INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM

A Monthly Double-Blind Peer Reviewed Refereed 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.

as well as in Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)]

Registered & Listed at: Index Copernicus Publishers Panel, Poland

Circulated all over the world & Google has verified that scholars of more than 1388 Cities in 138 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

www.ijrcm.org.in

CONTENTS

CALL FOR MANUSCRIPTS

Weinvite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; 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; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor 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; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email addresses: infoijrcm@gmail.comorinfo@ijrcm.org.in.

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/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '_____' for possible publication in 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 author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:
Designation:
Affiliation with full address, contact numbers & Pin Code:
Residential address with Pin Code:
Mobile Number (s):
Landline Number (s):
E-mail Address:
Alternate E-mail Address:

NOTES:

a) The whole manuscript is required to be in ***ONE MS WORD FILE*** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
b) The sender is required to mention the following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (**Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/ Engineering/Mathematics/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 required to be below **500 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 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 separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **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 stops at the end.

6. **MANUSCRIPT:** Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9. **MAIN TEXT:** The main text should follow the following sequence:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed ***5000 WORDS***.

10. **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.

11. **EQUATIONS:**These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12. **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**. 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 parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

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, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, KurukshetraUniversity, Kurukshetra.

ONLINE RESOURCES

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

WEBSITE

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

TESTING THE WEAK FORM EFFICIENCY OF COMMODITY MARKET IN INDIA

YUVARAJ. D
LECTURER
DEPARTMENT OF MANAGEMENT STUDIES
SRI BALAJI CHOCKALINGAM ENGINEERING COLLEGE
ARNI

ABSTRACT

The present study investigated the Weak form efficiency of Commodity Market in India with the help of efficient market hypothesis theory. The main Objective of the study is to analyze efficiency, Randomness and Stationary of Sample Commodities. The daily data consisted of closing spot rates from MCX for the period of 40 months from 19th Sep 2008 to 31st Jan 2012. Top three rank Commodities Silver, Gold, Copper, Natural Gas and Crude Oil were chosen as samples. Runs Test, Auto Correlation, Augmented Dickey Fuller test were used. It can be finally concluded According to Efficient Market Hypothesis, Past Prices cannot be used to predict the future Price. The study concludes the Commodity Market is efficient in Weak Form.

KEYWORDS
Commodity Market, Efficiency, Efficient Market Hypothesis, Spot Prices, Stationary.

INTRODUCTION
COMMODITY MARKET
The main aim of this is study about Commodity Market in India after the Global Financial crisis 2008. The gradual evolution of commodity market in India has been of great significance for the country's economic prosperity. The commodity futures exchanges were evolved in 1800 with the sole objective of meeting the demand of exchangeable contracts for trading agricultural commodities. For example, the cotton exchange located at Cotton Green in Mumbai was the one of the first organized commodity market in the country. A commodity may be defined as a product or material or any physical substance like food grains, processed products and agro-based products, metals or currencies, which investors can trade in the commodity market. One of the characteristics of a commodity is that its price is determined as a function of its market as a whole. A commodity market is a market where various commodities and derivatives products are traded. These contracts can include spot prices, forwards, futures and options on futures. The Indian commodity market offers a variety of products like rice, wheat, coal, petroleum, kerosene, gasoline; metals like copper, gold, silver, aluminum and many more. These days, a wide range of agricultural products, energy products, perishable commodities and metals can be sold under standardized contracts on futures exchanges prevailing across the globe. Commodities have gained importance with the development of commodity futures indexes along with the mobilization of more resources in the commodity market. In this paper Efficient Market Hypothesis were used test the Weak Form Efficiency of top three commodities were taken for research.

EFFICIENT MARKET HYPOTHESIS
'A market in which prices always "fully reflect" available information is called "efficient." Fama (1970), An efficient market will always "fully reflect" available information, but in order to determine how the market should "fully reflect" this information, we need to determine investors' risk preferences. Therefore, any test of the EMH is a test of both market efficiency and investors' risk preferences. For this reason, the EMH, by itself, is not a well-defined and empirically refutable hypothesis.

In weak-form efficiency, future prices cannot be predicted by analyzing prices from the past. Excess returns cannot be earned in the long run by using investment strategies based on historical share prices or other historical data. This implies that future price movements are determined entirely by information not contained in the price series.

REVIEW OF LITERATURE
A paper entitled **"**Do Precious Metals Markets Influence Stock Markets? A Volatility Approach**"** by **Morales** analyzed volatility spillovers between the major financial markets represented by the G-7 economies and the precious metals markets (gold, platinum and silver) with the help of EGARCH Model. On the otherhand A study entitled, **"** Commodity Derivative Market and its Impact on Spot Market" ,by **Golaka C Nath** and **Thulasamma Lingareddy,** studied the impact of Futures Trading in three important commodities which were banned by the Government from trading in Futures and their impact on Spot Prices. The studies found that Futures have increased the volatilities in the Spot Market for some of the commodities. "Econometric Modeling and Forecasting of Gold Futures Prices in India" was done by **Prabina Rajib** and **Suraj Bhuwania**, in this study; they forecast the Gold Futures Prices using ARIMA model. They check the validity of the best fitted model and then they use the fitted model for short term forecasting and concluded that this model gives superior forecasting result compared to other models. Another study 'A study on the accuracy of forecasts of gold prices in Australia' was done by **Selvanathan (1991)** under the research found that gold prices follow a simple random walk.

The previous studies were related to the Commodity Market in India. EGARCH, AR MA, ARIMA, Augmented Dickey Fuller test, Phillips Perron test, Auto correlation test, Runs Test, was used to measure the volatility and weak form efficiency. Auto Correlation test, Runs Test and Augmented Dickey Fuller test were used to examine Weak form Efficiency of Commodity Market in India. Very few studies have been carried out in India to analyze Weak form Efficiency of Commodity Market in India.

RESEARCH METHODOLOGY
The global volume of commodities contracts traded on exchanges increased by a fifth in 2010, and a half since 2008, to around 2.5 billion million contracts. During the three years up to the end of 2010, global physical exports of commodities fell by 2%, while the outstanding value of OTC commodities derivatives declined by two-thirds as investors reduced risk following a five-fold increase in value outstanding in the previous three years. The researcher used top three (1. Silver, 2.Gold, Copper and Natural Gas & 3.Crude Oil) world ranking commodities were used to analyze the weak form efficiency of Commodity Market in India.

OBJECTIVES OF THE STUDY
- To assess the efficiency of selected Commodity Values.
- To analyze the randomness in the movements of Commodity Values.
- To examine the stationary in the sample Commodity Values.
- To summarize the findings, suggestions and conclusion.

HYPOTHESIS OF THE STUDY
H0 1: Sample Commodities are not efficient in weak form.

H0 2: Silver. Gold, Copper, Natural Gas and Crude oil are not random.
H0 3: Closing spot prices of top three commodities are non stationary.

DATA

The daily closing spot value of commodities for this study was collected from the website "http://www.mcxindia.com/SitePages/HistoricalDataForVolume.aspx." For the present study the following three commodities are considered as samples which were in the top list of world ranking
Rank 1. Silver,
Rank 2.Gold, Copper and Natural Gas &
Rank 3.Crude Oil
These Three commodities traded Volumes were taken in to consideration for analysis purpose for the period of after Global Financial crisis to till date i.e 19th Sep 2008 – 31st Jan 2012 (40 months)

TOOLS USED IN THIS STUDY

The information gathered was analyzed by using the following basic and Econometric Tools, appropriate for the purpose.
1. Auto Correlation Test used to test the randomness of commodities.
2. Runs Test were used to test the efficiency of Sample Commodities.
3. Augmented Dickey Fuller Test to decide whether the time-series is difference stationary or trend stationary, a necessary property for random walk process.

DATA ANALYSIS AND INTERPRETATION

1. Runs Test for Sample Commodities (Median & Mean Base)

Table 1A shows the analysis of Runs Test for Median and Mean Base in Commodities. All the calculated value for median base is -15.77, -8.97, -12.9, -12.9 & -12.4 and Mean Base is -20.37, -10.44, -12.37, -13.37 & - 13.10 is less than the test critical value of ± 1.96. The overall analysis clearly denotes that the runs did not follow the normal distribution. Hence, The Null Hypothesis H01 Sample Commodities are not efficient in weak form is rejected for median and Mean base of Sample Commodities. As per the theory of Efficient Market Hypothesis under the Weak form efficiency, the Price reflects all information found in the record of past prices and volumes.

2. Auto Correlation test results for Silver, Gold, Copper, Natural Gas and Crude Oil

Table 2 exhibits the autocorrelation results for world ranking top three commodities for the study period from 19th Sep 2008 to 31st Jan 2012. It is clear from the table, Silver, Gold and Natural Gas time series movements were great. The most of the lag comes under either positive significant or negative significant. But there were no continuous lower and upper movement in Commodity values. This implies that the null hypothesis H0 2: Silver. Gold, Copper, Natural Gas and Crude oil are not random was rejected. Hence it can be concluded that the past values cannot reflect the future values as per Efficient Market Hypothesis. That means the sample Commodities were efficient in weak form.

3. Auto Correlation Charts showing the movement of Commodity Market for the period of 19th Sep 2008 to 31st Jan 2012

Charts clearly show the movement of Sample commodities. Each and every sample commodity movement doesn't depend on other. The commodity values upper movements and lower movements occurred alternatively. But there were no continuous upper and lower movements in sampling period. Hence it denotes the weak form efficiency of Commodity Market follows the random walk

4. Augmented Dickey Fuller Test results for Commodities.

The results of Augmented Dickey Fuller Test for the Silver, Gold, Copper, Natural Gas and Crude Oil are displayed in **Table 3**. Since the Test statistical value for the Augmented Dickey-Fuller Test statistics is not more than the critical value at 1% level of significance, the null hypothesis H0 3: Closing spot prices of top three commodities are non stationary was accepted. Hence it is moved to test with first difference. The first difference of Test statistical value for the Augmented Dickey-Fuller Test is more than the critical value at 1% level of significance. The Commodity values are stationary at first differences both for intercept and intercept & trend. The Silver, Gold, Copper, Natural Gas and Crude Oil rates under non-stationary in their level and become stationary when they are first differenced.

FINDINGS & SUGGESTION

Runs Test indicates that the entire test statistical values were lesser than the test critical value. The overall Runs did not follow the normal distribution. Hence the past prices and volumes information cannot be used to predict the future price. It clearly denotes the sample commodities are efficient in weak form
The Auto Correlation test result reveals that the Silver, Gold, Copper, Natural Gas and Crude Oil rates were efficient in Weak form. It exhibits the random walk.
Augmented Dickey Fuller indicates there is non-stationary in "Silver, Gold, Copper, Natural Gas and Crude Oil rates". It can be concluded that there is a healthy presence of stationary when it is first differenced.
The investors must aware of the publically available information. It plays a vital role in examining the market efficiency. The researcher suggested to investors that Silver, Gold and Natural Gas price movements were great. If investors, invest in these commodities means they may get good returns.

CONCLUSION

The present study investigated the Weak form efficiency of Commodity Market in India with the help of efficient market hypothesis theory. The daily data consisted of closing spot rates from MCX for the period (After Global Financial Crisis from Till Date) of 40 Months from 19th Sep 2008 to 31st Jan 2012. World Ranking Top Three commodities like "1.Silver, 2.Gold, Copper &Natural Gas and 3.Crude Oil" were chosen as samples. Runs Test, Auto Correlation Test, Augmented Dickey Fuller test were the primary tests for weak form efficiency among the three Commodities. The unit root tests confirmed that all the Commodity Prices are non stationary which means that past prices and volumes cannot be used to predict Future. From The overall results conclude that the Commodity Market was more incorporated by Global financial crisis. After the crisis, Commodity Market efficiency was improved gradually. But last 16 months from study period, the commodity market movements were good and efficient in weak form. It can be finally concluded that the Commodity Market is efficient in Weak Form.

SCOPE FOR FURTHER RESEARCH

The future research can focus on the following aspects:
The future study can focus on the Semi Strong Form and Strong form Efficiency of Commodity Market in India. It can also focus on analyzing future and option market. Further researchers can examine all the Commodity variables like Bullion, Plantations, Energy, Metals, Weather, Oil & Oil Seeds, Cereals, Spices, Fiber, Pulses and others that were traded in Commodity Market in India.

TABLES AND FIGURES

RUNS TEST FOR SAMPLE COMMODITIES

Median Mode	Silver	Gold	Copper	Natural Gas	Crude Oil
Test Value(a)	410045.16	712477.74	353662.42	76902.44	518579.94
Cases < Test Value	515	515	515	515	515
Cases ≥ Test Value	515	515	515	515	515
Total Cases	1030	1030	1030	1030	1030
Number of Runs	263	372	309	309	317
Z	**-15.774**	**-8.978**	**-12.906**	**-12.906**	**-12.407**
(2-tailed)	.000	.000	.000	.000	.000

Computed From: SPSS 11.5, Data from MCXIndia.com

RUNS TEST FOR SAMPLE COMMODITIES

Mean Mode	Silver	Gold	Copper	Natural Gas	Crude Oil
Test Value(a)	669631.112	770831.12	333920.0869	80349.3394	538675.32
Cases < Test Value	692	573	469	530	541
Cases ≥ Test Value	338	457	561	500	489
Total Cases	1030	1030	1030	1030	1030
Number of Runs	167	344	315	307	305
Z	**-20.376**	**-10.449**	**-12.375**	**-13.015**	**-13.107**
(2-tailed)	.000	.000	.000	.000	.000

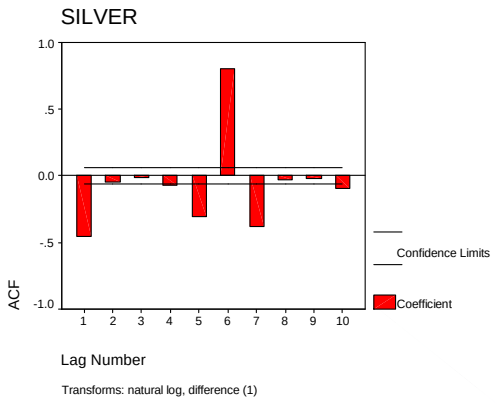
Computed From: SPSS 11.5, Data from MCXIndia.com

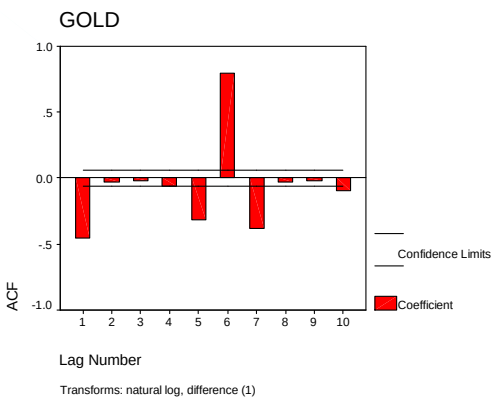
AUTO CORRELATION TEST RESULTS FOR SILVER, GOLD, COPPER, NATURAL GAS AND CRUDE OIL

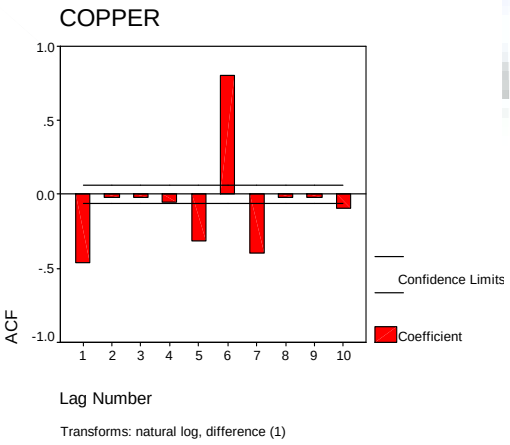
Lag	Silver	Gold	Copper	Natural Gas	Crude Oil	Std. Error
1	-0.450	-0.457	-0.464	-0.429	-0.464	**.031**
2	-0.041	-0.032	-0.024**	-0.111	-0.021**	**.031**
3	-0.009**	-0.017**	-0.021**	0.086	-0.026**	**.031**
4	-0.072	-0.062	-0.056	-0.143	-0.056	**.031**
5	-0.309	-0.311	-0.317	-0.273	-0.312	**.031**
6	0.804	0.794	0.807	0.781	0.802	**.031**
7	-0.383	-0.379	-0.394	-0.356	-0.389	**.031**
8	-0.032**	-0.027**	-0.024**	-0.089	-0.022**	**.031**
9	-0.019**	-0.022**	-0.019**	0.058	-0.028**	**.031**
10	-0.098	-0.091	-0.094	-0.159	-0.090	**.031**

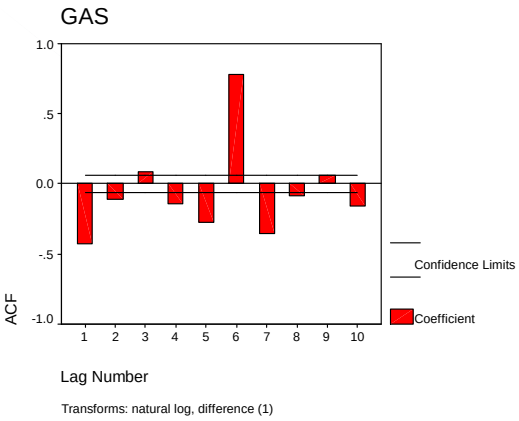
Computed From: SPSS 11.5, Data from MCXIndia.com, ** denotes Negative Correlation

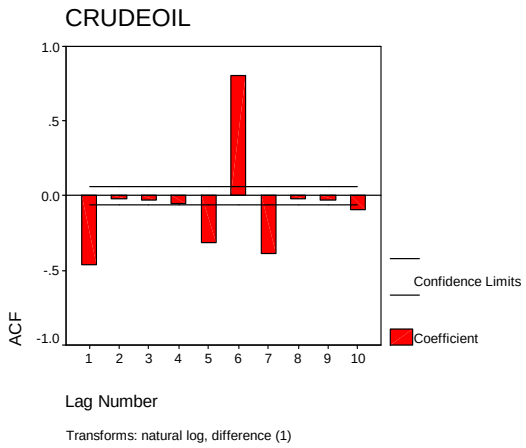
AUTO CORRELATION CHARTS SHOWING THE MOVEMENT OF COMMODITY MARKET FOR THE PERIOD OF 19TH SEP 2008 TO 31ST JAN 2012











AUGMENTED DICKEY FULLER TEST RESULTS FOR COMMODITIES

Commodities	Trend		Trend & Intercept	
	Level	First Difference	Level	First Difference
Silver	-2.477783	-8.734271	*-4.050233*	-8.731045
Gold	-3.206875	-7.780983	-3.696133	-7.773948
Copper	-2.556254	-10.32972	*-5.561275*	-10.32410
Natural Gas	-2.702383	-9.222912	-2.790615	-9.218893
Crude Oil	-1.822029	-11.47925	-3.880948	-11.46638
1% level	***-3.436625***	***-3.436625***	***-3.967160***	***-3.967160***

Calculated from Eviews 5.1, Data from MCXIndia.com

REFERENCES

1. Brigham & Houston (2001), "Fundamentals of Financial Management", South Western Publishers, Cincinnati.
2. Commodity Closing spot rates of sample, Viewed on 31st Jan 2012 "http://www.mcxindia.com/SitePages/HistoricalDataForVolume.aspx."
3. Efficient market hypothesis, Viewd on Dec 2011 "www.actionforex.com/.../efficient-market-hypothesis-20041204363"
4. Frank Reily & Keith Brown, (2008) "Investment Analysis & Portfolio Management", 7th edition, Shroff publishers , Mumbai.
5. Golaka.C.Nath and Thulasamma Lingareddy., (2008) "Commodity Derivative Market and its Impact on Spot Market" http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1087904
6. Kothari.C.R. (2009) "Research methodology methods and techniques" Wishwa Prakashan publishers, New Delhi.
7. Morales, (2003) **"**Do Precious Metals Markets Influence Stock Markets? A Volatility Approach**"** http://www.eurojournals.com/finance.htm.
8. Pandey.I.M., (2009) "Financial Management" 9th Edition, Vikas Publishing House pvt ltd, Noida.
9. Prabina Rajib., Suraj Bhuwania. "Econometric Modeling and Forecasting of Gold Futures Prices in India", http://www.ssrn.com/
10. Sharan.V., (2001), "International Financial Management", Prentice Hall Indian Pvt Ltd, New Delhi.
11. Selvanathan (1991) "A Note on the Accuracy of Business Economists, Gold Price Forecasts", http://www.ssrn.com/

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application and 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-mails i.e. **infoijrcm@gmail.com** or **info@ijrcm.org.in** 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 an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

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