

GLOBAL JOURNAL

OF MANAGEMENT AND BUSINESS RESEARCH: C

Finance

The Internet Banking Adoption

Demystifying Risk Management

Highlights

Socio-Economic Profile

Microfinance Market of Turkey

Discovering Thoughts, Inventing Future

VOLUME 13

ISSUE 8

VERSION 10

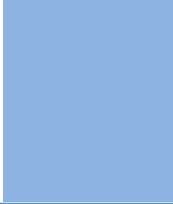


GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH : C
FINANCE



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH : C
FINANCE

VOLUME 13 ISSUE 8 (VER. 1.0)



© Global Journal of
Management and Business
Research.2013.

All rights reserved.

This is a special issue published in version 1.0
of "Global Journal of Management And
Business Research." By Global Journals Inc.

All articles are open access articles distributed
under "Global Journal of Management And
Business Research"

Reading License, which permits restricted use.
Entire contents are copyright by of "Global
Journal of Management And Business
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.
Ultrapublishing 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 [http://globaljournals.us/terms-and-condition/
menu-id-1463/](http://globaljournals.us/terms-and-condition/menu-id-1463/).

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 Inc., Headquarters Corporate Office,
Cambridge Office Center, II Canal Park, Floor No.
5th, **Cambridge (Massachusetts)**, Pin: MA 02141
United States

USA Toll Free: +001-888-839-7392

USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Open Association of Research Society, Marsh Road,
Rainham, Essex, London RM13 8EU
United Kingdom.

Packaging & Continental Dispatching

Global Journals, 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: investers@globaljournals.org

Technical Support: technology@globaljournals.org

Media & Releases: media@globaljournals.org

Pricing (Including by Air Parcel Charges):

For Authors:

22 USD (B/W) & 50 USD (Color)

Yearly Subscription (Personal & Institutional):

200 USD (B/W) & 250 USD (Color)

EDITORIAL BOARD MEMBERS (HON.)

John A. Hamilton, "Drew" Jr.,
Ph.D., Professor, Management
Computer Science and Software
Engineering
Director, Information Assurance
Laboratory
Auburn University

Dr. Henry Hexmoor
IEEE senior member since 2004
Ph.D. Computer Science, University at
Buffalo
Department of Computer Science
Southern Illinois University at Carbondale

Dr. Osman Balci, Professor
Department of Computer Science
Virginia Tech, Virginia University
Ph.D. and M.S. Syracuse University,
Syracuse, New York
M.S. and B.S. Bogazici University,
Istanbul, Turkey

Yogita Bajpai
M.Sc. (Computer Science), FICCT
U.S.A. Email:
yogita@computerresearch.org

Dr. T. David A. Forbes
Associate Professor and Range
Nutritionist
Ph.D. Edinburgh University - Animal
Nutrition
M.S. Aberdeen University - Animal
Nutrition
B.A. University of Dublin- Zoology

Dr. Wenying Feng
Professor, Department of Computing &
Information Systems
Department of Mathematics
Trent University, Peterborough,
ON Canada K9J 7B8

Dr. Thomas Wischgoll
Computer Science and Engineering,
Wright State University, Dayton, Ohio
B.S., M.S., Ph.D.
(University of Kaiserslautern)

Dr. Abdurrahman Arslanyilmaz
Computer Science & Information Systems
Department
Youngstown State University
Ph.D., Texas A&M University
University of Missouri, Columbia
Gazi University, Turkey

Dr. Xiaohong He
Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS,
PhD., (University of Texas-Dallas)

Burcin Becerik-Gerber
University of Southern California
Ph.D. in Civil Engineering
DDes from Harvard University
M.S. from University of California, Berkeley
& Istanbul University

Dr. Bart Lambrecht

Director of Research in Accounting and Finance
Professor of Finance
Lancaster University Management School
BA (Antwerp); MPhil, MA, PhD
(Cambridge)

Dr. Carlos García Pont

Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management),
Massachusetts Institute of Technology (MIT)
Master in Business Administration, IESE,
University of Navarra
Degree in Industrial Engineering,
Universitat Politècnica de Catalunya

Dr. Fotini Labropulu

Mathematics - Luther College
University of Regina
Ph.D., M.Sc. in Mathematics
B.A. (Honors) in Mathematics
University of Windsor

Dr. Lynn Lim

Reader in Business and Marketing
Roehampton University, London
BCom, PGDip, MBA (Distinction), PhD,
FHEA

Dr. Mihaly Mezei

ASSOCIATE PROFESSOR
Department of Structural and Chemical
Biology, Mount Sinai School of Medical
Center
Ph.D., Etsv Lornd University
Postdoctoral Training,
New York University

Dr. Söhnke M. Bartram

Department of Accounting and Finance
Lancaster University Management School
Ph.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)

Dr. Miguel Angel Ariño

Professor of Decision Sciences
IESE Business School
Barcelona, Spain (Universidad de Navarra)
CEIBS (China Europe International Business School).
Beijing, Shanghai and Shenzhen
Ph.D. in Mathematics
University of Barcelona
BA in Mathematics (Licenciatura)
University of Barcelona

Philip G. Moscoso

Technology and Operations Management
IESE Business School, University of Navarra
Ph.D in Industrial Engineering and
Management, ETH Zurich
M.Sc. in Chemical Engineering, ETH Zurich

Dr. Sanjay Dixit, M.D.

Director, EP Laboratories, Philadelphia VA
Medical Center
Cardiovascular Medicine - Cardiac
Arrhythmia
Univ of Penn School of Medicine

Dr. Han-Xiang Deng

MD., Ph.D
Associate Professor and Research
Department Division of Neuromuscular
Medicine
Davee Department of Neurology and Clinical
Neuroscience
Northwestern University
Feinberg School of Medicine

Dr. Pina C. Sanelli

Associate Professor of Public Health
Weill Cornell Medical College
Associate Attending Radiologist
NewYork-Presbyterian Hospital
MRI, MRA, CT, and CTA
Neuroradiology and Diagnostic
Radiology
M.D., State University of New York at
Buffalo, School of Medicine and
Biomedical Sciences

Dr. Roberto Sanchez

Associate Professor
Department of Structural and Chemical
Biology
Mount Sinai School of Medicine
Ph.D., The Rockefeller University

Dr. Wen-Yih Sun

Professor of Earth and Atmospheric
SciencesPurdue University Director
National Center for Typhoon and
Flooding Research, Taiwan
University Chair Professor
Department of Atmospheric Sciences,
National Central University, Chung-Li,
TaiwanUniversity Chair Professor
Institute of Environmental Engineering,
National Chiao Tung University, Hsin-
chu, Taiwan.Ph.D., MS The University of
Chicago, Geophysical Sciences
BS National Taiwan University,
Atmospheric Sciences
Associate Professor of Radiology

Dr. Michael R. Rudnick

M.D., FACP
Associate Professor of Medicine
Chief, Renal Electrolyte and
Hypertension Division (PMC)
Penn Medicine, University of
Pennsylvania
Presbyterian Medical Center,
Philadelphia
Nephrology and Internal Medicine
Certified by the American Board of
Internal Medicine

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. Aziz M. Barbar, Ph.D.

IEEE Senior Member
Chairperson, Department of Computer
Science
AUST - American University of Science &
Technology
Alfred Naccash Avenue – Ashrafieh

PRESIDENT EDITOR (HON.)

Dr. George Perry, (Neuroscientist)

Dean and Professor, College of Sciences

Denham Harman Research Award (American Aging Association)

ISI Highly Cited Researcher, Iberoamerican Molecular Biology Organization

AAAS Fellow, Correspondent Member of Spanish Royal Academy of Sciences

University of Texas at San Antonio

Postdoctoral Fellow (Department of Cell Biology)

Baylor College of Medicine

Houston, Texas, United States

CHIEF AUTHOR (HON.)

Dr. R.K. Dixit

M.Sc., Ph.D., FICCT

Chief Author, India

Email: authorind@computerresearch.org

DEAN & EDITOR-IN-CHIEF (HON.)

Vivek Dubey(HON.)

MS (Industrial Engineering),

MS (Mechanical Engineering)

University of Wisconsin, FICCT

Editor-in-Chief, USA

editorusa@computerresearch.org

Sangita Dixit

M.Sc., FICCT

Dean & Chancellor (Asia Pacific)

deanind@computerresearch.org

Suyash Dixit

(B.E., Computer Science Engineering), FICCTT

President, Web Administration and

Development , CEO at IOSRD

COO at GAOR & OSS

Er. Suyog Dixit

(M. Tech), BE (HONS. in CSE), FICCT

SAP Certified Consultant

CEO at IOSRD, GAOR & OSS

Technical Dean, Global Journals Inc. (US)

Website: www.suyogdixit.com

Email: suyog@suyogdixit.com

Pritesh Rajvaidya

(MS) Computer Science Department

California State University

BE (Computer Science), FICCT

Technical Dean, USA

Email: pritesh@computerresearch.org

Luis Galárraga

J!Research Project Leader

Saarbrücken, Germany

CONTENTS OF THE VOLUME

- i. Copyright Notice
- ii. Editorial Board Members
- iii. Chief Author and Dean
- iv. Table of Contents
- v. From the Chief Editor's Desk
- vi. Research and Review Papers
 1. Are Islamic Banks Immune from Global Financial Crisis: Evidences from 16-Cross-Country Islamic Banks. *1-5*
 2. Whether Different Changing Tax Rates Cause the Risk Level of Viet Nam Construction Firms Increase or Decrease so Much? *7-22*
 3. An Exploratory Study of Factors Affecting the Internet Banking Adoption: A Qualitative Study among Postgraduate Students. *23-32*
 4. "Relationship between Financial Leverage and Financial Performance: Empirical Evidence of Listed Sugar Companies of Pakistan". *33-40*
 5. Demystifying Risk Management – Implications on Business and Growth. *41-49*
 6. Bank Distress in Nigeria and the Nigeria Deposit Insurance Corporation Intervention. *51-60*
 7. Socio-Economic Profile of Village Bank Member in Suburban Ankara: Microcredit Mannequin and Assumptions on Microfinance Market of Turkey. *61-71*
 8. The Introduction of GSM Services in Anyigba Community and its Impact on Students Expenditure Pattern. *73-81*
- vii. Auxiliary Memberships
- viii. Process of Submission of Research Paper
- ix. Preferred Author Guidelines
- x. Index



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Are Islamic Banks Immune from Global Financial Crisis: Evidences from 16-Cross- Country Islamic Banks

By Abdus Samad

Utah Valley University, United States

Abstract - This paper empirically investigates whether the cross-country Islamic banks' financial performances are immune by the global financial crisis (GFC). Banks' financial performances- the pre GFC and the GFC period- are measured by return on assets (ROA). The comparison of mean and the median return on return on asset (ROA) show that Islamic banks' ROA prior to GFC were 0.031 and 0.012 respectively and they were 0.01 and 0.12 respectively during the GFC. The significance of the parametric mean test,- t-test, and non-parametric median test,- Kruska-Wallis, and Mann- Whitney demonstrates a significant difference between the mean and the median performance of Islamic bank during the pre GFC and the GFC periods. This difference suggests that Islamic banks' financial performance is not immune from the GFC.

Keywords : *islamic bank, financial performance, global financial crisis.*

GJMBR-C Classification : *JEL Code: C13, C23, C33, G21*



Strictly as per the compliance and regulations of:



Are Islamic Banks Immune from Global Financial Crisis: Evidences from 16-Cross-Country Islamic Banks

Abdus Samad

Abstract - This paper empirically investigates whether the cross-country Islamic banks' financial performances are immune by the global financial crisis (GFC). Banks' financial performances- the pre GFC and the GFC period- are measured by return on assets (ROA). The comparison of mean and the median return on return on asset (ROA) show that Islamic banks' ROA prior to GFC were 0.031 and 0.012 respectively and they were 0.01 and 0.12 respectively during the GFC. The significance of the parametric mean test, -t-test, and non-parametric median test, -Kruska-Wallis, and Mann-Whitney demonstrates a significant difference between the mean and the median performance of Islamic bank during the pre GFC and the GFC periods. This difference suggests that Islamic banks' financial performance is not immune from the GFC.

Keywords : *islamic bank, financial performance, global financial crisis.*

I. INTRODUCTION

During the global financial crisis of 2009-2010, financial institutions, banks in particular, were seriously impacted. In the U.S. about 140 banks failed in 2009 and 157 banks were wiped out in 2010 (Time, January 2012). Such a large-scale bank failure had not happened in the financial history of the United States since the Great Depression. These statistics relate to conventional (interest-based) banks and show that the profitability of banks was seriously impacted by the GFC.

The mode of operation of interest based (conventional) banks is different than that of interest free (Islamic banks). The distinguishing feature of Islamic banks is the profit and losing sharing where asymmetric information that results adverse selection and moral hazard is significantly reduced. Whether the reduction of moral hazard and adverse selection has had positive impact on Islamic banks financial performance needs to be empirically examined.

While conventional banks faced serious problems during the GFC, Apps (2008) claimed that Islamic banks (IB) are stable and continuing to perform well and therefore, should be considered as an alternative option. Citing a report from Moody's and RBS, Paul Koster, Chief Executive of DFSA, said the

Islamic finance industry is set to grow from \$700bn in 2000(Dh2,571bn) to \$4trn by 2013 and despite the crisis, Islamic banking is still projected to grow by 15-20 percent annually (Koster, 2009).

Since there are no empirical investigations that show the performance of Islamic banks has been unhurt by the global financial crisis, this paper is an attempt to fill this gap. If Apps (2008)'s and Koster (2009)'s claims are right, it would mean that there are no differences in Islamic bank performances during the pre-GFC and the GFC periods. This paper tests the hypothesis that Islamic bank performances are stable during both the pre-GFC and the GFC periods.

Exploring empirical evidence as to whether Islamic banks' performances remain stable resulting from the GFC is an important contribution of this paper in the banking literature.

This paper is organized as follows: Section II discusses the main operational differences of Islamic banks from conventional banks that provide theoretical underpinning for protecting the Islamic banks from external shocks like the GFC. A brief survey of literature is outlined in Section III. Section IV describes data and methodology. Empirical results and conclusions are provided in Section V.

II. OPERATIONAL DIFFERENCES BETWEEN ISLAMIC BANKS AND CONVENTIONAL BANKS

Islamic banks operate on some basic principles, quite different from conventional banks. The most important features that distinguish Islamic banks from conventional banks and provide the theoretical underpinning for Islamic banks' stability and protection from shocks are the following:

First, Islamic Banks operate free of interest. As usury (interest) is prohibited in the Divine book of Islam, interest-free transaction is the foundation of Islamic banks. By fixing a predetermined rate of return (interest), lenders (conventional banks) do not share the risk of losses in business. Interest provides assured income to lenders and it is the life and blood of conventional banks. Islamic banks do not lend; rather, they participate in the investment process and, therefore, do not earn fixed interest income.

Author : Ph.D., Associate Professor, Department of Finance and Economics, Utah Valley University, 800 W University PKY, Orem, UT 84058. E-mail : abdus.samad@uvu.edu

Second, Profits and loss sharing (PLS) is the cornerstone and the most distinguishing feature of Islamic banks. Since “riba” (interest) is prohibited in Islam, Islamic banks cannot operate on the principle of interest. However, without some kind of reward, Islamic banks cannot survive. The avoidance of interest in Islamic financing has led Islamic banks to innovate various products as a viable substitute for conventional products (Samad, Cook and Gardner 2005) consistent with Shariah principles. Based on the nature of contracts, these Islamic financial products may be classified into two broad categories: A: Equity type contract; and B: mark-up price (debt) type contract. “Musharakah” (partnership) and ‘Mudaraba’ (trust financing) are the only two products that fall into equity type contracts (Hamwi and Aylward 1999). They are based on profit and loss sharing (PLS) principle. These two products are unique to Islamic banking¹ and provide the most distinguished characteristics of Islamic banks.

a) ‘Musharakah’ (Partnership)

Under this equity type contract, ‘Musharakah’ (partnership), both parties provide capital. Profits and losses are shared (PLS) by contracting parties. Risk and rewards are shared by both contracting parties (Dar and Presley, 2003, Usmani, 2002). The key element is that both parties- banks and entrepreneurs- provide capital and share profits. Profits of the projects are shared by prearranged agreement, not necessarily in proportion to capital. The return of investor (bank) is, thus, not guaranteed and fixed. In case of losses, both parties share in proportion to capital.

The first element of a Musharakah contract is that both parties contribute capital investment, and profits are shared by pre-arranged agreement, not necessarily in proportion to their invested capital. In case of loss, both parties share in proportion to their capital contribution.

The second element of Musharakah contract is that both parties share and control the management of the investment. Thus, in financing investment under the ‘Musharakah’ contract, the Islamic bank exercises its right to examine investment records and to supervise the management of the enterprise.

The third element of the Musharakah is that liability is unlimited. “Therefore, each partner is fully liable for the actions and commitments of the other in financial matters”(Manian, Bexley and James, 2000, p. 26).

b) Mudaraba’ (Trust Financing)

Under the Mudaraba contract, one party (the investor) provides capital (maal) for a project and the other party (the entrepreneur) provides labor to run the project. Profits and losses are shared by both parties.

Profit and Loss Sharing (PLS) is a key feature of Islamic banking (Abdel Karim, 2001); Samad, Gardner and Cook, 2005). In the case of profits, both the investor and entrepreneur share the reward of the project based on pre-agreed arrangements. In the case of failure, all financial loss is borne by the capitalist and the entrepreneur loses his labor (Iqbal and Molyneux, 2005: P.28). Risk is fairly distributed in IFIs. Investor (supplying capital) loses capital and entrepreneur (providing labor) loses his entire labor.

Under a Mudaraba contract, the two parties – the financier (supplier of funds) and the entrepreneur (trustee of the venture) share profits according to the agreed-upon profit and loss sharing (PLS) ratio.

The first key element of a Mudaraba contract is that the return is not guaranteed to the lender. This principle is in direct contrast to conventional interest-based lending/ financing. In interest-based lending, a loan is not contingent upon a profit or loss outcome of the entrepreneur, and is normally secured by collateral. Thus, any losses must be borne by the debtor, not the lender.

The second key element of a Mudarabah contract concerns losses that may arise from the business venture. “The financier or investor is not liable for losses beyond the capital he has contributed, and the entrepreneur or trustee does not share in financial losses except for the loss of his time and efforts” (Maniam, Bexley and James, 2000, p.4).

The third element of a Mudaraba contract is that a financier (i.e. an Islamic bank) has no control over the management of the business venture undertaken by the entrepreneur or trustee.

c) Murabaha(Cost Plus Profit Margin)

Murabahais similar to conventional trade financing where the Islamic bank finances the purchase. A buyer of a product approaches the bank for financing the product. The bank buys the product at the market price and sells the product to the buyer (borrower) at a mark-up price. The mark-up price is the market price plus the cost of transaction., which represents the profit of the bank. Critiques of Islamic banks say the cost of transaction is exactly equal to the current interest rate. The interesting characteristic of Murabaha is that unlike conventional bank trade financing, the ownership and the title of the product remain in the hands of bank until payment is complete. It is a popular substitute for interest-based conventional trade financing (Josh, 1997). From an economic point of view, Murabaha financing and interest-based trade financing appear quite similar except in the contractual features.

Third, Zakah is an important characteristic of Islamic bank. Zakah is a compulsory poor due, is one of five pillars of Islam and an integral part not only for individual Muslims but also for Islamic Financial Institutions (IFIs). IFIs are considered instruments for

¹ Please see Samad, Cook and Gardner, 2005 for further details.

establishing a “just and equitable” society. IFIs are, therefore, obligated to pay “Zakah” from their profits to the poor. When Islamic banking was in the embryonic stage, it was expected that Islamic banks would be instruments for ensuring a “just and equitable” society not only by paying Zakah (the poor due) from their profits but also by financing small businesses, trades, and agriculture. The interests of small traders, businesses and agriculture should not be neglected while serving big businesses, corporation and industries. That is, laying an emphasis on micro-financing is one of the objectives of Islamic banks.

Forth, “Qard-hasan” is repeatedly emphasized in Hadith and Quran. The basic message of Islam is to support the needy and feed the poor. ‘Spending out of what God has provided’ has been frequently instructed in the Quran. The “Qard-al-hasan (benevolent) financing is a cornerstone of Islamic finance” (Samad, Gardner, Cook, 2005). IFIs are expected to practice and enhance “Qard-hasan” in the society.

III. SURVEY OF LITERATURE

There are empirical researches. However, these researches did not deal with Islamic banks’ financial performances during the pre GFC and the crisis period. Uppal and Mangla (2010) examined the experience of Islamic banks of two countries (Pakistan and Malaysia) with respect to global financial crisis (GFC) and found that Islamic banks of these countries “were not immune from the ravages of the GFC” (P.167). However, their study did not focus on the average efficiencies of Islamic banks but rather on relative ratios between two periods (pre GFC and during GFC).

Ashkari, Iqbal and Mirakhor (2009) claimed that Islamic banks are viable and superior alternatives to conventional banks because of Islamic banks’ unique product characteristics. However, they did not study the impact of GFC.

Samad (2004, 1999) compared performance between interest-free Islamic banks and interest-based conventional banks of Bahrain and Malaysia with respect to profitability, liquidity risk and credit risk and they found a significant difference. Kazarian (1993) compares Islamic banking with conventional banking in Egypt and found differences. Arif (1993) evaluated the performance of Bank Islam Malaysia during the first six years of its establishment and observed an improvement in performance.

Studies on the theoretical front include Chapra (1985), Siddiqi (1983), Zeneldin (1990), Kahf (1999), Khan and Mirakhor (1986), Iqbal and Mirakhor (1999), and Mannan (1998). They discussed the institutional issues of Islamic bank operation, including Arabic concepts and principles of finance that are subject to interpretation. Maniam, Baxely, and James (2000) analyzed the perception of Islamic financing in the U.S.,

along with a discussion of the problems of applying Islamic financing tools.

Samad, Gardner, and Cook (2005) focused on identifying the relative importance of Islamic financial products by examining the balance sheet of two Islamic banks, Bank Islam Malaysia and Islamic Bank of Bahrain. They ...

Askari and Mirakhor (2009), Bacha (1995) and Siddiqi (1983) dealt with institutional and product issues of Islamic banks. Askari and Mirakhor argued that a profit and loss sharing contract, being equity based, is better than a conventional equity contract.

There are studies (Aggarwal and Yousef (2000), Metwally (1997), Kuran (2005), and Bacha (2004) that are critical of Islamic banks with regards to risk associated with Islamic banking.

Apps’ (2009) study is not an empirical study. It is rather a descriptive study with statistical references.

The survey of literature clearly shows that there is no cross-country Islamic banks’ efficiency studies dealing with the GFC impact. Finding answer to the GFC impact on Islamic banks is a major contribution of this paper.

IV. DATA AND METHODOLOGY

a) Data

Data for bank performance measure, ROA, are obtained from bank annual reports. Each bank ROA is reported in Table 1.

b) Methodology

The stability of Islamic bank performances between the pre-GFC and the GFC periods is tested by a test of hypothesis. Whether the global financial crisis during 2009-2010 has had an impact on Islamic bank performances is tested by parametric, i.e., t-test and ANOVA and non-parametric, i.e., Mann-Whitney/Kruskal-Wallis K test tests.

The null hypothesis for t-test is tested against the alternative hypothesis as: Null hypothesis, H_0 : $\mu_{ROA_{preGFC}} = \mu_{ROA_{GFC}}$: There is no difference in ROA between the pre GFC and the GFC period. Alternative hypothesis, H_a : $\mu_{ROA_{preGFC}} \neq \mu_{ROA_{GFC}}$: There is a difference in efficiency between the pre GFC and the GFC period.

On the other hand, the non-parametric test, median test, is tested as: Null hypothesis, H_0 : $Med_{ROA_{preGFC}} = Med_{ROA_{GFC}}$: There is no difference in median ROA between the pre-GFC and the GFC periods. Alternative hypothesis, H_a : $Med_{ROA_{preGFC}} \neq Med_{ROA_{GFC}}$. There is a difference in median ROA between the pre GFC and the GFC periods.

If the null hypothesis is rejected, this research would demonstrate that the GFC has had an impact on the difference of bank performances. The performance of Islamic banks is not stable. The results of t-test and median tests are provided in Table 2 and Table 3.

V. EMPIRICAL RESULTS

Table 1 : ROA of Islamic Banks Between Two Periods

Bank*	Pre GFC Period ROA			GFC Period ROA			
	ROA	Firm	ROA	Firm	ROA	Firm	ROA
1	0.007	15	0.105	10	0.010	15	0.040
2	0.052	16	0.048	2	0.010	16	0.015
3	0.004	17	0.073	3	0.011	17	-0.013
4	0.022	18	0.062	4	0.021	18	0.041
5	0.019	19	0.012	5	0.013	19	0.034
6	0.023	20		6	0.033	20	0.022
7		21	0.020	7	0.008	21	0.016
8	0.020	22		8	0.010	22	0.006
9	0.016	23	0.018	9	0.008	23	0.027
10	0.027	24	-0.058	10	0.012	24	
11	0.000	25	0.000	11	-0.012	25	-0.012
12	0.072	26	0.039	12	0.031	26	0.030
13	0.040	27	0.020	13	0.003	27	0.016
14	0.073	28		14	-0.013	28	0.016
Mean ROA= 0.030				Mean ROA = 0.014			

Table 1 shows that mean performance of Islamic banks decreased from 3 percent to 1 percent in the GFC period.

Table 2 : Test of Equality of Means for ROA

Variables	Mean	Method	df	Statistics	Probability
Pre GFC ROA	0.03	t-test	48	2.15	0.036
GFC ROA	0.01	Anova F-statistics	(1,48)	2.15	0.037

Table 3 : Kruskal-Wallis Test of Equality of ROA for Pre GFC Median and GFC Median

Variable	Median	Mean Rank	Mean score	Count		
Pre GFC ROA	0.021	29.91	0.28	28		
GFC ROA	0.012	21.42	-0.26	28		
All	0.018	25.50	0.0002	56		
Method of Test				df	statistics	Probability
Kruskal-Wallis				1	4.23	0.03
Kruskal-Wallis (tie-adj)				1	4.23	0.03
Wilcoxon/Mann-Whitney					2.04	0.04

Table 2 shows that the mean ROA during the pre-GFC and the GFC periods are 0.03 and 0.01 respectively. Test statics 2.12 for the t-test and ANOVA rejects the null hypothesis that, $H_0: \mu_{ROApGFC} = \mu_{ROAGFC}$. That is, the mean ROA 0.03 and 0.01 during the pre-GFC period and GFC period respectively are significantly different.

Similarly, Table 3 shows that the median ROA during the pre-GFC and the GFC periods are 0.021 and 0.012 respectively. Test statics 4.23 and 2.04 for Kruskal-Wallis and Wilcoxon/Man-Whitney respectively rejects the null hypothesis that, $H_0: Med_{ROApGFC} = Med_{ROAGFC}$. That is, the mean ROA 0.03 and 0.01 during the pre GFC period and GFC period respectively are significantly different.

The rejection of the null hypothesis of the equality of mean and median performances rejects Apps (2008)'s claims that Islamic bank performances are stable and are immune from the global financial crisis.

VI. CONCLUSION

Whether the global financial crisis had an impact on the performances Islamic banks is examined by a test of hypothesis. ROA measures bank performances. The test of null-hypothesis, $H_0: \mu_{ROApGFC} = \mu_{ROAGFC}$ is tested against the alternative hypothesis, $H_a: \mu_{ROApGFC} \neq \mu_{ROAGFC}$.

The test of significance in both parametric and non-parametric tests, in Table 2 and Table 3, shows that the equality of mean performance of Islamic banks during the pre-GFC and the GFC periods is rejected, suggesting that global financial crisis has had its impact on Islamic Bank performances. The rejection of the null hypothesis of the equality of mean and median performances refutes Apps (2008)'s claims that Islamic banks performances are stable and are immune from the global financial crisis. Islamic bank performances are not immune from the global financial crisis.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Apps, Peter. 2008. "Global Financial Centers Battle for Islamic Markets", International Herald Tribune, July 25.
2. Asaftei, G and S. Kumbhakar. 2008. "Regulation and efficiency in transition: The Case of Romanian banks", Journal of Regulatory Economics, 33 (3), 253-282.
3. Ashkari, H, Z. Iqbal and A. Mirakhor. 2009. New Issues in Islamic Finance and Economics, John Wiley & Sons (Asia).
4. Bacha, Obiyathullalmath. (1995). "Conventional versus Mudarabah Financing: An Agency Cost Perspective", *Journal of Islamic Economics*, 4 (1): 33-49.
5. Iqbal, Z. and A. Mirakhor. (1999). "Progress and Challenges of Islamic Banking", *Thunderbird International Business Review*. 381-403.
6. Kahf, M. (1999). "Islamic Banks at the threshold of the third millennium", *Thunderbird International Business Review*. 445-459.
7. Khan, Mohsin S and Abbas Mirhkor (1986). "The Framework and Practice of Islamic Banking", *Finance and Development*, (September): 1-32.
8. Kazarian, E.G. (1993). *Islamic Versus Traditional Banking: Financial Innovation in Egypt*, Colorado: West View Press.
9. Koster, paul. 2009. [http://WWW. Business247.ae/ticles/2009/4/pages/18042009/04192009_5ae5bf647f4e46428e694dc436d437b6.aspx](http://WWW.Business247.ae/ticles/2009/4/pages/18042009/04192009_5ae5bf647f4e46428e694dc436d437b6.aspx)
10. Maniam, B, James J Bexley and Joe F. James. (2000). "Perception of Islamic Financial System: Its obstacles in application, and its market", *Academy of Accounting and Financial Studies Journal*: 22-36.
11. Norm Gardner and Bradley J. Cook. (2005). "Islamic Banking and Finance in Theory and Practice: The Malaysian and Bahrain Experience", *American Journal of Islamic Social Sciences*, 22 (2): 71-86.
12. Farook, Omar (2009) "Global financial crisis and the link between the monetary & real sector: moving beyond the asset-backed islamic finance", *Proceeding of the 20th Annual Islamic Banking Seminar: Financial and Economic Crisis and Development of Islamic Banking System of Iran*, Iran Banking Institute, pp. 123-123.
13. Farook, Umar. 2007. "Partnership, Equity-Financing and Islamic Finance: Whither Profit-Loss Sharing?" *Review of Islamic Economics*, Vol. 2, (Special Issue), pp. 67-88.
14. Farook, Umar. 2007. The Riba and Interest equation and Islam: Reexamination of the traditional Arguments", *Global Journal of Finance and Economics*.
15. Samad, Abdus. (1999). "Comparative Efficiency of the Islamic Bank vis-à-vis Conventional Banks in Malaysia", *Journal of Management and Finance*, 7 (1): 1-24.
16. Samad, Abdus. (2004). "Performance of Interest Free Islamic Banks vis-à-vis Interest Based Conventional Banks of Bahrain." *IJUM Journal of Economics and Management*, 12 (2): 115-129.
17. Siddiqi, M.N. (1983). *Issues in Islamic Banking*, Leicester: Islamic Foundation.
18. Uppal, Jamshed Y and Inayat U Mangla. 2010. "Islamic Banks and the Global Financial Crisis Of 2007-2009: An assessment", *Journal of the Academy of Finance*, 8(1): 167-178.
19. Zeneldin, M. (1990). *The Economy of Money and Banking: A Theoretical and Empirical Study of Islamic Interest-Free Banking*, Stockholm: Almqvist & Wiksell International.



This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Whether Different Changing Tax Rates Cause the Risk Level of Viet Nam Construction Firms Increase or Decrease so Much?

By Dinh Tran Ngoc Huy

International University of Japan, Japan

Abstract - The emerging stock market in Viet Nam has been affected by the financial crisis 2007-2009. This study analyzes the impacts of tax policy on market risk for the listed firms in the construction industry as it becomes necessary.

First, by using quantitative and analytical methods to estimate asset and equity beta of total 104 listed companies in Viet Nam construction industry with a proper traditional model, we found out that the beta values, in general, for many companies are acceptable.

Second, under 3 different scenarios of changing tax rates (20%, 25% and 28%), we recognized that there is not large disperse in equity beta values, estimated at 1,008, 1,106 and 1,014. These values are higher than those of the listed VN real estate firms.

Third, by changing tax rates in 3 scenarios (25%, 20% and 28%), we recognized both equity and asset beta mean values have positive relationship with the increasing levels of tax rate.

Finally, this paper provides some outcomes that could provide companies and government more evidence in establishing their policies in governance.

Keywords : *equity beta, financial structure, financial crisis, risk, tax rate real estate industry.*

GJMBR-C Classification : *JEL Code: G010, G100, G390*



Strictly as per the compliance and regulations of:



Whether Different Changing Tax Rates Cause the Risk Level of Viet Nam Construction Firms Increase or Decrease so Much?

Dinh Tran Ngoc Huy

Abstract - The emerging stock market in Viet Nam has been affected by the financial crisis 2007-2009. This study analyzes the impacts of tax policy on market risk for the listed firms in the construction industry as it becomes necessary.

First, by using quantitative and analytical methods to estimate asset and equity beta of total 104 listed companies in Viet Nam construction industry with a proper traditional model, we found out that the beta values, in general, for many companies are acceptable.

Second, under 3 different scenarios of changing tax rates (20%, 25% and 28%), we recognized that there is not large disperse in equity beta values, estimated at 1,008, 1,106 and 1,014. These values are higher than those of the listed VN real estate firms.

Third, by changing tax rates in 3 scenarios (25%, 20% and 28%), we recognized both equity and asset beta mean values have positive relationship with the increasing levels of tax rate.

Finally, this paper provides some outcomes that could provide companies and government more evidence in establishing their policies in governance.

Keywords : equity beta, financial structure, financial crisis, risk, tax rate real estate industry.

I. INTRODUCTION

Together with the development of real estate industry, throughout many recent years, Viet Nam construction industry is considered as one of active economic sectors, which has certain positive effect for the economy.

This paper is organized as follow. The research issues and literature review will be covered in next sessions 2 and 3, for a short summary. Then, methodology and conceptual theories are introduced in session 4 and 5. Session 6 describes the data in empirical analysis. Session 7 presents empirical results and findings. Next, session 8 covers the analytical results. Then, session 9 presents analysis of risk. Lastly, session 10 will conclude with some policy suggestions. This paper also supports readers with references, exhibits and relevant web sources.

II. RESEARCH ISSUES

We mention some issues on the estimating of impacts of tax rates on beta for listed construction companies in Viet Nam stock exchange as following:

Author : MBA, PhD candidate, Banking University, HCMC – GSIM, International University of Japan, Japan.
E-mail : dtnhuy2010@gmail.com

Issue 1 : Whether the risk level of construction firms under the different changing scenarios of tax rates increase or decrease so much.

Issue 2 : Whether the disperse distribution of beta values become large in the different changing scenarios of tax rates estimated in the construction industry.

III. LITERATURE REVIEW

Smith (2004) mentions in Chicago, properties located in a designated TIF (tax increment financing) district will exhibit higher rates of appreciation after the area is designated a qualifying TIF district when compared to those properties selling outside TIF districts, and when compared to properties that sell within TIF district boundaries prior to designation.

Robert et all (2011) recognized a significant positive relation between changes in intercorporate investment and changes in corporate marginal tax rates on ordinary income.

George and Jot Yau (2012) found that there is a positive relationship between transaction cost and price volatility, suggesting that the imposition of a transaction tax could increase financial market fragility, increasing the likelihood of a financial crisis rather than reducing it.

Next, Ruud et all (2013) said that greater tax bias is associated with significantly higher aggregate bank leverage, and this in turn is associated with a significantly greater chance of crisis.

Then, Sung, Mark and Laura (2013) also indicated that business property values are more responsive to changes in tax rates as compared to residential property.

Finally, tax rate can be considered as one among many factors that affect business risk of real estate firms.

IV. CONCEPTUAL THEORIES

a) *The impact of fiscal policy on the economy*

Tax policy is one among major fiscal policies. If the government changes the tax or expenditure policy, the economy will be affected because the aggregate demand fluctuates, level of economic activities fluctuates, level of income changes and the allocation of economic resources in the public sector in relative to private sector changes.

In a specific industry such as construction industry, on the one hand, using tax policy with a decrease or increase in tax rate could affect tax revenues, profit after tax and financial results and compensation and jobs of the industry. On the other hand, using tax policies could increase the financial results of this industry and therefore, affect the tax revenues, compensation and jobs.

During and after financial crises such as the 2007-2009 crisis, there raises concerns about fiscal policies or public policies of many countries, in both developed and developing markets.

V. METHODOLOGY

Because the period 2007-2011 is the time the local economy experienced impacts from financial crisis, in this study, we use the live data from the stock exchange market in Viet Nam (HOSE and HNX) during the four or five years period to estimate systemic risk results and tax impacts.

In this research, analytical research method is used and specially, tax rate scenario analysis method is used. Analytical data is from the situation of listed construction firms in VN stock exchange and current tax rate is 25%.

Finally, we use the results to suggest policy for both these enterprises, relevant organizations and government.

VI. GENERAL DATA ANALYSIS

The research sample has 104 listed firms in the construction market with the live data from the stock exchange.

Firstly, we estimate equity beta values of these firms and use financial leverage to estimate asset beta values of them. Secondly, we change the tax rate from 25% to 28% and 20% to see the sensitivity of beta values. In 3 cases (rate = 20%, 25%, and 28%), asset beta mean is estimated at 0,306, 0,307 and 0,308. Also in 3 scenarios, we find out var of asset beta estimated at 0,064 (almost the same) which shows small risk dispersion. Tax rate changes almost has no effect on asset beta var under financial leverage.

VII. EMPIRICAL RESEARCH FINDINGS AND DISCUSSION

In the below section, data used are from total 104 listed construction companies on VN stock exchange (HOSE and HNX mainly). In the scenario 1, current tax rate is 25% which is used to calculate market risk (beta). Then, two (2) tax rate scenarios are changed up to 28% and down to 20%, compared to the current corporate tax rate.

Market risk (beta) under the impact of tax rate, includes: 1) equity beta; and 2) asset beta.

- Scenario 1: current tax rate is 25%
In the case of tax rate of 25%, all beta values of 104 listed firms on VN construction market as following:

Table 1 : Market risk of listed companies on VN construction market (t = 25%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	CNT	1,062	0,134
2	DCC	1,299	0,578
3	DIG	1,772	0,964
4	FPC	0,484	0,229
5	HBC	1,030	0,277
6	L10	0,909	0,193
7	MCG	1,595	0,543
8	VNE	1,700	0,606
9	L35	0,295	0,095
10	LM3	0,337	0,040
11	LO5	0,745	0,179
12	L62	0,606	0,171
13	L61	0,856	0,261
14	L43	0,709	0,217
15	L44	1,277	0,252
16	B82	0,860	0,146
17	BCE	0,955	0,515
18	C92	0,800	0,121
19	CIC	0,919	0,248
20	CID	0,891	0,423
21	CSC	1,023	0,217
22	CT6	0,435	0,122
23	CTD	0,950	0,574
24	CTM	2,869	1,458
25	CVN	0,995	0,605
26	CX8	0,180	0,034
27	DC2	0,323	0,116
28	DLR	0,243	0,064
29	HUT	1,084	0,143
30	L18	1,069	0,156
31	LCS	0,141	0,037
32	LHC	0,755	0,358
33	LIG	0,436	0,091
34	LUT	1,433	0,730
35	MCO	0,755	0,127

36	NSN	0,115	0,014
37	PHC	1,667	0,409
38	QTC	0,259	0,110
39	TV2	0,822	0,207
40	TV4	0,666	0,241
41	VE1	1,475	0,776
42	VE2	0,595	0,358
43	VE3	0,598	0,403
44	VE9	0,704	0,430
45	VHH	0,440	0,226
46	SNG	1,264	0,484
47	SSS	1,074	0,385
48	STL	1,634	0,066
49	SJM	1,030	0,389
50	SJE	1,399	0,324
51	SJC	1,103	0,266
52	SIC	1,568	0,365
53	SEL	0,220	0,059
54	SDT	1,406	0,435
55	SDS	0,929	0,071
56	SDJ	1,257	0,249
57	SDH	2,884	1,290
58	SDB	0,214	0,043
59	SD9	1,456	0,415
60	SD8	1,210	0,103
61	SD7	1,461	0,243
62	SD6	1,670	0,479
63	SD5	1,332	0,503
64	SD4	1,114	0,233
65	SD3	1,361	0,695
66	SD2	1,386	0,450
67	SD1	0,198	0,034
68	S99	1,286	0,800
69	S96	1,706	0,480
70	S91	1,213	0,386
71	S74	1,250	0,443
72	S64	1,099	0,358
73	S55	1,251	0,476
74	S27	1,213	0,008
75	S12	1,180	0,202
76	MEC	1,410	0,040

77	ICG	1,634	0,795
78	PHH	1,069	0,108
79	PIV	0,598	0,325
80	PVA	1,932	0,209
81	PVE	1,580	0,499
82	PVR	1,670	0,440
83	PW	1,332	0,048
84	PVX	1,304	0,311
85	PXI	1,332	0,029
86	PXS	1,406	0,172
87	PXT	1,521	0,206
88	SDP	1,410	0,271
89	CTN	0,922	0,160
90	V11	1,148	0,161
91	V12	1,521	0,181
92	V15	1,566	0,582
93	V21	0,971	0,012
94	VC1	1,815	0,525
95	VC2	1,240	0,220
96	VC3	1,256	0,195
97	VC5	1,266	0,181
98	VC6	1,123	0,287
99	VC7	1,106	0,252
100	VC9	1,140	0,124
101	VCC	0,971	0,188
102	VCG	1,505	0,186
103	VCH	1,286	0,018
104	VMC	1,503	0,292

Note : Raw data, not adjusted

- Scenario 2: tax rate increases up to 28%
If corporate tax rates increases up to 28%, all beta values of total 45 listed firms on VN construction market as below:

Table 2 : Market risks of listed construction firms (t = 28%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	CNT	1,062	0,134
2	DCC	1,299	0,578
3	DIG	1,772	0,964
4	FPC	0,484	0,229
5	HBC	1,030	0,277

6	L10	0,909	0,193
7	MCG	1,595	0,543
8	VNE	1,700	0,606
9	L35	0,303	0,098
10	LM3	0,337	0,040
11	LO5	0,745	0,179
12	L62	0,606	0,171
13	L61	0,856	0,261
14	L43	0,709	0,217
15	L44	1,277	0,252
16	B82	0,860	0,146
17	BCE	0,971	0,523
18	C92	0,800	0,121
19	CIC	0,919	0,248
20	CID	0,891	0,423
21	CSC	1,023	0,217
22	CT6	0,447	0,125
23	CTD	0,950	0,574
24	CTM	2,869	1,458
25	CVN	1,008	0,613
26	CX8	0,185	0,035
27	DC2	0,331	0,119
28	DLR	0,250	0,066
29	HUT	1,084	0,143
30	L18	1,069	0,156
31	LCS	0,149	0,039
32	LHC	0,755	0,358
33	LIG	0,449	0,094
34	LUT	1,433	0,730
35	MCO	0,755	0,127
36	NSN	0,119	0,014
37	PHC	1,667	0,409
38	QTC	0,259	0,110
39	TV2	0,822	0,207
40	TV4	0,666	0,241
41	VE1	1,475	0,776
42	VE2	0,603	0,363
43	VE3	0,604	0,407
44	VE9	0,704	0,430
45	VHH	0,448	0,229
46	SNG	1,264	0,484

47	SSS	1,074	0,385
48	STL	1,634	0,066
49	SJM	1,030	0,389
50	SJE	1,399	0,324
51	SJC	1,103	0,266
52	SIC	1,568	0,365
53	SEL	0,226	0,061
54	SDT	1,406	0,435
55	SDS	0,929	0,071
56	SDJ	1,257	0,249
57	SDH	2,884	1,290
58	SDB	0,221	0,044
59	SD9	1,456	0,415
60	SD8	1,210	0,103
61	SD7	1,461	0,243
62	SD6	1,670	0,479
63	SD5	1,332	0,503
64	SD4	1,114	0,233
65	SD3	1,361	0,695
66	SD2	1,386	0,450
67	SD1	0,205	0,035
68	S99	1,286	0,800
69	S96	1,706	0,480
70	S91	1,213	0,386
71	S74	1,250	0,443
72	S64	1,099	0,358
73	S55	1,251	0,476
74	S27	0,113	0,008
75	S12	1,180	0,202
76	MEC	0,275	0,041
77	ICG	1,634	0,795
78	PHH	0,385	0,111
79	PIV	0,467	0,331
80	PVA	1,932	0,209
81	PVE	1,580	0,499
82	PVR	0,936	0,448
83	PWV	0,293	0,049
84	PVX	1,304	0,311
85	PXI	0,105	0,030
86	PXS	0,553	0,176
87	PXT	0,628	0,211

88	SDP	1,410	0,271
89	CTN	0,922	0,160
90	V11	1,148	0,161
91	V12	1,521	0,181
92	V15	1,566	0,582
93	V21	0,125	0,012
94	VC1	1,815	0,525
95	VC2	1,240	0,220
96	VC3	1,256	0,195
97	VC5	1,266	0,181
98	VC6	1,123	0,287
99	VC7	1,106	0,252
100	VC9	1,140	0,124
101	VCC	0,971	0,188
102	VCG	1,505	0,186
103	VCH	0,180	0,019
104	VMC	1,503	0,292

- Scenario 3: tax rate decreases down to 20%
If corporate tax rate decreases down to 20%, all beta values of total 104 listed firms on the construction market in VN as following:

Table 3 : Market risk of listed construction firms
t = 20%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	CNT	1,062	0,134
2	DCC	1,299	0,578
3	DIG	1,772	0,964
4	FPC	0,484	0,229
5	HBC	1,030	0,277
6	L10	0,909	0,193
7	MCG	1,595	0,543
8	VNE	1,700	0,606
9	L35	0,284	0,091
10	LM3	0,337	0,040
11	LO5	0,745	0,179
12	L62	0,606	0,171
13	L61	0,856	0,261
14	L43	0,709	0,217
15	L44	1,277	0,252
16	B82	0,860	0,146
17	BCE	0,931	0,502

18	C92	0,800	0,121
19	CIC	0,919	0,248
20	CID	0,891	0,423
21	CSC	1,023	0,217
22	CT6	0,417	0,116
23	CTD	0,950	0,574
24	CTM	2,869	1,458
25	CVN	0,974	0,592
26	CX8	0,171	0,033
27	DC2	0,311	0,112
28	DLR	0,232	0,061
29	HUT	1,084	0,143
30	L18	1,069	0,156
31	LCS	0,129	0,034
32	LHC	0,755	0,358
33	LIG	0,415	0,087
34	LUT	1,433	0,730
35	MCO	0,755	0,127
36	NSN	0,108	0,013
37	PHC	1,667	0,409
38	QTC	0,259	0,110
39	TV2	0,822	0,207
40	TV4	0,666	0,241
41	VE1	1,475	0,776
42	VE2	0,582	0,350
43	VE3	0,588	0,396
44	VE9	0,704	0,430
45	VHH	0,428	0,220
46	SNG	1,264	0,484
47	SSS	1,074	0,385
48	STL	1,634	0,066
49	SJM	1,030	0,389
50	SJE	1,399	0,324
51	SJC	1,103	0,266
52	SIC	1,568	0,365
53	SEL	0,210	0,057
54	SDT	1,406	0,435
55	SDS	0,929	0,071
56	SDJ	1,257	0,249
57	SDH	2,884	1,290
58	SDB	0,204	0,041

59	SD9	1,456	0,415
60	SD8	1,210	0,103
61	SD7	1,461	0,243
62	SD6	1,670	0,479
63	SD5	1,332	0,503
64	SD4	1,114	0,233
65	SD3	1,361	0,695
66	SD2	1,386	0,450
67	SD1	0,189	0,032
68	S99	1,286	0,800
69	S96	1,706	0,480
70	S91	1,213	0,386
71	S74	1,250	0,443
72	S64	1,099	0,358
73	S55	1,251	0,476
74	S27	0,103	0,007
75	S12	1,180	0,202
76	MEC	0,252	0,038
77	ICG	1,634	0,795
78	PHH	0,360	0,104
79	PIV	0,443	0,314
80	PVA	1,932	0,209
81	PVE	1,580	0,499
82	PVR	0,892	0,427
83	PW	0,270	0,046
84	PVX	1,304	0,311
85	PXI	0,091	0,026
86	PXS	0,518	0,165
87	PXT	0,590	0,198
88	SDP	1,410	0,271
89	CTN	0,922	0,160
90	V11	1,148	0,161
91	V12	1,521	0,181
92	V15	1,566	0,582
93	V21	0,114	0,011
94	VC1	1,815	0,525
95	VC2	1,240	0,220
96	VC3	1,256	0,195
97	VC5	1,266	0,181
98	VC6	1,123	0,287
99	VC7	1,106	0,252

100	VC9	1,140	0,124
101	VCC	0,971	0,188
102	VCG	1,505	0,186
103	VCH	0,165	0,017
104	VMC	1,503	0,292

All three above tables and data show that values of equity and asset beta in the case of increasing tax rate up to 28% or decreasing rate down to 20% have small fluctuation.

VIII. COMPARING STATISTICAL RESULTS IN 3 SCENARIOS OF CHANGING TAX RATE

a) tax rate = 25%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,884	1,458	1,427
MIN	0,115	0,008	0,107
MEAN	1,106	0,307	0,799
VAR	0,2527	0,0640	0,189

Note: Sample size : 104 firms

b) tax rate = 28%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,884	1,458	1,427
MIN	0,105	0,008	0,098
MEAN	1,014	0,308	0,706
VAR	0,2964	0,0640	0,232

Note: Sample size : 104 firms

c) tax rate = 20%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	2,884	1,458	1,427
MIN	0,091	0,007	0,083
MEAN	1,008	0,306	0,702
VAR	0,3028	0,0641	0,239

Note: Sample size : 104 firms

a) Based on above results, we find out

Equity beta mean values in all 3 scenarios are little high (> 1) but asset beta mean values are small. In the case of current tax rate of 25%, equity beta value fluctuates in a wide range from 0,115 (min) up to 2,884 (max) and asset beta fluctuates from 0,008 (min) up to 1,458 (max). If corporate tax rate increases to 28%, equity beta moves from 0,105 (min) up to 2,884 (max)

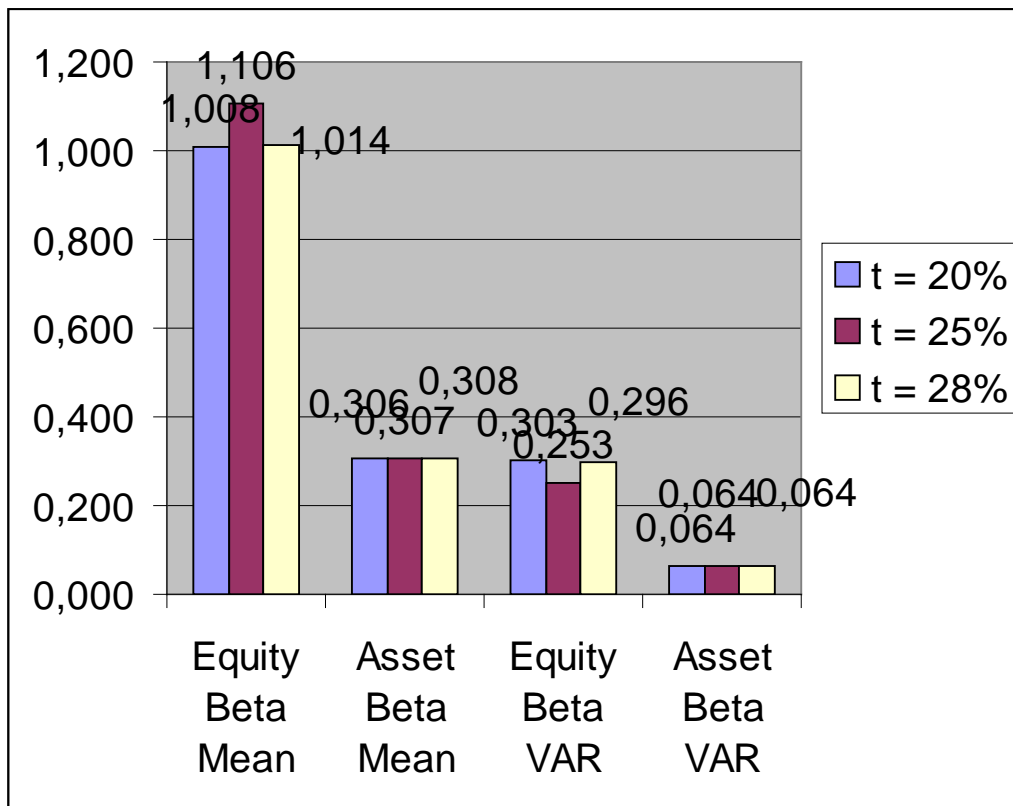
and asset beta moves from 0,008 (min) up to 1,458 (max). Hence, we note that there is a change in equity beta min value if corporate tax increases. When tax rate decreases down to 20%, equity beta value changes from 0,091 (min) up to 2,884 (max) and asset beta changes from 0,007 (min) up to 1,458 (max). So, there is small changes in equity/asset beta min values when tax decreases In scenario 3.

Beside, Exhibit 7 informs us that in the case 28% tax rate, average equity beta value of 104 listed firms decreases up to 0,0924 while average asset beta value of these 104 firms increase slightly up to 0,0008. Then, when tax rate reduces to 20%, average equity

beta value of 104 listed firms reduce to 0,0983 and average asset beta value of 104 firms down to 0,0013.

The below chart 1 shows us : when tax rate decreases down to 20%, average equity and asset beta values decrease slightly (1,008 và 0,306) compared to those at the initial rate of 25% (1,106 và 0,307). At the same time, when tax rate increases up to 28%, average equity beta decreases slightly whereas average asset beta value increases slightly (to 1,014 và 0,308). However, the fluctuation of equity and asset beta values (0,303 và 0,064) in the case of 20% tax rate is higher than or equal to (\geq) the results in the rest 2 tax rate cases.

Chart 1 : Comparing statistical results of three (3) scenarios of changing tax rate



IX. RISK ANALYSIS

In the case of decreasing tax rate, (20%), the market and companies can receive more benefits such as generating more jobs and compensation, but the government budget can have deficit and the government has to cut expenses. Changes in tax rates can have both positive and negative impacts on the local market.

In the case of increasing tax rate (28%), the government will have budget to finance public expenditures but the tax could reduce both demand and supply.

X. CONCLUSION AND POLICY SUGGESTION

In summary, the government continues to increase the effectiveness of building the legal system and regulation and macro policies supporting the plan of developing both the construction together with the real estate market. The Ministry of Finance Continue to increase the effectiveness of fiscal policies and tax policies which are needed to combine with other macro policies at the same time, although we could note that in this study when tax rate is going to increase up to 28%, the value of equity beta mean decreases down to 1,014, from 1,106.

The State Bank of Viet Nam continues to increase the effectiveness of capital providing channels for both construction and real estate companies.

Finally, this paper suggests implications for further research and policy suggestion for the Viet Nam government and relevant organizations, economists and investors from current market conditions.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Ajinkya, Bijal., and Kumar, Mahesh., (2012), Taxation aspects of Mergers and Acquisitions, Asia-Pacific Tax Bulletin
2. Dutt, Tanuj., and Mark, Humphery –Jenner., (2013), Stock Return Volatility, Operating Performance and Stock Returns: International Evidence on Drivers of the “Low Volatility” Anomaly, Journal of Banking and Finance
3. Eugene, Fama F., and French, Kenneth R., (2004), The Capital Asset Pricing Model: Theory and Evidence, Journal of Economic Perspectives
4. Flifel, Kaouther., (2012), Financial Markets between Efficiency and Persistence : Empirical Evidence on Daily Data, Asian Journal of Finance and Accounting
5. Grullon, Gustavo., Lyandres, Evgeny., and Zhdanov, Alexei., (2012), Real Options, Volatility and Stock Returns, Journal of Finance
6. Hai, Nguyen Minh., Hien, Phan Tat., and Linh, Dang Huyen., (2013), Phân tích tác động của phá giá tiền tệ đến tăng trưởng kinh tế VN thời kỳ 2000-2012, Journal of Economic Development
7. Huy, Dinh T.N., (2012), Estimating Beta of Viet Nam listed construction companies groups during the crisis, Journal of Integration and Development
8. Kimberly, Clausing A., (2012), In Search of Corporate Tax Incidence, Tax Law Review
9. Ling, Amy., (2013), Tax Issues Relating to Intangibles, Asia-Pacific Tax Bulletin
10. Pereiro, Luis E.,(2010), The Beta Dilemma in Emerging Markets, Journal of Applied Corporate Finance
11. Saleem, Kashif., (2011), Time Varying Correlations between Stock and Bond Returns : Empirical Evidence from Russia, Asian Journal of Finance and Accounting

Research

1. Ang, A., Chen, J., (2007), CAPM Over the Long Run: 1926-2001, Journal of Empirical Finance
2. Baker, Kent H., Singleton, Clay J., and Veit, Theodore E., (2011), Survey Research in Corporate Finance: Bridging The Gap Between Theory and Practice, Oxford University Press
3. ADB and Viet Nam Fact Sheet, 2010

Other web sources

1. http://www.ifc.org/ifcext/mekongpsdf.nsf/Content/P_SDP.

2. <http://www.mofa.gov.vn/vi/>
3. <http://www.hsx.vn/hsx/>
4. [www.tuoitre.com.vn;](http://www.tuoitre.com.vn/)
5. [www.saigontimes.com.vn;](http://www.saigontimes.com.vn/)
6. [www.mof.gov.vn ;](http://www.mof.gov.vn/)
7. [www.vneconomy.com.vn ;](http://www.vneconomy.com.vn/)
8. [www.sbv.gov.vn.](http://www.sbv.gov.vn/)

EXHIBIT

Exhibit 1 : Interest rates in banking industry during crisis

Year	Borrowing Interest rates	Deposit Rates	Note
2011	18%-22%	13%-14%	Approximately (2007: required reserves ratio at SBV is changed from 5% to 10%)
2010	19%-20%	13%-14%	
2009	9%-12%	9%-10%	
2008	19%-21%	15%-16,5%	
2007	12%-15%	9%-11%	(2009: special supporting interest rate is 4%)

(Source : Viet Nam commercial banks)

Exhibit 2 : Basic interest rate changes in Viet Nam

Year	Basic rate	Note
2011	9%	Approximately, fluctuated
2010	8%	
2009	7%	
2008	8,75%-14%	
2007	8,25%	
2006	8,25%	
2005	7,8%	
2004	7,5%	Approximately, fluctuated
2003	7,5%	
2002	7,44%	
2001	7,2%-8,7%	
2000	9%	

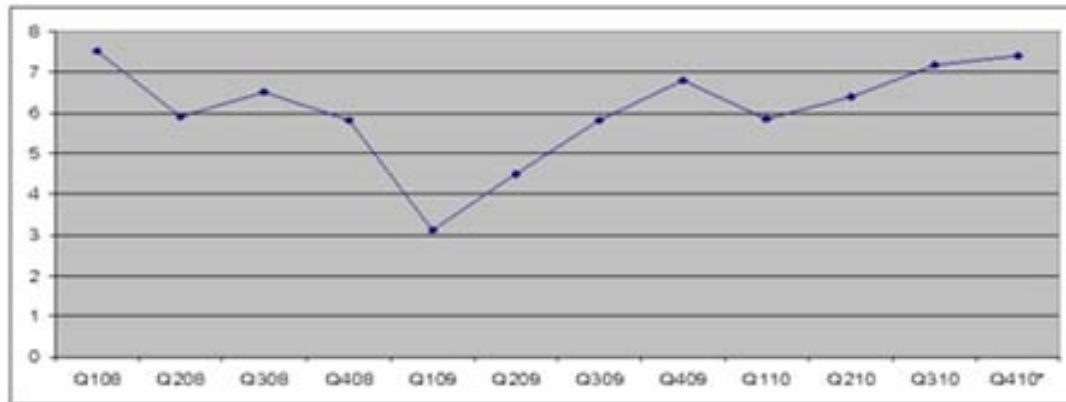
(Source : State Bank of Viet Nam and Viet Nam economy)

Exhibit 3 : Inflation, GDP growth and macroeconomics factors

Year	Inflation	GDP	USD/VND rate
2011	18%	5,89%	20.670
2010	11,75%	6,5%	19.495
	(Estimated at Dec 2010)	(expected)	
2009	6,88%	5,2%	17.000
2008	22%	6,23%	17.700
2007	12,63%	8,44%	16.132
2006	6,6%	8,17%	
2005	8,4%		
Note		approximately	

(Source: Viet Nam commercial banks and economics statistical bureau)

Exhibit 4 : GDP growth Việt Nam 2006-2010



(Source : Bureau Statistic)

Exhibit 5 : Top 40 among top 500 SMEs with the highest growth speed in 2012

Order	Rank	Company name	CEO	Tax code	Industry
1	1	CÔNG TY CP LÂM SẢN PISICO QUẢNG NAM	Phan Văn Cường	4000405162	Kinh doanh nông, lâm sản
2	2	CÔNG TY CP VÀNG BẠC ĐÁ QUÝ SJC CẦN THƠ	Lê Phát Vinh	1800636290	Vàng, bạc, đá quý
3	3	CÔNG TY CP SỢI PHÚ NAM	Hoàng Văn Thám	3300491474	Sản xuất sợi, dệt
4	4	CÔNG TY CP VÀNG BẠC ĐÁ QUÝ BẾN THÀNH	Tê Trí Dũng	300847936	Vàng, bạc, đá quý
5	5	CÔNG TY CP MAY CHIẾN THẮNG	Ninh Thị Ty	100101058	Ngành may
6	6	CÔNG TY TNHH DU LỊCH TRẦN VIỆT	Nguyễn Mạnh Cường	301069809	Du lịch, khách sạn
7	7	N.A		2012701	
8	8	CÔNG TY TNHH TRUYỀN THÔNG ADT	Đặng Huy Thắng	100905796	Sản xuất khác
9	9	CÔNG TY CP KẾT NỐI NHÂN TÀI	Tiêu Yến Trinh	305202145	Kinh doanh tổng hợp khác
10	10	CÔNG TY TNHH THIẾT LẬP	Nguyễn Hoàng Ân	1500441413	Sản xuất, kinh doanh, chế biến gạo, bột mì, ngũ cốc...
11	11	CÔNG TY TNHH-CHẾ BIẾN THỦY SẢN VÀ XNK TRANG KHANH	Trần Tuấn Khanh	1900287501	Nuôi trồng, chế biến, kinh doanh thủy sản và các sản phẩm thịt
12	12	CÔNG TY SẢN XUẤT THƯƠNG MẠI VÀ ĐẦU TƯ TAM MINH	Lưu Tuấn Anh	4300327589	Sản xuất đồ gỗ, nội thất
13	13	CÔNG TY TNHH THƯƠNG MẠI SẢN XUẤT HÙNG HUY	Voòng A Hoa	302259111	Sản xuất và gia công giày, dép
14	14	CÔNG TY TNHH THƯƠNG MẠI HOÀNG ĐẠO	Hồ Hoàng Bách	301434963	Sản xuất, kinh doanh thuốc lá, nguyên liệu thuốc lá
15	15	CÔNG TY TNHH THƯƠNG MẠI XÂY DỰNG DIỆU LONG	Đặng Thị Linh Phương	302000905	Kinh doanh tổng hợp khác
16	16	CÔNG TY CP XÂY DỰNG NHÀ VÀ PHÁT TRIỂN HẠ TẦNG HÀ NỘI	Phạm Thanh Nam	101370536	Xây dựng nhà và các công trình kỹ thuật dân dụng; hoạt động xây dựng chuyên dụng

17	17	CÔNG TY CP XĂNG DẦU THƯƠNG MẠI SÔNG TRÀ	Nguyễn Anh	4300334642	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
18	18	CÔNG TY CP SỢI PHÚ THẠNH	Nguyễn Văn Cường	3300471069	Sản xuất sợi, dệt
19	19	CÔNG TY TNHH DU LỊCH VÀ THƯƠNG MẠI SÔNG HỒNG	Lê Công Hoàng	100237411	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
20	20	CÔNG TY CP DẦU THỰC VẬT BÌNH ĐỊNH	Nguyễn Thị Thủy Giao	4100399995	Sản xuất thực phẩm chế biến: sữa, đường, cà phê, dầu ăn, bánh kẹo...
21	21	CÔNG TY CP VẬT TƯ MỎ ĐỊA CHẤT	Lê Nhật Tân	101453768	Kinh doanh tổng hợp khác
22	22	CÔNG TY TNHH MTV SÀI GÒN BẾN TRE	Nguyễn Ngọc Minh Hùng	1300419650	Bán lẻ, kinh doanh siêu thị
23	23	CÔNG TY TNHH HẢI VIỆT	Nguyễn Văn Rì	3700443193	Kinh doanh nông, lâm sản
24	24	CÔNG TY TNHH MAY PHÙ ĐỔNG	Dương Đức Thanh	100598947	Ngành may
25	25	CÔNG TY TNHH THƯƠNG MẠI VÀ DỊCH VỤ KỸ THUẬT TESCO	Trần Thanh Bình	101507773	Sản xuất, kinh doanh ô tô, phụ tùng ô tô
26	26	CÔNG TY TNHH THƯƠNG MẠI PHÚC THÁI	Bùi Xuân Huy	600346391	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
27	27	CÔNG TY TNHH MINH ĐĂNG	Nguyễn Thị Cẩm Nhung	2200258144	Nuôi trồng, chế biến, kinh doanh thủy sản và các sản phẩm thịt
28	28	CÔNG TY TNHH THƯƠNG MẠI VÀ DỊCH VỤ VẬN TẢI NGỌC KHÁNH	Trần Ngọc Huân	4000377194	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
29	29	CÔNG TY TNHH THƯƠNG MẠI DỊCH VỤ VẠN PHÁT	Cao Ngọc Anh	303332212	Kinh doanh tổng hợp khác
30	30	CÔNG TY CP VẬN TẢI VÀ DỊCH VỤ PETROLIMEX NGHỆ TĨNH	Võ Văn Tân	2900428497	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
31	31	CÔNG TY TNHH THƯƠNG MẠI SẢN XUẤT TÂN BÌNH	Trần Trí Thức	3900326063	Sản xuất đồ gỗ, nội thất
32	32	CÔNG TY TNHH NGUYÊN LIỆU GIẤY DUNG QUẤT	Nguyễn Nị	4300308498	Sản xuất đồ gỗ, nội thất
33	33	CÔNG TY TNHH BỆNH VIỆN ĐA KHOA TƯ NHÂN AN SINH	Ngô Đăng Sơn Anh	302774433	Sản xuất khác
34	34	CÔNG TY TNHH IN LỤA NHẤT PHƯƠNG	Huỳnh Thị Thanh Thủy	301441840	Sản xuất giấy, in ấn, xuất bản
35	35	CÔNG TY CP DẦU KHÍ SÀI GÒN-PHÚ YẾN	Trần Công Chương	4400344901	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
36	36	CÔNG TY CP BÊ TÔNG ĐĂNG HẢI	Phan Văn Khanh	400619838	Sản xuất, kinh doanh vật liệu xây dựng: xi măng, gạch xây, đá, cát...
37	37	CÔNG TY CP GIÀY BÌNH ĐỊNH	Võ Ngọc Thủy	4100258761	Sản xuất và gia công giày, dép
38	38	CÔNG TY CP ĐẦU TƯ PHÁT TRIỂN THIÊN SƠN	Vũ Văn Tuyên	101536301	Sản xuất, kinh doanh vật liệu xây dựng: xi măng, gạch xây, đá, cát...

39	39	HTX THƯƠNG MẠI ĐỒ THÀNH	Hàng Thanh Dân	302804374	Kinh doanh thực phẩm chế biến: sữa, đường, cà phê, dầu ăn, bánh kẹo.....
40	40	CÔNG TY CP XÂY DỰNG TỔNG HỢP 269	Trương Duy Niệm	3000244523	Xây dựng nhà và các công trình kỹ thuật dân dụng; hoạt động xây dựng chuyên dụng

(source : Vietnamnet and Viet Nam report)

Exhibit 6 : Risk and financial leverage of 104 listed construction firms on VN stock exchange period 2007-2011

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)	Note	Financial leverage
1	CNT	1,062	0,134		87,4%
2	DCC	1,299	0,578		55,5%
3	DIG	1,772	0,964		45,6%
4	FPC	0,484	0,229		52,6%
5	HBC	1,030	0,277		73,1%
6	L10	0,909	0,193		78,8%
7	MCG	1,595	0,543		66,0%
8	VNE	1,700	0,606		64,4%
9	L35	0,295	0,095	SKS as comparable	67,8%
10	LM3	0,337	0,040		88,1%
11	LO5	0,745	0,179		76,0%
12	L62	0,606	0,171		71,8%
13	L61	0,856	0,261		69,5%
14	L43	0,709	0,217		69,4%
15	L44	1,277	0,252		80,3%
16	B82	0,860	0,146		83,0%
17	BCE	0,955	0,515	SIC as comparable	46,1%
18	C92	0,800	0,121		84,9%
19	CIC	0,919	0,248		73,1%
20	CID	0,891	0,423		52,5%
21	CSC	1,023	0,217		78,8%
22	CT6	0,435	0,122	L44 as comparable	72,1%
23	CTD	0,950	0,574		39,6%
24	CTM	2,869	1,458		49,2%
25	CVN	0,995	0,605	VE1 as comparable	39,2%
26	CX8	0,180	0,034	LHC as comparable	81,0%
27	DC2	0,323	0,116	LHC as comparable	64,0%
28	DLR	0,243	0,064	MCO as comparable	73,8%
29	HUT	1,084	0,143		86,8%
30	L18	1,069	0,156		85,4%

31	LCS	0,141	0,037	CT6 as comparable	73,5%
32	LHC	0,755	0,358		52,5%
33	LIG	0,436	0,091	SD6 as comparable	79,1%
34	LUT	1,433	0,730		49,0%
35	MCO	0,755	0,127		83,2%
36	NSN	0,115	0,014	MCO as comparable	88,2%
37	PHC	1,667	0,409		75,5%
38	QTC	0,259	0,110		57,3%
39	TV2	0,822	0,207		74,8%
40	TV4	0,666	0,241		63,9%
41	VE1	1,475	0,776		47,4%
42	VE2	0,595	0,358	CID as comparable	39,8%
43	VE3	0,598	0,403	HPS as comparable	32,7%
44	VE9	0,704	0,430		38,9%
45	VHH	0,440	0,226	LHC as comparable	48,8%
46	SNG	1,264	0,484		61,7%
47	SSS	1,074	0,385		64,2%
48	STL	1,634	0,066		96,0%
49	SJM	1,030	0,389		62,2%
50	SJE	1,399	0,324		76,8%
51	SJC	1,103	0,266		75,9%
52	SIC	1,568	0,365		76,7%
53	SEL	0,220	0,059	TV4 as comparable	73,1%
54	SDT	1,406	0,435		69,1%
55	SDS	0,929	0,071		92,3%
56	SDJ	1,257	0,249		80,2%
57	SDH	2,884	1,290		55,3%
58	SDB	0,214	0,043	L61 as comparable	80,0%
59	SD9	1,456	0,415		71,5%
60	SD8	1,210	0,103		91,5%
61	SD7	1,461	0,243		83,4%
62	SD6	1,670	0,479		71,3%
63	SD5	1,332	0,503		62,3%
64	SD4	1,114	0,233		79,1%
65	SD3	1,361	0,695		49,0%
66	SD2	1,386	0,450		67,5%
67	SD1	0,198	0,034	SDS as comparable	83,1%
68	S99	1,286	0,800		37,8%

69	S96	1,706	0,480		71,9%
70	S91	1,213	0,386		68,2%
71	S74	1,250	0,443		64,6%
72	S64	1,099	0,358		67,5%
73	S55	1,251	0,476		61,9%
74	S27	1,213	0,008	S91 as comparable	93,1%
75	S12	1,180	0,202		82,9%
76	MEC	1,410	0,040	SDP as comparable	85,1%
77	ICG	1,634	0,795		51,3%
78	PHH	1,069	0,108	L18 as comparable	71,1%
79	PIV	0,598	0,325	VE3 as comparable	29,1%
80	PVA	1,932	0,209		89,2%
81	PVE	1,580	0,499		68,4%
82	PVR	1,670	0,440	SD6 as comparable	52,2%
83	PWV	1,332	0,048	SD5 as comparable	83,1%
84	PVX	1,304	0,311		76,1%
85	PXI	1,332	0,029	PWV as comparable	71,2%
86	PXS	1,406	0,172	SDT as comparable	68,2%
87	PXT	1,521	0,206	V12 as comparable	66,4%
88	SDP	1,410	0,271		80,8%
89	CTN	0,922	0,160		82,7%
90	V11	1,148	0,161		86,0%
91	V12	1,521	0,181		88,1%
92	V15	1,566	0,582		62,8%
93	V21	0,971	0,012	VCC as comparable	90,4%
94	VC1	1,815	0,525		71,1%
95	VC2	1,240	0,220		82,3%
96	VC3	1,256	0,195		84,5%
97	VC5	1,266	0,181		85,7%
98	VC6	1,123	0,287		74,4%
99	VC7	1,106	0,252		77,2%
100	VC9	1,140	0,124		89,1%
101	VCC	0,971	0,188		80,6%
102	VCG	1,505	0,186		87,7%
103	VCH	1,286	0,018	S99 as comparable	89,5%
104	VMC	1,503	0,292		80,6%
				Average	70,5%

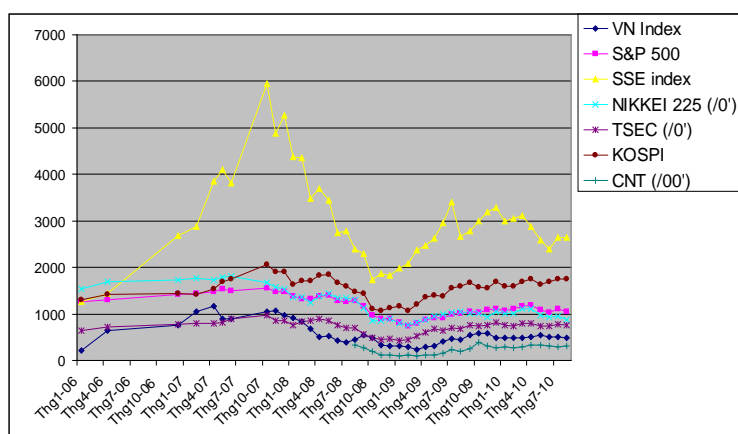
Exhibit 7 : Increase/decrease risk level of listed real estate firms under changing scenarios of tax rates : 25%, 28%, 20% period 2007 – 2011

Order No.	Company stock code	t = 25%		t = 28%		t = 20%	
		Equity beta	Asset beta	Increase /Decrease (equity beta)	Increase /Decrease (asset beta)	Increase /Decrease (equity beta)	Increase /Decrease (asset beta)
1	CNT	1,062	0,134	0,0000	0,000	0,000	0,000
2	DCC	1,299	0,578	0,0000	0,000	0,000	0,000
3	DIG	1,772	0,964	0,0000	0,000	0,000	0,000
4	FPC	0,484	0,229	0,0000	0,000	0,000	0,000
5	HBC	1,030	0,277	0,0000	0,000	0,000	0,000
6	L10	0,909	0,193	0,0000	0,000	0,000	0,000
7	MCG	1,595	0,543	0,0000	0,000	0,000	0,000
8	VNE	1,700	0,606	0,0000	0,000	0,000	0,000
9	L35	0,295	0,095	0,0074	0,002	-0,012	-0,004
10	LM3	0,337	0,040	0,0000	0,000	0,000	0,000
11	LO5	0,745	0,179	0,0000	0,000	0,000	0,000
12	L62	0,606	0,171	0,0000	0,000	0,000	0,000
13	L61	0,856	0,261	0,0000	0,000	0,000	0,000
14	L43	0,709	0,217	0,0000	0,000	0,000	0,000
15	L44	1,277	0,252	0,0000	0,000	0,000	0,000
16	B82	0,860	0,146	0,0000	0,000	0,000	0,000
17	BCE	0,955	0,515	0,0152	0,008	-0,024	-0,013
18	C92	0,800	0,121	0,0000	0,000	0,000	0,000
19	CIC	0,919	0,248	0,0000	0,000	0,000	0,000
20	CID	0,891	0,423	0,0000	0,000	0,000	0,000
21	CSC	1,023	0,217	0,0000	0,000	0,000	0,000
22	CT6	0,435	0,122	0,0118	0,003	-0,018	-0,005
23	CTD	0,950	0,574	0,0000	0,000	0,000	0,000
24	CTM	2,869	1,458	0,0000	0,000	0,000	0,000
25	CVN	0,995	0,605	0,0131	0,008	-0,021	-0,013
26	CX8	0,180	0,034	0,0057	0,001	-0,009	-0,002
27	DC2	0,323	0,116	0,0076	0,003	-0,012	-0,004
28	DLR	0,243	0,064	0,0068	0,002	-0,011	-0,003
29	HUT	1,084	0,143	0,0000	0,000	0,000	0,000
30	L18	1,069	0,156	0,0000	0,000	0,000	0,000
31	LCS	0,141	0,037	0,0079	0,002	-0,012	-0,003
32	LHC	0,755	0,358	0,0000	0,000	0,000	0,000
33	LIG	0,436	0,091	0,0133	0,003	-0,020	-0,004
34	LUT	1,433	0,730	0,0000	0,000	0,000	0,000
35	MCO	0,755	0,127	0,0000	0,000	0,000	0,000
36	NSN	0,115	0,014	0,0040	0,000	-0,006	-0,001
37	PHC	1,667	0,409	0,0000	0,000	0,000	0,000
38	QTC	0,259	0,110	0,0000	0,000	0,000	0,000
39	TV2	0,822	0,207	0,0000	0,000	0,000	0,000
40	TV4	0,666	0,241	0,0000	0,000	0,000	0,000
41	VE1	1,475	0,776	0,0000	0,000	0,000	0,000
42	VE2	0,595	0,358	0,0080	0,005	-0,013	-0,008
43	VE3	0,598	0,403	0,0064	0,004	-0,010	-0,007
44	VE9	0,704	0,430	0,0000	0,000	0,000	0,000

45	VHH	0,440	0,226	0,0075	0,004	-0,012	-0,006
46	SNG	1,264	0,484	0,0000	0,000	0,000	0,000
47	SSS	1,074	0,385	0,0000	0,000	0,000	0,000
48	STL	1,634	0,066	0,0000	0,000	0,000	0,000
49	SJM	1,030	0,389	0,0000	0,000	0,000	0,000
50	SJE	1,399	0,324	0,0000	0,000	0,000	0,000
51	SJC	1,103	0,266	0,0000	0,000	0,000	0,000
52	SIC	1,568	0,365	0,0000	0,000	0,000	0,000
53	SEL	0,220	0,059	0,0060	0,002	-0,009	-0,003
54	SDT	1,406	0,435	0,0000	0,000	0,000	0,000
55	SDS	0,929	0,071	0,0000	0,000	0,000	0,000
56	SDJ	1,257	0,249	0,0000	0,000	0,000	0,000
57	SDH	2,884	1,290	0,0000	0,000	0,000	0,000
58	SDB	0,214	0,043	0,0066	0,001	-0,010	-0,002
59	SD9	1,456	0,415	0,0000	0,000	0,000	0,000
60	SD8	1,210	0,103	0,0000	0,000	0,000	0,000
61	SD7	1,461	0,243	0,0000	0,000	0,000	0,000
62	SD6	1,670	0,479	0,0000	0,000	0,000	0,000
63	SD5	1,332	0,503	0,0000	0,000	0,000	0,000
64	SD4	1,114	0,233	0,0000	0,000	0,000	0,000
65	SD3	1,361	0,695	0,0000	0,000	0,000	0,000
66	SD2	1,386	0,450	0,0000	0,000	0,000	0,000
67	SD1	0,198	0,034	0,0064	0,001	-0,010	-0,002
68	S99	1,286	0,800	0,0000	0,000	0,000	0,000
69	S96	1,706	0,480	0,0000	0,000	0,000	0,000
70	S91	1,213	0,386	0,0000	0,000	0,000	0,000
71	S74	1,250	0,443	0,0000	0,000	0,000	0,000
72	S64	1,099	0,358	0,0000	0,000	0,000	0,000
73	S55	1,251	0,476	0,0000	0,000	0,000	0,000
74	S27	1,213	0,008	-1,1001	0,000	-1,110	0,000
75	S12	1,180	0,202	0,0000	0,000	0,000	0,000
76	MEC	1,410	0,040	-1,1349	0,001	-1,157	-0,002
77	ICG	1,634	0,795	0,0000	0,000	0,000	0,000
78	PHH	1,069	0,108	-0,6835	0,003	-0,709	-0,004
79	PIV	0,598	0,325	-0,1312	0,007	-0,155	-0,011
80	PVA	1,932	0,209	0,0000	0,000	0,000	0,000
81	PVE	1,580	0,499	0,0000	0,000	0,000	0,000
82	PVR	1,670	0,440	-0,7345	0,008	-0,778	-0,013
83	PVV	1,332	0,048	-1,0390	0,002	-1,062	-0,002
84	PVX	1,304	0,311	0,0000	0,000	0,000	0,000
85	PXI	1,332	0,029	-1,2267	0,002	-1,242	-0,003
86	PXS	1,406	0,172	-0,8528	0,004	-0,888	-0,007
87	PXT	1,521	0,206	-0,8922	0,005	-0,931	-0,008
88	SDP	1,410	0,271	0,0000	0,000	0,000	0,000
89	CTN	0,922	0,160	0,0000	0,000	0,000	0,000
90	V11	1,148	0,161	0,0000	0,000	0,000	0,000
91	V12	1,521	0,181	0,0000	0,000	0,000	0,000
92	V15	1,566	0,582	0,0000	0,000	0,000	0,000
93	V21	0,971	0,012	-0,8459	0,000	-0,857	-0,001
94	VC1	1,815	0,525	0,0000	0,000	0,000	0,000

95	VC2	1,240	0,220	0,0000	0,000	0,000	0,000
96	VC3	1,256	0,195	0,0000	0,000	0,000	0,000
97	VC5	1,266	0,181	0,0000	0,000	0,000	0,000
98	VC6	1,123	0,287	0,0000	0,000	0,000	0,000
99	VC7	1,106	0,252	0,0000	0,000	0,000	0,000
100	VC9	1,140	0,124	0,0000	0,000	0,000	0,000
101	VCC	0,971	0,188	0,0000	0,000	0,000	0,000
102	VCG	1,505	0,186	0,0000	0,000	0,000	0,000
103	VCH	1,286	0,018	-1,1056	0,001	-1,121	-0,001
104	VMC	1,503	0,292	0,0000	0,000	0,000	0,000
Average				-0,0924	0,0008	-0,0983	-0,0013

Exhibit 8 : VNI Index and other stock market index during crisis 2006-2010





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

An Exploratory Study of Factors Affecting the Internet Banking Adoption: A Qualitative Study among Postgraduate Students

By Nabil Hussein Al-Fahim

International Islamic University, Malaysia

Abstract - This paper aims to explore and understand the factors that affect the internet banking adoption among postgraduate' students in International Islamic University Malaysia (IIUM). Approach- Semi-structured interviews with eight informants; four adopters and four non-adopters on postgraduate' students were conducted to explore this issue. The results revealed that adopters and non-adopters realized that internet banking (IB) has several benefits and conveniences. However, non adopters were concerned about some factors like trust, ease of use, awareness and security. The results also showed that adopters had positive influence on use of online banking and they did not have problems with these factors because they had sufficient knowledge and experience in using online banking. This study has several limitations such as the sample used for the study was from a specific group of respondents in Malaysia (postgraduate' students at IIUM). The second limitation was that informants were postgraduate 'students who had limitation on banking transactions. The findings are important to enable bank executives to have a better understanding of clients' perception to adopt internet banking. This will help banks' managers and owners formulate strategies that could significantly affect IBA among their customers.

Keywords : (IBA) internet banking service, explore, adopters and non-adopters, postgraduate's students, IIUM.

GJMBR-C Classification : JEL Code: E50



Strictly as per the compliance and regulations of:



© 2013. Nabil Hussein Al-Fahim. 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 Exploratory Study of Factors Affecting the Internet Banking Adoption: A Qualitative Study among Postgraduate Students

Nabil Hussein Al-Fahim

Abstract - This paper aims to explore and understand the factors that affect the internet banking adoption among postgraduate' students in International Islamic University Malaysia (IIUM). Approach- Semi-structured interviews with eight informants; four adopters and four non-adopters on postgraduate' students were conducted to explore this issue. The results revealed that adopters and non-adopters realized that internet banking (IB) has several benefits and conveniences. However, non adopters were concerned about some factors like trust, ease of use, awareness and security. The results also showed that adopters had positive influence on use of online banking and they did not have problems with these factors because they had sufficient knowledge and experience in using online banking. This study has several limitations such as the sample used for the study was from a specific group of respondents in Malaysia (postgraduate' students at IIUM). The second limitation was that informants were postgraduate 'students who had limitation on banking transactions. The findings are important to enable bank executives to have a better understanding of clients' perception to adopt internet banking. This will help banks' managers and owners formulate strategies that could significantly affect IBA among their customers.

Keywords : (IBA) internet banking service, explore, adopters and non-adopters, postgraduate's students, IIUM.

I. INTRODUCTION

Over the past few decades, the world has been an unprecedented evolution of Information Technology (IT) which affected life as we know it. All industrial sectors have been affected especially the services sector. In recent years, the banking industry has undergone rapid technological changes and development. Therefore, banks have launched several service access methods via new delivery channels like ATM technology and Internet Banking Service (hereafter called as IBS). The growing importance of Information Systems (IS) in banks was the establishment of fully-fledged IBS by Security first Network bank in USA in 1995 [1] IBS is a new type of information system that uses the innovative resources of the internet and allows customers to engage in financial activities through virtual spaces and environments [2].

Author : Kullyyah of Economics and Management Sciences, International Islamic University Malaysia (IIUM).
E-mail : nalfahem@yahoo.com

Furthermore, IBS is extremely beneficial to both banks and clients. The main benefits to banks are cost savings, time saved, reaching new segments of the population, efficiency enhanced reputation and better customers' service satisfaction. [3] suggest that IBS offers new values to clients such as reduced costs in accessing and using bank services, increased comfort and time-saving transactions that can be made seven days a week and twenty four hours a day without requiring physical interaction with the bank speed of transaction and better administration of funds[4] IBS also offers a competitive advantage to banks by providing an unlimited distribution network. Through this technology, banks are able to provide services electronically such as lowering transaction costs and adding value to the customers' banker relationship. Moreover, a comprehensive online banking service strategy is essential for success in the increasingly competitive financial services market. Competition and changes in technology and lifestyles have changed making it more competitive and innovative. Due to the speed of technological change, bank are forced to continuously search for alternative and innovation services and products to keep with the rapidly change world [5]. As [6] predicted that approximately 20% of retail and 30 % of businessmen will use some form of Internet banking within the next five years

II. OBJECTIVE OF THE STUDY

There are past literatures studies on the adoption of internet banking, several of these studies have tended to focus on developed countries such as USA and UK [7]. However, still not predictable in some developing countries [8], [9], [10],[11]. Since the success or failure of internet banking is contingent upon the degree of its adoption.

This study attempts to explore and better understand these factors through the sampling (postgraduate' students) customers point of view. The IBS literature suggests five success factors or constructs for IBSA (convenience, ease of use, trust, security and awareness) for this study. The research question for this research can be formulated as:

What are main factors which influence the adoption of internet banking services?

In this context the factors that affect the adoption rate of internet banking which were considered in this study are listed as follows: convenience or benefits; ease of use; trust; security and awareness.

III. LITERATURE REVIEW

a) *Internet Banking*

Internet banking or online banking has been defined as “the service that allows consumers to perform banking transactions using a computer with an internet connection” [12]. Lloyd explains that these transactions include checking the balance in one’s bank account transferring funds between accounts and bill paying. [13] defined internet banking as “an internet portal used by clients for different types of banking services ranging from bill payment to investments”. According to [14] defined online banking “the use of the internet as a remote delivery channel for banking services and an internet bank is defined as a bank that offers transactional services via the internet. [15] propose that IB is the latest initiative in the spectrum of innovative banking services, Tele banking, ATM and debit cards. Internet banking has emerged as effective delivery channels for traditional banking products.

With The exception of cash withdrawals internet banking gives customers access to almost any type of banking transaction at the click of the mouse [16]. Electronic banking technologies refer to financial activities that involve use of electronic technology [17] ranging from the now ubiquitous automatic teller machines to other services such as direct deposit, e-fund transfer, e-bill payment, telephone banking and internet banking. [18] identify that there are three functional levels/ types of internet banking that are currently employed in the market place and these are: Informational, Communicational and Transactional.

b) *The adoption of electronic banking*

[19] defines adoption as” the acceptance and continued use of a product, service and idea. “The critical question is whether customers will accept the electronic form of receiving information and performing transaction. [20] explained that individual attitude toward accepting and adopting newly introduced technologies determine the success or failure of such technologies. As [21] found that the main reason for consumers not adoption ATMs was the lack of access, rather than their avoidance of the technology at its introductory stage.

Another related study [14] reported that having access to e-banking technologies is related to whether the consumer is affiliated with a bank that offers a variety of service options including computer banking. He also mentioned that perception of socioeconomic characteristics and innovation characteristics have proposed to influence consumers’ adoption technological innovation. Therefore, internet banking adoption is defined

as “The customer’s usage of multiple services represented in inquiring about account balance applying for a loan, remitting money from one count to another and many other services that are basically carried out online [22].

Another author described e-banking as internet banking that involves the provision of banking services such as accessing account transaction funds between accounts and offering internet financial services. [23] explained that the challenge to expand and maintain banking market share has influenced several banks to invest more in making better use of the internet.

c) *Theoretical underpinning theory of Internet banking adoption*

i. *Technology Acceptance Model (TAM)*

The Technology Acceptance Model (TAM) is one of a number of studies that have helped in providing theoretical framework for research in the adoption of information technology over the last few decades. TAM has been used extensively as the basis of a range of empirical studies [24]. Introduced by Davis in 1986 TAM was specially designed to explain and predict the behavior technology acceptance at work by specifying the determinants in belief, attitude, intention-IT usage relationships [25].

Moreover, [26] reported that, it is necessary to further explore the nature of technology and using – context factors that may alter the adopter’s acceptance. For example, recent research has illustrated that “trust” has a striking affect on users’ willingness to engage in internet exchange of money and sensitive personal information. Another example is the perceived risk, [27] illustrated that perceived risk is a main determinant of adoption behavior business to consumers (B2C) e-commerce environment. Since the introduction of TAM in 1986, a number of studies have applied it in a broad variety of IT applications to predict user acceptance behaviors of computer technologies such as wireless email, voice mail and online shopping [27]. As [29] mentioned that the TAM posits a user’s adoption of new information system is determined by that user’s intention to use the system which in turn is determined by the user’s beliefs about the system.

Furthermore, [25] noted that technology acceptance research must address how other variables influence ease of use, usefulness and user acceptance. Therefore, perceived ease of use and perceived usefulness may not explain behavior intentions towards the use of internet banking, necessitating a search for additional factors that can better predict the acceptance of internet banking. Additionally, [27] stated that TAM examines the mediating role of perceived usefulness and perceived ease of use in their relation between external variables and the probability of system use. The use of an extended TAM as a theoretical framework is adopted to test the effect of external variable such as,

security, risk, trust and awareness on the intention to use IB.

d) *Factors influencing adoption of Internet Banking*

Previous studies will show that altitudinal factors (also referred to as perceptions, characteristics, or experiences) affecting internet banking adoption. Some factors have most frequently demonstrated statistically significant relationship with internet banking adoption such as convenience, perceived ease of use, trust, security and awareness Lloyd Gibson,(2007). These factors demonstrated statistically significant relationship in studies performed in the developing countries such as [30] in Malaysia; [31] and [2] in Jordan; [32] in Oman; [33] in Tunis; [34] in Labia; [35] in Lebanon; [36] in Mauritius and [10] in Bangladesh).

i. *Convenience*

[37] pointed out that banks benefits from lower operating by offering online banking services which require less employees and fewer physical branches and also customers will benefit, around-the-clock availability and speed of IBs. He also added customers can pay their bills at any place and any time when they access internet because of the versatility of e-payment method. As [7] found that internet banking one the cheapest and more efficient delivery channels. He also added that benefits of the end adopters are numerous and include mainly convenience of service (time saved and globally accessible service) lower cost of transaction and more frequent monitoring of accounts among others. Furthermore, Ramsay and Smith (1999) explained that the main motivator for internet banking to be convenience in term 24 a day and 7 days a week access and time saved. Accessibility, which may be related to convenience, has been found important [38].

ii. *Perceived ease of use*

According to [25] perceived ease of use is defined as: “the extent to which a person believes that using the system will be free of effort”. In order to prevent the under-used useful system problem, online banking systems need to be both easy to use and easy to learn [32]. The reason is that effort saved by improved perceived ease of use can enable people to do a better job or accomplish more at work, thus enhancing their job performance [25].

In addition, [37] reported that perceived ease of use is postulated to have a positive direct effect on attitude toward using IT. Therefore, the higher perceived ease of utilizing a particular IT makes it more likely that the individual will have a positive attitude toward using it. Another related a study in Bangladesh on 400 banks' clients have been revealed positively affects the attitude toward using the technology and the findings imply that banks need to make internet banking ease of use [39] In the same field [40] tested the impact of the some factors upon the attitudes of retail users of banking services in Mauritius, he found that the most significant

factors are ease of use and trust to adopt of IB. Another study have done by [32] found that the research threw up three main issues related to perceived ease of use in Oman' banks, easy to manage and easy to learn. The researcher also inferred the difficulty of navigating on internet was highlight by Oman bank managers.

On the other hand, not all studies found that perceived ease of use has a positive effect on the adoption of online banking. For example, in developed counties such as [41] reported that, the relationship between ease of use and attitude to use online banking no significant and it has not been added to the model. Another related study in Fenland [7] found that the perceived use of use does not influence the adoption of online banking.

iii. *Perceived Trust*

Trust can be defined as “generalized expectancy ...that the word, promise, oral or written statement of another individual, or group can relied upon” [42] While [43] defined trust as “users thought, feeling, emotions, or behavior that occur when they feel that an agent can be relied upon to act in their best interest when they give up direct control”. [11] defined trust in manufacturer distributor as a belief that the partner company will not take unanticipated action that may result in negative outcomes for the firm.

[44] explained that, trust is needed not only in the pre-transaction and transaction phases, but also in post-transaction phase in the form of warranties and reimbursements. He also illustrated that trust in online banking addresses several different aspects of information system, including technical, reliability, and security information quality. Several studies have proved the significant relationship between internet banking and trust or any e-commerce. For instance, [45] tested on 1,500 banks' clients from the three banks in Jamaica, the findings indicated that trust is indeed a significant factor impacting both perceived usefulness and ease of use to adopt online banking. Moreover, [46] pointed out that the online services need the trust element, since trust is one of the main additions influencing the electronic setting?

Furthermore [47]) in Malaysia, this study has been shown that the relationship between trust and the attitudes of a number of college students towards the IBSA was positive. In the same field, [11] tested the impact of trust factor on corporate' clients who use internet for banking in Jordan, this study indicated that trust has a significant positive effect on ease of use to adopt IB. The study also showed that, the more a user trusted the bank and its website, the higher their belief that online banking was easy.

iv. *Security*

Security perceptions are defined as “the subjective probability with which consumers believe that their private information will not be viewed consistent

with their confident expectations”[48]. Security of transactions over the internet is a burning issue and it is an important factor that clients consider before adopting internet banking. Some customers avoid electronic banking as they perceive it as being easily susceptible to fraud [49]. Another related study by [19] found that 73% avoided the adoption internet banking because they are concerned about security and safety of transactions over the internet. Moreover, he also inferred that clients will not be ready to change from present familiar ways of banking to online banking unless their specific need is satisfied.

v. Awareness

Rogers (1983) defined awareness of innovation as “innovation’s existed and gain some understanding of how function”. While [19] has defined awareness of innovation as “understanding whether the customer is aware or not aware of service itself and its benefits”. He also shows that low level of IBS awareness is a critical factor in causing customers not to adopt internet banking. In this field [2] indicates that the importance of awareness for the adoption of any innovation and increasing the awareness levels of innovation of e-commerce among users has been identified as a major catalyst to encourage the adoption of electronic technologies.

Additionally, [8] explained that, the banking leader swishing to develop an Internet solution must educate customers on the security measures that awareness behavior is to build a trust relationship between the bank and the customer. He also illustrated that banking leaders then need to offer preferred products based on concepts such as knowing the customer and the customer’s history stored within the bank’s database. Furthermore, [23] suggested that if the banks provide their customers with sufficient information regarding the IBS, the customers will be more aware of these services. He also added that the banks can enlighten their customers on these services via brochures and any promotional campaigns.

IV. METHODOLOGY

The qualitative method was used to gain insight into how postgraduate students value online banking by interviewing both adopters and non-adopters of Internet banking. Eight informants were conducted with postgraduate’ students who study PhD and master in IIUM and they have accounts in banks. The researcher chose this sample because it was mainly very well educated. Another reason is that, postgraduate’s students have knowledge, awareness and several skills on usage of technology, in particular, computer and internet. The sample also contained two groups, the first of which consists of four of internet banking adopters and the second group consists of four non-internet banking adopters. This approach allowed us to

understand the perception of postgraduate’s students. For the purpose of this study, the convenience sampling technique was employed. It is defined as consisting of participants who are readily available and easy to contact. In spite of, this is considered as the least rigorous technique that involves the selection of the most accessible subjects, but is the least costly to the researcher, in terms of time, effort and money [50].

Standard semi- structured interview was used not only for the purpose of answering the study questions, but also to explore other additional and related information that may help meet the objective of this study. All interviews were conducted in person. They lasted 14-18 minutes with an average 16 minutes for adopters. However, non-adopters lasted 10-14 minutes an average 12 minutes because they did not have much information about online banking. Furthermore, transactions of adopters were limited with banks just fund transfer because they are not business’ students.

A set of interviews topics guided the interviews, with a list of probing questions to draw out informant opinions. Topics were discussed as perceptions to indentify the major factors which influence the adoption of online banking service from postgraduates’ perception in IIUM. Five factors were discussed with informants; these factors include convenience, perceived ease of use, trust, security and awareness. All eight interviews were audio-taped and transcription process yielded 18 pages.

V. FINDINGS AND ANALYSIS

The content analysis determined five affecting factors to internet banking. The interviews among postgraduate’ students indicated that some students have adopted internet banking and the others did not have adopted internet banking. Adopters and non-adopters were contrasted to determine possible difference.

a) Convenience

From the first interview question for most of informants adopters and non- adopters mentioned that internet banking has several benefits and convenience. Mostly, convenience and the benefits were described in terms of lifestyle, workplace use and housebound use, not having to travel, personal safety, not having to wait and also as found in the study, saved time 24/7 access. This has been viewed by the third informant as:

“I found banking online very well because of not having to travel to local branch or anything like that. I can do it twenty four hours a day.” (Adopter 3).

Another informant also has stressed convenience as one the factors. He stated that:

“people want rapidness and fastness, these the main two factors in order to adopt online banking, If you are in your business or in your home, you do not need to go bank and spend time for everything” (Adopter 1). The

view of the second adopter informants is supported by the first adopter:

"Many factors to lead to adopt online banking first, reduce the time, pay the bills and if you are in your home or your office you can pay the electricity bill, and water bill instead of going to the office." (Adopter 2).

Another informant adopter said "technology plays vital role especially in financial sector, taking about the facilities to provide holders by using of online banking" (Adopter 4).

Adopters and non-adopters made similar comments related to the issue of convenience, the first non-adopter sated: And another informant indicated that:

"Of course, online banking has too much benefit; first of all, minimize cost, for example, no need to travel from area to another area when you transfer money." (Non-adopter2). The fourth informant also shared the same view with the rest informants (Non-adopters 4). He further elaborated that:

"It is easy and save your time and you do not got to bank if you need or send money just you can transfer from your room."

The findings of the this study reveal that convenience is the most important factor in making the decision to bank using the internet both adopters and non-adopters. Most informants agreed that internet banking has several benefits and convenience. Adopters also felt more comfortable and enjoyable to deal with on this technology.

b) Perceived ease of use

Ease of use or usability was frequently cited and found linked to students' perceptions of complexity. Although most non-adopters already had experience using computers and internet, they felt that using online banking was difficult. Interestingly non adopters had formed views of complexity. The following was comments about this issue:

"I think one time I try to use and access to online banking, how I do it , I have confuse for using the transaction because it has a lot things inside the website and some people are not good enough in English in these facilities so they do not understand some terms in the bank' website." (Non-adopter 2).

Through this comment, we can see that English language plays essential role to adopt online banking because English' language is computer language.

Other informants mentioned that online banking is new technology and it has several complexes in the first time when the people use it.

"It is difficult for me. I think why it is difficult, I do not use it like hand phone. Any technology is difficult the first time but when I use it, it will become easily." (Non adopter 4).

Another informant is supported this issue:

"people cannot be use the IT; they are not familiar in modern IT system. It will be difficult for them to use modern technology compared to organizations and companies who have information and can use this technology." (Non-adopter1).

Some customers do not understand technology and they need to guide them to go the bank' website and how to inter to their accounts and open the website? They need to explain and learn using of online banking:

"There is problem even they know online banking; they do not know to use it because many technical terms that has been used." (Adopter 4).

On the other hand, adopters stated that internet banking is ease of use and they do not face difficulties when they use it and also others mentioned that online banking is easy way to conduct banking transactions. The first informant reported:

"All customers of banks are adopting to find the entrance to online banking is free, it is easy for me to use online banking and I have knowledge in the internet banking." (Adopter 1)

Another adopter said:

"I expect to be easy to do something that, online banking is easy way to conduct banking transactions and I perform my bank transaction on web easily." (Adopter 3).

In this factor, it is observed that most adopters did not face difficulties when they use this technology and they are familiar with using internet banking. However, non-adopters felt that ease of use or the difficulty in using online banking was problem for them. They also felt that using internet banking was complicated to understand and not easy because it is new technology. Therefore, banks should educate their customers to adopt this technology specially students' segment.

c) Trust

This statement highlights how the trust was often perceived by informants. Some adopters informants believed that customers' trust depend on the bank:

"The customers" trust depends on the bank because I deposit my money in the bank and I trust in my transactions in the bank so, I also have to trust online banking." (Adopter 1).

The second adopter also shared the same view. He elaborated that:

"The banks have to make a high trust for their customers and they encourage non users to use this technology because it saves time and effort too and non users should use this technology specially universities' students because they have more education compared to other people."

Distrust of technology was also revealed by various comments made about the security and privacy of internet technologies. Some informants did not use online banking because they did not have confidence with small banks in order to achieve their transactions by online banking: "There is a major factors which is very important in the banking industry so a big bank is trusted because the customers trust to deposit their money in a big bank but small banks have some problems for trusting, I like to deposit my money in a strong bank to use online banking later." (Non-adopter 1).

The third non-adopter informant had another feeling about trust. He said:

"In my case, I do not trust for using of online banking because the hackers and someone access to my account. So, if the bank has risk without online banking no doubt for me, I cannot put money in this bank sometimes".

The view of the fourth informant (non-adopter) is supported by the third informant by stating:

"I do not trust because I will be afraid if my money is lost or any hacker to access to my account, this is important issue and criminal."

To summaries this, trust is one the most critical issues. According to informants, some of them had this concern but non adopters had greater levels of worry, they did not have confidence to make any financial transactions via the Website. Moreover, trust is related to experience with the bank and bank policy, which contributes to customers' trust in bank business practices.

d) Security

Security is the main challenge because customers are doing the financial transaction through banking web site and they are not sure about the successful transaction or hacking of important personal information. So, the greatest concern expressed by most non-adopters was security. Many non-adopters commented on this:

"I do not like using online banking system because I hear about high hacking people and even though there are a lot of facilities, it has high risk because after I lose my money nobody can be responsibility, I do not have any evidence." (Non-adopter 2).

Additionally, another non-adopter shared the same view, as he stated that:

"I will be afraid if my money is lost or anyone hacker to access my account this is important issue for example, if I send money by internet to my friend and he does not receive, who is responsible for that" (Non adopter 4). From the above statement, there is strong indication, the fear of hackers, lack of trust and privacy are the core of customer's security concerns in internet banking transactions. Furthermore, another informant reported that:

"Security is the major factor and privacy for online banking system because nowadays, banking sector is a big dealing especially for companies, they have many transactions. So, banks have to give reality and security of customers." (Non adopter 1).

Most non-adopters informants had the similar feeling about security. They were afraid from hackers or someone accesses to their accounts when they use online banking.

In contrast, some adopters had a positive feeling for usage of internet banking they mentioned that their faith in banks having strong security measures such as virus checkers and recovery from system failure. For example the second informant explained that:

"Bank seeks to achieve and realize the safety for customers in the use of internet banking for example, my account was closed twice because one hacker entered to my account and bank informed me, I tried the second time but I cannot enter to my account. As well as, he added "banks have a high level of modern virus to protect money and personal information, so that one cannot penetrate this information or have access to personal account or banking transactions." (Adopter 2).

Moreover, another adopter stressed that banks have modern systems to protect their customers' transactions by internet. He said:

"I did not this find problem, some of the banks have following new policies like that change identity or kinds of internet security coders very frequently like mobile phone number, if you have wrong or any mistake through entrance to use online banking for example, transfer money the system will lock directly." (Adopter 1).

The fourth adopter is supported the others, he mentioned that:

"In this regard, banks has technical department, when the customers do their transactions by online, there are many details to protect privacy and security. Bank is serious in particular in terms of protection customers' information, it does not give any information for other."

From the above statement, it can be observed that adopters did not have concern regarding security due to they have sufficient knowledge and experience for using it. However, non-adopters did not deal with this technology and they did not have enough information to use online banking and they also had concern about security. It is observed that Adopter who had a technical background and understood security technology, they had higher levels of confidence in internet security than others.

e) Awareness

According to the findings of the interviews, some non-adopters had low awareness of online banking services and they also had little information

about online banking. Due to this reason they did not want to know what are advantages and disadvantages on using it. Moreover, they said banks did not provide their customers much information about using this technology. This can be seen that the following informants' statements regarding the awareness:

"I have little information about online banking, I think this phenomena is new I do not know completely about transaction of online banking and he said also banks have to educate their customers and give them information to use online banking and advertising is very important from the banks to customers." (Non adopter 1)" I do not have information about transaction and how to access, how to use just my bank gives me little information for check balance. If the banks provide these services and they have to explain their people how to use, how to do their transactions." (Non-adopter 3).

The fourth non-adopter also supported the previous argument. He mentioned that: "Just I lessen my friend who use internet to send his money from online banking and he buys air plane ticket and he said the bank must gives aware to people to use internet banking." (Non adopter 4) The above comments from non-adopters mentioned that they did not have enough information and they also are not much aware about use internet banking.

In contrast, adopters had a positive feeling regarding the awareness and they have enough

information for using online banking. He explained about his information towards using online banking:

"I got information about using internet banking from my bank and my friend tell me about use and banks gives me information to use online banking but just users and when you use this service, bank will guide you what are the next steps." (Adopter 2).

Another adopter has stressed that: "Nowadays, bank gives this option another bank must at least that kinds of options. If you go to the bank or you open online banking service, you have so many advertisements and you will get some discount" (Adopter 1).

As the third adopter mentioned that banks have to educate and aware their clients:

"I think to take about the awareness we can see clients of banks, bank must aware their clients and they have educate adopt online banking and also the society how be developed."

In summary, it can be observed that most non adopter had less awareness of internet banking applications and they had little information about using of online banking because they did not deal with this technology. On the other hand, adopters had more awareness of online banking and they got sufficient information from their knowledge and experience on use it.

Table 1 : Shows summary of informants 'perception between adopters and non-adopters of IB

Factors	Internet banking adopters	Non-Internet banking adopters
Convenience	It is rapidness and fastness, save the time; 24 hours a day and 7 a week. Reduce the cost	of course online banking has too much benefits. First of all, minimize cost , it is easy to transfer money and time saved;
Ease of use	It is easy to use and easy to learn for me; it is free and easy way to conduct banking transaction I do not face any difficulty.	For me, It is difficult to use and access, It has many technical terms inside web side; computer language is difficult.
Trust	the customers' trust depend on the bank because I deposit my money in the bank and I trust in my transactions in bank; Banks have to make a high trust for their customers, I did not find problem; Banks have a high level of modern virus to protect money and personal information; There are many details to protect privacy and security.	I do not trust for using online banking; I will be afraid if my money is lost; Small banks have problem for trust.
Security	I have got information from my bank and my friend; I have aware about use it; my bank guides me to use IB	It has high risk, I hear high hacking; I will be afraid anyone accesses my account; It is a major factor for online banking system.
Awareness		I do not have information about transaction by IB ; I do not completely about transaction of IB; I lessen my friend how to use; I think this phenomena is new.

VI. CONCLUSION

The main objective of this study is to explore and understand the factors affecting the adoption of

internet banking by (adopters and non- adopters) students in IIUM. From the analysis, we can come up with the conclusion that there are several factors that need to be considered and it is the duty of banks to

make sure that customers start using the internet banking services.

Convenience, twenty four hours availability, time savings and ease of conduction transactions at home were important benefits for internet banking mentioned by adopters. This study showed that students (adopters and non-adopters) realized that online banking will provide them with many benefits in the future.

According to study's findings, security and lack of trust have become a concern to non-adopters. In spite of, online banking provides flexibility in performing financial transactions and banks also have the means strong protection for security of information, non-adopters are reluctant to use the system due to the risk associated with it. Security also is element in the risk and clients are not ready to face any risk on using online banking. Non-adopters also did not believe that banks could protect their transactions when they used it. However, adopters trusted the ability of the banks to protect their transaction and privacy. In this case, banks need to build confidence about internet banking. The objective of the banks on the trust and security issues must be clear and their first priority.

Another issue raised by the non-adopters e-banking was difficult for them to conduct transactions online. They found difficult to understand and not easy while it was found easy for the adopters.

Eventually, the hindrance about awareness of online banking services is that, adopters were more aware and they have enough information on using internet banking. However, non-adopters were less aware of e-banking application and they did not have enough information how to use it. Therefore, , they did not know sufficient information about the advantages of doing transactions online and even banks are not providing much information so that customers can become well aware of online banking services.

VII. RECOMMENDATIONS

1. Banks must inform their clients about its security policy through all available media such as their websites or newsletters.
2. Banks must consider training and education programs that will help clients and non-adopters, in particular, overcome the difficulty of using online banking.
3. Banks should make an awareness campaign of security aspects of their internet services to encourage the use on internet banking.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Grandy, T. (1995). "Banking in E-space" The banker, vol. 145, December 1995, p. 74-7.
2. Al-Majali (2011). Modeling the antecedents of internet banking service adoption Structural

- Equation Modeling approach. Journal of Internet Banking and Commerce .JIBC< 2011, vol. 16, no.
3. Foley P. & Jayawardhena, C. (2000). Changes in the banking sector-the case of Internet banking in the UK. Research: Electronic Networking Applications and Policy, IO (1), 19-30.
4. Tuchila, R. (2000). Services bancare prin Internet, E-Finance Romania. Journal of e-business and Information Technology p. 231-130.
5. Jeevan., M. (2000). Only banks No brick voice and Data Available (online) <http://www.voicendata.com>.
6. Booz, D. and Hamilto, K (1997). E-banking: Global Study of Potential Effects, New York, NY.
7. Pikkarainen, K., Karjaluto, H., & Pahnila, S. (2004). Consumer acceptance of Online banking: An extension of the technology acceptance model Internet Research, 14(3), 224–235.
8. Kaled H. Al majli (2008). Participatory Action Research: An Exploration of Electronic Banking Adoption in Saudi Arabia PP 165-180.
9. Zolait, A., & Ibrahim A., & Farooq, A. (2010). A study on the Internet Security and its Implication for E-commerce In Yemen. International Journal of Technology Diffusion, 1(3), 34-47, July-September 2010.
10. Al Nahian R., & Shahriar A. (2009). -The adoption of e-banking in Developing countries in Bangladesh: A theatrical model for SMEs. International Review of Business Research Paper sol. 5 No. 6 November 2009, Pp. 212-230.
11. Mohammad, A., & Anton (2010). "The antecedents of Internet banking services adoption in Jordan. Journal of Internet banking and Commerce, vol. 15 No.2 (August 2010).
12. Lloyd G. G. (2007). Internet banking adoption by Chinese American: an empirical study on Banks customers from Chinese and American PP. 79-102, 134-155.
13. Pikkarainen, K., Karjaluto, H., & Pahnila, S. (2004). Consumer acceptance of online banking: An extension of the technology acceptance model Internet Research, 14(3), 224–235.
14. Enu u. L. (2000). Consumer adoption and diffusion of technological innovations: a case of electronic banking technologies P. 71-78.
15. Rahmath, S., & Hema, D. (2011). Internet Banking adoption in an emerging economy: International Arab journal of e-Technology Vol.2, no 1, pp. 250-289.
16. De Y., J. (2001) "The Internet's place in the banking industry", Chicago Fed Letter, No.163, P1.
17. Lee, M. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. Electronic Commerce Research and Adoptions, 8(3), 130-141.
18. Dube & Chitura and Runyowa, (2009). Adoption and Use Internet Banking in Zimbabwe: An Exploratory

- Study, *Journal of International Commerce*, vol. 14. no.1 pp 143-167. *Electronic Networking Applications and Policy*, 12(2), 165-180.
19. Sathye, M. (1999). Adoption of Internet banking by Australian consumers: an empirical investigation. *International journal of Bank marketing*, 17(7). 324-334.
 20. Khaled, H. (2010). An exploration of electronic banking adoption in Saudi Arabia. *Information Technology Banking and Services*, 15 (3), 232-243.
 21. Zeithaml, A., & Gilly (1987), "Characteristics Affecting the Acceptance of Retailing Technologies: A Comparison of Elderly and Nonelderly Consumers," *Journal of Retailing*, 63 (1), 49-68.
 22. Shih, Y., & Fang, K. (2004). The use of a decomposed theory of planned behavior to study Internet banking in Taiwan. *Internet Research*, 14(3), 213-223.
 23. Tan, M., & Teo, T. (2000). "Factors influencing the adoption of Internet Banking". *Journal of the Association for Information Systems* (5)-142.
 24. Muhammad S. & Khalil A. (2011). Internet Banking and Jordanian Corporate customers: Issues of Security and Trust: *JIBC* vol. 16, no.1.
 25. Davis, F., D. (1989), Perceived Usefulness, Perceived Eas of Use and User Acceptance of Information Technology, *MIS Quarterly*, 13(3) 319-339.
 26. Moon, JW, & Kim, Y., G. (2001). 'Extending the TAM for a World-Wide-Web context', *Information & Management*, vol. 38, no. 4, pp. 217-30.
 27. Muniruddenn L. (2007). An Examination of Individual's perceived security and privacy the internet in Malaysia and influence of their intention to use e-commerce: *Using ATM* Vol. 12, no.3 pp 77-89.
 28. Gefen, D., & Straub, D. (2003). Gender differences in the perception and use of e-mail: An extension to the technology acceptance model *MIS Quarterly*. 21(4), 389-399.
 29. Hamza S. & Younes E., Aymen S.,(2011). Factors affecting consumers adoption of mobile banking services *International Journal of Business and Social Science* Vol. 2 No. 20; pp 100-103.
 30. Norazah, M. (2010), An Empirical study of factors affecting the Internet banking adoption among Malaysian consumers. *Journal Internet banking and Commerce (JIBC)* vol. 15, no.2 pp 24-32.
 31. Emad A. Abushanab, (2005). Internet Banking and customers' acceptance in Jordan "The unified Model's perspective". *Journal of Internet Banking and Commerce* 186-210.
 32. Salim A. (2008). The Adoption of e-Banking: The Case of Omani Banks, *International Review Research Papers* Vol. 4 No. 5 PP. 120-128.
 33. Naris W. (2011). Factors influencing the adoption of internet banking in Tunisia. *International Journal of Business and Management*. Vol. 6, No. 8.
 34. Salim O. (2010) Factors influencing Internet banking adoption among customers in Libyan PP 75-90.
 35. Naoufel D. & Elissar T. (2007). The adoption of e-banking by Lebanese banks success and critical factors.
 36. Padaachi K, & Seetanah B., (2010). A study on the use of Internet Banking among SMEs Mauritius *International Research Symposium in Service Management* PP 198-205.
 37. Fang He (2009). Decision factors for the adoption E-finance and e-commerce activities. *Journal of Internet Banking and Commerce* of PP- 37-36.
 38. Jannatul M. N. (2010). E-banking and customers satisfaction in Bangladesh - *Journal of internet Banking commerce* vol. 14, no. 3 Jeevan M.(2000), Only banks No brick voice and Data Available (online) <http://www.voicendata.com>
 39. Kesseven p. & Boopen S. (2007). Analyzing the factors that influence the adoption of internet banking in Malaysia -*Journal of Internet Banking and Commerce*. vol, 18, no. 3.
 40. Grandy, T., (1995). "Banking in E-space" *The banker*, vol. 145, December 1995, p. 74-75 [46].
 41. Samsudin W., Nor Azila M., (2009). Technology Trust Banking Adoption: The Mediating effect of Customer Relationship Management Performance; *The Asian of Technology Management* vol. 2 no. 2 1-10.
 42. Patrick, L., & Andrew S., (2002). The Impact of Context Upon Trust Formation in Ambient Societes. Position paper presented at the CHI 2004 Workshop on Considering Trust in Ambient Societies, April 26, Vienna, Austria.
 43. Zakaria B. (2009). The Effect of Perceived Risk on the Intention to Use E-commerce: The case of Algeria *Journal of Internet banking and commerce*, vol. 14, no.
 44. Michael, R. (2008). Integrating Trust and Computer Self-Efficacy with TAM: An Empirical Assessment of Customers' Acceptance of Banking Information Systems (BIS) in Jamaica.
 45. Al-Shukkar, A., & Hasan, H. (2005). Toward a model for the acceptance of Internet banking in developing countries. *Information technology for Development*, 11(4), 381-39.
 46. Nor, M., & Pearson, J. (2007). The influence of trust on internet banking acceptance. *Journal of Interne Banking and commerce* Vol. 18, no. 4.
 47. Naha D., and Saroj K., (2010). Acceptance of E-banking among Adult Customers: An Empirical Investigation in India. *Journal of Internet Banking and Commerce* Vol. 17, no. 2.

48. Al Somali and Roya G, (2009). Internet Banking Acceptance in the Context of Developing Countries: An Extension of the Technology Acceptance Model-Operations& Information management Group, Aston Business School, Birmingham B47ET, UK.
49. Marshall, M. N. (1996). "Sampling for qualitative research." *Family Practice* 13(6): 522-525.





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

“Relationship between Financial Leverage and Financial Performance: Empirical Evidence of Listed Sugar Companies of Pakistan”

By Syed Shah Fasih Ur Rehman

University of Gujrat, Pakistan

Abstract - Sugar Industry is the 2nd most main industry of Pakistan after cotton. Pakistan is rich in the production of sugar, most of the production of sugar is consumed by the locals and surplus is exported. It is general concept that financial leverage and financial performance has positive relationship. The objective of the current study is to investigate the influence of financial leverage on financial and to investigate whether financial leverage has an effect on financial performance by taking evidence from listed sugar companies of Pakistan. The results of the study show the mix results. The results show the positive relationship of debt equity ratio with return on asset and sales growth, and negative relationship of debt equity ratio with earning per share, net profit margin and return on equity.

GJMBR-C Classification : JEL Code: E44



Strictly as per the compliance and regulations of:



“Relationship between Financial Leverage and Financial Performance: Empirical Evidence of Listed Sugar Companies of Pakistan”

Syed Shah Fasih Ur Rehman

Abstract - Sugar Industry is the 2nd most main industry of Pakistan after cotton. Pakistan is rich in the production of sugar, most of the production of sugar is consumed by the locals and surplus is exported. It is general concept that financial leverage and financial performance has positive relationship. The objective of the current study is to investigate the influence of financial leverage on financial and to investigate whether financial leverage has an effect on financial performance by taking evidence from listed sugar companies of Pakistan. The results of the study show the mix results. The results show the positive relationship of debt equity ratio with return on asset and sales growth, and negative relationship of debt equity ratio with earning per share, net profit margin and return on equity.

I. INTRODUCTION

Financial leverage can be described as the extent to which a business or investor is using the borrowed money. Financial leverage is a measure of how much firm uses equity and debt to finance its assets. As debt increases, financial leverage increases. It has been seen in different studies that financial leverage has the relationship with financial performance. In this study the sample size consists of 35 listed companies from food producer sector of Karachi Stock Exchange. The listed sugar companies are included in the study from the food producer sector of Karachi Stock Exchange. The aim of this study is an attempt to investigate the relationship between financial leverage and financial performance. The dependent variable which is used in this study is the financial performance of the listed sugar companies at Karachi Stock Exchange. The financial performance will be measured by using five indicators named as, Return on Assets (%), Return on Equity (%), Earning per Share after Tax (%), Net Profit Margin (%), Sales Growth (%). Financial leverage is the independent variable which is measured by using debt to equity ratio. Descriptive and correlation analysis are used for the data analysis.

II. BACKGROUND OF SUGAR INDUSTRY OF PAKISTAN

Sugar Industry is the 2nd most important industry of Pakistan after cotton. Pakistan is independent in

sugar. Out of which most is used up locally and the surplus is even exported. Pakistan had a weak base of sugar industry at the time of independence producing only 7,932 tonnes of sugar. This amount was not enough for the local needs and so most of it had to be imported. The Government paid attention to improve this sector and set up a commission with the purpose of developing a stronger sugar industry. After a very long struggle now we have 75 sugar mills in Pakistan which are producing 2.5 million tonnes of sugar. The industry has given employment to around 100,000 people. Most of sugar mills are present in Punjab and Sindh with 38 and 30 respectively and only 6 are present in Khyber pakhtunkwa. As sugarcane needs to be pressed soon after it is harvested, so the mills are located very close to the sugarcane fields so that the stalks can be transported as quickly as possible. After pressing the juice is used to make sugar while the left over named as 'Bagasse' is used to make chipboards, paper etc. and is also used as a source of power in the mills. Molasses is also a by-product obtained during the process of sugar refining. Molasses is used in the chemical industry to make alcohol which is used in some medicines etc. Sugar mills are facing a problem of lack of raw material as excess quantity of raw sugarcane is used for Gur making and for seeds. It should be only 25% of total sugarcane production used but around 37% of it is used. With the deficiency of raw material and some bad planning of the officials Pakistan has to import sugar from neighbouring countries to fulfil its local consumption.

III. RESEARCH AIMS AND OBJECTIVES

To study the influence of financial leverage on financial and to investigate whether financial leverage has an effect on financial performance by taking evidence from listed sugar companies of Pakistan. Progressive economic growth in a country is essential for effective and sound decision making of firm's financial policies. Capital structure is one of the most significant areas of firms' strategic financial decision making. Several economic and institutional factors drive the economy towards a certain direction and play a vital role in influencing the firms' choices of leverage. The aim of this study is an attempt to investigate the relationship between financial leverage and financial performance.

Author : Madina Syeddan Gujrat, University of Gujrat, Gujrat, Pakistan.
E-mail : shafasih@gmail.com

IV. NEED AND SIGNIFICANCE OF THE STUDY

There are very few researches on the topic of financial leverage effect on financial performance in Pakistan so, it's an opportunity for us to explore the relationship about aforesaid topic and there is a need and significance of this study in Pakistan. In Pakistan firms use financial leverage to meet their financing needs but they are not aware how it effecting their financial performance and hence increasing shareholders return. But here question also arises how much leverage they should use? All it depends upon their ability to generate sales to meet the debt burden. And also it depends on the economic conditions of Pakistan. This research will be very helpful for the firms to analyse their financial needs, capacity to borrow and how it is helpful for generating returns for shareholders and ultimately for economic growth of Pakistan.

V. LITERATURE REVIEW

Akhtar, et Al. (2012) had investigated the impact of influence on shareholders return. In their paper "Relationship between Financial leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan, they demonstrated that financial leverage has got a positive relationship with financial performance". Hence, the companies in the fuel and energy sector may enhance their financial performance and can play their role for the growth of the economy while improving at their optimal capital structures. In their study they employed a sample of 20 listed public limited companies from Fuel and Energy sector listed at Karachi Stock Exchange (KSE). The study aimed at measuring the relationship between financial leverage and the financial performance. To test the hypothesis, the main variables used in the study consist of a dependent variable which is financial performance of fuel and energy sector while an independent variable financial leverage in fuel and energy sector.

Akinmulegun Sunday Ojo (2012) in his paper "The Effect of Financial Leverage on Corporate Performance of Some Selected Companies in Nigeria empirically examines the effect of financial leverage on selected indicators of corporate performance in Nigeria". Leverage therefore significantly affects corporate performance in Nigeria. Other detailed objectives are to:

Examine the impact of leverage on the earnings per share and net assets per share of corporate firms in Nigeria.

The econometric findings presented in this study evidence that leverage shocks (debt/ equity ratio) have significant effect on corporate performance especially when the net assets per share (NAPS) is used as an indicator of corporate performance in Nigeria over the period covered by the study.

Earnings per share depend on feedback shock and less on leverage shock. Also, the outcome exposed that the influence shock on earnings per share indirectly disturb the net assets per share of firms as the majority of the shocks on the net assets per share was received from earnings per share of the firms.

Yoon and Jang (2005) study presents an empirical insight into the relationship between return on equity (ROE), financial leverage and size of firms in the restaurant industry for the period 1998 to 2003 using OLS regressions and for this purpose they take 62 Restaurant firms in US. Research results showed that high leveraged firms were less risky in both market-based and accounting-based measures. There is positive relationship between financial leverage and both profit measures and positively correlated. Also suggest that at least during the test period firm size had a more dominant effect on ROE of restaurant firms than debt use, larger firms earning meaningfully higher equity returns. Results also suggest that regardless of having lower financial leverage, smaller restaurant firms were significantly more risky than larger firms.

Ujah and Brusa (2013) in their research paper "The Effect of Financial Leverage and Cash Flow Volatility on Earnings Management." Took 559 US firms from the period 1990 through 2009 and identify the relationship between Leverage, Cash flow Instability and earning management variables. The findings of this paper suggest that financial leverage and cash flow impact the degrees to which firms manage their earnings. That business cycle and not bond or debt ratings affect firm's earnings management. Also, we find that depending of economic group or industry a firm belongs to their degree and extent of managed earnings varies.

Rajni Saini (2012) had investigated the influence of financial leverage on shareholders return and market capitalization. Empirical evidence of telecommunication sector companies, India. To measure this, financial statements of seven (07) listed firms have been analyzed over a period of 07 years. Descriptive Statistics, Co-relation and t-test has been conducted to find out nature of relationship and the state of influence of the financial leverage on shareholder's return and market capitalization individually. The research evidence of the study indicates that there is positive relationship between financial leverage and shareholder return but negative relationship between financial leverage and market capitalization.

Obradovich and Gill (2013) had researched on the Impact of Corporate Governance and Financial Leverage on the Value of American Firms. For this purpose a sample of 333 firms listed on New York Stock Exchange (NYSE) for a period of 3 years from 2009-2011 was selected. The co-relational and non-experimental research design was used to conduct this study by taking firm value as dependent variable and CEO

Duality, Board Size, Audit Committee and Financial Leverage as dependent variable. The purpose of this study was to find the impact of corporate governance and financial leverage on the value of American firms. Overall outcomes show that larger board size negatively impacts the value of American firms and CEO duality, audit committee, financial leverage, firm size, return on assets and insider holdings positively impact the value of American firms.

Aydemir et al. (2007) quantify the effect of financial leverage on stock return instability in a dynamic general equilibrium economy with debt and equity claims. The effect of financial leverage is studied both at a market and a firm level. They took the fake data and apply descriptive and Pearson correlation Statistics and Regression models, taking market return, market instability, Market price of Risk, financial leverage as dependent and independent variables. Their findings are for the market as a whole, financial leverage increases the level of equity volatility but the dynamics of equity volatility are mostly driven by a time-varying interest rate and a time-varying market price of risk. Financial leverage contributes more to the dynamics of stock instability for a small firm exposed to both individual risk and market risk.

Long and Malitz (1985) explored the influence of Investment Patterns on Financial Leverage. For this purpose they took the sample of 545 firms that are listed on NYSE & AMEX for the period of 1978-80 and develop a modal showing cause and effect relationship b/w underinvestment and asset substitution. Taking investment choices firm specific assets, tangible or intangible assets, capital assets as independent variable and financial leverage as dependent variables. Researchers find moral hazard problem. It is a major determinant of corporate leverage which affects a firm's investment decisions. Results provide direct empirical evidence that the moral hazard problem is important and that investment and financing decisions are not independent.

Pachori and Totala (2012) in their research paper "Influence of Financial Leverage on Shareholders Return and Market Capitalization: A Study of Automotive Cluster Companies of Pithampur, (M.P.), India" aimed to find out influence of financial leverage of automotive cluster companies on shareholders' return and market capitalization by using statistical tools. They took the sample of seven major automotive public companies. The study covered five years' time period from 2006 – 07 to 2010-11. Linear simple regression has been used as a tool to analyze the data by SPSS IBM-19 version by taking independent variables as financial leverage and the dependent variables are shareholders' return and market capitalization. The results indicate that there is no significant influence of financial leverage on shareholder's return and market capitalization. The

study also concludes that there might be other non-quantitative factors which may lead to nullify the impact of financial leverage on shareholders return like recession, saturation of auto industry, competition and government policy.

Cheng and Tzeng (2010) had investigated the Effect of Leverage on Firm Value and how the firm financial quality influences on this effect. For this purpose they took the sample consist of 645 companies listed in Taiwan Securities Exchange (TSE) that provide annual report from 2000-2009 consecutively. They took value of firm as dependent variable and financial leverage as independent variable. Apply descriptive and Pearson correlation Statistics and Regression models. They conclude that the values of leveraged firm are greater than that of an unleveraged firm if we don't consider bankruptcy probability. Secondly, if we consider the benefit and cost of debt instantaneously, the leverage is significantly positively related to the firm value before reaching firm optimal capital structure.

Thirdly, the positive influence of leverage to the firm value tends to be stronger when the firm financial quality is better (i.e., the greater Z-score).

Achchuthan and Jasinthan (2012) had investigated the "influence of financial and operating leverage on the financial performance with special reference to Lanka Orix leasing company Plc in Sri-Lanka. Data collected from lanka orix leasing company plc in Sri-Lanka (During the year 2001-2010). By taking financial performance as dependent and financial and operating leverage as independent leverage and perform ratio analysis and inferential statistics. Analyses of the data showed that only operating leverage has a significant on the financial performance of LOLC plc in Sri-Lanka. The outcomes revealed that no main difference was found between financial leverage and financial performance.

ALIU and Nuhu Onimisi (2010) examines the effect of capital structure on the performance of quoted manufacturing firms in Nigeria and determines a positive relationship between the value of Leverage and return on equity, return on assets and return on investment of Nigerian quoted manufacturing firms respectively. Further suggest that more properly the use justice and debt more the performance will be better. For this purpose data was collected from textbooks, annual reports, Journals, other published materials, Nigerian Stock Exchange fact books and the annual financial statements of the sampled 108 firms for the periods 2000 to 2009 and it was analyzed by statistical techniques.

Lemonakis and Voulgaris (2012) wrote in his research paper "Drivers of profitability and leverage of Greek firms in the post crisis era" determines overall all firms are showing a dramatically low net profit margin

during the recessionary study period (2008-2010) and a high reliance on debt. Both liquidity ratios are negatively correlated. The study covering the period 2008-10, Data are firm level financial data taken from the ICAP database for 3,222 corporate firms from 4 key sectors of the Greek economy. Two logistic regression models are used to analyze data by taking financial leverage and firms performance as independent and dependent variables.

Results of Dr. Khalaf Taani (2012) study indicated that the firm's working capital management policy, financial leverage and size have significant relationship to the net income, ROE, and ROA. The ANOVA F test and the t-test statistics showed significant results ($P > .50$). Both working capital management policy and firm size have positive effect on the firms' net income while financial leverage showed negative relation. He took 45 Jordanian industrial firms listed on Amman Stock Exchange for a period of five years from 2005 – 2009 and total of 225 observations. The SPSS statistics was used to determine significant relation among the variables. Test of correlation, ANOVA and multiple regression analysis were performed.

Pratheepkanth (2011) determines that there is a weak positive relationship between gross profit and capital structure at the same time, there is a negative relationship between net profit and capital structure. It reflects the high financial cost among the firms. ROI and ROA also have negative relationship with capital structure. Data of Business firms is collected from listed firms on Colombo Stock Exchange Sri-Lanka. All firms are taken for the study representing the period of 2005-2009. Regression, correlation and other statistical tools are used to analyze data.

Hasanzadeh et al. (2013) had investigated Evaluating Effects of Financial Leverage on Future Stock Value at Stock Exchange. The research statistical population was consisted of those Tehran stock exchange listed active cement industry companies analyzed from 2005 to 2008. By taking financial leverage and market to book value ratio as variable and to analyze data and test hypothesis of the present research, descriptive and inferential analyzing methods and SPSS statistical software were applied. They concluded that leverage does not affect future stock value of the firm. The results indicate non-response of capital market against levered nature of the firm. Lack of relationship between leverage and firm value approves net operational income (NOI) theory¹⁴ and Miller and Modigliani (M.M) theory¹⁵.

a) Variables

i. Dependent Variable

The dependent variable which is used in this study is the financial performance of the listed sugar companies at Karachi Stock Exchange. The financial performance will be measured by using five indicators

named as, Return on Assets (%), Return on Equity (%), Earning per Share after Tax (%), Net Profit Margin (%), Sales Growth (%).

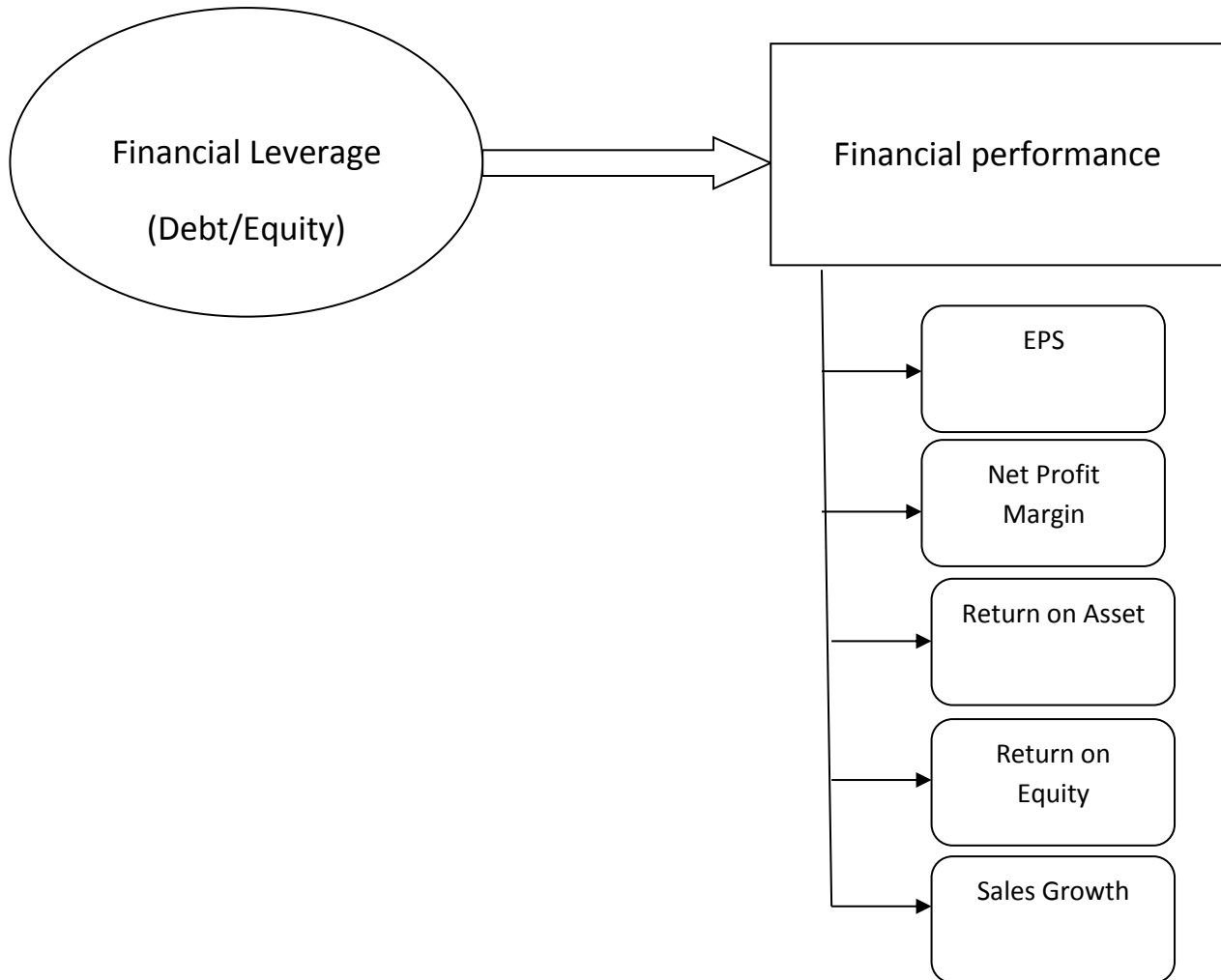
ii. Independent Variable

In this study we use financial leverage as independent variable which is measured by using debt to equity ratio.

The relationship between dependent and independent variable can be explained by the following equation:

$$\text{Financial performance} = a + b (\text{financial leverage}) + E$$

VI. CONCEPTUALIZATION



a) Hypothesis-H1

There is a positive relationship between financial leverage and financial performance of the sugar companies operating in a food producer sector of Karachi Stock Exchange.

VII. RESEARCH METHODOLOGY

a) Data Collection

This research is a quantitative research in which secondary data is used. Secondary data is data that have been previously collected for some other research. The data for this research is collected by using the annual reports of the companies which provide help in getting the authentic results. We also collect data from financial statement analysis of companies (non-financial) listed at Karachi Stock Exchange from the period 2006-2011. This data is published by state bank of Pakistan and DWH department.

b) Sampling Design

The sample size consists of 35 listed companies from food producer sector of Karachi Stock Exchange. The listed sugar companies are included in

the study from the food producer sector of Karachi Stock Exchange. All the other companies from food producer sector are excluded from this study.

c) Statistical Techniques

Descriptive statistics are used to describe and summarize the behavior of the variables in a study. They refer to the ways in which a large number of observations are reduced to interpretable numbers such as averages and percentages.

This is the general acceptance that financial leverage affects the financial performance of the companies. This current study analyzes the relationship between financial leverage and financial performance of the listed companies.

Correlation analysis is also used to find out the relationship between financial leverage and financial performance.

VIII. DATA ANALYSIS AND DISCUSSION

This section includes the statistical analysis of financial leverage and the financial performance. The common method to measure financial leverage is to use

financial ratio, in which debt to equity ratio is being calculated and analyzed. Debt to equity ratio is calculated by dividing total liabilities to shareholders' equity. Debt to equity ratio indicates that how much portion of capital structure is being financed by debt. In

listed sugar companies of Pakistan, the average debt equity ratio is -1.68%, maximum debt equity ratio is 10.22%, minimum debt equity ratio is -116.26%. The results show in the table 1 that the variance from the mean is 413.14% with the standard deviation of 20.33%.

Table 1 : Statistical Analysis of Financial Leverage Indicator

	Mean	Maximum	Minimum	Variance	Std. Dev.	Observations
Debt Equity Ratio	-1.68	10.22	-116.26	413.14	20.33	35

In table 2 statistical analysis of financial performance indicator is shown. The maximum value of earning per share is 17.53 and minimum value is 14.85.

The industrial average of earning per share is 0.92 with the variance from the mean is 64.77 and standard deviation of 8.05.

Table 2 : Statistical Analysis of Financial Performance Indicator

	Mean	Maximum	Minimum	Variance	Std. Dev.	Observations
EPS	0.92	17.53	-14.85	64.77	8.05	35
NET PROFIT MARGIN	-10.86	12.96	-411.91	4921.67	70.15	35
RETURN ON ASSET	3.98	22.72	-8.87	69.27	8.32	35
RETURN ON EQUITY	31.35	498.81	-87.61	9394.81	96.93	35
SALES GROWTH	1.09	4.04	-2.36	1.16	1.08	35

The maximum value of net profit margin is 12.96% and minimum value is -411.91. The industrial average of net profit margin is -10.86 with the variance from the mean is 4921.67 and standard deviation of 70.15. The maximum value of return on asset is 22.72 and minimum value is -8.87. The industrial average of return on asset is 3.98 with the variance from the mean is 69.27 and standard deviation of 8.32. . The return on

equity is very high maximum value of return on equity is 498.81 and minimum value is -87.61. The industrial average of return on equity is 31.35 with the variance from the mean is 9394.81 and standard deviation of 96.93. The maximum value of sales growth is 4.04 and minimum value is -2.36. The industrial average of sales growth is 1.09 with the variance from the mean is 1.16 and standard deviation of 1.08.

Table 3 : Correlations analysis of financial performance indicators with Financial Leverage

	D/E RATIO	EPS	NET PROFIT MARGIN	ROA	ROE	SALES GROWTH
D/E Ratio	1	-0.00341	-0.019857	0.028485	-0.83433	0.136025
EPS	-0.003405	1	0.340107	0.713719	0.005699	0.246167
NET PROFIT MARGIN	-0.019857	0.340107	1	0.279016	0.060038	0.136091
ROA	0.028485	0.713719	0.279016	1	0.036827	0.164832
ROE	-0.834333	0.005699	0.060038	0.036827	1	-0.039853
SALES GROWTH	0.136025	0.246167	0.136091	0.164832	-0.03985	1

Table 3 shows the relationship between debt equity ratio and various performance indicators. The results show the positive relationship of debt equity ratio with return on asset and sales growth, and negative

relationship of debt equity ratio with earning per share, net profit margin and return on equity.

There is a negative relationship between debt equity ratio and earning per share which support the fact

that as debt increases, the interest payment will also raise, so EPS will decrease.

Net profit margin tells that how much additional dollar earned by the company has effect on profits. The negative relation between debt equity ratio and net profit margin ratio indicates that as debt increase, net profits of the company tend to decrease, because most of the revenues are used to pay off the debts. So, the net profit margin ratio will also decrease.

The positive relationship between debt equity ratio and return on asset indicates that the assets which are financed by the debt have greater returns.

The relationship between debt equity ratio and ROE is negative as shown in table 3. The large debt will decrease the ROE, because in Pakistan economic conditions are poor. Using more debt will favor ROE when economic conditions are good but if economic condition is not good, then increase in debt may hurt ROE.

The results show the positive effect of financial leverage on sales growth of listed sugar companies of Pakistan.

IX. CONCLUSION

The aim of this study is an attempt to investigate the relationship between financial leverage and financial performance. The results show the positive relationship of debt equity ratio with return on asset and sales growth, and negative relationship of debt equity ratio with earning per share, net profit margin and return on equity. The variation from mean was quite high in debt equity ratio which means that there were massive fluctuations in the data during the study period (2006-2011). The variances of net profit margin and return on equity were also high. EPS and return on asset have relatively less variations from the mean. Sales growth has very low variance indicating that there were fewer fluctuations in the sales growth of the listed sugar companies of Pakistan. The use of debt may make a positive or negative impact on financial performance.

X. SUGGESTIONS

Future researchers may extend study period and may also take all the companies from food producer sector of Karachi Stock Exchange. Researcher can also conduct comparative study by taking data from different sectors to check the relationship between financial leverage and financial performance.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Pratheepkanth, P. (2011). "Capital structure and financial performance evidence from selected business companies in Colombo stock exchange Sri Lanka", Vol. – II, Issue –2.
2. ALIU, Onimisi, N. (2010). "Effect of capital structure on the performance of quoted manufacturing firms in Nigeria".
3. Hasanzadeh, B., Torabynia, S., Esgandari, K. and Kordbacheh, S. (2013). "Evaluating Effects of Financial Leverage on Future Stock Value at Stock Exchange", Research Journal of Recent Sciences, Vol. 2(2), 81-84.
4. Aydemir, A. Cevdet; Gallmeyer, Michael; and Hollifield, Burton, "Financial Leverage and the Leverage Effect - A Market and Firm Analysis" (2007). Tepper School of Business. Paper 142. <http://repository.cmu.edu/tepper/142>
5. Saini, R. (2012). "Impact of financial leverage on shareholders returns and market capitalization: empirical evidence of telecommunication sector companies, India", International Journal of Research in IT, Management and Engineering. Volume2, Issue12.
6. Jasinthan, T. and Achchuthan, S. (2012). "Impact of Financial, Operating Leverage on the Financial Performance: Special Reference to Lanka Orix Leasing Company Plc in Sri-Lanka", International Journal of Engineering Sciences Paradigms and Researches, Vol. 01, Issue 01, ISSN (Online): 2319-6564.
7. Taani, K. (2012). "Impact of Working Capital Management Policy and Financial Leverage on Financial Performance: Empirical evidence from Amman Stock Exchange – listed companies", International Journal of Management Sciences and Business Research, Vol. 1, Issue 8. (ISSN: 2226 - 8235).
8. Pachori, S. and Totala, K. (2012). "Influence of Financial Leverage on Shareholders Return and Market Capitalization: A Study of Automotive Cluster Companies of Pithampur, (M.P.), India", 2nd International Conference on Humanities, Geography and Economics (ICHGE'2012) Singapore.
9. Long, S. and Malitz, B. (1985). "Investment Patterns and Financial Leverage", University of Chicago Press, <http://www.nber.org/books/frie85-1>.
10. Akhtar, S., Javed, B., Maryam, A. and Sadia, H. (2012). "Relationship between Financial Leverage and Financial Performance: Evidence from Fuel & Energy Sector of Pakistan", European Journal of Business and Management ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol 4, No.11.
11. Ujah, U. and Brusa, O. "The Effect of Financial Leverage and Cash Flow Volatility on Earnings Management", Texas A&M International University.
12. Ojo, S.A. (2012). "The Effect of Financial Leverage on Corporate Performance of Some Selected Companies in Nigeria", Canadian Social Science, Vol. 8, No. 1, 2012, pp. 85-91 DOI:10.3968/j.css-1923669720120801.700.
13. Yoon, E. and Jang, S. (2005). "The Effect of Financial Leverage on Profitability and Risk of

Restaurant Firms", Journal of Hospitality Financial Management, Volume 13 Issue 1, Article 24.

14. Cheng, C. and Tzeng, C. (2010). "The Effect of Leverage on Firm Value and how the firm financial quality influence on this effect", National Chung Cheng University, Taiwan.
15. Obradovich, John and Gill, Amarjit, (2013). "The Impact of Corporate Governance and Financial Leverage on the Value of American Firms" Faculty Publications and Presentations. Paper 25. http://digitalcommons.liberty.edu/busi_fac_pubs/25





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Demystifying Risk Management – Implications on Business and Growth

By K. Bhavana Raj & Dr. Sindhu

JNTUH University, India

Abstract - There is a misplaced notion that Risk Management and Business Development are at cross-roads, which is based on the premise that the Business Managers tend to compromise in certain areas of Risk Management in the interest of the business growth. But, in the larger interests of the Risk Management and the Business Growth as well, the Business Managers should be actively involved in facilitating effective Risk Management. In fact, an effective Risk Management would facilitate a healthy understanding of the exposure and its inherent Risks, leading to healthy business growth for the Banks and thus protect the stakeholder value.

Keywords : risk management, banking, basel, credit risk, market risk, operational risk.

GJMBR-C Classification : JEL Code: G32, L84



Strictly as per the compliance and regulations of:



Demystifying Risk Management – Implications on Business and Growth

K. Bhavana Raj^α & Dr. Sindhu^σ

Abstract - There is a misplaced notion that Risk Management and Business Development are at cross-roads, which is based on the premise that the Business Managers tend to compromise in certain areas of Risk Management in the interest of the business growth. But, in the larger interests of the Risk Management and the Business Growth as well, the Business Managers should be actively involved in facilitating effective Risk Management. In fact, an effective Risk Management would facilitate a healthy understanding of the exposure and its inherent Risks, leading to healthy business growth for the Banks and thus protect the stakeholder value.

Keywords : risk management, banking, basel, credit risk, market risk, operational risk.

I. INTRODUCTION

The etymology of the word 'Risk' can be traced to the Latin word 'Rescum' or French word 'Risco' meaning 'That Cuts' or 'Causes Loss'. Risk is associated with uncertainty and reflected by way of change in the basic structure. These Risks are inter-dependent and events affecting one area of Risk can have ramifications and penetrations for a range of other categories of Risks.

Risk Management may broadly be defined as an Art or Science that facilitates identification and management of the possible deficiencies in any activity that may result in its underperformance. Risk is the possibility of the actual outcome being different from the expected outcome.

Banking has been undergoing metamorphic changes, depending upon the economic drivers, geo-physical requirements, social compulsions and practices etc. Banking, like any industry, is embedded with lots of Risks.

The Risk Managers are constantly evolving sound banking practices that could take care of the effective Risk Management, so that both the 'giver' and 'taker' are reasonably protected from the possible adversities and thus safeguard sound economic activity.

The most effective way of doing banking business would be to take reasonable Risks and derive

Author α : Assistant Professor (Finance), Justice City, NALSAR University of Law, Hyderabad, (Ph. D.), MBA, JNTUH University & Senior Research Fellow from JNTUH, Hyderabad, (Jawaharlal Nehru Technological University Hyderabad), Kukatpally, Hyderabad, Andhra Pradesh, India. E-mail : bhavana_raj_83@yahoo.com

Author σ : Associate Professor, Ph.D., School of Management Studies (SMS), JNTUH University (Jawaharlal Nehru Technological University Hyderabad), Kukatpally, Hyderabad, Andhra Pradesh, India. E-mail : sindhu999@yahoo.com

the benefit out of such Risks. Thus the core spirit of Risk Management would be 'to be aware of the Risks' and 'find the ways and means to mitigate such Risks', rather than develop the 'tendency of Risk-Averse'.

a) Statement of the Problem

The very nature of the Banking business is so sensitive because more than 85% of their liability is deposits from depositors (Saunders, Cornett, 2005). Banks use deposits to generate credit for their borrowers. This is in fact a revenue generating activity for most of the Banks. The aforesaid credit creation process ensures the Banks to have a good growth in its business. To generate revenue or earnings, to expand or grow and to survive the tough competition and the dynamic needs of the business, the Bank has to generate potential clients as well as retain the existing clients.

b) Objectives of the Study

The main objective of the study is to examine to what extent does the risk management has its implications on business and growth on the Banks operating in India. More specifically, the study aimed at achieving the following objectives:

1. To understand the impact of Basel Frameworks on Bank's Business Development and Quality of Business in the area of Risk Management in the select sample Banks.
2. To analyze the impact of Basel Frameworks on Bank's Business Development and Quality of Business in the Risk Management department across different types of Banks.
3. To suggest best measures for effective Business Development in Banks and improving Quality of Business in Banks in the area of Risk Management.

c) Research Hypotheses

Ho1 : There is no significant difference in the perception of the operating personnel with regard to the impact of Basel Frameworks in the area of Business Development.

Ho2 : There is no significant difference in the perception of the operating personnel with regard to the impact of Basel Frameworks in the area of Quality of Business.

d) Significance of the Study

The study enables the Bankers to understand the importance of effective Business Development and

also improving Quality of Business in Banks in the area of Risk Management. This study further attempts to assist the Risk Managers and the Regulators in ensuring a vibrant, sound and stress-free Banking environment which further helps in enhancing the country's economy.

e) Scope of the Study

The study is limited to only the Indian Banks and Foreign Banks operating in India and covers a period of ten (10) years from 2002-2013. A structured questionnaire is designed and administered to the Risk Managers in the select sample Banks.

II. LITERATURE REVIEW

a) Risk Management

Risk is all pervasive and is prevalent in every activity, be it a manufacturing or trading or service related. Human beings always attempt to manage the Risks faced by them in their day-to-day activities of life. Keeping inflammable material away from fire, saving for possible future needs, creation of a legal protection etc. are some of attempts at managing the Risks.

While there is no formal documentation of Risk Management in the primitive form of economic activity like 'barter' system, it would be reasonable to assume that both sides of the exchange-trade were prudently applying the basics of Risk Management viz. no loss or low loss. The extent of loss, whatever it may be, should have been the dictate of the 'need'. Broadly, this dictate of the 'need' may be classified as the primitive form of Risk-Return Trade-off.

As rightly said, anyone who is not comfortable in drilling in the middle of seas is probably does not belong to the oil exploration business. Similarly, anyone who is not prepared to take Risks is not in the banking business.

Managing Risk is nothing but managing the change before the Risk manages. While new avenues for the Banks have opened up, they have brought with them new Risks as well, which the Banks will have to manage and attempt to mitigate.

Every Industry strives to arrest these Risks with a view to minimize its losses and make optimum revenue. Banking Industry, primarily dealing with financial services can be no exception and thus, encounters with many related Risks. It is imperative that Banks have to identify and measure various Risks faced by them and initiate suitable remedial measures to mitigate them.

Banking has been undergoing metamorphic changes, in accordance with the economic drivers, geo-physical requirements, social compulsions etc. Rapid growth of industrialization supplemented by increase in agricultural production has dramatically changed the scope of Banking and expanded its horizons. Technological advancements in telecommunication and transportation have reduced the geo-physical barriers

and the Banks have stretched themselves overseas. These expanded horizons have further increased the Risk profile of the Banks. With the advent of Computers and Information Technology, there is a paradigm shift in the banking practices giving rise to more complex banking products and services, thus exposing the Banks to various new types of Risks.

Risk Management in Banks is universally the same across all the domains. The significant difference in Risks and the Risk Management practices arises mainly on account of the socio-economic fabric, the business models and the policies of the sovereign concerned.

The Regulators and the Risk Managers across the Globe have been defining and re-defining the Risks associated with the banking and have been attempting to find the ways and means to address such Risks, if not mitigate them completely, so that both the 'giver' and 'taker' are reasonably protected from the possible adversities and thus, ensure a sound Banking System in particular and a stable Economic System in general.

b) Basel Frameworks

On 26.06.1974, number of Banks had released Deutschmarks to Bank Herstatt in Frankfurt in exchange for Dollar payments deliverable in New York. Due to time-zone difference, there was lag in the Dollar payments to the Counterparty Banks. Before the payments could be effected in New York, Bank Herstatt was liquidated by the German Regulators, resulting in huge losses to the Banks who have taken the exposures. This Cross - border Settlement Risk is a major trigger point prompting the Banks across the Globe to think of comprehensive methodologies on Risk evaluation and mitigation.

i. Basel - I

With this objective, as an initiative from G20 Countries, Basel Committee on Banking Supervision (Basel Committee) under the aegis of Bank for International Settlement, had brought out the guidelines in 1988 (Basel I) for calculation of Capital Charge on Exposures (both fund based & non-fund based) and other Assets, based on the Risk Weights applicable to the counter-party, which primarily was intended to capture the Credit Risk. The Market Risk Amendment was introduced in 1996.

Basel I envisages Risk Weights to the counter-party under the premise 'One-Size-Fits-All'. For example, it did not differentiate between a low Risk Residential Housing Loan and highly volatile Commercial Real Estate loan etc. In nutshell, Basel I is less Risk sensitive to the ever-growing and multi-dimensional exposures of the Banking Industry.

ii. BASEL - II

Basel Committee, with a view to make computation of Capital Charge on the Assets more Risk-sensitive, had brought out revised guidelines in June,

2004 (Basel II). A Comprehensive version, inter-alia including 1996 Market Risk Amendment and 2005 paper on Trading Activities and Treatment of Double Default Effects was released in June 2006.

Basel II is not mandatory either on the member Banks or otherwise. However, it is quite gratifying to observe that Developing Economies like India and South

Africa preferred to migrate to Base II as per the given time-lines, whereas a Developed Economy like USA deferred its migration. Over a period of time, the Banks across the Globe, in their own interest, have voluntarily preferred to adopt Basel II, albeit late to suit their local conditions.

Pillar I	Minimum Capital Requirements	Maintenance of Risk-adequate computation of Capital requirements, which explicitly includes the Operational Risk, in addition to the Credit Risk and the Market Risk.
Pillar II	Supervisory Review	Establishment of robust Risk Management practices, which includes compilation of Internal Capital Adequacy Assessment Process (ICAAP) Policy and their review by the Supervisors.
Pillar III	Market Discipline	Increased transparency through expanded disclosures in the larger interests of all the Stakeholders.

Source : Compiled from *International Convergence of Capital Measurement and Capital Standards: A Revised Framework Comprehensive Version*, Bank for International Settlements (BIS) June, 2006

Figure 1 : Basel II envisages that stability of Financial Markets rests on 3 mutually reinforcing Pillars viz

a. Pillar I

Under Pillar I, Basel II envisaged a 3-tier migration to the Risk Management, viz. i) Basic Approaches ii) Middle Approaches and iii) Advanced Approaches. Each level of these approaches contained a set of guidelines to capture Capital Charge for Credit, Market and Operational Risks.

The Risks can fundamentally be divided into two types, i.e. Financial and Non-Financial Risks.

Financial Risks involve all those aspects which deal mainly with financial aspects of the Bank, and can be broadly stratified as Credit Risk and Market Risk. Both Credit and Market Risk may further be subdivided, as per the intensity and nuances of the Risk Management. Non-Financial Risks include all the Risks faced by the Banks in its normal functioning; like Operational Risk, Strategic Risk, Political Risk and Legal Risk etc.

Financial Risks		Non-financial Risks
Credit Risk	Market Risk	
Counter Party or Borrower Risk	Interest Rate Risk	Operational Risk
Intrinsic or Industry Risk	Liquidity Risk	Strategic Risk
Portfolio or Concentration Risk	Forex Currency Risk	Reputational Risk
Sovereign Risk	Sovereign Risk	Political Risk
Forex Currency Risk	Portfolio Risk	Legal Risk

Source : Compiled from *International Convergence of Capital Measurement and Revised Framework Comprehensive Version*, Bank for International Settlements (BIS) June, 2006

Figure 2 : A snapshot of the possible Risks the Banking Industry may be summarized as under

The above list is only indicative, but not exhaustive. Financial Risks in the Credit and Market Risks are inter-twined and complimentary. Any adverse affect on either of them may lead to adverse effect on the other. Non-financial Risks like Operational Risk and Strategic Risk etc. are all pervasive and can fuel the ill-effects of both the Credit Risk and Market Risk.

The 333-page Magnum Opus of Basel II Framework is a magnificent effort to document various methodologies to calculate the Capital Charge on various exposures taken by the Banks. Basel II has rightly introduced Capital Charge for Operational Risk. Despite the controversies surrounding the rationale underlying the compilation of Capital Charge for

Operational Risk (arguably due to the severe impact on the Capital position of the Banks), it is a welcome step.

If the recent failure of US and European Banks is any indication, the introduction of Capital Charge for Operational Risk by the Basel II Framework is well justified. However, Basel Committee in its wisdom did not attempt to address certain of the non-financial Risks like Reputation Risk, Legal Risk etc. and expected the Banks concerned to evaluate the respective policies depending upon the socio-economic conditions and geo-physical barriers.

b. Pillar II

Under Pillar II, Banks are encouraged to formulate the Internal Capital Adequacy Assessment

Process (ICAAP) Policy, inter-alia capturing a realistic Risk Profile of the exposures taken by them and assess the Capital Charge required, which will be subjected to Supervisory Review by the Regulators concerned. Developing a realistic ICAAP Policy is a gigantic exercise requiring ingenuity, spirit of truthfulness and robust Risk Management skills.

The ICAAP Policy has to be realistic and robust enough to stand the scrutiny of the Regulators. The Regulators in their wisdom may prescribe additional Capital Charge for the Idiosyncratic Risk of the Bank concerned and the Systematic Risk the Banking Industry per-se. A pragmatic ICAAP Policy is intended to lead to the concept of Economic Capital and reduce the Capital Arbitrage by the Regulators. However, in view of the conflicting interests of the players in the in the system, evolution of Economic Capital appears to be a distant dream.

The Banks are also encouraged to conduct Risk Controller and Self Assessment (RCSA) exercises across the cross-section of its employees (who are one of the stakeholders). RCSA exercises are intended to equip the employees mainly to address the issues relating to its Systems and Procedures, Risk Monitoring and Corporate Governance. This proved to be non-starter and the Banks are yet to take them seriously.

c. *Pillar III*

Basel Committee observed that the information given by the Banks in the Balance Sheets is barely intelligible for the common Customers and other Stakeholders. Under Pillar III, Banks are expected to maintain transparency and make additional disclosures at a desired level of integrity, over and above that have already been made in the Balance Sheets (which are made in line with the local Accounting Standards), so as to facilitate the Stakeholders take an informed decision about the Bank concerned. In the absence of the specific guidelines by Basel III on this aspect, the Regulators concerned are expected to formulate appropriate polices, as per the dictates of the banking practices prevalent in the Country concerned. However, 'User Test' is indicated as one of the barometers to decide the level of these additional disclosures.

iii. *BASEL – III*

There are many and varied reasons that led to the financial crises leading to failure or closure of many of the Banks in US and European Union. Evidently, no two Economists agree on a single analysis on such events. However, the main reasons can be traced to lack of Corporate Governance and inadequate Capital base.

To address the deficiencies revealed by the late 2000s financial crisis, Basel Committee has come out with Basel III Framework in 2010, scheduled to be introduced from 2013 until 2018. Basel III is designated to be a global regulatory standard on Banks' Capital

Adequacy, Stress Testing and Liquidity Risk and is aimed at:

- Strengthening the Risk Management and Corporate Governance.
- Augmenting buffer quality Capital to address the Cyclical Risks.
- Improving the ability to absorb shocks arising from financial/economic stress.
- Enhancing Transparency in transactions and Disclosures.

The Banks across the Globe are preparing themselves to comply with Basel III Framework and provide the required Capital. However, it is disturbing to note that many a Bank is willing to provide additional Capital (which has a Cost) to meet Basel Framework norms, rather than strengthen their Risk Management and reduce the impact of both financial and non-financial Risks and thus, save the Capital allocated for taking such exposures and the cost thereof.

III. RISK MANAGEMENT - GROWTH AND BUSINESS IMPLICATIONS

Basel Frameworks, for the Banks, on the face of it, appears to be very difficult to digest [it seeks to introduce new concepts like Haircut, Probability of Default (PD), Loss Given Default (LGD), Exposure at Default (EAD) etc.] and seem to haunt the traditional mind-set of the Risk Managers with the 'fear of unknown'. Hence, it is imperative that the myth of Basel II needs to be demystified to understand the 'Growth & Business Implications' on Banks.

The rapid growth of industrialization supplemented by increase in agricultural production has dramatically changed the scope of Banking and expanded its horizons. Technological advancements in telecommunication and transportation have increased the scope of banking business and reduced the geo-physical barriers. As result, the Banks have stretched themselves overseas. These expanded horizons have further increased the Risk profile of the Banks.

With the advancements in computers and information technology, there has been a paradigm shift in the banking practices giving rise to more complex banking products and services, thus exposing the Banks to various new types of Risks. With banking business growing leaps and bounds, may be, it is very much essential for the Banks now to look for ways and means to protect their Business and Growth.

a) *From Risk Management Perspective*

Risk is a significant aspect of a banking business activity. It is the Banks' willingness to take in business Risks as quantified by the appropriate indicators and is a basic operational prerequisite to send the relative 'Risk Limits'. For estimating the Bank's Risk-bearing capacity, it is necessary to determine the

extent to which the Bank can afford to take certain Risks at all. It is also necessary for the Banks to analyze the opportunities arising from Risk taking (Risk-Return). Though Basel II is voluntary in nature, the Banks on their own, in their own interest may have to migrate to Basel Frameworks, so as to equip themselves to protect from unexpected losses and also to be internationally competitive.

A Thought : With ever-growing and multi-dimensional banking business models, invariably, there appears to be an opaque area that always hides the Risk even from the sharp and trained vision of the Risk managers. Robust Risk Management practices will help Banks to identify, measure and mitigate the unexpected losses (apart from the expected losses, which the Banks in any case take care of, as a normal business practice) and eventually will lead to lesser losses and help Business and Growth prospects of the Banks.

b) From Capital Adequacy Perspective

Basel Frameworks seek to ensure that the available Risk coverage Capital is sufficient at all times to cover the Risks taken. Introduction of Basel Frameworks has reduced Capital to Risk Weighted Assets Ratio (CRAR or simply known as Capital Adequacy Ratio) of the Banks by around 150 bps to 200 bps, mainly on account of the Capital charge for Operational Risk, necessitating Banks to augment their Capital.

The Capital charge for Operational Risk (as 15% of average of previous 3-years Gross Income under Basic Indicator Approach) tends to block around 10% to 12% of Banks' Capital Funds. However, in reality, this additional Capital charge may not be adequate to meet the losses that may arise on account of Operational Risk. In any case, the lesser Risk Weights envisaged for Basel II defined 'Retail Loans' is expected to offset this additional Capital charge to some extent.

A Thought : This should encourage Banks to aim and migrate to Advanced Approaches, which would help them in improving their capacity to identify, measure and mitigate the possible Risk losses and thereby, may reduce the Capital charge. A healthy Capital to Risk Weighted Assets Ratio is one of the indicators of Banks' soundness, which should trigger the Business and Growth prospects of the Banks.

c) From Capital Management Perspective

Basel Frameworks also bring forth Bank Capital planning and Capital augmentation thereof, vis-à-vis the Risk bearing capacity of the Bank and business growth considerations. Banks have been traditionally used to provide Capital charge for the Assets created in its books, as per the Supervisory Prescriptions. The cost of Capital should form a part of every business decision and pricing thereof. However, the basic guiding premise

should be that providing Capital is no substitute for Risk Management and mitigation thereof.

A Thought : Realistic Internal Capital Adequacy Assessment Process (ICAAP) Policy intended to capture all the possible Risks the Banks are facing or likely to face, may help Banks in providing appropriate Capital, leading to the concept of Economic Capital. A better management of Capital helps the Banks to improve their bottom lines as well as Business and Growth prospects.

d) From Corporate Governance Perspective

Basel Frameworks seek a comprehensive Corporate Governance process including the management body and senior management oversight, monitoring, reporting and internal control reviews. The Banks have to identify and measure their Risks, allowing them to ensure that adequate provision is made for holding internal Capital in relation to their Risk profile. It is intended to guide the Banks to detect the developments that may endanger the Banks, well in advance and initiate suitable remedial countermeasures. Banks may have to put in place an Integrated Risk Governance Structure and Risk Based Internal Audit to facilitate effective control of the Risk losses.

A Thought : Risk Assessment, ICAAP and cost of Capital should form an integral part of the Banks' Management and Decision Making Process, across all levels of decision-making, day-in and day-out. A self-assessment of Bank's Risk profile is desirable, to gauge their preparedness and stability in case of sudden unforeseen shocks. This would facilitate better business sense leading to Business and Growth prospects of the Banks.

e) From Business Development Perspective

As Risk taking or transformation of Risks constitutes a major characteristic of the banking business, it is especially important for the Banks to address the Risk Management issues. The ever-increasing complexity of banking business calls for effective functioning systems that can reduce or control the Risk profile of the Banks. Banks have to have in place Risk Management Practices consistent with their business profile without losing focus on the vision, mission, business plans and ethics of the Bank. Banks have to view Basel Frameworks as an opportunity to improve functioning of the Banks and thereby Business and Growth prospects as well.

A Thought : Banks have to develop appropriate Risk Management practices that can identify and measure the Risks and mitigate them as far as possible, without compromising the business objectives and growth plans. In fact, the Banks ought to put in place robust Risk Management practices, not only to insulate them from the possible losses but also to be internationally competitive, which would facilitate Business and Growth prospects of the Banks.

f) *From Technology & MIS Perspective*

Basel Frameworks envisage that Banks develop robust MIS to meet with the stringent standards of Basel and also facilitate capturing of 5 to 7 years historical data, enabling near-accurate calculation of Risk ratios like PD (Probability of Default), LGD (Loss Given Default), EAD (Exposure at Default) etc. in the Advanced Approaches. Building up of historical data and analysis thereof for the Business Intelligence purposes is quite essential for Banks move towards a healthy banking domain. It is needless to emphasize that Banks do require adequate Business Intelligence support to be competitive and help their Business and Growth prospects.

Almost all the Banks have moved to wider platform like Core Banking Solutions. As Core Banking Solutions per-se cannot support robust MIS and historical-data-perspective, the Banks will have to move towards setting up Data Warehouse etc., which may require huge investments.

A Thought : Banks may have to make these investments in Technology and Infrastructure, not as Basel driven compulsions, but as Business-driven investments. A wider platform like Core Banking Solutions supported by Data Warehouse becomes essential for the ever-growing and complex banking operations. As setting up of individual Data Warehouse by each of the Bank may become uneconomical. The Banks may have to think of sharing the Data Warehouse facilities, with suitable protection for data secrecy and integrity. In the larger interest of the Banks, a Regulatory intervention in this regard may be desirable.

g) *From Employee Perspective*

Basel Frameworks seek to introduce fairly new concepts, which in all fairness are difficult to digest for the traditional operating personnel of the Banks. Banks may have to invest substantial time and money in updating the skill levels and motivation quotient of the operating personnel. It has been an established fact that ill-informed and ill-motivated operating personnel contribute negatively and hamper Business and Growth prospects of the Banks. Yet, this is often the most neglected area in the Banking Industry.

A Thought : Training system being run by the Banks is often confined to improving only the knowledge levels of the operating personnel (leaving aside the controversy over its utilization in the ground level situation). It is high time; the training system migrates from 'Training the Employees' to 'Educating the Employees', meaning 'Imparting Knowledge with Values'.

h) *From Stakeholders Perspective*

Banking Business should not be rooted exclusively in Supervisory consideration or business consideration, rather it should be in the best interest of

all Stakeholders of the Banks i.e., shareholders, customers, employees etc., who are inherently interested in the continued and sound existence of the Banks. Though the individual interests of these groups are not completely congruent, by and large, all the groups would be interested in ensuring that the Banks do not take on Risk positions that might endanger their continued and sound existence. The Stakeholders, if well informed, would fuel the Business and Growth prospects of the Banks.

A Thought : Pillar III Disclosures of Basel II Framework appear to be the right attempt in this direction, which would need improvement over a period of time to meet the 'User Test' norms. To sustain the spirit behind these guidelines, the Banks have to be honest and transparent in making true and fair additional Disclosures.

i) *From Stakeholders Perspective*

Banking Business should not be rooted exclusively in Supervisory consideration or business consideration, rather it should be in the best interest of all Stakeholders of the Banks i.e., shareholders, customers, employees etc., who are inherently interested in the continued and sound existence of the Banks. Though the individual interests of these groups are not completely congruent, by and large, all the groups would be interested in ensuring that the Banks do not take on Risk positions that might endanger their continued and sound existence. The Stakeholders, if well informed, would fuel the Business and Growth prospects of the Banks.

A Thought : Pillar III Disclosures of Basel II Framework appear to be the right attempt in this direction, which would need improvement over a period of time to meet the 'User Test' norms. To sustain the spirit behind these guidelines, the Banks have to be honest and transparent in making true and fair additional Disclosures.

j) *From Stakeholders Perspective*

Banking Business should not be rooted exclusively in Supervisory consideration or business consideration, rather it should be in the best interest of all Stakeholders of the Banks i.e., shareholders, customers, employees etc., who are inherently interested in the continued and sound existence of the Banks. Though the individual interests of these groups are not completely congruent, by and large, all the groups would be interested in ensuring that the Banks do not take on Risk positions that might endanger their continued and sound existence. The Stakeholders, if well informed, would fuel the Business and Growth prospects of the Banks.

A Thought : Pillar III Disclosures of Basel II Framework appear to be the right attempt in this direction, which would need improvement over a period of time to meet the 'User Test' norms. To sustain the

spirit behind these guidelines, the Banks have to be honest and transparent in making true and fair additional Disclosures.

k) From Group Perspective

Basel Frameworks envisage that financial group entities of a Bank (except Insurance entities, which have a different Risk profile that of the financial entities and probably, are outside the scope of Basel Framework) also function on sound lines as that of the Parent Bank. Any adverse movement in the group entities would adversely affect the Parent and at times, can be fatal enough to wipe out the Parent itself. On the same analogy, many a Regulator across the Globe have mandated that Banks will have to migrate to Basel Frameworks, both at Whole Bank (Solo) level and at the Consolidated (Group) level as well. This would ensure the Business and Growth prospects of the Banks and their Group entities as well.

A Thought : The Group concept of Basel Frameworks may lead to an anomalous situation, where Group-controlled NBFCs may have to adhere to Basel Frameworks, whereas independent NBFCs need not comply with the Framework. This is a serious issue requiring immediate remedial action by the Regulators concerned.

l) From Economic Perspective

The Banking System is one of the important barometers of the Economic stability of the System. Hence, any Economic System to achieve a robust growth and sustain the same needs to encourage and ensure a sound Banking System, the Regulators across the Globe have been defining and re-defining the regulatory interventions, so as to ensure a sound Banking System in particular and a stable Economic System in general.

A Thought : Bankers, Economists, Regulators and Sovereigns all over the world have been continuously striving to achieve a right balance between Banking Business Growth and Risk-Return Trade Off. It is easier said than done.

m) From Economic Perspective

The Banking System is one of the important barometers of the Economic stability of the System. Hence, any Economic System to achieve a robust growth and sustain the same needs to encourage and ensure a sound Banking System, the Regulators across the Globe have been defining and re-defining the regulatory interventions, so as to ensure a sound Banking System in particular and a stable Economic System in general.

A Thought : Bankers, Economists, Regulators and Sovereigns all over the world have been continuously striving to achieve a right balance between Banking Business Growth and Risk-Return Trade Off. It is easier said than done.

n) From Regulatory Perspective

Mere designing of Risk Assessment and Control Methods is not sufficient to secure the Banks' Risk-bearing capacity. Implementation of appropriate processes and reviews is essential. For improving Risk Management on an ongoing basis, development of relevant process should not be regarded as a one-time project, but a continuous development process. Hence, proper documentation of its Risk Governance Mechanisms, Systems & Procedures, their periodical updation and implementation of the same becomes the key. The Regulators would be too eager to study these aspects and assess the Risk profile of the Banks, as these would serve as Regulatory Tools. Regulators would be interested in the sound Business and Growth prospects of the Banks and hence would be monitoring the movements of the Banking industry and give the necessary impetus and guidance and initiate course correction, of considered necessary.

A Thought : Banking Industry is moderately regulated with the interventions of the Regulators and appears to be stable. Yet, the Risk Management practices of the Banks are not considered robust enough and hence, reengineering of the same may be required.

IV. METHODOLOGY

The research work employed is an experimental design. Primary data has been collected through a survey method using a structured questionnaire which was administered to the Operating Personnel working in the Risk Management capacity in general and Credit Risk in particular. Interview method was also used for the study. Secondary data sources like annual reports, annual accounts, bank's prospectus, Central Bank's (RBI's) guidelines and BIS (Bank for International Settlements) guidelines have been used as references. The population size is around 900 (Nine Hundred) and the sample size is 360 (Three Hundred and Sixty).

The sampling unit was mainly the Operating Personnel in the capacity of Credit Risk Managers, Senior Credit Risk Managers and General Managers and above. The sampling technique used was a purposive sampling or judgmental sampling. Three Public Sector Banks, three Private Sector Banks and three Foreign Banks have been chosen.

A 5-point Likert Scale has been used to carry out the research work, ranging from: 1 being 'Not Important', 2 being 'Of Little Importance', 3 being 'Moderately Important', 4 being 'Important' and 5 being 'Very Important'.

V. DATA ANALYSIS AND STATISTICAL TECHNIQUES

Data Analysis:
Tables:
Descriptives:

		Mean	Std. Deviation
X	PSU	-.1560	1.01366
	PSB	.0597	.07822
	FB	.0963	.07378
	Total	.0000	.59737
Y	PSU	-.1619	1.16567
	PSB	.1148	.05819
	FB	.0472	.03963
	Total	.0000	.68261

Note : In the above table of Descriptive: X refers to = Impact of Basel Frameworks on Bank’s Business Development, Y= Impact of Basel Frameworks on Bank’s Quality of Business, PSU= Public Sector Banks, PSB = Private Sector Banks and FB= Foreign Banks.

Figure 3 : The above table shows the responses of the sample respondents of the select sample Banks

	Contrast	Value of Contrast	Std. Error	t	df	Sig. (2-tailed)
X	1 - 2	-.2156	.07598	-2.838	357	.005
	1 - 3	-.2522	.07598	-3.320	357	.001
	2 - 3	-.0366	.07598	-.482	357	.630
Y	1 - 2	-.2767	.08704	-3.179	357	.002
	1 - 3	-.2091	.08704	-2.402	357	.017
	2 - 3	.0676	.08704	.777	357	.438

Note : In the above table of t-test, X refers to =Impact of Basel Frameworks on Bank’s Business Development, Y= Impact of Basel Frameworks on Bank’s Quality of Business, 1=PSU= Public Sector Banks, 2=PSB = Private Sector Banks and 3= FB= Foreign Banks

Figure 5 : t-Tests where significant differences exist

a) Statistical Techniques

- Nominal Data of the survey is transformed to Scale Data using Optimal Scaling (Categorical Principal Component Analysis) and a One Way ANOVA is also performed on the Transformed Data.
- t-test was performed to identify the areas where there is an existence of significant difference.

VI. CONCLUSIONS

- Observing the Significance levels corresponding to various impacts, it can be clearly seen that the significance levels for “ Impact of Basel Frameworks on Bank’s Business Development” and “ Impact of Basel Frameworks on Bank’s Quality of Business” is greater than 5% whereas the significance levels for the other dimensions is less than 5%.
- It can be concluded with 95% confidence level that there is no difference in the perceptions of the

		Sum of Squares	df	Mean Square	F	Sig.
X	BG	4.458	2	2.229	6.436	.002
	WG	123.649	357	.346		
	T	128.107	359			
Y	BG	4.995	2	2.498	5.494	.004
	WG	162.285	357	.455		
	T	167.281	359			

Note : In the above table of One Way ANOVA, X refers to =Impact of Basel Frameworks on Bank’s Business Development, Y=Impact of Basel Frameworks on Bank’s Quality of Business, BG=Between Groups, WG= Within Groups and T=Total

Figure 4 : ONE Way ANOVA

- Observing the t- test Significance Levels for areas where there is difference in the perceptions of Basel Impact, the following observations can be made:
 - There is no significant difference in the thinking between Indian Private Sector Banks and Foreign Banks with respect to impact of Basel on Business Development as seen by significance level of 63% (>5%) between 2 and 3.
 - Whereas the Significance level is < 5% in the relation between Indian Public sector and the other two types and the value of the contrast is negative in both the cases which seriously suggest that Indian public sector Banks are thinking that Basel

will not have much impact on Bank's business development whereas the Indian Private Sector and the Foreign Banks think that the impact on Business Development is going to be higher.

VII. SUGGESTIONS

To facilitate effective Business Development in Banks and improvise Quality of Business in Banks in the area of Risk Management, the Banks may have to...

- a) Upgrade & Update the Skill Levels of the Employees,
- b) Reengineer & Redesign the Systems, Policies & Procedures of the Banks,
- c) Strengthen the MIS (Management Information Systems) and Data Mining & Data Capturing capabilities,
- d) Augment adequate Capital,
- e) Improve Corporate Governance, Monitoring and Oversight,
- f) Map a realistic Internal Capital Adequacy Assessment Process Policy (ICAAP),
- g) Increase integrity in mapping all types of Risks (Credit Risk, Market Risk and Operational Risk etc.),
- h) Develop mechanisms to quantify the impact of all types of Risks (Credit Risk, Market Risk and Operational Risk etc.) and
- i) Initiate suitable measures to mitigate the Risks.

...and, these would evidently go a long way in developing the Business and Growth prospects of the Banks and also make them globally competitive.

REFERENCES RÉFÉRENCES REFERENCIAS

1. International Convergence of Capital Measurement and Capital Standards, Basel Committee on Banking Supervision, July 1988.
2. Basel Committee on Banking Supervision, Amendment to the Capital Accord to incorporate Market Risks, January, 1996.
3. David Jones, Emerging problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues, Journal of Banking & Finance, Vol. No. 24, Issue 1-2, pp 35-58, Jan 2000.
4. Basel Committee on Banking Supervision, Sound Practices for the Management and Supervision of Operational Risk, February 2003.
5. The International Convergence of Capital Measurement and Capital Standards, A Revised Framework, Bank for International Settlements, June 2004.
6. Basel Committee on Banking Supervision, Implementation of Basel II, Practical Considerations, July 2004.
7. The Global Implementation of Basel-II: Prospects and Outstanding Problems, International Developments in Financial Regulations Discussion

- Paper, Conford Andrew, Financial Market Center, June 2005.
8. International Convergence of Capital Measurement and Capital Standards: A Revised Framework Comprehensive Version, Bank for International Settlements, June, 2006.
9. Demystifying Basel-II, Journal of Islamic Banking and Finance, Akhtar Shamshad, December, 2006
10. The Banks battle back, a behind-the-scenes brawl over new Capital and Liquidity Rules, Economist, May 2010.
11. Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring, Bank for International Settlements, December 2010
12. Basel III: Counterparty Credit Risk - Frequently Asked Questions, Bank for International Settlements, November 2012.
13. Saunders, S. and Cornett, T. (2005): Financial Institution Management. McGraw Hill Pub. 2005.

This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Bank Distress in Nigeria and the Nigeria Deposit Insurance Corporation Intervention

By Olukotun, G. Ademola, James, O. Olusegun & Olorunfemi Kehinde
Kogi State University, Nigeria

Abstract - The Banking Sector has been relied upon by many household, small savers and industrialists to provide their financial assistance at one time or the other. While it is expected that they do this very well, banks have fallen short-off expectations in this respect due to fraud, mismanagement, inexperience and the initial absence of regulatory laws and authorities. People lost their trust and confidence in the banking system, which the government couldn't afford. The government desirous to instill confidence on the banking system by the public put the Nigeria Deposit Insurance Corporation (NDIC) in place. The objective of this project work is to see how the NDIC through its various activities have been able to restore confidence in the banking system. Secondary data were primarily used for this work because of the peculiar nature of the research work. Correlation coefficient and r-test were used to test the relationship between the variables. It was discovered that due to the increase in deposit guarantee, there is an increase in deposit mobilization. It was also discovered that the NDIC has transmitted from the flat rate premium assessment system to a differential premium assessment system. It is therefore recommended that from time to time, the deposit cover should be reviewed in conformity with the happenings in the economy.

Keywords : *bank failure, deposit guarantee, supervision, liquidation, public confidence, regulatory authorities.*

GJMBR-C Classification : *JEL Code: G22, E50*



Strictly as per the compliance and regulations of:



© 2013. Olukotun, G. Ademola, James, O. Olusegun & Olorunfemi Kehinde. 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.

Bank Distress in Nigeria and the Nigeria Deposit Insurance Corporation Intervention

Olukotun, G. Ademola^α, James, O. Olusegun^σ & Olorunfemi Kehinde^ρ

Abstract - The Banking Sector has been relied upon by many household, small savers and industrialists to provide their financial assistance at one time or the other. While it is expected that they do this very well, banks have fallen short-off expectations in this respect due to fraud, mismanagement, inexperience and the initial absence of regulatory laws and authorities. People lost their trust and confidence in the banking system, which the government couldn't afford. The government desirous to instill confidence on the banking system by the public put the Nigeria Deposit Insurance Corporation (NDIC) in place. The objective of this project work is to see how the NDIC through its various activities have been able to restore confidence in the banking system. Secondary data were primarily used for this work because of the peculiar nature of the research work. Correlation coefficient and r-test were used to test the relationship between the variables. It was discovered that due to the increase in deposit guarantee, there is an increase in deposit mobilization. It was also discovered that the NDIC has transmitted from the flat rate premium assessment system to a differential premium assessment system. It is therefore recommended that from time to time, the deposit cover should be reviewed in conformity with the happenings in the economy.

Keywords : bank failure, deposit guarantee, supervision, liquidation, public confidence, regulatory authorities.

I. INTRODUCTION

a) Background to the Study

The Banking industry is so strategic to the economy that virtually everybody is a stakeholder. Banks act as lubricants of the economy and the custodians of the payment system. They therefore impact on every sector of the economy. Banks with high capital base perform their traditional role of banking by financing capital projects that is in the oil and gas sector.

Banks help in mobilizing savings through a network of branches. By mobilizing savings, the bank channels them into investments. Thus, they help in capital formation. Other roles performed by the banks in the economy include financing trade, agriculture, industry, consumer activities and they help in the implementation of monetary policies.

Despite the fact that there are so many sectors in the economy that depend on banking, banks in Nigeria are yet to realize their full potentials. Likewise the banking sector has a long way to go in playing its

expected roles in development and growth of the economy. Despite the fact that the banking industry recorded a strong second fastest growing sector in the economy, the banking industry has not been performing their traditional role of banking but have been engaged in bad ways of practicing banking.

The importance of the financial sector of an economy, which comprises banks and non bank financial intermediaries, regulatory framework and ever increasing financial products in stimulating economic growth is widely recognized in the literature on development economics.

A banking system that is in crisis cannot therefore, carry out its intermediation role effectively as new lending comes to a halt, which is known as credit crunch. Two mechanisms can act; low capital adequacy ratios of banks and shortfall of liquidity.

b) The Rationale for the Establishment of NDIC

The birth of NDIC was one of adverse circumstance like the much copied scheme in the United States of America, the Federal Deposit Insurance Corporation (FDIC), which started in 1993 following the banking crises that engulfed the American banking system. The crises led to the declaration of a banking holiday and severe disruptions of economic activities.

In the early 1980's assessment of the World Bank, seven Nigerian banks were found to be insolvent. Yet, the country had no mechanism to see to the orderly exit of the insolvent banks. The need to have a government agency to guarantee deposits of the failed banks and to handle the liquidation of such failed banks so as to avoid banking crises and instability led to the establishment of the NDIC in 1988.

Specifically, the reasons for the establishment of the NDIC are:

- i. The lessons of history connected with the experience of prior bank failures in Nigeria.
- ii. The establishment of the NDIC was also informed by the approaches adopted in other countries to ensure banking stability. For example, Czechoslovakia which was the first to establish a nationwide deposit scheme in 1924 used the scheme to revitalize the country's banking system after ravages of the First World War. In addition, the scheme served to encourage saving by increasing the safety of deposits and ensuring the best possible development of banking practice in that country. Other countries that had deposit

Authors α σ ρ : Department of Banking and Finance, Kogi State University, Anyigba, Nigeria. E-mails : olukgaby@yahoo.com, okehinde24@gmail.com

insurance schemes to protect depositors which Nigeria learnt from are India (1961/62), Phillipines (1963), United Kingdom (1979), France (1980), Kenya (1985) and Sri Lanka (1987).

- iii. The Structural Adjustment Programme was introduced in 1986 with the aim of deregulating the economy. Since deregulation involved the liberalization of the bank licensing process, there was substantial increase in the number of licensed banks to be supervised by the Central Bank of Nigeria (CBN). The establishment of an explicit deposit insurance scheme with supervisory power over insured institutions was expected to complement the supervisory efforts of the CBN.
- iv. Prior to the establishment of the Corporation, government has been unwilling to let any bank fail, no matter a bank's financial condition and/or quality of management. Government feared the potential adverse effects on confidence in the banking system and in the economy, following a bank failure. Thus, government established the corporation to administer the deposit protection scheme on its behalf and to serve as a vehicle for implementing failure resolution options on its behalf and to serve as a vehicle for implementing failure resolution options for badly managed insolvent banks.

The functions of NDIC include the following-;

- i. Insuring all deposit liabilities of licensed banks and such other deposit taking financial institutions operating in Nigeria so as to engender confidence in the Nigerian banking system.
- ii. Giving assistance in the interest of depositors, in case of imminent or actual financial difficulties of banks particularly when suspension of payment is threatened and avoiding damage to public confidence in the banking system.
- iii. Guaranteeing payment to depositors, in case of imminent or actual suspension of payments by insured banks or financial institutions up to the maximum amount as provided for in section 20 of the Act.
- iv. Assisting monetary authorities in the formulation and implementation of banking policies so as to ensure sound banking practice and fair competition among banks operating in the country.
- v. Pursuing any other measures necessary to achieve the functions of the corporation provided such measures and actions are not repugnant to the objectives of the corporation.

c) *Statement of Problem*

The history of bank failure in Nigeria dates back to 1930 when the Industrial and Commercial Bank failed. Thereafter, the Nigerian Mercantile Bank failed in 1936 while the Nigerian Penny Bank failed in 1946 (Foluso, 1985). It is instructive to note that 21 out of the 25

indigenous banks that were established collapsed in quick succession due to bad management, inadequate capital, inexperienced personnel, excessive branch expansion, lack of banking regulation and unfair competition from foreign banks (Ajayi and Ojo 1981). Others included outright fraud, lack of acceptable prudential guideline and lack of right banking orientation among the operators. Most of the bank failures were resolved mainly through self liquidation.

These bank failures led to a significant loss to depositors, loss of confidence by the public in the Nigerian banking industry, loss of confidence also in the ability of Nigerians to manage banking business. The government was therefore apprehensive of banking operations. The Paton Commission of inquiry set up in 1948 by the government on the need and form of control required in the banking sector further exposed the precarious position of Nigerian banks.

This subsequently led to the first banking regulation in 1952 and the establishment of the Central Bank in 1958 to regulate and supervise the activities of banks in Nigeria. The emergence of the CBN introduced a regulatory framework into the financial system as part of the efforts by the government at promoting a sound financial structure and monetary stability in Nigeria.

The reforms introduced into the banking system from 1986 (i.e the structural adjustment programme) generally led to a banking boom. This culminated in the establishment (proliferation) of new commercial and merchant banks, finance houses, primary mortgage finance institutions, and community banks. For example, at the beginning of the reforms in 1986, there were a total of 29 commercial banks and 12 merchant banks. Coincidentally, by 1994, there were a total of 66 commercial banks and 54 merchant banks. There was also an upsurge in the number of other financial institutions. By 1994, there were 752 registered finance houses, 879 community banks, 252 primary mortgage institutions and 271 people's bank branches in Nigeria (CBN 1993, 1994). The above scenario resulted in increased and unhealthy competition in the industry, the discarding of all norms of prudent banking and the emergence of other destabilizing factors. The regulatory authorities were overstretched and distress set in, in the banking industry.

Due to the banking failures and distresses, public confidence in the banking sector waned with attendant comments like-

"I will never keep my money in the bank again"

"The CBN is not doing its work properly"

"Is this how we are going to continue?"

"This work is too much for the CBN alone"

"ALL my hard earned money must not go like this".

These and many more, governments concern for the protection of public deposit, the restoration of confidence in the banking sector and the financial

system generally prompted government's establishment of the Nigeria Deposit Insurance Corporation (NDIC).

Has the NDIC justified its existence- to restore, enhance public confidence in the banking sector? This is the crux of this research work.

d) Objectives of the Study

In the light of the above the objectives of the study include:

- i. To examine the situation of the banking system in Nigeria precedent to the establishment of NDIC.
- ii. To identify the causes of bank distress in Nigeria and its impact on the Nigerian economy through its four mandates.
- iii. To examine the roles/impact of the Nigeria Deposit Insurance Corporation in the reduction of bank crisis in the country.

e) Statement of Hypotheses

Three hypotheses were formulated to be tested:

H_{01} : The NDIC through its deposit guarantee has not significantly enhanced public confidence through deposit mobilization in the banking industry.

H_{02} : The NDIC through its supervisory and distress resolution functions has not significantly enhanced public confidence through deposit mobilization in the banking industry.

II. LITERATURE REVIEW

a) Introduction

A Deposit Insurance Scheme (DIS) is an arrangement whereby a designated agency (usually government owned) guarantees deposits in insured financial institutions. The guarantee is usually limited to discourage moral hazard, a situation where the financiers and depositors would care little about the safety of the deposits because such deposits are fully insured. Also, most DIS act as liquidators of failed insured institutions whilst some in addition act as supervisors of the insured institutions as well. It is noteworthy that in a DIS unlike in ordinary insurance, the insured institution pays the premium for the benefit of the depositors.

b) What is Bank Distress?

A bank is distressed when it cannot meet its commitments as they fall due. Such a bank either experiences illiquidity or insolvency. A bank is illiquid when it can no longer meet its liabilities as and when due; whereas a bank becomes insolvent when the value of its realizable assets is less than the total value of its liabilities. In such a case, owners' capital becomes negative. An illiquid bank may not be insolvent immediately. However, both illiquidity and insolvency are sources of worry for owners, management and the monetary authorities (Jimoh, 1992).

According to Alashi, (2002) a bank is said to be in severe crisis when a bank shows most or all of the following:

- Gross undercapitalization in relation to the level and character of business.
- High level of non performing loans to total loans.
- Illiquidity as reflected in a banks inability to meet customers cash withdrawals and/or a persistent overdrawn of position with the Central Bank.
- Low earnings resulting in huge operational losses; and
- Weak management as reflected by the poor asset quality, insider abuse, inadequate internal controls, fraud, including unethical and unprofessional conduct, squabbles, and a high level of staff turnover, among others.

In ordinary parlance, 'distress' connotes being in danger or difficulty and in need of help. It is a state of 'inability' or 'weakness' which prevents the achievement of set goals and aspirations. Distress can also be associated with a cessation of independent operations or continuance only by virtue of financial assistance from the banking system's safety net such as the supervisory regulatory agency or a deposit insurer. CBN / NDIC (1995) describes a distressed financial institution as 'one with severe financial, operational and managerial weaknesses which have rendered it difficult for the institution to meet its obligations to its customers, owners when due.

c) Symptoms of Distress

Ogunleye, (1993) cited in Donli, (2004) gives the most common symptoms of bank distress in Nigeria as follows: Late submission of returns to regulatory authorities, falsification of returns; rapid staff turnover; frequent top management changes; inability to meet obligations as and when due; persistent adverse clearing position; borrowing at desperate rate; persistent contravention of laid-down rules; use of political influence; petitions / anonymous letters; and overdrawn current account position at the CBN.

According to Kama, (2010) the features of bank distress includes:

i. Bad Debt/Loan

When banks or a bank begin to have more irrecoupable loan popularly called bad debt, it is a sign of bank distress. And if the bank allows the percentage of the irrecoupable loan to increase, then such bank goes distress. All the banks should watch out when giving out loans.

ii. Loss of Customers (Patronage)

When a bank on a continual basis keeps loosing its customer, it is a sign of distress for such a bank. For example, any customer that leaves a bank (i.e. closes his/her account with the bank), the liquidity of such banks reduces and if the bank allow the

percentage of losing customer to be great, it may be named a distressed bank.

iii. *Going to the capital market more than once in a year*

All things being equal, a bank should not go to the capital market more than once in a year, so as to give investors and customers a great deal of confidence in the bank. Going to the capital more than once a year shows that banks do not have effective management and it is a sign of being distressed.

iv. *Loss of Good Staff*

For any organization to strive well, it must be equipped with good working staff. Therefore, if a bank lacks good staff there is the possibility of an improper search before facility is given to any customer.

d) *Causes of Banking Sector Distress*

Various authors like Ojo (1994), Olugbon (1994), Ebhodaghe (1993, 1994), Sanusi (1997), CBN/NDIC (1997), amongst others, have clearly articulated various factors responsible for the high level of distress in the banking sector which came to a climax in 1998 with the liquidation of 26 commercial / merchant banks in one fell swoop.

Prior to the liberalization of the financial sector in 1986, the Nigerian banking industry was highly regulated. Banks were expected to perform developmental roles by the CBN through the provision of subsidized credit to the priority sectors which some of them were ill equipped to perform. Moreover, most of the loans granted to the priority areas were not repaid; therefore, this worsened the liquidity position of these banks (Ebhodagbe, 1997). In addition, the series of government monetary policy measures in 1988 and 1989 respectively coupled with government directives on the withdrawal of public sector deposits from commercial and merchant banks to the Central bank led to the liquidity crises in 1989. The implementation of the withdrawal of public sector deposits resulted in about N8.27 billion deposit loss to the banking system (NDIC 1989). This consequently exposed the weak banks and exacerbated their liquidity problems. These policy measures were counter productive and consequently led to the collapse of many banks in 1994, 1995 and 1996 respectively.

A dramatic increase in uncertainty in the banking sector, due largely to the failure of a prominent bank or non-financial institution, a recession, political instability, rumors of instability in the sector or stock market crash, makes it difficult for lender to separate good from bad risk. The rise in uncertainty therefore is capable of making information in the banking sector even more asymmetric and may worsen the adverse selection problem and these will make lenders unwilling to lend thereby precipitating to a decline in lending, investment and aggregate economic activity.

Poor risk management procedures, ignorance and non-compliance with rules, laws and regulations, technical incompetence, violation of regulations, policies, procedures guidelines, unhealthy competition and weak internal control and operational procedure lead to banking crisis. Banks that have proper risk management and internal controls as well as a well focused strategic objective are likely to operate normally even in the face of turbulent situation.

Weak corporate governance, particularly insider abuse and contravention of supervisory regulatory provisions and overbearing directors' interest in loans and advances or any credit facilities are major causes of banking crisis, especially in a developing country like Nigeria.

Fraud refers to an act of dishonesty, deceit and imposture. It includes embezzlement, theft or an attempt to steal or unlawfully obtain, misuse or harm the asset of the bank (Bank Administration Institute, (1989) cited in Ogunleye, (2000).

Bank frauds vary in nature, character and methods of perpetration. Fraud can be perpetrated by employees, customers or others operating independently or in conjunction with others, inside or outside (see Ogunleye, 2000 and NDIC Quarterly, 1991 for causes and types of fraud).

Empirical evidences have shown that many of the banks in liquidation have suffered a great deal of fraud. Some banks recorded monumental losses due to fraud, which rocked the foundation of these banks. For example, the sum of N8.2 billion was involved in bank frauds between 1991 and 1996 (Umoh, 1997). In 1999 alone, the sum of N7.4 billion was the reported fraud, while an actual loss of N2.7 billion was expected (Ogunleye, 2000). A great deal of the frauds perpetuated in 14 liquidated banks were due to insider abuse (Afolabi, 2002).

Political interference and ownership structure is another source of distress in the banking industry. Ownership structure of a bank has a direct bearing to its survival. The overbearing influence of particular director of the board and management of a bank could result in frequent boardroom crisis and the breakdown of internal controls precipitation to banking crisis and may eventually lead to the failure of the bank (Kama 2010).

e) *The Nigerian Experience*

Two broad types of resolution options have been adopted in Nigeria so far by the regulatory/supervisory authorities to resolve the distress:

- Outright liquidation (deposit pay-out) and
- The Purchase and Assumption (P&A) options (assisted mergers and acquisitions). Other resolution options adopted in Nigeria will also be discussed.

i. *Outright Liquidation (deposit pay-out)*

Under this option, the entire assets and liabilities of the affected banks are placed under the control of the liquidator (NDIC) who would arrange to physically close the bank. NDIC then verifies the assets and liabilities of the bank and exercises control over all its moveable assets. Under Nigeria's deposit insurance scheme, each customer's account is insured up to a maximum N200.000 (two hundred thousand naira) between 2006 and 2009. In 1998, 26 banks with 347 branches spread over 32 states and Abuja were closed down and faced liquidation under the NDIC.

ii. *Purchase and Assumption (P&A) Model*

The basic characteristics of this option is the purchase of the whole or part (cherry-picking) of the assets of a failed bank by a healthy (assuming) bank and the assumption of the deposit liabilities of the failed bank by the same bank. The P & A option has featured prominently in the history of bank failure resolution in Nigeria. Following the conclusion of the bank consolidation exercise at end – December 2005, 13 banks that failed to make it were handed over to the NDIC for liquidation. The P&A model has since been adopted by the corporation for their liquidation. As at end-December 2009, 11 out of the 13 affected banks had been assumed by some healthy banks.

Other bank resolution options adopted in Nigeria included:

iii. *CBN Bail-Out using Guarantees*

This option was applied by the CBN during the late 1990s for some of the ailing banks. For instance, at the inauguration of one of the affected bank's new board and management, the CBN gave a commitment that it was fully behind the bank and would honour all cheques drawn on it. Further guarantees were given to other healthy banks, which enabled those banks to provide life-boat facilities to the affected banks. Unfortunately, this option did not stop the run on these banks.

iv. *CBN/NDIC Controlled Restructuring (Open bank assistance)*

This option implies taking over the board and management of a bank by the CBN and NDIC in order to restructure the bank and run it profitably. The hope is that the cream of professionals selected jointly by the CBN and NDIC would be able to turn the bank around within a short period of time and return the bank to the owners. This was variously used by the Bank in the late 1990s and recently when about eight (8) banks had problems. In most cases, this option worked out as some of the affected banks were resuscitated, while in other cases the resuscitation efforts proved abortive. In most of the failed cases, the banks had forwarded falsified financial reports to the regulatory authorities to cover up its fraudulent practices which were already beyond redemption.

One of the recent policy actions taken to strengthen the reform process was the creation of Asset Management Corporation of Nigeria (AMCON). The AMCON as a resolution vehicle is to soak the toxic assets of the CBN-intervened banks and provide liquidity to them as well as assist in their capitalization process.

III. RESEARCH METHODOLOGY

Secondary data were used mostly for the study. This is because the issue of discussion covers the entire nation. It might be difficult to generalize, using Anyigba or even Kogi State. As such, data will be sourced from the annual report and statement of Accounts of the Nigeria Deposit Insurance Corporation (NDIC), News paper publications, Business magazines, textbooks e.t.c. This is considered averagely sufficient to produce robust results.

The four mandates of the corporation were covered. While the years 2001 – 2009 were covered for mandate 1, the years 2007 – 2009 were covered for the mandates 2-4. This is to make for easy generalization-since the result obtained will be sufficient to draw up conclusions which can be used for generalization. Not only that, in any year, cumulative figures of previous years used. So in the three years used, we are able to get the figures for the previous years.

a) *Methods of Data Analysis*

In this research, two data analysis methods will be employed; inferential statistics and descriptive method. In literature, the parameters that are relevant in explaining public confidence in the relevant in Nigerian Banking system covered the four mandates of the Nigerian deposit insurance corporation (NDIC). These include:

- Deposit guarantee
- Bank Supervision
- Distress Resolution
- Bank Liquidation

To achieve this, quantitative analysis involving the use of sample linear regression analysis, were time-series and cross-sectional observations will be combined to generate the coefficients of each relevant explanatory variables.

Key indicator or relevant variable in explaining Bank public confidence is Total Deposit of Banks (TDB) and its relationship with NDIC Insurance cover i.e (it examined to see the effect of the insurance cover on public confidence in the Nigerian banking industry.

Thus, based on the above theoretical underpinnings, the estimating Bank public confidence equation is expressed as follows:

$$Y = a + bX$$

Where

Y = Dependent variable

a = Intercept parameter

b = Slope of the regression line
 X = Independent variable.
 Bank public confidence equality

$$TDB = a + bIC$$

Where TDB = Total Deposit of Banks
 a = Intercept parameter
 b = Slope of the regression line
 IC = NDIC Insurance cover

Coefficient of correlation will be used to ascertain the strength of the relationship between the dependant and independent variables.

T-test will be used to best whether the relationship between the dependant and the independent variables are statistically significant or not. (i.e Hypothesis Testing).

Moreso, Analysis of variable (ANOVA) inferential statistical techniques will also be used to test the hypothesis postulated for the study.

b) Data Presentation and Analysis

NDIC has four mandates. The data presented and analysed are along the mandates given to the corporation in order to know whether through their mandates, they have been able to enhance public confidence in the banking system.

The four mandates are:

i. *Deposit Guarantee*

This is perhaps the most significant and distinct activity of the corporation. As an insurer, NDIC guarantee the payment of deposits up to the maximum limit in accordance with its statute in the event of failure of an insured financial institution

ii. *Banking Supervision*

The Corporation supervises banks so as to protect depositors; foster monetary stability, promote an effective and efficient payment system, promote competition and innovation in the banking system.

iii. *Failure Resolution*

This is to ensure that failing and failed institutions are resolved in a timely and efficient manner. In other words the corporation provides financial

assistance to deserving failing participating institutions in the interest of depositors.

iv. *Bank Liquidation*

The institution is responsible for the orderly and efficient closure of failed institutions. The closure is done with minimal disruptions in the banking system. After closure, the assets of the failed institutions are realized in the most cost effective manner and the proceeds appropriated among the various claimants in accordance with the relevant laws.

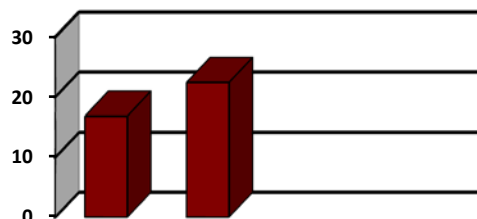
c) *Deposit Guarantee*

In 1988, when Deposit Insurance scheme (DIS) was established in Nigeria, the Maximum Deposit Insurance Cover (MDIC) as specified in the enabling statute was N50, 000 per depositor. Then, that amount covered more than 90% of the total number of depositors and was 28times the prevailing per capital GDP. (NDIC, 2007). In 2004, a study was done to review the adequacy of the initial MDIC. The result showed that the average deposit per account in the 89 banks in operation stood at N115, 136. In addition, the deposit profile of the banks showed that the MDIC would have to be increased to N200,000 per depositor in order to achieve the generally accepted coverage of 90% total number of accounts. Then, the statute establishing the NDIC was amended in 2006 with a new MDIC of N200,000 (Universal Banks) while depositors of other insured banks will enjoy MDIC of N100,000 per depositor. The deposit cover has been increased to N500,000.

When it was N200, 000, about 89% of the total number of depositor or (23,403,774 depositors) were covered as against 77.6% or 16,971,986 depositors under the older MDIC of 50,000.

Effective 2008, microfinance banks were also brought under the deposit insurance scheme to effectively cover the small or micro savers.

Chart 1 : Deposit insurance coverage at N50, 000 AND N200,000



Source : NDIC Annual Report and Statement of Accounts, 2007.

As seen from chart 1 above, at the limit of N200,000, about 23million depositors were covered as against 17 million depositors under the old MDIC of 50,000.00.

Table 1 : Insurance Cover and Total Deposit of Banks

Year	Total Deposit of Banks (In # Billions)	Ndic Insurance Cover (In #000)
2000	721.93	50
2001	928.48	50
2002	1106.14	50
2003	1415.8	50
2004	1814.75	50
2005	2469.07	50
2006	3412.3	200
2007	5357.2	200
2008	8702	200
2009	9989	200

Source : Annual Report & Statement of Accounts 2007-2010

d) Presentation of Result

Bank public confidence equation

$$TDB = a + bIC$$

Where TDB = Total deposit of Banks

a = Intercept parameter

b = Slope of regression line

IC = NDIC Insurance cover

Through mini-tab 14

- Correlation: total deposit of banks, NDIC insurance Pearson correlation of total deposit of banks and NDIC insurance = 0.842 p-value = 0.002
- Regression Analysis : total deposit of banks NDIC insurance cover

The regression equation is

$$\text{Total deposit of banks} = 409 + 36.4 \text{ NDIC insurance}$$

Predictor	Coef	SE Coef	T	P
	-409	-1092	0.37	0.717
NDIC	36.372	8.251	4.41	0.002

$$S = 1917.41 \text{ R-SQ} = 70.8\% \text{ R-Sq(adj)} = 67.2\%$$

Analysis of variance

Source	DF	SS	MS	F	P
Regression	1	71436936	71436936	19.43	0.002
Residual error	8	29411678	3676460		
Total	9	100848614			

- Co-variances: total deposit of banks, NDIC insurance
Total deposit NDIC insurance
Total deposit 11205402
NDIC insurance 218231 6000

e) Analysis of Results

(Bank public confidence equality)

From the result of the bank public confidence equality above, it revealed that change in the dependent

variable (Total Deposit of Banks) with respect to change in the independent variable (NDIC insurance cover) is positive.

This is stated below:

$$\frac{\Delta TDB}{\Delta IC} = 36.4$$

This means that the dependent variable (Total deposit of Banks) is directly related to the independent variable (NDIC Insurance cover).

The Pearson product moment coefficient (r) is 0.842. This means that there is strong positive relationship between the dependent variable (Total deposit of Banks) and independent variable (NDIC Insurance cover).

The coefficient of determination (R-squared) is 70.8%. This means that 70.8% variation in the dependent variable (Total Deposit of Banks) is explained by the independent variable (NDIC Insurance cover) and only 29.2% of the variable in the dependent variable is explained by disturbance term or error term. This disturbance or error terms are global economic meltdown, low liquidity of banks, bank distress, small size of some commercial banks e. t. c.

The adjustment R-squared of 67.2% also high and very close to the original R-squared of 70.8%.

f) Testing For The Statistical Significance At 5%

$$H_0 : bB = 0$$

$$H_1 : bB \neq 0$$

Ho : There is no significant relationship between Total deposit of Banks and NDIC Insurance cover.

From the result in bank public confidence equation above, the t calculated = 4.41.

IV. DECISION

$$t_{0.05} \text{ at } (10-2) \text{ 8 degrees of freedom} = 2.306$$

t-calculated is greater than t0.05. The deference is significant, therefore H0 is rejected and H1 is accepted, meaning that bB is not equal to zero. This means that there is significant relationship between Total Deposit of Banks and NDIC Insurance cover.

In addition, Analysis of variance (ANOVA) shows that there is significant relationship (p-value < 0.05; p=0.002) between Total Deposit Banks and NDIC Insurance cover.

a) Banking Supervision

Banks are supervised to protect depositor, ensure monetary stability and promote an effective and efficient payment systems. It provides the oversight required to preserve the integrity of, and promote public confidence in the banking system (Table2).

Table 2 : No of Banks examined (Universal Banks) by the NDIC in 2006-2009

Year	Routine Examination	Target Examination	Special Examination	Special Examination	Joint CBN/NDIC Investigation	Total
2006	6	-	11	14	-	31
2007	10	-	20	1	1	32
2008	2	6	25	-	1	34
2009	-	-	28	24	-	52

Table 3 : Microfinance Banks (MFBs) & Primary Mortgage Institutions (PMIs)

Year	No. of CBs/MFBs Examination	No. of PMIs Examination	TOTAL
2005	67	47	114
2006	110	22	132
2007	95	30	125
2008	68	4	72
2009	124	9	133

CBs – Community banks, MFBs – Microfinance banks

Source : NDIC Annual Report and Statement of Accounts, various issues.

In 2009, NDIC continued to monitor the insured financial institutions, through both on-site examination and off-site surveillance procedures. During the year, NDIC Jointly conducted the special examination of 24 deposit money banks with the CBN to ascertain their true financial condition and to enable the regulatory authorities adopt necessary supervisory measures that would RESTORE AND SUSTAIN PUBLIC CONFIDENCE IN THE BANKING SYSTEM.

V. DISCUSSION OF FINDINGS

From the data analysis and the narrations to the data and other activities undertaken by the NDIC, there were many findings as seen in the summary of findings in chapter four. We shall now go ahead to discuss the findings as outlined.

a) Maximum insurance coverage was fixed at N50,000 at inception in 1988. It was however increased to N200,000 in 2006 and N500,000 in 2010.

At the limit of 200,000 in 2009, about 89% of the total number of depositors or 23,403,774 deposited were covered as against 77% or 16,971,986 depositors under the old MDIC of N50,000.

The increase in the deposit cover can be said to have enhanced confidence in the banking sector. When the amount was N50,000, the average total deposit of banks between 2004-2005 and 2005-2006 rose by 37%. When the rate was increased in 2006 to 200,000 average total depositors of banks was 59.5%. This has gone a long way to show peoples enhanced confidence in the banking system i.e through increased total deposit of banks.

b) The purchase and assumption mechanism was introduced to lessen the consequence of outright

liquidation on the depositors. Under the P and A arrangement the corporation had disposed off 10 out of the 11 banks for which it had been appointed liquidator. In 2008, the corporation had resolved all the eleven banks for which it had been appointed liquidator.

- c) As at the end of 2009, NDIC had paid the sum of N84,249,699,499.93 to both insured and uninsured depositors of the 49 banks in liquidation. This amount would have been lost if not for the insurance activities of the corporation. This money has found its way to the economy and productive use is being made of it in the form of investment to generate employment and income.
- d) Many examinations were carried out by the NDIC on the universal banks. They included routine target special examination; special investigation, joint CBN/NDIC investigations were also carried out. The examinations revealed many things including the following: inaccurate finance reporting, deliberate falsification of income, failure to implement effective risk management framework, inadequate provisioning for bad quality assets, excessive insider dealing and abuse, reckless and fraudulent management, extremely weak boards that lacked proper understanding of what was happening in their respective banks.
- e) The findings of the joint special examination gave rise to unprecedented regulatory intervention which included, among others, the removal of the executive management in 8 of the 24 banks and the appointment of new ones, the injection of liquidation support in the sum of N620 billion to strengthen the liquidity position of the banks, in order to meet their

obligations to their depositors and the by enhance public confidence. There was also order on two banks to recapitalize by June 2010.

VI. SUMMARY OF FINDINGS

From the data analysis and the narrations to the data and other activities undertaken by the NDIC, there were many findings as seen in the summary of findings in chapter four. We shall now go ahead to discuss the findings as outlined.

- Maximum insurance coverage was fixed at N50,000 at inception in 1988. It was however increased to N200,000 in 2006 and N500,000 in 2010.
- The NDIC has also paid the insured deposit of the 35 banks liquidated during the 2005 consolidation exercise. N3.3billion has been paid out of the figure of 5.2 billion
- By the provision of the NDIC Act of 2006 (effective Jan 2007) the corporation extended its cover to MFB's and PMS.

The introduction of MFB's in 2005 was meant to ensure financial inclusion that not only enhance productivity but also enhance public confidence in the banking system (Ibrahim, 2011)

VII. CONCLUSION

Nigeria experienced bank failures starting from as early as 1930 when the industrial and commercial banks failed. Subsequently, many other banks failed. In 1954 alone, 17 banks failed. The reasons for the failures are not far fetched. They included unfavourable competitive environment, the absence of a supervisory and regulatory authority, outright fraud etc. These led to the loss of confidence in the banking system and the monetary authorities because people lost their hard earned money.

The government, in an attempt to restore the people's confidence in the banking system introduced a deposit insurance scheme, the Nigeria Deposit Insurance Corporation (NDIC) in 1988. The scheme was to give relief to depositors in case of the unexpected failure of a bank.

The NDIC worked through four mandates in order to achieve its objective properly i.e. protection of depositor's funds. They are deposit guarantee, bank supervision, distress resolution and bank liquidity / claim settlement. Even though these were the broad mandates, the NDIC engaged also in various publicity activities to enhance public confidence in the banking system.

There is no doubt that the NDIC has enhanced people's confidence in the banking system. The parameter used (-bank deposit) shows a positive correlation between deposit guarantee and bank deposit. Because, there is deposit guarantee, there's increase in bank deposit and when the deposit

guarantee increased, bank deposit also increased. This can be explained by the fact that the DNIC pays not only the insured depositors, it also pays uninsured depositors.

VIII. RECOMMENDATIONS

It is an indisputable fact that the NDIC has contributed immensely to restoring public confidence in the Nigerian banking sector it has also paid depositors of insured deposit their claims in the events of bank failures. Not only that, it has also paid uninsured depositors their claims – thereby bringing stability to the financial system. These are (no doubt) commendable achievement – as money that could have been lost is paid to their owners.

These notwithstanding, the NDIC could do more. The job of efficient deposit guarantee is not only the duty of NDIC. Everybody is an active participant. For the NDIC to perform its duties more efficiently and be relevant to all the stakeholders, the following are recommended:-

- Depositors should file their rightful claims as at when due in case of banking failure. This will assist the corporation to process their claims and pay them on time.
- There is also the perennial issue of unreliable returns being received from the supervised institutions. These returns are obviously rendered to hide whatever difficulties the banks might have.

Banks should render the correct return so that the corporation can detect and help them solve their problems before it becomes unresolvable. The correct returns will also help detect early warning signals through an analysis of such returns.

- Every bank should also undertake (as a matter of necessity) to update their data providing mechanisms. This is because there were breakdown of servers containing database of the closed banks which constrained access to vital information when the need arose after the bank failures.
- NDIC should also undertake to employ more supervisory staff. This is necessary because of the complexity of the job of supervision and the need to do it more regularly. If this is not done, billions of depositor's funds could be lost in just a day or two due to inadequate supervision.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Ajayi, S.I. and Ojo, O.O. (1981): *Money and Banking: An Analysis and Policy in the Nigerian Context* London: George Allen & Unwin Ltd.
2. Alashi, S.O. (2002): *Banking Crisis: Its Causes, Early Warning Signal and Resolution* in Central Bank of Nigeria. Conference Proceedings on Enhancing Financial Sector Soundness in Nigeria, Abuja: CBN pp. 126 – 153.

3. Central Bank of Nigeria (1993, 1994): *Annual Report and Statement of Accounts*.
 4. CBN/NDIC (1996): *Distress in the Nigerian Financial Services Industry*. A CBN/NDIC Collaborative Study, Lagos.
 5. CBN (1997): Research Department Briefs, Lagos.
 6. Ebhodaghe, J.U. (1993): *The Role of NDIC in the Management of Distressed Banks*. NDIC Quarterly Vol. 3 No. 1, March.
 7. Ebhodaghe, J.U. (1997): *Safe and Sound Bonding Practices in Nigeria: Selected Essays*. NDIC Publication, Lagos NDIC
 8. Folusho, O. (1985): *Introduction to Banking and Finance*, Ibadan: Evan Brothers.
 9. Jimoh (1992): *The Role of Early Warning Models in the Identification of Problem Banks*: Evidence from Nigeria *Nigerian Financial Review*, Vol. 16. No. 1. pp. 29 – 40.
 10. Kama, U. (2010): *Banking Sector Crisis and Resolution Options in Nigeria*. The Bullion Vol. 34 No. 1 January – March.
 11. NDIC (1991): *Report on Frauds and Forgeries in the Nigerian Banking Industry* NDIC Quarterly, Vol. 1 No. 3 September.
 12. NDIC & CBN (1995): *Distress in Nigerian Financial Services Industry*, Lagos 1989, 2008, 2009.
 13. NDIC (1989) Annual Report and Statement of Accounts
 14. NDIC (2007) Annual Report and Statement of Accounts
 15. Ogunleye, G.A. (1993): *Manifestation and Management of Distress in the Financial Services Industry*, Paper Presented at FITC's 2nd Bank Directors Workshop held at the Lagos Sheraton Hotel.
 16. Ogunleye, G.A. (2000): *Bank Frauds: Challenges and Solutions* NDIC Quarterly, Vol. 10. No. 2 June pp 22 – 35.
 17. Ojo, A.T. (1994): *An Overview of the Nigerian Banking System* Economic and Financial Review, Lagos CBN Vol. 32 No. 3 September.
 18. Ologun, S.O. (1994): *Bank Failure in Nigeria: Genesis, Effects and Remedies*, Economic and Financial Review Lagos, CBN Vol. 32 No. 3.
 19. Oshodi, A.F. (2006): An Appraisal of Bank Failure in Nigeria in *The National Question and Some Selected Topical Issues in Nigeria* – Edt by Saliu, A.H., Jimoh, A. and Arosanyin, T. FBSS and Vantage Publications Ltd, Ilorin.
 20. Sanusi, J.O. (1994): *Supervision of Banking Industry in Nigeria*. Economic and Financial Review, Lagos, CBN, Vol. 32 No. 2 September.
 21. Umoh, P.N. (1997): *Bank Deposit Insurance in Nigeria* Abuja NDIC Publication.
 22. Umoh, N.P. (2004): *The Role of Deposit Insurance in Financial Sector Stability*. The Bullion (A Publication of CBN) Vol. 28 No. 1 January / March.
- Newspapers*
1. Donli, J.G. (2004): *Causes of Bank Distress and Resolution Options*. Nigerian Tribune 10th February.
 2. Ibrahim, U. (2011): *NDIC Pays N3.36 to Failed Banks' Depositors*. The Nation August 3, pg. 11.
- Seminar Paper*
1. Afolabi, J.A. (2002): *Globalization and the Nigerian Banking System*. A Paper Presented at the NESAs Annual Lecture for 2001/2002 Session at the University of Ilorin.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Socio-Economic Profile of Village Bank Member in Suburban Ankara: Microcredit Mannequin and Assumptions on Microfinance Market of Turkey

By Dipl. Kfm. Tomáš Hes, Ing. Alena Neradová & Prof. Karel Srnec
Czech University of Life Sciences Prague, Czech Republic

Abstract - Turkey harbours one of the greatest untapped microfinance markets in the world. Despite its enormous dormant potential, few studies were undertaken in order to portrait the socio-economic character of its main protagonist: enterprising mother operating in the suburbs of urban and semi-urban environment. The study summarizes result of field research carried out by team of researchers from Czech University of Life Sciences and models a credit mannequin, profiling the average Turkish microfinance client in suburban areas of Central Anatolia. The assemblage enables to depict genuine relationships of mainstream clientele towards selected topics, reaching better understanding of nature and particularities of the Turkish microfinance market and drawing conclusions on its further development.

Keywords : *microfinance, funding, turkey, development, public private partnership, market, microcredit mannequin, credit mannequin, microfinance, funding, turkey, microcredit, TGMP.*

GJMBR-C Classification : *JEL Code: E59, E60*



Strictly as per the compliance and regulations of:



© 2013. Dipl. Kfm. Tomáš Hes, Ing. Alena Neradová & Prof. Karel Srnec. 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.

Socio-Economic Profile of Village Bank Member in Suburban Ankara: Microcredit Mannequin and Assumptions on Microfinance Market of Turkey

Dipl. Kfm. Tomáš Hes^α, Ing. Alena Neradová^σ & Prof. Karel Srnec^ρ

Abstract - Turkey harbours one of the greatest untapped microfinance markets in the world. Despite its enormous dormant potential, few studies were undertaken in order to portrait the socio-economic character of its main protagonist: enterprising mother operating in the suburbs of urban and semi-urban environment. The study summarizes result of field research carried out by team of researchers from Czech University of Life Sciences and models a credit mannequin, profiling the average Turkish microfinance client in suburban areas of Central Anatolia. The assemblage enables to depict genuine relationships of mainstream clientele towards selected topics, reaching better understanding of nature and particularities of the Turkish microfinance market and drawing conclusions on its further development.

Keywords : microfinance, funding, turkey, development, public private partnership, market, microcredit mannequin, credit mannequin, microfinance, funding, turkey, microcredit, TGMP.

1. INTRODUCTION

a) Microfinance Market in Turkey

In comparison to neighbouring countries in the South-Eastern Europe and Central Asia, Turkey remains far from reaching its microfinance potential. (2) Despite being the biggest economy of the region with a high number of people unable to access banking services through the formal sector (Burrill, 2003), microcredit schemes are rather new in Turkey and only few research studies were undertaken in this field.(4)

Turkey is in acute need of microfinance. Statal social policies developed to help those who receive aid within the aid system to become producers have proved insufficient.(3) According to OECD Factbook, Turkey belonged to the countries with the worst income distribution among OECD members in 2010, being 29th in terms of inequality, with the Gini coefficient of 0.43. The same rank hold Turkey in the category of poverty, with 18.08% of the population living under poverty line. (3)

Author α : Ph.D. Student, Czech University of Life Sciences Prague, Institute of Tropics and Subtropics. Kamýcká 129, 165 21, Prague 6, Czech Republic. E-mails : thes@myelen.com, neradovaa@its.czu.cz

Author σ : Ph.D., Czech University of Life Sciences Prague, Institute of Tropics and Subtropics, Kamýcká 129, 165 21, Prague 6, Czech Republic. E-mail : srnec@its.czu.cz

Substantial disparities of income between urban and rural environment persist. Sweeping urbanisation increases the interconnected challenges of infrastructure, labour supply, healthcare, education and security. Moreover, urbanization without adequate collateral development forms a particular type of markets, escalating due to absence of formal property titles in „gecekondu”¹ neighbourhoods, leading to formation of informal job markets conformed by unemployed labourers streaming into urbs from the provinces. Microfinance could play important role by reducing migration pressures consisting in stimulation of economic growth and job creation, both in urban and rural settlements.

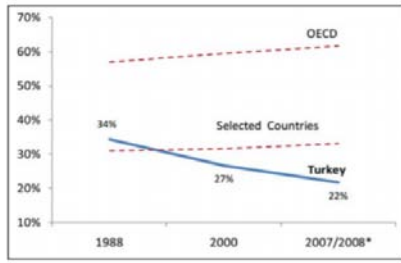
Not with standing the fact that microfinance belongs to the recommended instruments for poverty eradication in Turkey, the sector is in its early stage of development in terms of number of people served as well as of range of services offered.(1) The potential of microfinance appears considerable, giving the fact that SMEs account for 99% of all enterprises in Turkey estimated by TAC³ at 4 million units, with non agricultural SMEs employing more than 40% of the workforce, and producing 35% of exports. Access to microfinance would help to decrease vulnerability by enabling microenterprises to take advantage of opportunities, to diversify and to increase sources of income.(11)

In particular microfinance ought to become an empowering platform for a country with low rate of women participating in the labor force, which constitutes another questionmark related to Turkey in relation to microfinance. Suprisingly, significant structural and social changes of recent decades did not facilitate more women to enter the labor markets, although women are becoming more educated, getting married at a later age and the social attitudes toward working spouses has changed, while fertility rates are declining. Despite these factors, the share of women seeking or having jobs is on

² Gecekondu is a Turkish word meaning a house put up quickly without proper permissions. The gecekondu phenomenon is linked with the problems of unemployment and poverty, especially in the east of the country.

³ Tradesmen and Artisans Confederation

decrease, from 34.3% in 1988 to 22% in 2008, which is the opposite trend than occurring among OECD countries. (13)



Source: Dayiloglu and Kirdar (2009), WDI, TÜİK, OECD Stat Extracts. *Latest available year.

Figure 1 : Comparison of female labor participation rates development trend in Turkey and OECD countries, 1988-2008

The lack of quality information on microfinance, lack of regulatory framework combined with little understanding on microfinance among government, NGOs and private sector and deficient legal infrastructure for new microcredit initiatives are the top reasons for lack of development of the sector. (5) Disregarding EIF funded CIP⁴ initiatives and state-owned Halk Bank and Ziraat Bank, providing individual loans to SMEs with average loan sum higher than 1,000 USD, the main providers of classical microcredit in Turkey are currently two MFIs, Maya and TGMP, serving loans mostly to female microentrepreneurs operating in the informal sector, with average loan size of about 350 USD.(3)

b) Grameen Microfinance Project (TGMP)

In June 2003, the Foundation for Waste Reduction launched the Turkish Grameen Microfinance Project (TGMP) which applies the Grameen village bank microcredit methodologies of loans to poor people without collateral. TGMP became principal partner for the survey project being a prime Turkish MFI with substantial experience gathered, operating throughout the country and offering standardized product countrywide. TGMP provides microcredits ranging between 200-600YTL (150-350 US\$) with an interest rate of 20 % p.a.a which are distributed on the basis of solidarity groups consisting of five to ten women. The group members are equally accountable for the repayment of loans. The credit receivers use the credits mostly in home-based activities such as raising livestock, petty retail commerce, sewing, and offering other handicraft or small marketing activities in the neighbourhood. The credit programs require borrowers to form groups in which all borrowers are jointly liable for each other's loans. The creation of peer group pressure among the group members encourages each individual

in the group to repay her debts regularly enabling the micro credit program to achieve high repayment rates of 98 percent (Rahman 1999). As of October 2012, TGMP operated 94 branches throughout Central and Eastern Turkey, with 60,641 members registered and 183,728 townships of Turkish lira loaned out by 303 employees.⁵

II. RESEARCH

a) Background of the Study

In August - September 2012, research team from Czech University of Life Sciences (CULS) carried out in collaboration with Turkish microfinance institution TGMP and SESRIC⁶, subsidiary organ of the Organisation of Islamic Cooperation (OIC)⁷, a survey of the microfinance clientele in the suburban outskirts of Ankara. Both organizations extended key infrastructure and support of credit officers for the field research. The survey focused on village bank members, the most important segment of microfinance clientele in Turkey, mostly enterprising women operating in suburbs of cities and adjacent conurbanisations. The main objective of the project is to model an average microfinance client on the basis of survey data and thus to assess the socio-demographic nature of the core Turkish microfinance clientele.

b) Research Justification

The present knowledge base on microcredit is partial and contested.(Kovsted et al., 2000). The state of the art know-how on microfinance is territorial and non-transferable due to cultural uniqueness of every market, and fragmented into many fields of focus, targeting specific topics, while unable to provide a general picture on the characteristics of average client. For young, culturally homogeneous and untapped markets, just as Turkey is, simulation of a credit mannequin presents a way to produce valuable assumptions opportune for the MFIs determined to offer standardized products to mass market clientele with certain socio-demographic traits, reknitting their strategy according to the acquired knowledge during the initial phase of the market development. Credit mannequin, a term introduced for the first time in this study, represents a simulated client model, displaying its most probable characteristics in order to foresee the behavior of the mass clientele in advance. The objective of this synthesis is thus to apprise the average character of the microfinance clientele in Turkey, in the attempt to find socio-demographic patterns of the debtorship, as well as to define a blueprint of the use of loans, access to finance, past experience and nexus with religion. Summarized, the principal goals of the survey are:

⁵ <http://eng.tgmp.net/> , 1th of December 2012

⁶ The Statistical, Economic and Social Research and Training Centre for Islamic Countries

⁷ Organization of Islamic Conference

⁴ CIP Micro-credit agreement, at present collaborating with Finansbank (5)

1. To assess the socio-economic profile of the average client participating in a successful microfinance program, classified in six key areas.
2. Define remarkable particularities of the Turkish clientele, in relation to three selected assumptions and validate or rejem these.
3. To provide details concerning the socioeconomic traits of microentrepreneurs' households and sectorial activities estimating the potentials and threats influencing development of Turkish microfinance market.

Furthermore, the study intends to answer the following questions. What can be said about the average socio-demographic household profile of ideal debtor? Does islamic finance present a competition for classical microfinance? Does religion play an important role for the credit takers? What is the access to finance and what experience have clients with microcredit? Are there any determinants for the turkish micro-entrepreneurs that are exogenous for the allocation of credit, which could be extrapolated for the future build up of microfinance markets?

c) Methodology

The primary methodology selected for this study has been a qualitative non-longitudinal approach with percentages of responses being the main data used for the verdict on the client characteristics, based on a standardized questionnaire in which qualitative responses are converted into discrete interval variables, examined with standard correlational tools. The questionnaire consisted out of 30 closed format questions of dichotomous, rating scale and close-ended importance types. The selected sample size of the survey was completed by 117 active clients, belonging to the stable core of TGMP portfolio of clients, who answered the questions during weekly ordinary repayment sessions of the TGMP credit groups under the guidance of the credit officer, routinely organised in

flats, courtyards or working spaces of the group members.

The first part of the study architecture describes the involvement of the debtorship with credit, in six layers of interest: demographic, household, religion, credit experience, credit access and credit use. Pre-synthesis extended in the second part follows, depicting a model of average turkish microfinance client through those characteristics belonging to the clients whose answers coincide in 50% with the answers from all sample members. In the third part of the study, the clients who according to our view share characteristics desirable by a standard MFI are filtered out and assorted. In the fourth part of the study the two profiles are compared, the average 50% matching profile as well as the desired client profile, in order to obtain credit mannequin profile through profile intersection. The resulting credit mannequin constitutes the most suitable average microcredit client profile in Turkey, ideal target of the MFIs. In the fifth concluding part, we confirm or reject general assumptions and input the credit mannequin into context of current microcredit development in contemporary Turkey, coming to recommendations for expanding/growing microfinance institutions.

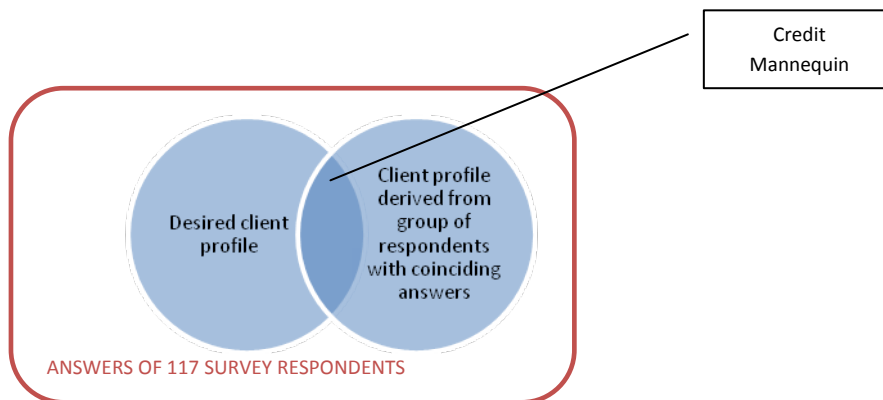


Figure 2 : Research Architecture

III. RESEARCH RESULTS

a) Classification in six research domains

In the following table we present the questions in the survey classified in six domains.

Table 1 : Survey questions classified in six research domains

Domain	Nr. of question	Question	Nr. of question	Question	Nr. of question	Question
Domain A: Demographic profile	1	Sex	2	Age	3	Marital status
	4a	Children	4b	Number of children		
Domain B: Household profile	5	How many people live in the household?	7	Where do you live?	6	How many of those who live in the household are economically active?
Domain C: Religion profile	28	What is your religion?	29	Does religion form important part of your life?	30	Does your religious leader prevent you from taking microcredit?
Domain D: Credit experience profile	9a	Did you use any type of credit in the past?	10	Did you use the possibility to finance your economic activities with help of microcredit more than once?	23	Does the fact that you are taker of microcredit harm your family / neighbour relationships?
	9b	In case you had any type of credit in the past, what credit did you take?	13	Is frequency of payment of installments of microcredit for you better than frequency of other credits?	25	Does the installment payment meeting influence your working activities?
Domain E: Use of credit	11	Do you at present any opportunity to use any other type of credit?	17	Does microcredit solve your financial situation?	19	Is your microcredit a groupcredit?
	12	Do you prefer islamic credit?	18	What are you using the microcredit for?	26	Are you holder of more than once microcredit at the same time?
Domain F: Credit access	14	Is microcredit more expensive than any other accessible credits?	16	Do social / family conventions prevent you from being a debtor?	21	Does microcredit demand in your village / city exceed the supply?
	15	Is it difficult to access microcredit?	20	Does the length of credit period address your needs?	22	Do you have your own bank account?
	27	Do you need digger debt or are your finance needs fully covered by microcredit?				

b) Profile of the client group with responses coinciding in more than 50% of the sample

The answers to the questions which coincided in over 50% and henceforth present significant reference for the nature of microfinance market, were the following ones:

Table 2 : List of answers that coincide in over 50% of the cases

Nr.	Question	Answer	% of Answers
1	Sex	Woman	100
3	Marital status	Married	90.60
4a	2-3 children	yes	76.79
8	Achieved education	basic	69.83
9a	Did you use credit in the past?	Yes	53.40
17	Does microcredit solve your financial situation?	Yes	87.13
22	Do you have your bank account?	No	73.53
23	Does the fact that you are taker of microcredit harm your family relationships?	No	96.00
24	Do you recommend your economic active neighbours to take microcredit?	Yes	95.19
25	Does the installment payment meetings influence your working activities?	No	80.81
26	Are you holder of more than one microcredit at the same time?	No	58.59
27	Are your financial needs covered by microcredit?	No	75.76
29	Does your religion create important part of your life?	Yes	92.00
30	Does your religious leader prevent you from taking microcredit?	No	91.00

Concluding, the filtrated answers that coincide in over 50% of the cases indicate that the microfinance massmarket in urban-semiurban environment in Turkey is formed by clients featured by the following profile traits:

Table 3 : Verbal description of client profile through answers coinciding in over 50% of the cases

Questions	Profile characteristics		
1,3, 4A	A woman	married	mother
4B	with 2-3 children		
8, 9	with basic education	with experience with debt in the past	
17	declaring that microcredit solves her financial situation		
22,23	unbanked		stating that microcredit does not harm family relationships
24,25,26	recommending neighbours to take microcredit	saying that weekly meetings do not influence her activities	with just one microcredit at a time
28,29,30	a muslim	for whom religion is an important part of her life	while her religious leader does not prevent her from taking microcredit.

c) *Desired client profile*

In order to establish the profile of most desired or suitable client out from the sample, the answers to selected questions deemed to deliver positive value to a MFI in terms of its desire to include such respondent in its portfolio, were filtered from the the rest. The resulting

profile is derived from the characteristics of these respondents falling into this category in 100% of the answers to selected group of questions. The selection abstains from speculation by choosing only those topics from the survey that undeniably present a simply understandable plus for any MFI, as depicted below.

Table 4 : Desired client answers that coincide in over 50% of the cases

Nr.	Question	Desired Answer	% of answers
13	Is frequency of paying the installments of microcredit for you better than frequency of other credits?	Yes	84.00
16	Do social/ family conventions prevent you from becoming a debtor?	No	89.11
23	Does the fact that you are taker of microcredit harm your family/ neighbour relationships?	No	96.00
24	Do you recommend your economic active neighbours to take microcredit?	Yes	95.19
26	Are you holder of more than one microcredit at the same time?	No	58.59

The clientele that answered in line with the desired answers was separated from the rest and the responses to all survey questions were processed in percentual charts. The responses from those who fall into the desired client profile are presented below in the respective predetermined six domains.

Domain 1 : Demographic profile of desired clients

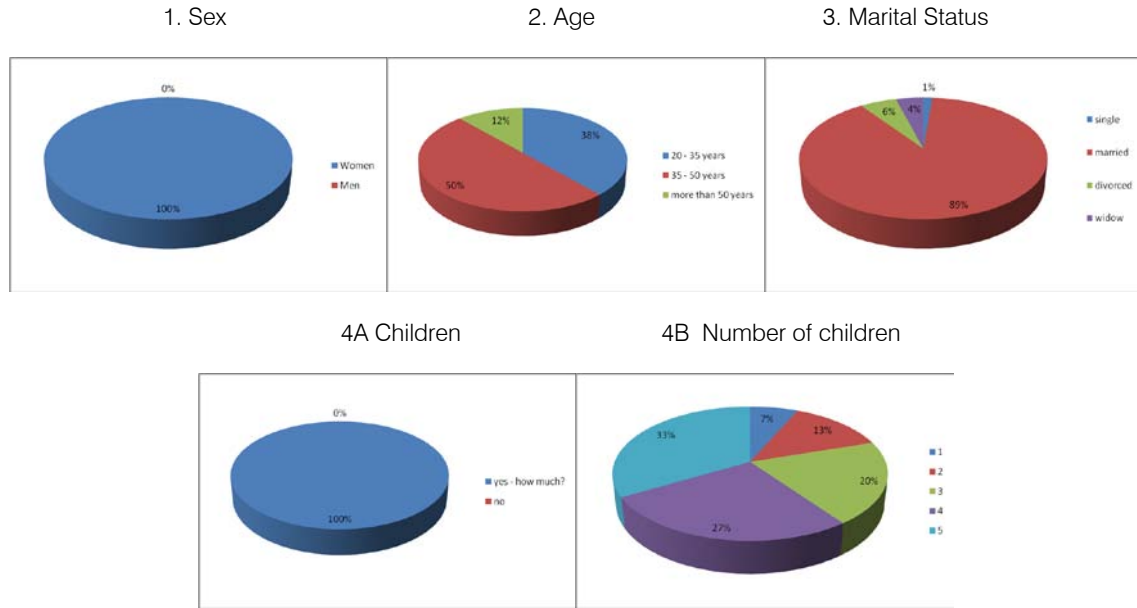


Figure 2 : Demographic profile graphs of desired answers to question 1-4B

Domain 2 : Household of desired clients

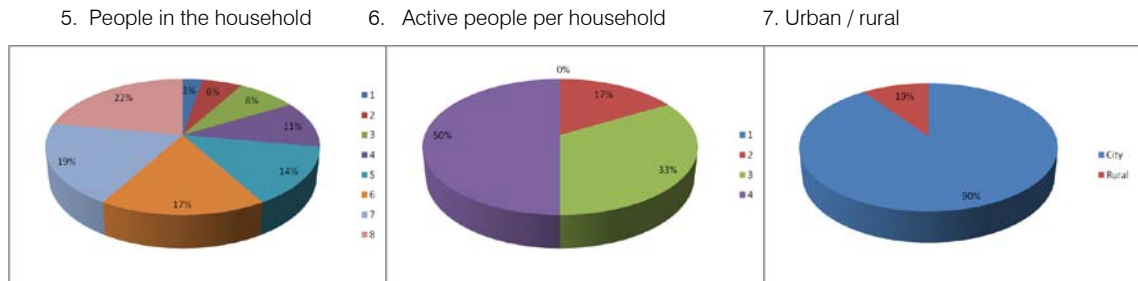


Figure 3 : Household profile graphs of desired answers to question 5-7B

Domain 3 : Religion of desired clients

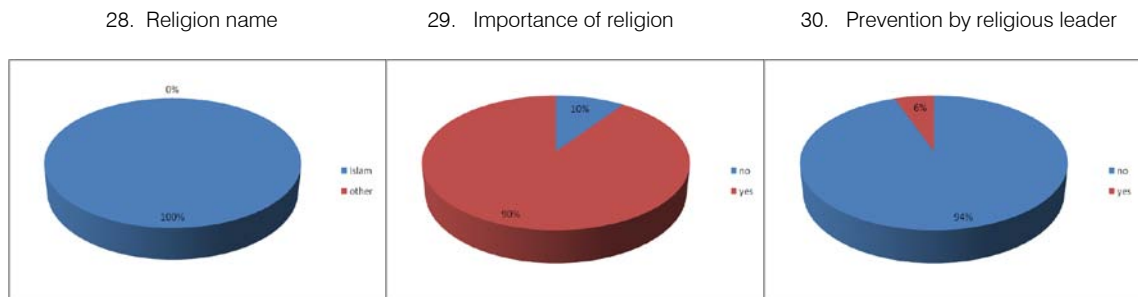


Figure 3 : Religion profile graphs of desired answers to question 28-30

Domain 4 : Credit experience of desired clients

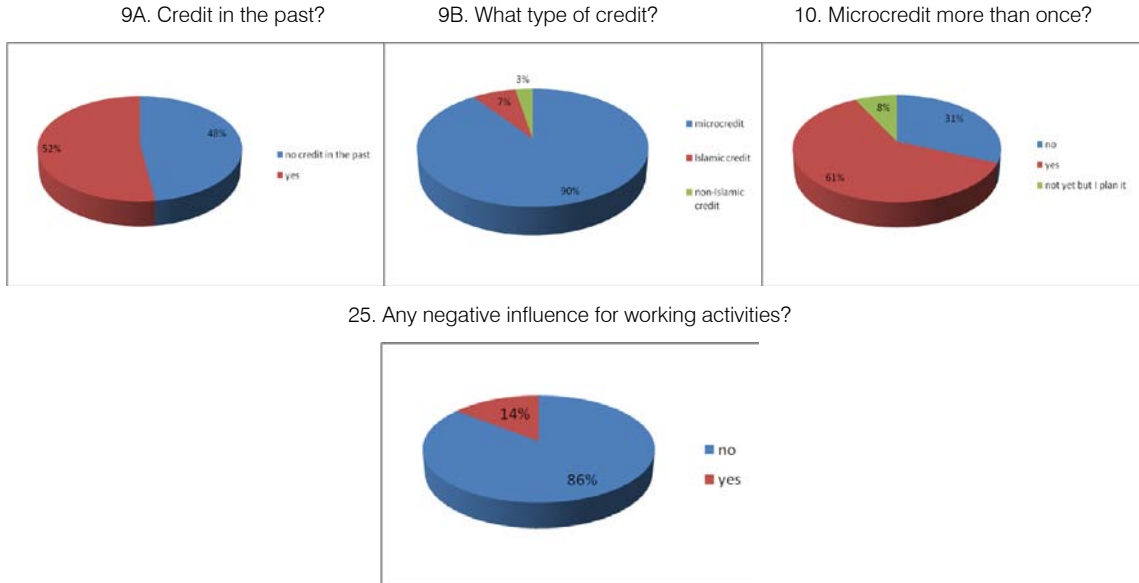


Figure 4 : Credit experience profile graphs of desired answers to question 9A-10 + 25

Domain 5 : Use of credit of desired clients

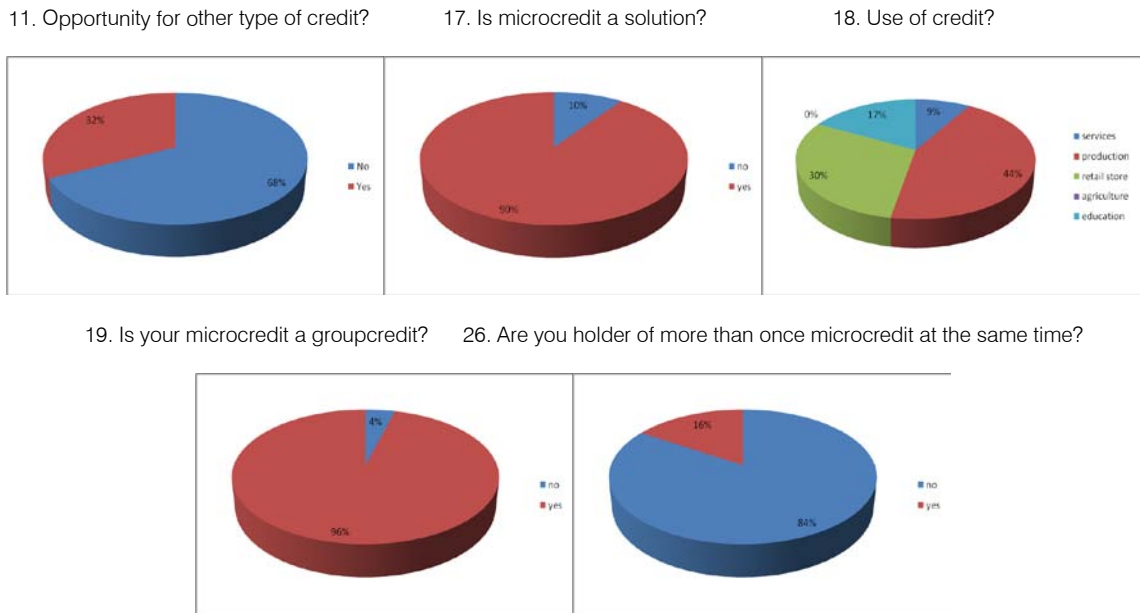
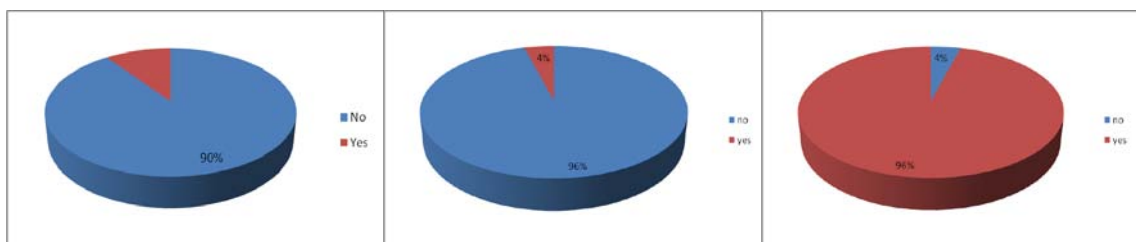


Figure 5 : Credit experience profile graphs of desired answers to question 11,17 - 19

Domain 6 : Credit access of desired clients

14. Is microcredit more expensive than other credits? 15. Is it difficult to access microcredit? 20. Does the length of credit period address your needs?



21. Does microcredit demand in your village / city exceed the supply? 22. Do you have your own bank account?
27. Do you need more debt or are your finance needs fully covered by microcredit?

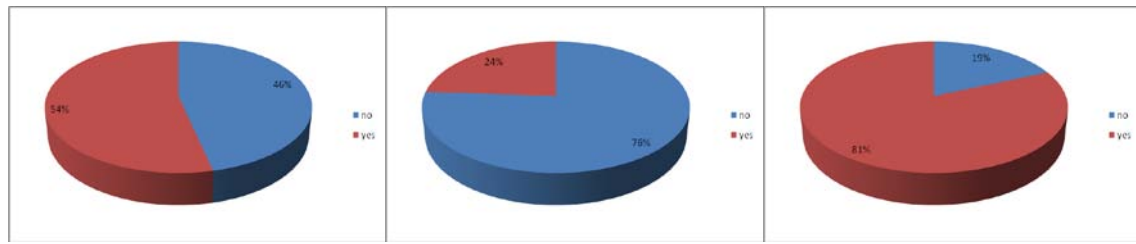


Figure 6 : Credit experience profile graphs of desired answers to question 14,15, 20, 21,22, 27

d) *Overlapping result: Credit mannequin profile*

We construct the credit mannequin by allowing the 50% co-incidence profile (3.2.) to intersect with the desired client profile (3.3.) , by filtering the answers

matrix field through first and through second filter. The result is the following profile of the ideal microfinance client filtered from the real personalities.

Table 5 : Credit mannequin profile in verbal description

Questions	Profile characteristics			
1 – 4A	A woman	aged between 20-50+	married	mother
4B -7	with children 2-3	with 3-4 people living in the household	of out of whom 2 are economically active	living in urban area
8-10	with basic education	with experience with debt in the past	in form of microcredit	but only once
11-15	who does not know if there are other credits available	claiming that frequency of payments is not better than other credits	and that microcredit is less expensive than other types of debt	and that microcredit is not complicated to access
16-19	and that social / family conventions do not prevent her from becoming a debtor	and that microcredit solves her financial situation	using the microcredit for production and retail store	in form of group credit
20-23	and that the length of microcredit period doesnot adress her needs	and that microcredit demand exceeds supply	unbanked	and that microcredit does not harm family relationships
24-27	who recommends neighbours to take microcredit	while weekly meetings do not influence her activities	with just one microcredit at a time	who does not need bigger debt as the needs are covered by microcredit
28-30	a muslim	for whom religion is an important part of her life	and her religious leader does not prevent her from taking microcredit.	

e) *Confirmation / Rejection of assumptions*

i. *Assumptions*

We have established three assumptions that call for corroboration due to the particularity of microfinance market in Turkey, which differs from the neighbouring microfinance markets in peculiarity of its state-society relationship, religion-state relationship, original culture and stage of development. Confirmation / rejection of these assumptions will shed more light on the understanding of the microfinance market in Turkey as a whole and help to position credit mannequin into wider market context. The assumptions follow:

1. Islamic credit presents a competition for microcredit of Grameen type.
2. The likelihood of being enrolled in the microcredit programmes in Turkey is correlated with the number of economically active household members, as the pressure for income originates in the family environment.
3. There is a cultural aversion for microcredit in Turkey, due to gender and conservative stands of the traditional socio-economic system of a muslim society.

a. Analysis of Assumption A: Islamic credit presents a competition for microcredit of Grameen type

Table 6 : Responses to questions 11-14

Nr.	Question	no %	yes in %
11	Do you have opportunity to use any other type of credit?	58.59	31.31
12	Do you prefer Islamic credit?	12.87	87.13
14	Is microcredit more expensive than any other accessible credits?	79.21	20.79

Answers to the selected questions nr. 11 and nr. 14 in Table 6 indicate that competition between islamic credit and village bank microcredit is negligible in Turkey at present, as majority of the clientele stipulated (58.59% and 79.21%) that not many choices are available, nor other credits are accessible from the point of view of price. The resulting answers to question nr. 12 were interpreted as misunderstood, as the clientele considered the term "islamic credit" a synonym for TGMP microcredit. This mere fact however confirms that Shari'ah-compliant credit related literacy is low.

b. Assumption B: Number of economically active members of the household correlates with clients enrollment potential.

In order to test the results on interdependence through statistical methods, we apply the Chi-square test, a measure of the discrepancy between the

observed results and hypothetically expected results, with the H0 of no correlation between the group samples.

$$\chi^2 = \sum \frac{(O-E)^2}{E} \quad (1)$$

O = the observed value

E = the expected value

The survey data was input into a table serving the purposes of the analysis, consisting of variables corresponding to number of collected questionnaires, and numbers of economically active people in the household next to suitability mark of the clientele, qualified with marks from -1 to 3 scale, as per answers of every client in the questionnaire, converting qualitative data into quantitative, ordinal data.⁸

Table 7a : Base for calculation of suitability

Nr.	Question	Less desired client answer
16	Do social/ family conventions prevent you from becoming a debtor?	Yes
23	Does the fact that you are taker of microcredit harm your family/ neighbour relationships?	Yes
24	Do you recommend your economic active neighbours to take microcredit?	No
26	Are you holder of more than one microcredit at the same time?	Yes
30	Does your religious leader prevent you from taking microcredit?	Yes

According to the result, there is none statistically significant interrelation between the number of economically active people living in the household and the suitability of a microfinance client coming from

the household and the assumption B is refuted. In other words, the pressure of extense family background in the household cannot be accepted as a significant statistic force driving people becoming microfinance clients.

Table 7b : Result of X₂ test

	Value	df	Asymp. Sig. (2-sided)[]
Pearson Chi-square	9,118681	10	0,520879

⁸ 3 points: desired clients as per 3.3; 2 points: ordinary clients as those not falling into categories of desired / less desired / undesired; 1 point: less desired client who answered 1 of the answers to questions in Table 6; 0 points: undesired client with 2 or more indicated answers to the questions in Table 6.

- c. Assumption C: There is a cultural aversion for microcredit in Turkey, due to gender and conservative stands of the traditional muslim society

Table 8 : Base for calculation of Assumption C

Nr.	Question	No. in %	Yes in %
30	Does your religious leader prevent you from taking microcredit?	91.00	9.00
16	Do social/ family conventions prevent you from becoming a debtor?	89.11	10.89
23	Does the fact that you are taker of microcredit harm your family/ neighbour relationships?	96.00	4.00

According the answers recorded in Table 8, the overwhelming majority of more than 89% of the customers of MFI do not acknowledge having registered any issues in the family / community surrounding, negatively perceiving the act of becoming debtor of a microfinance institution. The assumption C thus cannot be confirmed.

IV. CONCLUSION

The study provides us with a counterfactual opportunity to combine assumptions on the microfinance market in Turkey with the credit mannequin profile derived out of the intersection of two client profiles based on the field data, and to position the profile of the clientele in the context of contemporary microfinance market in Turkey.

The conclusion can be drawn on basis of the survey that there is no significant competition evidence between Islamic Sharia based credit and classical microcredit. Neither can be confirmed that cultural, religious and community based factors interfere nor influence the debtors in using microcredit, by inspiring distress caused by breach of religious beliefs due to use of interest based microfinance. The number of of the family members co-habiting the same household with the debtors seems not to have an important correlational effect either.

The credit mannequin exercise signposts the sector of retail commerce and small scale production as the most promising markets. It evidences little relevance of age and education for active microcredit clientele, neither regards the current price policy, average loan amounts nor weekly repayments as a matter for reconsideration. On the other hand, the 16 weeks repayment period is considered too short. Past experience with credit can be considered an important positive characteristics to be aimed at when defining new clientele, as well as marital and family status showing as preferent clients married women with 2-3 children, with a strong family background being a robust element of solid debtorship.

This study has shown that the microcredit market in Turkey, however it is influenced by many

different factors, is centered around a centre of gravity, which is a family circle. It has not identified major hindrances and indicates high level of flexibility in terms of cultural and communitarian limitations, that will enable its autonomous future development. Therefore, by providing stronger support for development of microfinance markets, the Turkey seems to acquire a strong and unused grass root development lever, currently far from reaching its potential.

REFERENCES RÉFÉRENCES REFERENCIAS

- Grossman H. (2006) Demand Study for Micro-Finance in Turkey Results from a Field Survey Major Findings, Bankakademie International.
- Arasli B. (2011) Is Turkey microfinance investable? Hurriyet Daily News.
- Burritt K. (2003) Microfinance in Turkey A Sector Assessment Report, United Nations Development Programme.
- Karatas A. (2008), The microcredit strategies for SMES in Turkey in the eu harmonization process,, 8th Global Conference on Business & Economics in Florence.
- EIF http://www.eif.europa.eu/what_we_do/guarantees/news/2012/finansbank.htm (10.12.2012) High demand from Turkish businesses secures more finance from the EU Competitiveness and Innovation Programme.
- Elliot I. (2010) Fact Finding Report on poverty and housing in Turkey.
- TGMP (2.12.2012) Corporate presentation, <http://eng.tgmp.net/>
- Toros A. (2010) How compatible is the turkish population structure with EU Countries? Hacettepe University, Institute of Population Studies.
- Erman T. (2011) Urbanization in a southern context: the transformation of the urban periphery in the case of a Gecekondu neighborhood in Ankara, Turkey.
- Ajaz Ahmed Khan et al. (2010) The influence of faith on Islamic microfinance programmes, Islamic Relief Worldwide.

11. Kovstedt J. (2009) Synthesis of impact evaluations of microcredit evaluation Study, Centre for Economic and Business Research Porcelónshaven.
12. Kandemir O. et al. (2011) Important of microcredit in fight against poverty in Turkey, International Journal of Economics and Finance Studies.
13. World Bank (2009) Female Labor Force Participation in Turkey: Trends, Determinants and Policy Framework.



This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
FINANCE
Volume 13 Issue 8 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

The Introduction of GSM Services in Anyigba Community and its Impact on Students Expenditure Pattern

By Olukotun, G. Ademola, James, O. Olusegun & Olorunfemi Kehinde
Kogi State University, Nigeria

Abstract - This research work-the introduction of GSM services in Anyigba community and its impact on students expenditure pattern is aimed at examining the pre and post GSM introduction expenditure pattern of students with a view to finding out whether the introduction of GSM has any significant impact on students expenditure pattern or not. Data were collected using the primary and secondary sources. Questionnaire and personal interview were the primary method used while journal material/article formed the bulk of the secondary material used. Chi-square was used to analyse the data collected. It was found out from the analysis that a significant relationship exist between the introduction of GSM service in Anyigba and students expenditure pattern in the sense that after the introduction of GSM, the amount spent on it takes priority over budgeted amount on academic activities, food, transport etc. It is therefore recommended that students should maintain a balance in their expenditure. In other words, they should scale down on the amount spent on GSM and reorder their priorities in the interest of their major purpose for coming to Anyigba-academic pursuit.

Keywords : *student, expenditure pattern, Anyigba community, service provider, GSM.*

GJMBR-C Classification : *JEL Code: F65, G01*



Strictly as per the compliance and regulations of:



The Introduction of GSM Services in Anyigba Community and its Impact on Students Expenditure Pattern

Olukotun, G. Ademola ^α, James, O. Olusegun ^σ & Olorunfemi Kehinde ^ρ

Abstract - This research work-the introduction of GSM services in Anyigba community and its impact on students expenditure pattern is aimed at examining the pre and post GSM introduction expenditure pattern of students with a view to finding out whether the introduction of GSM has any significant impact on students expenditure pattern or not. Data were collected using the primary and secondary sources. Questionnaire and personal interview were the primary method used while journal material/article formed the bulk of the secondary material used. Chi-square was used to analyse the data collected. It was found out from the analysis that a significant relationship exist between the introduction of GSM service in Anyigba and students expenditure pattern in the sense that after the introduction of GSM, the amount spent on it takes priority over budgeted amount on academic activities, food, transport etc. It is therefore recommended that students should maintain a balance in their expenditure. In other words, they should scale down on the amount spent on GSM and reorder their priorities in the interest of their major purpose for coming to Anyigba-academic pursuit.

Keywords : student, expenditure pattern, Anyigba community, service provider, GSM.

I. INTRODUCTION

At independence in 1960, with the population of roughly 45million people, Nigeria had about 18,724 phone lines for use. This translated to tele-density of a telephone line to 2403 people. Between independence in 1960 and 1985, telecoms services of Post and Telecommunication (P&T) under the Ministry of Communications became separated and Nigeria External Telecommunications (N.E.T) Ltd was created to take care of external telecommunications services while the old P&T handled internal network. One of the objectives of establishing Nigeria Telecommunication Limited (NITEL) was to provide accessible, efficient and affordable telephone services. NITEL, the only national monopoly operator in the sector was synonymous with epileptic services and bad management which made telephone then to be unreliable, congested, expensive and customer unfriendly. According to Ajayi et al (2008), the years 1992 to 1999 was tagged the liberal liberalization era when government embarked on market oriented, partial liberalization of the Nigerian

Authors ^α ^σ ^ρ : Department of Banking and Finance, Kogi State University, Anyigba, Nigeria. E-mails : olukgaby@yahoo.com, okehinde24@gmail.com

telecommunication sector via the Nigeria Communication Commission (NCC) Decree 75 of 1992.

There is no doubt that the telecommunication system in Nigeria has undergone a revolution since the deregulation of the market. Ever since then, there has been astronomical growth in the acquisition of cell phones by the youths, the grown-ups and even the aged. Similarly, the Nigeria Communication Commission NCC, seeing the robust growth in the sector, encouraged the entry of more mobile operators into the market in the year 2001. This has influenced the tele-density growth from 0.73% in December 2011 to 26.77% in August 2007 and the market witnessed increased records of investment on daily basis.

In year 2001, the NCC held an open auction for G.S.M licenses which were issued to MTEL, operating as M-TEL, South African Telecoms Company, operating as MTN and a consortium led by Zimbabweans as ECONET Wireless. The entry of the mobile operators immediately changed NITEL's control of the market. Consumers saw that mobile phones offered better opportunities than the limited fixed line infrastructure offered by NITEL.

a) Statement of Research Problem

Information dissemination between and within States, Local Governments etc. were carried out loosely by the use of automobiles in Nigeria despite the fact that NITEL was in operation before the year 2001. This was because, NITEL served the affluent in the society; hence their services were not within the reach of the poor. It was so bad that customers pay money in advance (for several months) to acquire telephone lines and customers had to follow NITEL officially round the town at times for a whole day to get their telephone lines repaired (if you are lucky, after 1 or 2 months).

Anyigba community was not immuned from the above scenario. In fact, in its case, it was worse. It is a rural settlement and not even a Local Government headquarter. There was no NITEL in the community. The means of communication was basically through NIPOST, sending other people on errand, sending people who came from the other communities to their relations when they are going back etc.

Before the introduction of G.S.M in Anyigba community, GSM has started serving the communities

of Ankpa and Dekina though erratically. However, people from Anyigba community sometimes go to these neighbouring communities of Ankpa and Dekina to make telephone calls with the attendant risks, non and bad networks.

Prior to the introduction of G.S.M in this community, students spent their income/pocket money/upkeep allowances on items like food, clothing, academic exercises, social activities etc. But with its introduction, it adds up to the unending list of students' expenditure items i.e. expenditure on purchase of phones, recharge cards, internet facilities and subscriptions such as modems, mobile phone charges etc.

Intuitively, from the foregoing trend of GSM introduction in Anyigba community, one is likely to ask this question: Has the introduction of GSM services affected the students' expenditure pattern? And if it has, in what way/ways? This particular question is the crux of this paper.

II. HISTORY OF G.S.M INTRODUCTION IN ANYIGBA COMMUNITY

Global System for Mobile Communication popularly known as G.S.M came into Nigeria in the year 2001 and Anyigba was one of the late boomers of G.S.M. technology in Nigeria. This is because in Anyigba community, information technology was not quickly embraced. There were no GSM networks in Anyigba until 2005 when the then vice chancellor of the Kogi State University, situated at the heart of the community, felt the need for this technology because there were not enough social amenities to cope with the increasing population of both the school and the community. The vice chancellor spoke to two telecommunication networks; MTEL and MTN to install masts for their networks. After setting up the masts, it took MTN and MTEL 2months and 6months respectively to activate their masts.

Consequent upon the coming of this telecoms services, there were still network problems due to over congestion that is, the one mast set up by each telecom service providers could not serve the entire population of the community. This created opportunities for other service providers. Glo then came in 2006, Celtel (which is now Airtel) in 2007 and Etisalat in 2011. GSM technology has improved tremendously and this has created a multiplier effect, improving the standard of living of the people by creating job opportunities for the teeming youths in the community and also increased the number of small-scale business such as recharge card printers and road side G.S.M. operators.

a) Objectives of the Study

The objectives of the study include:

- An examination of Pre-GSM service in Anyigba community

- Reasons for the introduction of GSM in Nigeria and its impact on the Nigeria economy.
- The Pre-GSM expenditure pattern of students' of Kogi State University
- The Post GSM students' expenditure pattern in Kogi State University

b) Research Hypothesis

The research hypothesis to be tested was formulated as follows:

H_0 The introduction of GSM service has no significant impact on students expenditure pattern in Kogi State University.

H_1 The introduction of GSM service has significant impact on student expenditure pattern in Kogi State University.

III. LITERATURE REVIEW

a) Introduction

The concept, importance and economic implications of GSM have been discussed severally and widely. Balogun, (2008) opined that the advent of GSM facilitates economic development as it provides easy and effective communication needed to stimulate and promote trade between Nigerians and its foreign partners in the world.

According to Tella et al (2007), GSM has emerged as an integral and essential part of the culture and life of Nigerians. It had played and still currently playing a significant role in communication and also helps in encouraging investment. Okereocha (2008) found that over 1,000,000 Nigerians have been directly and indirectly employed by the operators. While supportive enterprise and service organization like banking, consultancies, insurance etc. have themselves blossomed.

According to Soyinka (2008), in Bakare et al (2010) mobile phone has continued to empower the poor by opening up veritable windows of wealth generation for them to get out of the scourge of poverty. For Adebayo (2008), the introduction of mobile telecoms has the potential for reducing the cost of doing business and increasing output. Similarly, the introduction of GSM in Nigeria has had its own effect on the pattern of expenditure of Nigerians. According to Aderibigbe (2007), some household even prepare a separate budget on GSM recharge (card and vouchers) beside their expenditure on food, transport, housing etc.

Soyinka (2008) and Ndukwe (2008) reported that the GSM business has contributed to the economy in the area of GSM recharge card printing. This has had the effect of saving Nigeria of about \$150 million monthly while providing employment and new skill to the dealers. It has also improved entertainment and networking among Nigerians, using short message services, SMS and the signal calls. This view has been

corroborated by Okerecha (2008), According to him; the telecommunication sector has become a major tool for empowering Nigerians and with the continued inflow of massive investment and the doggedness of the industry regulator, the future looks bright.

b) Reasons for the Introduction of GSM in Nigeria

GSM in Nigeria, introduced by the government of president Obasanjo in 2001 has helped in its economic development in various ways. The reasons for its introduction are stipulated below:

i. To Generate Employment

GSM aid in creating employment opportunity in the country in different angles or ways such as GSM dealer i.e, those that sell GSM phone, GSM accessories, GSM repairs, those selling card, those making calls etc. In Nigeria GSM has helped to reduce the level of unemployment in the nation and thereby helping the government to develop the Nigerian economy.

ii. To create a means of efficient communication

Today people can stay in Lagos or any other part of the world to communicate unlike in the older days of NITEL cable, when the means the communication is some how restricted and not every individual can afford to buy NITEL phones.

iii. To reduce congestion of vehicles on the road

Before the introduction of GSM people travel daily on the road trying to deliver information or messages here and there and individuals spend their time and money in transportation for the purpose of delivering information. However, the issue of GSM has helped to reduce such congestion on the high way thereby enabling individual to stay at home and deliver information from one place to another (Asouzu: 1995).

iv. For the reduction of accident

Since individuals can stay at home and deliver information without being on the road, the issue of accident is reduced.

v. To serve as a source of revenue to the government

Taxes are paid by company owners, operators and all employees who are employed either directly or indirectly to the state and federal government.

vi. To enhance banking services

The introduction of GSM also increased the volume of services rendered by banks. Recharge cards are stored and sold in bulk by banks thereby enabling them to charge commission and also invest the money and make little profit before submission or making returns for sales.

vii. To reduce fraud in the banking industry

One can use GSM to monitor his/her account.

viii. To promote global marketing

GSM also help to promote global marketing. This is done by transacting business globally or with other foreign countries through GSM phone call.

ix. To promote International Trade

GSM also enhance ordering of goods and services through making GSM phone calls.

x. To Enhance Security

Police can easily be contacted at any point in time in case of any problem of robbery or other related cases which may arise.

xi. To improve the services of fire services/brigade

Through GSM communication, the fire brigade and other agencies involved would be timely informed about any fire accident which may arise at any point in time.

xii. To contribute to the development of rural areas thereby making it possible and easy for those who are in rural areas to communicate immediately with those in urban are in other words aid the development of rural areas.

c) The Positive Impact of GSM on Nigeria Economic Development

- Immediate dissemination of information: GSM encourages fast dissemination of information to protect some event which may happen within a limited or short period of time.
- It facilitates business transaction: Another positive impact of GSM is that it facilitates the means of transacting business. A customer or buyer of a particular product may be at his business premises and order for goods for immediate distribution.
- Assessment of Information: information can be assessed through making calls, police and other force can also assess information about a particular event through phone calls.
- Cost Saving advantage: Transportation cost which individual may incur by moving from one place or area to another is eliminated through making a minute call or sending SMS message which cost little amount which is below what could have been spent on transport.
- With the introduction of GSM, there has been improved police service delivery as security is more guaranteed-through quicker dissemination of information.
- GSM has also improved the services of fire brigade and therefore reduce excessive fire waste which has been recorded in Nigeria years gone by.
- Saving of life and property in case of accident. Usage of ambulance has been enhanced through the introduction of GSM.
- Encourages Economic Stability: Equally important feature of the GSM is the ability to connect to the internet with the Blackberry. This has made

communication a lot easier for business men and others who require the internet to do their work. The GSM enables access to the World Wide Web in any location within or outside the work environment. This has helped in making more business opportunities available.

Businesses in Anyigba have improved with the introduction of GSM; goods and services are delivered on time while delays are better managed and crises truly averted.

Families have become closer than ever before through the use of GSM information. Information is passed easily to members, especially when partners or parents are staying apart due to work, school or other challenges.

IV. RESEARCH METHODOLOGY

Here the research methodology of the study is presented, emphasis shall be laid on the area of the study, model specification, research design, sources and method of data collection, sampling procedure and sample size and the data processing techniques.

a) Research Design

The research design adopted for collection is the sample survey. This is because, it is capable of testing specific hypothesis and allows sample to be drawn from the whole population.

Sample size drawn for this study was limited to the selected students of Kogi State University, Anyigba as they represent the use of questionnaires, personal interviews. *Oral interview was used for the collection of data from the target respondents.

b) Research Method

The method to be adopted in carrying out this work is the scientific method. Scientific method is defined as a systematic, controllable, empirical and unbiased investigation of the hypothetical proposition about the assumed relationship between the variables that create a particular state of affairs.

c) Population of the Study

The population studied in this research is Kogi State University as a case study. The respondents on which questionnaires were administered were students of both undergraduate and postgraduate students of Kogi State University.

d) Sources of Data

Basically two types of data were used in this study. These include primary and secondary data. Primary data were obtained from questionnaires that were administered on students of Kogi State University. Secondary data were obtained from articles, term and seminar papers, reports and relevant literature on the research topic.

e) Sample Size and Sampling Methods

The study used a sample of 300 students which comprised both male and female students of the undergraduates and postgraduate students. Therefore the sampling technique employed in this research was simple random sampling.

f) Method of Data Analysis

Chi-square was used to test the hypothesis; the hypothesis was tested separately on the basis of the supplied data for easy understanding.

Chi-square is the measure of discrepancies, existing between the observed frequency and expected frequency supplied by the statistic. It is a greek letter denoted by χ^2

$$\chi^2 = \sum (fo - fe)^2/fe$$

Where E = Summation

χ^2 = The chi-square

Fo = Observed frequency

Fe = Expected frequency

The hypothesis was tested at 5% level of significance. The degree of freedom is expressed as follows:

$$Df = (c-1)(r-1)$$

Where; c = Column number

R = Row number

V. DATA PRESENTATION AND ANALYSIS

a) Data Presentation

This chapter involves the presentation and data analysis of data gathered from the questionnaires which were administered on the sample selected. For the analysis, table and sample percentage (100%) will be used to present data while the test of hypothesis shall be carried out using chi-square (χ^2) at 5% level of significance with relevant degree of freedom to validate the research hypothesis. A total of 300 questionnaires were administered.

b) Data Analysis

In analyzing the data, questionnaires were designed to get the respondents view on a number of issues relating to the introduction of GSM and its effect on students' expenditure pattern. The questionnaires were administered on students' of Kogi State University, Anyigba.

Table 1 : Sex of the Respondents

Sex	Frequency	Percentage
Male	156	52%
Female	144	48%
Total	300	100

Source : Field Survey, 2012

From the table above, 156 of the respondents representing 52% are males, while 144 of the respondents representing 48% are females.

Table 2 : Age group of the Respondents

Age bracket	Frequency	Percentage
Under 20	75	25%
20-30	150	53%
31-40	40	13%
41-50	15	5%
51-60	10	4%
Total	300	100%

Source : Field Survey, 2012

The table above shows that 75 of the respondents representing 25% are under 20years of age, 160 of the respondent representing 53% are between the ages of 21-30 years old, 40 of the respondents representing 13% are between the ages of 31-40 years old, 15 of the respondents representing 5% are between 41-50 years old and 10 of the respondents representing 4% are between 51-60. This is because past graduate students were also interviewed.

Table 3 : Marital status of the respondents

Options	Frequency	Percentage
Married	35	12%
Single	265	88%
Total	300	100%

Source : Field Survey, 2012

The table above shows that majority of the respondents are single.

Table 4 : Educational Qualification

Options	Frequency	Percentage
Undergraduate	215	71.7%
Postgraduate	85	28.3%
Total	300	100%

Source : Field Survey, 2012

The table above shows that 215 of the respondents representing 71.7% are undergraduate students while 85 of the respondents representing 28.3% are postgraduate students. Majority of the respondents are undergraduates.

Table 5 : Faculty of Respondents

Options	Frequency	Percentage
Agric sciences	50	16.7%
Management sciences	50	16.7%
Art And Humanities	50	16.7%
Natural sciences	50	16.7%
Social sciences	50	16.7%
Law	50	16.7%
Total	300	100%

Source : Field Survey, 2012

The table above shows that 50 respondents are equally chosen from each faculty in the University.

Table 6 : Do you have a mobile phone?

Options	Frequency	Percentage
Yes I do	300	100%
No I don't	-	-
Total	300	100%

Source : Field Survey, 2012

The table above indicates that all the respondents have phones.

Table 7 : For how long have you been using a mobile phone?

Options	Frequency	Percentage
1-3years	40	13.3%
4-6years	160	53.3%
7-9years	70	23.3%
10years and above	30	10.1%
Total	300	100%

Source : Field Survey, 2012

The table above shows that 40 of the respondents representing 13.3% have been using their mobile phones between 1-3years, 160 of the respondents representing 53.3% have been using their mobile phones for the period between 4-6years while 70 of the respondents representing 23.3% have been using their mobile phones for the period between 7-9years and 30 others representing 10.1% have been using mobile for the period of 10years and above. Those that have used mobile phone for over ten years have used them before coming to K.S.U and are postgraduate students.

Table 8 : How many GSM networks do you use?

Options	Frequency	Percentage
One	110	36.7%
Two	90	30%
Three	60	20%
Four and above	40	13.3%
Total	300	100%

Source : Field Survey, 2012

From the table above, it indicates that majority of the respondents 63.3% more than one use one GSM network.

Table 9 : Which of the following are your choices of networks?

Options	Frequency	Percentage
GLO	75	25%
MTN	160	53.3%
AIRTEL	40	13.3%
ETISALAT	25	8.3%
Total	300	100%

Source : Field Survey, 2012

From the table above, it shows that 75 of the respondent representing 25% use GLO network, 160 of the respondent representing 53.3% use MTN network,

40 of the respondent representing 13.3% use AIRTEL while 25 of the respondent representing 8.3% use ETISALAT network. Majority of the respondents use MTN network.

Table 10 : Which network is the most important to you?

Options	Frequency	Percentage
GLO	75	25%
MTN	160	53.3%
AIRTEL	40	13.3%
ETISALAT	25	8.3%
Total	300	100%

Source : Field Survey, 2012

From the table above it shows that to majority of the respondents MTN is most preferred network

Table 11 : How do you recharge your phone?

Options	Frequency	Percentage
Buying a card	105	35%
ATM Print	25	8.3%
Credit Transfer at call centre	80	26.7%
Credit transfer from parent	30	10%
Credit transfer from friend	60	20%
Total	300	100%

Source : Field Survey, 2012

From the table it shows that 35% of the respondent buy recharge card, 8.3% of the respondent recharge their phone at ATM print, 26.7% of the respondent transfer credit from call centres, 10% recharge through transfer from their parents, while 20% of the respondents recharge their mobile through transfer from friends. This is easily comprehensible as the respondents are majorly undergraduate students and do not find it too easy to buy recharge card.

Table 12 : How often do you recharge?

Options	Frequency	Percentage
Daily	60	20%
Once a week	120	40%
Twice a week	80	26.7%
Three times a week	20	6.7%
Four times a week	20	6.7%
Total	300	100%

Source : Field Survey, 2012

From the table above 20% of the respondent recharge daily, 40% of the respondent recharge once a week, 26.7% of the respondent recharge twice a week, 6.7% of the respondent recharge their phone three times a week and four time a week respectively. Those that recharge 3-4 times a week recharge only with very small amounts.

Table 13 : How much do you take as monthly allowance?

Options	Frequency	Percentage
Below N5000	134	45%
N6000- N10,000	76	25%
N11,000 – N15,000	24	8%
N16,000 – N20,000	21	7%
N21,000 – N25,000	18	6%
N26,000 – N30,000	15	5%
Above N30,000	12	4%
Total	300	100%

Source : Field Survey, 2012

The table above shows that majority of the respondent are living on a monthly allowance of N5000 (about \$33) a month.

Table 14 : How much do you spend to recharge monthly?

Options	Frequency	Percentage
Below N1000	150	50%
N1000 – N2000	95	31%
N3000 – N4000	45	15%
N5,000 and above	10	15%
Total	300	100%

Source : Field Survey, 2012

From the table analyzed above majority of the respondents (81%) spend N1000 – N2000 on recharge card monthly.

Table 15 : What was your expenditure pattern before the introduction of GSM Service in Anyigba?

Options	Frequency	Percentage
Food	2000	23%
Toiletries	1500	18%
Academic/photocopies	2000	23%
Transport	1500	18%
Clothing	1500	18
Total	8500	100%

Source : Field Survey, 2012

From table above, it shows that 46% of the respondents spend their money on food and books respectively while toiletries, transport and clothing are responsible for the balance of 54%

Table 16 : What is your expenditure pattern now?

Options	Frequency	Percentage
Food	1500	17.65%
Academic/photocopies	1500	17.65%
Transport	1500	17.65%
Clothing	1500	17.65%
GSM Services	2500	29.40%
Total	8500	100%

Source : Field Survey, 2012

From the table analyzed above shows that majority of the respondents spend their money on GSM as their 1st priority, followed by others.

Table 2.7 : Student Expenditure Pattern Without and With GSM

Without GSM		With GSM	
Item	N	Item	N
Food	2000	Recharge cards	2500
Toiletries	1500	Food	1500
Academic/ photocopies	2000	Academic/ photocopies	1500
Transport	1500	Transport	1500
Clothing	1500	Clothing	1500
Total	8500	Total	8500

Expected Frequencies = 8500/5 = 1700

It implies that the expected frequencies of $F=T=A=C=1700$.

VI. TEST OF HYPOTHESIS

O	E	O-E	(O-E) ²	$\frac{(O-E)^2}{E}$
2500	1700	800	640000	376.47
1500	1700	-200	40,000	23.53
1500	1700	-200	40,000	23.53
1500	1700	-200	40,000	23.53
1500	1700	-200	40,000	23.53
				$X^2_{CAL} = 470.59$

At 5% level of significance

Degree of freedom = $K - 1$, where $k = 5$

Therefore $5-1 = 4$

DF = 4

$X^2_{0.0514} = 9.49$

VII. DECISION RULE

- Accept alternative hypothesis H_1 and reject null hypothesis H_0 when the $X^2_{cal} > X^2_{tab}$
- Accept the null hypothesis H_0 and reject alternative hypothesis H_1 when the $X^2_{cal} < X^2_{tab}$

a) Decision

Since the calculated $X^2 = 470.59$ is greater than the value of tabulated $X^2 = 9.49$, H_1 is accepted and H_0 is rejected. Therefore we conclude that the introduction of GSM has impacted on the student expenditure pattern.

VIII. DISCUSSION OF FINDINGS

From the test of hypothesis, it was found that:

- A significant relationship exist between the introduction of GSM in Anyigba and students' expenditure pattern.
- The amount (percentage) spent on GSM services takes priority over budgeted amount on expenditure such as food, clothing, transport etc.
- Introduction of GSM in Anyigba community has an increasing effect on students' expenditure pattern

as most students' interviewed would prefer to have sufficient airtime on their phones rather than having the cash on them, or spend more money buying airtime.

The introduction of GSM has even altered the students expenditure pattern in such a way that the major items of expenditure before the introduction of GSM, (food, academic/photocopies) have lost their position of prominence. Students are ready to sleep in hunger than not having airtime on their phone.

The huge benefits of the GSM, the new technology has come with its challenges since its introduction in Anyigba, Kogi State University in particular. There have been increases in the act of students using the device to cheat during examinations by scanning material in their handset. This development has become a major threat to our Educational system as it has direct bearing on the quality of graduates produced by the fraudulent system.

Not only that, students do not go to the library as they should again. They mostly do all their assignments using the telephone-which has encouraged academic laziness.

Mobile lies have increased astronomically among students with the GSM which makes it convenient for users to tell lies about their location and other sundry issues. Also, GSM has been identified as the facilitator of rumours, gossip and false alarm. With the aid of this instrument, rumours have spread like wild fire, far and wide and could make crises control/management very difficult-particularly within the university system.

Generally, speaking GSM has come to affect the way students sleep, eat, think and ultimately their health, as they indulge in night calls, it affects pre-productivity when student waste valuable time on trivial conversation with boy and girl friends. It has eaten deep into the lean fabric of student allowances or pocket money, crashing their budget and causing discomfort to their education and lives.

Finally, it has posed a lot of challenges for service providers to meet the demands of its teeming subscribers and this has resulted in failing service quality.

IX. SUMMARY OF FINDINGS

This research work has been able to give the background study of the emergence of GSM services in Nigeria. At independence in 1960, with a population of about 45million people, Nigeria had about 18,724 phone lines for use. The study revealed that the number of phone lines available in Nigeria in 1960 compared to the total population then translated to a state of information anarchy.

By January 1985, the erstwhile Post and Telecommunication (P&T) divisions merged with the

NET to give birth to Nigeria Telecommunication Limited (NITEL), a government owned Limited Liability Company. The objectives of NITEL are;

- a) To harmonize the planning and co-ordination of external and external communication services.
- b) To rationalize the investment in telecoms development and to provide accessible, efficient and affordable services.

NITEL, the only national operator in the communication industry had absolute monopoly of the industry, which was highly characterized by epileptic services and bad management which made telephone service then to be unreliable, congested, expensive and customer unfriendly.

NITEL still continued to retain monopoly power over voice telephony in both national and long distance international calls, until the last decade when GSM came into operation after the inception of president Olusegun Obasanjo Administration in May 1999. The government brought a deregulated telecommunication sector by auctioning three Global Systems for Mobile communication (GSM) license in January 2001 for US \$285 million each and further reserved a license for NITEL at the end. Only two out of the three companies at the auction, MTN communication, ECONET wireless and NITEL were awarded full GSM licenses. ECONET was the first wireless who commenced operation on August 6, 2001 with its post paid package popularly referred to as pay as you-go.

Over the years, the cost of acquiring GSM lines and mobile devices were very high. During this time only the rich and affluent in the society could afford to buy a line and mobile devices. Apart from the high cost of acquiring a GSM line and mobile devices, it was also not readily available, with the activation of line taking several working days. The above scenario poses serious communication challenges to Anyigba town and environs. Any student wishing to communicate with his/her guidance will have to do so by traveling over some distance in order to have access to GSM services and where he/she found one, it was usually characterized with poor networks and high call rates. The only alternative left at their disposal will be to send messages through the motorists and commercial bus drivers.

Consequently, from the data analyzed it was noted that the expenditure pattern on food and academics were 28.3% before the advent of GSM in Anyigba community. But with the introduction of GSM, the expenditure pattern on food remained the same for the same selected respondents' i.e 28.3% while that of academic dropped by 10% accounting for 18.3% giving way for GSM expenditure to rise to a whopping 26.7%. Buying of Recharge cards have ranked second behind food as the major expenditure of students since the introduction of GSM services in Anyigba community.

X. CONCLUSIONS

Now that GSM services are available in Anyigba, every single student has access to one. From this research, it was found that some students even use more than one GSM line and more mobile devices ranging from a simple mobile phone to the more sophisticated one. The effect of which is an increase in their expenditure pattern. Some students will prefer to have airtime on their phones rather than to buy food stuffs. They spend as much as N3000 to N5,000 per month on GSM recharge cards and vouchers.

Also, it is interesting to note that students use their mobile device to perform varieties of task, but despite the huge benefits of the GSM, the new innovation/technology came with its own evils as some students had been caught using their mobile devices to cheat during examinations, saving materials on their handsets and browse the internet to provide answers to questions during examination. This unwholesome development has brought about a huge threat to our education system as it has direct impact on the quality of graduates being produced by the fraudulent system.

Apart from the above mentioned evil which students indulge in with the use of their mobile devices, there are also a number of other crimes that are made evident with the use of mobile phones among students. Girls, particularly are ready to do anything to have blackberry which they use for pinging and other social network such as tweeter, 2go, whatsapp etc. which in most cases are short cuts to prostitution.

XI. RECOMMENDATIONS

From the findings and conclusions presented above, the following recommendations were made to students of Kogi State University. Students should work towards achieving a balanced expenditure in their spending. To achieve this goal, students will need to be prudent in their spending pattern. From the interview conducted, it was revealed that most students recharge their GSM lines daily. Some of the students interviewed do not handle/have textbooks as much as they handle/have mobile devices.

To many of the students interviewed, their expenditure on their GSM lines take priority over and above all other expenditure on such materials as food stuffs, clothing and even their textbooks etc. the effect of this is poor academic performance on the part of such students. This is because they have paid very little attention to their primary purpose of being here.

In addition, students should in the interest of their academic endeavor scale down significantly the amount spent on buying recharge cards and mobile gadgets, and to work assiduously towards achieving academic excellence as this is their primary purpose of being here. More should also be spent on buying

textbooks and educational materials so as to aid their academic well being.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Adebayo F. (2008), Seven Years of Telecoms Revolution – The Fun and Fury. This is how it all began. Tell Magazine of Nigeria.
2. Adegboyega O. A. (2008), Seven Years of Telecoms Revolution – Hello! This is how it all began. Tell Magazine of Nigeria.
3. Ajayi et al (2008), A Century of Telecommunication Development in Nigeria – what next? Retrieved from <http://file://f:/telecom/nigeria.htm>.p.7.
4. Asouzu C. D. (1995): Digitalization of Communication Network in Nigeria: implementation Perspective.
5. Balogun, J. (2008), Impact of GSM on culture and technical interchange between east and west. Gwagwalada, Abuja.
6. Ndukwe E. (2008), Seven Years of Telecoms Revolution –Tell Magazine of Nigeria.
7. Okereocha C. (2008); Seven Years of Telecoms Revolution – One revolution, A Thousand Gains. Tell Magazine of Nigeria.
8. Tella, S. A., L. A, Amaghionyeodiwe and Adesoye, B. A. 2007. "Telecommunications Infrastructure and Economic Growth: Evidence from Nigeria"- A paper submitted for the Un-Idep AND Afea Joint Conference on Sector-Led Growth in Africa and Implication for Development" Dakar, Senegal, PP:8-11.
9. Soyinka, K. (2008); Seven Years of Telecoms Revolution – "Breeding jobs for the Masses". Tell Magazine of Nigeria p7:30-32.
10. Sridhar K. S, Sidhar V. (2003); The Effect of Telecommunicating on Sub-urbanization; Empirical Evidence, J. Regional Anal. Policy, 33 (1); 1-25.

GLOBAL JOURNALS INC. (US) GUIDELINES HANDBOOK 2013

WWW.GLOBALJOURNALS.ORG

FELLOW OF INTERNATIONAL CONGRESS OF MANAGEMENT AND BUSINESS RESEARCH (FICMBR)

- 'FARSB' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'FARSB' can be added to name in the following manner. eg. **Dr. John E. Hall, Ph.D., FARSB or William Walldroff Ph. D., M.S., FARSB**
- Being FARSB is a respectful honor. It authenticates your research activities. After becoming FARSB, you can use 'FARSB' title as you use your degree in suffix of your name. This will definitely will enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 60% Discount will be provided to FARSB members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- FARSB will be given a renowned, secure, free professional email address with 100 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- FARSB member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 15% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- Eg. If we had taken 420 USD from author, we can send 63 USD to your account.
- FARSB member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- After you are FARSB. You can send us scanned copy of all of your documents. We will verify, grade and certify them within a month. It will be based on your academic records, quality of research papers published by you, and 50 more criteria. This is beneficial for your job interviews as recruiting organization need not just rely on you for authenticity and your unknown qualities, you would have authentic ranks of all of your documents. Our scale is unique worldwide.
- FARSB member can proceed to get benefits of free research podcasting in Global Research Radio with their research documents, slides and online movies.
- After your publication anywhere in the world, you can upload you research paper with your recorded voice or you can use our professional RJs to record your paper their voice. We can also stream your conference videos and display your slides online.
- FARSB will be eligible for free application of Standardization of their Researches by Open Scientific Standards. Standardization is next step and level after publishing in a journal. A team of research and professional will work with you to take your research to its next level, which is worldwide open standardization.

-
- FARSB is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), FARSB can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 80% of its earning by Global Journals Inc. (US) will be transferred to FARSB member's bank account after certain threshold balance. There is no time limit for collection. FARSB member can decide its price and we can help in decision.

MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSB)

- 'MARSB' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'MARSB' can be added to name in the following manner. eg. Dr. John E. Hall, Ph.D., MARSB or William Walldroff Ph. D., M.S., MARSB
- Being MARSB is a respectful honor. It authenticates your research activities. After becoming MARSB, you can use 'MARSB' title as you use your degree in suffix of your name. This will definitely will enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 40% Discount will be provided to MARSB members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- MARSB will be given a renowned, secure, free professional email address with 30 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- MARSB member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 10% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- MARSB member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- MARSB is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), MARSB can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 40% of its earning by Global Journals Inc. (US) will be transferred to MARSB member's bank account after certain threshold balance. There is no time limit for collection. MARSB member can decide its price and we can help in decision.

AUXILIARY MEMBERSHIPS

ANNUAL MEMBER

- Annual Member will be authorized to receive e-Journal GJMBR for one year (subscription for one year).
- The member will be allotted free 1 GB Web-space along with subDomain to contribute and participate in our activities.
- A professional email address will be allotted free 500 MB email space.

PAPER PUBLICATION

- The members can publish paper once. The paper will be sent to two-peer reviewer. The paper will be published after the acceptance of peer reviewers and Editorial Board.



PROCESS OF SUBMISSION OF RESEARCH PAPER

The Area or field of specialization may or may not be of any category as mentioned in 'Scope of Journal' menu of the GlobalJournals.org website. There are 37 Research Journal categorized with Six parental Journals GJCST, GJMR, GJRE, GJMBR, GJSFR, GJHSS. For Authors should prefer the mentioned categories. There are three widely used systems UDC, DDC and LCC. The details are available as 'Knowledge Abstract' at Home page. The major advantage of this coding is that, the research work will be exposed to and shared with all over the world as we are being abstracted and indexed worldwide.

The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC,*.DOCX).

The Author can submit the paper either online or offline. The authors should prefer online submission.Online Submission: There are three ways to submit your paper:

(A) (I) First, register yourself using top right corner of Home page then Login. If you are already registered, then login using your username and password.

(II) Choose corresponding Journal.

(III) Click 'Submit Manuscript'. Fill required information and Upload the paper.

(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.

(C) If these two are not convenient, and then email the paper directly to dean@globaljournals.org.

Offline Submission: Author can send the typed form of paper by Post. However, online submission should be preferred.

PREFERRED AUTHOR GUIDELINES

MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)

Page Size: 8.27" X 11"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, "Abstract" word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

You can use your own standard format also.

Author Guidelines:

1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript's Category,
5. Structure and Format of Manuscript,
6. After Acceptance.

1. GENERAL

Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

Scope

The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global

Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

2. ETHICAL GUIDELINES

Authors should follow the ethical guidelines as mentioned below for publication of research paper and research activities.

Papers are accepted on strict understanding that the material in whole or in part has not been, nor is being, considered for publication elsewhere. If the paper once accepted by Global Journals Inc. (US) and Editorial Board, will become the copyright of the Global Journals Inc. (US).

Authorship: The authors and coauthors should have active contribution to conception design, analysis and interpretation of findings. They should critically review the contents and drafting of the paper. All should approve the final version of the paper before submission

The Global Journals Inc. (US) follows the definition of authorship set up by the Global Academy of Research and Development. According to the Global Academy of R&D authorship, criteria must be based on:

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

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.

Permissions: It is the author's responsibility to have prior permission if all or parts of earlier published illustrations are used in this paper.

Please mention proper reference and appropriate acknowledgements wherever expected.

If all or parts of previously published illustrations are used, permission must be taken from the copyright holder concerned. It is the author's responsibility to take these in writing.

Approval for reproduction/modification of any information (including figures and tables) published elsewhere must be obtained by the authors/copyright holders before submission of the manuscript. Contributors (Authors) are responsible for any copyright fee involved.

3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.



To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

4. MANUSCRIPT'S CATEGORY

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

5. STRUCTURE AND FORMAT OF MANUSCRIPT

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also. Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

Papers: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

- (a) Title should be relevant and commensurate with the theme of the paper.
- (b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.
- (c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.
- (d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.
- (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, unless non-standard.
- (f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;
- (g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.
- (h) Brief Acknowledgements.
- (i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.



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

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

Format

Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than $1.4 \times 10^{-3} \text{ m}^3$, or 4 mm somewhat than $4 \times 10^{-3} \text{ m}$. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

Structure

All manuscripts submitted to Global Journals Inc. (US), ought to include:

Title: The title page must carry an instructive 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) wherever the work was carried out. The full postal address in addition with the e-mail address of related author must be given. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining and indexing.

Abstract, used in Original Papers and Reviews:

Optimizing Abstract for Search Engines

Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Key Words

A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

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

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art. A few tips for deciding as strategically as possible about keyword search:



- One should start brainstorming lists of possible keywords before even begin 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 research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

Acknowledgements: Please make these as concise as possible.

References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and Similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

The Editorial Board and Global Journals Inc. (US) recommend that, citation of online-published papers and other material should be done via a DOI (digital object identifier). If an author cites anything, which does not have a DOI, they run the risk of the cited material not being noticeable.

The Editorial Board and Global Journals Inc. (US) recommend the use of a tool such as Reference Manager for reference management and formatting.

Tables, Figures and Figure Legends

Tables: Tables should be few in number, 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. Vertical lines should not be used.

Figures: Figures are supposed to be submitted as separate files. Always take in a citation in the text for each figure using Arabic numbers, e.g. Fig. 4. Artwork must be submitted online in electronic form by e-mailing them.

Preparation of Electronic Figures for Publication

Even though low quality images are sufficient for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit (or e-mail) EPS (line art) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings) in relation to the imitation size. 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: It is the rule of the Global Journals Inc. (US) for authors 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.



Figure Legends: Self-explanatory legends of all figures should be incorporated separately under the heading 'Legends to Figures'. In the full-text online edition of the journal, figure legends may possibly be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should notify the reader, about the key aspects of the figure.

6. AFTER ACCEPTANCE

Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

6.1 Proof Corrections

The corresponding author will receive an e-mail alert containing a link to a website or will be attached. A working e-mail address must therefore be provided for the related author.

Acrobat Reader will be required in order to read this file. This software can be downloaded

(Free of charge) from the following website:

www.adobe.com/products/acrobat/readstep2.html. This will facilitate the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof.

Proofs must be returned to the dean at dean@globaljournals.org within three days of receipt.

As changes to proofs are costly, we inquire that you only correct typesetting errors. All illustrations are retained by the publisher. Please note that the authors are responsible for all statements made in their work, including changes made by the copy editor.

6.2 Early View of Global Journals Inc. (US) (Publication Prior to Print)

The Global Journals Inc. (US) are enclosed by our publishing's Early View service. Early View articles are complete full-text articles sent in advance of their publication. Early View articles are absolute and final. They have been completely reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after sending them. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the conventional way.

6.3 Author Services

Online production tracking is available for your article through Author Services. Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The authors will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript.

6.4 Author Material Archive Policy

Please note that if not specifically requested, publisher will dispose off hardcopy & electronic information submitted, after the two months of publication. If you require the return of any information submitted, please inform the Editorial Board or dean as soon as possible.

6.5 Offprint and Extra Copies

A PDF offprint of the online-published article will be provided free of charge to the related author, and may be distributed according to the Publisher's terms and conditions. Additional paper offprint may be ordered by emailing us at: editor@globaljournals.org.

You must strictly follow above Author Guidelines before submitting your paper or else we will not at all be responsible for any corrections in future in any of the way.



Before start writing a good quality Computer Science Research Paper, let us first understand what is Computer Science Research Paper? So, Computer Science Research Paper is the paper which is written by professionals or scientists who are associated to Computer Science and Information Technology, or doing research study in these areas. If you are novel to this field then you can consult about this field from your supervisor or guide.

TECHNIQUES FOR WRITING A GOOD QUALITY RESEARCH PAPER:

1. Choosing the topic: In most cases, the topic is searched by the interest of author but it can be also suggested by the guides. You can have several topics and then you can judge that in which topic or subject you are finding yourself most comfortable. This can be done by asking several questions to yourself, like Will I be able to carry our search in this area? Will I find all necessary recourses to accomplish the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

2. Evaluators are human: First thing to remember that evaluators are also human being. They are not only meant for rejecting a paper. They are here to evaluate your paper. So, present your Best.

3. Think Like Evaluators: If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

4. 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.

5. Ask your Guides: If you are having any difficulty in your research, then do not hesitate to share your difficulty to your guide (if you have any). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work then ask the supervisor to help you with the alternative. He might also provide you the list of essential readings.

6. Use of computer is recommended: As you are doing research in the field of Computer Science, then this point is quite obvious.

7. Use right software: Always use good quality software packages. If you are not capable to judge good software then you can lose quality of your paper unknowingly. There are various software programs available to help you, which you can get through Internet.

8. Use the Internet for help: An excellent start for your paper can be by using the Google. It is an excellent search engine, where you can have your doubts resolved. You may also read some answers for the frequent question how to write my research paper or find model research paper. From the internet library you can download books. If you have all required books make important reading selecting and analyzing the specified information. Then put together research paper sketch out.

9. Use and get big pictures: Always use encyclopedias, Wikipedia to get pictures so that you can go into the depth.

10. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right! It is a good habit, which helps to not to lose your continuity. You should always use bookmarks while searching on Internet also, which will make your search easier.

11. Revise what you wrote: When you write anything, always read it, summarize it and then finalize it.



12. Make all efforts: Make all efforts to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in introduction, that what is the need of a particular research paper. Polish your work by good skill of writing and always give an evaluator, what he wants.

13. Have backups: When you are going to do any important thing like making research paper, you should always have backup copies of it either in your computer or in paper. This will help you to not to lose any of your important.

14. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several and unnecessary diagrams will degrade the quality of your paper by creating "hotchpotch." So always, try to make and include those diagrams, which are made by your own to improve readability and understandability of your paper.

15. Use of direct quotes: When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.

16. Use proper verb tense: Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

17. Never use online paper: If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

18. Pick a good study spot: To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

19. Know what you know: Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

20. Use good quality grammar: Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

21. 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 to your topic. You may also maintain your arguments with records.

22. Never start in last minute: Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

23. Multitasking in research is not good: Doing several things at the same time proves bad habit in case of research activity. Research is an area, where everything has a particular time slot. Divide your research work in parts and do particular part in particular time slot.

24. Never copy others' work: Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

25. Take proper rest and food: No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

26. Go for seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.



27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

28. Make colleagues: Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

29. Think technically: Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

30. Think and then print: When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

31. Adding unnecessary information: Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

32. Never oversimplify everything: To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

33. Report concluded results: Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

34. After 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 to 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 in 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 criterion for grading the final paper by peer-reviewers.

Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of 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 the 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 evade

- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

- Use standard writing style including articles ("a", "the," etc.)
- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives
- Shun use of extra pictures - include only those figures essential to presenting results

Title Page:

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



Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript-- must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing 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 approach 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. Yet, use comprehensive sentences and do not let go readability for brevity. You can maintain it succinct by phrasing sentences so that they provide more than 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 maintain the initial two items to no more than one ruling each.

- Reason of the study - 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 quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness 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 to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled 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 with every section. If you make the four points listed above, you will need a least of four paragraphs.



- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose 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 sound written Procedures segment allows a capable scientist to replacement 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 for the least amount of information that would permit another capable scientist to spare 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 object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text 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:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

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

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- 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 a 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. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.



Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise 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 in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to 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 part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a 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 implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly 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 with prospect, and let it drop at that.

- Make a decision if each premise is supported, 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
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One 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?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.



ADMINISTRATION RULES LISTED BEFORE
SUBMITTING YOUR RESEARCH PAPER TO GLOBAL JOURNALS INC. (US)

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

Segment Draft and Final Research Paper: You have to strictly follow the template of research paper. If it is not done your paper may get rejected.

- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptives of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.
- Do not give permission to anyone else to "PROOFREAD" your manuscript.
- **Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)**
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION)
BY GLOBAL JOURNALS INC. (US)

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 Inc. (US).

Topics	Grades		
	A-B	C-D	E-F
<i>Abstract</i>	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
<i>Introduction</i>	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
<i>Methods and Procedures</i>	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
<i>Result</i>	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
<i>Discussion</i>	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
<i>References</i>	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



INDEX

A

Altitudinal · 25
Amenities · 78
Analogy · 49
Anomalous · 49
Assiduously · 84
Augment · 46

C

Collateral · 2, 64, 65
Congruent · 47
Consecutively · 35
Consortium · 77
Contractual · 2
Corroboration · 71

D

Deliberate · 61
Deregulation · 54, 77
Determinant · 24, 35
Discrepancies · 80
Dispersion · 8

E

Embryonic · 3
Enlighten · 26
Envisages · 43, 44
Exogenous · 66

F

Fraudulent · 58, 61, 83, 84

G

Gratifying · 44

H

Hindrances · 74

I

Illustrated · 24, 25, 26
Imminent · 54
Inadequate · 45, 55, 56, 61, 62
Inception · 61, 62, 84
Inferential · 35, 36, 58, 59
Inflammable · 42
Instantaneously · 35
Integrity · 45, 47, 51, 60
Intelligible · 45
Intuitively · 78

M

Mannequin · 64, 65, 66, 71, 74
Metamorphic · 41, 42
Mitigate · 41, 42, 43, 46, 51

P

Parlance · 56
Penetrate · 28
Pervasive · 42, 44
Postulated · 25, 59
Precipitating · 57
Prerequisite · 45
Primitive · 42
Proliferation · 55
Prudently · 42

Q

Quantified · 45
Quotient · 47

R

Recessionary · 36
Resuscitated · 58

S

Scourge · 78
Sovereign · 43
Speculation · 68
Surveillance · 61
Susceptible · 26



save our planet

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



ISSN 9755853

© Global Journals