

# GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: C

Finance

Factors on Banks Performance

Comparative Study of Islamic Bank

Highlights

Impact of Psychological Biases

Economic Model of Exchange Rate

Discovering Thoughts, Inventing Future

**VOLUME 18** 

ISSUE 5

**VERSION 1.0** 

© 2001-2018 by Global Journal of Management and Business Research, USA



# Global Journal of Management and Business Research: C Finance



# © Global Journal of Management and Business Research. 2018.

All rights reserved.

This is a special issue published in version 1.0 of "Global Journal of Science Frontier Research." By Global Journals Inc.

All articles are open access articles distributed under "Global Journal of Science Frontier Research"

Reading License, which permits restricted use. Entire contents are copyright by of "Global Journal of Science Frontier Research" unless otherwise noted on specific articles.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without written permission.

The opinions and statements made in this book are those of the authors concerned.

Ultraculture has not verified and neither confirms nor denies any of the foregoing and no warranty or fitness is implied.

Engage with the contents herein at your own risk.

The use of this journal, and the terms and conditions for our providing information, is governed by our Disclaimer, Terms and Conditions and Privacy Policy given on our website <a href="http://globaljournals.us/terms-and-condition/">http://globaljournals.us/terms-and-condition/</a>

By referring / using / reading / any type of association / referencing this journal, this signifies and you acknowledge that you have read them and that you accept and will be bound by the terms thereof.

All information, journals, this journal, activities undertaken, materials, services and our website, terms and conditions, privacy policy, and this journal is subject to change anytime without any prior notice.

Incorporation No.: 0423089 License No.: 42125/022010/1186 Registration No.: 430374 Import-Export Code: 1109007027 Employer Identification Number (EIN): USA Tax ID: 98-0673427

# Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; Reg. Number: 0423089)
Sponsors: Open Association of Research Society
Open Scientific Standards

# Publisher's Headquarters office

Global Journals® Headquarters 945th Concord Streets, Framingham Massachusetts Pin: 01701, United States of America USA Toll Free: +001-888-839-7392 USA Toll Free Fax: +001-888-839-7392

# Offset Typesetting

Global Journals Incorporated 2nd, Lansdowne, Lansdowne Rd., Croydon-Surrey, Pin: CR9 2ER, United Kingdom

# Packaging & Continental Dispatching

Global Journals Pvt Ltd E-3130 Sudama Nagar, Near Gopur Square, Indore, M.P., Pin:452009, India

# Find a correspondence nodal officer near you

To find nodal officer of your country, please email us at *local@globaljournals.org* 

#### *eContacts*

Press Inquiries: press@globaljournals.org
Investor Inquiries: investors@globaljournals.org
Technical Support: technology@globaljournals.org
Media & Releases: media@globaljournals.org

# Pricing (Excluding Air Parcel Charges):

Yearly Subscription (Personal & Institutional) 250 USD (B/W) & 350 USD (Color)

# EDITORIAL BOARD

#### GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH

### Dr. John D. Theodore

American Military University

JDT Management Consultants, President.

D.B.A., Business Economy

University of South Africa

Ph.D. Aristotelian University

Business Administration

Ph.D. Administration, University of Kansas

USA

# Dr. R. Allen Shoaf

B.A., M.A., Ph.D. Cornell University

Cornell University, Teaching Assistant in the English

Department,

University of Florida, US

# Dr. Mehdi Taghian

Senior Lecturer

Faculty of Business and Law

BL Deakin Business School

Melbourne Burwood Campus

Australia

# Dr. Agni Aliu

Ph.D. in Public Administration,

South East European University, Tetovo, RM

Asociater profesor South East European University,

Tetovo, Macedonia

# Dr. Wing-Keung Won

Ph.D., University of Wisconsin-Madison,

Department of Finance and

Big Data Research Center

Asia University,

Taiwan

## Prof. Moji Moatamedi

Honorary Vice Chair

Ph.D., at The University of Sheffield,

MBA, Manchester Business School

University of Manchester

UK

# Professor Maura Sheehan

Professor, International Management

Director, International Centre

for Management & Governance Research (ICMGR)

Ph.D. in Economics

UK

## Dr. Carl Freedman

B.A., M.A., Ph.D. in English, Yale University

Professor of English, Louisiana State University, US

## Dr. Tsutomu Harada

Professor of Industrial Economics

Ph.D., Stanford University, Doctor of Business

Administration, Kobe University

## Dr. Xiaohong He

Professor of International Business

University of Quinnipiac

BS, Jilin Institute of Technology; MA, MS, Ph.D.,.

(University of Texas-Dallas)

## Dr. Carlos García Pont

Associate Professor of Marketing

IESE Business School, University of Navarra

Doctor of Philosophy (Management),

Massachussetts Institute of Technology (MIT)

Master in Business Administration, IESE, University of

Navarra

Degree in Industrial Engineering,

Universitat Politècnica de Catalunya

Web: iese.edu/aplicaciones/faculty/facultyDetail.asp

# Dr. Bassey Benjamin Esu

B.Sc. Marketing; MBA Marketing; Ph.D Marketing

Lecturer, Department of Marketing, University of Calabar

Tourism Consultant, Cross River State Tourism

Development Department

Co-ordinator, Sustainable Tourism Initiative, Calabar,

Nigeria

# Dr. Ivona Vrdoljak Raguz

University of Dubrovnik,

Head, Department of Economics and Business

Economics,

Croatia

## Dr. Charles A. Rarick

Ph.D.

Professor of International Business

College of Business

Purdue University Northwest

Hammond, Indiana US

# Dr. Albrecht Classen

M.A. (Staatsexamen), Ph.D. University of Virginia,

German

Director, Summer Abroad Program, Medieval Europe

Travel Course

### Dr. Söhnke M. Bartram

Department of Accounting and Finance

Lancaster University Management School

Ph.D. (WHU Koblenz)

MBA/BBA (University of Saarbrücken)

Web: lancs.ac.uk/staff/bartras1/

# Dr. Dodi Irawanto

Ph.D., M.Com, B.Econ Hons.

Department of Management

Faculty of Economics and Business

Brawijaya University

Malang, Indonesia

# Dr. Yongbing Jiao

Ph.D. of Marketing

School of Economics & Management

Ningbo University of Technology

Zhejiang Province, P. R. China

# Yue-Jun Zhang

Business School,

Center for Resource and

Environmental Management

Hunan University, China

# Dr. Brandon S. Shaw

B.A., M.S., Ph.D., Biokinetics, University of Johannesburg,

South Africa

Professor Department of Sport and Movement Studies

University of Johannesburg, South Africa

# CONTENTS OF THE ISSUE

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Contents of the Issue
- 1. An Empirical Assessment of the Economic Model of the Exchange Rate. 1-6
- 2. The Study of Fund Disbursement by NABARD in Uttar Pradesh. 7-11
- 3. Impact of Psychological Biases of Investors in Financial Satisfaction. 13-17
- 4. Empirical Evidence on the Impact of Bank Specific Factors on the Commercial Banks Performance: The Camel Model and Case of Ethiopian Banks. 19-30
- 5. Impact of Firm Size on Profitability: A Comparative Study of Islamic Bank and Commercial Bank in Pakistan. *31-35*
- v. Fellows
- vi. Auxiliary Memberships
- vii. Preferred Author Guidelines
- viii. Index



# Global Journal of Management and Business Research: C Finance

Volume 18 Issue 5 Version 1.0 Year 2018

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# An Empirical Assessment of the Economic Model of the Exchange Rate

By Dr. Nurseiit, N. A, Bissembayev, A. S., Maulenov, A. O. & Dildebaeva, Zh. T.

Kazakh - American University

Abstract- The article analyzes the various factors influencing the formation of national currency in Kazakhstan from Q1 2004 to Q4 2016. This helps to identify the most significant factors determining the equilibrium rate of tenge. These include the current dynamics of the exchange rate, the size of the debt and the rate of its growth, the coefficient of the money multiplier. Other factors, such as the growth rate of the economy and the money supply, net inflow of financial assets and a current account, did not have a significant impact on the tenge.

Keywords: equilibrium exchange rate model, exchange rate, tenge, economy, balance of payments, monetary aggregates, investments, Kazakhstan.

GJMBR-C Classification: JEL Code: G00



Strictly as per the compliance and regulations of:



© 2018. Dr. Nurseiit, N. A, Bissembayev, A. S., Maulenov, A. O. & Dildebaeva, Zh. T. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

# An Empirical Assessment of the Economic Model of the Exchange Rate

Dr. Nurseiit, N. A a, Bissembayev, A. S. , Maulenov, A. O. & Dildebaeva, Zh. T. a

Abstract- The article analyzes the various factors influencing the formation of national currency in Kazakhstan from Q1 2004 to Q4 2016. This helps to identify the most significant factors determining the equilibrium rate of tenge. These include the current dynamics of the exchange rate, the size of the debt and the rate of its growth, the coefficient of the money multiplier. Other factors, such as the growth rate of the economy and the money supply, net inflow of financial assets and a current account, did not have a significant impact on the tenge.

Keywords: equilibrium exchange rate model, exchange rate, tenge, economy, balance of payments, monetary aggregates, investments, Kazakhstan.

#### I. Introduction

ow the exchange rate of tenge is subject to sharp unpredictable fluctuations. In conditions of strong dependence of Kazakhstan's economy on foreign trade and foreign investments, as well as high share of imports in production costs and high external debts of economic entities, such sharp fluctuations in exchange rate have a very negative effect on business. They lead to price uncertainty, which makes it difficult to plan and conduct business, investing and calculating the return on investment, causes additional business costs for changing price tags and changing priorities, etc. All this reduces the growth rates of real production and with sharp fluctuations in the rate may lead to a decline in production and living standards of the population.

The course in the country is now freely floating or equilibrium. Moreover, the last devaluation in August of 2015 by 35.6% was conducted in order to move the national currency to free float (Reuters, 2015). However, Kazakhstan officially went over to the regime of a free floating exchange rate in April of 1999, when the exchange rate fell by 40% (Kase, 2018). The question arises, why it was necessary to go into the same regime for the second time or was the first fake? The plasible explanationhere is that the rate of tenge is politically determined than economically

conditioned<sup>1</sup>. In both cases, the delay in devaluation was caused by the upcoming presidential elections, since a stable currency is a symbol of the effectiveness of the acting authorities in the eyes of the electorate, while a non-stable currency would say the opposite.

In the first case, the presidential elections were held on January 10, 1999, and in the second case - on April 26, 2015, despite the fact that deterioration of external economic conditions due to a strong devaluation of the ruble was observed much earlier in August 1998 and in August 2014, respectively. At the same time, the authorities of the country held 2-3 months after the presidential election, so that the philistine did not directly associate the devaluation of the national currency with the presidential elections. Thus, the tenge was artificially held in the first case for 7 months, and in the second case - for 11 months, despite the fact that there was a significant revaluation of the national currency, which led to noncompetitiveness of domestic products, deterioration in financial performance and bankruptcy of Kazakh enterprises, and rising unemployment among the population.

Of course, the policy of demonstration of the strength of the economy of Kazakhstan and its national currency - tenge, which continues to be "stable" despite unfavorable external circumstances, was very expensive for the country. In 1998, the National Bank of Kazakhstan spent on the support of tenge from \$400 to \$600 million. which amounted to 30-35% of the country's gold and foreign exchange reserves (Arystanbekov, 2015). In 2014-2015, the loss of gold and foreign exchange reserves to support the unrealistic exchange rate of tenge was \$39.7 billion, including \$22 billion in 2014 (83% of the country's gold and foreign exchange reserves)<sup>2</sup> and \$17.7 billion (63%) in 2015 (Liter, 2016). However, these reserves could be used in a much better way. Instead of throwing them into the wind for the sake of false ponts, they could be used to create new factories and plants that would allow increasing output,

Author α: Kazakh - American University, Almaty, Kazakhstan. e-mail: askartau@mail.ru

Author o: Ph.D, Suleyman Demirel University, Almaty, Kazakhstan. e-mail: alibek.bissembayev@gmail.com

Author p: Ph.D, Kazakh National Research Technical University, Almaty. Kazakhstan. e-mail: askar.maulenov@gmail.com

Author O: Ph.D, Kazakh State Women's Teacher Training University, Almaty, Kazakhstan. e-mail: zh.dildebaeva@mail.ru

<sup>&</sup>lt;sup>1</sup> In August 1998 and August 2014 there was a significant devaluation of the Russian ruble, in the first case caused by the crisis in the South-East Asia and the technical default on Russian government bonds, and in the second case due to a sharp drop in oil prices and the introduction of sanctions on Russia by Western countries because of the joining of the Crimea.

<sup>&</sup>lt;sup>2</sup> This value is given without taking into account the funds of the National (Oil) Fund of Kazakhstan.

and solving the problem of unemployment and insufficient income for the majority of the population.

Therefore, the main purpose of this article was to identify the main factors influencing the equilibrium exchange rate of the tenge, the construction of the corresponding model and its econometric verification on the data of Kazakhstan.

There are many different methodologies for explaining the equilibrium exchange rate. Some of them use purchasing power parity for this purpose (Rogoff, 1996). Others associate the formation of the course with performance as in the model of Balassa-Samuelson, which implies that countries with rapidly expanding economies should tend to have more rapidly appreciating exchange rates (Balassa, 1964; Samuelson, 1964; Tica and Druzic, 2006). Others consider the dependence of the rate on terms of trade, openness of the economy and capital flows (Neary, 1988; Montiel and Peter, 1999). In the study, we use the equilibrium-rate model developed by Nurlan Nurseiit in 2004 (Nurseiit, 2004).

#### II. Research Methodology

As a model of the equilibrium exchange rate, we used the equilibrium exchange rate model (Nurseiit, 2004, pp. 104-105) for a short period of time, which has the following form:

$$E = \frac{\frac{M}{k} * (\dot{m} - \dot{y}) - \Delta B + I * (r_l + 1/t_l)}{CAB + DI + \Delta D - D * (r_D + 1/t_D)}$$
(1)

Where E is the nominal exchange rate of the national currency expressed in units of foreign currency; M - money supply in the economy of the country; k - money multiplier;  $\dot{m}$  - the growth rate of the money supply;  $\dot{v}$  - growth rates of nominal GDP;  $\Delta B$ -net sale of government securities; I - the amount of internal debt; CAB - current account balance of the balance of payments; DI - net inflow of direct investment; D - amount of external debt; r<sub>1</sub> - the rate on the country's domestic debt; r<sub>D</sub> - the rate of the external debt of the country; t<sub>1</sub> - the average maturity of a country's domestic debt; t<sub>D</sub> - the average maturity of a country's external debt.

following relationships are observed (Nurseiit, 2004, pp. 104). The exchange rate is appreciated with a decrease in the money supply (M), or an increase in the money multiplier (k), and when, the nominal GDP growth rates exceed the growth rates of the money supply  $(\dot{y} > \dot{m})$ .

The exchange rate is appreciated by the sale of securities ( $\Delta B$ ), a decrease in the size of domestic date (I) and the interest rate on domestic debt (r<sub>1</sub>) and the increase in the maturity of this debt ((t<sub>l</sub>).

The current appreciation of the national currency may be also due to an increase in the surplus of the current account of the balance of payments (CAB), a net inflow of direct investment (DI) and loans  $(\Delta D)$ , a decrease in external debt (D), interest rate  $(r_D)$ and an increase in the maturity of external debt (t<sub>D</sub>).



Source: National Bank of Kazakhstan, 2018

Figure 1: Dynamics of the nominal exchange rate of tenge

As a source of data on the money supply, the balance of the current account of the balance of

payments, foreign direct investment, the size of external debt and its rates, we used the data of the National Bank of Kazakhstan. As a source of data on domestic debt, the data of the Ministry of Finance of Kazakhstan, and as data on GDP growth, the data of the Committee on Statistics of Ministry of National Economy of Kazakhstan were used. The data were analyzed for the period from the 1st quarter of 2005 to the 4th quarter of 2016. (Table 1)

Table 1: Methods of Calculating Data

Symbol	Name	Calculation method
М	Money supply	The M2 monetary aggregate calculated at the nominal tenge rate by constant prices (2016q4 = 100%), \$ bn. The CPI of USA for All Urban Consumersis used as inflation rate.
MM	The growth rate of money supply	Calculated as the rate of change in M2 money supply in constant US dollars, %.
уу	Growth rates of the nominal GDP	The growth rate of nominal GDP, by the previous quarter,%. Before the nominal GDP was recalculated into US dollars.
K	The <b>m</b> oney multiplier	It is calculated as the ratio of money supply to the monetary base (reserve money).
DB	Net sale of government securities	Difference between sales and purchase of government securities in terms of dollars, \$ mln.
CAB	Current account of the balance of payments	Difference between export and import receipts on the current account, \$ mln.
DI	Net inflow of direct investment	Difference between inflow and outflow of net investment, \$ mln.
FA	Financial account	The balance of the country's financial account (excluding the reserve assets of the NBK\$ mln.
Debt	External debt	Accumulated external debt, \$ mln.
D_Debt	Increase in external debt	Increase in external debt, \$ mln.
Int_Debt	Domestic debt	The total domestic debt of the government and the National Bank at the reporting date, \$ bn.
RI	Average interest rate on domestic debt	The share of payment of internal debt to the accumulated amount of domestic debt, in %.
IID	Interest payments on domestic debt	Multiplying the accumulated domestic debt by the average interest rate on it, \$ bn.
Kurs	Exchange rate	Weighted average exchange nominal exchange rate, tenge to US dollar.

#### RESULTS AND DISCUSSION Ш.

As can be seen from the correlation matrix (Table 1), most explanatory variables are not strongly dependent on each other. The exception is the variable of external debt (DEBT) and the interest on domestic debt (IID), as well as money supply, the correlation between which are 89.8% and 80.6%, respectively. Also, a high correlation is observed between the interest on internal debt (IID) and money supply - about 60.7%, as well as between the growth of external debt (D Debt) and the growth rates of money supply (MM) - 61.8%, and also between money supply and money multiplier (K). Therefore, the variable of internal debt (IID) when used with variables external debt (DEBT) and money supply (M), the variable of the increase in external debt (D Debt) when used with money supply (M) or its growth rate (MM), as well as money supply when used with a money multiplayer (K), can give the wrong signs.

Table 2: Correlationmatrix

	KURS	М	MM	K	YY	DB	IID	CAB	D_DEBT	DEBT	DI	FA
KURS	1.000	0.097	-0.305	-0.171	-0.291	0.215	0.710	-0.239	-0.162	0.582	0.127	0.047
М	0.097	1.000	-0.291	0.687	0.040	0.073	0.607	0.289	-0.223	0.806	0.133	0.191
MM	-0.305	-0.291	1.000	-0.101	0.341	0.301	-0.316	0.029	0.618	-0.468	0.196	-0.382
K	-0.171	0.687	-0.101	1.000	0.156	-0.099	0.229	0.268	-0.120	0.336	0.083	0.385
YY	-0.291	0.040	0.341	0.156	1.000	-0.093	-0.139	0.025	0.127	-0.165	0.166	0.021
DB	0.215	0.073	0.301	-0.099	-0.093	1.000	0.282	0.043	0.231	0.187	0.294	-0.669
IID	0.710	0.607	-0.316	0.229	-0.139	0.282	1.000	-0.075	-0.190	0.898	0.137	0.041
CAB	-0.239	0.289	0.029	0.268	0.025	0.043	-0.075	1.000	-0.167	0.036	0.193	-0.277
D_DEBT	-0.162	-0.223	0.618	-0.120	0.127	0.231	-0.190	-0.167	1.000	-0.294	0.000	-0.331
DEBT	0.582	0.806	-0.468	0.336	-0.165	0.187	0.898	0.036	-0.294	1.000	0.151	0.135
DI	0.127	0.133	0.196	0.083	0.166	0.294	0.137	0.193	0.000	0.151	1.000	-0.128
FA	0.047	0.191	-0.382	0.385	0.021	-0.669	0.041	-0.277	-0.331	0.135	-0.128	1.000

Based on the available data for Kazakhstan for the period from the 1st quarter of 2004 to the 4th quarter of 2016, we obtained the following models (Table 2). The calculations were carried out using the method of least squares. The Generalized Method of Moments (GMM) was also used to verify the correctness of the calculations. All models, except the first one, are statistically significant. This is evidenced by a high coefficient of determination after adjustment (about 0.95), high F statistics (147 to 205), as well as Durbin-Watson statistics - within the allowed intervals.

The first model included almost all the variables that were presented in the functional mathematical model we tested (Table 3). The exception was the average maturity of internal and external debt and the rate of external debt, for which data were not available. In addition, for better testing the model of the equilibrium nominal exchange rate (1), we created the variable MMY (= M\*(mm-yy)). In theory, it should show a positive correlation with the exchange rate.

Virtually all variables (model show 1) theoretically expected signs. This indicates the correctness of the proposed theoretical model. Exception are observed by variables such as net sale of government securities (DB), the net inflow of direct investment (DI), and the balance of the financial account (FA). They show the wrong sign due to the high multicollaterality with the variable of exchange rate of tenge to US dollar. However, these are the results of the observed situation in Kazakhstan for the analyzed period of time (from 2004 to 2016), and not the short comings of the model itself (Table 2). According to theory, the net sale of government securities, reducing the money supply in the economy, should have led to a depreciation of the national currency. The same trend would have to be observed with respect to the inflow of foreign investment (DI) or the financial account (FA).

The first wrong sign of net sale of government securities (DB) is explained by the fact that the offbalance sheet operations of the National Bank are most likely not reflected in the data used. The second wrong sign was unexpected, since everyone was used to believe that the inflow of foreign currency into the country favorably affects the balance of payments and the stability of the national currency. Although attracting foreign direct investment in the early years of oil and gas development (in the 1990s) led to a significant inflow of foreign currency into the country, but the situation has changed radically now. At the present time, the rate of inflow of foreign direct investment has slowed considerably. This is due to an ever larger net outflow of dividends on previously invested investments. Hence, the conclusion that the emphasis on foreign investment in order to support the stability of the tenge has not proved itself in the long term. At the same time, certain problems of autocorrelation of residuals and heteroskedness were characteristic for this model

(low Durbin-Watson = 0.615), which led to a decrease in the efficiency of regression coefficients and reduced the statistical reliability of the main parameters of the model (as R-squared, t statistics, F statistics and etc.). Therefore, in subsequent models, we used first-order AR (1) regression models in order to eliminate these problems.

In the second model, we excluded weakly significant variables (MMY, CAB), and the variables showing incorrect signs because of multicollinearity (M, IID). The variable money supply (M) showed incorrect sign because of the inclusion of the variable D Debt in the equation, and the variable IID - because of the inclusion of the variable Debt (Model 2). On the contrary, we included a variable of real GDP growth (yy) in the model. As a result of these actions, the basic statistical parameters of the model have improved noticeably (adjusted R-squared increased up to 95.2, Durbin-Watson statistics to 1.788, and F-statistic to 147). Signs in explaining variables are preserved, and the coefficients for explanatory variables are adjusted in favor of their greater reliability.

The model shows that the exchange rate in the previous time (KURS (-1)), money multiplier (K), the growth rate of real GDP (yv), the change in external debt (D DEBT) and to some extent the amount of external debt (DEBT) are the main factors determining the dynamics of the equilibrium exchange rate of tenge. At the same time, the exchange rate reached in the previous time, and the amount of the external debt contributed to the weakening of the tenge, as the growth of money multiplier, the growth rate of real GDP and the growth of external debt led to the strengthening of its nominal rate.

To verify the correctness of this model, we calculated it using the Generalized Method of Moments (GMM) method. This method makes it possible to improve the normal ordinary squares in the presence of both heteroskedasticity autocorrelation (HAC) of unknown form (Arellano and Bond, 1991). However, the basic statistical parameters of the model did not change, and only the coefficients of the explanatory variables were somewhat refined. The obtained result confirms the correctness of the specifying of the model.

Then we excluded the variable external debt (DEBT), which strongly correlated with the exchange rate of the national currency, from the model (model 3). This positively affected the model, which was reflected in the improvement of statistical coefficients. The coefficient of determination increased to 95.5, F-statistic grew to 205.4, and S.E. of regression decreased to 12.9. At the same time, the value of the regression coefficients remained approximately at the same level, and Durbin-Watson statistics improved to 1.82. The use of the GMM method did not lead to a significant change in the model. The major statistics of the model have not changed noticeably. The use of this method only allowed us to refine the coefficients of regression for explanatory variables.

An exception to the variable YY led to some improvement in the F-statistic model (model 4). The remaining parameters remained without significant changes. Using of the GMM method allowed refining the

regression coefficients, but did not noticeably affect the basic statistical parameters of the model.

For the conclusion, it should be noted that the high statistical parameters of the models obtained indicate a correct specification of the model of the equilibrium nominal exchange rate of the tenge and an adequate choice of explanatory variables.

Table 3: De	pendence of	f the Nomina	l Tenae Rate on	Various Factors

	Model 1	Mod	del 2	Mod	lel 3	Mod	del 4
	LS	LS	GMM	LS	GMM	LS	GMM
KURS(-1)		0.966746	0.984237*	0.997502*	1.00935*	0.971907*	0.960900*
MMY	1.44E-05						
YY		-0.340393**	-0.2152****	-0.413403*	-0.2683***		
K	-46.91161*	-15.71669**	-10.80830*	-10.95190**	-6.3441****	-13.6587***	-9.807134**
IID	148.2687*						
CAB	-0.003392						
D_DEBT	-0.001884	-0.001406**	-0.0008****	-0.001503**	-0.00091***	-0.00143**	-0.001339**
DEBT		0.000165	0.0001****				
С	190.9062*	31.6686***	18.370****	35.0731***	18.904****	45.1806***	36.47716**
AR(1)		0.31787***	0.311301**	0.32859***	0.35527**	0.44387**	0.395390*
R-squared	0.644040	0.958748	0.955857	0.962515	0.959986	0.955575	0.954808
Adjusted R-squared	0.600631	0.952235	0.948887	0.957829	0.954984	0.951241	0.950399
S.E. of regression	57.32617	13.44559	13.83140	12.90923	13.33755	13.88106	14.00042
F-statistic	14.83631	147.1954		205.4177		220.4756	
Durbin-Watson stat	0.615773	1.788414	1.657918	1.826739	1.688570	1.784562	1.650280
J-statistic			1.702504		3.660651		3.235525

Note: \* Probability is less than 1%, \*\* - less than 5%, \*\*\* - less than 10%, \*\*\*\* - less than 15%

#### IV. Conclusions

An empirical test of the theoretical model of equilibrium exchange rate developed by Nurseiit (2004, p. 104) on quarterly data of Kazakhstan for the period from the 1st quarter of 2005 to the 4th quarter of 2016 show the correctness of its main conclusions. This primarily concerns the list of explanatory factors and their behaviours, as well as the features of their interactions.

From the built empirical models it follows that the most significant factors determining the equilibrium rate of the tenge are the current dynamics of the exchange rate, the size of money multiplier, the growth rates of real GDP, the amount of increase of external debt and, to some extent, the amount of accumulated external debt.

Factors such as the previous level of the exchange rate, and the accumulated amount of external debt contribute to the weakening of the tenge, and the coefficient of the money multiplier, the growth rate of the economy and the amount of increase of external debt lead to its strengthening.

As for other factors, such as the money supply. net inflow of direct investment and the size of the current account, they, as a rule, did not significantly affect the tenge's stability. This is due to the fact that the NBK artificially maintained the tenge's exchange rate in separate, rather long periods of time. In addition, the National Bank often uses the off-balance sheet operations, which are not always reflected in the official statements. In addition, in recent years there have been sharp changes in the rates of inflow of foreign direct investment. They noticeably slowed down. At the same time, in order to maintain the exchange rate of the national currency, the state not only conducted currency interventions at the expense of the previously accumulated gold and currency reserves, but also often resorted to selling part of the property of state-owned enterprises.

#### References Références Referencias

- 1. Arellano, Manuel and Stephen R. Bond. 1991. "Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations." Review of Economic Studies. April, 58: 2. pp. 277-97.
- 2. Arystanbekov K., 2015. "Is there a connection between the early elections and the tenge rate?" February 19<sup>th</sup>, 2015. https://forbes.kz/finances/ finance.
- 3. Balassa, Bela. 1964. "The Purchasing Power Parity Doctrine: A Reappraisal." Journal of Political Economy 72: 584-96.
- Kase, 2018. "Annual results of Kazakhstan's transition to free floating tenge-National Bank." Kazakhstan Stock Exchange JSC. http://kase.kz/ru/ news/show/87917/ (April 7, 2000).

- Liter, 2018. \$39.7 billion was sent by the National Bank of Kazakhstan to support the tenge rate in 2014-2015. The media portal of the social and political newspaper "Liter". March 31, 2016. https:// liter.kz/ru/news/show/18612- 39 7 mlrd napravil nacbank rk na podderzhku kursa tenge v 2014-2015 gg.
- Reuters, 2015. Gordeyeva, M. and Solovyov, D. "Kazakhstan floats tenge, currency tumbles." https:// www.reuters.com/article/us-kazakhstan-tenge-id USKCN0QP0PN20150820 (August 20, 2015).
- Rogoff K. 1996. "The Purchasing Power Parity Puzzle". Journal of Economic Literature, Vol. 34, No. 2. (Jun., 1996), pp. 647-668.
- Samuelson, Paul A. 1964. "Theoretical Notes on Trade Problems," Review of Economics and Statistics 46: 145-54.
- Tica, J. & Druzic, I. 2006. "The Harrod-Balassa Samuelson Effect: A Survey of Empirical Evidence", EFZG Working Paper Series, No. 06-07. Univerosty of Zagreb.
- 10. Montiel H., Peter, J. 1999. "Exchange rate misalignment: Concepts and measurement for developing countries". Washington, DC: World Bank.
- 11. Neary, P., 1988. "Determinants of the Equilibrium Real Exchange Rate," American Economic Review, Vol. 78(1), pp. 210-215.
- 12. Nurseiit N. A. 2004. "Ensuring the stability of the national currency: Theory and practice of monetary policy". Almaty: Dyuir.



# Global Journal of Management and Business Research: C Finance

Volume 18 Issue 5 Version 1.0 Year 2018

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# The Study of Fund Disbursement by NABARD in Uttar Pradesh

By Dr. Sandeep Kumar Kesarwani & Dr. Satish Chandra Tiwari

ICFAI University

Abstract- Agriculture is major source of employment and food to our country but even this sector is facing various problems from many years. The problem of availability of credit is one of them, due to this problem the agricultural production get affected every year. The Present Study focuses over the fund disbursement to agricultural sector by NABARD in Uttar Pradesh. The Present Study indicates the preferences of NABARD in financial assistance to different sectors including agriculture sector. The present paper is an attempt by the researchers to examine the role of NABARD in agriculture in Uttar Pradesh through financial disbursements made by it directly. The study is purely based on secondary data which were analyzed with the help of mean, percentage, CAGR, one-way ANNOVA, Post Hoc Test, Tukey etc. to draw the results. The study also exhibited that NABARD continuously focuses on NFS, and farm mechanization, however, agriculture which assumes great significance in present day scenario, is yet to get its dues from Bank. It was established through the study that there is a significant difference in refinance disbursement of NABARD through Purpose and Programme-wise to various sectors.

Keywords: agricultural credit, refinancing, non farm sector, NABARD.

GJMBR-C Classification: JEL Code: G10



Strictly as per the compliance and regulations of:



© 2018. Dr. Sandeep Kumar Kesarwani & Dr. Satish Chandra Tiwari. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

# The Study of Fund Disbursement by NABARD in Uttar Pradesh

Dr. Sandeep Kumar Kesarwani α & Dr. Satish Chandra Tiwari σ

Abstract- Agriculture is major source of employment and food to our country but even this sector is facing various problems from many years. The problem of availability of credit is one of them, due to this problem the agricultural production get affected every year. The Present Study focuses over the fund disbursement to agricultural sector by NABARD in Uttar Pradesh. The Present Study indicates the preferences of NABARD in financial assistance to different sectors including agriculture sector. The present paper is an attempt by the researchers to examine the role of NABARD in agriculture in Uttar Pradesh through financial disbursements made by it directly. The study is purely based on secondary data which were analyzed with the help of mean, percentage, CAGR, one-way ANNOVA, Post Hoc Test, Tukey etc. to draw the results. The study also exhibited that NABARD continuously focuses on NFS, and farm mechanization, however, agriculture which assumes great significance in present day scenario, is yet to get its dues from Bank. It was established through the study that there is a significant difference in refinance disbursement of NABARD through Purpose and Programme-wise to various sectors.

Keywords: agricultural credit, refinancing, non farm sector, NABARD.

#### I. Introduction

he major problem in agricultural sector is unavailability of finance at right time, due to this farmer faces difficulty to arrange resources in cultivation on time and sometime they failed to arrange the financial support for their farming activities which results in poor production. If farmers avail the credit facilities in proper amount on time then the scenario of agricultural sector may be changed.

This argument has been empirically examined in many studies these are-"Despite the significant strides achieved in terms of spread, network and outreach of rural financial institutions, the quantum of flow of financial resources to agriculture continues to be inadequate (Golait, 2007)". "This situation brings out the fact that the existing institutional arrangement for credit delivery is not adequate and suitable to address the agrarian distress in the country (Barah and Sirohi, 2011)". "Reserve Bank of India (2006) also reported that one common factor that can be seen

across all regions is that manifestation of economic distress is primarily through indebtedness." "In this context it is pertinent to mention that the Planning Commission of India in the Approach Paper to 11th Five Year Plan 2007-2012 observed that 'there is evidence that farm debt is increasing much faster than farm incomes' (Government of India 2006)". These studies focuses that there is still need of reform.

The National Bank for Agricultural and Rural development has been set up as an apex body to support and regulate agricultural credit in India. But the present study is covering the role of NABARD in finance disbursement to Uttar Pradesh only.

Uttar Pradesh is the largest food grain producing State of the country contributing about 19% total food grains of the country. It is the highest producer of wheat and second highest producer of rice. The State is also the largest milk producing state, accounting for nearly 17 per cent of the total milk production. U.P is the second largest sugarcane producer of India after Maharashtra accounting for about 28% of total production in the country.

## II. OBJECTIVE AND HYPOTHESIS

As discussed in the previous sections the impact of availability of finance to agricultural sector:

- 1) To know the role of NABARD in refinance disbursement to agricultural sector in Uttar Pradesh.
- To know the role of NABARD in refinance to various activities in Uttar Pradesh.

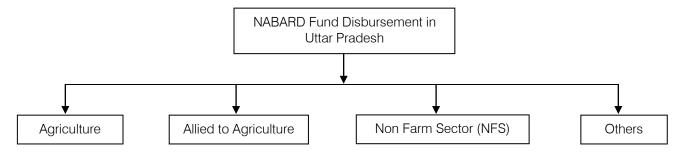
Based on these observations, we have formulated a hypothesis, which is as follows:

- HO: There is no significant difference in financial assistance among different agricultural activities plans and programs of NABARD in Uttar Pradesh.
- ➤ H1: There lies a significant difference in financial assistance among different agricultural activities plans and programs of NABARD in Uttar Pradesh.

As aforementioned, the NABARD is an apex institution in agricultural rural development in India. That is why the hypothesis has been framed to know the contribution of NABARD in Uttar Pradesh.

#### III. Research Methodology

The total disbursements by NABARD in Uttar Pradesh have been divided into four categories then analyses have been conducted.



The Conclusive-Descriptive-Cross Sectional research design have been adopted and Sample have been collected from annual Data Considered from 2002-03 to 2011-12. The Nature of data is

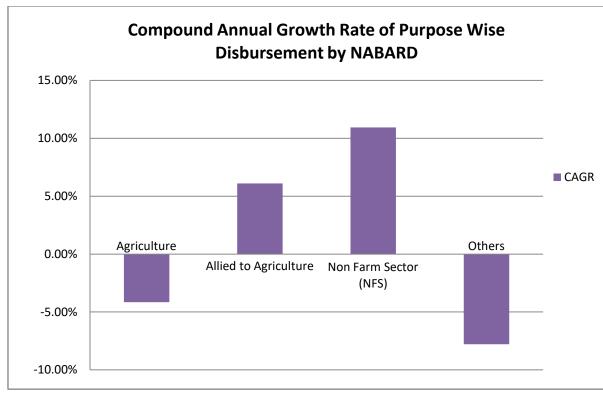
Secondary and Source of data from annual report of NABARD and SLBC and Statistical tools have been used one way-Anova, Tukey Test, & Trend Analysis.

# IV. Analysis and Testing of Hypothesis

Table 1: Purpose wise disbursement by NABARD in Uttar Pradesh from (1995-96 to 2011-12) (Amount in Lakh)

Sector/Purpose/ Activity	2000- 01	2001- 02	2002- 03	2003- 04	2004- 05	2005- 06	2007- 08	2008- 09	2009- 10	2010- 11	2011- 12	CAGR
	•				Agricultur	re						
Minor irrigation	9794	15791	18436	18463	12841	6108	9857	5448	10688	7719	4794	
Land development	1	10	6103	427	1814	663	2036	9746	2196	90	154	
Farm Mechanisation	43009	25094	18724	12011	10371	42971	26843	12802	19188	18880	15307	
Plantation & Horticulture	3436	7498	5916	6244	8312	10263	6216	8342	8242	8130	8381	
Other Agriculture	5654	5097	4395	26062	53036	40223	22484	4784	9940	10041	10137	
Total	61894	53490	53574	63207	86374	100228	67436	41122	50254	44860	38773	-4.16%
				Allie	d to Agric	ulture						
Fisheries	280	427	389	353	337	512	268	121	1008	210	110	
Animal Husbandry	19173	30791	34610	26531	29289	24552	15824	14525	27687	26459	24662	
Poultry							3143	6060	7737	8886	10008	
Storage/Market Yard							55	1234	1307	96	2547	
Waste land Development (Forestry)							117	Nil	Nil	Nil	Nil	
Total	19453	31218	34999	26884	29626	25064	19407	21940	37739	35651	37327	6.10%
				Non F	arm Secto	or (NFS)						
SGSY Non Farm Sector	5406	10405	6177	5137	7384	7460	3145	1322			1213	
SC-ST-AP- Non Farm Sector							648	167				
Non Farm Sector	5286	6818	21522	25398	22090	20104	24400	21617	25253	49697	32295	
Total	10692	10692	27699	30535	29474	27564	28193	23106	25253	49697	33508	10.94%
					Others							
Non Conventional Energy (Bio Gas Plant)							Nil	Nil	2	1		
Self help Group	559	813	1292	1553	1883	2043	1815	4022		1760		
AH (Others)							624	701	1295	518	123	
Agriclinics and Agri Business							10	Nil			106	
Total	559	813	1292	1553	1883	2043	2449	4723	1297	2279	229	
Total Disbursement	92598	102744	117564	122179	147357	154899	117485	90891	114543	132487	109837	-7.79%

(Sources: Statistical Statement of NABARD)



Graph 1

The analysis of Purpose-wise refinance disbursement by NABARD with the help of CAGR shows that the Non-Farm Sector had been the priority areas for the bank with a highest CAGR of 10.94% during the period under study. This Sector had been on the top in almost all the years on the basis of absolute amount of disbursement. Allied to agriculture sector come next with a CAGR score of 6.10% followed by Agriculture Sector (CAGR -4.16%), having the lowest share in assistance in terms of both percentage and absolute amount. The Other Sector is the only region exposing a lowest negative CAGR of -7.79%. Hence, it can safely be concluded that allied to agriculture sector and Non-Farm Sector constitute the preference Sector in the eyes of the bank as far as the agriculture and rural area is concerned. The Purpose-wise distribution of finance can be visualized with the help of Figures-which express that the Non-farm sector has been a priority sector for NABARD particularly after 2005-06 to 2010-12 though, its share declined during 2011-12 in comparison to 2010-11. The figure is the proof of the fact that Agriculture Sector is the most neglected Sector while Allied to agriculture and Non-Farm Sector got assistance better than the other sector.

Table 1.2 (b): ANOVA

Expenditure									
	Sum of Squares	Df	Mean Square	F	Sig.				
Between Groups	1.886E10	3	6.286E9	48.123	.000				
Within Groups	5.225E9	40	1.306E8						
Total	2.408E10	43							

Mean Square Source: Researcher's Calculations Note: \*Significant at 5 per cent level of significance

Table 1.2 (c): Post Hoc Tests

	Multiple Comparisons									
		Expenditur	e Tukey HSD							
(I) Sector	(J) Sector	Mean	Std. Error	Sig.	95% Confidence Interval					
(I) Sector	(J) Sector	Difference (I-J)	Sta. Elloi	Sig.	Lower Bound	Upper Bound				
	Allied to Agriculture	31082.18182 <sup>*</sup>	4.87348E3	.000	18019.1995	44145.1641				
Agriculture	Non farm sector	33163.54545*	4.87348E3	.000	20100.5631	46226.5278				
	Others	58372.00000*	4.87348E3	.000	45309.0177	71434.9823				
Allied to	Agriculture	-3.10822E4*	4.87348E3	.000	-44145.1641	-18019.1995				
	Non farm sector	2081.36364	4.87348E3	.974	-10981.6187	15144.3459				
Agriculture	Others	27289.81818*	4.87348E3	.000	14226.8359	40352.8005				
Non farm	Agriculture	-3.31635E4*	4.87348E3	.000	-46226.5278	-20100.5631				
sector	Allied to Agriculture	-2081.36364	4.87348E3	.974	-15144.3459	10981.6187				
Sector	Others	25208.45455 <sup>*</sup>	4.87348E3	.000	12145.4722	38271.4369				
	Agriculture	-5.83720E4*	4.87348E3	.000	-71434.9823	-45309.0177				
Others	Allied to Agriculture	-2.72898E4*	4.87348E3	.000	-40352.8005	-14226.8359				
	Non farm sector	-2.52085E4*	4.87348E3	.000	-38271.4369	-12145.4722				

<sup>\*</sup> The mean difference is significant at the 0.05 level

Table 1.2 (d): Expenditure

	Tukey HSD										
Sector	N	Subs	set for Alpha =	= 0.05							
Sector	IN.	1	2	3							
Others	11	1.7382E3									
Non Farm Sector	11		2.6947E4								
Allied to Agriculture	11		2.9028E4								
Agriculture	11			6.0110E4							
Sig.		1.000	.974	1.000							

Means for groups in homogeneous subsets are displayed

One way ANOVA is conducted at 95% confidence level to compare the expenditure of NABARD across various sectors such as Agriculture, Allied to agriculture, Non-farm sector, and others from the financial year 2000-01 to 2011-12. The ANOVA table shows a F-value of 48.123 with significance value 0.000. This implies that the null hypothesis is rejected and the alternative hypothesis is accepted. Thus there is significant disparity in financial assistance among different agriculture Purposes and programs of NABARD. Then Tukey test is conducted to carry out a multiple pair wise comparison. The results of Tukey test show that there is significant difference in NABARD's refinancing between Agriculture & Allied to agriculture, Agriculture & Non-farm sector, and Agriculture & other sectors. But with the significance value of 0.974, Tukey test that there is no significant difference shows in NABARD's expenditure between allied to agriculture & Non-farm sector.

### Results and Discussions

The analysis of Purpose - wise refinance disbursement by NABARD with the help of CAGR shows that the Non-Farm Sector had been the priority areas for the bank with a highest CAGR of 10.94% during the period under study. This Sector had been on the top in almost all the years on the basis of absolute amount of disbursement. Allied to agriculture sector comes next with a CAGR score of 6.10% followed by Agriculture Sector (CAGR-4.16%), having the lowest share in assistance in terms of both percentage and absolute amount. The Other Sector is the only region exposing a lowest negative CAGR of -7.79%. Hence, it can safely be concluded that allied to agriculture sector and Non-Farm Sector constitute the preference Sector in the eyes of the bank as far as the agriculture and rural area is concerned. The Purpose-wise distribution of finance can be visualized with the help of Figure-which express that the Non-farm sector has been a priority sector for NABARD particularly after 2005-06 to 2010-12 though, its share declined during 2011-12 in comparison to 2010-11. The figure is the proof of the fact that Agriculture Sector is the most neglected Sector while allied to agriculture and Non-Farm Sector got assistance better than the other sector. From the study of Purpose wise different agricultural plans and programmes in the disbursement of funds it has been seen that NABARD has disbursed less money towards farm sector as compared to Non-farm and allied to agriculture sector.

#### References Références Referencias

Arrawatia M. A. (2010) Role of NABARD in Development of Rural India, available at: http://www.

- indianmba.com/Faculty\_Column/FC1219/fc1219.ht ml
- 2. Golait, Ramesh (2007) Current issues in agriculture credit in India: An Assessment, Reserve Bank of India Occasional Papers, 28, No. 1.
- 3. NABARD (2008) Annual Report 2007-08, National Bank for Agriculture and Rural Development, Head Office, Mumbai.
- 4. URL: http://www.nabard.org/databank/pdf/Statistical%20Statements%2009-101.pdf.
- 5. GOI (2008), Economic Survey 2007-08, Ministry of Finance, Government of India.
- Mohan, Rakesh (2004) Agricultural credit in India: Status, issues and future agenda, Reserve Bank of India Bulletin, November.
- 7. Planning Commission (2007a), Report of the Steering Committee on Agriculture for 11<sup>th</sup> Five-Year Plan, Yojana Bhavan, New Delhi.
- 8. Report of Ministry of Agriculture State of Indian Agriculture 2012-13.

# This page is intentionally left blank



# Global Journal of Management and Business Research: C Finance

Volume 18 Issue 5 Version 1.0 Year 2018

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Impact of Psychological Biases of Investors in Financial Satisfaction

# By Muhammad Nauman Sadiq, Raja Ased Azad Khan, Muhammad Kamran Bashir & Muhammad Ejaz

Riphah International University

Abstract- Purpose: The purpose of this study is to investigate the impact of investors behavioural biases in their satisfaction with current financial position.

Design/Methodology/Approach: Based on 207 individual investors, present study individually regressed each investors behaviour bias with financial satisfaction.

Findings: The results of the study shown behavioural biases like overconfidence and categorization tendency has significant positive impact on investors financial satisfaction levels. Others behavioural biases like Reliance on experts, Self-control bias, Budgeting tendency, Adaptive tendency has no significant impact on investors levels of financial satisfaction.

*Practical Implications:* Financial institutions which provides the financial products and services to clients needs to understand the behaviour of investors regarding different financial planning and investment choices. The findings of present study have implications for financial service providers.

Originality/Value: The relationship of psychological biases of individual investors with their financial satisfaction is widely researched in the literature. But in Pakistan no study is observed in this context. Present study fills the gap in literature with the perspective of individual Pakistani investors.

Keywords: financial satisfaction, behavioural biases, individual investors, pakistan.

GJMBR-C Classification: JEL Code: G19



Strictly as per the compliance and regulations of:



© 2018. Muhammad Nauman Sadiq, Raja Ased Azad Khan, Muhammad Kamran Bashir & Muhammad Ejaz. This is a research/ review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

# Impact of Psychological Biases of Investors in Financial Satisfaction

Muhammad Nauman Sadiq α, Raja Ased Azad Khan σ, Muhammad Kamran Bashir ρ & Muhammad Ejaz α

Abstract- Purpose: The purpose of this study is to investigate the impact of investors behavioural biases in their satisfaction with current financial position.

Design/Methodology/Approach: Based on 207 individual investors, present study individually regressed each investors behaviour bias with financial satisfaction.

Findings: The results of the study shown behavioural biases like overconfidence and categorization tendency has significant positive impact on investors financial satisfaction levels. Others behavioural biases like Reliance on experts, Self-control bias, Budgeting tendency, Adaptive tendency has no significant impact on investors levels of financial satisfaction.

Practical Implications: Financial institutions which provides the financial products and services to clients needs to understand the behaviour of investors regarding different financial planning and investment choices. The findings of present study have implications for financial service providers.

Originality/Value: The relationship of psychological biases of individual investors with their financial satisfaction is widely researched in the literature. But in Pakistan no study is observed in this context. Present study fills the gap in literature with the perspective of individual Pakistani investors.

Keywords: financial satisfaction, behavioural biases, individual investors, pakistan.

#### I. Introduction

mong other features of life satisfaction, individual satisfaction with their financial matters or financial satisfaction is an imperative factor for life satisfaction or subjective will-beings. "financial satisfaction is a subjective assessment of the adequacy of one's financial resources or financial situation" (Hira & Mugenda, 1998). Definition and measurement of the financial satisfaction always endure under the discussion, but no ultimate definition or measurement method has been conferred upon which consensus of researchers developed (Joo & Grable, 2004).

Financial satisfaction of individual investors is based on their financial decisions. Now a day individual investor has numerous investment opportunities to employ their funds. However due to the bounded rationality investors faced the influenced of various situation and personal factors. In-depth understanding

Author α ω: MS Finance, Riphah International University, Islamabad, Pakistan. e-mail: nauman sns22@yahoo.com

Author  $\sigma$ : MS Management Science, Federal Urdu University of Art, Sciences, and Technology (FUUAST), Islamabad, Pakistan.

Author p: MS Management Science, Hamdard University, Islamabad, Pakistan.

of these factors in essential to understand how these factors caused the financial satisfaction or financial dissatisfaction (Simon, 1993).

In Pakistan, stable economic condition is creating the positive impact on the behaviour of people toward investment. Along this "private media revolution, effective marketing of financial institutions for different products create a sense of investment" (world bank 2015-2016). Sahi (2017) conducted the similar study in India and consider the similar situation and raise question when household income is increasing, their saving is also increasing. "but are the savings being invested wisely? Are people able to meet their financial planning goals? Is the financial consumer in India, satisfied with the management of his/her finances"? Present study is also designed to answer the following questions and to investigate the financial levels of consumers, and to investigate the impact of psychological biases of investors in financial satisfaction with the perspective of Pakistan. No study has been led to check the investors psychological factors and their socio-economic factors in relation with their financial satisfaction. Present study is conducted to fill the gap in literature with the perspective of Pakistan. Present study used the investors psychological biases (overconfidence bias categorization tendency, Reliance on experts, Self-control bias, Budgeting tendency, Adaptive tendency) as independent variable and investors financial satisfaction as dependent variable. The findings of present study have implications for financial service providers.

# II. LITERATURE REVIEW

#### a) Overconfidence

Overconfidence bias was first described by Oskamp (1965), as a factor inducing the decision-making process of people in different areas of life. Overconfidence Bias is a propensity to overestimates the own capabilities about some situation. In behavioural finance literature, overconfidence bias is the most debating behavioural / psychological bias (Michailova, 2010).

It can be defined as the measurement of the difference between knowledge that people think they have and the actual knowledge that they have (Dobelli, 2014). In overconfidence bias people misapprehend their knowledge, abilities, availability of information and skills (Tapia & Yermo, 2007). Study

finds "Overconfidence bias, self-control bias, and budgeting tendency have a positive and significant association with financial satisfaction" (Sahi, 2017). Overconfident individuals hold high views about their ability and personal belief, which lead to "positive expectations and optimism about their endeavors, and help them to achieve certain financial goals that would enhance their financial satisfaction" Barber & Odean, 1999; Szyszka, 2013).

Therefore, on the bases of above arguments the following hypothesis has been formulated:

Hypothesis (1): Overconfidence bias is significantly associated with financial satisfaction.

#### b) Reliance on Experts

The second variable which is tested as a factor influencing the investors financial satisfaction is their reliance on experts. Reliance on expert can be define as "the tendency to take on the opinion of someone who's seen as an authority on a subject" (Evatt, 2008). Reliance on expert tendency revealed investors things, financial experts have more financial knowledge and expertise in financial matters, beside this most of time people select their area of investment or stock or a mutual funds because of their boss or friend, about which they think he was a good boy (Dutt, 1999). Low level of financial knowledge caused mental stress and financial dis-satisfaction which caused inability of management of funds (Grable & Joo, 1999). Meanwhile people find satisfaction by relying on experts (Srinivas, 2000). Another study finds that "Reliance on expert bias has a positive and significant association with financial satisfaction for those investors with more than 5 years of investment experience and a negative but significant relationship for those investors with 2-5 years of investment experience, thereby indicating that time plays a crucial role in the ability of investors to build trust with their financial advisors".

Therefore, on the bases of above arguments the following hypothesis has been formulated:

Hypothesis (2): Reliance on expert bias is significantly associated with financial satisfaction.

#### c) Categorization Tendency

Categorization tendency means to categories the source and use of funds, and categories the money into groups. This categorization tendency is called mental accounting (Shefrin & Thaler, 1988). People categories their wealth into current assets, current income, and future income. This categorisation positively associated with investors financial satisfaction (Thaler, 1999). Categorization effect caused to higher satisfaction (Mogilner et al., 2008). Study shown categorization tendency is advantageous to people because it helps to categories the funds based on purpose. Another study shown "For professionally educated individuals, categorization tendency has a

positive and significant association with financial satisfaction". Therefore, on the bases of above arguments the following hypothesis has been formulated:

Hypothesis (3): Categorization tendency is significantly associated with financial satisfaction.

#### d) Self-Control Bias

Self-control bias is a behavioral tendency which instigated someone to postponed consumption today for future saving (Sahi, 2017). Self-control comprises an "internal conflict" between the "rational and emotional aspects of the individual's personality" (Shefrin & Thaler, 1988). Saving behaviour has positive relationship with financial satisfaction (Parrotta & Johnson, 1998: Cummins & Nistico, 2002). Study shown self-control caused current investment to increase saving in future and increase financial satisfaction (Xiao et al. 2006). Another study finds "Overconfidence bias, self-control bias, and budgeting tendency have a positive and significant association with financial satisfaction" (Sahi, 2017). Therefore, on the bases of above arguments the following hypothesis has been formulated:

Hypothesis (4): Self-control bias is significantly associated with financial satisfaction.

### e) Budgeting Tendency

Budgeting tendency is the tendency of plan for saving and investment. Budgeting tendency of investors can be used as a behavioural bias to find the investors financial satisfaction (Sahi, 2017). Study shown Budgeting tendency is influenced the financial satisfaction (Titus et al.1989). Another study finds "Overconfidence bias, self-control bias, and budgeting tendency have a positive and significant association with financial satisfaction" (Sahi, 2017). However, another study find that investors budgeting tendency has no significant relationship with financial satisfaction (Xiao et al. 2006). Therefore, on the bases of above arguments the following hypothesis has been formulated:

Hypothesis (5): Budgeting tendency is significantly associated with financial satisfaction.

#### Adaptive Tendency

Adaptive tendency is the tendency to adopt the changing financial necessities with the passage of time (Sahi, 2017). People change their investments goals and investments patterns based on market situation. Individual tendency to adopt the changing market conditions caused them to meet their sets goals and caused financial satisfaction (Cummins & Nistico, 2002). Another study also supports these results and concluded people should follow the changing market conditions (Soros, 2003). However, study conducted in India shown that Adaptive

tendency has no effect on investors level of financial satisfaction (Sahi, 2017).

Therefore, on the bases of above arguments the following hypothesis has been formulated:

Hypothesis (6): Adaptive tendency is significantly associated with financial satisfaction.

# III. THEORETICAL FRAMEWORK



#### IV. METHODOLOGY

Present study is designed to determine the impact of investors psychological biases in their financial satisfaction. Quantitative techniques were applied to determined psychological biases of each investor and their levels of financial satisfaction. Similar study conducted in India shown that "Only the "investing classes" or people having the financial savings and the capacity to invest in the various instruments were of significance to this study" (Gupta, 1991). To make it more specific present study interact the people having investment experience in different financial instruments.

Nonprobability sampling technique was used for this study. In Nonprobability sampling technique, Convenience sampling method was used to select the respondents. To collect the data from respondent's study used the questionnaire. Questionnaire were distributed among the people who were willing and convenience to fill the questionnaire. Condition pertains with the selecting of each respondent was that they should have investment experience in any financial instrument. Study interact 250 investors and distribute

questionnaire, among which 220 questionnaires were received, 13 questionnaires were find incomplete, so study used 207 sample size.

Present study used the investors psychological biases (e.g. Overconfidence bias, Reliance on expert bias, Categorization tendency, Budgeting tendency, Self-control bias, Adaptive tendency) as independent variable, and financial satisfaction as dependent variable. To measure the investors psychological biases present study used the scale developed by Sahi (2017). Where IFDFW Scale was used for measuring the financial satisfaction or financial well-being.

## V. Results and Discussion

The first step in the data analysis was the reliability checking of the instruments. Studies shown that questionnaire must produce the reliability coefficient ranging from .5 to .80 to shown the consistency (Pedhazur, 1982). Table 1 shown the Cronbach's coefficient alpha above from 50 for each item which shown the reliability of the instruments.

Table 1: Reliability Statistics

Construct	Number of Items	Reliability
Overconfidence Bias	4	.601
Reliance on Expert Bias	4	.569
Categorization Tendency	2	.543
Self - Control Bias	3	.680
Budgeting Tendency	2	.597
Adaptive Tendency	3	.706
Financial Satisfaction	8	.704

Multiple regression was conducted with investors behavioural biases as independent variable and investors financial satisfaction as dependent variable. Significant regression equation found with a R2 .079. Only two variable shown significant impact on investors financial satisfaction. Overconfidence bias and categorisation tendency shown significant positive influence on investors financial satisfaction. Beside conducting regression test all conditions of regression were met. No multicollinearity finds as tolerance values were below 2 and ALL VIF values were below 10. No Autocorrelation, Durbin-Watson = 1.982

Table 2: Hypothesis testing results: simple regression of individual investor biases on financial satisfaction

Model	Unstandardized Coefficients		Standardized	Adjusted	F-Statistic	+	Sig.	Result
	В	Std. Error	Coefficients	R-square	1 -otatistic	·	oig.	ricouit
Overconfidence Bias	.264	.131	.139	.015	4.057	2.014	.045	Accept
Categorization Tendency	.263	.100	.181	.028	6.934	2.641	.009	Accept
Reliance on Expert Bias	134	.155	060	001	.751	867	.387	Reject
Self-Control Bias	.135	.072	.130	.012	3.514	1.874	.062	Reject
Budgeting Tendency	073	.106	048	003	.471	686	.493	Reject
Adaptive Tendency	.031	.114	.019	006	.076	.276	.783	Reject

Table 2 shown the results of simple regression of individual investor biases on financial satisfaction. The hypothesis that investors behavioural biases have significant influence on financial satisfaction is only accepted for overconfidence bias and categorization tendency. However this influence is very limited as R2 value shown. Overconfidence bias shown significant positive impact on investors financial satisfaction. This infers that the tendency of overestimating the investment decision making capability is significantly and positively related with to financial satisfaction.

While investors categorization tendency also has significant positive impact on financial satisfaction. This implies that the tendency of categorizing the money into groups or based on its use is significantly and positively associated with financial satisfaction. Besides these two Psychological factors all other behavioural biases shown no significant impact on investors financial satisfaction with their financial status.

#### VI. Conclusion

Present study intend is to find the impact of investors behavioural biases on financial satisfaction. Study finds among six behavioural biases only overconfidence bias and categorization tendency bias shown significant and positive impact on investors levels of financial satisfaction. This implies investors having tendency of overestimating the investment decision making capability, and categories their funds into different groups are more satisfied with their financial status. Others behavioural biases like Reliance on experts, Self-control bias, Budgeting tendency, Adaptive

tendency has no significant impact on investors levels of financial satisfaction.

#### VII. LIMITATIONS OF THE STUDY

Besides contributing to the literature, present study has several limitations. First this study has the small sample size. Secondly this study used the convenience sampling method to collect the data from respondents to disclosed their financial preferences and Thirdly, present study used only beliefs. psychological biases of investors to check their influence on financial satisfaction, more psychological biases can be used to check their influence on investors level of financial satisfaction. However, besides these limitations present study has implication for financial service providers.

#### References Références Referencias

- Barber, B., & Odean, T. (1999). The courage of misguided convictions. Financial Analysts Journal, 55. 97-116.
- Cummins, R. A., & Nistico, H. (2002). Maintaining life satisfaction. The role of positive cognitive bias. Journal of Happiness Studies, 3, 37-69.
- Dutt, A. (1999). The penguin guide to personal finance. New Delhi: Penguin Books India (P) Ltd.
- Evatt, C. (2008). "The authority bias." Retrieved on 3rd January 2009, from http://www.brainbiases. com/2008/11/authority-bias.html
- Grable, J. E., & Joo, S. (1999). Financial help-seeking behaviour: Theory and implications. Financial Counseling and Planning, 10, 14-25.

- 6. Gupta, L. C. (1991). Indian shareowners: A survey. Society of Capital Market Research & Development, New Delhi.
- 7. Hira, T. K., & Mugenda, O. M. (1998). Predictors of financial satisfaction: Differences between retirees and non-retirees. Financial Counseling and Planning, 9(2), 75-84.
- 8. Joo, S., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. Journal of Family and Economic Issues, 25(1), 25-50. doi: 10.1023/B: JEEI.0000016 722.37994.9f.
- 9. Dobelli, R. (2014). The Art of Thinking Clearly. USA: Harper Paperbacks.
- 10. Michailova, J. (2010). Overconfidence and bubbles in experimental asset markets. https://mpra.ub.unimuenchen.de/30579/1/MPRA paper 30579.pdf
- 11. Mogilner, C., Rudnick, T., & Iyengar, S. S. (2008). The mere categorization effect: How the presence of categories increases choosers' perceptions of assortment variety and outcome satisfaction. Journal of Consumer Research, 35, 202-215.
- 12. Oskamp, S. (1965). Overconfidence in case-study judgments. Journal of consulting psychology, 29(3), 261.
- 13. Parrotta, J. L., & Johnson, P. J. (1998). The impact of financial attitudes and knowledge on financial management and satisfaction of recently married individuals. Financial Counseling and Planning, 9, 59-75.
- 14. Pedhazur, E. J. (1982). Multiple regression in behavioral research: Explanation and prediction. Fort Worth, TX: Holt, Rinehart and Winston. Pedhazur2Multiple Regression in Behavioral Research: Explanation and Prediction 1982.
- 15. Sahi, S. K. (2017). Psychological biases of individual investors and financial satisfaction. J Consumer Behav. 2017; 1-25.
- 16. Shefrin, H. M., & Thaler, R. H. (1988). The behavioural life-cycle hypothesis. Economic Inquiry, 26(4), 609-643.
- 17. Simon. H. A. (1993). Decision making: Rational. non-rational, and irrational. Educational Administration Quarterly, 29(3), 392-411.
- 18. Srinivas, V. K. (2000). "Individual investors and financial advice: A model of advice seeking behaviour in the financial planning context." Ph.D. dissertation, Rutgers the State University of New Jersey - Newark, United States - New Jersey. Retrieved February 16, 2010, from ABI/INFORM Global. (Publication No. AAT 9967099).
- 19. Soros, G. (2003). The alchemy of finance. New Jersev. NY: Wilev.
- 20. Szyszka, A. (2013). Behavioral finance and capital markets: How psychology influences investors and corporations. New York: Palgrave Macmillan.

- 21. Tapia, W., & Yermo, J. (2007). Implications of behavioral economics for mandatory individual account pension systems. (OECD working papers on Insurance and Private Pensions No. 11). OECD Publishing, doi:10.1787/103002825851
- 22. Thaler, R. H. (1999). Mental accounting matters. Journal of Behavioral Decision Making, 12, 183-206.
- 23. Titus, P. M., Fanslow, A. M., & Hira, T. K. (1989b). Net worth and financial satisfaction as a function of household money managers' competence. Home Economics Research Journal, 17(4), 309-318.
- 24. Xiao, J. J., Sorhaindo, B., & Garman, E. T. (2006). Financial behaviours of consumers in credit counseling. International Journal of Consumer Studies, 30, 108-121.

# This page is intentionally left blank



# Global Journal of Management and Business Research: C Finance

Volume 18 Issue 5 Version 1.0 Year 2018

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

# Empirical Evidence on the Impact of Bank-Specific Factors on the Commercial Banks Performance: The Camel Model and Case of Ethiopian Banks

By Tesfaye Boru Lelissa & Abdurezak Mohammed Kuhil

Addis Ababa University

Abstract- The study has investigated one of the key research questions: how do bank specific factors are related to bank performance? The model constructed is framed based on the commonly used supervisory tool to monitor bank performance: CAMEL. This consists of elements from Capital Adequacy, Asset Quality, Management, Earning and Liquidity. It has used six variables representing each of the components and run a regression model based on fixed and random models. The outcome shows that many of the bank specific factors have a significant statistical relationship with performance measures. Despite the mixed result in the various models, the study explored that bank's capital holding, asset quality and business diversification, cost control and liquidity positions are important part of the management decisions to have a significant influence on performances.

Keywords: performance, commercial banks, ethiopia, CAMEL model.

GJMBR-C Classification: JEL Code: G21



Strictly as per the compliance and regulations of:



© 2018. Tesfaye Boru Lelissa & Abdurezak Mohammed Kuhil. This is a research/ review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

# Empirical Evidence on the Impact of Bank-Specific Factors on the Commercial Banks Performance: The Camel Model and Case of Ethiopian Banks

Tesfaye Boru Lelissa <sup>a</sup> & Abdurezak Mohammed Kuhil <sup>a</sup>

Abstract- The study has investigated one of the key research questions: how do bank specific factors are related to bank performance? The model constructed is framed based on the commonly used supervisory tool to monitor bank performance: CAMEL. This consists of elements from Capital Adequacy, Asset Quality, Management, Earning and Liquidity. It has used six variables representing each of the components and run a regression model based on fixed and random models. The outcome shows that many of the bank specific factors have a significant statistical relationship with performance measures. Despite the mixed result in the various models, the study explored that bank's capital holding, asset quality and business diversification, cost control and liquidity positions are important part of the management decisions to have a significant influence on performances.

Keywords: performance, commercial banks, ethiopia, CAMEL model.

#### I. Introduction

he Money and banking Proclamation No. 83/1994 identifies banking business as:....an operation that involves such activities like receiving funds, discounting and negotiating of promissory notes, drafts, bills of exchange and other evidence of debt; receiving deposits of money and commercial paper, lending money, and buying and selling of gold and silver bullion and foreign exchange. Even if the list in the proclamation is exhaustive, from the balance sheet and income statements of banks it can be inferred that the main stay of banks largely relied on the intermediation activities (NBE report, 2015/16). A bank is usually defined as an institution whose current operations consist in granting loans and receiving deposits from the public (Mishkin, 2001). Therefore, as core to their functions, banks need to mobilize deposits (in local and foreign currency) from the public so that they can lend the deposit to borrowers and foreign currency users and earn income in the process. The need for more liquidity is associated with the high leverage position following the very limited capital base of banks as compared to

ratio for banks in Ethiopia in year 2015 is 17% reflecting that a great part of banks' activity is financed through deposit collection (NBE, 2015/6).

their asset holdings. For instance, the capital to asset

From the income structure of banks, it appears that the current trend in banking activities seem altered towards pursuing a mix of fee-generating activities along with the intermediation business. That is, instead of just accepting deposits and making loans; they receive good sum of earning from fee-based activities like foreign operations and off balance sheet activities. Literature also supports that non-interest income is among the most rapidly growing sources of revenue for deposit accepting institutions (Rose and Hudgins, 2008). A similar trend has been noted in the Ethiopian banking situation where income from non-interest sources is revealing growing trend overtime. For instance, the share of fee income from international banking activities in some banks exceeds the income from interest sources. Industry wide scenario also reflects fee income has constituted almost half of the total earning of Ethiopian banks (NBE report, 2015/16). Nachane and Ghosh (2007) remarked that the dynamism in the banking sector has urged banks to be innovative in their operations. This innovation process has contributed for wider expansion in the off-balance sheet activities which are contributing for the expansion in fee income. This may, however, have effect on increasing overall risk of banks by exposing them to high income volatility. In addition, literature suggested that banks with relatively high non-interest earning assets are less profitable (Demirgiic-Kunt and Huizinga, 1999). Despite such argument on the risk associated with holding high share of non-interest income, the significant share of fee income justifies the need to incorporate them in the analysis of bank performance. More specifically, if performance is rated based on profitability measure, excluding fee-based variables will lead to bias. For instance, Rogers (1998) explained that the exclusion of nontraditional activities in the estimation of bank performance and efficiency actually understates it. The other scenario which differentiates banks from other businesses is that of the existence of risk factors.

Author α: Ph.D, Vice President, Debub Global Bank S.C. e-mail: teskgbl@gmail.com

Author σ: Ph.D. Assistant Professor of Business Leadership, School of Commerce, College of Business and Economics, Addis Ababa University, Ethiopia.

This is because the capital base of a bank is smaller relative to the asset base and liability it holds. In terms of the risk types, Allen and Cartelli (2008) identified two major risk types which are associated with the core activities of banks: default and liquidity risks. Thus, existence of both liquidity and default risk for a bank differentiates it from an ordinary firm and the impact of such risk factors on performance should deserve consideration. Beyond the abovementioned factors driving bank performances, there remains several factors to have implications on banks profitability. These factors are mostly classified in to two parts: internal and external. For instance, Al-Tamimi (2010) and Aburime (2005) have classified the determinant factors as internal and macroeconomic variables. The internal factors are defined as the characteristics exhibited by individual bans and which fall under the management's control. On the other front, the external factors include sector or country wide factors and appear outside the control of the management but have a bearing on performances. There are also studies which attempted to separate the external factors into sector and macroeconomic variable (Ongore, 2011). The former considers industry related factors that commonly affects the individual banks while the later takes into account the general economy wide variables. This study provides focus on bank specific variables that have a bearing on the performance of banks. We follow on the approach that is most commonly used by bank regulators to monitor performance: CAMEL approach with the core aim of exploring factors under the control of the management on banking operational excellence. The core theme of the research is to investigate the impact of bank specific factors, which are highly related to internal management of resources, on performance of banks. In such endeavor the banks own undertaking to excel in performance through managing some of the key selected determinant factors will be examined through testing a hypothesis: Ho: Bank Specific Variables has no impact on the Performance of Banks. The study employs a panel data of all commercial banks operating in the country from 19990-2015.

#### II. LITERATURE REVIEW

The approach that is most commonly used by bank regulators to monitor performance is the CAMEL approach. This is a composite of various bank performance components that management is expected to act upon so as to improve performances. The CAMELS approach evaluates financial institutions like banks on the basis of SIX critical dimensions which are: Capital adequacy, Asset quality, Management, Earnings Liquidity, and Sensitivity to Market risk. Nevertheless, the sensitivity to market risk which requires a well developed financial market is not commonly used in the developing countries studies. Each of the components and the variables to be used in this study is explained below:

## III. CAPITAL ADEQUACY

The Capital Adequacy ratio is the ratio of banks primary capital to risk weighted assets (Directive No. SBB/9/95). Regulators like the NBE issue directives on the manner of computation of the capital adequacy ratio which is a specification on the risk conversion rates for on and off balance sheet assets as well as classification of different components of capital. The directive demands banks to strictly maintain a capital level exceeding or equivalent to 8% of the risk weighted assets. This is with the intent that holding a reasonable level of capital is expected to serve as cushion in times of crisis (Dang, 2011). Nevertheless, such view is also supported by others as adequate capital level being a source of liquidity enhances performance via reducing the banks' financing costs (Diamond, 2000). Holding a high capital level is also challenged by the counter view in that it reduces the return on equity. This is because excessive capital encourages a low risk taking attitude that potentially impacts the earning potential. Furthermore, a higher capital reduces the debt position of firms resulting in lower earnings from the tax exemption from debt leverage Bourke (1989) and Berger (1995). Therefore, the impact of the capital adequacy ratio has uncertain a priori as it could potentially reduce or improve performance depending on its utilization and level of exposures. The study uses the capital to asset ratio which is not risk adjusted to proxy the actual capital adequacy ratio as the data is not publicly available.

#### a) Asset Quality

As discussed above, one of the critical success factors for better bank performance is its ability to manage the risk emanating from defaults. A bank balance sheet is mostly a composite of various asset elements such as cash, foreign deposits, reserves at the NBE, loans, investments, fixed assets etc. However, the loan portfolio remains to have the dominant share of the asset especially for banks that highly rely on the intermediation business for their earnings. Therefore, keeping the quality of such asset is witnessed in many studies to affect performances. For instance, Dang (2011) claims that delinquent loans are the highest risk components whose poor handling can lead to substantial losses. Similarly, Liu and Wilson (2010) finds that problem in credit quality reduces the profitability measures, the ROA and ROE. Correspondingly, the impact on the price measure Net Interest Margin (NIM) appears positive as banks look for an increase in their margins to reimburse their default risk as well as monitoring credits. Usually, the share of nonperforming loan in the total loan portfolio is employed to measure the asset quality of banks. Even regulators sometime set a threshold for banks to monitor their asset quality level. For instance, in Ethiopia, the NBE has set banks to maintain their nonperforming loan ratio to a maximum of 5% of their credit exposure in terms of loans and

advances. Nevertheless, banks usually keep their record on delinquent loans confidential, hence, studies are obliged to use another proxy measure, the provision to total loan ratio as a measure of the asset quality (Kumbirai and Webb, 2010). This study also uses the provision to total loan ratio as a measure of the risk arising from credit defaults. As pointed in the start of this section, banks ability to diversify income through integrating both interest and non interest income sources as another variable revealing quality of assets. Therefore, the study also similarly follows the same trend as noninterest income appears a growing business in the Ethiopian banking industry.

### b) Management

Banks as financial firms managing large resources, their management quality obviously affects their performances. Nevertheless, empirical studies usually confirm the difficulty in measuring management performances with financial ratios (Ongore, 2013). The regulator like NBE also apply various quantifiable and non-quantifiable factors to rate the management performances. Empirically, however, there is an attempt to apply proxy financial measures to measure management and mostly from the efficiency side. The ratios applied to measure management include: operating profit to income ratio (Rahman et al., 2009) and costs to total assets (Nassreddine, 2013), cost to income ratio Altunbas et. el (2001)). In terms of relationship with performances, the applied management quality measures are found to relate positively with performances. For instance, Altunbas et. el., (2001) investigated the relationship between management efficiency and profitability and finds a positive results. This study also employs the cost to income ratio as well as the efficiency measures that directly relates to management performance, the x-efficiency.

#### c) Earning

The ability of banks to generate adequate return from their operations is one of the key components of CAMEL. It considers not only the ability to remain profitable but to ensure sustainable return from core earning sources. As discussed in the introduction, Earning from fee generating activities nowadays is becoming a dominant banking income sources while the perception of the regulators still relied on income from the intermediation activities. Earning performance is usually measured therefore using the common profitability indicators like return on assets, return on equity and net interest margin. Nevertheless, income mix analysis usually separates the non-interest income sources from interest earning sources. Sustainability and innovation in banking therefore is emerging to be reflected on the dominance of fee based income in the income composition of banks. This study also considers the share of non-interest income sources from the total

income in order to examine the reliability of the banks' income as well as to explore its impact on the performance of banks.

### d) Liquidity

The liquidity status of a bank indicates the bank's position to meet its obligations in a timely and effective manner. Even its considered as one of the factors determine a bank to stand as a financial institution (Samad, 2004). The measurement used, nevertheless, has wide variations among the various empirical studies. Some authors like Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. Others use the loan to deposit ratio, liquid asset to asset etc. Regulators in most countries, however, set the minimum required level of liquidity holding of banks. A similar trend is witness in Ethiopia where the NBE set the liquid asset to deposit ratio which is expected not to fall below 15% of the Bank's net current liability of which around 5% is expected to be held in the form of primary reserve assets, cash and assets easily convertible to cash (see directive no SBB 55/2013). Studies reveal a mixed outcome with regard to the relationship between bank liquidity position and performance. Studies witnessing a negative relationship between liquidity and performance claim that the liquidity reserves mainly of those that are compulsory remain a burden for banks (Berger and Bouwman, 2009). Others find a positive relationship state that a reliable liquidity position improves performance (Dang, 2011; Bourke, 1989). There are also other studies that are done in China and Malaysia that explored absence of a significant relationship between liquidity and performances of banks (Said and Tumin, 2011). This study, therefore, employees the liquid asset to deposit ratio, which is a measure used by the NBE to evaluate its link with performances.

#### IV. METHODOLOGY

The unit of analysis for the study is all commercial banks operating in the country from 1990-2015. A quantitative approach is adopted to form a causal link among different variables with bank performance measures. A panel data set from 1999 to 2015 for all (eighteen) commercial banks is used for the quantitative study. The quantitative study employs a panel data regression model to investigate the relationship between bank specific factors with profit and price performances. Conceptually, the study uses the CAMEL framework which is a widely used performance monitoring tool by regulators to set variables and establish relationship with performances. In order to test the effect of bank specific factors on performances several models have been derived. The basic model is primarily follows the commonly used regulatory approach to measure performance of banks across various parameters. The CAMEL rating system

which was introduced by the Basel and commonly accepted regulators across countries including the National Bank of Ethiopia considers rating for its individual components: Capital Adequacy Asset Quality, Management, Earning and Liquidity. The aggregate rating will be a derivative of the result on each individual composite rating. Therefore, the a priori assumption on each rating is expected to have a positive relationship with bank performance. In other words a bank scoring well in each component is believed to performing well on composite basis. Therefore based on such framework the model is constructed as follows:

Per%i,t = 
$$\beta 0 + \beta 1BSF\%i,t + \epsilon i,t$$
 (1)

Where Per %i,t is the proxy of bank performance measure for bank i in period t (for detailed definition of the variable refers the conceptual framework and variable setting section of Chapter Five); BSF%i,t is estimated bank specific variables for bank i in period t; and  $\varepsilon i$ , t is the error term.

Based on the CAMEL framework the above model is then extended to incorporate proxies for each component:

Per%i,t = 
$$\beta$$
0 +  $\beta$ 1CAR%i,t +  $\beta$ 2 PRTL%i,t +  $\beta$ 3 NIITI%i,t +  $\beta$ 4 XEFF%i,t +  $\beta$ 5 COIN%i,t +  $\beta$ 5 LATDi,t εi,t (2)

Where CAR is capital adequacy ratio, PRTLprovision to total loans, NIITI- Non-Interest Income to Total Income, XEFF- managerial efficiency, COIN-Total cost to Total income, LATD- Liquid assets to Deposits. The summary definition of each variable is as

shown below.

Variable Definition and a priori assumption The independent and dependent variables are chosen from six proxies of bank specific factors and three performance indicators that have been collected from interview and the regulatory organ formats of bank rating with an added variable from the literature and the study result from efficiency assessment. The definition and the expected relationship are framed based on the literature work. These are displayed on the below table:

Table 1: Variable Definition and CAMEL Category

Variables	Definition	Representation in CAMEL Category	Expected Relationship
	Dependent		
ROA	Ability of a bank's management to generate profits from the bank's assets.		
ROE	The return to shareholders on their equity.		
NIM	Residual of interest income resulted from efficient decision making of management.		
	Independent		
CAR	Capital adequacy ratio-computed as percentage of capital to asset.	Capital Adequacy	+/-
PRTL	Provision to Loans-ratio of provision expenses to total loans.	Asset Quality	-
XEFF	Managerial efficiency measure using DEA scores.	Management	+
NIITI	Non-Interest Income to Total Income measures the share of earning from non-intermediation sources.	Earning	+
COIN	Cost to income-share of aggregate income from the total income.	Management	-
LATD	Liquid Asset to Total Deposit- the share of liquid asset from total deposit.	Liquidity	+/-

Source: Author's Computation

#### b) Data and Data Sources

The data used in the study mostly relies on secondary data sources. This is gathered mainly from the financial records of each bank as well as various publications and databases of the NBE. A time series data from 1999 to 2015 for 18 commercial banks is used in the study.

#### Descriptive Statistics

In terms of maintaining asset quality records through controlling of non-performing assets, the ratio of PRTL shows that banks on average are holding a provision level of around 4% of their outstanding loans. This is a bit higher than the provision required for outstanding loans had all loans been in pass status and is closer to the provision required for loans under special mention status (3%) as per the directives of the NBE (SBB 43/2008). Therefore, based on such comparability, the level of industry wide problem asset stock does not seem significant. The worrying issue is the variation across banks is significant with a standard deviation closer to 5 and a maximum PRTL record of 28%. The distribution measure through skweness also shows an asymmetrical distribution with a long tail to the right with higher positive value. Therefore, despite the good record of managing assets at sector level, there appears a notable difference across banks in terms of managing their credit exposures which is costing some banks up to 28% of their lending in the form of provision expenses. This remains to be a worrying a concern of a regulator which has set a directives/circulator for banks to maintain their non-performing loans to 5% of their outstanding loans which later revised even to a reduced level ,3% as per a circular issued in relation to meeting the Growth and Transformation Plan of the country (BSD09/2015). The other parameter, NIITI, which is indicative of the banks attempt to ensure a diversified business mix through operating in non-interest income sources also witnessed an encouraging trend. The mean score shows that banks were generating around 43% of their average income from non-interest income sources which are basically related to foreign exchange

transactions, commissions from off-balance sheet exposures, service related fees etc. This seems following the global trend which is now shifting towards fee based sources that are serving as an additional income outlet to banks through providing wide spectrum of services to their customers. The reason behind such trend is due to the decline in interest income from intermediation business which is highly dependent on banks capacity to mobilize deposits from customer bases. The less growth rate in deposit market and the high competition level coupled with various regulatory measures (e.g. bill purchase) affecting the lending productivity seems shifting the Ethiopian banks to work more towards searching for other income bases. The variation however is still strong in such parameters where some banks seem by large reliant of the nonintermediation business for their income sources while others are still dependent on the traditional intermediation business as their earning sources.

Table 2: Descriptive Statistics of Bank Specific Variables

Stats	ROE	ROA	NIM	CAR	PRTL	NIITI	XEFF	COIN	LATD
Mean	18.996	2.233	4.547	14.389	3.901	43.357	84.332	65.817	50.143
Max	90.820	5.250	10.160	54.464	28.972	76.687	100.000	89.231	137.705
Sd	12.880	1.107	1.806	7.505	4.702	13.158	12.467	26.079	18.951
P50	18.318	2.420	4.400	12.385	2.451	42.457	84.975	61.285	47.397
Kurtosis	9.264	2.724	2.916	9.644	10.855	2.812	4.954	17.553	4.920
Skewness	1.684	-0.309	0.263	2.069	2.554	0.042	-0.916	3.315	0.997
P75	24.806	2.999	5.633	17.364	4.637	52.151	94.656	71.771	60.796
OBS	193	193	193	193	193	193	193	193	193

Source: Author's Computation (STATA 12)

With regard to cost control, the aggregate cost to income ratio for the industry on average is 65%. This witnesses the fact that banks are expending 65 cents in their various engagements to generate a 1 Birr income per their transactions. The large variation is also an indicative for the existence a wider room for improvement for some banks with regard to controlling their expenditures. On the liquidity front, the liquid asset to deposit ratio, a commonly used measure of liquidity level by the NBE, shows that during the periods considered, banks are operating at a reliable level of liquidity. Despite occasional adjustment in the regulatory requirement, the level of LATD appears to exceed the standards of the NBE (15%) and witnesses a high liquid asset stock holding (SBB/57/2014). This is in line with the argument for the growth in the share of non interest income sources which is enforcing banks to operate under a high liquidity position through maintaining significant balance of liquid asset bases such as foreign deposits. This is in fact usually offset by the counter side off balance sheet commitments already allocated for letter of credit and other mode of trade payments. However, the ratio is still strong if one considers the easily convertible and liquid nature of the accounts.

#### Pearson Correlations

Investigation of the relationship between variables with a Pearson correlation coefficient and result from the significance value shows that in most of the variables the probability of getting a correlation coefficient this big in an observation of 193, if the null hypothesis were true, is very low. Hence, we can gain confidence that there is a genuine relationship between the variables in the model. For instance, the relationship between CAR and the dependent variables (ROE, RoA, NIM) is much strong and negative with regard to the return on equity than others due to the impact of change in capital on the level of returns from equity holdings. The negative and strong relationship will not be a surprise considering the usage of capital as a denominator in computing the return on equity; therefore, an increase in capital has a reverse impact on the earning to equity ratio and vice versa. In addition, the variable has significant relationship with other explanatory variables of which it is strongly and positively related to liquidity and cost to income measures. The positive relationship with liquidity supports the argument for the use of capital as a buffer stock in case of liquidity problems and its association with cost to income is related to the lack of its

productive usage in a situation of excess liquidity standing. The CAR is also strongly but negatively related to PRTL, XEFF and NIITI. But the coefficient is modest with regard to NIITI. The association basically emanates from the pressure of high nonperforming assets (high risk scenario) on capital cushion, challenge to manage and plan capital usage in excess liquidity and under regulatory involvements scenario as well as the limited effect of capital to create non-interest income despite its notable contribution to boost the currency holding position of banks.

Similarly, the asset quality measure (PRTL), is negatively associated with most of dependent and explanatory variables. The association could not be a surprise considering the impact of a problem asset stock on most of profitability, price and liquidity measures. The rationale behind such relationship lies on the impact of credit risk on the cost of credit through affecting provision expenses, narrowing intermediation margin through affecting the interest recognition from loans and tiding the flow of funds from loan collections as a result of default and/or late payments.

Table 3: Correlation Matrix of Bank Specific Variables

Correlations										
		ROE	ROA	NIM	CAR	PRTL	NIITI	XEFF	COIN	LATD
ROE	Pearson Correlation	1								
	Sig. (2-tailed)									
ROA	Pearson Correlation	.652**	1							
	Sig. (2-tailed)	.000								
NIM	Pearson Correlation	143 <sup>*</sup>	.023	1						
	Sig. (2-tailed)	.047	.752							
CAR	Pearson Correlation	520**	165 <sup>*</sup>	.344**	1					
	Sig. (2-tailed)	.000	.022	.000						
PRTL	Pearson Correlation	.122	168 <sup>*</sup>	244**	435**	1				
	Sig. (2-tailed)	.090	.020	.001	.000					
NIITI	Pearson Correlation	.129	.309**	.019	.018	030	1			
	Sig. (2-tailed)	.074	.000	.793	.799	.679				
XEFF	Pearson Correlation	.194**	.147*	036	238**	.269**	120	1		
XEFF	Sig. (2-tailed)	.007	.042	.624	.001	.000	.096			
COIN	Pearson Correlation	621**	736**	.138	.510**	031	159 <sup>*</sup>	331**	1	
COIN	Sig. (2-tailed)	.000	.000	.055	.000	.669	.027	.000		
LATD	Pearson Correlation	283**	239**	.118	.501**	.095	.280**	309**	.384**	1
	Sig. (2-tailed)	.000	.001	.101	.000	.188	.000	.000	.000	

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed). N=193, \* Correlation is significant at the 0.05 level (2-tailed) Source: Author's Computation (SPSS 20)

Another important relationship derived from the correlation table is that the negative and significant relationship between LATD with both profitability and efficiency measures. This is in line with the argument that liquidity establishes a trade off with profitability through resulting in a relationship where an increase in liquidity impacts profitability to the negative through limiting the share of productive assets in the portfolio of the Bank. Therefore, balancing such trade-off through maintaining an adequate liquidity level without compromising the profitability opportunity through efficient use of funds remain a challenge to be tackled by Banks management. An ineffective use of fund therefore not only affects the profit level but affects the efficiency level of banks through affecting the cost of idle fund.

Overall speaking, the correlations among the independent variables are not high (less that 0.50), indicating that there might be no serious Multicollinearity problems existing. Gujarati and Porter (2009) suggest that if the pair-wise correlation coefficient between two independent variables is in excess of 0.8, then multicollinearity is a serious problem. Therefore, considering the correlations among variables and the tests in the following sections, the models to test the hypothesis are built.

#### e) Outliers and Missing Values

Before applying the econometrics models to the data, it is necessary to address the potential problem of outliers and missing values as they may have an undesirable influence on the estimates produced by the regressions. A univariate statistics showing summary for missing and extreme values is computed. The result shows that there are no missing values that are likely to lower the quality of panel date but the data for some variables holds extreme values. For instance, the univariate statistics of variables presented in the table below shows that there are six extreme values in the dependent variable, mainly related to the higher extreme. Therefore, in order to reduce the potential bias caused by the outliers, the variables in the Models are winsorized<sup>1</sup> at the 5% and 95% levels. In other words, the top and bottom 5% values of CR% are replaced by the value at the 5th and 95th percentiles, respectively. Therefore, the winsorized output is used as the

dependent and explanatory variables for the Models. This is justifiable in consideration of uneven financial records of banks during the early year of entrance to the industry. Newly formed banks usually show a lower profitability record resulting from high capital expenditure for establishment costs, branch expansions, IT investments, low level of asset portfolio and income.

Table 4: Univariate Statistics of Bank Specif	ic Variables
---	--------------

	N	Mean	Std.	Mi	ssing	No. of Extremes <sup>a</sup>		
	IN	IVICALI	Deviation	Count	Percent	Low	High	
RoE	193	18.9962	12.87965	0	.0	0	6	
RoA	193	2.2333	1.10661	0	.0	0	1	
NIM	193	4.5473	1.80649	0	.0	0	1	
CAR	193	14.3889	7.50490	0	.0	0	11	
PRTL	193	3.9012	4.70174	0	.0	0	18	
NITI	193	43.3567	13.15770	0	.0	1	0	
XEFF	193	84.2089	12.55139	0	.0	2	0	
COIN	193	65.8174	26.07931	0	.0	0	8	
LATD	193	50.1431	18.95113	0	.0	0	4	

a. Number of cases outside the range (Q1 - 1.5\*IQR, Q3 + 1.5\*IQR)

Source: Author's Computation (SPSS 20)

#### Tests of Stationerity

Graphical Observation of the variables shows that the variables selected don't exhibited nonstationerity. Further test based on a mathematical approach is done applying the Fisher Type unit root test which is based on the Augmented Dicky-Fuller tests. The Fisher Type appears more pertinent considering the unbalanced data stock on panel. Therefore, the basis hypothesis Ho: All panels contain unit roots is tested and the result witnessed that all variables are stationery at zero ADF. Therefore, the variables can be used in the model without being differenced or further action.

# Results and Discussions

Before running the model both normality and panel unit root tests were conducted. The normality test through kurtosis and skewness witnesses the normality of the data as shown in the below table, both the F-test and the LM test with large chi-square result rejects the null hypothesis. Hence, the fixed and random effect models appear better than pooled OLS. The Hausman test taking the coefficients of the fixed and random models tests the null hypotheses that Ho: difference in coefficients not systematic. The chi-square result is

with probability lower than 0.05 rejects our initial hypothesis that the individual-level effects adequately modeled by a fixed-effects model in case of RoA but not in others. Therefore, the estimation result has been done through the fixed effect model in the RoA model but random effect model is applied in RoE and NIM models.

As shown in the table below among the identified six bank specific determinant factors and applied to model 1 (RoA) four of them were significant and considered to be drivers of the banks' profitability. More, specifically, with regard to the coefficients on the independent variables, CAR remains significant in all the models where it acts as a regressor, suggesting that the ratio of capital to asset has a statistically significant impact on bank profitability and price performances. The unexpected result is that the direction of impact provides a mixed result where the CAR has been found to positively relate to RoA and NIM but remained negative in case of RoE. The negative relationship with RoE however is expected in consideration of the relative impact of capital building on the earning measure through diluting the earning to equity position of banks. Therefore, the growth rate in capital should follow the proportional growth in the earning base of banks. Otherwise, obstruction on capital planning from internal and external forces potentially result in a counter impact on the RoE of banks.

<sup>&</sup>lt;sup>1</sup> There are different ways of dealing with outliers, such as winsorisation, exclusion, or retention. In this study, since the number of observations is not large, and the extreme values are likely to seriously bias the estimates, either exclusion or retention seems to be inappropriate. In this study, all winsorizing are done based on full sample rather than on balanced sample i.e. on the 193 cases.

Table 5: Regression Results

	Model 1	Model 2	Model 3	
	RoA	RoE	NIM	
CAR	.0522522	5180715	.0814718	
CAN	(0.0000)*	(0.0010)*	(0.0050)*	
PRTL		445118	0199116	
FNIL		(0.0019)*	(0.5820)	
NIITI	.0295337	.1060527	.0006569	
INITI	(0.0000)*	(0.0125)*	(0.9600)	
XEFF	.0108347	0570724	.663684	
ALII	(0.0538)	(0.3770)	(0.5520)	
COIN	034499	2449508	0000826	
COIN	(0.0000)*	(0.0000)*	(0.8980)	
LATD	5186258	.0181338	0054677	
LAID	(0.0570)	(0.0721)	(0.5710)	
CONS	-4.167119	42.79821	3.277389	
CONS	(0.0000)*	(0.0000)*	(0.0150)*	
Adjusted R2	62.8%	45.05%	42.5%	
Walid Chi2		152.72	54.8	
Walld Chi2		(0.0000)*	(0.000)*	
F(6,168)	57.1			
1 (0,100)	(0.0000)*			
F-test	2.88	5.5	2.66	
1 -16-51	(0.0003)*	(0.0000)*	(0.0000)*	
LM test	4.62	54.33	9.6	
LIVI ICSI	(0.0315)*	(0.0000)*	(0.0019)*	
Hausman Chi2	216.3	8.24	1.32	
Tidustriali Offiz	(0.0000)*	(0.2143)	(0.4532)	
Rho	(Fraction of variance	.14795143	.14163641	
11110	due to u_i)	.17730170		

Source: Author's Computation (STATA12)

Considering the sporadic involvement from the regulator in setting the requirement of entry as well as capital threshold for banks already in the business, the impact of capital on earning position remained negatively affecting RoE. This obviously will be severe for banks which already are operating at a capital level in excess of their asset holdings and/or are managing to operate under limited growth of earning as compared to their growth in their capital level. On the other front, the positive relation of CAR with RoA and NIM is much related with the notable impact of a high level of capital on business expansion through increasing the capacity of banks to achieve large credit extension for a single borrower and boosting their capacity to hold an increased foreign currency holdings. This will be very relevant to the Ethiopian banking industry where the lending decision to single borrower, 25% of capital (Directives SBB/53/12) and foreign currency positions, 15% of capital (Directives SBB27/01) are directly attached with the capital level by regulations. This has been an important driver for banks to operate under a relatively excess capital level with a motive to register a rapid balance sheet expansion. This has assisted to boost the earning position of banks through directing their activity to a high growth- high earning scenario and without worrying much about liquidity shortfall. This

however, has not adequately covered the negative impact of capital on their RoE (or earning per share) which doesn't seem a worry to the banks until recent period considering the high earning per share and dividend offering of the Ethiopian banks. This benign regime however might not sustain in the forthcoming as banks are stipulated to operate under a capital level beyond their expectation and the gradual slowdown in their earnings growth due to a growing competition and regulatory tightening. Therefore, to some extent capital planning remains to be one of critical bank specific determinants warranting management intent in the process to discharge their obligations to various stakeholders, most importantly of the shareholders. This has been one of several reasons enforcing banks management to capitalize on a business mix through focusing noninterest income sources.

On the other hand, the commonly used proxy metrics to measure asset quality, PRTL, has been positive but insignificant in the RoA model and witnessed significant and negative relationship with RoE model. The model related to price (NIM) similarly shows negative and insignificant relationship with PRTL. As shown in the trend and descriptive statistics, the aggregate PRTL level is towards a positive track record revealing the banks remarkable achievement in

maintaining a healthy asset portfolio through in placing control on the level of their nonperforming asset. This has been not only an internally driven strategy but supported by enforcement from the regulator which insisted banks not to hold nonperforming assets beyond 5% of their loan portfolio, a high risk asset component. Therefore, the low level of PRTL record observed in most banks in the industry succeeded to establish a positive relationship with the earning position of banks through controlling the cost of asset mismanagement as shown in low rate of provision expenses as compared the loan portfolio. In other words, the effect of provision for problem assets has limited impact on profitability performances justifying for the insignificant relationship with the RoA and RoE. Nevertheless, the mixed outcome with regard to the direction of impact mostly relates to the differences in the sensitivity of the base at which the two ratios are computed i.e. asset and capital. Banking is a highly leveraged business with most of its sources of businesses relies highly on liability from customers than shareholders investments leading to hold asset level far exceeding the capital invested by its shareholders. Such scenario potentially has put banks capital more sensitive to earning disorder from asset quality related problems as compared to the level of banks. This can be easily justified if one considers the coefficient values of PRTL in the two models. In contrast, the pricing measure establishes a negative and significant relationship with PRTL due to the double effect of non-performing assets on net yield from intermediation activity. On one front, nonperforming assets potentially reduces the level of interest income from lending business through restricting the earning from problem assets. This is because income recognition from problem assets is not allowed unless the asset is backed by cash and cash substitute collateral (Directives SBB/43/08). On the other front, problem assets will bring additional costs in the form opportunity cost of unproductive use of interest bearing deposits besides the demand to set aside provision based on the classification level of the problem asset. Therefore, the double side impact results in a narrow interest income that provides a narrow interest margin justifying a negative relationship of PRTL with NIM.

The other measure applied to assess banks' capacity to ensure a diversified income sources through establishing appropriate level of business mix, NIITI remained a significant driver of profitability measure. Nevertheless, it has insignificant effect on the price related performances. The direction of relationship, however, is positive in all models considered. The established relationship goes well with the a priori assumption due to the obvious effect of a diversified and hence increased income bases on the gross income and profit level of banks. In addition, the macroeconomic framework of the country remained suitable for banks to generate a substantial income in

their foreign trade offerings granting a liberty to set charges of their discretion for their international banking services and during currency selling. The liberty of charging basically emanates from the shortage in the availability of foreign currency due to high unmet demand from the business community that are engaged in import related businesses. Therefore, a bank holding a reliable level of foreign currency obviously manages to easily convert its foreign assets to fee based income and associated gain from currency conversions. Additionally, a high demand in off balance sheet related services such as issuing guarantees and offering domestic banking services ensured another source of fee based services increasing the income base of banks. The aforesaid services have contribution not only on the income base of banks but on the overall risk portfolios through directing their activities on almost risk free services bearing a lower impact to affect their income positions. The insignificant relationship with price measure is basically is a result of a loose association between NIM, which is basically a measure of the yield from intermediation business and NIITI which covers businesses exterior to the traditional banking engagements. Therefore, NIITI is not much affected by a change in the price for earning assets and the cost of fund for deposits as a result of its distinct pricing mechanism and limited use of locally mobilized deposits.

An important finding from the empirical result is that management's ability to control costs has a negative impact in all the models. This suggests that in addition to banks' endeavor for boosting revenue through engaging themselves in diversified businesses, their specific experience in managing expenses appears to be an important factor in determining performance. More specifically, the COIN ratio established a statistically negative significant relationship to the profit based models witnessing the fact that the cost of undertaking banking business is one of the prominent variables requiring the managements' focus. Lack of proper cost control could potentially drain profit of banks and its effect as revealed in the coefficient is much strong on RoE. This will be an important finding of the study because it instigates management to have careful considerations on their cost of doing business during critical cost driven decisions like expansions through branch network, IT investments, e-banking channels, employment etc. On the other front, the study contributes a variable which can serve to assess management performance during rating by the Board or the regulator which mostly prefers to do it applying simple ratios as witnessed during the interview sessions. Such approach has an obvious drawback of aggregating costs potentially hiding the effect of individual cost components through offsetting their under and over usage. Nevertheless, the aggregate position serves as an initial start to look for the affixed

cost management capacity in banks. The COIN relationship with price measure, NIM, is insignificant which could be associated with the current interest rating setting regime reigning in the system. The interest rate in both asset and liability side naturally seems variable but in practice has a fixed nature due to limited variation in interest rate applied both lending and deposit side. This has provided an opportunity for banks to run under a stable yield curve, hence, the burden to manage expenses through price controls appear irrelevant or deserved a reduced merit justifying for the insignificant relationship with the price related variable. Nevertheless, the negative relationship provides indication an existing concern to manage costs through controlling factors that have implication on both cost and income. Such factors as discussed above include maintaining healthy asset portfolio, managing deposit mixes, etc. among others. Supporting this argument, the managerial efficiency measure, the XEFF, shows that performance of some banks could be improved through increasing the efficiency of management. The established relationship in some models, however, is not statistically significant that indicates a homogenous management approach. However, as shown in previous section and suggested in the interview, managerial efficiency is one of the area deserving improvement and to be considered for building competitive advantage in the Ethiopian banking system.

On the liquidity front, a mixed result has been witnessed in the three models with a negative relationship record in the RoA and NIM models and a positive relationship with RoE. This is in line with the literature where the impact of liquidity is reflected depending upon the usage of liquidity to optimize the liquidity-profitability trade off. Surplus liquidity holding ensures a comfortable status to meet commitments at ease but drains profitability by increasing vulnerability to growing expenses on excess fund holding. As indicated in the descriptive statistics, the Ethiopian banks are mostly characterized by surplus liquidity holdings maintaining a liquid asset level far above required by the regulatory standard. Therefore, the impact of such norm has negatively affected profitability measures as well as placed a pressure on the productivity of their intermediation businesses. This is a signal for the lack of in-placed strong liquidity management that can ensure an optimum usage of funds. As shown in the models, the impact of the above constraint has been significant on both profitability and price performance sides with notable exceptions on the RoE model. The explanation for the exception is in relation to the reduced pressure arising from surplus liquidity on the capital planning of banks. Planning for capital growth, therefore, appears much slower in circumstances of excess liquidity unless it is driven by exceptional business motive and fulfilling regulatory requirements. This remains an important finding of the study indicating that banks in the Ethiopia

still have a way to boost their earnings not only aiming at further expansions but also ensuring their capacity to establish a liquidity-profitability trade off. In addition, their liquidity position among several factors could be considered as an important variable in their capital growth decisions.

Robustness Test (Specification Tests after the Result)

The residual statistics shows the error term has a normal distribution with a mean of 0. Hence, the normality assumption holds. The results from the VIF table suggest that VIF is not greater than 10 for any of the explanatory variables. The Breusch-Pagan / Cook-Weisberg test for heteroskedasticity test shows that at 5% level of significance, the p-value is higher showing that heteroskedasticy is not significant in the model. The small value of chi-square also supports the constant variance of the error term. The result has shown that the D-statistic (1.273) appears closer but lesser than 2 depicting positive correlation. As suggested by Field (2009), values less than 1 or greater than 3 are a cause of concern. Hence from Field's rule of thumb it can be inferred that autocorrelation is not serious.

#### VI. Conclusions

Concerning the third research question: 'How do bank specific factors relate to bank performance' the study explored that most of the proxies to measure bank specific factors are significantly related to performances. Therefore, the result rejects the null hypothesis that bank specific factors have no impact on bank performances. The constructed model has used the CAMEL framework which is a widely used supervisory tool to measure bank performances. The result shows that the capital adequacy ratio (CAR) remains significant in all the models suggesting statistically significant relationship with bank profitability and price performances. Nevertheless, the direction of impact is mixed where the CAR has been found to positively related to RoA and NIM, but remained negative in the case of RoE. The mixed result appears justified in consideration of the multifaceted impact of capital to asset ratio on performances. In one front, a higher capital to asset ratio improves profitability by enhancing the banks' risk assimilation capacity and creating a reliable liquidity position. On the other hand, it affects performances of banks as measured by the return on their equity as it places burden on banks via setting an expectation for management to match the growth in profit in line with the capital holdings. On the other front, the quantitative study finds a positive and insignificant relationship of the asset quality (PRTL) with RoA, but witnessed significant and negative relationship with RoE. The model related to price (NIM), similarly shows negative and insignificant relationship with PRTL. The qualitative study, however, identified that asset quality remains an important determinant of bank profit and price performances as

problem assets directly affect the profit performance demanding for equivalent provision expense holdings. In addition, they affect prices by drawing down the earnings from granted loans. From the mixed result of the two studies, the research concludes that the low asset quality problem in most banks has concealed the potential impact of asset problem on performances. In addition, the study suggests the use of the actual rate of nonperforming loan ratio instead of the proxy provision to total loans in future researches attempting to investigate the impact from asset quality problems. This study has used the proxy measure as nonperforming assets related data are not publicly available due to confidentiality. Nevertheless, the mixed outcome with regard to the direction of impact mostly relates to the differences in the sensitivity of the base at which the two ratios are computed i.e. asset and capital.

Another important finding of this study is that banks' capacity to ensure a diversified business mix (NIITI) remained a significant driver of profitability measure. Nevertheless, it has insignificant effect on the price related performances. The direction of relationship, however, is positive in all models considered. As shown above, the proxy variable not only appears as a significant driver of performance but is also a major source of efficiency. This arises from the double edge impact of a diversified business to ensure an enhanced income base and its positive contribution to maintain quality asset portfolio.

The empirical result also that shows management's ability to control costs (COIN) has a positive impact in all the models showing that in addition to banks endeavor for boosting revenue through engaging themselves in diversified businesses, their specific experience in managing expenses appears to be an important factor in determining performance. Nevertheless, the qualitative study shows that cost control should be supported by an optimum expense management strategy that ensures a balance to meet both short-term and long-term goals. Unlike the above finding, the managerial efficiency variable (XEFF), established a statistically positive relationship with performances showing that performance of some banks could be improved through increasing the efficiency of management. The established relationship in the models however is not statistically significant. The result appears unexpected, but explained in the qualitative study on the ground that the tight regulatory framework which discourages risk taking in banking business apart from traditional and common banking endeavors has limited to use top management experience in innovative practices. Furthermore, regulation has also taken the critical role of management in some cases such as strategy setting that establish areas and modes of bank growth. However, there is a suggestion from bank managers for improvement in managerial efficiency allowing the freedom to be used as a competitive tool.

Banks' ability to maintain a reliable liquidity position (LADP) witnessed a mixed result in the models: a negative and statistically significant relationship with the RoA and NIM models and a positive statistically insignificant relationship with RoE. Nevertheless, the finding is justified as excess liquidity standing could reduce the profitability of banks by exposing them to non-earning placements. Nevertheless, it can ensure better customer services to comfortably meet the credit demand of borrowers. The important finding of this study replicating the findings in literature is that banks' decision with regard to liquidity should consider the trade-off between profitability and liquidity. This accepts the commonly accepted liquidity-profitability trade-off theory.

#### References Références Referencias

- 1. Allen, F. and Carletti, E. (2008), "Mark-to-Market Accounting and Liquidity Pricing," forthcoming, Journal of Accounting and Economics, (finance. wharton.upenn.edu/%7Eallenf/download/Vita/Allen-Carletti-MMA-200706-final.pdf).
- Al-Tamimi, H., Hassan, A. (2010) Factors Infuluncing Performance of the UAE Islamic and Conventional National Banks. Department of Accounting, Finance and Economics, College of Business Administration, University of Sharjah.
- Altunbas, Y., Evans, L. and Molyneux, P. (2001). Ownership and efficiency in banking, Journal of Money, Credit and Banking, Vol. 33 (4), pp. 926-54.
- Altunbas, Y., Gardener, E., Molyneux, P. and Moore, B. (2001). Efficiency in European Banking, European Economic Review, (45), pp. 1931-1955.
- Berger A, Bouwman C (2009) Bank liquidity creation. Rev Financ Stud 22: 3779-3837.
- Berger, A. (1995). The profit-structure relationship in banking, Tests of market-power and efficientstructure hypotheses. Journal of Money, Credit and Banking, 27(2), 404-431.
- Bourke, P. (1989). Concentration and Other Determinants of Bank Profitability in Europe, North America and Australia, Journal of Banking and Finance, Vol. 13, pp. 65-79.
- Dang, U. (2011). The CAMEL Rating System in Banking Supervision: a Case Study of Arcada University of Applied Sciences, International Business.
- Demirguc-Kunt, A. and Huizinga, H. (1999). commercial Determinants of bank interest margin and profitability: some international evidence, World Bank Economic Review, Vol. 13(2), pp. 379-408.
- 10. Diamond, D. (2000). Financial Intermediation and Delegated monitoring, Review of financial Studies, 51: pp. 393-414.
- 11. Gujarati, D. and Porter, D. (2009). Econometrics, 5<sup>th</sup> edition, New York, McGraw-Hill.

- 12. Kumbirai, M. & Webb, R. (2010). A financial Ratio Analysis of Commercial Bank Performance in South Africa. African Review of Economics and Finance, Vol. 2, No. 1, Dec 2010 pp. 30-54.
- 13. Ihomovich, S.E. (2009), Factors Affecting the Performance of Foreign Banks in Malaysia Master of Science (Banking), College of Business (Finance and Banking), University Utara Malaysia.
- 14. Liu, H., & Wilson, J. (2010). The profitability of banks in Japan. Applied Financial Economics, 20, pp. 1851-1866.
- 15. Mishkin. F (2001) The Economics of Money, Banking, and Financial Markets. Addison-Wesley series in economics.
- 16. Nachane, D. and Ghosh, S. (2007). An Empirical Analysis of the Off-Balance Sheet Activities of Indian Banks, Journal of Emerging Market Finance, 6, pp. 39-45.
- 17. Nassreddine, G., Fatma, S., & Anis, J. (2013). Determinants of Bank Performance: Viewing Test by Cognitive Mapping Technique a case of Biat. International Review of Management and Business Research, 2(1) 2035.
- 18. National Bank of Ethiopia Annual, report of various times accessed at www.nbe.gov.et
- 19. National Bank of Ethiopia various Directives accessed at www. nbe.gov.et: Directives SBB27/01.
- 20. Ongore, V. (2011). Determinants of financial performance of commercial banks in Kenya. International Journal of Economics and Financial Issues, 3(1), pp. 237-252.
- 21. Rahman, Aisyah Abdul., Mansor, Ibrahim, & Meera, Ahamad Kameel Mydin., 2009. Lending Structure and Bank Insolvency Risk: A Comparative Study between Islamic and Conventional Banks. Journal of Business & Policy Research, 4(2), 189-211.
- 22. Rogers, E. (1998). Non-traditional Activities and the Efficiency of U.S. Commercial Banks, Journal of Banking and Finance 22 (4), pp. 467-82.
- 23. Rose, P. and Hudgins, S. (2010). Bank Management and Financial Services, 8e, McGraw Hill/Irwin. Rosse, J. and J. Panzar (1977). Chamberlin vs. Robinson, an Empirical Test for Monopoly.
- 24. Said, R. M., & Tumin, M.H. (2011). Performance and Financial Ratios of Commercial Banks in Malaysia and China. International Review of Business Research Papers, 7(2), 157-169.
- 25. Samad, A. (2004). Performance of interest-free Islamic banks vis-a-vis interest-based conventional banks of Bahrain, Journal of Economics and Management, Vol. 12 No. 2, pp. 1-15.
- 26. The Money and banking Proclamation No. 83/1994.



## Global Journal of Management and Business Research: C Finance

Volume 18 Issue 5 Version 1.0 Year 2018

Type: Double Blind Peer Reviewed International Research Journal

Publisher: Global Journals

Online ISSN: 2249-4588 & Print ISSN: 0975-5853

## Impact of Firm Size on Profitability: A Comparative Study of Islamic Bank and Commercial Bank in Pakistan

By Syed Atif Ali & Dr. Zahiruddin Ghazali

COMSATS Institute of Information Technology

Abstract- This article shows the impact of banking size on the profitability of Commercial and Islamic Banks operating in the Pakistan for the period 2008-2012. In Pakistan Banking organizations provide fund for other organizational developments. This analysis is done in the context of firm size and profitability. Using data from 5 Commercial and 5 Islamic Banks, our observed study provides partial support to the hypothetical predictions. In study we use the measure the profitability of Commercial Bank and Islamic Bank in Pakistan like return on assets and firm size of all Banks like number of branches. The relationships between size and profitability measures are statistically show that Islamic Banks become more profitable with the respect of small size because there is no relation between Bank size and profitability. The regressions investigation that, there is optimistic association between Firm size and Profitability in Commercial Bank Ltd, but there is no relationship between firm size and profitability in Islamic Banks.

Keywords: profitability, commercial bank, islamic bank, firm size.

GJMBR-C Classification: JEL Code: G20



Strictly as per the compliance and regulations of:



© 2018. Syed Atif Ali & Dr. Zahiruddin Ghazali. This is a research/ review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all noncommercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

# Impact of Firm Size on Profitability: A Comparative Study of Islamic Bank and Commercial Bank in Pakistan

Syed Atif Ali a & Dr. Zahiruddin Ghazali a

Abstract- This article shows the impact of banking size on the profitability of Commercial and Islamic Banks operating in the Pakistan for the period 2008-2012. In Pakistan Banking organizations provide fund for other organizational developments. This analysis is done in the context of firm size and profitability. Using data from 5 Commercial and 5 Islamic Banks, our observed study provides partial support to the hypothetical predictions. In study we use the measure the profitability of Commercial Bank and Islamic Bank in Pakistan like return on assets and firm size of all Banks like number of branches. The relationships between size and profitability measures are statistically show that Islamic Banks become more profitable with the respect of small size because there is no relation between Bank size and profitability. The regressions investigation that, there is optimistic association between Firm size and Profitability in Commercial Bank Ltd, but there is no relationship between firm size and profitability in

Keywords: profitability, commercial bank, islamic bank, firm size.

#### I. Introduction

his study was conducted to provide experimental results & theoretical research on the topic of the firm size profitability: a comparative study of Commercial Banks Vs Islamic Banks. In earlier there have been a lot of researches conducted regarding the firm size profitability. But the aim of this study is to analyze the size of firms on profitability, Commercial Banks vs. Islamic Banks in Pakistan. The first Islamic Bank started in Egypt in 1959 then Islamic Banking was grown and was introduced in more than 60 countries. In Pakistan, Islamic Banking was introduced during the year of general Zia in 1980 and then a lot of local and foreign Commercial Banks have started Islamic Bank operation in Pakistan. Rabia is Arabic word which means raise, accumulation, growth. Islamic Banking usually works as interest free Banking and main purpose of Islamic Bank is interest prohibition and avoids transaction. However, interest is the basic part in Commercial Banking transactions. Commercial Banking is the most popular and prevalent Banking in all civilized countries. In Pakistan Banks are established in form of partnership and Joint Stock Company, the kind of

Author α: Ph.D Scholar, UUM, Malaysia, Assistant Professor, Department of Management Sciences, COMSATS Institute of Information Technology, Lahore. e-mail: syedatif@ciitlahore.edu.pk Author σ: Associate Professor at UUM, Malaysia.

scheduled Banks and non-scheduled Banks. Quaid-e-Azam ordered to establish state Bank of Pakistan on 12<sup>th</sup> may 1948 and he inaugurated it on first July 1948 in Karachi when Pakistan was facing serious financial crisis.

#### II. BACKGROUND OF THE STUDY

Normally, firm size of the Banks and other financial institutions is measured by using a combination of financial ratio analysis, benchmark rate, performance against the budget and the mix of these methodologies. The relationship between the size and productivity for U.S. firms from 1970 to 1989, essentially finds the reverse relationship between the size and profitability of the firms (Dhawan, 2001).

Researchers revealed the coefficient of the growth rate of sales suggesting that factors on the demand side had a greater impact on profitability of the firm than any other supply side. There are a lot of predefined methods for the performance measures of firms, but the problem in relying on these measures is that the difference in measures of performance can clash (Lumpkin & Dess, 1996).

Dess & Robinson (1984) reported the strong statistically significant relationship between subjective & comparative assessment of five years performance of 18 businesses by the top management against other comparable business in the industries, the objective was to measure the return on assets & the sales growth. Generally the profitability of the firms depends upon the organizational growth. Whereas the growth had been considered the most significant measures of performance in small firms, it has furthermore been argued that financial performance is multinational in nature and the measure of financial performance & growth rate are diverse phase of performance that needs to be considered. It has to argue if the firms grow in many ways, such as the firm's growth patterns are inter related to age, size and industry.

The first Islamic Bank was established in Egypt in 1963; later on many Islamic Banks were established in Middle East and Asia. The growth of Islamic Banks not only increased in terms of number of countries but it's operating in terms of areas of finance too. Within the

three decades the Islamic Banking has increased in numbers and exhaustive size globally. Several countries such as Iran and Sudan have renewed their entire Banking into Islamic Banking system. Islamic Banking operates in more than 60 countries. Islamic Banking finance increased by 10 to 15 percent per annum, it worldwide assets exists round about \$1 trillion and more than 160 financial institutions (Dar, 2003).

Commercial Banking are comparatively older and has been focused both extensively and intensively on literature as compared to the modern Islamic Banking which was started before 4 decades but at a standstill, lacks in level of extensive and intensive literature. So that's way the center of the discussion and focus of the study is Islamic Banks and Commercial Banking.

#### III. RESEARCH OBJECTIVES

- 1. Investigate the impact of Bank size and Gross domestic product on the profit of Commercial Bank and Islamic Bank in Pakistan
- Find when firm size raise and how use assets to achieve maximum profit.
- To determine the structural impact on profitability of Commercial and Islamic Banks of Pakistan

#### IV. SCOPE OF THE STUDY

This study is beneficial for economist, this research find the gap between the firm size and profitability. Banking sector play the vital role in the economic development of any country. M Financial ratio is the financial strength of any sector. This ratio is not only for depositor people even in future routine for improvement of management activities plus point is to show full information and image about Banking position to investor, management and shareholders.

This study will help to not only the Banking sector but also those who lend or financial institutions, because Banking sector of Pakistan has been growing slightly despite its social and economic problems. However not only customers perceive which made efforts to determine the crucial factors that in their choice Banks but institutions.

#### V. LITERATURE REVIEW

Empirical investigation of the link between firm size and gain in industrial economies within the past has given variable outcome. Many studies have gotten either week negative relationship or none in any respects (Marcus, 1969).

Decision making utility maximization may be a byproduct of the separation of possession from management in gift business. This division will rise through firm size creating giant firm a lot of susceptible social control utility maximization than minor companies. Decision making utility maximization provides abstract frame work for negative relationship between firm size

and profit. The connection between firm size and profit is also positive over some firm size range (Wilder, 1985).

Another study has examined Profitability and marketability of Commercial Banks by applying data envelopment investigation (DEA) model. The method of data analysis was based on two stages. On the base of this study it was completed large Banks performed better with respect to profitability than small size Banks, while small size Banks have better characteristic of marketability as compare to large Bank size (Seiford, 1999).

Researchers also observed the factor that affected the profitability of Banks in USA for the amount of 1985 to 1990 during which the quantity of the Banks was found to be negatively related with productivity, the negative relationship of the dimensions indicate the diseconomies of scale (Noulas, 1997).

The performance of special kinds of Chinese Banks for the amount 1999 and 2006 has observed. The end result counsel economic price added and therefore the web interest margin do improved than a lot of standard measure of profitableness, name come on the average quality and on the average equity and economics variable and money ratio square measure important with the predictable symbols. The sort of Bank is powerful, Bank volume isn't neither the proportion of foreign possession Bank listing contains a visible impact (Heffernan & Fu, 2008).

The Bank with higher total capital, deposit and credit or whole quality doesn't continuously mean that there will be a higher profit routine. Money performance of the Banks was powerfully and completely influenced by the operational potency and quality management and addition to the Bank size (Tarawneh, 2006).

A study divided the Bank in class. With the victimization statistical procedure analysis, the following result were determined of the plus management, operational effectiveness, and Bank size on the money performance concerning industrial Banks with twenty branches, the finding was; higher total capital, deposits, credit, or total assets don't forever stand a stronger profit performance (Akhigbe & McNulty, 2005).

A study find the some vital issue influence performance of the UAE Muslim and standard national Banks kind 1996-2008 using the multivariate analysis, especially ROE and ROA as variable, investigator show the result liquidity and concentration were the foremost vital determinant of typical nation Banks. Range of branches and value were the foremost powerful issue of Muslim Bank performance (Al-Tamimi, 2010).

Researchers investigated the potency of Greek Banks against size. They used their study multi criteria methodology to classify Greek Banks in step with the come back and performance issue, show the distinction of the Bank gain and potency between tiny and huge Banks through this study (Spathis, Kosmidou & Doumpos, 2002).

A study was conducted in Kuwait to see the important factor employed in Kuwait business consumer in domestic and foreign Banks. Result show the best ranking Bank in Kuwait by house size of Bank assets, personal potency and Banking expertise, friendliness of staff and reputation, goodwill and handiness of branches in foreign country (Edris, 1997).

Researchers studied the performance of Islamic and conventional Banks through CAMEL test during the time of 2005 to 2009. They use sample for research 5 Islamic and 5 conventional Bank and found the Islamic Bank performed better and high liquidity as compare to Commercial Banks and realized the Commercial Bank have strong in the management with high quality earning capacity (Jaffar & Manarvi, 2011).

Some studies have also conducted to gauge the perceptions of employees regarding Islamic products and services. It has found that Islamic Banking employers has more positive perception about the Islamic products and services (Arshad et al, 2011).

Researchers also observed the strong relationship between rates of interest on deposits at Commercial Bank with rate of profit of deposit cash in Islamic Bank and realized the effect of interest rate on deposit cash at Commercial Bank and Islamic Bank through adaptive expectation model. They found negative relationship between rates of interest of Commercial Bank with the interest free Bank (Haron & Ahmad, 2000). Interest rates also have some relation with ROE and ROA (Ali et al., 2012a).

A study measure the performance and market power of the Saudi Banking sector. They use market

concentration ratio and explain the structure performance. They collect data form monopolistic competitive market and apply regression model for the independent variable. Their result from this model business risk and Bank size were main variable determine Bank profitability (Ahmad & Khababa, 1999). A study also revealed the positive relation of Bank's profitability with Equity and number of shares (Ali et al., 2012b).

#### VI. Data and Methodology

In this research use secondary data for measure the firm size and profitability. Data and financial statement collected form websites of all Bank and state Bank of Pakistan. During this study 5 Commercial Bank and 5 Islamic Banks are selected for the period of 2008 to 2012. Data process and measure result by using software "statistical package for social science" and in excel sheet. Dependent variable use return on assets and independent variable is firm size. Some test and Techniques use for outcome purpose. Regression and T-Test run for checking the independent variable on dependent variable and comparison of both Bank plus descriptive statistics. Regression shows relationship between the independent variables and dependent variables. Return on assets use as a dependent variable and firm size use as an independent variable. When only one dependent variable run is called regression analyses-Test use for comparison of Commercial and Islamic Bank by using data and then compare of both Bank.

#### VII. EMPIRICAL RESULTS

#### a) Commercial Bank

Table 4.1.2: Coefficients<sup>a</sup>

	Model	Un-Standardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	.559	.189		2.953	.007
ı	Firm Size	.001	.000	.678	4.424	.000

a. Dependent Variable: ROA

#### b) Islamic Bank

Table 4.1.4: Coefficients<sup>a</sup>

Un-Standardized  Model Coefficients		Standardized Coefficients	t	Sig.		
		В	Std. Error	Beta		
-1	(Constant)	-1.318	.535		-2.463	.022
ı	Firm Size	.014	.009	.303	1.526	.141

a. Dependent Variable: ROA

Regressions coefficients model explanation is given blow. The hypothesis of this study with the two variables is significant and insignificant results. Commercial Banks value of B is 0.678, Std. Error

0.189 but Islamic Banks Beta 0.303 STD 0.535 but there are significant and insignificant relations between Commercial Bank and Islamic Bank.

#### c) T-Test

Table 4.2.1: Group Statistics

	Codes	N	Mean	Std. Deviation	Std. Error Mean
Firm Size	Commercial	25	7.8352E2	401.47884	80.29577
FIIIII SIZE	Islamic	25	55.0000	25.51797	5.10359
ROA	Commercial	25	1.30800	.565847	.113169
NOA	Islamic	25	57480	1.137542	.227508

T-Test shows the size of the firm has greater impact on profitability in Commercial Banks rather than Islamic Banks. The positive or greater values of Commercial Banks express the positive impact on profitability of firm's size. The negative ROA express the insignificant impact of size on profitability of Islamic Banks. The firm size has impact on profitability of Commercial Banks but not on Islamic Banks profitability.

Table 4.2.2: Independent Samples Test

Levene's Test for Equality				t-Test for Equality of Means				
	of Variances		Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Firm Size Equal Variances Assumed Equal Variances Not Assumed		96.35	0	9.055	48	0	728.52	80.4578
				9.055	24.194	0	728.52	80.4578
ROA	Equal Variances Assumed	12.26	0.001	7.41	48	0	1.8828	0.254101
NOA	Equal Variances Not Assumed			7.41	35.192	0	1.8828	0.254101

The result of this table show that the relationships between firm size and profitability significant in case of Commercial Bank but insignificant in case of Islamic Bank. Only one variable has significant impact of Commercial Bank. The significant result of Commercial Bank is 48 but 24.194 of Islamic which show that the relationship has a positive impact on the profitability.

In ROA of the Commercial Bank are 48 but Islamic Banks 35.192 which is smaller than Commercial Banks. That's mean the firm size has greater impact on Commercial Banks but not on Islamic Banks profitability, so that way the values of Commercial Banks are greater or positive.

#### VIII. CONCLUSION

In this study we use five year data from 2008 to 2012. The data used of 10 Banks by which 5 Commercial Banks and 5 Islamic Banks. The result shows that Commercial Banks have significant impact and Islamic Banks insignificant impact of firm size on profitability. This research show the sound effects of the firm size on profitability of Commercial Bank Ltd and Islamic Bank in Pakistan. Regression analysis shows that, there is positive effect of Firm size on Profitability in Commercial Bank., but there was no effect between firm size and Profitability in Islamic Banks.

Regression test express the significant impact (Commercial Bank) and insignificant impact (Islamic Bank) of firm size on Banks profitability, but the firm size's greater impact on Commercial Banks profitability than Islamic Banks. The relationship between firm size and profitability are significant or positive. T-test shows larger impact of firm size on Commercial Banks profitability but have no effect on Islamic Banks profitability. Negative value of ROA

describes the insignificant on Islamic Bank, in Islamic Banking size or number of branches doesn't have impact on profitability but in Commercial Banking size or number of branches have positive impact on Bank profitability.

#### RECOMMENDATIONS

The model size can be increased of all Banks like increase the Bank for finding the empirical result in this sector. In Pakistan full-fledged Islamic Bank is low and initial stage as compare to Commercial Bank, require more research about banking performance for taking correct decision on the right time in Pakistan. This study is restricted only five Commercial Bank and Islamic Bank, it is recommend the all Commercial Bank and all Islamic Bank be carry out or analysis Islamic and Commercial Banks with collect more data, and then find result and compare with each other in the country, because the outcome and finding is not provide full information to investors and not help for decision making. Investors also check each and every think like fact and figure before deal and investment.

#### References Références Referencias

- 1. Ahmad, A. M. & Khababa, N. (1999). Performance of the Banking Sector in Saudi Arabia. Journal of Financial Management & Analysis, 12 (2), 30-36.
- Akhigbe, A. and McNulty, J. E. (2005). Profit Efficiency Sources and Differences among Small and Large U.S. Commercial Banks, Journal of Economics and Finance, 29 (3), 289-299.
- Ali, S. A. (2012a). Profitability Determinants of Islamic Banking in Pakistan. International Journal of Contemporary Research in Business. 3 (11). 86-99.
- 4. Ali, S. A. (2012b). Efficiency and profitability analysis of investment banking in Pakistan. International

- Journal of Contemporary Research in Business. 4 (2), 1067-1083.
- 5. Al-Tamimi, H. A. H. (2010). Factors Influencing Performance of the UAE Islamic and Conventional National Banks, Global Journal of Business Research, 4 (2), 1-9.
- 6. Arshad, M., Aslam, S., Razi, A. & Ali, S. A. (2011). A comparative analysis of Bankers' perception on Islamic Banking in Pakistan. International Journal of Economics and Research, 2 (4), 1-12.
- 7. Dar, H. (2003). Handbook of International Banking, UK: Edward Elgar.
- 8. Dess, G. G. & Robinson, R. B. Jr. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. Strategic Management Journal, 5, 265-273.
- 9. Dhawan, R. (2001). Firm size and Productivity Differential: Theory and Evidence from a Panel of US firms, Journal of Economic Behavior and Organization, 44, 269-293.
- 10. Edris, T. A. (1997). Services considered important to business customers and determinants of Bank selection in Kuwait: A segmentation analysis. Journal of Bank Marketing, 15 (4), 126-133.
- 11. Haron, S. and Ahmad, N. (2000). The effects of conventional interest rates and rate of profits on funds deposited with Islamic Banking system in Malaysia. International Journal of Islamic Financial Services, 1, 1-7.
- 12. Heffernan, S. & Fu. M. (2008). The determinants of Bank performance in China, Cass Business School, City University, London, Working Paper Series (WP-EMG-03-2008).
- 13. Jaffar, M., & Manarvi, I. (2011). Performance Comparison of Islamic and Conventional Banks in Pakistan. Global Journal of Management and Business Research, 11 (1), 59-66.
- 14. Lumpkin, G. T., and Dess, G. G. (1996) Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance, Academy of Management Review. 21 (1), 135-172.
- 15. Marcus, M. (1969). Profitability and size of firm. Review of Economics and Statistics, 104-107.
- 16. Noulas, M. (1997). Portfolio Mix and Large Bank profitability in the USA. Applied Economics, 505-512.
- 17. Seiford, Z. (1999). Profitability and Marketability of the top 55 US Commercial Banks. Management Science, 1270-1288.
- 18. Spathis, Ch., Kosmidou, K. & Doumpos, M. (2002). Assessing Profitability Factor in the Greek Banking System. International Transaction in Operational Research, 9, 517-530.
- 19. Tarawneh, M. (2006). Comparison of financial Performance in the Banking Sector: Some Evidence from Omani Commercial Banks. International

- Research Journal of Finance and Economic, 3, 101-112.
- 20. Wilder, A. (1985). The Effect of Firm Size on Profit Rate in U.S. Manufacturing. Southern Economics Journal, 181-190.

## GLOBAL JOURNALS GUIDELINES HANDBOOK 2018 WWW.GLOBALJOURNALS.ORG

#### FELLOW OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (FARSB)

Global Journals Incorporate (USA) is accredited by Open Association of Research Society (OARS), U.S.A and in turn, awards "FARSBA" title to individuals. The 'FARSBA' title is accorded to a selected professional after the approval of the Editor-in-Chief/Editorial Board Members/Dean.



The "FARSB" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSBA or William Walldroff, M.S., FARSBA.

FARSBA accrediting is an honor. It authenticates your research activities. After recognition as FARSBA, you can add 'FARSBA' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and repute to your name. You may use it on your professional Counseling Materials such as CV, Resume, and Visiting Card etc.

The following benefits can be availed by you only for next three years from the date of certification:



FARSBA designated members are entitled to avail a 40% discount while publishing their research papers (of a single author) with Global Journals Incorporation (USA), if the same is accepted by Editorial Board/Peer Reviewers. If you are a main author or coauthor in case of multiple authors, you will be entitled to avail discount of 10%.

Once FARSBA title is accorded, the Fellow is authorized to organize a symposium/seminar/conference on behalf of Global Journal Incorporation (USA). The Fellow can also participate in conference/seminar/symposium organized by another institution as representative of Global Journal. In both the cases, it is mandatory for him to discuss with us and obtain our consent.





You may join as member of the Editorial Board of Global Journals Incorporation (USA) after successful completion of three years as Fellow and as Peer Reviewer. In addition, it is also desirable that you should organize seminar/symposium/conference at least once.

We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.







Journals Research

The FARSBA can go through standards of OARS. You can also play vital role if you have any suggestions so that proper amendment can take place to improve the same for the benefit of entire research community.

As FARSBA, you will be given a renowned, secure and free professional email address with 100 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.





The FARSBA will be eligible for a free application of standardization of their researches. Standardization of research will be subject to acceptability within stipulated norms as the next step after publishing in a journal. We shall depute a team of specialized research professionals who will render their services for elevating your researches to next higher level, which is worldwide open standardization.

The FARSBA member can apply for grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A. Once you are designated as FARSBA, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria. After certification of all your credentials by OARS, they will be published on your Fellow Profile link on website <a href="https://associationofresearch.org">https://associationofresearch.org</a> which will be helpful to upgrade the dignity.



The FARSBA members can avail the benefits of free research podcasting in Global Research Radio with their research documents. After publishing the work, (including published elsewhere worldwide with proper authorization) you can upload your research paper with your recorded voice or you can utilize chargeable services of our professional RJs to record your paper in their voice on

request.

The FARSBA member also entitled to get the benefits of free research podcasting of their research documents through video clips. We can also streamline your conference videos and display your slides/ online slides and online research video clips at reasonable charges, on request.





The FARSBA is eligible to earn from sales proceeds of his/her researches/reference/review Books or literature, while publishing with Global Journals. The FARSBA can decide whether he/she would like to publish his/her research in a closed manner. In this case, whenever readers purchase that individual research paper for reading, maximum 60% of its profit earned as royalty by Global Journals, will be credited to his/her bank account. The entire entitled amount will be credited to

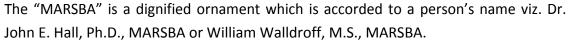
his/her bank account exceeding limit of minimum fixed balance. There is no minimum time limit for collection. The FARSC member can decide its price and we can help in making the right decision.

The FARSBA member is eligible to join as a paid peer reviewer at Global Journals Incorporation (USA) and can get remuneration of 15% of author fees, taken from the author of a respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account.



#### MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSBA)

The 'MARSBA' title is accorded to a selected professional after the approval of the Editor-in-Chief / Editorial Board Members/Dean.





MARSB accrediting is an honor. It authenticates your research activities. After becoming MARSBA, you can add 'MARSBA' title with your name as you use this recognition as additional suffix to your status. This will definitely enhance and add more value and repute to your name. You may use it on your professional Counseling Materials such as CV, Resume, Visiting Card and Name Plate etc.

The following benefitscan be availed by you only for next three years from the date of certification.



MARSBA designated members are entitled to avail a 25% discount while publishing their research papers (of a single author) in Global Journals Inc., if the same is accepted by our Editorial Board and Peer Reviewers. If you are a main author or coauthor of a group of authors, you will get discount of 10%.

As MARSBA, you will be given a renowned, secure and free professional email address with 30 GB of space e.g. johnhall@globaljournals.org. This will include Webmail, Spam Assassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.







We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.

The MARSBA member can apply for approval, grading and certification of standards of their educational and Institutional Degrees to Open Association of Research, Society U.S.A.



Once you are designated as MARSBA, you may send us a scanned copy of all of your credentials. OARS will verify, grade and certify them. This will be based on your academic records, quality of research papers published by you, and some more criteria.

It is mandatory to read all terms and conditions carefully.

#### AUXILIARY MEMBERSHIPS

#### Institutional Fellow of Open Association of Research Society (USA)-OARS (USA)

Global Journals Incorporation (USA) is accredited by Open Association of Research Society, U.S.A (OARS) and in turn, affiliates research institutions as "Institutional Fellow of Open Association of Research Society" (IFOARS).



The "FARSC" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.

The IFOARS institution is entitled to form a Board comprised of one Chairperson and three to five board members preferably from different streams. The Board will be recognized as "Institutional Board of Open Association of Research Society"-(IBOARS).

The Institute will be entitled to following benefits:



The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA) The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.

The author fees of such paper may be waived off up to 40%.

The Global Journals Incorporation (USA) at its discretion can also refer double blind peer reviewed paper at their end to the board for the verification and to get recommendation for final stage of acceptance of publication.





The IBOARS can organize symposium/seminar/conference in their country on penal or Global Journals Incorporation (USA)-OARS (USA). The terms and conditions can be discussed separately.

The Board can also play vital role by exploring and giving valuable suggestions regarding the Standards of "Open Association of Research Society, U.S.A (OARS)" so that proper amendment can take place for the benefit of entire research community. We shall provide details of particular standard only on receipt of request from the Board.



Journals Research relevant details.

The board members can also join us as Individual Fellow with 40% discount on total fees applicable to Individual Fellow. They will be entitled to avail all the benefits as declared. Please visit Individual Fellow-sub menu of GlobalJournals.org to have more relevant details.

We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.



After nomination of your institution as "Institutional Fellow" and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf.

The board can also take up the additional allied activities for betterment after our consultation.

#### The following entitlements are applicable to individual Fellows:

Open Association of Research Society, U.S.A (OARS) By-laws states that an individual Fellow may use the designations as applicable, or the corresponding initials. The Credentials of individual Fellow and Associate designations signify that the individual has gained knowledge of the fundamental concepts. One is magnanimous and proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice.





Open Association of Research Society (US)/ Global Journals Incorporation (USA), as described in Corporate Statements, are educational, research publishing and PROBLEM RADIO professional membership organizations. Achieving our individual Fellow or Associate status is based mainly on meeting stated educational research requirements.

Disbursement of 40% Royalty earned through Global Journals: Researcher = 50%, Peer Reviewer = 37.50%, Institution = 12.50% E.g. Out of 40%, the 20% benefit should be passed on to researcher, 15 % benefit towards remuneration should be given to a reviewer and remaining 5% is to be retained by the institution.



We shall provide print version of 12 issues of any three journals [as per your requirement] out of our 38 journals worth \$ 2376 USD.

#### Other:

The individual Fellow and Associate designations accredited by Open Association of Research Society (US) credentials signify guarantees following achievements:

The professional accredited with Fellow honor, is entitled to various benefits viz. name, fame, honor, regular flow of income, secured bright future, social status etc.



- In addition to above, if one is single author, then entitled to 40% discount on publishing research paper and can get 10% discount if one is co-author or main author among group of authors.
- ➤ The Fellow can organize symposium/seminar/conference on behalf of Global Journals Incorporation (USA) and he/she can also attend the same organized by other institutes on behalf of Global Journals.
- The Fellow can become member of Editorial Board Member after completing 3yrs.
- ➤ The Fellow can earn 60% of sales proceeds from the sale of reference/review books/literature/publishing of research paper.
- ➤ Fellow can also join as paid peer reviewer and earn 15% remuneration of author charges and can also get an opportunity to join as member of the Editorial Board of Global Journals Incorporation (USA)
- This individual has learned the basic methods of applying those concepts and techniques to common challenging situations. This individual has further demonstrated an in-depth understanding of the application of suitable techniques to a particular area of research practice.

#### Note:

- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.
- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.
- In case of "Difference of Opinion [if any]" among the Board members, our decision will be final and binding to everyone.



#### Preferred Author Guidelines

#### We accept the manuscript submissions in any standard (generic) format.

We typeset manuscripts using advanced typesetting tools like Adobe In Design, CorelDraw, TeXnicCenter, and TeXStudio. We usually recommend authors submit their research using any standard format they are comfortable with, and let Global Journals do the rest.

Alternatively, you can download our basic template from https://globaljournals.org/Template.zip

Authors should submit their complete paper/article, including text illustrations, graphics, conclusions, artwork, and tables. Authors who are not able to submit manuscript using the form above can email the manuscript department at submit@globaljournals.org or get in touch with chiefeditor@globaljournals.org if they wish to send the abstract before submission.

#### Before and During Submission

Authors must ensure the information provided during the submission of a paper is authentic. Please go through the following checklist before submitting:

- 1. Authors must go through the complete author guideline and understand and agree to Global Journals' ethics and code of conduct, along with author responsibilities.
- 2. Authors must accept the privacy policy, terms, and conditions of Global Journals.
- 3. Ensure corresponding author's email address and postal address are accurate and reachable.
- 4. Manuscript to be submitted must include keywords, an abstract, a paper title, co-author(s') names and details (email address, name, phone number, and institution), figures and illustrations in vector format including appropriate captions, tables, including titles and footnotes, a conclusion, results, acknowledgments and references.
- 5. Authors should submit paper in a ZIP archive if any supplementary files are required along with the paper.
- 6. Proper permissions must be acquired for the use of any copyrighted material.
- 7. Manuscript submitted *must not have been submitted or published elsewhere* and all authors must be aware of the submission.

#### **Declaration of Conflicts of Interest**

It is required for authors to declare all financial, institutional, and personal relationships with other individuals and organizations that could influence (bias) their research.

#### POLICY ON PLAGIARISM

Plagiarism is not acceptable in Global Journals submissions at all.

Plagiarized content will not be considered for publication. We reserve the right to inform authors' institutions about plagiarism detected either before or after publication. If plagiarism is identified, we will follow COPE guidelines:

Authors are solely responsible for all the plagiarism that is found. The author must not fabricate, falsify or plagiarize existing research data. The following, if copied, will be considered plagiarism:

- Words (language)
- Ideas
- Findings
- Writings
- Diagrams
- Graphs
- Illustrations
- Lectures



- Printed material
- Graphic representations
- Computer programs
- Electronic material
- Any other original work

#### **AUTHORSHIP POLICIES**

Global Journals follows the definition of authorship set up by the Open Association of Research Society, USA. According to its guidelines, authorship criteria must be based on:

- Substantial contributions to the conception and acquisition of data, analysis, and interpretation of findings.
- Drafting the paper and revising it critically regarding important academic content.
- 3. Final approval of the version of the paper to be published.

#### **Changes in Authorship**

The corresponding author should mention the name and complete details of all co-authors during submission and in manuscript. We support addition, rearrangement, manipulation, and deletions in authors list till the early view publication of the journal. We expect that corresponding author will notify all co-authors of submission. We follow COPE guidelines for changes in authorship.

#### Copyright

During submission of the manuscript, the author is confirming an exclusive license agreement with Global Journals which gives Global Journals the authority to reproduce, reuse, and republish authors' research. We also believe in flexible copyright terms where copyright may remain with authors/employers/institutions as well. Contact your editor after acceptance to choose your copyright policy. You may follow this form for copyright transfers.

#### **Appealing Decisions**

Unless specified in the notification, the Editorial Board's decision on publication of the paper is final and cannot be appealed before making the major change in the manuscript.

#### **Acknowledgments**

Contributors to the research other than authors credited should be mentioned in Acknowledgments. The source of funding for the research can be included. Suppliers of resources may be mentioned along with their addresses.

#### **Declaration of funding sources**

Global Journals is in partnership with various universities, laboratories, and other institutions worldwide in the research domain. Authors are requested to disclose their source of funding during every stage of their research, such as making analysis, performing laboratory operations, computing data, and using institutional resources, from writing an article to its submission. This will also help authors to get reimbursements by requesting an open access publication letter from Global Journals and submitting to the respective funding source.

#### Preparing your Manuscript

Authors can submit papers and articles in an acceptable file format: MS Word (doc, docx), LaTeX (.tex, .zip or .rar including all of your files), Adobe PDF (.pdf), rich text format (.rtf), simple text document (.txt), Open Document Text (.odt), and Apple Pages (.pages). Our professional layout editors will format the entire paper according to our official guidelines. This is one of the highlights of publishing with Global Journals—authors should not be concerned about the formatting of their paper. Global Journals accepts articles and manuscripts in every major language, be it Spanish, Chinese, Japanese, Portuguese, Russian, French, German, Dutch, Italian, Greek, or any other national language, but the title, subtitle, and abstract should be in English. This will facilitate indexing and the pre-peer review process.

The following is the official style and template developed for publication of a research paper. Authors are not required to follow this style during the submission of the paper. It is just for reference purposes.



#### Manuscript Style Instruction (Optional)

- Microsoft Word Document Setting Instructions.
- Font type of all text should be Swis721 Lt BT.
- Page size: 8.27" x 11'", left margin: 0.65, right margin: 0.65, bottom margin: 0.75.
- Paper title should be in one column of font size 24.
- Author name in font size of 11 in one column.
- Abstract: font size 9 with the word "Abstract" in bold italics.
- Main text: font size 10 with two justified columns.
- Two columns with equal column width of 3.38 and spacing of 0.2.
- First character must be three lines drop-capped.
- The paragraph before spacing of 1 pt and after of 0 pt.
- Line spacing of 1 pt.
- Large images must be in one column.
- The names of first main headings (Heading 1) must be in Roman font, capital letters, and font size of 10.
- The names of second main headings (Heading 2) must not include numbers and must be in italics with a font size of 10.

#### Structure and Format of Manuscript

The recommended size of an original research paper is under 15,000 words and review papers under 7,000 words. Research articles should be less than 10,000 words. Research papers are usually longer than review papers. Review papers are reports of significant research (typically less than 7,000 words, including tables, figures, and references)

A research paper must include:

- a) A title which should be relevant to the theme of the paper.
- b) A summary, known as an abstract (less than 150 words), containing the major results and conclusions.
- c) Up to 10 keywords that precisely identify the paper's subject, purpose, and focus.
- d) An introduction, giving fundamental background objectives.
- e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition, sources of information must be given, and numerical methods must be specified by reference.
- f) Results which should be presented concisely by well-designed tables and figures.
- g) Suitable statistical data should also be given.
- h) All data must have been gathered with attention to numerical detail in the planning stage.

Design has been recognized to be essential to experiments for a considerable time, and the editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned unrefereed.

- i) Discussion should cover implications and consequences and not just recapitulate the results; conclusions should also be summarized.
- j) There should be brief acknowledgments.
- k) There ought to be references in the conventional format. Global Journals recommends APA format.

Authors should carefully consider the preparation of papers to ensure that they communicate effectively. Papers are much more likely to be accepted if they are carefully designed and laid out, contain few or no errors, are summarizing, and follow instructions. They will also be published with much fewer delays than those that require much technical and editorial correction.

The Editorial Board reserves the right to make literary corrections and suggestions to improve brevity.



#### FORMAT STRUCTURE

It is necessary that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

All manuscripts submitted to Global Journals should include:

#### Title

The title page must carry an informative title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) where the work was carried out.

#### **Author details**

The full postal address of any related author(s) must be specified.

#### **Abstract**

The abstract is the foundation of the research paper. It should be clear and concise and must contain the objective of the paper and inferences drawn. It is advised to not include big mathematical equations or complicated jargon.

Many researchers searching for information online will use search engines such as Google, Yahoo or others. By optimizing your paper for search engines, you will amplify the chance of someone finding it. In turn, this will make it more likely to be viewed and cited in further works. Global Journals has compiled these guidelines to facilitate you to maximize the webfriendliness of the most public part of your paper.

#### Keywords

A major lynchpin of research work for the writing of research papers is the keyword search, which one will employ to find both library and internet resources. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining, and indexing.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy: planning of a list of possible keywords and phrases to try.

Choice of the main keywords is the first tool of writing a research paper. Research paper writing is an art. Keyword search should be as strategic as possible.

One should start brainstorming lists of potential keywords before even beginning searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in a research paper?" Then consider synonyms for the important words.

It may take the discovery of only one important paper to steer in the right keyword direction because, in most databases, the keywords under which a research paper is abstracted are listed with the paper.

#### **Numerical Methods**

Numerical methods used should be transparent and, where appropriate, supported by references.

#### **Abbreviations**

Authors must list all the abbreviations used in the paper at the end of the paper or in a separate table before using them.

#### Formulas and equations

Authors are advised to submit any mathematical equation using either MathJax, KaTeX, or LaTeX, or in a very high-quality image.

#### **Tables, Figures, and Figure Legends**

Tables: Tables should be cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g., Table 4, a self-explanatory caption, and be on a separate sheet. Authors must submit tables in an editable format and not as images. References to these tables (if any) must be mentioned accurately.



#### **Figures**

Figures are supposed to be submitted as separate files. Always include a citation in the text for each figure using Arabic numbers, e.g., Fig. 4. Artwork must be submitted online in vector electronic form or by emailing it.

#### Preparation of Eletronic Figures for Publication

Although low-quality images are sufficient for review purposes, print publication requires high-quality images to prevent the final product being blurred or fuzzy. Submit (possibly by e-mail) EPS (line art) or TIFF (halftone/ photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Avoid using pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings). Please give the data for figures in black and white or submit a Color Work Agreement form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution at final image size ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs): >350 dpi; figures containing both halftone and line images: >650 dpi.

Color charges: Authors are advised to pay the full cost for the reproduction of their color artwork. Hence, please note that if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a Color Work Agreement form before your paper can be published. Also, you can email your editor to remove the color fee after acceptance of the paper.

#### TIPS FOR WRITING A GOOD QUALITY MANAGEMENT RESEARCH PAPER

Techniques for writing a good quality management and business research paper:

- 1. Choosing the topic: In most cases, the topic is selected by the interests of the author, but it can also be suggested by the guides. You can have several topics, and then judge which you are most comfortable with. This may be done by asking several questions of yourself, like "Will I be able to carry out a search in this area? Will I find all necessary resources to accomplish the search? Will I be able to find all information in this field area?" If the answer to this type of question is "yes," then you ought to choose that topic. In most cases, you may have to conduct surveys and visit several places. Also, you might have to do a lot of work to find all the rises and falls of the various data on that subject. Sometimes, detailed information plays a vital role, instead of short information. Evaluators are human: The first thing to remember is that evaluators are also human beings. They are not only meant for rejecting a paper. They are here to evaluate your paper. So present your best aspect.
- 2. Think like evaluators: If you are in confusion or getting demotivated because your paper may not be accepted by the evaluators, then think, and try to evaluate your paper like an evaluator. Try to understand what an evaluator wants in your research paper, and you will automatically have your answer. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.
- **3.** Ask your guides: If you are having any difficulty with your research, then do not hesitate to share your difficulty with your guide (if you have one). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work, then ask your supervisor to help you with an alternative. He or she might also provide you with a list of essential readings.
- **4. Use of computer is recommended:** As you are doing research in the field of management and business then this point is quite obvious. Use right software: Always use good quality software packages. If you are not capable of judging good software, then you can lose the quality of your paper unknowingly. There are various programs available to help you which you can get through the internet.
- 5. Use the internet for help: An excellent start for your paper is using Google. It is a wondrous search engine, where you can have your doubts resolved. You may also read some answers for the frequent question of how to write your research paper or find a model research paper. You can download books from the internet. If you have all the required books, place importance on reading, selecting, and analyzing the specified information. Then sketch out your research paper. Use big pictures: You may use encyclopedias like Wikipedia to get pictures with the best resolution. At Global Journals, you should strictly follow here.



- 6. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right? It is a good habit which helps to not lose your continuity. You should always use bookmarks while searching on the internet also, which will make your search easier.
- 7. Revise what you wrote: When you write anything, always read it, summarize it, and then finalize it.
- 8. Make every effort: Make every effort to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in the introduction—what is the need for a particular research paper. Polish your work with good writing skills and always give an evaluator what he wants. Make backups: When you are going to do any important thing like making a research paper, you should always have backup copies of it either on your computer or on paper. This protects you from losing any portion of your important data.
- **9. Produce good diagrams of your own:** Always try to include good charts or diagrams in your paper to improve quality. Using several unnecessary diagrams will degrade the quality of your paper by creating a hodgepodge. So always try to include diagrams which were made by you to improve the readability of your paper. Use of direct quotes: When you do research relevant to literature, history, or current affairs, then use of quotes becomes essential, but if the study is relevant to science, use of quotes is not preferable.
- 10. Use proper verb tense: Use proper verb tenses in your paper. Use past tense to present those events that have happened. Use present tense to indicate events that are going on. Use future tense to indicate events that will happen in the future. Use of wrong tenses will confuse the evaluator. Avoid sentences that are incomplete.
- 11. Pick a good study spot: Always try to pick a spot for your research which is quiet. Not every spot is good for studying.
- 12. Know what you know: Always try to know what you know by making objectives, otherwise you will be confused and unable to achieve your target.
- 13. Use good grammar: Always use good grammar and words that will have a positive impact on the evaluator; use of good vocabulary does not mean using tough words which the evaluator has to find in a dictionary. Do not fragment sentences. Eliminate one-word sentences. Do not ever use a big word when a smaller one would suffice. Verbs have to be in agreement with their subjects. In a research paper, do not start sentences with conjunctions or finish them with prepositions. When writing formally, it is advisable to never split an infinitive because someone will (wrongly) complain. Avoid clichés like a disease. Always shun irritating alliteration. Use language which is simple and straightforward. Put together a neat summary.
- **14.** Arrangement of information: Each section of the main body should start with an opening sentence, and there should be a changeover at the end of the section. Give only valid and powerful arguments for your topic. You may also maintain your arguments with records.
- **15. Never start at the last minute:** Always allow enough time for research work. Leaving everything to the last minute will degrade your paper and spoil your work.
- **16. Multitasking in research is not good:** Doing several things at the same time is a bad habit in the case of research activity. Research is an area where everything has a particular time slot. Divide your research work into parts, and do a particular part in a particular time slot.
- 17. Never copy others' work: Never copy others' work and give it your name because if the evaluator has seen it anywhere, you will be in trouble. Take proper rest and food: No matter how many hours you spend on your research activity, if you are not taking care of your health, then all your efforts will have been in vain. For quality research, take proper rest and food.
- 18. Go to seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.
- 19. Refresh your mind after intervals: Try to give your mind a rest by listening to soft music or sleeping in intervals. This will also improve your memory. Acquire colleagues: Always try to acquire colleagues. No matter how sharp you are, if you acquire colleagues, they can give you ideas which will be helpful to your research.
- **20.** Think technically: Always think technically. If anything happens, search for its reasons, benefits, and demerits. Think and then print: When you go to print your paper, check that tables are not split, headings are not detached from their descriptions, and page sequence is maintained.

- 21. Adding unnecessary information: Do not add unnecessary information like "I have used MS Excel to draw graphs." Irrelevant and inappropriate material is superfluous. Foreign terminology and phrases are not apropos. One should never take a broad view. Analogy is like feathers on a snake. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Never oversimplify: When adding material to your research paper, never go for oversimplification; this will definitely irritate the evaluator. Be specific. Never use rhythmic redundancies. Contractions shouldn't be used in a research paper. Comparisons are as terrible as clichés. Give up ampersands, abbreviations, and so on. Remove commas that are not necessary. Parenthetical words should be between brackets or commas. Understatement is always the best way to put forward earth-shaking thoughts. Give a detailed literary review.
- **22.** Report concluded results: Use concluded results. From raw data, filter the results, and then conclude your studies based on measurements and observations taken. An appropriate number of decimal places should be used. Parenthetical remarks are prohibited here. Proofread carefully at the final stage. At the end, give an outline to your arguments. Spot perspectives of further study of the subject. Justify your conclusion at the bottom sufficiently, which will probably include examples.
- **23. Upon conclusion:** Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium though which your research is going to be in print for the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects of your research.

#### INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

#### Key points to remember:

- Submit all work in its final form.
- Write your paper in the form which is presented in the guidelines using the template.
- Please note the criteria peer reviewers will use for grading the final paper.

#### **Final points:**

One purpose of organizing a research paper is to let people interpret your efforts selectively. The journal requires the following sections, submitted in the order listed, with each section starting on a new page:

The introduction: This will be compiled from reference matter and reflect the design processes or outline of basis that directed you to make a study. As you carry out the process of study, the method and process section will be constructed like that. The results segment will show related statistics in nearly sequential order and direct reviewers to similar intellectual paths throughout the data that you gathered to carry out your study.

#### The discussion section:

This will provide understanding of the data and projections as to the implications of the results. The use of good quality references throughout the paper will give the effort trustworthiness by representing an alertness to prior workings.

Writing a research paper is not an easy job, no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record-keeping are the only means to make straightforward progression.

#### General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear: Adhere to recommended page limits.

Mistakes to avoid:

- Insertion of a title at the foot of a page with subsequent text on the next page.
- Separating a table, chart, or figure—confine each to a single page.
- Submitting a manuscript with pages out of sequence.
- In every section of your document, use standard writing style, including articles ("a" and "the").
- Keep paying attention to the topic of the paper.



- Use paragraphs to split each significant point (excluding the abstract).
- Align the primary line of each section.
- Present your points in sound order.
- Use present tense to report well-accepted matters.
- Use past tense to describe specific results.
- Do not use familiar wording; don't address the reviewer directly. Don't use slang or superlatives.
- Avoid use of extra pictures—include only those figures essential to presenting results.

#### Title page:

Choose a revealing title. It should be short and include the name(s) and address(es) of all authors. It should not have acronyms or abbreviations or exceed two printed lines.

**Abstract:** This summary should be two hundred words or less. It should clearly and briefly explain the key findings reported in the manuscript and must have precise statistics. It should not have acronyms or abbreviations. It should be logical in itself. Do not cite references at this point.

An abstract is a brief, distinct paragraph summary of finished work or work in development. In a minute or less, a reviewer can be taught the foundation behind the study, common approaches to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Use comprehensive sentences, and do not sacrifice readability for brevity; you can maintain it succinctly by phrasing sentences so that they provide more than a lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study with the subsequent elements in any summary. Try to limit the initial two items to no more than one line each.

Reason for writing the article—theory, overall issue, purpose.

- Fundamental goal.
- To-the-point depiction of the research.
- Consequences, including definite statistics—if the consequences are quantitative in nature, account for this; results of any numerical analysis should be reported. Significant conclusions or questions that emerge from the research.

#### Approach:

- Single section and succinct.
- o An outline of the job done is always written in past tense.
- o Concentrate on shortening results—limit background information to a verdict or two.
- Exact spelling, clarity of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else.

#### Introduction:

The introduction should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable of comprehending and calculating the purpose of your study without having to refer to other works. The basis for the study should be offered. Give the most important references, but avoid making a comprehensive appraisal of the topic. Describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will give no attention to your results. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here.

The following approach can create a valuable beginning:

- o Explain the value (significance) of the study.
- O Defend the model—why did you employ this particular system or method? What is its compensation? Remark upon its appropriateness from an abstract point of view as well as pointing out sensible reasons for using it.
- Present a justification. State your particular theory(-ies) or aim(s), and describe the logic that led you to choose them.
- o Briefly explain the study's tentative purpose and how it meets the declared objectives.



#### Approach:

Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done. Sort out your thoughts; manufacture one key point for every section. If you make the four points listed above, you will need at least four paragraphs. Present surrounding information only when it is necessary to support a situation. The reviewer does not desire to read everything you know about a topic. Shape the theory specifically—do not take a broad view.

As always, give awareness to spelling, simplicity, and correctness of sentences and phrases.

#### Procedures (methods and materials):

This part is supposed to be the easiest to carve if you have good skills. A soundly written procedures segment allows a capable scientist to replicate your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order, but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt to give the least amount of information that would permit another capable scientist to replicate your outcome, but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section.

When a technique is used that has been well-described in another section, mention the specific item describing the way, but draw the basic principle while stating the situation. The purpose is to show all particular resources and broad procedures so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step-by-step report of the whole thing you did, nor is a methods section a set of orders.

#### **Materials:**

Materials may be reported in part of a section or else they may be recognized along with your measures.

#### Methods:

- Report the method and not the particulars of each process that engaged the same methodology.
- Describe the method entirely.
- o To be succinct, present methods under headings dedicated to specific dealings or groups of measures.
- o Simplify—detail how procedures were completed, not how they were performed on a particular day.
- o If well-known procedures were used, account for the procedure by name, possibly with a reference, and that's all.

#### Approach:

It is embarrassing to use vigorous voice when documenting methods without using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result, when writing up the methods, most authors use third person passive voice.

Use standard style in this and every other part of the paper—avoid familiar lists, and use full sentences.

#### What to keep away from:

- o Resources and methods are not a set of information.
- o Skip all descriptive information and surroundings—save it for the argument.
- Leave out information that is immaterial to a third party.

#### **Results:**

The principle of a results segment is to present and demonstrate your conclusion. Create this part as entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Use statistics and tables, if suitable, to present consequences most efficiently.

You must clearly differentiate material which would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matters should not be submitted at all except if requested by the instructor.



#### Content:

- o Sum up your conclusions in text and demonstrate them, if suitable, with figures and tables.
- o In the manuscript, explain each of your consequences, and point the reader to remarks that are most appropriate.
- o Present a background, such as by describing the question that was addressed by creation of an exacting study.
- Explain results of control experiments and give remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or manuscript.

#### What to stay away from:

- Do not discuss or infer your outcome, report surrounding information, or try to explain anything.
- Do not include raw data or intermediate calculations in a research manuscript.
- Do not present similar data more than once.
- o A manuscript should complement any figures or tables, not duplicate information.
- Never confuse figures with tables—there is a difference.

#### Approach:

As always, use past tense when you submit your results, and put the whole thing in a reasonable order.

Put figures and tables, appropriately numbered, in order at the end of the report.

If you desire, you may place your figures and tables properly within the text of your results section.

#### Figures and tables:

If you put figures and tables at the end of some details, make certain that they are visibly distinguished from any attached appendix materials, such as raw facts. Whatever the position, each table must be titled, numbered one after the other, and include a heading. All figures and tables must be divided from the text.

#### Discussion:

The discussion is expected to be the trickiest segment to write. A lot of papers submitted to the journal are discarded based on problems with the discussion. There is no rule for how long an argument should be.

Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implications of the study. The purpose here is to offer an understanding of your results and support all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of results should be fully described.

Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact, you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved the prospect, and let it drop at that. Make a decision as to whether each premise is supported or discarded or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."

Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work.

- o You may propose future guidelines, such as how an experiment might be personalized to accomplish a new idea.
- o Give details of all of your remarks as much as possible, focusing on mechanisms.
- o Make a decision as to whether the tentative design sufficiently addressed the theory and whether or not it was correctly restricted. Try to present substitute explanations if they are sensible alternatives.
- One piece of research will not counter an overall question, so maintain the large picture in mind. Where do you go next? The best studies unlock new avenues of study. What questions remain?
- o Recommendations for detailed papers will offer supplementary suggestions.



#### Approach:

When you refer to information, differentiate data generated by your own studies from other available information. Present work done by specific persons (including you) in past tense.

Describe generally acknowledged facts and main beliefs in present tense.

#### THE ADMINISTRATION RULES

Administration Rules to Be Strictly Followed before Submitting Your Research Paper to Global Journals Inc.

Please read the following rules and regulations carefully before submitting your research paper to Global Journals Inc. to avoid rejection.

Segment draft and final research paper: You have to strictly follow the template of a research paper, failing which your paper may get rejected. You are expected to write each part of the paper wholly on your own. The peer reviewers need to identify your own perspective of the concepts in your own terms. Please do not extract straight from any other source, and do not rephrase someone else's analysis. Do not allow anyone else to proofread your manuscript.

Written material: You may discuss this with your guides and key sources. Do not copy anyone else's paper, even if this is only imitation, otherwise it will be rejected on the grounds of plagiarism, which is illegal. Various methods to avoid plagiarism are strictly applied by us to every paper, and, if found guilty, you may be blacklisted, which could affect your career adversely. To guard yourself and others from possible illegal use, please do not permit anyone to use or even read your paper and file.



## CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION) BY GLOBAL JOURNALS

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals.

Topics	Grades		
	А-В	C-D	E-F
Abstract	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form  Above 200 words	No specific data with ambiguous information  Above 250 words
Introduction	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
Methods and Procedures	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
Result	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
Discussion	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
References	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



### INDEX

R

 $\begin{array}{c} \text{Reigning} \cdot 47 \\ \text{Reimburse} \cdot 33 \end{array}$ 

A
Accumulated • 9, 10 Alchemy • 28 Assimilation • 48 Assortment • 28
C
Collaterality · 7 Contemporary · 60, 61
D
Delinquent · 33, 34 Disbursement · 12, 14
Н
Heteroskedasticity · 8, 48
1
Instigated · 24
M
Misapprehend · 22 Monopolistic · 57
P
Palgrave · 28 Pertinent · 13, 41 Plasible · 1 Potency · 56, 57 Propensity · 22

#### S

Stipulated · 44 Susceptible · 55

#### V

Victimization · 56

#### W

Winsorized · 41



## Global Journal of Management and Business Research

Visit us on the Web at www.GlobalJournals.org | www.JournalofBusiness.Org or email us at helpdesk@globaljournals.org



61427>

E28227P NZZI

© Global Journals