

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

I  
J  
R  
C  
M



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., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,  
Indian Citation Index (ICI), J-Gate, India [link of the same is duly available at Inlibnet of University Grants Commission (U.G.C.)],  
Index Copernicus Publishers Panel, Poland with IC Value of 5.09 (2012) & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 6575 Cities in 197 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/>

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<p><b>IN-STORE VISUAL MERCHANDISING AND SHOPPER BEHAVIOUR: AN EMPIRICAL STUDY OF SHOPPERS AT SELECT RETAIL STORES IN THE CITY OF HYDERABAD</b></p> <p><i>M HIMABINDU &amp; Dr. K. MALLIKARJUNA REDDY</i></p>	1
2.	<p><b>LEGAL DIMENSION OF CROWDFUNDING PLATFORMS - A CROSS COUNTRY PERSPECTIVE WITH SPECIAL FOCUS ON BRICS NATIONS</b></p> <p><i>IRENA MIRIAM SANIL &amp; SURESHA B</i></p>	8
3.	<p><b>A STUDY OF THE RELATIONSHIP BETWEEN STOCK MARKET INDEX PRICE AND CORRESPONDING PRICE OF GOLD FROM INDIAN MARKET PERSPECTIVE AND COMPARATIVE PERCENTAGE OF RETURN IN LONG TERM</b></p> <p><i>Dr. ANUPAM KARMAKAR</i></p>	15
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	24

**FOUNDER PATRON****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**

Former Faculty, Shree Ram Institute of Engineering & Technology, Urjani

**ADVISOR****Prof. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

**EDITOR****Dr. PARVEEN KUMAR**

Professor, Department of Computer Science, NIMS University, Jaipur

**CO-EDITOR****Dr. A. SASI KUMAR**

Professor, Vels Institute of Science, Technology & Advanced Studies (Deemed to be University), Pallavaram

**EDITORIAL ADVISORY BOARD****Dr. S. P. TIWARI**

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

**Dr. CHRISTIAN EHIUBUCHE**

Professor of Global Business/Management, Larry L Luing School of Business, Berkeley College, USA

**Dr. SIKANDER KUMAR**

Vice Chancellor, Himachal Pradesh University, Shimla, Himachal Pradesh

**Dr. JOSÉ G. VARGAS-HERNÁNDEZ**

Research Professor, University Center for Economic & Managerial Sciences, University of Guadalajara, Guadalajara, Mexico

**Dr. TEGUH WIDODO**

Dean, Faculty of Applied Science, Telkom University, Bandung Technoplex, Jl. Telekomunikasi, Indonesia

**Dr. M. S. SENAM RAJU**

Professor, School of Management Studies, I.G.N.O.U., New Delhi

**Dr. A SAJEEVAN RAO**

Professor & Director, Accurate Institute of Advanced Management, Greater Noida

**Dr. D. S. CHAUBEY**

Professor & Dean (Research & Studies), Uttarakhand University, Dehradun

**Dr. CLIFFORD OBIYO OFURUM**

Professor of Accounting & Finance, Faculty of Management Sciences, University of Port Harcourt, Nigeria

**Dr. KAUP MOHAMED**

Dean & Managing Director, London American City College/ICBEST, United Arab Emirates

**Dr. VIRENDRA KUMAR SHRIVASTAVA**

Director, Asia Pacific Institute of Information Technology, Panipat

**Dr. MIKE AMUHAYA IRAVO**

Principal, Jomo Kenyatta University of Agriculture & Tech., Westlands Campus, Nairobi-Kenya

**Dr. SYED TABASSUM SULTANA**

Principal, Matrusri Institute of Post Graduate Studies, Hyderabad

**Dr. BOYINA RUPINI**

Director, School of ITS, Indira Gandhi National Open University, New Delhi

**Dr. NEPOMUCENO TIU**

Chief Librarian & Professor, Lyceum of the Philippines University, Laguna, Philippines

**Dr. SANJIV MITTAL**

Professor &amp; Dean, University School of Management Studies, GGS Indraprastha University, Delhi

**Dr. RAJENDER GUPTA**

Convener, Board of Studies in Economics, University of Jammu, Jammu

**Dr. SHIB SHANKAR ROY**

Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh

**Dr. SRINIVAS MADISHETTI**

Professor, School of Business, Mzumbe University, Tanzania

**Dr. NAWAB ALI KHAN**

Professor &amp; Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P.

**MUDENDA COLLINS**

Head, Operations &amp; Supply Chain, School of Business, The Copperbelt University, Zambia

**Dr. EGWAKHE A. JOHNSON**

Professor &amp; Director, Babcock Centre for Executive Development, Babcock University, Nigeria

**Dr. A. SURYANARAYANA**

Professor, Department of Business Management, Osmania University, Hyderabad

**P. SARVAHARANA**

Asst. Registrar, Indian Institute of Technology (IIT), Madras

**Dr. MURAT DARÇIN**

Associate Dean, Gendarmerie and Coast Guard Academy, Ankara, Turkey

**Dr. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engg. &amp; Tech., Amity University, Noida

**Dr. YOUNOS VAKIL ALROAIA**

Head of International Center, DOS in Management, Semnan Branch, Islamic Azad University, Semnan, Iran

**WILLIAM NKOMO**

Asst. Head of the Department, Faculty of Computing, Botho University, Francistown, Botswana

**Dr. JAYASHREE SHANTARAM PATIL (DAKE)**

Faculty in Economics, KPB Hinduja College of Commerce, Mumbai

**SHASHI KHURANA**

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

**Dr. SEOW TA WEEA**

Associate Professor, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia

**Dr. OKAN VELI ŞAFAKLI**

Professor &amp; Dean, European University of Lefke, Lefke, Cyprus

**Dr. MOHENDER KUMAR GUPTA**

Associate Professor, Government College, Hodal

**Dr. BORIS MILOVIC**

Associate Professor, Faculty of Sport, Union Nikola Tesla University, Belgrade, Serbia

**Dr. LALIT KUMAR**

Course Director, Faculty of Financial Management, Haryana Institute of Public Administration, Gurugram

**Dr. MOHAMMAD TALHA**

Associate Professor, Department of Accounting &amp; MIS, College of Industrial Management, King Fahd University of Petroleum &amp; Minerals, Dhahran, Saudi Arabia

**Dr. V. SELVAM**

Associate Professor, SSL, VIT University, Vellore

**Dr. IQBAL THONSE HAWALDAR**

Associate Professor, College of Business Administration, Kingdom University, Bahrain

**Dr. PARDEEP AHLAWAT**

Associate Professor, Institute of Management Studies &amp; Research, Maharshi Dayanand University, Rohtak

**Dr. ALEXANDER MOSESOV**

Associate Professor, Kazakh-British Technical University (KBTU), Almaty, Kazakhstan

**Dr. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**Dr. BHAVET**

Former Faculty, Shree Ram Institute of Engineering & Technology, Urjani

**YU-BING WANG**

Faculty, department of Marketing, Feng Chia University, Taichung, Taiwan

**SURJEET SINGH**

Faculty, Department of Computer Science, G. M. N. (P.G.) College, Ambala Cantt.

**Dr. TITUS AMODU UMORU**

Professor, Kwara State University, Kwara State, Nigeria

**Dr. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**Dr. SAMBHAVNA**

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

**Dr. THAMPOE MANAGALESWARAN**

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

**Dr. SHIVAKUMAR DEENE**

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

**SURAJ GAUDEL**

BBA Program Coordinator, LA GRANDEE International College, Simalchaur - 8, Pokhara, Nepal

***FORMER TECHNICAL ADVISOR***

**AMITA**

***FINANCIAL ADVISORS***

**DICKEN 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 the 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 **M.S. Word format** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

## **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 titled ' \_\_\_\_\_ ' for likely publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published anywhere in any language fully or partly, nor it is 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 inclusion of their 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.

<b>NAME OF CORRESPONDING AUTHOR</b>	:
Designation/Post*	:
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	:

\* i.e. Alumnus (Male Alumni), Alumna (Female Alumni), Student, Research Scholar (M. Phil), Research Scholar (Ph. D.), JRF, Research Assistant, Assistant Lecturer, Lecturer, Senior Lecturer, Junior Assistant Professor, Assistant Professor, Senior Assistant Professor, Co-ordinator, Reader, Associate Professor, Professor, Head, Vice-Principal, Dy. Director, Principal, Director, Dean, President, Vice Chancellor, Industry Designation etc. **The qualification of author is not acceptable for the purpose.**

**NOTES:**

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. ***pdf. version 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 the 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) Only the **Abstract 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 the manuscript, within two days of its 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 on 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 typed in **bold letters, 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 Italic printing**, ranging between **150 to 300 words**. The abstract must be informative and elucidating 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 etc.
  7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at [www.aea-web.org/econlit/jelCodes.php](http://www.aea-web.org/econlit/jelCodes.php). However, mentioning of JEL Code is not mandatory.
  8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER**. **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 be in 2000 to 5000 WORDS, But the limits can vary depending on the nature of the manuscript.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered** & self-explained, and the **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, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may 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 e.g. 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 may follow Harvard Style of Referencing. **Also check to ensure 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 italic printing. 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 before 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>



# A STUDY OF THE RELATIONSHIP BETWEEN STOCK MARKET INDEX PRICE AND CORRESPONDING PRICE OF GOLD FROM INDIAN MARKET PERSPECTIVE AND COMPARATIVE PERCENTAGE OF RETURN IN LONG TERM

**Dr. ANUPAM KARMAKAR**  
**ASST. PROFESSOR (COMMERCE)**  
**NEW ALIPORE COLLEGE**  
**KOLKATA**

## ABSTRACT

*The study of Stock Market is one the most challenging as well as rewarding task for any financial analyst. Predictions about stock markets carry a lot of potential risk and can easily lead to a catastrophic loss of assets if a small factor is overlooked or not considered. There are many tools for studying past market trends and predicting the future market scenarios which takes in account all available data and tries to predict any highly probable future events. In this paper, attempt was made to analyze the relation between monthly closing price of NIFTY which is index of National Stock Exchange (NSE) of India and GOLD Price. The price points over the last 15 years were looked into and attempt was made to establish a relation between the two instruments. The Stock Market Index Price was marked against the price of gold and attempt was made to find out if there is any relation between them. The Karl Pearson's Correlation coefficient technique was used to find out exactly how precisely the prices are interdependent. The return rate provided by both over a short range of time as well as in the long span of time was also examined. After a thorough data collection, calculation and analysis, the paper concludes that, there is a strong positive correlation between the Stock Market Index Price and corresponding Price of GOLD over the larger time span of last 15 years. Though there have been instances where a negative correlation was also seen due to high uncertainty and fear factor of the investor's point of thinking towards stock market, however keeping in mind that the market crash during those period of times, they can be concluded as case studies. The detailed analysis of this paper also revealed that investing in NIFTY can provide short term benefits; however, in the long span of time horizon GOLD gives a much higher return on investment percentage compared to index NIFTY.*

## KEYWORDS

ROI, gold, nifty, inverse correlation.

## JEL CODES

G10, O16.

## 1. INTRODUCTION

This study is aiming at two variables, the stock market index price and Gold price as they have significant position within current era of economy and are highly weighty assets for investors in the financial market. Gold is considered an important and leading asset and commodity in the bullion market and industrial sectors, as well as a valuable personal property, an investment and saving tool, an exchange asset and a hedging asset against different critical situations. If stock market is the topic of discussion, its importance is indisputably unquestionable, in fact it is impossible to imagine a world without a stock market as it plays a pivotal role in the economy of any country, and helps towards the progress of the economy, and can cause a enormous damaging impression when not observed. The stock market can be divided into two main segments, primary market (Cash Market) and derivative market (Future & Options Segment). The stock markets and their movements are closely related to and affected by different economic indicators such as inflation, gross domestic product (GDP), jobless rate, consumer price index (CPI), producer price index (PPI), along with other indicators. Many investors choose to invest in the stock market as well as bullion market, in order to minimize or eliminate the systematic risk. It is also considered as insurance against risk to invest in gold as well, as in, using gold as a hedging tool. Because stock market is seen by the investors as a return of value whereas gold is considered as a store of value. There are two types of psychological emotions that run the instruments of the investment market which has association with risk, those two emotions or the psychological states of investors are known as greed and fear. It is generally said that when fear captures the stock market investors want to withdraw the money from individual stocks and invest in some a safer instrument like gold. In this paper attempt has been made to figure out whether there exists any type of correlation between the stock market index price and the gold price for mid to short time of 1 year time frame or in the longer time frame of 5, 10 or 15 years. In this paper analysis was made to figure out what would be the comparative return percentage of both the gold price and the stock market index return and will compare which instrument between these two will generate more return in a mid-term and long-term investment.

## 2. OBJECTIVES

The objectives of this study are:

1. To examine whether stock market influences gold market price or not.
2. To find out the correlation between stock market index price and gold price in short term and in long term.
3. To check the long term correlation between stock market index price and gold price and short term correlation between the same.
4. To find out in mid to long time frame which instrument between gold and stock index generates more return and how much greater percentage.

## 3. RESEARCH GAP

Many previous studies focused on the relationship between stock market and macroeconomic variables and other commodities but very few studies focused on the relationship between the stock market and the gold price in the long-term and short-term perspectives. Therefore, an attempt has been made in this paper to fill up that research gap by analyzing the relationship between the stock market and gold price in the short range and long-range perspectives.

## 4. SURVEY OF LITERATURE

Kaliyamoorthy (2012) on the basis of their study established that there is no significant relationship exists with the Stock market and Gold price and when stock market crashes, gold prices have not been increased.

Bhunia (2012) found co-movement in gold prices and stock prices. Similarly, this study also found that in a longer time frame both gold price and the stock market will have a positive correlation and both will generate good return on investments

Mishra et al., (2010) examined the volatility of domestic gold and stock market returns based on BSE index during the period of 1991-2009 by applying the econometrics framework and found that the gold prices influences stock market returns in India and vice versa.

Arouri et al. (2015) study using VAR-GARCH model to investigate the effect of gold price volatility on the stock market returns in China for the period of 2004-2011 establishes significant impact of gold price volatility on China's stock market return.

5. RESEARCH METHODOLOGY

In order to proceed with this paper historical data have been collected for the last 15 years i.e. April, 2005 to March, 2020 and analysis was performed.

**5a. Hypotheses:** Here,  $H_0$  is null hypothesis and  $H_1$  alternate hypothesis.

➤ For our **first** objective, the following null hypothesis has been formulated:

$H_0$ : Stock market does not influence gold market price ( $r=0$ ), where  $r$  is the correlation coefficient.

$H_1$ : Stock market influences gold market price ( $r \neq 0$ ), where  $r$  is the correlation coefficient.

➤ For our **second** objective, the following null hypothesis has been formulated:

$H_0$ : Stock market does not have a correlation with gold market price in short term and in long term i.e.  $r=0$ , where  $r$  is the correlation coefficient at different time frames.

$H_1$ : Stock market has a correlation with gold market price in short term and in long term i.e.  $r \neq 0$ , where  $r$  is the correlation coefficient at different time frames.

➤ For our **third** objective, the following null hypothesis has been formulated:

$H_0$ : Stock market does not have a correlation with gold market price in short term and in long term i.e.  $r=0$ , where  $r$  is the correlation coefficient at different time frames.

$H_1$ : Stock market has a positive correlation or a negative correlation with gold market price in short term and in long term i.e. check either  $r < 0$  or  $r > 0$ , where  $r$  is the correlation coefficient at different time frames.

➤ For our **fourth** objective, the following null hypothesis has been formulated:

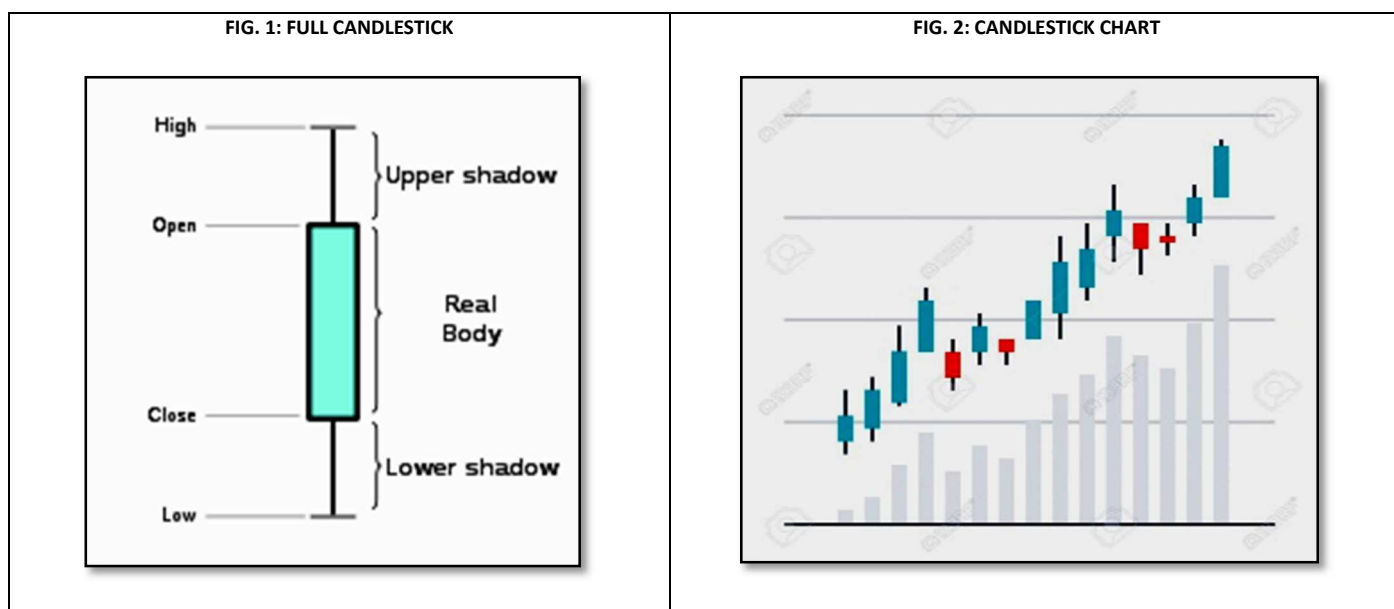
$H_0$ : Gold generates same return as stock market in long term (in percentage).

$H_1$ : Gold generates more return than stock market in long term (in percentage).

**5b. Data Source:** The data collected is the secondary data which is collected from <https://in.investing.com> and also rechecked with National Stock Exchange (NSE) for Nifty price and Multi Commodity Exchange (MCX) for the prices of gold as per availability.

**5c. Charts and Graphs:** The type of chart which has been used for collecting the data is closing price of the time frame of candlestick chart for both the gold and nifty closing price.

- **Candlesticks:** The Opening Price and Closing Price is plotted in a way as shown in Fig.1 and Fig.2. The timeframe's high and low forms the lower and upper wicks of the candlestick. If the price has increased during the time, it is shown in either blue or green and if the price has gone down, it is shown in Red. The resultant chart formed is as shown in Fig.1 and Fig.2.



Green/Blue candles are bullish candle and red are the bearish candles. For bullish candle closing price is higher than the opening price and for the bearish candle closing price is lower than the opening price. That's how the prices have been captured.

**5d. Time Period and Time Interval:** In this study, a time interval of 15 years has been taken. For reference, each and every Financial Year has been taken, starting from April 2005 till March 2020. The data from these 15 years consists of the monthly closing price of Gold and NIFTY respectively within the selected timeframe. Putting the collected data to use, the correlation between the closing prices of gold and NIFTY has been calculated on a Year-on-Year (YOY) basis. For further analysis between the closing prices of gold and NIFTY as well as to calculate the Return on Investment (ROI), the percentage increase in the prices of gold and NIFTY has been calculated within the time of 5 years (APRIL 2005 – MARCH 2010), 10years (APRIL 2005 – MARCH 2015) and 15years (APRIL 2005 – MARCH 2020).

**5e. Statistical Methods & Mathematical Formula Used**

➤ To check the correlation between the **two** variables: **Stock market index price (X)** and **Gold price (Y)**, **Karl Pearson's correlation coefficient ( $r_{(X, Y)}$  or  $r$ )** between the aforesaid time period and the price point was used.

The coefficient of correlation  $r_{xy}$  between two variables **X** (Stock market index price) and **Y**(Gold price), for the bi-variate dataset ( $X_i, Y_i$ ) where  $i = 1, 2, 3, \dots, n$ ; is given by –

$$r_{(X,Y)} = \frac{\text{cov}(X,Y)}{S_X S_Y}$$

Where,

- $\text{Cov}(X, Y)$  = the covariance between X and Y
- $S_X$  = Standard Deviation of X
- $S_Y$  = Standard Deviation of Y

$$\text{cov}(X, Y) = \left( \frac{1}{n} \sum XY \right) - \bar{X}\bar{Y}$$

$$(S_X)^2 = \left( \frac{1}{n} \sum X^2 \right) - (\bar{X})^2$$

$$(S_Y)^2 = \left( \frac{1}{n} \sum Y^2 \right) - (\bar{Y})^2$$

$n$  = Total Frequency

Plotting the data (X and Y) to check if the Scatter Diagram is consistent and Pearson’s correlation coefficient can be determined or not.

Using the Pearson’s correlation coefficient formula, the Pearson’s correlation coefficient is calculated.

➤ To check the return percentage of gold and stock index from mid to long term time frame, the 15 years historical data have been divided into 3 parts (March-2010, March-2015 and March-2020) from the base April-2005.

Therefore, the formula used:

$$\text{Percentage change in Stock index price} = \frac{(\text{Stock index price})_j - (\text{Stock index price})_b}{(\text{Stock index price})_b} \times 100$$

Where,

5 years:  $(\text{Stock index price})_j$  = Stock Index Price on March, 2010

$(\text{Stock index price})_b$  = Stock Index Price on April, 2005 (Base)

10 years:  $(\text{Stock index price})_j$  = Stock Index Price on March, 2015

$(\text{Stock index price})_b$  = Stock Index Price on April, 2005 (Base)

15 years:  $(\text{Stock index price})_j$  = Stock Index Price on March, 2020

$(\text{Stock index price})_b$  = Stock Index Price on April, 2005 (Base)

$$\text{Percentage change in Gold price} = \frac{(\text{Gold price})_j - (\text{Gold price})_b}{(\text{Gold price})_b} \times 100$$

Where,

5 years:  $(\text{Gold price})_j$  = Gold Price on March, 2010

$(\text{Gold price})_b$  = Gold Price on April, 2005 (Base)

10 years:  $(\text{Gold price})_j$  = Gold Price on March, 2015

$(\text{Gold price})_b$  = Gold Price on April, 2005 (Base)

15 years:  $(\text{Gold price})_j$  = Gold Price on March, 2020

$(\text{Gold price})_b$  = Gold Price on April, 2005 (Base)

## 6. CASE STUDY BASED ON ANALYSIS AND FINDINGS

### 6a. CALCULATIONS TO FIND OUT THE RELATIONSHIP BETWEEN THE MONTHLY CLOSING PRICE OF NIFTY AND GOLD PRICE

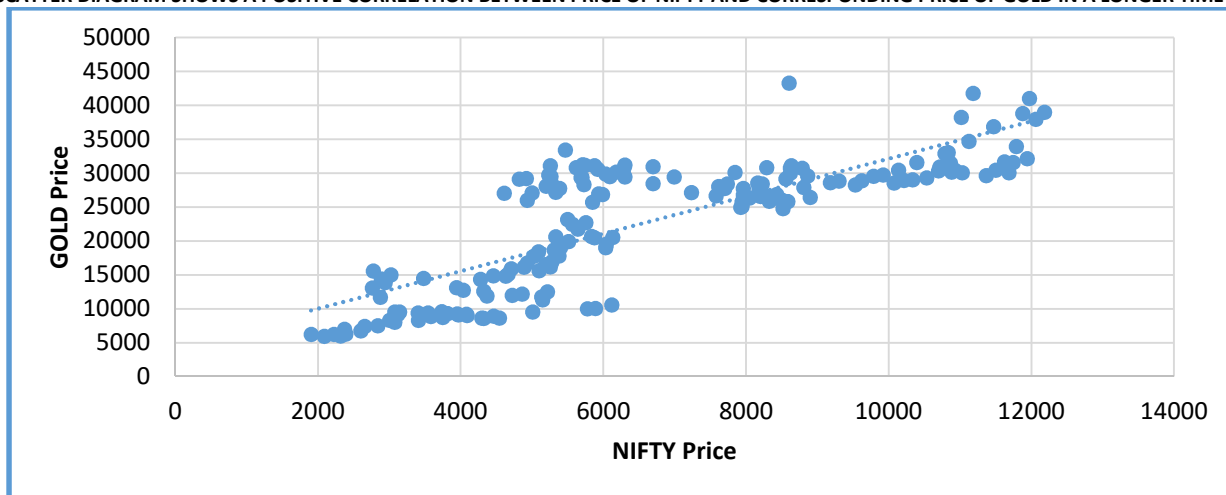
TABLE 1: CALCULATIONS TO FIND OUT THE CORRELATION COEFFICIENT BETWEEN NIFTY AND GOLD PRICE

Month & Year	Gold Price (Y)	NIFTY Price (X)	Y <sup>2</sup>	X <sup>2</sup>	XY
Apr-05	6240	1902	38937600	3617604	11868480
May-05	5964	2086	35569296	4351396	12440904
Jun-05	6232	2223	38837824	4941729	13853736
Jul-05	6016	2314	36192256	5354596	13921024
Aug-05	6318	2387	39917124	5697769	15081066
Sep-05	6762	2598	45724644	6749604	17567676
Oct-05	7000	2369	49000000	5612161	16583000
Nov-05	7432	2653	55234624	7038409	19717096
Dec-05	7508	2836	56370064	8042896	21292688
Jan-06	8308	3002	69022864	9012004	24940616
Feb-06	8037	3075	64593369	9455625	24713775
Mar-06	8329	3405	69372241	11594025	28360245
Apr-06	9427	3539	88868329	12524521	33362153
May-06	9579	3072	91757241	9437184	29426688
Jun-06	9167	3113	84033889	9690769	28536871
Jul-06	9535	3140	90916225	9859600	29939900
Aug-06	9405	3401	88454025	11566801	31986405
Sep-06	8907	3580	79334649	12816400	31887060
Oct-06	8776	3745	77018176	14025025	32866120
Nov-06	9275	3950	86025625	15602500	36636250
Dec-06	9145	3967	83631025	15737089	36278215
Jan-07	9232	4077	85229824	16621929	37638864
Feb-07	9622	3734	92582884	13942756	35928548
Mar-07	9340	3816	87235600	14561856	35641440
Apr-07	9058	4090	82047364	16728100	37047220
May-07	8674	4296	75238276	18455616	37263504
Jun-07	8589	4323	73770921	18688329	37130247
Jul-07	8674	4542	75238276	20629764	39397308
Aug-07	8947	4460	80048809	19891600	39903620
Sep-07	9537	5008	90954369	25080064	47761296
Oct-07	10063	5886	101263969	34644996	59230818
Nov-07	10042	5776	100841764	33362176	58002592
Dec-07	10610	6118	112572100	37429924	64911980
Jan-08	11788	5132	138956944	26337424	60496016
Feb-08	12525	5214	156875625	27185796	65305350
Mar-08	12020	4721	144480400	22287841	56746420
Apr-08	11368	5145	129231424	26471025	58488360
May-08	12188	4858	148547344	23600164	59209304
Jun-08	12757	4036	162741049	16289296	51487252
Jul-08	12609	4323	158986881	18688329	54508707
Aug-08	11915	4364	141967225	19044496	51997060
Sep-08	13156	3940	173080336	15523600	51834640
Oct-08	11746	2871	137968516	8242641	33722766

Nov-08	13114	2761	171976996	7623121	36207754
Dec-08	13893	2940	193015449	8643600	40845420
Jan-09	14419	2884	207907561	8317456	41584396
Feb-09	15598	2775	243297604	7700625	43284450
Mar-09	15008	3021	225240064	9126441	45339168
Apr-09	14522	3476	210888484	12082576	50478472
May-09	14900	4454	222010000	19838116	66364600
Jun-09	14387	4276	206985769	18284176	61518812
Jul-09	14819	4631	219602761	21446161	68626789
Aug-09	15143	4664	229310449	21752896	70626952
Sep-09	15629	5098	244265641	25989604	79676642
Oct-09	15926	4709	253637476	22174681	74995534
Nov-09	17761	5020	315453121	25200400	89160220
Dec-09	16528	5187	273174784	26904969	85730736
Jan-10	16165	4887	261307225	23882769	78998355
Feb-10	16755	4931	280730025	24314761	82618905
Mar-10	16210	5253	262764100	27594009	85151130
Apr-10	16982	5275	288388324	27825625	89580050
May-10	18434	5087	339812356	25877569	93773758
Jun-10	18706	5309	349914436	28185481	99310154
Jul-10	17798	5375	316768804	28890625	95664250
Aug-10	19069	5397	363626761	29127609	102915393
Sep-10	19024	6030	361912576	36360900	114714720
Oct-10	19568	6041	382906624	36493681	118210288
Nov-10	20521	5875	421111441	34515625	120560875
Dec-10	20566	6130	422960356	37576900	126069580
Jan-11	19931	5508	397244761	30338064	109779948
Feb-11	20657	5331	426711649	28419561	110122467
Mar-11	20703	5831	428614209	34000561	120719193
Apr-11	22700	5753	515290000	33097009	130593100
May-11	22472	5564	504990784	30958096	125034208
Jun-11	21792	5641	474891264	31820881	122928672
Jul-11	23198	5497	538147204	30217009	127519406
Aug-11	27100	4998	734410000	24980004	135445800
Sep-11	26011	4931	676572121	24314761	128260241
Oct-11	27191	5331	739350481	28419561	144955221
Nov-11	29142	4820	849256164	23232400	140464440
Dec-11	27055	4609	731973025	21242881	124696495
Jan-12	28100	5198	789610000	27019204	146063800
Feb-12	27781	5386	771783961	29008996	149628466
Mar-12	28088	5298	788935744	28068804	148810224
Apr-12	29070	5253	845064900	27594009	152704710
May-12	29242	4920	855094564	24206400	143870640
Jun-12	29508	5264	870722064	27709696	155330112
Jul-12	29772	5231	886371984	27363361	155737332
Aug-12	31120	5253	968454400	27594009	163473360
Sep-12	31267	5708	977625289	32581264	178472036
Oct-12	30857	5620	952154449	31584400	173416340
Nov-12	31120	5875	968454400	34515625	182830000
Dec-12	30593	5920	935931649	35046400	181110560
Jan-13	29919	6031	895146561	36372961	180441489
Feb-13	29362	5697	862127044	32455809	167275314
Mar-13	29392	5686	863889664	32330596	167122912
Apr-13	26988	5934	728352144	35212356	160146792
May-13	26871	5986	722050641	35832196	160849806
Jun-13	25728	5848	661929984	34199104	150457344
Jul-13	28336	5726	802928896	32787076	162251936
Aug-13	33436	5466	1117966096	29877156	182761176
Sep-13	31150	5744	970322500	32993536	178925600
Oct-13	31208	6298	973939264	39664804	196547984
Nov-13	30182	6177	910953124	38155329	186434214
Dec-13	29480	6298	869070400	39664804	185665040
Jan-14	29508	6090	870722064	37088100	179703720
Feb-14	30622	6281	937706884	39450961	192336782
Mar-14	28483	6696	811281289	44836416	190722168
Apr-14	31003	6696	961186009	44836416	207596088
May-14	27164	7233	737882896	52316289	196477212
Jun-14	28072	7614	788037184	57972996	213740208
Jul-14	27784	7701	771950656	59305401	213964584
Aug-14	27784	7961	771950656	63377521	221188424
Sep-14	26835	7961	720117225	63377521	213633435

Oct-14	25907	8324	671172649	69288976	215649868
Nov-14	25821	8584	666724041	73685056	221647464
Dec-14	26598	8290	707453604	68724100	220497420
Jan-15	27892	8809	777963664	77598481	245700628
Feb-15	26468	8896	700555024	79138816	235459328
Mar-15	26058	8497	679019364	72199009	221414826
Apr-15	26598	8203	707453604	67289209	218183394
May-15	26856	8428	721244736	71031184	226342368
Jun-15	26295	8376	691427025	70157376	220246920
Jul-15	24785	8515	614296225	72505225	211044275
Aug-15	26533	7995	704000089	63920025	212131335
Sep-15	25800	7943	665640000	63091249	204929400
Oct-15	26360	8047	694849600	64754209	212118920
Nov-15	25110	7943	630512100	63091249	199448730
Dec-15	25000	7925	625000000	62805625	198125000
Jan-16	26705	7580	713157025	57456400	202423900
Feb-16	29467	6991	868304089	48874081	206003797
Mar-16	28432	7735	808378624	59830225	219921520
Apr-16	30136	7845	908178496	61544025	236416920
May-16	28583	8163	816987889	66634569	233323029
Jun-16	30827	8285	950303929	68641225	255401695
Jul-16	31107	8633	967645449	74528689	268546731
Aug-16	30740	8785	944947600	77176225	270050900
Sep-16	30805	8618	948948025	74269924	265477490
Oct-16	30050	8618	903002500	74269924	258970900
Nov-16	28432	8224	808378624	67634176	233824768
Dec-16	27698	8178	767179204	66879684	226514244
Jan-17	29165	8558	850597225	73239364	249594070
Feb-17	29597	8861	875982409	78517321	262259017
Mar-17	28604	9179	818188816	84254041	262556116
Apr-17	28848	9301	832207104	86508601	268315248
May-17	28890	9619	834632100	92525161	277892910
Jun-17	28303	9528	801059809	90782784	269670984
Jul-17	28597	10074	817788409	101485476	288086178
Aug-17	29771	9922	886312441	98446084	295387862
Sep-17	29561	9786	873852721	95765796	289283946
Oct-17	29058	10332	844367364	106750224	300227256
Nov-17	28932	10210	837060624	104244100	295395720
Dec-17	29352	10529	861539904	110859841	309047208
Jan-18	30065	11029	903904225	121638841	331586885
Feb-18	30442	11498	926715364	132204004	350022116
Mar-18	30442	10135	926715364	102718225	308529670
Apr-18	30945	10714	957593025	114789796	331544730
May-18	30861	10756	952401321	115691536	331940916
Jun-18	30358	10695	921608164	114383025	324678810
Jul-18	29645	11363	878826025	129117769	336856135
Aug-18	30107	11681	906431449	136445761	351679867
Sep-18	30484	10923	929274256	119311929	332976732
Oct-18	31616	10392	999571456	107993664	328553472
Nov-18	30190	10878	911436100	118330884	328406820
Dec-18	31491	10862	991683081	117983044	342055242
Jan-19	33042	10832	1091773764	117332224	357910944
Feb-19	32917	10786	1083528889	116337796	355042762
Mar-19	31700	11621	1004890000	135047641	368385700
Apr-19	31574	11742	996917476	137874564	370741908
May-19	32162	11939	1034394244	142539721	383982118
Jun-19	33965	11788	1153621225	138956944	400379420
Jul-19	34720	11120	1205478400	123654400	386086400
Aug-19	38243	11014	1462527049	121308196	421208402
Sep-19	36859	11469	1358585881	131537961	422735871
Oct-19	38830	11878	1507768900	141086884	461222740
Nov-19	37950	12060	1440202500	145443600	457677000
Dec-19	38998	12182	1520844004	148401124	475073636
Jan-20	41011	11970	1681902121	143280900	490901670
Feb-20	41766	11181	1744398756	125014761	466985646
Mar-20	43276	8603	1872812176	74011609	372303428

FIG. 3: SCATTER DIAGRAM SHOWS A POSITIVE CORRELATION BETWEEN PRICE OF NIFTY AND CORRESPONDING PRICE OF GOLD IN A LONGER TIME HORIZON



As per **first objective** it is established that there is an influence of stock market price to the price of gold. So for objective 1,  $H_1$  as our **alternate hypothesis**: stock market influences gold market price ( $r \neq 0$ ), where  $r$  is the correlation coefficient has been established.

**6c. ADDITIONAL CALCULATIONS**

TABLE 2: ADDITIONAL CALCULATIONS BASED ON GOLD PRICE AND NIFTY PRICE

	Gold Price (Y)	NIFTY Price(X)	Y <sup>2</sup>	X <sup>2</sup>	XY
Sum	4094444	1187877	1.08727E+11	9170440641	30704131007
Average	22746.91	6599.317	604038465.2	50946892.5	170578505.6
$\bar{Y}$	22746.9111				
n	180				
$\bar{X}$		6599.31667			
$(S_y)^2$	86616500.1				
$(S_x)^2$		7395911.98			
$(S_y)$	9306.7986				
$(S_x)$		2719.54261			
$cov(X, Y)$		20464436			
r		<b>0.80854388</b>			

Calculated value of correlation coefficient shows a positive correlation between Price of Nifty and corresponding price of gold in a longer time horizon.

As per our **second objective** it is established by the mathematical calculations that there is a correlation between stock market price and price of gold. So for objective 2,  $H_0$ : Stock market does **not** have a correlation with gold market price in short term and in long term has been rejected and  $H_1$ : Stock market has a correlation with gold market price in short term and in long term( $r \neq 0$ ) as **alternate hypothesis** has been accepted.

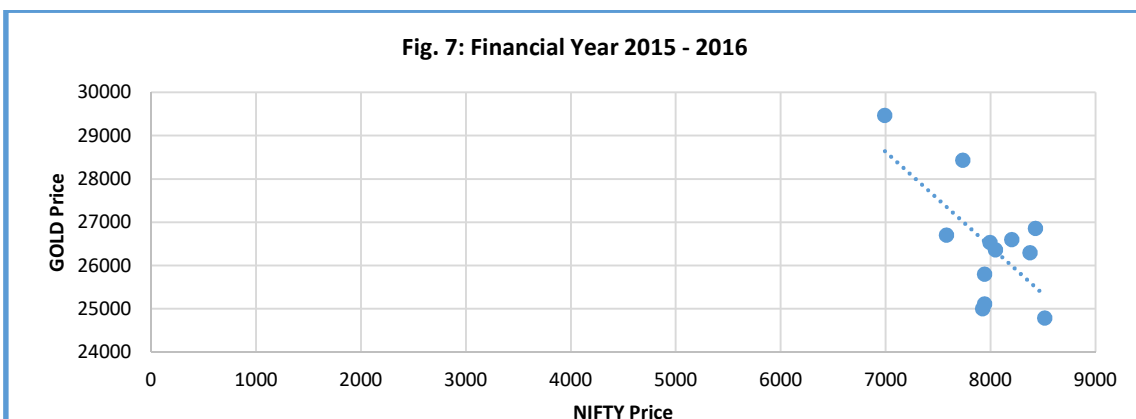
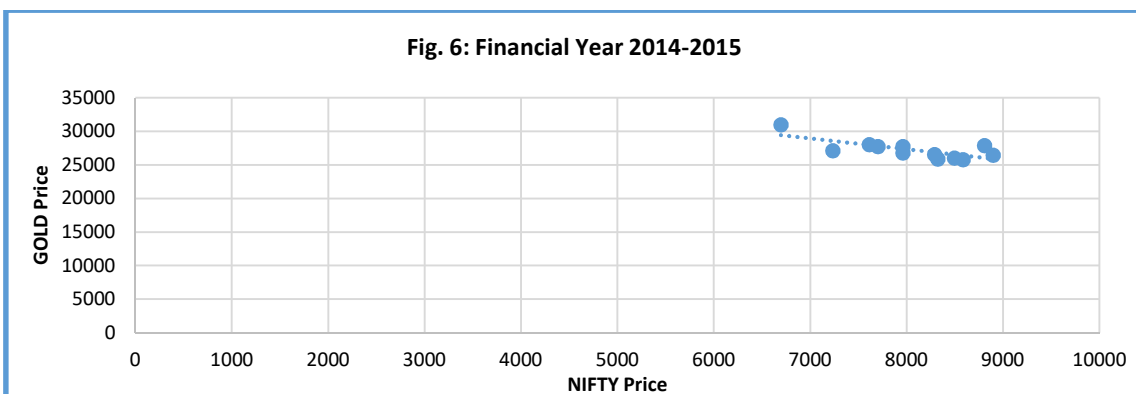
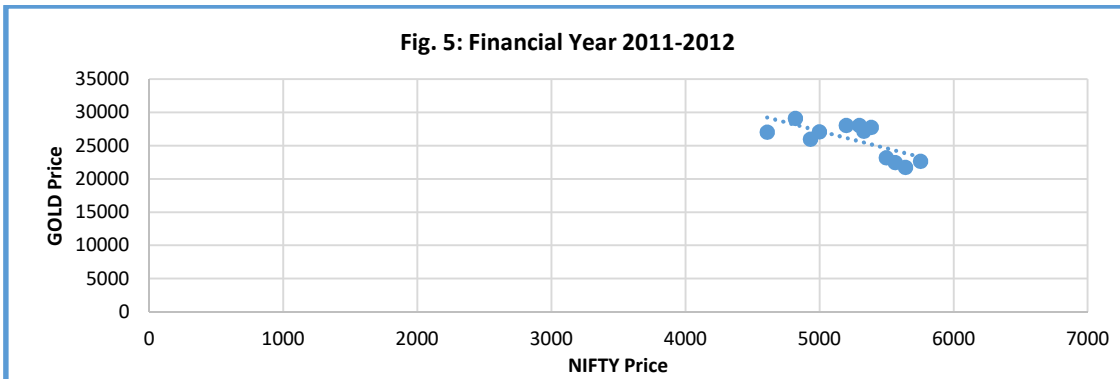
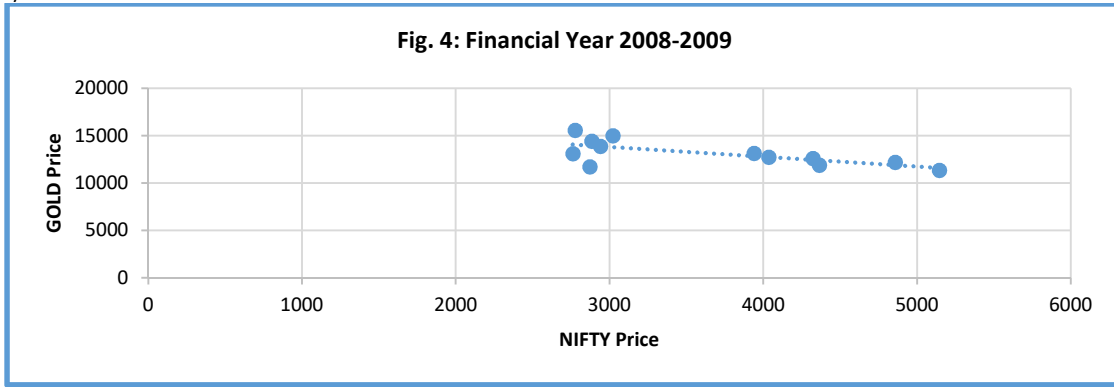
**6d. Sample Cases:** However, in some short term cases (12 months period), it has been observed that the relationship between Gold Price and NIFTY Price shows a negative correlation. Below is the year-wise correlation for the last 15 years:

TABLE 3: YEAR-WISE CORRELATION OF THE PERIOD MARCH, 2006 TO MARCH, 2020

Month & Year	GOLD PRICE	NIFTY PRICE	12 months correlation
Mar-06	8329	3405	0.92530396
Mar-07	9340	3816	-0.336331751
Mar-08	12020	4721	0.469943605
Mar-09	15008	3021	-0.687539113
Mar-10	16210	5253	0.715185469
Mar-11	20703	5831	0.555694906
Mar-12	28088	5298	-0.705286675
Mar-13	29392	5686	0.406668985
Mar-14	28483	6696	-0.139050916
Mar-15	26058	8497	-0.736941785
Mar-16	28432	7735	-0.667521181
Mar-17	28604	9179	0.148555223
Mar-18	30442	10135	0.656549873
Mar-19	31700	11621	-0.306599935
Mar-20	43276	8603	-0.474818964

6e. SCATTER DIAGRAM FOR SELECTED YEAR FOR NEGATIVE CORRELATION

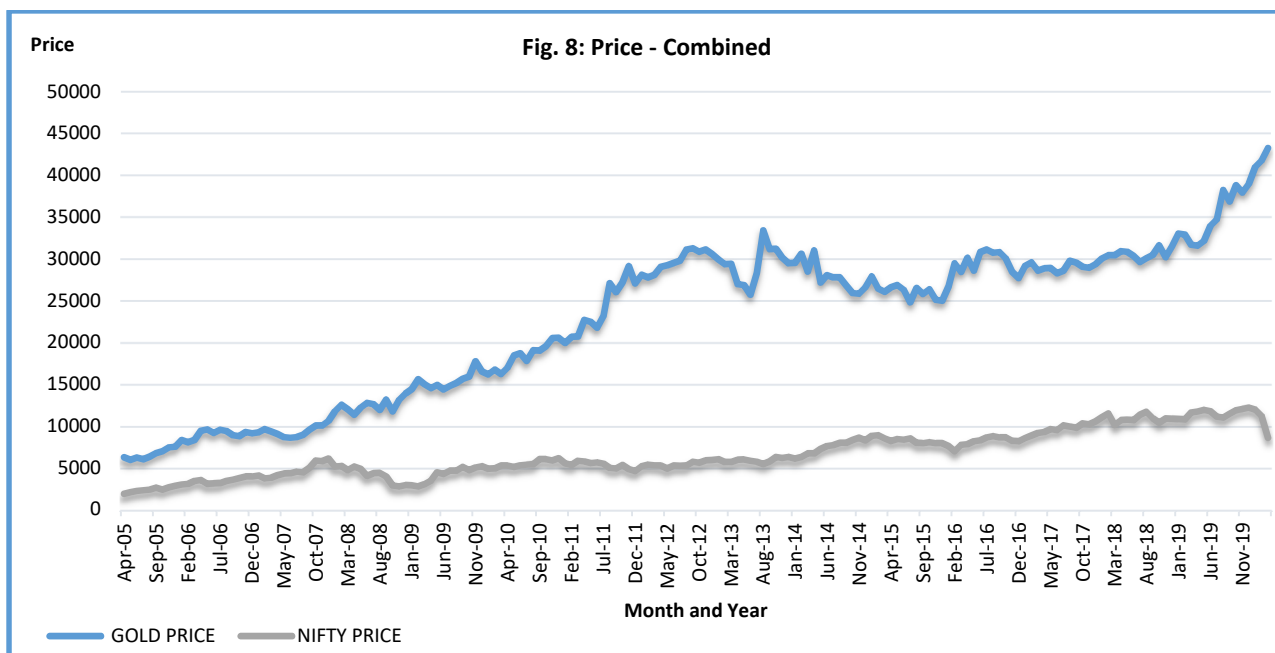
For the selected years:



In this four selected financial year when Indian stock market had witnessed market crash it has been observed that price of the gold had gone up and thus creates negative correlation with the stock index price. These are the time when extreme fear captures the investors' mindset and they search and park their liquid assets in a safer instrument like gold.

For our third objective, mathematical calculations show that stock market has a positive correlation in long term with gold market price and a negative correlation with gold market price in short term, so here,  $H_0$ : the stock market does not have a correlation with gold market price in short term and in long term has been rejected and  $H_1$ : the stock market has a positive correlation ( $r > 0$ ) with gold market price in long term and a negative correlation ( $r < 0$ ) with gold market price in short term as our alternate hypothesis has been accepted.

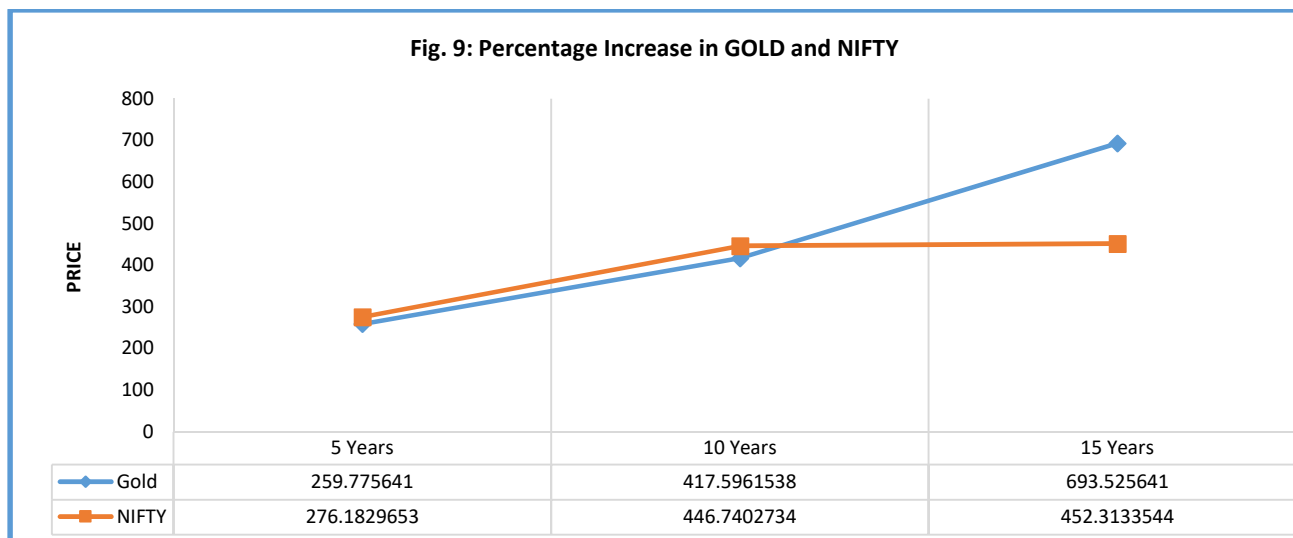
6f. COMBINED PRICE CHART



6g. PERCENTAGE OF ROI IN BOTH GOLD AND STOCK FOR MID TO LOG TIME HORIZON

TABLE 4: ROI IN BOTH GOLD AND STOCK FOR MID TO LOG TIME HORIZON (IN %)

% Increase	5 Years	10 Years	15 Years
Gold	259.7756	417.5962	693.5256
NIFTY	276.183	446.7403	452.3134
Increase Ratio	5 Years	10 Years	15 Years
Gold	2.597756	4.175962	6.935256
NIFTY	2.76183	4.467403	4.523134



For our fourth objective, mathematical calculations show that gold has greater return on investment in longer time horizon, so here  $H_0$ : Gold generates same return as stock market in long term (in percentage) has been rejected and  $H_1$ : Gold generates more return than stock market in long term (in percentage) as our alternate hypothesis has been accepted.

7. CONCLUSION

Gold is a precious metal so the supply of this is relatively scarce. Due to this reason this is traditionally well known conservative investment instrument among the investors. Gold price movement in shorter time frame can give more or less accurate reflection of the fear factor about upcoming economic condition in the market. In the state of high volatility in the market, investors are in a state of fear about their investments so they tend to move out from the high risk assets like equity shares and invest/park their liquid money to the relatively safer assets like Gold. As the demand of the gold increases with the supply being constant, so the price of the gold goes high. Analysis of historical data confirms that in the shorter time frame when stock market crashes, gold prices went up and became the safe house of the investors. It also confirms that in a longer time frame both gold and the stock price will have a positive correlation and both will generate good return on investments. Statistical analysis of historical data suggests that in a short timeframe when fear factor is very high or in the bearish market there is an inverse correlation between stock index price and price of Gold in commodity market. It has also been concluded that in long term both the instruments have been positively correlated. Mathematical calculations of the historical price data of both the instruments show that the return on investments of the gold is greater than the return of stock market index.



**8. LIMITATIONS OF THE STUDY**

The limitations of this study is that it has not considered the impact of the factors like Rupee-USD \$ exchange rate, inflation and Crude oil price in world market.

**REFERENCES**

1. Aloui, R. Aissa, M. S. B. and Nguyen, D. K. (2011). Global financial crisis, extreme interdependences, and contagion effects: the role of economic structure. *Journal of Banking and Finance*, 35:130 – 141
2. Arouri, M. E., Lahiani, A., Nguyen, D. K., 2015. World Gold Prices and Stock Returns in China: Insights for Hedging and Diversification Strategies. *Economic Modelling* 44, 273–282.
3. Baig, M. M., Shahbaz, M., Imran, M., Jabbar, M., & Ain, Q. U. (2013). Relationship between Gold and Oil Prices and Stock Market Returns. *Economica*, 9(5), 28- 39.
4. Bhunia, A. & Das, A. (2012). Association between Gold Prices and Stock Market Returns: Empirical Evidence from NSE. *Journal of Exclusive Management Science*. 1(2), available on [www.exclusivemba.com/jems](http://www.exclusivemba.com/jems).
5. Capie, Forrest- Mills, Terence C. Wood, Geoffrey. (2005). Gold as a Hedge against the Dollar”, *Journal of International Financial Markets, Institutions and Money*, 15(4):343-352.
6. Dickey, D.A., & W.A. Fuller. (1979). Distribution of the Estimation for Autoregressive Time Series with a Unit Root. *Journal of American Statistical Association*, 79:355-367
7. Elliott, G. Rothenberg, T. J., & Stock, J. H. (1996). Efficient Tests for an Autoregressive Unit Root. *Econometrica*, 64:813-836
8. Engle, R.F., & Granger, C.W.J. (1987). Co-integration & Error correction: Representation, estimation & Testing” *Econometrica*, 55:251-76
9. Gayathri, V., & Dhanabhakym, M. (2014). Cointegration and Causal Relationship between Gold Price and Nifty—An Empirical Study. *Abhinav International Monthly Refereed Journal of Research in Management & Technology*, 3, 14-21.
10. Ismail, Z., Yahya, A., and Shabri, A. (2009). Forecasting gold prices using multiple linear regression method. *American Journal of Applied Sciences*, 6(8):1509-1514
11. Johansen, S. (1991). Estimation and Hypothesis Testing of Cointegration Vectors in Gaussian Vector Autoregressive Models. *Econometrica*, 59(6):1551-80.
12. Junpeng Dee, Liuling Li, Zhonghua Zheng. (2013). Is gold a hedge or a safe haven Evidence from inflation and stock market “*International Journal of Development and Sustainability*, 2(1):12-27.
13. Kaliyamoorthy S, Parithi S (2012). Relationship of Gold Market and Stock Market: An Analysis. *International Journal of Business Management Tomorrow*. 2(6):1-6.
14. Kwiatkowski, D., P. C. B. Phillips, P. Schmidt & Y. Shin. (1992). Testing the Null Hypothesis of trend Stationary, *Journal of Econometrics*, 54:159-178
15. Lee Y, Huang Y, Yang, H (2012). The Asymmetric Long-Run Relationship between Crude Oil and Gold Futures, *Global Journal of Business Research* 6(1):9-15.
16. Mishra, P. K., Das, J. R., & Mishra, S. K. (2010). Gold price volatility and stock market returns in India. *American Journal of Scientific Research*, 9, 47-55.
17. Ray, S. (2013). Causal nexus between gold price movement and stock market: Evidence from Indian stock market. Sciknow Publications Ltd. *Econometrics*, © Attribution, 3, 12-19.
18. Srinivasan, P., & Prakasam, K. (2014). Gold price, stock price and exchange rate nexus: The case of India. *IUP Journal of Financial risk management*, 11(3), 52.
19. Sujit, K. S. and Rajesh Kumar.,B (2011). Study on dynamic Relationship Among Gold price, Oil price, Exchange Rate, and Stock market returns. *International Journal of Applied Business and Economic Research*, 9(2):145-165.
20. Wang, Ching-Ping, -Huang, Tzu-Ying (2010). Relationships among Oil Price, Gold Price, Exchange Rate and International Stock Markets, *International Research Journal of Finance and Economics*, (47):80-89.
21. Yahyazadehfah M, Babaie A (2012). Macroeconomic Variables and Stock Price: New Evidence from Iran, *Middle-East Journal of Scientific Research*, 11 (4):408-415.
22. Zhang, Yue-Jun, Wei Yi-Ming (2010). The Crude Oil Market and the Gold Market: Evidence for co integration, Causality and Price Discovery, *Resource Policy*, 35(3):168-177.

**WEB REFERENCES**

23. <https://in.investing.com/commodities/gold-mini-streaming>-Accessed on 11.05.2020 at 7pm.
24. <https://in.investing.com/indices/s-p-cnx-nifty-chart>-Accessed on 18.05.2020 at 9.05 pm.
25. <https://www.bseindia.com/>-Accessed on 10.05.2020 at 5pm.
26. [www.nseindia.com](http://www.nseindia.com/)- Accessed on 19.05.2020 at 10 pm.

## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Commerce, IT & 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](mailto: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](mailto: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 co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

### *Our Other Journals*

