INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

IJRCM

IJRCM

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.,

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 **4700 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/

CONTENTS

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We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications;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 ***M.S. Word format*** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. 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 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. ***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 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 ***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 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

ANALYSIS OF THE EFFECT OF GOVERNORS' TERM ON MONETARY POLICY: A CROSS-SECTIONAL ANALYSIS OF SELECTED SUB-SAHARAN AFRICAN CENTRAL BANKS

DR. IBRAHIM NYABOGA
COORDINATOR
SCHOOL OF BUSINESS & ECONOMICS
MOUNT KENYA UNIVERSITY
ELDORET

NYAUNCHO JOSIAH
LECTURER
SCHOOL HUMAN RESOURCE DEVELOPMENT
MOI UNIVERSITY
ELDORET

ELIJAH MAGORI OMOBE
LECTURER
SCHOOL OF PURE & APPLIED SCIENCES
MT. KENYA UNIVERSITY
EDLORET

ABSTRACT
The objective of the study was to investigate the effect of term of the governors on monetary policy objective. The research was conducted through a cross-sectional analysis. A sample was obtained from the selected 16 Sub-Saharan African central banks websites. The target populations were 52 Sub-Saharan African countries where only 16 countries were selected for the study because of the data constrains. The websites of central banks from 1996 to 2011 were used which the researcher a maximum of 288 observations. The selected countries were reached through convenience sampling procedure for the study. The study used reports from central banks to gather pertinent data. The researcher also used previous studies on the same to compare them with existing data in order to provide conclusions and competent recommendations. Data Analysis was analyzed through the use of qualitative and quantitative analysis and presented in tabular form. Data analysis was facilitated by the use of SPSS (Statistical Package for Social Scientist) and spreadsheet. The Pearson product-moment correlation coefficient was conducted to estimates the strength of the linear relationship between two random variables. Regression models were estimated using the random effects methods and tested by the Hausman random effects. ANOVA was used to test for differences among the means of the populations by examining the amount of variations between each of the samples, relative to the amount of variation between the samples. It was also used to analyze the hypothesis of the study. The study concluded that, Central Bank Independence (CBI) has long been a topic of interest given the association that has been found between central bank independence and low inflation. The study recommends Central banks to, have an independent board of directors that can serve fully their term for transparency practice, openness, honesty and trustworthy, which is vital for an independent institution like central banks to engineer the confidence of the public domain because of its independence.

KEYWORDS
term of governors, monetary policies.

INTRODUCTION
BACKGROUND INFORMATION
The idea that an independent central bank is associated with lower inflation was supported by an important empirical literature which suggests that average inflation is negatively related to the central bank independence degree Cukierman, Webb and Neyapti (1992) argue that "the legal status of a central bank is only one of several elements that determine its actual independence. Many central banks laws are highly incomplete and leave a lot of room of interpretation. As a result, factors such as tradition or the personalities of the governor and other high officials of the bank at least partially shape the actual level of central bank independence. Even when the law is quite explicit, reality may be very different". Thus, according to Fuhrer (1997), "legal central bank independence could be very different from actual central bank independence in countries where the practice of monetary policy deviates from the letter of the law. Measures of legal central bank independence should thus be viewed as (possibly noisy) indicators of underlying central bank independence".

According to Cukierman, Webb, and Neyapti index is based on four legal characteristics as described in a central bank's charter. First, a bank is viewed as more independent if the chief-executive is appointed by the central bank board rather than by the prime minister or minister of finance, is not subject to dismissal, and has a long term of office. These aspects help insulate the central bank from political pressures. Second, independence is higher the greater the extent to which policy decisions are made independently of government involvement. Third, a central bank is more independent if its charter states that price stability is the sole or primary goal of monetary policy. Fourth, independence is greater if there are limitations on the government's ability to borrow from the central bank. Cukierman, Webb, and Neyapti combine these four aspects into a single measure of legal independence. Based on data from the 1980s, they found Switzerland to have the highest degree of central bank independence at the time, closely followed by Germany. At the other end of the scale, the central banks of Poland and the former Yugoslavia were found to have the least independence.

Conventional wisdom holds that while fiscal policy should be made directly by democratically-elected legislators, monetary policy should be made by technocrats nominated by the democratically-elected president, and confirmed by democratically-elected legislators. The rationale for this conventional wisdom is that democratically-elected leaders inherently are given to inflation proclivities, giving to the citizenry more than it is willing to tax the citizenry and running perpetual budget deficits that would be monetized, if such leaders kept monetary policy decisions to themselves. Thus, it is argued, democratically-elected leaders are doing the citizenry a huge benefit by bestowing operational political independence to the Federal Reserve, essentially protecting themselves – and, thus, the citizenry – from their inflationary selves.

One of the solutions to this problem is to appoint a conservative central bank governor, who can place greater weight on price stability than the government does (Rogoff, 1985). In practice, Central Bank Independence could be a manner of appointing a conservative central banker. Furthermore, concerning this time-inconsistency problem, recent studies have suggested that Central Bank Independence could allow the protection of monetary policy against partisan electoral cycles (Alesina, 1988; Alesina et al., 1997) and therefore not to divert the monetary policy from its primary objective. The principal message of these arguments is that the government suffers from inflationary bias and that, it is necessary to depoliticize monetary policy (i.e. increase the Central Bank Independence) in order to fight more efficiently against inflation.

OBJECTIVE OF THE STUDY

To analyze the effect of the term of the governors (tenure) on monetary policies objectives.

METHODOLOGY

RESEARCH DESIGN: According to Kothari (2005), research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. It sought to observe, explain, and describe phenomena of interest without manipulating the variables or the respondents. The study was appropriate to provide secondary information.

The research was conducted through a cross-sectional analysis. A sample was obtained from the selected 16 Sub-Saharan African central banks websites. These methods were suitable as non-experimental and were only concerned mainly with explanation, descriptions and explorations of opinions, attitudes, preferences and perception, as it exists at the time of the study and to describe present conditions, events or policy based on the impressions or reactions of the respondents of the research (Creswell, 1994). The researcher opted to use this kind of research considering the desire of the researcher to obtain data from the sample so as to formulate rational, sound conclusions and recommendations for the study

TARGET POPULATION: According to Mugenda and Mugenda (2003) target population is the population targeted for the study. It refers to all the units of whatever nature that a researcher intends to study. The population refers to the group of people or study subjects who are similar in one or more ways and which forms the subject of the study. The target populations were 52 Sub-Saharan African countries where only 16 countries were selected for the study because of the data constrains. In these countries, economic attributes were observed over a period of 15 years. These was done in order to come up with a realistic information bearing in and how these economic attributes contributions to the economical development of a country.

SAMPLE AND SAMPLING TECHNIQUES: The data for our sample of 16 African countries was retrieved from various sources including the World Bank, International Monetary Fund, Financial Statistics, Central Statistical Offices, the worldwide governance indicators (WGI) and the websites of each sixteen central banks from 1996 to 2011 which gives the researcher a maximum of 288 observations. The selected countries were reached through convenience sampling procedure for the study. The stratification of the sample allowed for diversity of views and analysis. This is possible because of the following reasons. First, sampling is undertaken due to limitation of resources and availability of the data in some other countries. Secondly is a limitation of time, finances and research personnel. Finally, it is no longer possible to use the entire population. A clearly selected sample is therefore assumed to be representative of the entire population as it enables detailed data collection and analysis.

DATA COLLECTION METHODS: According to Kothari (2005); there are several methods of collecting data, particularly survey and descriptive research. The data for our sample of 16 African countries was retrieved and obtained from various sources including the World Bank, IMF Financial Statistics, Central Statistical Offices and the websites of central bank.

DATA COLLECTION PROCEDURES: The researcher then visited the respective websites banks to download the data in person. Equality data was gathered from World Bank, IMF Financial Statistics data and the Worldwide Governance Indicators (WGI) bank for analysis.

DATA COLLECTION INSTRUMENTS: The study used reports from central banks to gather pertinent data. The researcher also used previous studies on the same to compare them with existing data in order to provide conclusions and competent recommendations. Acquiring secondary data was more convenient to use because they were already condensed, organized and readily available. This was done by the researcher personally retrieving the data.

VALIDITY: According to Mugenda et al (1999) validity refers to the accuracy and meaningfulness of inferences, which are based on the research results. Validity therefore, has to do with how accurately the data obtained in the study represents the variables of the study. If such data is a true reflection of the variables, then inferences based on such data was accurate and meaningful. The content validity of the research instrument was determined by the researcher through accuracy of the same data obtained from IMF and World Bank which provided the same data.

RELIABILITY: Kothari (2005) defines reliability of the research tools as the ability of that test to consistently yield the same results when repeated measurements are taken for the same individual economic factors under the same conditions. According to the study reliability therefore implies the extent to which consistent results can be achieved through the use of the same instruments with the same respondents at different intervals. This was tested by the Hausman test.

DATA ANALYSIS AND PRESENTATION

Data Analysis was analyzed through the use of qualitative and quantitative analysis and presented in tabular form. Data analysis was facilitated by the use of SPSS (Statistical Package for Social Scientist) and spreadsheet Computer package using the following models as follows.

DESCRIPTIVE STATISTICS

Measures of central tendency include the mean, median and mode, while measures of variability include the standard deviation (or variance), the minimum and maximum variables, kurtosis and skewness.

Descriptive statistics provide a useful summary of variability when performing empirical and analytical analysis, as they provide a historical account of tenure behavior. Although past information is useful in any analysis, one should always consider the expectations of future events.

PEARSON PRODUCT-MOMENT CORRELATIONS (PMMC)

The Pearson product-moment correlation coefficient (PMCC) is a quantity between -1.0 and 1.0 that estimates the strength of the linear relationship between two random variables. It is to be noted that correlation simply describes the relationship between the two variables and does not explain why they are related. Therefore, a correlation should not be interpreted as a proof of a cause-and-effect relationship between the variables X and Y. Similar results was provided by Spearman rank-order correlation coefficient.

$$r_{xy} = \frac{n(\sum xy) - n(\sum x)(\sum y)}{\sqrt{\{n(\sum x^2}) - (\sum x)2\}\{(\sum y^2) - (\sum y)2}$$

Where:

n = number of paired observations

∑XY = sum of cross of products

∑X and ∑Y are sum of X and Y respectively

$\sum x^2$ *= sum of all the squares values of the X scores*

Σy^2 *= sum of all the squares values of the Y scores*

$(\Sigma X)^2$ *= sum of all the X scores, this sum squared*

$(\Sigma Y)^2$ *= sum of all the Y Scores, this sum squared*

THE REGRESSION ANALYSIS

The four regression models of the structure provided below were estimated using the random effects methods where these equations are tested by the Hausman random effects. The dependent variable is regressed with the CBI indexes excluding one at time to check the change of R^2 as well the assumption made is that the depend on one another as follows:

$M2 = \beta 0 + \beta_1 EXCH_t + \beta_2 INF_t + \beta_3 GDP_t + \beta_4 TERM_t + U_{it}$

$EXCH = \beta 0 + \beta_1 EM2_t + \beta_2 INF_t + \beta_3 GDP_t + \beta_4 TERM_t + U_{it}$

$INF = \beta 0 + \beta_1 M2_t + \beta_2 EXCH_t + \beta_3 GDP_t + \beta_4 TERM_t + U_{it}$

$GDP = \beta 0 + \beta_1 M2_t + \beta_2 EXCH_t + \beta_3 INF_t + \beta_4 TERM_t + U_{it}$

Where:

GDP = Gross Domestic Product, M2 = Money Supply EXH = Foreign Exchange Rate and INF = Inflation

TERM = Term of governor in office.
U_{it} = error term & t = time (years)

ANALYSIS OF VARIANCE (ONE-WAY ANOVA)

The basic principle of ANOVA is to test for differences among the means of the populations by examining the amount of variations between each of the samples, relative to the amount of variation between the samples. In this case the researcher's concern is to analyze the performance of various monetary policies in order to know whether their performances differ significantly and investigate any number of factors (CBI) which are hypothesized or said to influence the dependent variable. The ANOVA technique is important in this context because the researcher wanted to compare more than two populations such as the CBI on monetary policy outcomes and investigated the differences among the means of the population's simultaneously.

The hypothesis of the study is similarly analyzed through the use of ANOVA due to insignificance results observed by the regressed models. ANOVA gave a more explanatory power of the independent variables than regression thus more preferred. The tests of the hypothesis using ANOVA therefore provides the yeast of this study which would have been insignificant due to dummy results of regression model making it significant.

THE ANOVA MODEL

$Yij = \mu + ti + \sum ij$

Where

μ = grand mean

ti = i^{th} treatment effect.

$\sum ij$ = random error term.

Yij = dependent variable.

i.e the response of the ij^{th} experimental units that receive the i^{th} treatment.

The researcher tested;

HO: $\mu_1 = \mu_2 = \mu_3$ - - - - - - - - - $= \mu_t$

H1: $\mu_1 \neq \mu_2 \neq \mu_3$ - - - - - - - - - - - $\neq \mu_t$

Or at least one μ_o is different.

ANOVA Theorem

Total Sum of squares (TSS)

TSS = (Square of square due to treatment) + (sum of squares of due to error)

TSS = SStr + SSE

$\sum(Yij - \bar{Y})^2 = \sum (Yi - \bar{Y})^2 + \sum (Yij - \bar{Y})^2$

Correlation factor CF = $[\sum^{t}_{i}\sum^{n}_{j} y_{ij}]$

Total sum of squares

TSS = $\sum_i \sum_j y_{ij - CF}$

Sum of squares due to treatment SStr $= \sum ti^2 - CF$

$\frac{i=t}{n}$

SSE = TSS – SStr

Mean sum of squares due to treatment (MSStr) = $\frac{SStr}{t-1\,(numerator)}$

r)

Mean sum of squares due to error (MSE) = $\frac{SSE}{(nt-1)(t-1)\,(Denominator)}$

= $\frac{SSE}{Nt-t}$

Test statistics;

F = <u>MSStr (Estimate of population variance based on between samples variance.</u>

MSE (Estimate of population variance based on within samples variance

Reject H_0 if F > Fα (t-1, nt- t)

Accept otherwise.

FINDINGS AND DISCUSSIONS

TABLE 1: DESCRIPTIVE STATISTICS

	N	Range	Min	Max	Mean		Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Statistic	Std. Error
TERM	288	14.00	.00	14.00	4.2014	.19940	3.38387	11.451	.603	.144

Source: The researcher 2015.

The output produced shown above in table 1. The first line tells us about the data set for which descriptive statistics have been calculated. The first column in the group output table, labelled N gives the number of cases in that data set followed by range. In the next two columns, that minimum and the maximum values of the variables selected for the study is given. In the last three columns, the mean, standard deviation and the variance are given while the last column gives tells us where the data selected is skewed to.

It can be seen that the *TERM* of the monetary outcomes vary from .00 to 14.00 with a mean of 4.2014, standard deviation of 3.38387, variance of 11.451 and skewed to the positive at .603. Therefore, the longer the tenure of the governor in office, the higher the degree of central bank independence to formulate and implement monetary policies that will result highest price stability.

TABLE 2: CORRELATIONS

Correlations						
		EXCH	INFL	M2	GDP	TERM
EXCH	Pearson Correlation	1	-.151	-.378	.163*	.103*
	Sig. (2-tailed)	-	.010	.000	.006	.080
	N	-	288	288	288	288
INFL	Pearson Correlation	-	1	-.146	.094*	-.031
	Sig. (2-tailed)	-	-	.013	.112	.601
	N	-	-	288	288	288
M2	Pearson Correlation	-	-	1	-.283	-.069
	Sig. (2-tailed)	-	-	-	.000	.246
	N	-	-	-	288	288
GDP	Pearson Correlation	-	-	-	1	.090*
	Sig. (2-tailed)	-	-	-	-	.128
	N	-	-	-	-	288

Source: The researcher 2015

The output produced is shown in the table 1 above, the output gives correlation for the variable and each correlation is produced twice in the matrix. The term of the governor is much more significance in the regulation of foreign exchange rates and the gross domestic production.

In the correlation matrix, the researcher gets Pearson's correlation coefficient, P-value for two-tailed test for significance and the sample size. From this table the researcher can conclude that there is a positive correlation between monetary objectives outcomes and the governors term hence the correlations is significant at the significance level of α= 0.05 (which was given at *significance 5%). Results for correlation between other set of variables can be interpreted similarly. The same results were generated though the non-parametric correlations.

TABLE 3: REGRESSION RESULTS RANDOM EFFECTS

Independent Variables	*Exchange Rate*		*Money Supply*		*Inflation*		*Gross Domestic Product*	
I.V	*t*	*Beta*	*t*	*Beta*	*T*	*Beta*	*T*	*Beta*
Term	*1.879***	*0.099***	*-.574v*	*-.030v*	*-.511v*	*-0.030v*	*0.543***	*.066**
(Std error)	*(7.244)*		*(0..354)*		*(.189)*		*(.036)*	
Constants	*5.660***** *(79.353)*		*19.509***** *(2.652)*		*7.832***** *(1.970)*		*8.386***** *(.679)*	
R-Square	*.2433*		*.247*		*0.089*		*0.129*	
Adjusted R^2	*.227*		*.231*		*0.069*		*.111*	
N	*288*		*288*		*288*		*288*	

Sources: Researcher (2015)

Note: *Note: The dependent variable is the transformed inflation rate INF, TERM is the period a central bank governor in office, EXCH is the annual percentage change in exchange rate, GDP is the log of real GDP and M2 is the summation of money supply as a percentage. The significance levels are given by **significant at 5%; V insignificant; Standard errors in brackets.*

The Wooldridge test for autocorrelation in panel data is used to test for autocorrelation and the researcher also test for panel level heteroskedasticity. The results suggest that the researcher's model does not suffer from these problems. (The test is derived by Wooldridge (2002) to test for autocorrelation in panel data models. Drukker (2003) affirms that the test is reasonably good in plausibly sized samples) The Haussman test indicates that the random effects technique is most appropriate to use. The Hausman test indicates again that the random effects technique is more appropriate to use. The variable in the model is correctly signed and significant. The R^2 obtained under random effects is 0.243 for exchange rate, 0.247 for money supply, 0.089 inflation and 0.129 GDP meaning that the researcher's models are able to explain about 24% exchange rate, 24.7% money supply 8.9% inflation and 12.9% GDP. Once more, the Wooldridge test for autocorrelation and the test of heteroskedasticity were performed indicating that there is no such problem in our model.

OUTPUT OF ANOVA

ANOVA provides us the results of the inferential statistics as requested. One-way ANOVA gives the results of the analysis for omnibus hypothesis. The results are gives in three rows in collaboration with the regression results. The first row labelled regression gives the variability due to the monetary policy factor (between-groups variability), the second row labelled residual gives variability due to the random error term and the third row gives the total variability as summarized in the table below. Equally, as one CBI is omitted from the regression equation the R^2 decreases while the F-value increase as summarized below.

TABLE 4: ANOVA RESULTS

Independent Variables	*Exchange Rate*		*Money Supply*		*Inflation*		*Gross Domestic Product*	
I.V	*t*	*Beta*	*T*	*Beta*	*T*	*Beta*	*T*	*Beta*
Term	*1.879***	*0.099***	*-.574v*	*-.030v*	*-.511v*	*-0.030v*	*0.543***	*.066**
Constants	*5.660***** *(79.353)*		*19.509***** *(2.652)*		*7.832***** *(1.970)*		*8.386***** *(.679)*	
F	*15.030*		*15.352*		*4.564*		*6.943*	
N	*288*		*288*		*288*		*288*	

(Source: the researcher, 2015)

ANOVA RESULTS

The results obtained indicate that CBI is a relatively good means to combat inflation in Africa. However, even though it is a necessary instrument it is not a sufficient measure. As can be seen from this model, the R-squared is not sufficiently high to explain all the variation in the inflation rate. There are other sources which generate inflation in Africa. This is why other accompanying measures are needed to bring back the inflation rate to a satisfying level. The adoption of a responsible balance budget combined with an efficient application of price control can help restrain inflationary pressures. However, if price controls are done improperly, then this could encourage the development of parallel markets as is the case in certain African countries like Ghana, Nigeria, Zambia and Angola. If this happens, then the economic activity would shift to the hidden economy which in turn will negatively affect economic growth in Africa.

CONCLUSIONS

Central Bank Independence (CBI) has long been a topic of interest given the association that has been found between central bank independence and low inflation. Recently, a number of countries in Africa have tried to improve central bank independence and transparency in their monetary policy making. However, in Africa research on the issue of CBI this has been quite problematic given the lack of data especially on unemployment. In this paper, the research examines the relationship of some the monetary policies on inflation, exchange rate, gross domestic production, money supply and central bank independence using data for 16 countries over the period 1996-2011, and it attempts to investigate whether central bank independence can help achieve price stability in African countries where monetary policy is always a serious problem. The research uses governors term in office as the main proxy measure of central bank independence on monetary policies formulation.

RECOMMENDATIONS

Central banks should, have an independent board of director's composition of all genders because research carried out else on financial institutions depicts that a BOD consist of more women tends to be more transparent, openness, honesty and trustworthy, which is vital for an independent institution like central banks to engineer the confidence of the public domain because of its independence. Independence constrains the government borrowing, which leads to no interest rate manipulations hence price stability a key goal for monetary policies; where government involvement (politicians) is insulated from technocrat's interferences.

REFERENCES

1. Alesina, A., and L. H. Summers (1993). Central Bank Independence and Macroeconomic Performance: Some Comparative Evidence. Journal of Money, Credit and Banking 25 (2): 151-162. [Online] Available at: http://www.econ.ucdenver.edu/smith/econ4110/Alesina%20Summers%20-%20Central%20Bank%20 Independence%20and%20Macro%20Performance.pdf [Accessed on 05 November 2014]
2. Creswell, J. (1994). Research design: Qualitative and quantitative approaches. London: Sage
3. Cukierman, A. & S. B. Webb. 1995. Political influence on the Central Bank: International evidence. *The World Bank Economic Review*, Vol. 9(3), pp. 397-423.
4. Debelle, G. and S. Fischer. 1994. How Independent Should a Central Bank Be? in J.C. Fuhrer (ed.), Goals, Guidelines and Constraints Facing Monetary Policymakers. Federal Reserve Bank of Boston, 195-221.

5. Kothari C. R. (2005). Research Methodology. Method and Techniques. New Delhi: Wishwa Rakashani.
6. Mugenda, A & O. Mugenda (1994). Research Methods: Qualitative and Quantitative Approaches. Nairobi: Act Press.
7. Mugenda, A & O. Mugenda (2003). Research Methods: Qualitative and Quantitative Approaches. Nairobi: Act Press.
8. Neyapti, B. (2003. “Budget deficits and inflation: The roles of Central Bank independence and financial market development. *Contemporary Economic Policy,* Vol. 21(4), pp.1458-1475

WEBSITE

9. www.investopedia.com/terms/d/descriptive_statistics.asp#ixzz3lK46tcrD [Accessed on 08 August, 2015]

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 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