



UNIVERSITI PUTRA MALAYSIA

***FINANCIAL INCLUSION, FINANCIAL STABILITY AND ECONOMIC
GROWTH IN DEVELOPING COUNTRIES***

HAMISU SADI ALI

FEP 2016 4



**FINANCIAL INCLUSION, FINANCIAL STABILITY AND ECONOMIC
GROWTH IN DEVELOPING COUNTRIES**

By

HAMISU SADI ALI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Degree of Doctor of Philosophy.**

May 2016

COPYRIGHT

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



DEDICATION

This PhD thesis is warmly dedicated to my beloved late father ALHAJI SADI ALI may his gentle soul rest in perfect and absolute peace, Ameen, and to my lovely mother HAJIYA AISHA SALISU, may ALLAH continue to bless her life, Ameen. This thesis is also dedicated to my lovely wife ZAINAB HAMISU ALI, and my charming Son SADI HAMISU SADI (Hilal) as well as the entire family of the late ALHAJI SADI ALI. It is my great pleasure and honour also, to dedicate this PhD thesis to His Excellency, the former Executive Governor of Kano State and the current Senator representing Kano Central Senatorial District, ENGINEER DR. RABI'U MUSA KWANKWASO (FNSE). Your supports and cares for educational and human development in my dear Kano State will forever be in my heart. May almighty Allah bless you and your entire family forever, and may Allah fulfill all what you desires in this life and hereafter.

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the Degree of Doctor of Philosophy

FINANCIAL INCLUSION, FINANCIAL STABILITY AND ECONOMIC GROWTH IN DEVELOPING COUNTRIES

By

HAMISU SADI ALI

May 2016

Chairman : Associate Professor Law Siong Hook, PhD
Faculty : Economics and Management

The number of individuals and firms that have access and uses formal financial services provided by the mainstream financial sectors determines the performance of the financial sector of the economy; higher level of financial inclusion could automatically increase banking liquidity and hence provides more loanable funds for viable investments, the multiplier effect of this may positively influence the level of employment and reduce income inequality as well poverty. The present study has the overall objective of investigating the impacts of financial inclusion in sustaining financial stability and economic growth in developing countries.

The first specific objective intends to examine the effect of migrant workers' remittance on financial inclusion in developing countries based on dynamic panel GMM estimation technique. In this objective 46 developing countries were selected and the time period of the study is 2004-2010. The empirical finding reveals that migrant workers remittances have positive and significant impact on financial inclusion in the sample countries. The result reveals that 1% increase in migrant workers remittance could increase financial inclusion by 0.067% in the sample countries. Migrant workers remittance therefore becomes an important financial inflow that stimulates financial sector development in the countries investigated.

The second specific objective based on 52 developing countries for the time period of 2004-2010 also applied dynamic panel GMM estimation technique, the objective is to examine the effect of financial inclusion on financial stability in developing countries. The main empirical finding shows that financial inclusion positively influences financial stability, the result suggest that 1% increase in financial inclusion positively stimulates financial stability by 0.375%. This therefore emphasizes the relevance of higher access and usage of formal financial services in controlling the shocks of financial instability, hence financial inclusion stimulates the stability of the financial system.

The third specific objective also applied dynamic panel GMM estimation technique across 48 developing countries for the period of 2004-2010; the objective is to investigate the impact of financial inclusion on economic growth in developing countries. The key empirical finding reveals that financial inclusion have positive and significant impact on economic growth in developing countries. The result highlight that 1% increase in financial inclusion could stimulates economic growth to increase by 0.132%, this finding confirmed the essential functions that access and usage of formal financial services plays in promoting the overall economic performance in developing countries. Therefore it is imperative from the policy perspectives to encourage uses as well as provide enabling policies and suitable environments for smooth accessibility of formal financial services considering its diverse positive effects on financial sector development as well as overall economic growth.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

**MEMASUKKAN KEWANGAN, KESTABILAN KEWANGAN DAN
PERTUMBUHAN EKONOMI DI NEGARA MEMBANGUN**

Oleh

HAMISU SADI ALI

Mei 2016

Pengurus : **Profesor Madya Law Siong Hook, PhD**
Fakulti : **Ekonomi dan Pengurusan**

Bilangan firma dan individu yang mempunyai akses dan menggunakan perkhidmatan kewangan formal yang disediakan oleh sektor kewangan boleh menentukan prestasi sektor kewangan sesebuah negara; semakin tinggi rangkuman kewangan secara automatiknya, boleh meningkatkan mudah-tunai perbankan, dan selanjutnya menyediakan lebih banyak dana pinjaman untuk pelaburan yang berdaya maju. Kesan berganda secara positif dari ini, boleh mempengaruhi tahap pekerjaan dan mengurangkan ketidaksamaan pendapatan serta kemiskinan. Kajian ini bertujuan untuk menyiasat kesan rangkuman kewangan dalam mengekalkan kestabilan kewangan dan pertumbuhan ekonomi di negara-negara membangun.

Objektif khusus yang pertama bercadang untuk mengkaji kesan pengirim wang oleh pekerja asing terhadap rangkuman kewangan di negara-negara membangun berdasarkan teknik anggaran panel dinamik GMM. Dalam objektif ini, 46 buah negara membangun telah dipilih untuk kajian dalam tempoh masa dari 2004 hingga 2010. Penemuan empirikal menunjukkan bahawa pengirim wang oleh pekerja asing mempunyai kesan positif dan signifikan terhadap rangkuman kewangan di negara-negara yang dipilih untuk kajian. Keputusan menunjukkan bahawa peningkatan 1% dalam penghantaran wang oleh pekerja asing boleh meningkatkan rangkuman kewangan sebanyak 0.067% di negara-negara yang dikaji. Oleh itu, pengirim wang oleh pekerja asing boleh menjadi aliran masuk kewangan yang penting bagi merangsang pembangunan sektor kewangan di negara-negara tersebut.

Objektif khusus yang kedua mengkaji kesan rangkuman kewangan terhadap kestabilan kewangan di negara-negara membangun dengan menggunakan teknik anggaran panel dinamik GMM berdasarkan 52 buah negara membangun untuk tempoh masa 2004-2010. Hasil penemuan empirik utama menunjukkan bahawa rangkuman kewangan secara positif mempengaruhi kestabilan kewangan. Keputusan kajian menunjukkan bahawa peningkatan 1% dalam rangkuman kewangan merangsang kestabilan kewangan sebanyak 0.375%. Maka ini menegaskan hubungan di antara akses yang

lebih tinggi dan penggunaan perkhidmatan kewangan bagi mengawal kejutan ketidakstabilan kewangan. Oleh itu rangkuman kewangan dapat merangsangkan kestabilan sistem kewangan.

Objektif khusus yang ketiga juga menggunakan teknik anggaran panel dinamik GMM terhadap 48 negara membangun bagi tempoh 2004-2010; tujuannya adalah untuk menyiasat kesan rangkuman kewangan kepada pertumbuhan ekonomi di negara-negara membangun. Penemuan empirik utama menunjukkan bahawa rangkuman kewangan mempunyai kesan positif dan signifikan terhadap pertumbuhan ekonomi di negara-negara membangun. Hasil kajian mendapati bahawa peningkatan 1% dalam rangkuman kewangan boleh merangsang peningkatan pertumbuhan ekonomi sebanyak 0.132%, penemuan ini mengesahkan fungsi penting yang akses dan penggunaan perkhidmatan kewangan formal dalam mempromosikan prestasi keseluruhan ekonomi di negara-negara membangun. Oleh itu adalah penting daripada perspektif dasar untuk menggalakkan penggunaan dan juga menyediakan dasar yang membolehkan persekitaran yang sesuai untuk kelancaran akses perkhidmatan kewangan yang formal. Ia adalah penting untuk meningkatkan kesan-kesan positif yang pelbagai terhadap pembangunan sektor kewangan serta pertumbuhan ekonomi secara keseluruhan.

ACKNOWLEDGEMENTS

All thanks, praise and gratitude goes to almighty Allah who gave me strength and courage to complete this gigantic work, and also to his beloved Prophet Muhammad (S.A.W.). Special appreciations go to my Supervisor Associate Professor Dr. Law Siong Hook for his guidance, suggestion and overall support throughout the period of this study, without his maximum supports and motivation in providing critical inputs, this thesis will not be up to this level. My warm appreciations also goes to my Supervisory Committee members; Professor Dr. Zulkornain Yusop and Associate Professor Dr. Lee Chin, who despite their tight schedules try to give insightful comments, suggestions and contributions during this study which is highly significant and really enhance the overall objective of this thesis.

Special thanks, gratitude and appreciations goes to my lovely wife Zainab Hamisu Ali and our charming and lovely Son Sadi Hamisu Sadi (Hilal) for their patience, endurance and perseverance throughout my study period. The entire family of the late Alhaji Sadi Ali; Alhaji Ali Sadi Ali, Alhaji Kabiru Sadi Ali, Hadiza Sadi Ali, Auwalu Sadi Ali, Sani Sadi Ali, Salisu Sadi Ali, Rabi'u Sadi Ali and Aisha Sadi Ali (Munnubiya) all deserves a special recognition and attention, without their supports, loves and cares, I will not be in this position, may almighty Allah continue to bless them forever. Special appreciation and gratitude goes to his Excellency, the current Senator representing Kano Central Senatorial zone ENGINEER DR. RABI'U MUSA KWANKWASO (FNSE) for sponsoring this PhD program during his second tenure (2011-2015) as the executive governor of Kano State, may Allah continue to bless him and his entire family. My colleagues and friends also plays an important roles for this achievements, notable among them includes; Ibrahim Zannah Talha, Yusuf Ibrahim Kofarmata, Kamal Kabir, Ibrahim Yusuf Maitama, Nura Abubakar Gwadabe, Hafizu Sani Liman, Sunusi Usman, Sani Dahiru Buba, Dr. Abubakar Lawal Ngoma, Dr. Konto Mohammed, Muhammad Ribadu (Bamanga), Jamilu Mohammed Musa, Abdullahi Adamu, Murtala Shehu Ahmad, Muhammad Bello Sabo, Ishaq Abubakar Ahmed, Shuaibu Ahmad Chindaya, Ahmed Ibrahim Karage, Ibrahim Haruna Shanono, Idris Bashir Bugaje, Umar Mukhtar, Abba Nuhu Zubairu (Bobby), Yakubu John Abdullahi, Adamu Yahaya, Hussain Zandam, Suleiman Dahiru, Idris Isyaku Abdullahi, Aliyu Alhaji Jibrilla, and Ibrahim Muye Muhammad, just to mention a few.

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Law Siong Hook, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Zulkornain Yusop, PhD

Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

Lee Chin, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

BUJANG BIN KIM HUAT, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work
- quotations, illustrations and citations have been duly referenced
- the thesis has not been submitted previously or concurrently for any other degree at any institutions
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- written permission must be owned from supervisor and deputy vice –chancellor (Research and innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software

Signature: _____ Date: _____

Name and Matric No.: Hamisu Sadi Ali (GS38005)

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) were adhered to.

Signature: _____

Name of Chairman
of Supervisory
Committee:

Associate Professor
Dr. Law Siong Hook

Signature: _____

Name of Member
of Supervisory
Committee:

Professor
Dr. Zulkornain Yusop

Signature: _____

Name of Member
of Supervisory
Committee:

Associate Professor
Dr. Lee Chin

TABLE OF CONTENTS

	Page
ABSTRACT	i
ABSTRAK	iii
ACKNOWLEDGEMENTS	v
APPROVAL	vi
DECLARATION	viii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
LIST OF ABBREVIATIONS	xv
 CHAPTER	
1 INTRODUCTION	1
1.1 Introduction and Background of the Study	1
1.1.1 Financial inclusion and remittances	10
1.1.2 Financial inclusion and financial stability	12
1.1.3 Financial inclusion and economic growth	14
1.2 Statement of the Research Problem	16
1.3 Research Questions	18
1.4 General and specific objectives of the study	18
1.5 Scope and limitations of the study	18
1.6 Significance of the study	19
 2 LITERATURE REVIEW	 21
2.1 Introduction	21
2.2 Overview of financial development and economic growth	21
2.2.1 Theoretical perspectives	21
2.2.2 Empirical Literature	26
2.3 Effects of migrant workers' remittances on financial inclusion	32
2.3.1 Theoretical literature review	32
2.3.2 Empirical Literature Review	33
2.4 Effect of financial inclusion on financial system stability	36
2.4.1 Theoretical Literature	36
2.4.2 Empirical Literature	36
2.4.3 Functions of financial system	38
2.5 Effects of financial Inclusion on Economic Growth	39
2.5.1 Theoretical Literature Review	40
2.5.2 Empirical Literature Review	41
 3 METHODOLOGY AND DATA	 45
3.1 Introduction	45
3.2 Conceptual framework	45
3.3 Theoretical framework	46
3.3.1 Migrant workers' remittances and financial inclusion	46
3.3.2 Financial inclusion and financial system stability	50
3.3.3 Financial inclusion and economic growth	51
3.4 Empirical Strategy: Model Specification	54

3.4.1	Model specification for objective 1: Effects of migrant workers' remittances on financial inclusion	55
3.4.2	Variables justification and expected sign based on theory/literature	56
3.5	Model specification for objective 2: Effects of financial inclusion on financial system stability	58
3.5.1	Variables justification and expected sign based on theory/literature	60
3.5.2	Model specification for objective 3: Impacts of financial Inclusion on economic growth	62
3.5.3	Variables justifications and expected sign based on theory/literature	64
3.6	Method of Estimation	68
3.6.1	The bias of fixed effects in dynamic panel model	68
3.6.2	Generalized method of moment (GMM) estimation technique	69
3.7	Sample Countries	73
4	EMPIRICAL RESULTS AND ANALYSIS	76
4.1	Descriptive analysis	76
4.2	Migrant workers' remittances and financial inclusion	76
4.2.1	Data statistics and correlation matrix	76
4.2.2	Empirical results: Migrant workers' remittances and financial inclusion	78
4.2.3	Robustness checks	80
4.3	Financial inclusion and financial stability	81
4.3.1	Data statistics and correlation matrix	81
4.3.2	Empirical results: Financial inclusion and financial stability	83
4.3.3	Robustness checks	87
4.4	Financial inclusion and economic growth	88
4.4.1	Data statistics and correlation matrix	88
4.4.2	Empirical results: Financial inclusion and economic growth	89
4.4.3	Robustness checks	93
4.5	Concluding remarks	94
5	SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS	96
5.1	General review of the study	96
5.2	Summary of the major findings	96
5.3	Contributions of the study	97
5.4	Policy implications of the study	98
5.4.1	Policy on enhancing migrant workers' remittance	98
5.4.2	Policy on improving financial stability	99
5.4.3	Policy on improving economic growth	99
5.5	Recommendations for future study	99
	REFERENCES	101
	APPENDICES	126

BIODATA OF STUDENT	129
LIST OF PUBLICATIONS	130



LIST OF TABLES

Table	Page
3.1 Expected signs based on theory/literature	58
3.2 Expected signs based on theory/literature	62
3.3 Expected signs based on theory/literature	66
3.4 Summary of data, description, sources and measurements of variables	67
3.5 Sample countries for objective one	73
3.6 Sample countries for objective two	74
3.7 Sample countries for objective three	75
4.1 Summary of descriptive statistics of the variables	77
4.2 Correlation matrix	77
4.3 Migrant workers' remittances and financial inclusion in developing countries: Dynamic panel GMM model	79
4.4 Migrant workers' remittances and financial inclusion in developing countries: Dynamic panel GMM model after removing outliers	80
4.5 Migrant workers' remittances and financial inclusion in developing countries	81
4.6 Summary of descriptive statistics of the variables	82
4.7 Correlation matrix	82
4.8 Financial inclusion and financial stability in developing countries: Dynamic panel GMM models	84
4.9 The marginal effect of financial inclusion on financial stability in developing countries: Dynamic panel GMM model	85
4.10 Financial inclusion and financial stability in developing countries: Dynamic panel GMM model after removing outliers	86
4.11 Financial inclusion and financial stability in developing countries	88
4.12 Summary of descriptive statistics of the variables	89

4.13	Correlation matrix	89
4.14	Financial inclusion and economic growth in developing countries: Dynamic panel GMM model	91
4.15	Marginal effect of financial inclusion on economic growth in developing countries: Dynamic panel GMM model	92
4.16	Financial inclusion and economic growth in developing countries: Dynamic panel GMM model after removing outliers	93
4.17	Financial inclusion and economic growth in developing countries	94

LIST OF FIGURES

Figure		Page
1.1	Number of deposit accounts with the commercial banks per 1,000 adults (2004-2010)	6
1.2	Number of depositors with the commercial banks per 1,000 adults (2004-2010)	7
1.3	Number of borrowers from commercial banks per 1,000 adults (2004-2010)	8
1.4	Number of commercial bank branches per 100,000 adults (2004-2011)	9
1.5	Migrant workers' remittances and financial inclusion in developing countries (2004-2010)	11
1.6	Migrant workers' remittances and financial inclusion in high income countries (2004-2010)	11
1.7	Financial inclusion and financial stability in developing countries (2004-2010)	13
1.8	Financial inclusion and financial stability in high income countries (2004-2010)	14
1.9	Financial inclusion and economic growth in developing countries (2004-2010)	15
1.10	Financial inclusion and economic growth in high income countries (2004-2010)	16
3.1	Research framework	46

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AfDB	African Development Bank
CGAP	Consultative Group to Assist the Poor
FI	Financial Inclusion
GDP	Gross Domestic Product
GMM	Generalized Method of Moments
ICRG	International Country Risk Guide
IFC	International Finance Corporations
IMF	International Monetary Fund
IV	Instrumental Variables
LSDV	Least Square Dummy Variable
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary Least Square
SMEs	Small and Medium sized Enterprises
TO	Trade openness
WDI	World Development Indicators

CHAPTER 1

INTRODUCTION

1.1 Introduction and Background of the Study

Financial sector is the set of institutions, market, and instruments. It also refers to the combination of banking institutions, financial markets, and other related financial intermediaries which includes; pension firms and insurance companies. It encompasses the legal and regulatory framework that supervise the overall transactions and dealings in the financial market (Ang, 2008). That is the Central Bank or Federal Reserve Bank as it is called in some countries like U.S and India. Financial institutions (such as banks and insurance companies) and financial markets including stock markets, bond markets, and derivative markets) have positive and significant impact on economic development, poverty alleviation, and economic stability (Levine 2005). The goal of financial sector development in emerging and developing economies is to achieve higher growth and reduce the level of poverty.

Financial sector development is basically concern to resolve the costs incurred in the financial system. The process of cutting costs of obtaining information, contract enforcement, and performing transactions lead to the emergence of financial contracts, intermediaries and markets. Various evidence shows that financial sector development promotes economic development. It enhance economic growth via capital accumulation and technological progress through boosting savings rate, providing information about investment, capital allocation optimization, mobilizing and pooling savings, and promoting and facilitating foreign capital inflows (Department for International Development, 2004). Financial development is a broad concept that contains other sub-components, like financial depth, financial efficiency, financial stability, and financial access.

Financial depth measures the strength of the financial sector in relation to the economy, it refers to the size of the banks, other financial institutions, as well as financial markets in relation to the overall economic productivity. The main indicator that is mainly used in the literature to capture financial depth is domestic and private credits to private sector relative to GDP. Private credit to GDP mainly differ among the countries, and it is highly correlate with the income level. For example, in high income countries the level of private credit to GDP is 103%, higher than 4 times the average ratio of low income countries. According to this indicator, countries with deep financial systems mostly from Europe; Canada, Australia, and South Africa ranked among those in the highest quartile in relation to private credit to GDP ratio. China's quartile is also considered highest more than other emerging markets like; Russia, Brazil, and India. Financial depth measures by private credit to GDP, believed to have strong link with the long-run economic growth and poverty reduction. For example, the yearly average of private credit across countries was 39%, and its corresponding standard deviation is 36%. The average during 1980-2010 of private credit of financial institutions was less than 10% in Angola, Cambodia, and Yemen, whereas it

is more than 85% of GDP in Austria, China, and the United Kingdom (Global financial report, 2016). This highlights the wide margin variation of financial system depth among high financially developed economies and those in the low level segments.

Financial efficiency refers to the amount of revenue incurred by the firms due to investing a specific amount of financial resources in a given venture. It also means how sound a dollar invested in every alternate generates revenues to the firm. Financial efficiency measures the ability of the organization's to transform its financial resources into its mission related undertakings. It is highly desirable in all organizations irrespective of the mission and nature of the organization. It also measures the intensity by which a business applied its assets to obtain gross revenues and the efficiency of purchasing, producing, marketing, and financing decisions (Zala, 2010). Some of the measures of financial efficiency includes; net interest margin (NIM) that measures the difference between the interest income obtained by banks and other financial institutions and the amount of interest they paid out to their lenders compared to the amount of interest assets earned. Efficiency of the financial system could be one of the determining factor to evaluate the overall performance of the financial system. Financial efficiency also measures how well an organization is able to manage different tradeoffs which includes; risk and return, and liquidity and profitability in its financial resources. The level at which an organization is capable of managing its financial resources, and its ability to generate high returns determine its strength which shows the degree of its financial efficiency.

Financial stability refers to the situation in which the financial system which comprised of the main financial markets and financial institutions are able to resist internal or external economic shocks and it's fit to achieve its primary functions. These includes among others; financial funds intermediation, risk management, and sustainable payment arrangements. Financial stability is considered as the terms of the financial system's capacity: a) to facilitate an efficient allocation of resources both intertemporal and spatial and other economic processes which includes; wealth accumulation, economic growth, and eventually social affluence; b) to access price, allot, and manage risks; and c) to maintain its stability to perform these main functions and manage even the external shocks or build up of disparities basically through self-corrective tools (Schinasi, 2004). He also stressed that, financial system is considered stable if it is able to promote economic performance in various magnitudes, while unstable financial system is the one that weakens economic performance. Therefore, no matter how the financial system is stable if it fails to enhance economic performance, it will not be regarded as stable. Instability could be overcome by the authorities by redefining the market rules for effective performance of the financial system.

Financial access refers to the ability of individuals and firms to obtain formal services timely without any obstructions. Financial inclusion could be a process of guaranteeing access to formal financial services at reasonable time and sufficient credit to both vulnerable portion which include low income groups and weaker segments at reasonable costs, it basically signifies access to bank accounts, insurance, reasonable

credits, and sound payment system (Khan, 2011). Some segments of the population were excluded from formal financial services involuntarily as a result of market imperfections/failures, while others were deliberately excluded themselves due to their personal reasons (beliefs, norms and traditions). The policy frameworks for financial inclusion focus more on the former because it's a market distortions that excluded them from accessing formal financial services, such as non-proximity or totally lack of banking branches more especially in the rural areas, excessive costs of opening, operating and maintaining accounts, lack of suitable financial products for their needs, etc. Financial inclusion is one of the main challenges of financial policy makers in the world because the global financial losses incurred from the excluded segments are of great concern nowadays. The main aim of financial inclusion is to incorporate the unbanked segment of the population into formal financial system so as to get access to financial services; the outcome will really enhance economic activities by pooling resources from the surplus economic sector to the deficit sector (financial intermediation) and hence improve the level of investment in the economy.

Based on 2014 financial inclusion report of the World Bank, the Group President Jim Yong Kim said *"Whether you are a public sector financial regulator or a private sector bank, it is in your interest to get everyone access to financial services. This is good for the world and will help us end poverty"*. Financial inclusion perceive to be a mechanism through which the obstructions to formal financial services could be eliminated, and resolve the inaccessibility of some segments of the population such as poor and disadvantaged for getting into formal financial services, i.e. loans, insurance, payments, and deposits anytime they needed (Carbo, et al. 2007; Conroy, 2005; Mohan, 2006; Rangarajan Committee, 2008). Poverty is not only about low income it also encompassed lack of numerous abilities which include security and aptitude to partake in economic and political systems (Corbridge, 2002). This means even if household have sufficient income but excluded from formal financial sector they will be considered poor in the society.

The idea of providing inclusive financial system is not only the aim of integrating numerous excluded poor into the formal financial system, rather it also challenge the mainstream financial institutions to reach the unbanked portion of the economy (Beck et al. 2004). Every one out of two people in the world do not have access to formal savings accounts, insurance, loans, and other financial services. Global financial inclusion data base, 2012 (Global index, 2012) shows that less than a quarter of global adults possess an account in the formal financial institutions, and most of them uses informal methods to save, and their burrowing is mainly from family, friends and other traditional techniques. In the UK for example, three dimension of financial inclusion exist such as; access to banking services, access to loans and access to face to face financial advices. Financial inclusion could also be seeing as the mechanisms through which all members of the society as a whole and vulnerable in particular have access to formal financial services at reasonable costs in an impartial and clear approach by conventional institutional players. This entails the wipeout of all impediments to the poor and disadvantaged segments of the population in accessing formal financial services globally which if carefully and systematically operated could lead to create an avenue of reducing income inequalities, create more jobs, reduce poverty and stimulate sustainable economic growth. Access to formal financial loans can encourage self-

employment thereby reduce the level of unemployment and underemployment (Menon and Rodgers, 2011).

Increasing theoretical and empirical proof advocates that financial systems that deal with low-income segments enhance pro-poor growth (Bankable frontier associates, 2009), which means achieving inclusive growth is among the best strategies to fight poverty. When firms and individuals are excluded from using formal financial services, they will only depend on personal wealth to provide their financial desires, which is saving for the future, financing their education, taking the benefit of business prospects and thereby faced with systemic or idiosyncratic shocks (Ayyagari et al. 2008). According to financial sector deepening trust (2009), the figure of adults excluded from formal financial services in many economies is greater than the adult's population living below poverty line of \$2 per day. It is estimated that a quarter of Europeans do not possess credit card (27%), about a third don't have access to formal financial credits (34%) and virtually half found it hard to get mortgage finance (47%), though with wide cross-country differences (Eurobarometer, 2010). A study conducted in Mexico City based on survey shows that, the main reason for being financially excluded among the respondents is high minimum balance to maintain bank account as well as dearth of income not location as mainly believed (Caskey et al. 2006).

For example, it is documented that 25% of poor households in Asia have access to formal financial services, while individual economies in Africa hardly exhibit same (Torre et al. 2007). In Africa only 23% of adults possess an account at formal financial sector, though even within the African sub-region there is a variation in terms of account penetration, while in Southern Africa 42% have access, in Central Africa is 7%, and 95% of adults in Central Africa and Congo don't have access to formal financial services. In North Africa, 23% of adults have account in the formal financial institutions, example 39% in Morocco and 10% in Egypt (Demirguc-Kunt and Klapper, 2013). Africa is among the regions with the highest level of financial exclusion in developing countries as majority of the populace are not into mainstream financial dealings. For example, the latest proof of the surveys of 47,745 firms in 99 economies globally indicated that SMEs are the main provider of jobs across the economies; it provides 66% of the employment market of developing countries. Equally, firms in Africa do not have access to formal financial loans when compared to other developing countries irrespective of their magnitude, the restrictions is more prevalent among small and medium sized enterprises (SMEs), while other sources of finances remain stagnant (Demirguc-Kunt and Klapper, 2013). There are more than 50 million micro, small and medium businesses in Africa (ADB, 2011), but 69% were informally operated.

The SMEs sector contributes 58% of Africa's employment and 33% of the continent's GDP thereby become paramount for socio-economic growth of the continent (Ayyagari et al. 2011). One of the determinants of firm growth is the access to loans more especially for small firms, (Beck et al. 2005), and in the early stage of the new business formation (Klapper et al. 2006). The International Finance Corporations (IFC) enterprise survey (2011) found that on average, one of every two enterprises in Africa do not have access to formal loan or lacks suitable financial product for the

firms' innovation and growth (CGAP, 2011). Only 29% of formal firms have access to loan, line of credit or overdraft in sub-Saharan Africa where the problem is more severe which deter the economic sub-sector to contribute for employment generation and economic growth (Stein et al. 2013). In Sub-Saharan Africa, financial development is constrained by inadequate financial products and financial innovation, manifest fragmentation of market, high interest rates and mainly informal financial dealings (Atindehou et al. 2005; Ncube, 2007). Based on assessment of micro credit in India, Banerjee et al. (2010) claimed that access to microcredit results to higher investment and business robustness, improve the quantity of early stage businesses, and enhance the existing ventures. Access to formal credits by SMEs improves the performance of the economy considering its influence on generating employment, poverty reduction and hence reduce income inequality.

Even though some empirical studies argued that there is negative correlation between poverty, inequality and formal financial services, see among others; Burgess and Pande (2005), Clarke, et al. (2006), Beck et al. (2007), Jeanneney and Kpodar (2011), however there is a positive correlation between financial development and economic growth as empirically tested by the following studies Abu-Bader and Abu-Qarn (2008); Yang and Yi (2008); Pal (2011); Bittencourt (2012). It also stressed that more access to formal financial services has the potential to enhance economic efficiency and equity (Conroy, 2005). Total number of global savings account is more than the world population (Aguirre, 2008), but still half of the world's adults population i.e. 2.5 billion people are excluded from formal financial services (Banco do Nordeste do Brasil, 2010).

Figure 1.1 shows the trend of number of deposit accounts with the commercial banks per 1,000 adults among developing countries. When this indicator is used as a measure of financial inclusion, the level of financial inclusion is very low in most of the countries. For example, looking at the Algeria, Bangladesh, and Ghana the level of financial inclusion is extremely low. Though, some countries like Costa Rica, Malaysia, and Turkey shows a high level of financial inclusion, but averagely it shows the level of deposit account per 1,000 adults in these countries is very low. This highlight the degree through which developing countries are left behind in terms of the access and uses of formal financial services.

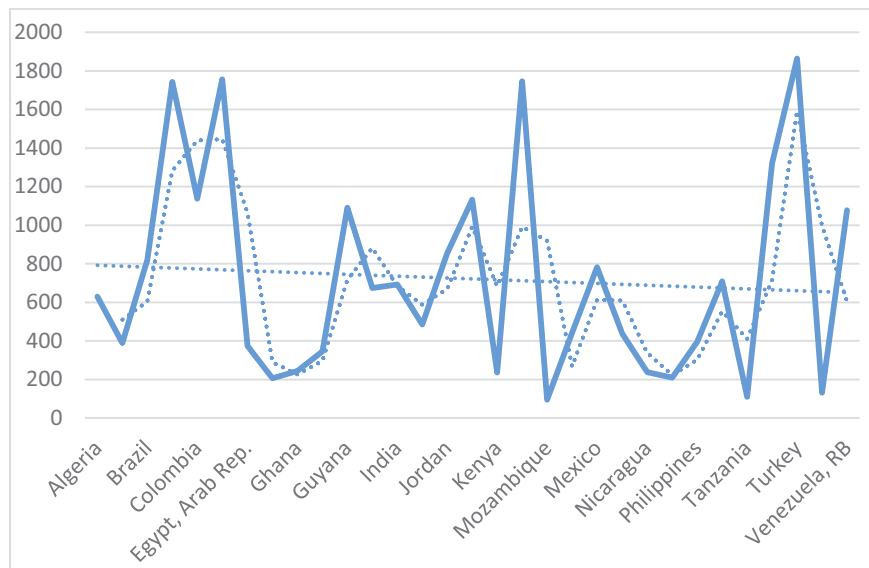


Figure 1.1 Number of deposit accounts with the commercial banks per 1,000 adults (2004-2010)

Source: Author's calculation based G-20 financial inclusion indicators, World Bank (2015)

Based on figure 1.2 also, number of depositors with the commercial banks per 1,000 adults is used as an indicator of financial inclusion in developing countries. The trend also shows that, for most of the countries the level of financial inclusion is low. For example, countries like Congo, Ethiopia, Gabon, and Paraguay shows lower level of number of depositors with the commercial banks out of every 1,000 adults. Despite, the level of financial inclusion in some countries is a bit higher, but majority of the adults' population are left out in terms of using formal financial services as shown by the original data across the countries from 2004-2010.

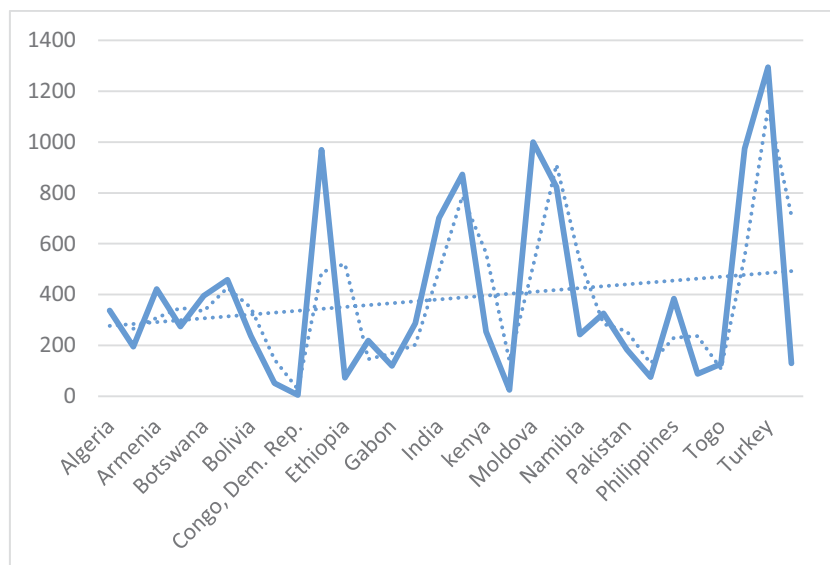


Figure 1.2 Number of depositors with the commercial banks per 1,000 adults (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators, World Bank (2015).

Inaccessibility of the required credits leads in failure to finance profitable businesses, resulted to misallocation of resources and negatively affects growth and poverty alleviation strategies. Stringent regulations, weak telecommunications system and dilapidated infrastructures hinder geographical expansion of bank branches (CGAP, 2009). Figure 1.3 shows the trend of borrowing from commercial banks out of every 1,000 adults in selected developing countries. The graph based on this indicator also shows that, borrowing behaviour from formal financial institutions is very low in developing countries. Though, some countries like Turkey, Malaysia, and Thailand exhibit high level of borrowing by the adult segment from the formal banks, but majority of the countries exhibit very poor level of borrowing among their adults' population. Hence, it shows that majority of the adult population are not borrowing from formal financial institutions due to numerous problems encountered that made some individuals and firms to rely on informal form of borrowings.

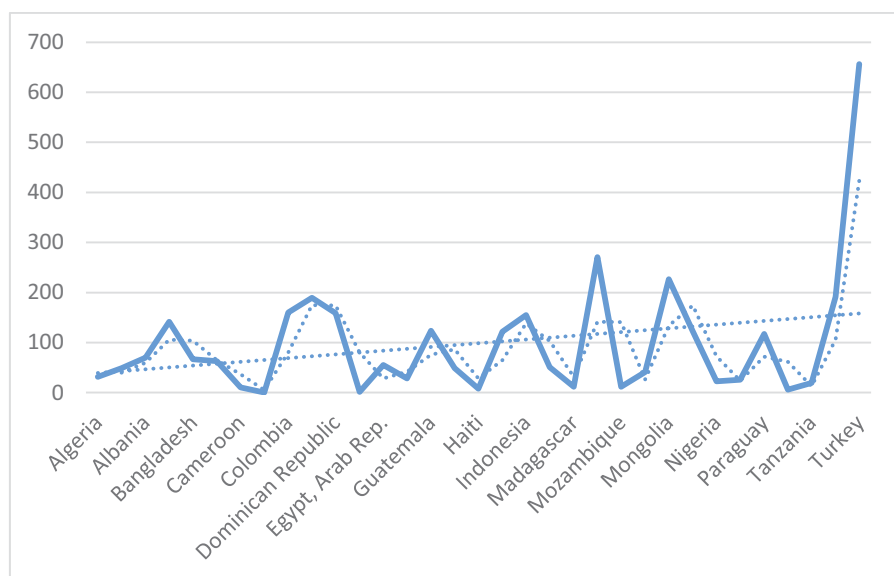


Figure 1.3 Number of borrowers from commercial banks per 1,000 adults (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators, World Bank (2015)

Available statistics from World Development Report (2014) shows that, 48% of the population in the high income countries saved in the formal financial institutions, and only 18% and 11% saved in the middle and low income countries respectively. The data also indicated that, 14% of the individuals saved using other methods in high income countries, 13% in middle income countries and 18% in low income countries, the percentage of people that do not save are 42%, 69% and 70% for high, middle, and low income countries respectively.

The level of financial exclusion is very high in Africa when compared to other developing countries from Asia, and Latin America. This is because the continent of Africa is far left behind in terms of infrastructure, good institutions, and other regulatory frameworks that encourage both economic agents and financial institutions to effectively deal with each party. Demircuc-Kunt and Klapper (2013) for example argues that, the rate of obtaining loans in Africa is high compared to global indices, 44% of adults in Africa borrowed money in the past 12 months compared to global indices of 34%, however there is a variation of borrowing in Africa as 58% of adults borrowed in East Africa compared to 34% in North Africa. Access to capital was found to have critical impacts for firm's growth as confirmed by various countries studies and randomized field experiments (Banerjee and Duflo, 2008; Mel et al. 2008). Not only access to credits matters, access to savings is also essential because it stimulates investment more specifically among women entrepreneurs (Dupas and Robinson, 2009).

Access to formal financial services is essential to both individuals, firms and economy at large because lack of credits leads to inefficiency of capital allocation and deepen income inequality by hindering the distribution of capital to poor segments that may have investment potentials that may generate maximum expected returns (Galor and Zeira, 1993; Aghion and Bolton, 1997; Galor and Moav, 2004; Beck et al. 2007; Lopez and Serven, 2009). For example, 39% of borrowing in Africa is from informal sector, in Central Africa for example, only 3% of the adults obtained a loan from formal financial institutions in the past year. South Africa is the country with high initiation of new loans from formal financial sector of 8% adults borrowed, adults in East Africa use store credit (13%) or to borrow from private informal lender (7%).

For example, Africa as the region with very low level of financial inclusion among the developing regions, the available statistics reveals that only 3% of adults have credit card in which adults in Southern Africa have the highest percentage of 7% (African Development Bank, 2013). ADB, (2013) also claimed that, globally 14% of account holders and 7% of adults receive remittances through their accounts. In Africa however, 41% of account holders receive remittances via their accounts. Receiving remittances from family members living abroad is more spread in Southern Africa and fragile states within Africa. In Somalia for example, 66% of account holders use their account to receive remittances, 55% in Zimbabwe, and 45% in Sierra Leone. Increase in the accessibility of loans and banking services to the populace such as savings accounts, small scale loans, and remittances can incorporate the higher percentage of financially excluded segment to have access to formal financial services (IMF, 2005).

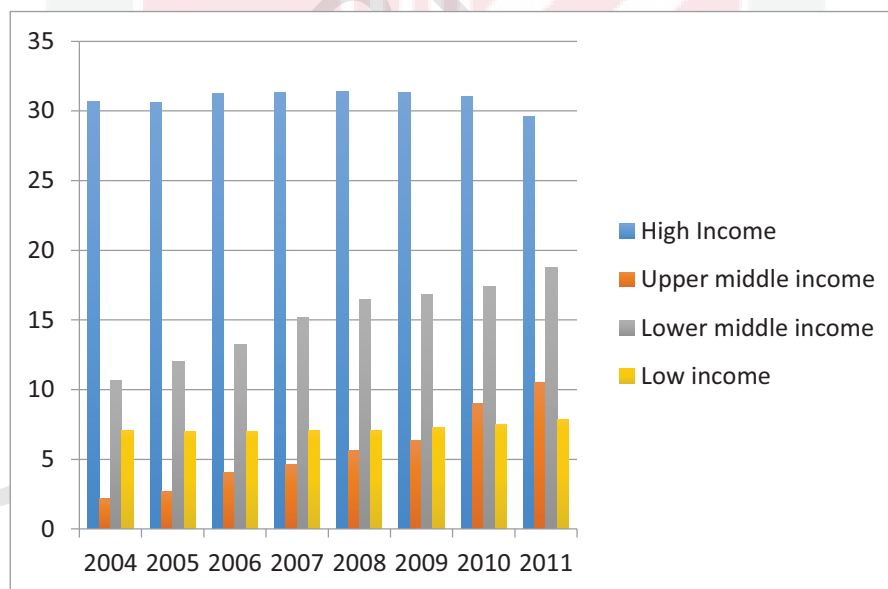


Figure 1.4 Number of commercial bank branches per 100,000 adults (2004-2011)

Source: Author's calculation based on G-20 financial inclusion, World Bank (2015)

Figure 1.4 below above highlights the dimension of financial inclusion as proxied by number of commercial bank branches per 100,000 adults among different income levels in the world. As expected high income countries are dominantly financially inclusive when compared with the other low income levels. But surprisingly, lower middle income has more bank branch networks than upper middle income, low income countries are the least financially included as a priori expected.

1.1.1 Financial inclusion and remittances

There are various factors that determines financial inclusion, migrant workers remittances that are sent to developing countries is among the factors that promote financial inclusion in developing countries, because the inflow may influence unbanked segment to be included into mainstream financial system as some transfers are through formal mediums. Remittances can enhance economic growth in developing countries by improving financial sector deepening more especially in the financially less developed economies (Giuliano and Ruiz-Arranz, 2009).

Aggarwal et al. (2006) reveals that migrants' financial remittances can lead to financial sector development in the less developed economies as it promote total volume of deposits and loans granted by the banking institutions. Figure 1.5 shows the trend of the relationship between migrant workers remittances and financial inclusion in developing countries. The trend shows that; in almost all the countries, increase in migrant workers remittances shows corresponding increase in the level of financial inclusion. This graph therefore shows the existence of positive relationship between the two key variables in most of the sample countries. However, in case of high income countries the relationship is found to be vague, because the significance of migrant workers remittances on financial inclusion in these countries is unimportant as indicated that their level of financial inclusion is high and migrant workers remittances shows a flat trend. This might be due to the fact that most of their labour force do not migrate for greener pastures in other countries, due to the stability of their economies.

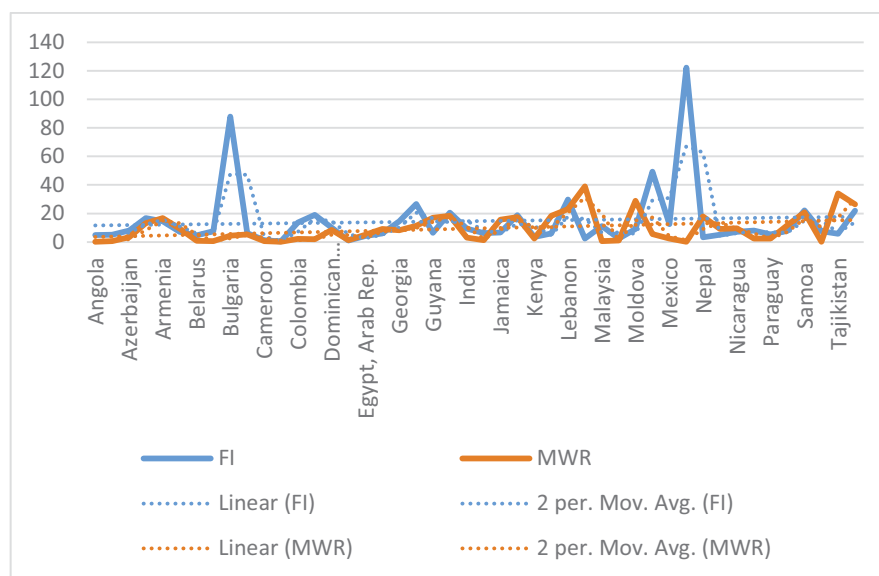


Figure 1.5 Migrant workers' remittances and financial inclusion in developing countries (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators and world development indicators (WDI), World Bank (2015)

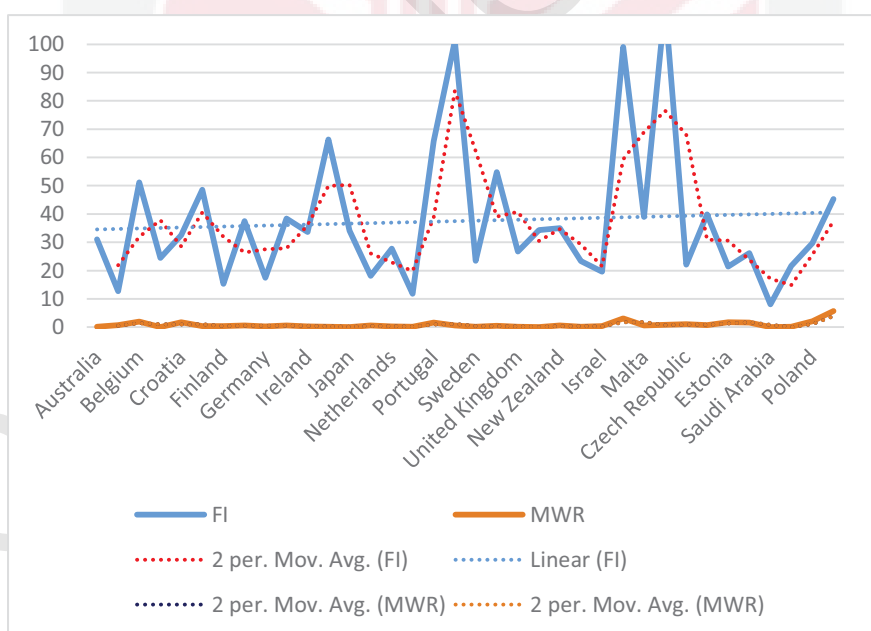


Figure 1.6 Migrant workers' remittances and financial inclusion in high income countries (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators and world development indicators (WDI), World Bank (2015)

1.1.2 Financial inclusion and financial stability

Financial system is stable when it is able to facilitate not hindering the economic performance, and also resolving the imbalances of the financial system that emanate within or due to antagonistic and unexpected actions (Schinasi, 2005). Stable financial system must be flexible to shocks and sustained capability of performing primary functions of financial intermediation in a real economy. Financial stability could also refers to a situation whereby financial system which comprises of financial intermediaries, markets and market structures are able to absorb shocks and separating financial disequilibrium, this will reduce the possibilities of interruptions in the financial intermediation procedure that may negatively affect the allocation of savings to viable investment ventures (European Central Bank, 2012). They went further to highlight three conditions for stable financial system which are;

- a) Financial system should be able to allocate resources from savers to investors appropriately
- b) The risks in the system should be reasonably and accurately priced and should be moderately managed
- c) Financial system should comfortably be able to absorb financial and real unexpected economic shocks.

Financial system stability is therefore the ability of the financial system to resist any internal or external shocks, and also to perform its primary function of financial intermediation like arrangement of payments and proper risk management. Greater financial inclusion is a path of achieving high financial stability, this is because financial inclusion is a sub-set of financial development and without stability in the financial system it will be difficult to achieve financial development in an economy. Hannig and Jansen (2010), claimed that financial instability occurs when shocks to the system dramatically worsen information problems, so that financial intermediation between savings and productive investment opportunities breaks down. This definition is associated with one side of the coin, it is lopsided towards information asymmetry that transmits to financial instability through the vulnerability of the financial institutions' balance sheet. Shocks to the system can also directly worsen the balance sheet and currency stability to engender financial instability.

Financial instability maybe caused by information asymmetry, i.e. unequal sharing of information between the financial institutions and customers that may result to adverse selection and moral hazard problems as propose by Mishkin (1991). Despite the policy objectives of most central banks and global financial regulators in improving access to formal financial services to the less privileged and poor in the society, prudential guidelines and proper monitoring to ensure the balance between financial inclusion and financial stability is paramount, and to ensure that the objectives to provide higher access to financial services are not risks or fraud related (Khan, 2011). Including more segments and neglecting the consequences of the problems that may arise might affect the entire financial system and throw it into instability. Greater financial inclusion can enhance the effectiveness and stability of transferring savings to investment and as such there will be more savings deposits in the banking sector, as a result the

economy's banking system will not rely more on foreign capital and its stability will remain firm and strong.

Sound and stable financial system is the one that provide easy flow of loanable funds to both firms and individuals at reasonable time and affordable costs. Exclusion of various firms (more especially SMEs) and individuals from accessing formal financial credits jeopardizes the economy as it result in destroying various business ideas and increase the level of hunger, poverty and unemployment. This point is buttressed by the study of Karlan and Zinman (2010), in which they used consumer finance in South Africa and found significant and positive relationship between access to finance and consumption, economic freedom as well as mental health and attitude. This highlights the positive influence of getting formal credits on the improvement of the economy as formal credits if efficiently utilized will definitely boost the economic activities and hence lead to greater financial development and economic growth. Financial inclusion influenced the liquidity of the banking sector and therefore improves investment opportunities because there are adequate available loanable funds to borrow from financial institutions since large portion of the population were able to formally save. The relationship between financial inclusion and financial stability in developing countries is positive as shown in figures 1.7;

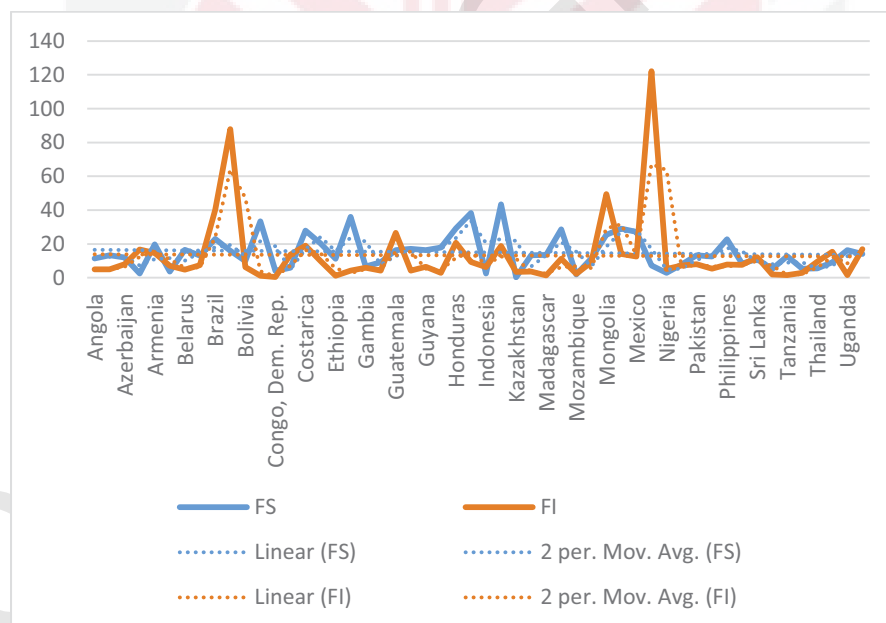


Figure 1.7 Financial inclusion and financial stability in developing countries (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators and world development indicators (WDI), World Bank (2015)

Although, the changes might not be of equal magnitude for all the countries, but on the average it shows that an increase in the level of access and uses of formal financial services stimulates the level of financial stability in the sample countries. Therefore, the nexus between financial inclusion and financial stability is positive among the sample countries. However, comparing this relationship with what is obtained in the high income countries it shows a different result. The trend shows that, increase in having access and uses of formal financial services in high income countries, reduces the level of financial stability among high income countries. The level of financial stability increases but at a decreasing rate for the average of the countries in the sample. Hence, the nexus between the two key variables is negative among high income countries as indicated by figure 1.8.

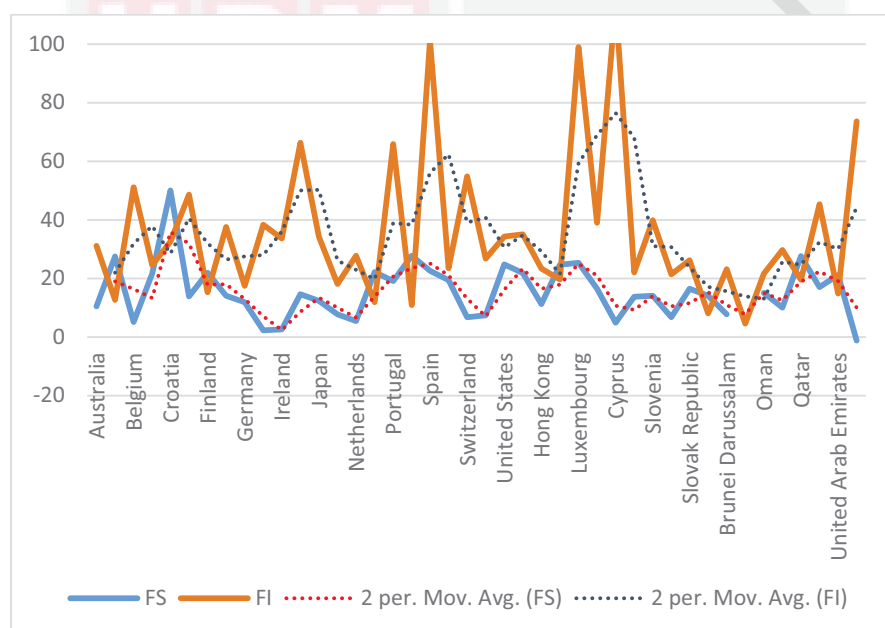


Figure 1.8 Financial inclusion and financial stability in high income countries (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators and world development indicators (WDI), World Bank (2015)

1.1.3 Financial inclusion and economic growth

Access to formal financial services is believed to improve banking liquidity which increases investable funds and ultimately make more loanable funds available for both individuals and firms. Efficient financial sector is a prerequisite condition for achieving sustainable economic growth. Accessing financial services regularly with ease will stimulate savings, accelerate investments, increase in the reduction of poverty and achieve high and sustainable growth by promoting social cohesion in the society. Lack of access to finance negatively affects growth and poverty reduction, thereby

make it difficult for the poor people to mobilise savings in a formal way and hard to get access to formal loans, and the informal means of savings and loans charged them exorbitantly (Lammermann, 2010). Conroy (2005) argues that more access to formal financial services is expected to promote the efficiency and equity of the economy.

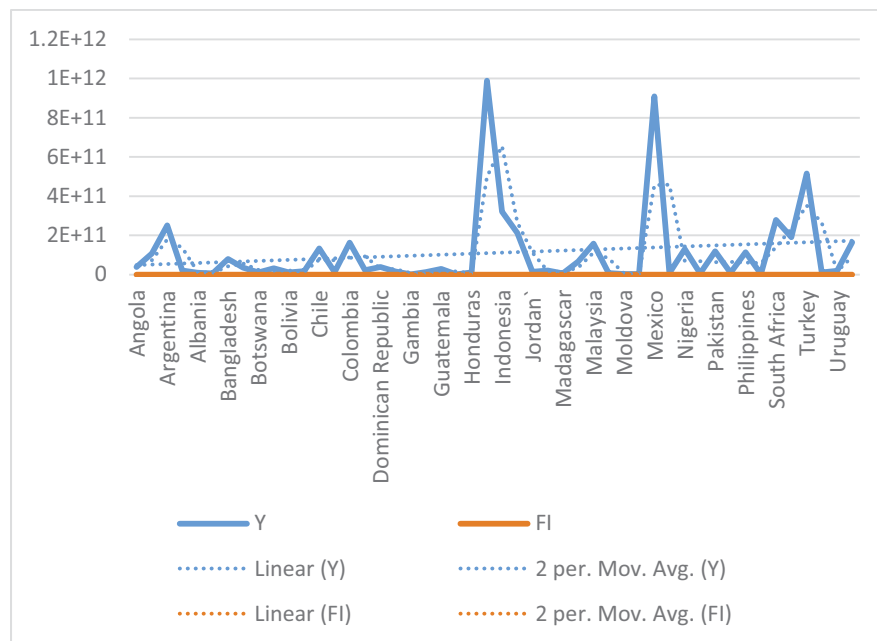


Figure 1.9 Financial inclusion and economic growth in developing countries (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators and world development indicators (WDI), World Bank (2015).

Figure 1.9 depicted the relationship between economic growth and financial inclusion across developing countries, the trend shows that there is no any significant relationship between increase in having access and uses of formal financial services and economic performance in the sample developing countries. Furthermore, same relationship also exist in the case of high income countries as exhibited in figure 1.10.

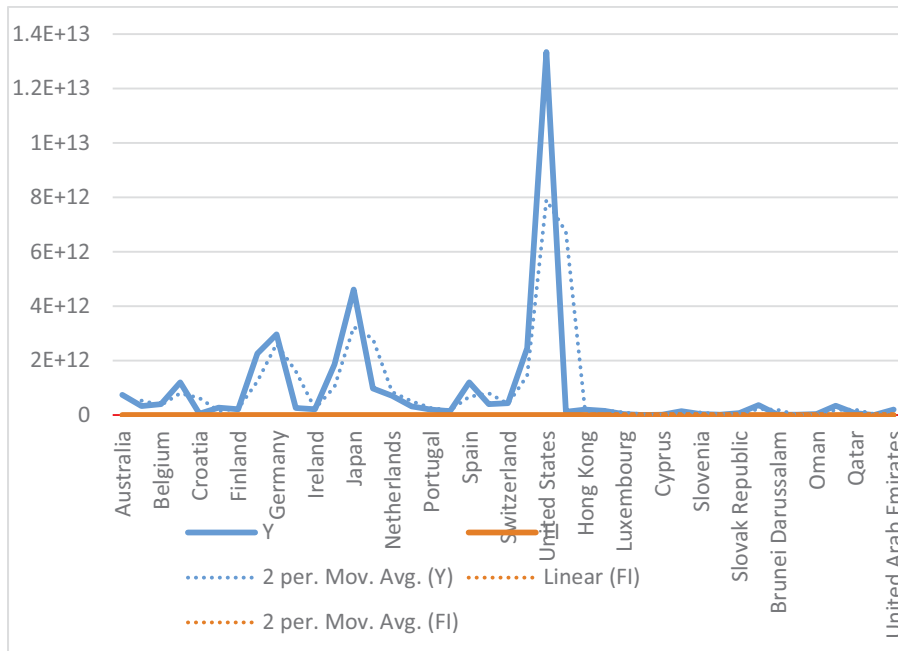


Figure 1.10 Financial inclusion and economic growth in high income countries (2004-2010)

Source: Author's calculation based on G-20 financial inclusion indicators and world development indicators (WDI), World Bank (2015)

1.2 Statement of the Research Problem

Existing empirical studies documented that the links between financial inclusion and economic growth is strongly positive which gave policy makers and global financial institutions the zeal to consider the concept and treat it as a global financial agenda. The level of financial exclusion is much higher in developing countries than developed countries; it creates serious problems of macroeconomic shocks of poverty, widening income inequality, unemployment, hunger, and other socio-economic vices. Without having access to formal financial services both individuals and firms are denied the privilege of using formal savings, loans, deposits, insurance and payments. The vulnerable segment or poor are mostly financially excluded because they cannot afford to open and maintain accounts in the formal banks in some instances even if there is availability of bank branches in their locality.

Some of the factors that influence financial inclusion among others include; high transaction costs, lack of bank branches in some geographical locations, low income, poor infrastructures, and lack of collateral are among the factors that lead to exclusion of individuals. However, for SMEs information asymmetry, lacks of collateral and credit history impede them from accessing formal financial loans or operating formal account with the mainstream financial sector. Number of savings accounts in the world is more than the world population (CGAP Report, 2009), but still half of the global adult's population (2.5 billion people) do not have access to formal financial services.

For example, the rate of savings account uses in high income countries is 48%, it is 18% in middle income countries, while it is only 12% in low income countries (World Development Report, 2014). It is evident that 62% of the 2.5 billion unbanked adults are living in developing countries, and even among the banked population in developing countries more than 800 million are living on less than \$2 per day (Chaia et al. 2009).

Financial inflows sent by the migrant workers to their home countries may likely influence the recipients to open an account and deposit the funds in the formal financial institutions. The relatives and family of the migrant worker may not be financially included, due to probably limited income, poverty, and poor infrastructures that may hinder accessibility to formal financial products. Inflow of remittances into developing countries is presumed to increase financial inclusion because the beneficiaries are expected to deposit or save the funds in the mainstream financial sector, hence increase the level of financial inclusion due to the inflow of remittances into the recipient economies.

The inflow of remittances into developing countries could play a key role in reducing financial exclusion in the developing economies, but some remittances are not invested into the real economic sector because of poverty and insufficient income in most developing countries. The funds are instead used for consumption and acquiring other assets, therefore the financial resources received may not contribute to economic growth and hence do not play its deserving roles to include the excluded segments into formal financial system. Despite the desire to include more people into formal financial system, the costs and risks associated with it cannot be ignored, any shock into the system which will increase information asymmetry that affect financial intermediation between savings and viable investment to collapse is detriment to the financial sector as it will endanger the overall economy (Hannig and Jansen, 2010). Achieving inclusive financial system will be difficult without stability in the financial system, whereas it is challenging to attain financial stability, while large segment of the population are financially underserved (Khan, 2011), without achieving high level of financial inclusion, financial stability could still be an illusion.

Achieving higher level of financial inclusion without proper monitoring and supervision from financial institutions and regulators could weaken financial system stability and may lead to financial crisis. Greater financial inclusion may poses serious risks to the financial system because when low-income group were integrated into the mainstream financial system the likelihood of default maybe higher, as the market is highly composed of large number of vulnerable customers with insufficient balances and little volume of transactions which have a serious consequences on the banking liquidity. Countries with high level of financial exclusion are exposes to threat on financial instability, as both individual and firms will rely on informal sector for their financial dealings and informal sector can impose more risks considering its high level of uncertainty.

Financial inclusion is expected to improve the level of economic performance in both developed and developing countries, this is related to its functions of improving banking liquidity which in the long-run influences the overall economic growth because more funds are available for initiating new and expanding existing investments. Contrary to the general believe, sometimes financial inclusion do not enhance economic growth for both developed and developing countries, and the contribution may sometimes become very mild or ambiguous. Lack of access to finance negatively affects growth and poverty reduction thereby make it difficult for the poor people to mobilise savings in a formal way and hard to get access to formal loans, and the informal means of savings and loans charged them exorbitantly (Lammermann, 2010).

1.3 Research Questions

The research questions that objectives of this study will answer give an insight of what will be the aims and objectives of the research and highlight the ideas that the study is trying to find out. The research questions were as follows;

- a) Do migrant workers' remittances have any effects on financial inclusion in developing countries?
- b) Does stable financial system creates more inclusive financial system in developing countries?
- c) What will be the impacts of financial inclusion on economic growth in developing countries?

1.4 General and specific objectives of the study

The main objective of the study is to assess the impacts of financial inclusion in sustaining financial stability and economic growth in developing countries. While, the specific objectives were as follows;

- a) To examine the effect of migrant workers' remittances on financial inclusion in developing countries
- b) To examine the effect of financial inclusion on financial stability in developing countries
- c) To investigate the impact of financial inclusion on economic growth in developing countries

1.5 Scope and limitations of the study

This research will cover only selected developing countries based on reliable data availability and suitability of the countries in relation to the issue needed to be addressed. One of the justifications for selecting developing countries is because, most of the countries have low level of financial inclusion, and hence the level of financial exclusion remain very high. As mentioned in various literatures majority of adults in

Asia, Africa and some parts of Europe and Latin America are unbanked, this make them vulnerable to unequal distribution of income and unemployment which leads to increase in the level of poverty in developing countries. The main limitation of the study is that it will only focus on the countries with available and reliable data in developing countries thereby make it impossible to cover other countries with no available data, as well as the variables whose data is insufficient or is lacking entirely.

1.6 Significance of the study

This study will numerously add to the existing literatures through different ways; the first contribution of this research is that, most of the studies on financial inclusion used household survey data (micro), this study will used aggregate countries data (macro) to show the impact of financial inclusion in developing countries. Also, on the relationship between financial inclusion and remittances, very few researchers focus on cross-country study presently on the effects of remittances on financial inclusion. For instance, recently Anzoategui et al. (2014), study the impacts of remittances on financial inclusion in El-Salvador using household survey data. This study will fill the literature gap by using secondary data across numerous developing countries. Secondary data have some advantages over primary data sources which includes; time saving, low cost, easy access, answer targeted problem/issue, and provide bases for comparison among others. Secondly, there is little empirical evidence that document the relationship between financial inclusion and financial system stability in wide range of developing countries, as most of the evidences are based on single country study. For example Khan (2011), discussed about the relationship but restricted it on India alone. While, Han and Melecky (2013) used access to deposit as an indicator of financial inclusion, and linked their study with the recent global financial crisis, this study extend its scope and examined the issue in pre, during and post financial crisis. It also adopts number of branches per 100,000 adults to reflect financial inclusion based on the new data set (G-20 financial inclusion indicators Database, World Bank). Also, Morgan and Pontines (2014) based their study on small and medium enterprises lending only, the present study encompass overall financial inclusion in relation to financial stability.

Thirdly, still little studies were conducted on the links between financial inclusion and economic growth in the literature, as most of the studies in this angle are mainly about financial development and economic growth. Therefore this study will add to the existing literatures the roles that access and uses of formal financial services plays on economic growth of the countries under investigation. The present study also used a new dataset for the financial inclusion variable i.e. G-20 financial inclusion indicators, World Bank which is not highly utilised in the literature because of its newness.

From the policy perspectives, the study will be of great importance to policy makers, firms and financial institutions in developing countries and the wider world. Previous attention on financial inclusion from both policy and academic circle targeted at extending institutional credits at the detriment of providing savings, despite the indication of more savings demand by the poor segment (Basu, 2005; Dev, 2006; Mohan, 2006). Therefore this research finding will be a yardstick to various

governments in developing economies to realize the consequences of excluding large segments of the supposed bankable population, which if financially included would improve the deposits, savings, payments and credits in the respective countries' financial sectors.

This research outcome will be used by developing countries to combat the excessive poverty that emancipated their countries as enshrined by the global development institutions as an excellent strategy to reduce poverty by using efficient market based solution of incorporating the excluded segment into formal financial services. Simeon et al. (2008) conducted a study on households in Mexico and found that, reduction in financial exclusion is essential for economic advancement, they claimed that households that possess bank account derive higher degree of consumption, owned higher assets and have more potential to reach high school educational level. In most transition economies, the possibility of holding a bank account or bank card is positively correlated with income, education, and affluent (Beck et al. 2010).

Furthermore, applying different panel data techniques may probably provide different information on these relationships, thus also recommended for future studies.



REFERENCES

- Abida, Z., & Sghaier, I. M. (2014). Remittances, Financial Development and Economic Growth: The Case of North African Countries. *Romanian Economic Journal*, 17(51).

- Abu-Bader, S., & Abu-Qarn, A. S. (2008). Financial development and economic growth: The Egyptian experience. *Journal of Policy Modeling*, 30(5), 887–898.
- Acosta, Pablo A., Emmanuel K. K. Lartey, and Federico Mandelman, 2007, “Remittances, and the Dutch Disease,” Federal Reserve Bank of Atlanta Working Paper No. 2007–08 (Atlanta: Federal Reserve Bank).
- Acosta, P., C. Calderon, P. Fajnzylber, and H. Lopez. (2008). What is the impact of international migrant remittances on poverty and inequality in Latin America? *World Development* 36, no. 1: 89–114.
- Adams, R.H., & Page, J. (2003). International migration, remittances, and poverty in developing countries. Policy Research Working Paper Series 3179, the World Bank.
- Adams, R. (2004). Remittances and poverty in Guatemala. World Bank policy research paper, No. 3418.
- Adams, R. H. (2006). Remittances and poverty in Ghana (Vol. 3838). World Bank Publications.
- Adams Jr, R. H. (2009). The determinants of international remittances in developing countries. *World Development*, 37(1), 93-103.
- Adams Jr, R. H., & Page, J. (2005). Do international migration and remittances reduce poverty in developing countries?. *World development*, 33(10), 1645-1669.
- Adelman I and Taylor JE (1990). “Is Structural Adjustment with a Human Face Possible? The Case of Mexico.” *Journal of Development Studies*. 26(3): 387-407.
- Adu, G., Marbuah, G., & Mensah, J. T. (2013). Financial development and economic growth in Ghana: Does the measure of financial development matter?. *Review of Development Finance*, 3(4), 192-203
- AfBD (2011) “African Development Report.”
- African Development Bank (2013): Financial Inclusion in Africa, African Development Bank Group Publication, ISBN: 978-9938-882-19-3.
- African confederation of co-operative savings and credit associations (2014): Supporting Financial Inclusion using the Co-operative Model of Financial Access. Published by ACCOSCA in March, 2014
- African Institute For Remittances (Air) Project. 2013. Frequently Asked Questions (FAQ) (Revised Version). Available: <http://www.worldbank.org/content/dam/Worldbank/document/Africa/afri-can-institute-for-remittances-september-2013-faq.pdf>

- Aga, G. A., & Martinez Peria, M. S. (2014). International remittances and financial inclusion in Sub-Saharan Africa. *World Bank Policy Research Working Paper*, (6991).
- Agarwal, R., & Horowitz, A. (2002). Are international remittances altruism or insurance: Evidence from Guyana using multiple-migrant households. *World Development*, 30, 2033–2044.
- Aggarwal R, Demirguc-Kunt A and Martinez-Peria M (2006) “Do Workers’ Remittances Promote Financial Development?” *World Bank Policy Research Working Paper* 3957, Washington.
- Aggarwal, R., Demirguc-Kunt, A., & Peria, M. S. M. (2011). Do remittances promote financial development?. *Journal of Development Economics*, 96(2), 255-264.
- Agarwal, R., & Horowitz, A. W. (2002). Are international remittances altruism or insurance? Evidence from Guyana using multiple-migrant households. *World Development*, 30(11), 2033-2044.
- Aghion, Philippe, and Patrick Bolton (1997): A Theory of Trickle-Down Growth and Development. *The Review of Economic Studies* 64, 151-72.
- Aguirre, Ernesto, Denise Dias, and Klaus Prochaska. (2008). “Diagnostic Report on the Legal and Regulatory Environment for Branchless Banking in Colombia.” Washington: CGAP.
- Ahmed, A. D. (2013). Effects of financial liberalization on financial market development and economic performance of the SSA region: An empirical assessment. *Economic Modelling*, 30, 261-273.
- Ahn, S. C; and Schmidt, P. (1995), "Efficient Estimation of Models for Dynamic Panel Data," *Journal of Econometrics*, 68, 29-52.
- Akkoyunlu, Ş., & Siliverstovs, B. (2014). The Role of Remittances for Economic Growth: Evidence for Turkey. In *The Socio-Economic Impact of Migration Flows* (pp. 89-96). Springer International Publishing.
- Alberola E and Salvado R (2006) “Banks, Remittances and Financial Deepening in Receiving Countries: A Model” Documentors de Trabajo No, 0621, Banco de Espana.
- Alfred Hannig and Stefan Jansen (2010): Financial Inclusion and Financial Stability: Current Policy Issues, *Asian Development Bank Institute Working Paper Series* No. 529.
- Allen, F., & Gale, D. (2000). *Comparing financial systems*. MIT press.
- Allen, Franklin and Douglas, Gale (2004). “Comparative financial systems: A discussion”, in S. Bhattacharya, A. Boot and A. V. Thakor (eds.), *Credit*

Intermediation and the Macroeconomy: Models and Perspectives, New York: Oxford University Press, Oxford, 699-770.

- Allen, F., Demirgüç-Kunt, A., Klapper, L. F., & Martinez Peria, M. S. (2012). The foundations of financial inclusion: Understanding ownership and use of formal accounts. *World Bank Policy Research Working Paper*, (6290).
- Allen, F., Carletti, E., Cull, R., Senbet, L., & Valenzuela, P. (2014). The African financial development and financial inclusion gaps. *Journal of African Economies*, 23(5), 614-642.
- Allen, F., Carletti, E., Cull, R., Qian, J., Senbet, L. W., & Valenzuela, P. (2014). Improving access to banking: evidence from Kenya. The World Bank Development Research Group Policy Research Working Paper No. 6593.
- Al-Yousif, Y. K. (2002). Financial development and economic growth: another look at the evidence from developing countries. *Review of Financial Economics*, 11(2), 131-150.
- Amuedo-Dorantes, C., and Pozo, S., (2004), Workers' Remittances and the Real Exchange Rate: A Paradox of Gifts, *World Development*, 32, issue 8, p. 1407-1417.
- Anderson, T. W., & Hsiao, C. (1981). Estimation of dynamic models with error components. *Journal of the American statistical Association*, 76(375), 598-606.
- Andrianaivo, M., & Kpodar, K. (2011). ICT, financial inclusion, and growth evidence from African countries. International Monetary Fund.
- Ang, J. B. (2008). What are the mechanisms linking financial development and economic growth in Malaysia?. *Economic Modelling*, 25(1), 38-53.
- Ang J. B. (2008). A Survey of Recent Developments in The Literature of Finance and Growth, *Journal of Economic Surveys* (2008) 22(3), 536–576.
- Anton, K. I. (2010). The impact of nutritional status of children in Ecuador. *International migration review*, 44, 269–299.
- Anzoategui, D., Demirgüç-Kunt, A., & Pería, M. S. M. (2014). Remittances and financial inclusion: evidence from El Salvador. *World Development*, 54, 338-349.
- Aportela, F. (1999). Effects of financial access on savings by low-income people. MIT Department of Economics Dissertation.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.

- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, 68(1), 29-51.
- Arcand, J.L., Berkes, E., Panizza, U., 2012. Too Much Finance? *IMF Working Paper* 12/161.
- Arora, R. U. (2012). Financial inclusion and human capital in developing Asia: the Australian connection. *Third World Quarterly*, 33(1), 177-197.
- Ashraf, N., Aycinena, C., Martinez, A., & Yang, D. (2010a). Remittances and the problem of control: A field experiment among migrants from El-Salvador. Mimeo: University of Michigan.
- Ashraf, N., Karlan, D., & Yin, W. (2010b). Female empowerment: Further evidence from a commitment savings product in the Philippines. *World Development*, 28(3), 333-344.
- Asli Demirgüç-Kunt and Enrica Detragiache (1998): "Financial Liberalization and Financial Fragility," in Boris Pleskovic and Joseph E. Stiglitz, eds., *Annual World Bank Conference on Development Economics, 1997*. Washington, DC: World Bank, 1998, pp. 303-31.
- Asli Demirgüç-Kunt and Leora Klapper (2013): Financial Inclusion in Africa: A Snapshot, publication of African Development Bank (AfBD).
- Aterido, R., Beck, T., & Iacovone, L. (2013). Access to Finance in Sub-Saharan Africa: Is There a Gender Gap?. *World Development*, 47, 102-120.
- Atindéhou, R.B., J.P. Gueyie and E.K. Amenounve. (2005) "Financial Intermediation and Economic Growth: Evidence from Western Africa," *Applied Financial Economics* 15: 777-790.
- Ayyagari, M., Demirguc-Kunt, A., & Maksimovic, V. (2010). Formal versus informal finance: Evidence from China. *Review of Financial Studies*, 23(8), 3048-3097.
- Ayyagari, M.; Demirguc-Kunt, A. And Maksimovic, V.(2008) "How Important Are Financing Constraints? The Role of Finance in the Business Environment," *World Bank Economic Review*, 22(3), 483-516
- Ayyagari, M., A. Demirgüç-Kunt, and V. Maksimovic. (2011). "Small vs. Young Firms across the World: Contribution to Employment, Job Creation, and Growth." Policy Research Working Paper 5631, World Bank, Washington, D.C.
- Ayyagari, M., Demirgüç-Kunt, A., & Maksimovic, V. (2011). Firm innovation in emerging markets: The role of finance, governance, and competition. *Journal of Financial and Quantitative Analysis*, 46(6), 1545-1580.

- Bailey, W., Huang, W., & Yang, Z. (2011). Bank loans with Chinese characteristics: Some evidence on inside debt in a state-controlled banking system. *Journal of Financial and Quantitative Analysis*, 46(6), 1795–1830.
- Baltagi, B.H., 2005. *Econometric Analysis of Panel Data*. (John Wiley, Chichester).
- Baltagi, B.H., Demetriades, P.O. & Law, S.H. (2009). Financial development and openness: Evidence from panel data. *Journal of Development Economics* 89, 285-296.
- Banco do Nordeste do Brasil. 2010. “Background” (www.bnb.gov.br/Content/aplicacao/O_Banco/Historico_eng/gerados/hist_principal.asp)
- Bankable Frontier Associates. (2009). “Key Issues in Financial Inclusion Measurement for Regulators: Survey Design and Implementation.” Commissioned draft working paper. Bangkok: Alliance for Financial Inclusion.
- Banerjee, A. and Newman, A., (1993). Occupational Choice and the Process of Development. *Journal of Political Economy* 101, 274-98.
- Banerjee, Abhijit and Esther Duflo. (2008). Do Firms Want to Borrow More? Testing Credit Constraints Using a Directed Lending Program. MIT mimeo
- Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. (2010). The miracle of microfinance? Evidence from a randomized evaluation. MIT bureau for research and economic analysis of development working paper 278.
- Barajas, A., Cosimano, T., Fullenkamp, C., Gapen, M., & Montiel, P. (2008). Macroeconomic consequences of remittances. International Monetary Fund.
- Barajas, A., Chami, R., Fullenkamp, C., Gapen, M., & Montiel, P. (2010). Do workers’ remittances promote economic growth? *IMF working paper WP/09/153*.
- Basu, P. (2005). A Financial System for India's Poor. *Economic and Political Weekly*, 4008-4012.
- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the Sources of Growth. *Journal of financial economics*, 58(1), 261-300.
- Beck, Thorsten, Asli Demirguc-Kunt, and Vojislav Maksimovic. (2004). “Bank Competition and access to Finance: International Evidence.” *Journal of Money, Credit, and Banking* 36, no. 3 (part 2): 627–48.
- Beck, T. & Levine, R. (2004). Stock markets, banks and growth: Panel evidence. *Journal of Banking and Finance* 28,423-442.

- Beck, Thorsten, Asli Demirguc-Kunt, and Vojislav Maksimovic. (2005). Financial and Legal Constraints to Firm Growth: Does Firm Size Matter? *Journal of Finance* 60, 137-177.
- Beck, T., Demirguc-Kunt, A., & Peria, M. (2005). Reaching out: Access to and use of Banking Services across Countries. *World Bank Policy Research Working Paper* 3754.
- Beck, T., Demirguc-Kunt, A., Martinez Peria, M.S., (2006). Banking services for everyone? Barriers to bank access around the world. Unpublished working paper. The World Bank.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality, and the poor. *Journal of Economic Growth*, 12(1), 27–49.
- Beck, T., Demirguc-Kunt, A., & Martinez Peria, M. S. (2007). Reaching out: Access to and use of banking services across countries. *Journal of Financial Economics*, 85(1), 234–266.
- Beck, T., & Honohan, P. (2008). *Finance for all?: Policies and pitfalls in expanding access* (Vol. 41792). World Bank Publications.
- Beck, T., Demirgüç-Kunt, A., & Peria, M. S. M. (2008). Banking services for everyone? Barriers to bank access and use around the world. *The World Bank Economic Review*.
- Beck, T., Demirgüç-Kunt, A. and Honohan, P.(2009) “Access to Financial Services: Measurement, Impact, and Policies,” *World Bank Research Observer*, 24(1), 119-145
- Beck, T., Demirguc-Kunt, A. & Peria, M. (2010). Banking Services for Everyone? Barriers to Bank Access and Use around the World. *World Bank Policy Research Working Paper*, 4079, World Bank, Washington, DC.
- Beck, T., & Brown, M. (2011). Which households use banks? Evidence from the transition economies.
- Beck, T., A. Demirgüç-Kunt, R. Levine, M. Cihak, and E. H.B. Feyen. (2013). ‘A New Database on Financial Development and Structure’. (Updated 2013). *World Bank Economic Review* 14, 597-605.
- Beck, T., Buyukkarabacak, B., Rioja, F. K., & Valev, N. T. (2012). Who gets the credit? And does it matter? Household vs. firm lending across countries. *The BE Journal of Macroeconomics*, 12
- Beck, T., Lu, L., & Yang, R. (2013). Finance and Growth for Microenterprises: Evidence from Rural China. *European Banking Center Discussion Paper*, (2013-010).

- Beck, T., Demirguc-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & Finance*, 37(2), 433-447.
- Beck, T., Lin, C., & Ma, Y. (2014). Why Do Firms Evade Taxes? The Role of Information Sharing and Financial Sector Outreach. *The Journal of Finance*, 69(2), 763-817.
- Beck, T., Degryse, H., & Kneer, C. (2014). Is more finance better? Disentangling intermediation and size effects of financial systems. *Journal of Financial Stability*, 10, 50-64.
- Bekaert, G., Harvey, C. R., & Lundblad, C. (2005). Does financial liberalization spur growth?. *Journal of financial Economics*, 77(1), 3-55.
- Bencivenga, V. and B. Smith, "Financial Intermediation and Endogenous Growth," *Review of Economic Studies* 58 (1991):195-209.
- Bencivenga, V., B. Smith and R. Starr. (1995) "Transaction Costs, Technological Choice, and Endogenous Growth," *Journal of Economic Theory* 67:153-77.
- Berger, A.N., Udell, G.F., (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance* 22, 613-673.
- Bergheim, S. (2005). "Human Capital is the Key to Growth: Success Stories and the Policies for 2020." In *Current Issues: Global Growth Centres*, edited by S. Schneider, 1-20. Frankfurt: Deutsche Bank Research.
- Bettin, G., Lucchetti, R. and Zazzaro, A. (2012). Endogeneity and sample selection in a model for remittances. *Journal of Development Economics*, 99 (2), 370-384.
- Bettin, G., & Zazzaro, A. (2012). Remittances and financial development: substitutes or complements in economic growth? *Bulletin of Economic Research*, 64(4), 509-536.
- Bittencourt, M. (2012). Financial development and economic growth in Latin America: Is Schumpeter right? *Journal of Policy Modeling*, 34(3), 341-355.
- Bhanot, D., Bapat, V., & Bera, S. (2012). Studying financial inclusion in north- east India. *International Journal of Bank Marketing*, 30(6), 465-484.
- Bhowmik, S. K., & Saha, D. (2013). Financial Inclusion of the Marginalised: Street Vendors in the Urban Economy. Springer Science & Business.
- Bjuggren, P.-O., J. Dzansi, and G. Shukur. 2010. Remittances and investment. Working Paper Series no. 216, CESIS Electronic.

- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics*, 87(1), 115-143.
- Boehme, R. D., Danielsen, B. R., Kumar, P., & Sorescu, S. M. (2009). Idiosyncratic risk and the cross-section of stock returns: Merton (1987) meets Miller (1977). *Journal of Financial Markets*, 12(3), 438-468.
- Boyd, J. and Prescott, E., (1986). Financial Intermediary-coalitions. *Journal of Economic Theory* 38, 211-3
- Brambor, T., Clark, W. R., & Golder, M. (2006). Understanding interaction models: Improving empirical analyses. *Political analysis*, 14(1), 63-82.
- Brown, R. (2008). A comparative econometric assessment of the effects of migrants' on income and welfare in Armenia, Azerbaijan, the Kyrgyz Republic and Tajikistan (Working Paper Series No. 182). In Asian Development Bank, Regional Technical Assistance on Remittances and Poverty in Central Asia and South Caucasus. Manila, Philippines: ADB Economics
- Bruhn, Miruam. (2009). Female-Owned Firms in Latin America: characteristics, performance, and obstacles to growth. *World Bank Policy Research Working Paper* 5122.
- Bumann, S., Hermes, N., & Lensink, R. (2013). Financial liberalization and economic growth: A meta-analysis. *Journal of International Money and Finance*, 33, 255-281.
- Burgess, R., & Pande, R. (2005). Do rural banks matter? Evidence from the Indian social banking experiment. *American Economic Review*, 95(3), 780–795.
- Calderon, C., Fajnzylber, P. and Lopez, J. H. (2008). 'Remittances and growth: the role of complementary policies', in Fajnzylber, P. and Lopez, J. H. (eds), *Remittances and Development: Lessons from Latin America*, Washington, DC: World Bank.
- Campos R and Lardé de Palomo A (2002). "Invirtamos en Educación para Desafiar el Crecimiento Económico y la Pobreza." Fundación Salvadoreña para el Desarrollo Económico y Social, San Salvador (May).
- Carbo, S., Gardener, E. P., & Molyneux, P. (2007). Financial exclusion in Europe. *Public Money and Management*, 27(1), 21-27.
- Caskey, J., Duran, C.R. and Solo, T.M. (2006) The urban unbanked in Mexico and the United States. Accessed on 14th, January 2014 through: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=922961
- Catrinescu, N., Leon-Ledesma, M., Piracha, M., & Quillin, B. (2009). Remittances, institutions, and economic growth. *World Development*, 37(1), 81-92.
- CGAP. 1998. "Savings Mobilization Strategies: Lessons from Four Experiences." CGAP Focus Note 13.

CGAP. (2004): The Role of Governments in Microfinance; Donor Brief. Washington, DC: CGAP.

CGAP. 2011. "Estimating Funder Support for Small and Medium Enterprises." Available at: <http://www.slideshare.net/CGAP/estimating-funder-support-for-small-and-medium-enterprises-smes-12117027>, accessed on 13th, March, 2014.

Chaia, A., Dalal, A., Goland, T., Gonzalez, M. J., Morduch, J., & Schiff, R. (2013). 2 Half the World Is Unbanked. Banking the world: empirical foundations of financial inclusion, 19.

Cecchetti, G., Kharroubi, E., 2012. Reassessing the Impact of Finance on Growth. BIS Working Papers No. 381, Bank for International Settlements.

Chami, R., Fullenkamp, C. and Jahjah, S. (2005). 'Are immigrant remittance flows a source of capital for development?', IMF Staff Paper, 52(1), Washington, DC: International Monetary Fund.

Chami R, Hakura D and Montiel P (2009) "Remittances: An Automatic Output Stabilizer?" "IMF Working Papers: 91/2009.

Chee-Keong, C. and Sok-Gee Chan (2010):" Financial development and Economic growth: A review". A publication in the *African Journal of Business Management*. 04/2011; 5:2017-2027.

Chenery and Bruno (1962): "Development Alternatives in an Open Economy: The Case of Israel". *Economic Journal* vol.77.

Cheng, X., & Degryse, H. (2010). The impact of bank and non-bank financial institutions on local economic growth in China. *Journal of Financial Services Research*, 37, 179–199.

Chinn, M. D., & Ito, H. (2006). What matters for financial development? Capital controls, institutions, and interactions. *Journal of Development Economics*, 81(1), 163-192.

Chowdhury, M. B., & Rabbi, F. (2014). Workers' remittances and Dutch Disease in Bangladesh. *The Journal of International Trade & Economic Development*, 23(4), 455-475.

Christen, R. (1997). Banking Services for the Poor: Managing for Financial Success: An Expanded and Revised Guidebook for Developing Finance Institutions: Boston, ACCION International.

Clarke, G. R., Zou, H. F., & Xu, L. C. (2003). Finance and income inequality: test of alternative theories (Vol. 2984). World Bank Publications.

- Coase, R. H. (1937), .The nature of the firm, *Economica* 4, 386-405.
- Combes, J-L., Ebeke, C. (2011) Remittances and household consumption instability in developing countries, *World Development*, 39(7), 1076 – 1089.
- Conroy, J. (2005). APEC and financial exclusion: Missed opportunities for collective action? *Asia-Pacific Development Journal*, 12(1), 53–79.
- Cook, R. D. (1977). Detection of influential observation in linear regression. *Technometrics*, 15-18
- Consultative Group to Assist the Poor (CGAP). 2009. Financial Access 2009: Measuring Access to Financial Services around the World. Washington, D.C.: CGAP/World Bank.
- Consultative Group to Assist the Poor (CGAP). 2009a. Financial Access 2009: Measuring Access to Financial Services around the World. Washington.
- Consultative Group to Assist the Poor (CGAP), 2010: Financial Access 2010: The State of Financial Inclusion through the Crisis. Available online at <http://cgap.org>.
- Corbridge, S. (2002). Development as freedom: the spaces of Amartya Sen. Progress in *Development Studies*, 2(3), 183-217.
- Corr, C. (2006) *Financial Exclusion in Ireland: an Exploratory Study and Policy Review*, Dublin: Combat Poverty Agency.
- Creel, J., Hubert, P., & Labondance, F. (2014). Financial stability and economic performance. *Economic Modelling*.
- Crockett, A. (1996). The theory and practice of financial stability. *De Economist*, 144(4), 531-568.
- Cukierman, A., 1991. Why does the Fed smooth interest rates? In: Belongia, M.T. (Ed.), *Monetary Policy on the 75th Anniversary of the Fed*. Kluwer Publishers
- Cull, Robert, Asli Demirguc-Kunt and Timothy Lyman. 2012. “Financial Inclusion and Stability: What Does Research Show?” CGAP Brief 71305, CGAP, Washington, DC.
- Dalberg. 2011. “Report on Support to SMEs in Developing Countries Through Financial Intermediaries
- David Romer (2011), *Advance Macroeconomics*, 4th edition, McGraw Hill ISBN 10:0073511374 ISBN-13: 978-0073511375
- Deidda, L., Fattouh, B., (2002). Non linearity between finance and growth. *Economics Letters* 74 (3), 339–345.

- De Haas H, Plug R. (2006). Cherishing the goose with the golden eggs: Trends in migrant remittances from Europe to Morocco 1970-2004. *International Migration Review* 40:603-34
- De la Torre, Augusto, Juan Carlos Gozzi, and Sergio Schmukler (2007). "Innovative Experiences in Access to Finance: Market Friendly Roles for the Visible Hand?" Policy Research Working Paper 4326. Washington: World Bank.
- DeLong, J. Eradford, (1988) "Productivity Growth, Convergence, and Welfare: Comment," *American Economic Review*, DCXVIII, 1138-54.
- De Mel, Suresh, David McKenzie and Chris Woodruff, (2008). Returns to Capital in Microenterprises: Evidence from a Field Experiment, *Quarterly Journal of Economics*, 123, 1329-72.
- Dev, S. M. (2006). Financial inclusion: Issues and challenges. *Economic and political weekly*, 4310-4313.
- Demirgüç-Kunt, A., Levine, R., (2009). Finance and Inequality: Theory and Evidence. World Bank Policy Research Working Paper 4967
- Demirgüç-Kunt, A., Klapper, L. F., & Panos, G. A. (2011). Entrepreneurship in post-conflict transition. *Economics of Transition*, 19(1), 27–78.
- Demirgüç-Kunt, A., Klapper, L. F., & Singer, D. (2013). Financial inclusion and legal discrimination against women: evidence from developing countries. *World Bank Policy Research Working Paper*, (6416).
- Demetriades, P. O. & Hussein, K. A. (1996). Does financial development cause economic growth? Time-series evidence from 16 countries. *Journal of Development Economics* 51, 387-411.
- Demetriades, P., & Hook Law, S. (2006). Finance, institutions and economic development. *International Journal of Finance & Economics*, 11(3), 245-260.
- Deshpande, Rani and Jasmina Glisovic-Mezieres. 2007. "The True Cost of Deposit Mobilization." *CGAP Draft Report*.
- Diamond, D., (1991). Monitoring and Reputation: the Choice between Bank Loans and Directly Placed Debt. *Journal of Political Economy* 99, 689-21.
- Diamond, D., (1984): Financial intermediation and delegated monitoring. *Review of Economics Studies* 51, 393-414.
- Diamond, D. and P. Dybvig, (1983) "Bank Runs, Deposit Insurance and Liquidity," *Journal of Political Economy* 91:401–19.

- Djankov, Simeon, Miranda, Pedro, Seira Enrique, and Siddharth Sharma. (2008). "Who Are the Unbanked?" *World Bank Policy Research Working Paper* 4647.
- Dupas, P., & Robinson, J. (2009). Savings constraints and microenterprise development: Evidence from a field Experiment in Kenya. National bureau of economic research working paper 14693.
- Durand , Parrado EA, and Massey DS (1996). "Migradollars and Development: A Reconsideration of the Mexican Case." *International Migration Review*, Vol. 30(2), 423–44.
- Ekanayake EM, Mihalís H (2008). "Do remittances and foreign direct investment promote growth? Evidence from developing countries." *Journal of International Business and Economics*, Jan-1.
- Elbadawi, I. A., & Rocha, R. R. (1992). Determinants of expatriate workers' remittances in North Africa and Europe (No. 1038). Country Economics Department, World Bank
- El-Sakka, M., & McNabb, R. (1999). The macroeconomic determinants of emigrant remittances. *World Development*, 27, 1493–1502.
- Eurobarometer (2010), Poverty and Social Exclusion, Special Eurobarometer 355/Wave 74.1, European Commission.
- European Central Bank. 2012. Financial Stability Review. What is Financial Stability?Frankfurt:EuropeanCentralBank.www.ecb.int/pub/fsr/html/index.en.html , accessed on 13, November, 2014.
- Evans P. 1997. How fast do economies converge. *The Review of Economics and Statistics* 79: 219–225.
- Evans, A.D., Green, C.J. and Murinde, V. (2002), "Human Capital and Financial Development in Economic Growth: New Evidence Using the Translog Production Function", *International Journal of Finance and Economics*, vol. 7, 123-140.
- Faini, R. (1994). Workers remittances and the real exchange rate: A quantitative framework. *Journal of Population Economics*, 7, 235–245.
- Faini, R. (2002, September). Migration, remittances and Growth. In Conference on Poverty, International Migration and Asylum, Helsinki, September (pp. 27-28).
- Fayissa, B. and Nsiah, C. (2008). 'The impact of remittances on economic growth and development in Africa', *Working Papers 200802*, Department of Economics and Finance, Middle Tennessee State University.

Financial Sector Deepening Trust. 2009. FinAccess National Survey 2009: Dynamics of Kenya's changing financial landscape (www.fsdkenya.org/finaccess/documents/15/03/14_FinAccess_FA09_Report.pdf).

Foster, A., & Rosenzweig, M. (2001). Imperfect commitment, altruism and the family: Evidence from transfer behavior in low-income rural areas. *The Review of Economics and Statistics*, 83, 389–407.

Franklin Allen, Asli Demirguc-Kunt, Leora Klapper, Maria Soledad Martinez Peria (2012: The Foundations of Financial Inclusion understanding Ownership and Use of Formal Account. World Bank policy research working paper 6290. World Bank development research group, finance and private sector development team, 2012.

Freund C and Spatafora N (2005) “Remittances: Transactions Costs, Determinants, and Informal Flows” World Bank Policy Research Paper No, 3704.

Freixas, X., Rochet, J-C., 1997. Microeconomics of Banking. The MIT Press, Cambridge, MA.

Freund, C. and Spatafora, N. (2008). Remittances, transaction costs, and informality. *Journal of Development Economics*, 86 (2), 356–366.

Friedman, M. (1959), “The demand for money: some theoretical and empirical results”, *Journal of Political Economy*, Vol. 67, August, pp. 327-51.

Fry, M.J. (1988) *Money, Interest, and Banking in Economic Development*. Baltimore, MD, and London: Johns Hopkins University Press

Fungacova, Z., & Weill, L. (2015). Understanding financial inclusion in China. *China Economic Review*.

Fu, X. M., Lin, Y. R., & Molyneux, P. (2014). Bank competition and financial stability in Asia Pacific. *Journal of Banking & Finance*, 38, 64-77.

Galindo, A., Schiantarelli, F. (Eds.), (2003). Credit constraints and investment in Latin America. Inter-American Development Bank, Washington, DC.

Galindo, A., Schiantarelli, F., & Weiss, A. (2007). Does financial liberalization improve the allocation of investment?: Micro-evidence from developing countries. *Journal of development Economics*, 83(2), 562-587.

Galor, O., & Stark, O. (1990). Migrants' savings, the probability of return migration and migrants' performance. *International Economic Review*, 463-467.

Galor, Oded, and Joseph Zeira. (1993). Income Distribution and Macroeconomics. *The Review of Economic Studies* 60, 35-52.

- Galor, Oded and Omer Moav (2004): From Physical to Human Capital Accumulation: Inequality and the Process of Development. *Review of Economic Studies* 71, 1001-26.
- Genesis (2005b). Measuring Access to Transaction Banking Services in the Southern Customs Union - an Index Approach. Johannesburg, South Africa.
- Giuliano P and Ruiz-Arranz M (2009) "Remittances, Financial Development and Growth," *Journal of Development Economics*, 90, 144-152.
- Global financial report (2016): Accessed on 16th May, 2016 through the link: <http://www.worldbank.org/en/publication/gfdr/background/financial-depth>
- Goldsmith, R.W. (1969). Financial structure and development. Yale University Press, New Haven.
- Glytsos, N. (1997). Remitting behavior of 'temporary' and 'permanent' migrants: The case of Greeks in Germany and Australia. *Labour*, 11,409-435.
- Grossman, S. J., & Stiglitz, J. E. (1980). On the impossibility of informationally efficient markets. *The American economic review*, 393-408.
- Global Financial Development Report, The World Bank, 2013. P.1-23; 51-55, accessed on 10, August 2013.
- Greenwood, J. & Boyan, J. (1990). Financial Development, Growth, and the Distribution of Income, Department of Economics, Social Science Centre, University of Western Ontario.
- Gheeraert, L., Mata, R. S., & Traca, D. (2010). Remittances and domestic investment in developing countries: an analysis of the role of financial sector development. *Working papers CEB*, 10.
- Gries, T., & Meierrieksy, D. (2010, January). Institutional Quality and Financial Development in Sub-Saharan Africa. In *12th INFER Annual Conference, Münster, 3rd-5th September*.
- Grossman, G., & Helpman, E. (1991). *Innovation and growth in the world economy* (Cambridge, Massachusetts: MIT Press).
- Giuliano, P., & Ruiz-Arranz, M. (2009). Remittances, financial development, and growth. *Journal of Development Economics*, 90(1), 144-152.
- Gupta, S., Pattillo, C., & Wagh, S. (2007). Impact of remittances on poverty and financial development in Sub-Saharan Africa. IMF working paper, WP/07/38.
- Gupta S, Pattillo A and Wagh S (2009) "Effect of Remittances on Poverty and Financial Development in Sub-Saharan Africa," *World Development*, 37, 104-115.

- Gurley, J.G. and Shaw, E.S. (1960), *Money in a Theory of Finance*, Brookings Institution, Washington, DC.
- Gurley, J.G. & Shaw, E.S. (1955). Financial aspects of economic development. *American Economic Review* 45,515-538.
- Gustafsson, B., & Makonnen, N. (1993). Poverty and remittances in Lesotho. *Journal of African Economies*, 2(1), 49-73.
- G-20 Financial Inclusion Indicators, World Bank accessed on 14th, February, 2015 through: <http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=g20-basic-set-of-financial-inclusion-indicators>
- Habibullah, M. S., & Eng, Y. K. (2006). Does financial development cause economic growth? A panel data dynamic analysis for the Asian developing countries. *Journal of the Asia Pacific Economy*, 11(4), 377-393.
- Han, Rui, and Martin Melecky. (2013). "Financial Inclusion for Financial Stability: Access to Bank Deposits and the Growth of Deposits in the Global Financial Crisis." Washington, D.C. World Bank. Policy Research Working Paper 6577
- Hanh, P. T. H. (2010). Financial development, financial openness and trade openness: New evidence. *CARE-EMR, University of Rouen, France*.
- Hansen, H. and Rand, J. (2011). Another Perspective on Gender Specific Access to Credit in Africa. IFRO Working Paper 2011/14, University of Copenhagen, Department of Food and Re-source Economics
- Haron, S., N. Ahmad, and S. Planisek. 1994. "Bank patronage factors of Muslim and non-Muslim customers." *International Journal of Bank Marketing* 12(1): 32-40.
- Heckscher, E. F., & Ohlin, B. G. (1991). *Heckscher-Ohlin trade theory*. The MIT Press.
- Hicks, J.R. (1969). *A Theory of economic history*. Oxford University Press, Oxford.
- Im, K.S., Lee, J. & Tieslau, M. (2005). Panel LM unit root tests with level shifts, *Oxford Bulletin of Economics and Statistics* 63, 393-419.
- Higgins, M., Hysenbegasi, A., & Pozo, S. (2004). Exchange-rate uncertainty and workers' remittances. *Applied Financial Economics*, 14,403-411.
- Holmstrom, B., & Tirole, J. (1997). Financial intermediation, loanable funds, and the real sector. *The Quarterly Journal of economics*, 663-691.
- Honohan, P., (2008). Cross-country variation in household access to financial services. *Journal of Banking and Finance* 32 (11), 2493-2500.
- Huang, H.C., Lin, S.C., (2009). Non-linear finance-growth nexus. *Economics of Transition* 17, 439-466.

- Hulme, David, and Paul Mosley (1996). *Finance Against Poverty*. Routledge, London.
- Hsiao, C., M. H. Pesaran, and A. K. Tahmiscioglu. (2002). "Maximum Likelihood Estimation of Fixed Effects Dynamic Panel Data Models Covering Short Time Periods. *Journal of Econometrics* 109, 107–50.
- Ilahi, N., & Jafarey, S. (1999). Guest worker migration, remittances and the extended family: Evidence from Pakistan. *Journal of Development Economics*, 58, 485–512.
- International Monetary Fund (2005) *World Economic Outlook: Globalization and External Imbalances*, Washington.
- International Finance Corporations (2011): Enterprise Finance Gap Database.
- Islam, N., (1995), Growth empirics: a panel data approach, *The Quarterly Journal of Economics*, 1127-1170.
- Jeanneney, S. G., & Kpodar, K. (2011). Financial development and poverty reduction: Can there be a benefit without a cost? *Journal of Development Studies*, 47(1), 143–163.
- Johnson, H.G. (1969), "Inside money, outside money, income, wealth and welfare in monetary theory", *Journal of Money, Credit and Banking*, Vol. 1, pp. 30-45.
- Jongwanich, J. (2007). 'Workers' remittances, economic growth and poverty in developing Asia and the Pacific countries', UNESCAP Working Paper WP/07/01.
- Judson, R. A., & Owen, A. L. (1999). Estimating dynamic panel data models: a guide for macroeconomists *Economics letters*, 65(1), 9-15.
- Kalemli-Ozcan, S., Sørensen, B. E., & Yosha, O. (2003). Risk sharing and industrial specialization: Regional and international evidence. *American Economic Review*, 903-918.
- Kapur, B.K. (1976) Alternative stabilization policies for less-developed economies. *Journal of Political Economy* 84: 777–795.
- Kapur D. 2003. Remittances: the new development mantra?, Palais des Nations, Geneva
- Karlan, D., & Zinman, J. (2010). Expanding credit access: Using randomized supply decisions to estimate the impacts. *Review of Financial Studies*, 23(1), 433–464
- Kasselaki, M. T., & Tagkalakis, A. O. (2014). Financial soundness indicators and financial crisis episodes. *Annals of Finance*, 10(4), 623-669.

- Keane, M., and Runkle, D. (1992), "On the Estimation of Panel Data Models With Serial Correlation When Instruments Are Not Strictly Exogenous," *Journal of Business and Economic Statistics*, 10, 1-9.
- Khandker, S. R. (2005). Microfinance and Poverty: Evidence Using Panel Data from Bangladesh, *The World Bank Economic Review*, Oxford
- Khan, H.R. (2011) "Financial inclusion and financial stability: are they two sides of the same coin?" Address at BANCON 2011, organized by the Indian bankers association and Indian overseas bank, Chennai 4 November 2011.
- Kindleberger, Charles P., (1978) manias, panics and crashes: A history of financial crisis, New York, Basic Books
- King, R., & Levine, R. (1993). Finance, entrepreneurship, and growth: Theory and evidence. *Journal of Monetary Economics* 32, 513-542.
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The quarterly journal of economics*, 717-737.
- Kiviet, J. F. (1995). On bias, inconsistency, and efficiency of various estimators in dynamic panel data models. *Journal of econometrics*, 68(1), 53-78.
- Klapper, Leora, Luc Laeven, Raghuram Rajan, (2006). Entry regulation as a barrier to entrepreneurship. *Journal of Financial Economics*, 82, 591-629.
- Klapper, L. F., & Parker, S. C. (2011). Gender and the business environment for new firm creation. *The World Bank Research Observer*, 26(2), 237-257.
- Kumar, M., & Woo, J. (2010). Public debt and growth. *IMF working papers*, 1-47.
- Kumar, N. (2013). Financial inclusion and its determinants: evidence from India. *Journal of Financial Economic Policy*, 5(1), 4-19.
- Kutivadze, N. (2011). *Public debt, domestic and external financing, and economic growth* (No. 2011-12).
- Lämmermann S. (2010): Financial Exclusion and Access to Credit, European Social Watch
- Law, S. H., Azman-Saini, W. N. W., & Ibrahim, M. H. (2013). Institutional quality thresholds and the finance–Growth nexus. *Journal of Banking & Finance*, 37(12), 5373-5381.
- Law, S. H., & Singh, N. (2014). Does too much finance harm economic growth?. *Journal of Banking & Finance*, 41, 36-44.
- Lee K, Pesaran MH, Smith RP. (1997). Growth and convergence in a multi-country empirical stochastic Solow model. *Journal of Applied Econometrics* 12: 357–392.

- Levine, R. (1997). Financial development and economic growth: Views as agenda. *Journal of Economic Literature* 35, 688 -726.
- Levine, R., Loayza, N., & Beck, T. (2000). Financial intermediation and growth: Causality and causes. *Journal of monetary Economics*, 46(1), 31-77.
- Levine, R. (2005). 'Finance and growth: theory and evidence' in Aghion, P. and Durlauf, S. (eds), *Handbook of Economic Growth*, Amsterdam: Elsevier, ch. 12, 865–934.
- Leyshon A. & Thrift N., (1996), Financial exclusion and the shifting boundaries of the financial system", in "Environment and Planning A", no. 28, pp. 1150-1156.
- Li, Hongyi, Lyn Squire and Heng-fu Zou, (1998). "Explaining International and Intertemporal Variations in Income Inequality", *Economic Journal*, 108(1): 26-43.
- Li, H., & Zou, H. F. (2002). Inflation, growth, and income distribution: A cross-country study. *Annals of Economics and Finance*, 3(1), 85-101.
- Liu, H., & Wilson, J. O. (2011). Bank type, competition and stability in Japanese banking. *University of St Andrews Working Paper*.
- Lopez, H., Bussolo, M., & Molina, L. (2007). Remittances and the real exchange rate. *World Bank Policy Research Working Paper*, (4213).
- Lopez, H., & Servén, L. (2009). Too poor to grow. *World Bank Policy Research Working Paper* 5012.
- Love, I., & Peria, M. S. M. (2014). How bank competition affects firms' access to finance. *The World Bank Economic Review*, lhu003.
- Lucas, R.E.B., "On the Mechanisms of Economic Development," *Journal of Monetary Economics* 22 (1988):3–42.
- Lucas, R. E., & Stark, O. (1985). Motivations to remit: Evidence from Botswana. *The Journal of Political Economy*, 901-918.
- Mankiw, N. G., Romer, D., and Weil, D. N., 1992, A contribution to the empirics of economic growth, National Bureau of Economic Research.
- Massey, D. S., Parrado, E. A., Bustamante, J., Hart, J., & Martin, P. (1998). International migration and business formation in Mexico. Commentaries. Authors' reply. *Social Science Quarterly*, 79(1), 1-34.
- Massey, D., & Parrado, E. (1998). International migration and business formation in Mexico. *Social Science Quarterly*, 79, 1–20.
- Mathieson, D.J. (1980). Financial reform and stabilization policy in a developing economy. *Journal of Development Economics* 7: 359–395.

- McCormick B and Wahba J (2001). "Overseas work experiences: Saving and Entrepreneurship Amongst Return Migrants to LCDs." *Scottish Journal of Political Economy*. 48, 164-178.
- McKinnon, R.I. (1973) *Money and Capital in Economic Development*. Washington, DC: Brookings Institution.
- Menon, M., & Rodgers, Y. ven der M. (2011). How access to credit affects self-employment: Differences by gender during India's rural banking reform. *Journal of Development Studies*, 47(1), 48–69.
- Merton, Robert C. and Bodie, Zvi. "A Conceptual Framework for Analyzing the Financial Environment," in the global financial system: A functional perspective. Eds.: DWIGHT B. CRANE ET AL. Boston, MA: Harvard Business School Press, 1995, pp. 3–.
- Minsky, H. (1977). A theory of systemic fragility' in: E.I. Altman and A.W. Sametz (eds.) *Financial crises: New York Wiley*.
- Misati, R. N., & Nyamongo, E. M. (2011). Financial development and private investment in Sub-Saharan Africa. *Journal of Economics and Business*, 63(2), 139–151.
- Mishkin, F.S. (1991) Asymmetric information and financial crises: A historical perspective, in R.G. Hubbard, ed., *financial markets and Financial Crises*. Chicago: University of Chicago Press.
- Mishkin, F. S. (2009). Globalization and financial development. *Journal of Development Economics*, 89(2), 164-169.
- Mohan, R. (2006): "Economic growth, financial deepening and financial Inclusion". Address at the Annual Bankers' Conference 2006, at Hyderabad on Nov 3, 2006. <http://rbidocs.rbi.org.in/rdocs/Speeches/PDFs/73697.pdf>
- Mohieldin, M. 2012. "Op-Ed; Islamic Finance Unbound." *Project Syndicate*. 6 January 2012. <http://www.project-syndicate.org/commentary/islamic-finance-unbound>
- Molho, L.E. (1986) Interest rates, saving, and investment in developing countries: a reexamination of the McKinnon–Shaw hypotheses. *International Monetary Fund Staff Papers* 33: 90–116.
- Morduch, J., Haley, B., & Robert, F. (2002). *Analysis of the Effects of Microfinance on Poverty Reduction*. New York University: Wagner Graduate School of Public Service
- Morduch. (2005). Smart Subsidies for Sustainable Microfinance: Finance for the Poor. Quarterly Newsletter of the Focal Point for Microfinance, 6, 1-7.

- Muravyev, A., Talavera, O., & Schafer, D. (2009). Entrepreneurs' gender and financial constraints: evidence from international data. *Journal of Comparative Economics*, 37(2), 270-286.
- Muhsin Kar and E. J. Pentecost (2000) Financial Development and Economic Growth in Turkey: Further Evidence on the Causality Issue, Centre for International, Financial and Economics Research, Economic Research Paper No. 00/27 Report, available at: http://www.socialwatch.eu/wcm/documents/.nancial_exclusion.pdf. Accessed on 18/03/2014.
- Morgan, P., & Pontines, V. (2014). Financial Stability and Financial Inclusion. Asian Development Bank working paper series No. 488..
- Mohapatra, S., Joseph, G., & Ratha, D. (2009). Remittances and natural disasters: ex-post response and contribution to ex-ante preparedness, Policy Research Working Paper Series 4972, The World Bank.
- Mundaca B. G (2009) "Remittances, Financial Market Development, and Economic Growth: The Case of Latin America and the Caribbean," *Review of Development Economics*, 13, 288-2009.
- Naidoo, Sharda and Anne Hilton, 2006. Access to finance for women entrepreneurs in South Africa. World Bank, Washington, DC.
- Narain, S. (2009). Gender and access to finance. *Analytical Paper, World Bank*
- Naser, K., J. Amad, and K. Al-Khatib. 1999. "Islamic banking: A study of customer satisfaction and preferences in Jordan." *International Journal of Bank Marketing* 17(3): 135-150.
- Ncube, M., "Financial Services and Economic Development in Africa," (2007) *Journal of African Economies* 16:13-57.
- Nickell, S., 1981. Biases in dynamic models with fixed effects. *Econometrica* 49, 1417-1426.
- North, D. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Nyamongo, E.M., & Misati, R.N. (2011). Remittances and Banking Sector Development in Sub Saharan Africa. Paper presented at the Global Development Forum, Dubai, United Arab Emirates, November.
- Odedokun, M.O. (1998). Financial intermediation and economic growth in developing countries, *Journal of Economic Studies*, 25 (3), 203-224, MCB University Press, 0144-3585
- Okpara, G. C. (2011). Financial Inclusion and Financial Stability: A Toda-Yamamoto Causality Approach. *Social Sciences (Jamelss)*, 1(1), 86-100.

Orozco M and Fedewa R (2005) “Leveraging Efforts on Remittances and Financial Intermediation” Report Commissioned by the Inter-American Development Bank.

Overseas Development Institute (2014): Lost in intermediation: how excessive charges undermine the benefits of remittances for Africa

Ozkan, F.G., Kipici, A., Ismihan, M., (2010). The banking sector, government bonds and financial intermediation: the case of emerging market countries. *Emerging Markets Finance and Trade* 46 (4), 55–70.

Pagano, M. (1993). Financial markets and growth: an overview. *European Economic Review* 37: 613–622.

Pant B (2008). “Mobilizing Remittances for Productive Use: A Policy-oriented Approach.” Nepal Rastra Bank, working paper Serial Number: NRB/WP/4, Dec 2008.

Pal, R. (2011). The relative impacts of banking, infrastructure and labour on industrial growth: Evidence from Indian states. *Macroeconomics and Finance in Emerging Market Economies*, 4(1), 101–124.

Pasali, Selahattin Selsah. 2013. “Where Is the Cheese? Synthesizing a Giant Literature on Causes and Consequences of Financial Sector Development.” World Bank Policy Research Working Paper 6655. Washington D.C.: World Bank, October.

Patinkin, D. (1965), Money, Interest and Prices, 2nd ed., Harper & Row, New York, NY.

Peer Stein, Nina Bilandzic and Martin Hommes (2013): Fostering Financing for Africa’s Small and Medium Enterprises, Publication of Africa Development Bank.

Pesaran, M. H., & Smith, R. (1995). Estimating long-run relationships from dynamic heterogeneous panels. *Journal of econometrics*, 68(1), 79-113.

Pesaran, M. H., Shin, Y., & Smith, R. P. (1999). Pooled mean group estimation of dynamic heterogeneous panels. *Journal of the American Statistical Association*, 94(446), 621-634.

Piras, C., Presbitero, A., & Rabellotti, R. (2013). *Definitions Matter: Measuring Gender Gaps in Firms' Access to Credit*. Inter-American Development Bank.

Prescott, E. and J. Boyd, “Dynamic Coalitions, Growth, and the Firm,” in E. Prescott and N. Wallace (eds), *Contractual Arrangements for Intertemporal Trade*, Minneapolis, MN: University of Minnesota Press (1987).

Press released by the World Bank group president on Universal Financial Access Is Vital to Reducing Poverty. Accessed on 10/12/2014 through

<http://www.worldbank.org/en/news/press-release/2013/10/11/universal-financial-access-vital-reducing-poverty-innovation-jim-yong-kim>

- Rachdi, H. (2011). The causality between financial development and economic growth: A panel data cointegration. *International Journal of Economics and Finance*, 3(1), p143.
- Rajan, R. G. and Zingales, L. (1998), "Financial dependence and growth," *American Economic Review* 88(3), 559–86.
- Rajan, R. G., & Zingales, L. (2003). The great reversals: the politics of financial development in the twentieth century. *Journal of financial economics*, 69(1), 5-50.
- Rajan R and Subramanian A (2005) "What Undermines Aid's Impact on Growth?" NBER Working Paper, 11657.
- Ramakrishnan, R. T., & Thakor, A. V. (1984). Information reliability and a theory of financial intermediation. *The Review of Economic Studies*, 51(3), 415-432.
- Ramirez, M. D. and Sharma, H. (2008). 'Remittances and growth in Latin America: a panel unit root and panel cointegration analysis', *Working Papers 51*, Yale University, Department of Economics.
- Rangarajan Committee (2008): Report of the committee on financial inclusion. Government of India.
- Ratha, D., Eigen-Zucchi, C., Plaza, S., Wyss, H., & Yi, S. (2013). Migration and Remittance Flows: Recent Trends and Outlook, 2013–2016. Migration and Development Brief.
- Rebelo, S. (1991) Long-run policy analysis and long-run growth. *Journal of Political Economy* 99: 500–521.
- Reuters. 2012. "Global Islamic finance assets hit \$1.3 trillion". March 29, 2012. <http://www.reuters.com/article/2012/03/29/islamic-finance-growth-idUSL6E8ET3KE20120329>
- Richardson, Pat, Rhona Howarth and Gerry Finnegan, 2004. The challenges of growing small businesses: Insights from women entrepreneurs in Africa. ILO Geneva, SEED WP No. 47.
- Rioja, F., Valev, N., (2004a). Does one size fit all? Are examination of the finance and growth relationship. *Journal of Development Economics* 74 (2), 429–447.
- Rioja, F., Valev, N., (2004b). Finance and the sources of growth at various stages of economic development. *Economic Inquiry* 42 (1), 127–140.
- Robinson, J. (1952). *The Rate of Interest and Other Essays*. London: Macmillan.

Robinson, Marguerite S. (2001). *The Microfinance Revolution. Sustainable Finance for the Poor*. Washington: International Bank for Reconstruction and Development/ The World Bank, Open Society Institute.

Rojas-Suarez, L., & Amado, M. A. (2014). Understanding Latin America's Financial Inclusion Gap. *Center for Global Development Working Paper*, (367).

Romer, P.M., (1986) "Increasing Returns and Long Run Growth," *Journal of Political Economy* 94:1002–37., (1987) "Crazy Explanations for the Productivity Slow down." *NBER Macroeconomics Annual*, 163-210., (1990). Human capital and growth: theory and evidence. In *Carnegie-Rochester Conference Series on Public Policy* (Vol. 32, pp. 251-286). North-Holland.

Roodman, D. (2009). A note on the theme of too many instruments. *Oxford Bulletin of Economics and Statistics*, 71(1), 135–158.

Rousseau, L.P. & Wachtel, P. (2000). Equity markets and growth: cross-country evidence on timing and outcomes, *Journal of Banking and Finance* 24, 1933-1957.

Ruiz-Porras, A. (2008). Financial structure, financial development and banking fragility: International evidence. *Análisis Económico* Núm. 24(56): <http://redalyc.uaemex.mx/pdf/413/41312223007.pdf>

Samargandi, N., Fidrmuc, J., & Ghosh, S. (2014). Financial development and economic growth in an oil-rich economy: The case of Saudi Arabia. *Economic Modelling*, 43, 267-278.

Samuelson, P. (1947), *Foundations of Economic Analysis*, Harvard University Press, Cambridge, MA.

Sarma, M., & Pais, J. (2011). Financial inclusion and development. *Journal of International Development*, 23(5), 613-628.

Sanusi L. Sanusi (2011): "Financial Inclusion for Accelerated Micro, Small and Medium Enterprises Development: The Nigerian Perspective" Paper presented at the 2011 Annual Microfinance and Entrepreneurship Awards.

Schinasi, G. 2004. Defining Financial Stability. IMF Working Paper WP/04/187. Washington, DC: International Monetary Fund.

Schumpeter, J.A. (1911). *The Theory of Economic Development*. Oxford: Oxford University Press.

Shaw, E.S. (1973). *Financial deepening in economic development*. Oxford University Press, New York.

- Shen, C.H., Lee, C.C., 2006. Same financial development yet different economic growth – why? *Journal of Money, Credit and Banking* 38 (7), 1907–1944.
- Sherief S. R and S.T. Sharief (2008). Scaling Up Microfinance in Eastern and Western Africa with Lessons from India, Africa Economic Analysis
- Singh, Raju J., Markus Haacker, and Kyung-woo Lee. 2009. Determinants and macroeconomic impact of remittances in sub-Saharan Africa, IMF working Paper WP/09/216, IMF, Washington DC.
- Solow, R. M. (1962). Technical progress, capital formation, and economic growth. *The American Economic Review*, 76-86.
- Stefani, M. L., & Vacca, V. (2013). *Credit access for female firms: evidence from a survey on European SMEs* (No. 176). Bank of Italy, Economic Research and International Relations Area.
- Stensnes, K. (2006). Trade Openness and Economic Do Institutions Matter? Norwegian Institute of International Affairs Paper No. 702 – 2006
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, 393-410.
- Taylor JE, Mora J and Adams R (2005). “Remittances, inequality and Poverty: Evidence from Rural Mexico. “Unpublished Manuscript. University of California, Davis, CA United States.
- Team, D. F. S. (2004). The Importance of Financial Sector Development for Growth and Poverty Reduction. *Policy Division Working Paper. London: Policy Division, Department for International Development.*
- Torres, G. B., Herrera, C. S., Coss, R. H., Zavala, A. V., Garza, L. T., Kushida, M. A., & García, B. Z. (2009). FINANCIAL INCLUSION REPORT December 2009.
- Toxopeus, H. S., & Lensink, R. (2008). *Remittances and financial inclusion in development* (pp. 236-263). Palgrave Macmillan UK.
- Uchenna, E., Evans, O. S., & Stephen, O. (2014). One Dollar, One Bank Account: Remittance and Bank Breadth in Nigeria. *Journal of International Migration and Integration*, 1-21.
- United Nations (2006). Building Inclusive Financial Sectors for Development, New York.
- Uruçi, E., & Gedeshi, I. (2003). Remittances management in Albania. CeSPI (Centro Studi di Politica Internazionale) Working Paper, (5).
- Valickova, P., Havranek, T., & Horvath, R. (2014). Financial development and economic growth: a meta-analysis. *Journal of Economic Surveys*.

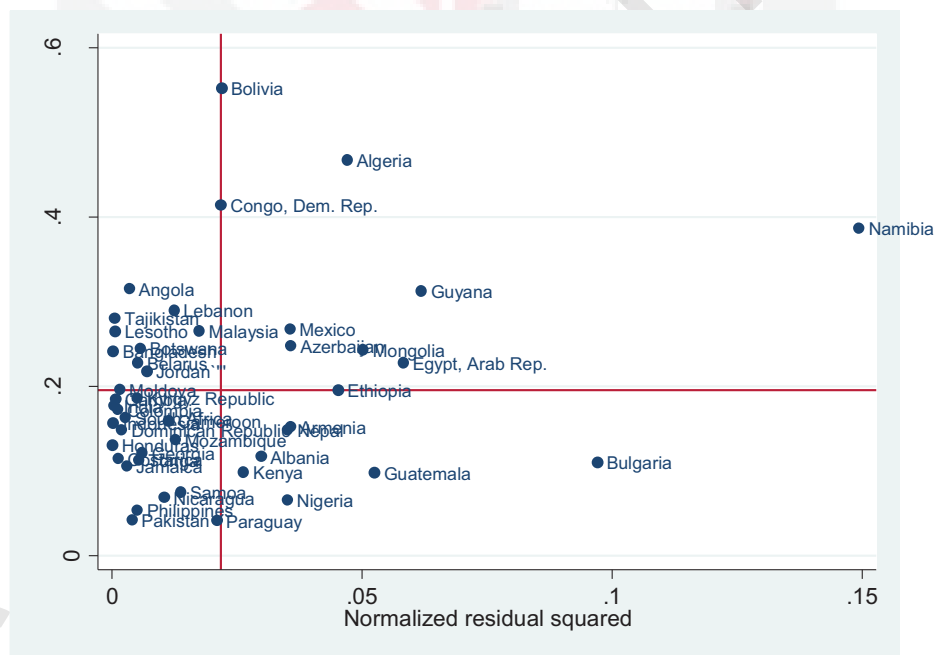
- Van Rooyen, C., Stewart, R., & de Wet, T. (2012). The impact of microfinance in sub-Saharan Africa: a systematic review of the evidence. *World Development*, 40(11), 2249-2262.
- Vargas-Silva, C., Jha, S., & Sugiyarto, G. (2009). Remittances in Asia: Implications for the fight against poverty and the pursuit of economic growth.
- Wang'oo, e. W. (2013): The relationship between financial inclusion and economic development in Kenya. A research project submitted in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, University of Nairobi, Kenya.
- Woller, G., & Schreiner, S. (2006). Poverty lending, financial self-sufficiency and the six Aspects of Outreach. New York: SEEP Network Publications.
- Woodruff, C., & Zenteno, R. (2007). Migration networks and microenterprises in Mexico. *Journal of Development Economics*, 82(2), 509–528.
- Woodruff C and Zenteno R (2007) "Migration Networks and Microenterprises in Mexico," *Journal of Development Economics*, 82, 509-528.
- World Bank (2009): Site resources.worldbank.org/.../RemittancesData_July 09(Public).xls.
- World Bank. 2010. "Women, Business and the Law". Washington, D.C.
- World Bank (2011): Migration and remittances fact book 2010. Washington: World Bank.
- World Bank Migration and Development Brief 22, April, 11 2014.
- World Bank Migration and Development Brief 22, April, 13 2015.
- World Development Indicators (WDI) accessed on 12th, January, 2015 through: <http://data.worldbank.org/data-catalog/world-development-indicators>
- Wright, Graham. 2003. "Designing Savings Services for the Poor." Micro Banking Bulletin:9.
- Yang, D. (2004). International Migration, Human Capital, and Entrepreneurship: Evidence from Philippine Migrants' Exchange rate Shocks. Ford School of Public Policy Working Paper No. 02-011, University of Michigan, Ann Arbor.
- Yang, Y. Y., & Yi, M. H. (2008). Does financial development cause economic growth? Implication for policy in Korea. *Journal of Policy Modeling*, 30(5), 827–840.

Yang D (2008). International migration, remittances and household investment: Evidence from Philippines migrants' exchange rate shocks. *The Economic Journal*, 118, 591–630.

Yang, D. (2008). Coping with disaster: The impact of hurricanes on international financial flows, 1970-2002, *Advances in Economic Analysis & Policy*, 8(1), 1903-1903

APPENDICES

Appendix I: Outlier test result for objective one



S/N	Country	d1
2	Algeria	0.3196487
10	Bolivia	0.2483298
12	Congo Dem. Rep.	0.1082137
17	Egypt, Arab Rep.	0.0918038
21	Guyana	0.1683887
34	Mongolia	0.0879721
36	Namibia	0.6320801