0.035757577	-1.9479
-19	-0.003497436	-0.19052	2	0.017050454	0.928826
-18	0.007862744	0.428324	3	0.017667798	-0.96246
-17	0.005560523	0.30291	4	0.016391741	0.892942
-16	0.018111718	0.986638	5	0.012382737	-0.67455
-15	0.007310818	0.398258	6	0.009047217	0.492848
-14	0.006554257	0.357044	7	0.018942451	-1.03189
-13	-0.01487275	-0.8102	8	0.007340279	-0.39986
-12	-0.008567639	-0.46672	9	0.004028029	0.219427
-11	-0.018585322	-1.01244	10	-0.00236169	-0.12865
-10	-0.036043896	-1.9635	11	0.006354585	0.346167
-9	0.018622143	1.014444	12	0.016436608	0.895386
-8	-0.001751375	-0.09541	13	0.007391121	-0.40263
-7	0.051542813	2.807802	14	0.000490982	0.026746
-6	-0.054000732	-2.9417	15	0.009077549	0.494501
-5	0.027620821	1.504648	16	0.014124454	0.769432
-4	-0.002890763	-0.15747	17	-0.01051223	-0.57266
-3	0.001495106	0.081446	18	0.01107021	0.603051
-2	0.036683174	1.998321**	19	0.021814666	-1.18836
-1	-0.00895344	-0.48774	20	0.040581944	2.210707**
0	0.014462584	0.787851			

\*\*significant at 5% AR= Abnormal Return

#### PRE- ANNOUNCEMENT PERIOD (-20, -1)

The abnormal returns before the event day show a mixed pattern. ARs before the event day are positive only for 11 days out of 20 days and are negative for rest of 9 days. Significant AR has been noted only for day t-2. The results show that ARs for days 3 to 20 preceding the announcement date are found to be almost equal to zero, as they are not statistically different from zero, indicating that the market did not anticipate the bonus issue event of the firm even three days before the formal announcement.

#### ON THE EVENT DAY

It is interesting to note that AR which was -0.89% on day t-1, increased by a huge fraction and became +1.44% on day t = 0, the day of official announcement of bonus issue. This sudden increase in AR from its level on previous day (t-1) might have been due to official recording of bonus issue announcement on which the market reacted quickly and positively. The results show that on event day, AR = 1.44% i.e. the wealth of shareholders of the company had gone up by 1.44% but not significantly. This indicates that the market reacted positively but not significantly to the bonus issue announcement of company.

#### POST- ANNOUNCEMENT PERIOD (1,20)

The ARs after the announcement day also show no consistent pattern. There is an immediate jump on day succeeding the announcement day resulting in positive AR of 3.57% on day one after the announcement. But after that there is reversal of trend, there are both positive and negative returns which are not significant, pointing towards market efficiency.

#### A COMPARISON OF PRE & POST- ANNOUNCEMENT PERIODS

#### THROUGH STATISTICAL TESTS

To see whether there is a difference in stock prices (as well as abnormal returns) before and after the announcement day during the event window, two independent samples parametric and non-parametric statistical tests have been used. These tests have been performed to find out the first and third hypothesis of this research. Two independent samples t-test and Mann-Whitney test have been conducted after a test of normality is performed using Shapiro Wilks test.

#### ADJUSTED CLOSING PRICES (refer to table 4) i)

Both the pre and post announcement period data are normally distributed using 5% level of significance. The average closing price in post-announcement period is Rs. 0.10 lower than the pre-announcement period average and this difference is not statistically significant. Both parametric and non-parametric test indicate that there is no significant difference in stock price before and after the announcement day. P-value from T-test and Mann-Whitney are 0.369 and 0.449 respectively, which are above 0.05. Thus, we cannot reject the null hypothesis that the stock price before and after the announcement day is equal.

#### TABLE 4: SHOWS THE RESULT OF PARAMETRIC AND NON-PARAMETRIC TESTS AND ALSO PROVIDES ADDITIONAL INFORMATION ABOUT THE NORMALITY OF THE DATA

PERIOD	P-VALUE	MEAN DIFFERENCE	PARAMETRIC TEST	(2 SAMPLES t- TEST)	NON PARAMETRIC TEST	(MANN-WHITNEY TEST)
		(pre-post)	T- VALUE	P- VALUE	Z- VALUE	P-VALUE
BEFORE	0.108	0.0109260	0.910	0.369	-0.758	0.449
AFTER	0.910					

#### ABNORMAL RETURNS (refer to table 5) ii)

Both the pre and post announcement period data are normally distributed using 5% level of significance. The average abnormal return in post-announcement period is 0.25% lower than the pre-announcement period average but this difference is not statistically significant. Both parametric and non-parametric test indicate that there is no significant difference in abnormal returns before and after the announcement day. P-value from T-test and Mann-Whitney are 0.703 and 0.665 respectively, which are above 0.05. Thus, we cannot reject the null hypothesis that the abnormal returns before and after the announcement day are equal.

#### TABLE 5: SHOWS THE RESULT OF PARAMETRIC AND NON-PARAMETRIC TESTS AND ALSO PROVIDES ADDITIONAL INFORMATION ABOUT THE NORMALITY OF THE DATA

PERIOD	P-VALUE	MEAN DIFFERENCE (pre-post)	N DIFFERENCE (pre-post) PARAMETRIC TEST (2 SAMPLES t- TEST) NON PARAMETRIC TEST (MANN-WHITNEY		(MANN-WHITNEY TEST)	
			T- VALUE	P- VALUE	Z- VALUE	P-VALUE
BEFORE	0.993	0.0025727	0.384	0.703	-0.433	0.665
AFTER	0.163					

#### THROUGH REGRESSION ANALYSIS

We have tested the effect of time on Adjusted Close Price, and Abnormal Returns. We have tried to find out in what time phase these variables are significant. The time phases are namely pre announcement and post announcement.

#### ADJUSTED CLOSING PRICE i)

 $Ln (PRICE) = \beta 0 + \beta 1D + \beta 2t + \beta 3tD - -$ ----- GENERAL FORM OF EQUATION

We got the following regression equation:

Ln (PRICE) = 5.585 + 0.142D + 0.003t - 0.007tD

S.E = (0.10) (0.029) (0.001) (0.001)

t = (536.497) (4.918) (3.743) (-5.761)

It was found that the intercept for the pre-announcement period has come out to be positive and significant at 5% level. But the post announcement price is higher than the pre-announcement period and significant at 5%. On the other hand, we noted that the growth rate of price for pre-announcement period is significantly positive while it is significantly negative for post- announcement period. This means that immediately after the announcement, the stock price increased significantly, but as the post- announcement period increased, the stock price started falling. This confirms the result of t- test which indicates that the stock price reduced but not significantly in the post- announcement period.

#### ii) ABNORMAL RETURNS

#### ABNORMAL RETURNS = $\beta 0 + \beta 1D + \beta 2t + \beta 3tD$ ------ GENERAL FORM OF EQUATION

(We could not take semi-log form regression equation here due to negative values of abnormal return)

We got the following regression equation:

ABNORMAL RETURNS = 0.001 + 0.030D + 0.000t - 0.001tD

S.E = (0.010) (0.028) (0.001) (0.001)

t = (0.105) (1.101) (0.236) (-1.031)

It was found that the intercept for the pre-announcement period has come out to be positive but not statistically significant at 5% level. The post announcement abnormal returns are higher than the pre-announcement period but this increase is not statistically significant at 5%. Also, we noted that the growth rates of returns for both pre-announcement and post- announcement periods are statistically insignificant. This means that the announcement of bonus issue doesn't have a significant impact on the returns experienced by the issuing company.

#### THROUGH ANALYSIS OF CUMULATIVE ABNORMAL RETURNS

We found that the cumulative abnormal returns (CAR) for the pre-announcement period are 6.19%, which decreased to 1.04% for the post- announcement period. This clearly shows the pattern of decreased returns from pre-merger periods to post merger period days. Thus, the reduced CAR for post period is showing worse position of the shareholders i.e. decrease in wealth after the announcement of bonus issue.

#### ٠ TESTING MARKET EFFICIENCY

To support the analysis above, it is also important to test for the presence of abnormal returns around the announcement day. Both parametric (Paired samples t - test) and non-parametric test (Wilcoxon matched pairs signed rank test) have been conducted to see the presence of abnormal return. In this part of analysis, event window is narrowed to 15 days prior and after the announcement day to identify the presence of abnormal return closely around the announcement day.

Actual and expected return within the narrowed event window should differ in order to know the possibility to outperform the stock market in the case of bonus issue announcement. In the case of bonus issue announcement, shareholders will expect to gain on their investment after the announcement day. Therefore, a test of difference in actual return and expected return on one day after the announcement day to 15 days after the announcement day is also conducted to see if shareholders could earn excess return.

Both of these tests have the null hypothesis of expected return being same as actual return which makes it impossible to outperform the market.

#### TABLE 6: SHOWS THE RESULT OF NORMALITY TEST, PAIRED SAMPLE T-TEST AND WILCOXON MATCHED-PAIRS SIGNED-RANK TEST DURING THE NARROWED EVENT WINDOW (-15, 15)

NORMALITY ( P-VALUE)		MEAN DIFFERENCE	PAIRED SAMPLE t- TEST		WILCOXON SIGNED RANK TES			
ACTUAL	EXPECTED		t- VALUE	P-VALUE	Z VALUE	P-VALUE		
0.002	0.042	-0.0001400			0.000	1.000		

The non-parametric test shows that there is no significant difference between actual and expected return from day -15 to +15 (p-value> 0.05), making it impossible for the investors of Godrej Industries to outperform the market.

#### TABLE 7: SHOWS RESULTS OF STATISTICAL TESTS ON THE ACTUAL RETURN AND EXPECTED RETURN AFTER THE ANNOUNCEMENT DAY (1 to +15)

NORMALITY (P-VALUE)		MEAN DIFFERENCE	PAIRED SAMPLE t- TEST		WILCOXON SIGNED RANK TEST	
ACTUAL	EXPECTED		t- VALUE	P-VALUE	Z VALUE	P-VALUE
0.012	0.080	-0.0015311			-0 227	0.820

The non-parametric tests show that there is no significant difference between actual and expected return from day 1 to +15 (p- value> 0.05), making it impossible for the investors of Godrej Industries to outperform the market.

In order to identify the real effect of bonus issue announcement, the focus is more on table 7, which represents the ability of investors to earn abnormal return after the announcement of issue. If the market is not efficient, it is possible for investors to earn significant abnormal return after the announcement day. But as per Table 7, the market is efficient because the shareholders are not able to earn excess return. Therefore, we fail to reject the null hypothesis 3 and conclude that Indian stock market is efficient in semi-strong form in case of bonus issue announcement.

#### SUMMARY

The analysis shows that there is no significant difference between the stock price before and after the announcement of bonus issue. The stock price has reduced but not significantly in the post-announcement period. Also, the abnormal returns have reduced in the post-announcement period but this decrease is not statistically significant. The cumulative abnormal returns also show a decrease in the post-announcement period. Thus, it can be said that Godrej Industries bonus issue announcement has had a negative but not significant impact on the wealth of shareholders of Godrej Industries.

As far as market efficiency is concerned, the analysis shows that the investors are not able to earn significant excess returns in the post- announcement period, showing that Indian stock market is semi- strong form efficient. The informational content of the bonus issue announcement gets quickly impounded into the stock prices, making it impossible for the investors of Godrej Industries to use publicly available information to outperform the market.

### B) HCL TECHNOLOGIES ♦ DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation
PRE PERIOD CLOSING PRICE	20	751.03	843.48	802.9570	25.91283
POST PERIOD CLOSING PRICE	20	946.73	1022.73	987.6065	21.36593
PRE PERIOD ACTUAL RETURN	20	05	.05	0001	.03006
POST PERIOD ACTUAL RETURN	20	03	.05	.0059	.01929
PRE PERIOD ABNORMAL RETURN	20	03	.03	.0010	.01558
POST PERIOD ABNORMAL RETURN	20	03	.05	.0055	.01924
Valid N (listwise)	20				

The mean adjusted closing price for the pre-announcement period is Rs. 802.95 (with the standard deviation of 25.91%). On the other hand, the mean adjusted closing price for the post- announcement period is Rs. 987.60 (with a standard deviation of 21.36%). The mean value of return series in the pre-announcement period is -0.01% (with a standard deviation of 3.00%) while that in post- announcement period is 0.59% (with a standard deviation of 1.92%). The mean value of abnormal return series in the pre-announcement period is 0.10% (with standard deviation of 1.55%) while that in post-announcement period is 0.55% (with a standard deviation of 1.92%).

#### Solution of Abnormal Returns around the Announcement date for days -20 to 20

**GRAPH 2: SHOWS ABNORMAL RETURNS PLOTTED AGAINST TIME** 



#### INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

#### TABLE 8: SHOWS ANNOUNCEMENT PERIOD ABNORMAL RETURNS OF THE COMPANY FOR DAYS -20 TO 20

Day	AR	t-Value	day	AR	t-Value
-20	0.004277	0.230226	1	0.053585	2.884619**
-19	5.41E-05	0.002911	2	0.003351	0.180401
-18	-0.01525	-0.82091	3	-3E-05	-0.00159
-17	-0.02836	-1.52682	4	0.036593	1.969882
-16	-0.0225	-1.21116	5	-0.009	-0.48434
-15	0.019233	1.035368	6	0.019332	1.040701
-14	0.007483	0.402835	7	-0.03007	-1.61864
-13	0.018685	1.005846	8	0.010148	0.546301
-12	0.004857	0.261479	9	0.014047	0.756165
-11	-0.00303	-0.16317	10	0.003979	0.214188
-10	0.008668	0.466601	11	-0.00385	-0.20731
-9	0.026236	1.412378	12	0.022014	1.185066
-8	0.005065	0.272651	13	0.00544	0.292869
-7	0.013458	0.724505	14	-0.02223	-1.19694
-6	0.008628	0.464461	15	-0.01638	-0.88172
-5	-0.01393	-0.74975	16	0.004122	0.22189
-4	-0.01201	-0.64639	17	0.003029	0.163042
-3	-0.01626	-0.87524	18	-0.00199	-0.10709
-2	0.02325	1.251613	19	0.020565	1.107063
-1	-0.00877	-0.47204	20	-0.00205	-0.11062
0	0.086487	4.655827**			

\*\*significant at 5% AR= Abnormal Return

#### PRE- ANNOUNCEMENT PERIOD (-20, -1)

The abnormal returns before the event day show a mixed pattern. ARs before the event day are positive only for 12 days out of 20 days and are negative for rest of 8 days. The results show that ARs for days 1 to 20 preceding the announcement date are found to be almost equal to zero, as they are not statistically different from zero, indicating that the market did not anticipate the bonus issue event of the firm even one day before the formal announcement.

#### ON THE EVENT DAY

It is interesting to note that AR which was -0.87% on day t -1, increased by a huge fraction and became +8.64% on day t = 0, the day of official announcement of bonus issue. This sudden increase in AR from its level on previous day (t-1) might have been due to official recording of bonus issue announcement on which the market reacted quickly and positively. The results show that on event day, AR = 8.64% i.e. the wealth of shareholders of the company had gone up by a significant 8.64%. This indicates that the market reacted positively and significantly to the bonus issue announcement of company.

#### POST- ANNOUNCEMENT PERIOD (1,20)

The ARs after the announcement day also show no consistent pattern. As compared to event day, there has been a fall in returns on day succeeding the announcement day, but still the investors have managed to earn significantly positive AR of 5.35% on day one after the announcement. But after that there is reversal of trend, there are both positive and negative returns which are not significant, pointing towards market efficiency.

#### A COMPARISON OF PRE & POST- ANNOUNCEMENT PERIODS

#### THROUGH STATISTICAL TESTS

#### i) ADJUSTED CLOSING PRICES (refer to table 9)

Both the pre and post announcement period data are normally distributed using 5% level of significance. The average closing price in post-announcement period is Rs. 0.20 higher than the pre-announcement period average and this difference is statistically significant. Both parametric and non-parametric test indicate that there is significant difference in stock price before and after the announcement day. P-value from T-test and Mann-Whitney are 0.000 and 0.000 respectively, which are below 0.05. Thus, we can reject the null hypothesis that the stock price before and after the announcement day is equal.

#### TABLE 9: SHOWS THE RESULT OF PARAMETRIC AND NON-PARAMETRIC TESTS AND ALSO PROVIDES ADDITIONAL INFORMATION ABOUT THE NORMALITY OF THE DATA

PERIOD	P-VALUE	MEAN DIFFERENCE	PARAMETRIC TEST	(2 SAMPLES t- TEST)	NON PARAMETRIC TEST (MANN-WHITNEY TEST)		
		(pre-post)	T- VALUE	P- VALUE	Z- VALUE	P-VALUE	
BEFORE	0.108	-0.2072575	-23.727	0.000	-5.410	0.000	
AFTER	0.910						

#### ii) ABNORMAL RETURNS (refer to table 10):

Both the pre and post announcement period data are normally distributed using 5% level of significance. The average abnormal return in post-announcement period is 0.45% higher than the pre-announcement period average but this difference is not statistically significant. Both parametric and non-parametric test indicate that there is no significant difference in abnormal returns before and after the announcement day. P-value from T-test and Mann-Whitney are 0.417 and 0.705 respectively, which are above 0.05. Thus, we cannot reject the null hypothesis that the abnormal returns before and after the announcement day are equal.

#### TABLE 10: SHOWS THE RESULT OF PARAMETRIC AND NON-PARAMETRIC TESTS AND ALSO PROVIDES ADDITIONAL INFORMATION ABOUT THE NORMALITY OF THE DATA

PERIOD	P-VALUE	MEAN DIFFERENCE (pre-post)	PARAMETRIC TEST (2	2 SAMPLES t- TEST)	NON PARAMETRIC TEST (MANN-WHITNEY TEST)		
			T- VALUE	P- VALUE	Z- VALUE	P-VALUE	
BEFORE	0.993	-0.004540	-0.820	0.417	-0.379	0.705	
AFTER	0.163						

#### THROUGH REGRESSION ANALYSIS

We have tested the effect of time on Adjusted Close Price, and Abnormal Returns. We have tried to find out in what time phase these variables are significant. The time phases are namely pre-announcement and post-announcement.

#### i) ADJUSTED CLOSING PRICE

Ln (PRICE) =  $\beta$ 0 +  $\beta$ 1D +  $\beta$ 2t +  $\beta$ 3tD ------ GENERAL FORM OF EQUATION

We got the following regression equation:

Ln (PRICE) = 6.729 + 0.247D - 0.004t + 0.001tD

S.E = (0.009) (0.026) (0.001) (0.001)

t = (732.533) (9.690) (-5.111) (1.971)

It was found that the intercept for the pre-announcement period has come out to be positive and significant at 5% level. But the post announcement price is higher than the pre-announcement period and significant at 5%. Also, we noted that the growth rate of price for pre-announcement period is significantly negative.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories http://ijrcm.org.in/

The differential slope coefficient is significantly positive, showing that the growth rate of price has increased significantly in the post- announcement period. This means that the share price has increased in the post announcement period on account of the announcement of bonus issue by the company, showing that announcement has had a positive and significant effect on share price.

#### ii) ABNORMAL RETURNS

ABNORMAL RETURNS =  $\beta 0 + \beta 1D + \beta 2t + \beta 3tD$  ------ GENERAL FORM OF EQUATION

We got the following regression equation:

ABNORMAL RETURNS = 0.004 - 0.030D - 0.003t + 0.001tD

S.E = (0.008) (0.022) (0.001) (0.001)

t = (0.506) (-1.325) (-0.437) (1.381)

It was found that the intercept for the pre-announcement period has come out to be positive but not statistically significant at 5% level. The post announcement abnormal returns are lower than the pre-announcement period but this decrease is not statistically significant at 5%. Also, we noted that the growth rates of return for both pre- and post-announcement periods are negative and statistically insignificant, but the growth rate has increased in post-announcement period. This means that the announcement of bonus issue has a positive but not a significant impact on the returns experienced by the issuing company.

#### THROUGH ANALYSIS OF CUMULATIVE ABNORMAL RETURNS

We found that the cumulative abnormal returns (CAR) for the pre-announcement period are 1.97%, which increased to 11.06% for the post- announcement period. This clearly shows the pattern of increased returns from pre-merger periods to post merger period days. Thus, the increase in CAR for post- announcement period is showing better position of the shareholders i.e. increase in wealth after the announcement of bonus issue.

TESTING MARKET EFFICIENCY

TABLE 11: SHOWS THE RESULT OF NORMALITY TEST, PAIRED SAMPLE T-TEST AND WILCOXON MATCHED-PAIRS SIGNED-RANK TEST DURING THE NARROWED EVENT WINDOW (-15, 15)

NORMALI	ΓΥ ( P-VALUE)	MEAN DIFFERENCE	PAIRED SAMPLE t- TEST		WILCOXON SIGNED RANK TEST	
ACTUAL EXPECTED			t- VALUE	P-VALUE	Z VALUE	P-VALUE
0.006	0.032	-0.0082253			-1.803	0.071

The non-parametric test shows that there is no significant difference between actual and expected return from day -15 to +15 (p-value> 0.05), making it impossible for the investors of HCL Technologies to outperform the market.

#### TABLE 12: SHOWS RESULTS OF STATISTICAL TESTS ON THE ACTUAL RETURN AND EXPECTED RETURN AFTER THE ANNOUNCEMENT DAY (1 TO +15)

NORMALITY ( P-VALUE)		MEAN DIFFERENCE	PAIRED SAMPLE t- TEST		WILCOXON SIGNED RANK TEST	
CTUAL	EXPECTED		t- VALUE	P-VALUE	Z VALUE	P-VALUE
0.011	0.090	-0.0057953			-0.909	0.363

The non-parametric tests show that there is no significant difference between actual and expected return from day 1 to +15 (p- value> 0.05), making it impossible for the investors of HCL Technologies to outperform the market.

As per Table 12, the market is efficient because the shareholders are not able to earn excess return. Therefore, we fail to reject the null hypothesis 3 and conclude that Indian stock market is efficient in semi-strong form in case of bonus issue announcement.

#### SUMMARY

The analysis shows that there is a significant difference between the stock price before and after the announcement of bonus issue. The stock price has increased significantly in the post- announcement period. Also, the abnormal returns have increased in the post-announcement period but this increase is not statistically significant. The cumulative abnormal returns also show an increase in the post- announcement period. Thus, it can be said that HCL Technologies bonus announcement has had a positive impact on the wealth of shareholders of HCL Technologies.

As far as market efficiency is concerned, the analysis shows that the investors are not able to earn significant excess returns in the post-announcement period, showing that Indian stock market is semi- strong form efficient. The informational content of the bonus issue announcement gets quickly impounded into the stock prices, making it impossible for the investors of HCL Technologies to use publicly available information to outperform the market.

#### C) LOOKS HEALTHCARE

#### DESCRIPTIVE STATISTICS

	Ν	Minimum	Maximum	Mean	Std. Deviation
PRE PERIOD CLOSING PRICE	20	16.57	23.43	18.5600	2.22691
POST PERIOD CLOSING PRICE	20	18.57	30.11	23.8045	2.91080
PRE PERIOD ACTUAL RETURN	20	21	.05	0156	.06034
POST PERIOD ACTUAL RETURN	20	10	.18	.0079	.07704
PRE PERIOD ABNORMAL RETURN	20	20	.06	0027	.05909
POST PERIOD ABNORMAL RETURN	20	09	.20	.0213	.07666
Valid N (listwise)	20				

The mean adjusted closing price for the pre-announcement period is Rs. 18.56 (with the standard deviation of 2.22%). On the other hand, the mean adjusted closing price for the post- announcement period is Rs. 23.80 (with a standard deviation of 2.91%). The mean value of return series in the pre-announcement period is -1.56% (with a standard deviation of 6.03%) while that in post- announcement period is 0.79% (with a standard deviation of 7.70%). The mean value of abnormal return series in the pre-announcement period is -0.27% (with standard deviation of 5.90%) while that in post-announcement period is 2.13% (with a standard deviation of 7.66%).

#### ✤ DISTRIBUTION OF ABNORMAL RETURNS AROUND THE ANNOUNCEMENT DATE FOR DAYS -20 to 20

#### **GRAPH 3: SHOWS ABNORMAL RETURNS PLOTTED AGAINST TIME**



#### TABLE 13: SHOWS ANNOUNCEMENT PERIOD ABNORMAL RETURNS OF THE COMPANY FOR DAYS -20 TO 20

DAY	AR	t- VALUE	DAY	AR	t-VALUE
-20	0.039221	0.685647	1	-0.0222	-0.38818
-19	-0.06853	-1.19805	2	-0.00931	-0.16268
-18	0.038909	0.680194	3	-0.01925	-0.33644
-17	-0.01013	-0.17714	4	0.195048	3.409773**
-16	0.00305	0.053313	5	0.150934	2.638592**
-15	-0.19718	-3.44697	6	0.174251	3.046214**
-14	-0.00236	-0.04123	7	-0.09063	-1.5843
-13	0.049446	0.864397	8	0.024838	0.43421
-12	0.054731	0.956802	9	-0.02519	-0.44045
-11	-0.00897	-0.15676	10	-0.03124	-0.54619
-10	-0.06483	-1.1333	11	0.05142	0.898905
-9	0.055851	0.976379	12	-0.02914	-0.50937
-8	0.013324	0.232935	13	-0.02978	-0.52058
-7	-0.00291	-0.0508	14	-0.06614	-1.15628
-6	-0.03181	-0.55611	15	0.013245	0.231542
-5	0.011918	0.20835	16	0.050707	0.886445
-4	0.028766	0.502884	17	0.005698	0.09961
-3	0.025382	0.443728	18	0.07866	1.375114
-2	0.051191	0.894915	19	-0.01239	-0.21659
-1	-0.03828	-0.66917	20	0.017217	0.300989
0	0.174825	3.056247**			

\*\*significant at 5%

AR= Abnormal Return

PRE- ANNOUNCEMENT PERIOD (-20, -1)

The abnormal returns before the event day show a mixed pattern. ARs before the event day are positive only for 11 days out of 20 days and are negative for rest of 9 days. The results show that ARs for days 1 to 20 preceding the announcement date are found to be almost equal to zero, as they are not statistically different from zero, indicating that the market did not anticipate the bonus issue event of the firm even one day before the formal announcement.

ON THE EVENT DAY

It is interesting to note that AR which was -3.82% on day t-1, increased by a huge fraction and became +17.48% on day t = 0, the day of official announcement of bonus issue. This sudden increase in AR from its level on previous day (t-1) might have been due to official recording of bonus issue announcement on which the market reacted quickly and positively. The results show that on event day, AR = 17.48% i.e. the wealth of shareholders of the company had gone up by a significant 17.48%. This indicates that the market reacted positively and significantly to the bonus issue announcement of company.

POST- ANNOUNCEMENT PERIOD (1, 20)

The ARs after the announcement day also show no consistent pattern. As compared to event day, there has been a fall in returns on day succeeding the announcement day, resulting in abnormal loss of 2.22% to the investors. But after that there is a mixed trend, there are both positive and negative returns, pointing towards market efficiency.

#### ✤ A COMPARISON OF PRE & POST- ANNOUNCEMENT PERIODS

THROUGH STATISTICAL TESTS

#### i) ADJUSTED CLOSING PRICES (refer to table 14)

Both the pre and post announcement period data are normally distributed using 5% level of significance. The average closing price in post-announcement period is Rs. 0.24 higher than the pre-announcement period average and this difference is statistically significant. Both parametric and non-parametric test indicate that there is significant difference in stock price before and after the announcement day. P-value from T-test and Mann-Whitney are 0.000 and 0.000 respectively, which are below 0.05. Thus, we can reject the null hypothesis that the stock price before and after the announcement day is equal.

TABLE 14: 9	FABLE 14: SHOWS THE RESULT OF PARAMETRIC AND NON-PARAMETRIC TESTS AND ALSO PROVIDES ADDITIONAL INFORMATION ABOUT THE NORMALITY OF											
	PERIOD	P-VALUE	MEAN DIFFERENCE	PARAMETRIC TEST	(2 SAMPLES t- TEST)	NON PARAMETRIC TEST (MANN-WHITNEY TEST)						
			(pre-post)	T- VALUE	P- VALUE	Z- VALUE	P-VALUE					
	BEFORE	0.208	-0.2480159	-6.590	0.000	-4.805	0.000					
	AFTER	0.710										

#### ii) ABNORMAL RETURNS (refer to table 15)

Both the pre and post announcement period data are normally distributed using 5% level of significance. The average abnormal return in post-announcement period is 2.39% higher than the pre-announcement period average but this difference is not statistically significant. Both parametric and non-parametric test indicate that there is no significant difference in abnormal returns before and after the announcement day. P-value from T-test and Mann-Whitney are 0.274 and 0.914 respectively, which are above 0.05. Thus, we cannot reject the null hypothesis that the abnormal returns before and after the announcement day are equal.

#### TABLE 15: SHOWS THE RESULT OF PARAMETRIC AND NON-PARAMETRIC TESTS AND ALSO PROVIDES ADDITIONAL INFORMATION ABOUT THE NORMALITY OF THE DATA

PERIOD	P-VALUE	MEAN DIFFERENCE (pre-post)	PARAMETRIC TEST (	2 SAMPLES t- TEST)	NON PARAMETRIC TEST (MANN-WHITNEY TEST)		
			T- VALUE	P- VALUE	Z- VALUE	P-VALUE	
BEFORE	0.893	-0.0239973	-1.109	0.274	-0.108	0.914	
AFTER	0.167						

#### THROUGH REGRESSION ANALYSIS

We have tested the effect of time on Adjusted Close Price, and Abnormal Returns. We have tried to find out in what time phase these variables are significant. The time phases are namely pre-announcement and post-announcement.

#### i) ADJUSTED CLOSING PRICE

Ln (PRICE) =  $\beta$ 0 +  $\beta$ 1D +  $\beta$ 2t +  $\beta$ 3tD ------ GENERAL FORM OF EQUATION

We got the following regression equation:

Ln (PRICE) = 2.756 + 0.517D + 0.015t + 0.019tD

S.E = (0.048) (0.132) (0.004) (0.006)

t = (57.905) (3.908) (3.801) (3.330)

It was found that the intercept for the pre-announcement period has come out to be positive and significant at 5% level. The post announcement price is higher than the pre-announcement period price and this increase is statistically significant at 5% level. Also, we noted that the growth rate of price for pre-announcement period is significantly positive. But, the differential slope coefficient is significantly positive, showing that the growth rate of price has increased significantly in the post- announcement period. This means that the share price has increased in the post announcement period on account of the announcement of bonus issue by the company, showing that announcement has had a positive and significant effect on share price.

#### ii) ABNORMAL RETURNS

ABNORMAL RETURNS =  $\beta 0 + \beta 1D + \beta 2t + \beta 3tD$  ------ GENERAL FORM OF EQUATION

We got the following regression equation:

ABNORMAL RETURNS = 0.015 + 0.060D - 0.002t + 0.004tD

S.E = (0.032) (0.089) (0.003) (0.004)

t = (0.460) (0.665) (-0.619) (1.007)

It was found that the intercept for the pre-announcement period has come out to be positive but not statistically significant at 5% level. The post announcement abnormal returns are higher than the pre-announcement period but this increase is not statistically significant at 5%. Also, we noted that the growth rates of return for both pre- and post-announcement periods are negative and statistically insignificant, but the growth rate of abnormal return has increased in post-announcement period. This means that the announcement of bonus issue has had a positive but not significant impact on the returns experienced by the issuing company.

#### THROUGH ANALYSIS OF CUMULATIVE ABNORMAL RETURNS

We found that the cumulative abnormal returns (CAR) for the pre-announcement period are 5.31%, which increased to 42.67% for the post- announcement period. This clearly shows the pattern of increased returns from pre-merger periods to post merger period days. Thus, the increase in CAR for post- announcement period is showing better position of the shareholders i.e. increase in wealth after the announcement of bonus issue.

#### TESTING MARKET EFFICIENCY

## TABLE 16: SHOWS THE RESULT OF NORMALITY TEST, PAIRED SAMPLE T-TEST AND WILCOXON MATCHED-PAIRS SIGNED-RANK TEST DURING THE NARROWED EVENT WINDOW (-15, 15):

				<u> </u>		
NORMALIT	Y (P-VALUE)	MEAN DIFFERENCE	PAIRED SAMPLE t- TEST		WILCOXON SIGNED RANK TEST	
ACTUAL EXPECTED			t- VALUE	P-VALUE	Z VALUE	P-VALUE
0.008	0.042	-0.0130958			-0.470	0.638

The non-parametric test shows that there is no significant difference between actual and expected return from day -15 to +15 (p-value> 0.05), making it impossible for the investors of Looks Healthcare to outperform the market.

#### TABLE 17: SHOWS RESULTS OF STATISTICAL TESTS ON THE ACTUAL RETURN AND EXPECTED RETURN AFTER THE ANNOUNCEMENT DAY (1 TO +15)

NORMALITY ( P-VALUE)		MEAN DIFFERENCE	PAIRED SAMPLE t- TEST		WILCOXON SIGNED RANK TEST	
ACTUAL	EXPECTED		t- VALUE	P-VALUE	Z VALUE	P-VALUE
0.021	0.080	-0.0191238			-0.057	0.955

The non-parametric tests show that there is no significant difference between actual and expected return from day 1 to +15 (p- value> 0.05), making it impossible for the investors of Looks Healthcare to outperform the market.

As per Table 16, the market is efficient because the shareholders are not able to earn excess return. Therefore, we fail to reject the null hypothesis 3 and conclude that Indian stock market is efficient in semi-strong form in case of bonus issue announcement.

#### SUMMARY

The analysis shows that there is a significant difference between the stock price before and after the announcement of bonus issue. The stock price has increased significantly in the post- announcement period. Also, the abnormal returns have increased in the post-announcement period but this increase is not statistically significant. The cumulative abnormal returns also show an increase in the post- announcement period. Thus, it can be said that Looks Healthcare bonus announcement has had a positive impact on the wealth of shareholders of Looks Healthcare.

As far as market efficiency is concerned, the analysis shows that the investors are not able to earn significant excess returns in the post-announcement period, showing that Indian stock market is semi- strong form efficient. The informational content of the bonus issue announcement gets quickly impounded into the stock prices, making it impossible for the investors of Looks Healthcare to use publicly available information to outperform the market.

#### CONCLUSION

The main goal of a firm is to maximize the wealth of its shareholders. In this light, an important issue in the area of corporate restructuring is to determine the effect of bonus issue on the wealth of shareholders of the company.

In past many researchers have tried to address this issue by using event study methodology and have documented mixed results about the impact of bonus issue on the shareholders of issuing firms. This study has taken a sample of three companies listed on Bombay Stock Exchange, which made bonus issue announcement during the period 2013-15. To capture short run/immediate effect of bonus issue announcement on the stock price and shareholders return, this study has used Market Model to calculate abnormal returns and has employed both - parametric and non- parametric tests on it to check the significant differences in two sample (pre- and post–announcement) data set. Then abnormal returns have been used to determine CAR (cumulative abnormal returns) to examine the total impact of bonus issue announcement on shareholder's wealth. Further, semi-log regression equations have been estimated to test the effect of time on closing adjusted stock price and abnormal returns. We have tried to find out in what time phase these dependent variables are significant. The two time phases being preannouncement and post- announcement periods.

Out of total 3 cases of bonus issues studied, two cases have shown that stock price increases significantly in the post- announcement period and, one case has shown no significant change. Moreover, we have observed increase in abnormal returns in the post- announcement period in case of two sample firms while a decrease in abnormal returns in post- announcement period has been observed for one sample firm, but these changes were found to be statistically insignificant at 5% level. Overall on the basis of majority of bonus issue results, the study concludes that bonus issue announcements have a positive effect on share price which ultimately increases the returns in the short run.

The positive impact on share price could be due to two reasons. First, the stock is now more liquid. Now that there are so many more shares, it is easier to buy and sell. Second, a bonus issue is a signal that the company is in a position to service its larger equity. This is because the management would not have given these shares if it was not confident of being able to increase its profits and distribute dividends on all these shares in the future.

We have also investigated the efficiency of Indian stock market in semi-strong form in the case of bonus issue announcements. Both, parametric and nonparametric test have been used to test for market efficiency. The finding from this research is that Indian stock market is efficient in semi-strong form in the case of bonus issue announcements. This implies that the news/ information resulting from the event of announcement of bonus issue is fully discounted by the market. However, we have considered only 3 cases of bonus issues. There is a need to study a larger sample and explore in future, the results for the issuing firm. The management of firms can use this information regarding the impact of bonus issue announcement while deciding about/ carrying out these corporate restructuring activities. Also the investors and other stakeholders, particularly in India, may get an idea of the impact of bonus issue announcement on their wealth and can act accordingly.

#### RFERENCES

- 1. Balachandran & Sally (2001). "Bonus share issues & announcement effect: Australian evidence", Australian Economic paper, 44(3), 248-268.
- 2. Ball, R., Brown, P., and Finn, F.J., (1977). "Share capitalization changes, information and the Australian equity market", Australian Journal of Management, 2,105-125.
- 3. Barnes, M.L., & Ma, S., (2001). "Market Efficiency or Not? The Behaviour of China's Stock Prices in Response to the Announcement of Bonus issue". Retrieved from: http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1511&context=commpapers&seiedir=1#search =%22M. %20L. %20Barnes%20S. %20Ma%22
- Budharaja, I., Parekh, P., & Singh, T., (2004). "Empirical Study on Market Reaction Around the Bonus and Stock Split". Retrieved from: www.Indiainfoline.com.
  Dennis, P., & Strickland, D., (2003). "The Effect of Stock Splits on Liquidity and Excess Returns: Evidence from Shareholder Ownership Composition", *Journal of Financial Research*, 26(3), 123-198.
- 6. Dhar, S., & Chhaochharia, S., (2009). "Market Reaction Around the Stock Splits and Bonus Issues: Some Indian Evidence", Portfolio Organizer, ICFAI University Press, August 2006, 27-33.
- 7. Dolley, J., (1933). "Characteristics and Procedure of Common Stock Split –Ups", Harvard Business Review, 11, 316-326.
- 8. Foster, T. W., and Vickrey, D., (1978). "The information content of stock dividend announcement", Accounting Review, 53(2), 360-370.
- 9. Grinblatt, M. S., Masulis, R. W., & Titman, S., (1984). "The Valuation Effects of Stock Splits and Stock Dividends", Journal of Financial Economics, 13(4), 461-90.
- 10. Malhotra, M., Thenmozhi, M., Kumar, A.G., "Stock Market reaction & liquidity changes around bonus issue announcement: Evidence from India", 10th Capital Markets Conference, Indian Institute of Capital markets paper, 1-12.
- 11. Mishra, A. K., (2005). "The empirical Analysis of Market reaction around the bonus issues in India", The ICFAI Journal of applied Finance, August, 21-37.
- 12. Obaidullah, M., (1992). "How do Stock Prices React to Bonus Issues?", Vikalpa, 17(1), 17-22.
- 13. Rao, K., Chandra Sekhara, and Geetha, T., (1996). "Indian Capital Market (Informational Signaling and Efficiency)," A.P.H. Publishing Corporation, New Delhi.
- 14. Srinivas, S., (2008). "Dilemma of Corporate Action: Empirical Evidences of Bonus Issue vs. Stock Split", Vikalpa, 33 (3), 35 47.

# **REQUEST FOR FEEDBACK**

### **Dear Readers**

At the very outset, International Journal of Research in Commerce, Economics & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as, on the journal as a whole, on our e-mail **infoijrcm@gmail.com** for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-Co-ordinator

# **DISCLAIMER**

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

## **ABOUT THE JOURNAL**

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active cooperation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Fournals





