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Is Financial Inclusion Growth Significant?

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Abstract

An effective financial intermediation takes the country to higher economic growth by mobilising savings, allocating, and utilising the scare resources the best way possible. This paper is an endeavour to assess the extent of growth in the financial inclusiveness among the economies across the world from 2011 to 2014 after a series of policy implementation within the framework of national and international standards. Global Findex-2015 provided a detailed analysis of the financial penetration across the world from 2011 to 2014 based on income, gender, age, and region. In addition, it is an attempt to make a fine analysis of banking penetration by time and level of development of the economies. For this purpose, correlation between Gross National Income (GNI) and the financial inclusion indicators (FII) are established based on the Global Findex-2015 and subsequently, using the highly correlated factors of financial inclusion, the change in the banking penetration of 2014 over 2011 is assessed. The study revealed that ownership of accounts, savings, credit availability, debit card usage, and GNI are correlated. And financial inclusiveness does change significantly by period and by level of development.

Keywords: Developed and Developing Countries, Financial Inclusion Indicators and Gross National Income

JEL Classification: G2, G20, G21

Paper Classification: Research Paper

Introduction

Inclusiveness aims at Indian principle, 'Loko Samastha Sukhino Bhavanthu'. The prerequisites for this long journey of ensuring happiness are equal opportunities and equal access. Financial inclusion is one of the means to the stated end implied in this invocational mantra. Financial Inclusion is a radical step to share the benefits of development in the formal financial sector to all equally without waiting to be trickled down in the due course. According to K.C. Chakrabarty, the former deputy director of RBI, inclusive growth is the shortest route to economic development. Financial inclusion is one of the four pillars of inclusive growth intended to improve the formal banking connectivity with unbanked and under-banked. The empirical studies have proved

the correlation between effective financial system and the economic development of the nation. Developed and developing economies could further scale up the ladder of development if the financial inclusion initiatives are actualised, consequently there would be an increase in the household savings, added entrepreneurial activities and better life for the people, especially the poor.

The interest and commitment expressed by the World Leaders boosted the initiatives for financial inclusion all over the world. To be exact, the G20 leaders emphasised financial inclusion as one of the main pillars of the development agenda at the G20 Summit in Seoul, 2010. Leaders of G20 took up financial inclusion as an urgent and compelling target to be persuaded with well-defined action plan. Meeting the target is the challenge; G20 leaders formulated nine principles to face the challenge of financial exclusion that existed around the world (GPFI, 2015). They also identified three implementing and monitoring agencies at international level for the financial inclusion drive, namely, Alliance for Financial Inclusion, the Consultative Group to Assist the Poor, and the International Finance Corporation. Later on the World Bank (2012), the Organisation for Economic Co-operation and Development (2013) and the Better than Cash Alliance and the International Fund for Agricultural Development (2014) were joined in Global Partnership for Financial Inclusion (GPFI) as the implementing partners. Though the target setting was done at global level, its actual implementation and monitoring were left with individual economies. The national Governments and the apex banks around the world have laid down a number of legislations and constituted committees and has rolled out innovative financial products and tried out financial models with unwavering commitment to attain the ambitious goal of 'financial services for all'.

Literature Review

Levin (2005) has made an in-depth study on the interaction between financial system and economic growth. The researcher clearly put forward that financial development fosters entrepreneurship, new firm formation, and hence economic growth. And as the economic growth escalates, the financial system has to advance constantly to provide better information about investment opportunities, to ensure efficient corporate governance, to pool and mobilise savings and to extend required financial services at different stages of development. Researcher concluded with a note of caution that financial system should not be restricted to wealthy and the influential, but should include all, to share the benefits of economic growth.

Singh and Kodan (2011), carried out a study using the database of 28 states and six union territories in India for the year ending 2006, to determine the role of financial inclusion in development and to explore the factors that significantly affect the financial inclusion in India. For the study four regression equations were framed, first one measured the degree of relationship between development (HDI); the second equation measured the relationship between economic development and financial inclusion using similar methodology as Sarma (2010); third, assessed the relationship between economic development indicators (per capita value of NSDP and employment rate) and financial inclusion; and the last determined the relationship between socio-economic development (literacy rate, urbanisation and sex-ratio) and financial inclusion. The study found that financial inclusion index is positively and significantly convergent to development (HDI) and financial inclusion is significantly influenced by per capita NSDP or economic development of the nation but not employment rate. Other major highlights of the study were socio-economic factors and financial inclusion was interrelated and there were no significant difference in the financial inclusion penetration among the selected states during the study period.

Van De Werff, Hogarth and Peach (2013) analysed the Global Findex of OECD countries and found that countries with even distribution of wealth had greater financial inclusion than the countries with uneven distribution of wealth and also confirmed that lack of income and trust in financial institutions have significant bearing on the financial inclusion rates. Ayyagari and Beck (2015) studied the financial development and inclusion in developing Asia and found that Asian region of economies have better banking sector depth compared to many other developing economies and it also highlighted the present status of financial inclusion in developing Asia. Around 27 per cent of adults in developing Asia have the ownership of accounts in formal financial institutions and 37 per cent enterprises have received credit from formal banking institutions. Moreover, unaffordable cost, lack of geographical access and identification requirements were pointed out as the major barriers to financial inclusion.

Micro Finance India-State of the Report, an annual evaluation of MFIs contribution to Indian rural poor prepared by Srinivasan (2013) states that financial inclusion is a cause and consequences of economic growth. Revolutionary changes are taking place in the banking sector in financial penetration and financial-engineering of financial products and services. Although it creates wealth to the financial intermediaries, the benefits of development in financial sector do not trickle down to the base of the pyramid. He opined that if the trickle down process has not been taking place in the perceived manner, it leads to increased inequality, vulnerability of the economy instead of growth and development.

According to Indira (2015), financial inclusion initiatives have succeeded to certain extent in the first step i.e., ensuring ownership of bank accounts to the low-income group but the time has come to rethink the meaningfulness of inclusive growth and multidimensional index of financial inclusion has to be revisited to differentiate between the access and use. The author proposed to assess the financial habit indicators and financial deepening indicators. The financial deepening indicators such as number of bank account per households from demand dimension and bank branches per 1,000 kilometres from supply dimension could be included to compute the effectiveness of financial inclusion. The researcher proposed that the actual usage of bank accounts by the chief earner of the house by their occupation was to be measured to assess the degree of financial banking habit of the account holders.

Research Gap Identified

Financial system and its impact on economic growth of an economy has been a topic of debate and discussion for researchers at national and international levels. Extensive studies have been undertaken on the determinants of financial development, influence of financial system on savings and investment decisions, financial system and the entrepreneurial thrust and the correlation between Human Development Index score and the financial inclusion index score etc. But the present study intends to assess the influence of GNI on financial inclusion indicators and to identify the progress of financial inclusion indicators by period of time and by the current level of development of economies across the world. This study would be a great help to the policy holders to take more realistic steps to accelerate the process of financial inclusion and to ensure a speedy sustainable development in the world.

First of all, the present study confirms to the earlier empirical evidences on the established association between overall development and the financial inclusion status of the economies. Secondly, it brings about the changes that have taken place in the financial inclusion indicators from 2011 to 2014 in the selected developed and developing economies. Thirdly, it invites the attention of the policy makers to a missing focus of financial inclusion thrust that the hesitance

observed in extending institutional credit among the developed economies, which would weaken the soul of highlighted poverty alleviation tool. The study reiterates that financial inclusion should free the poor from the clutches of private money lenders and enable them to spend the surplus earning to escalate their standard of living rather than mere connecting them to the formal banking sector.

Statement of the Problem

The banking sector around the world shows tremendous growth in volume and offer high-ended products and services to its customers. A deliberate observation helps to fathom the tempo of the modern banking. It is oriented towards the maxim of big is beautiful and wealthy is safe. An analysis of the Global Findex data depicted that developed countries like Norway, Denmark and Finland have achieved cent percentage financial inclusion indicating tremendous efforts of such Governments' concerted initiatives backed by legal framework. With a decade long untiring and focused commitment for financial inclusion by developing economies has been commendable as the banking penetration has been deepeed in terms of bank branches and ownership of accounts. But the depth of financial service penetration still raise a cause for debate. It is an attempt to assess the growth of financial inclusiveness among developed and developing economies from 2011 to 2014.

Objectives of the Study

1. To ascertain the extent of correlation between Gross National Income (GNI) and financial inclusion indicators.

2. To determine the change in the financial inclusion indicators of the global economies by period of time and by level of development.

Hypotheses

H01: There is no significant relation between GNI and other financial inclusion indicators of economies across the globe.

H02: There is no significant difference in the financial inclusion indicators among the selected economies from 2011 to 2014.

H03: There is no significant difference among the financial inclusion indicators across economies by their level of development.

Research Methodology & Database

Nature of Research

The present study is descriptive and analytical in nature based on the secondary data collected from Global Findex-2015, the global financial inclusion data base maintained by World Bank and International Statistical Institute in 2014 (ISI, 2014) and the World Economic Situation and Prospects 2014 (UN, 2014) for classfiying the economies based on the prevailing status of development.

Sample

The Global Findex database provides the demand-side data on access to and use of accounts,

credit, payments, and savings by adults (age 15+) in 143 countries. The sample for the present study consists of 21 developed economies and 62 developing economies. The database for the present study is accessible in the APPENDIX-1, titled as Database of Financial Inclusion Indicators.

Variables Analysed

Financial Inclusion Global Findex. As per recently published, Little Data Book on Financial Inclusion updates financial inclusion database, maintained by World Bank and provides a detailed picture of the finacial landscape of the globe under regional category and income category. The variables under study are as follows, (i) GNI of each nationalities converted into US Dollars; (ii) Ownership of accounts; (iii) Debit card users; (iv) Savings; and (v) Borrowal from financial instituions; and (vi) Level of development of economies. The Global Findex 2012 presented financial inclusion status from 2001 to 2011 and the definition of 'ownership of accounts' was restricted to account holders of a financial institutions only, but in the Global Findex 2015, it has redefined 'ownership of accounts' as adult having an account either at a financial institution and through mobile money providers such as M-PESA, MTN Mobile Money, Airtel Money, or Orange Money (World Bank, 2015). Debit card users denote the percentage of respondents who reported to have debit cards. Savings denotes percentage of adults who saved in the past 12 month using accounts at a bank or financial institutions. Borrowing stands for percentage of respondents who have borrowed in the past 12 months from any of the financial institutions

Gross National Income. The concept 'GNI' measures income procured by an economy both domestically and from abroad, 143 economies were categorised as low income, middle income and high income on the basis of Gross National Income per capita in 2013. Low-income economies, otherwise known, as developing economies are those with GNI per capita of $1,045 or less and Middle-income economies are those with a GNI per capita of more than $1,045 but less than $12,746. Lower middle income refers to GNI per capita less than $4,125 and Upper-middle income economies are greater than GNI per capita of $4,125. High-income economies are those with a GNI per capita of $12,746 or more.

The breadth and depth of financial inclusion across the globe can be assessed taking into account of the economic advancement of the economies rather than the regional pattern. Hence, Gross National Income and level of development are chosen as the dependent variable. Subsequently, 81 countries consists of 16 low-income countries, 19 low-middle income countries, 24 upper-middle income counties and 22 high-income economies, with complete details of the financial inclusion variables like number of accounts per adults, number of adults who chose formal banks to deposit their savings, number of households raised credit from formal sector, adults using ATM cards, and ownership of debit cards of 2011 as well as 2014 were selected from the Global Findex data. As a first step, correlation between GNI (dependent variable) and five financial inclusion factors (independent variables) were determined. The correlated factors alone were considered to ascertain the change in the financial inclusion penetration by period from 2011 to 2014 and also by level of development.

Statistical Tools Used

The researchers have made use of correlation technique to examine the relationship between the study variables and paired t-test has been used to compare means of financial inclusion indicators by period of time and independent t-test is used to compare the means by level of development.

Reference period

The Global Findex database provides the financial inclusion details of 143 countries based on the data collected for the year 2014. The level of development of economies are adopted from the list published by the Interrational Statistical Institute in 2014 (ISI, 2014) and the World Economic Situation and Prospects, 2014 (UN, 2014).

Result and Discussion

Financial Inclusiveness from 2011 to 2014

The Global Findex data claims to have increased penetration in the financial service across the globe, as the adults with an account increased from 51 per cent in 2011 to 62 per cent in 2014 depicting an increase of 11 per cent and the unbanked population has come down to 2 billion from 2.5 billion. Table 1 presents the overall picture of the financial inclusion status of the world, based on their Gross National Income. It depicts that 60.7 per cent of the adults worldwide have an account at a formal financial institution and the account penetration varies with region, income, gender and individual characteristics. 27.4 percent of adults reported to have saved at a formal financial institution in the past 12 months, and 10.7 percent reported to have taken a new loan from a bank, credit union or microfinance institution in the past year. The database also reported barriers to use accounts by the half of the unbanked as high cost in dealing with banks, physical distance to the bank and lack of proper documentation.

Table 1: Cross Country Financial Inclusion Land Scape

Name of the Country (Income Category)	Ownership of Account		Debit Card users		ATM users		Savings at Formal Institutions		Credit from Formal Institutions	
	2011	2014	2011	2014	2011	2014	2011	2014	2011	2014
Low income (GNI per capita-$728)	21.1	22.3	6.3	6.6	19.7	20.2	11.5	9.9	11.7	8.60
Middle Income (GNI per capita-$4754)	43.3	57.1	24.6	84.4	38.1	51.2	18.2	24.1	7.6	9.10
Lower Middle Income (GNI per capita-$ 2074)	41.3	53.1	22.9	31.2	49.7	37.1	17.6	22.5	8.00	9.90
Upper Middle Income (GNI per capita-$7604)	57.4	70.4	38.5	45.9	42.8	55.7	25.1	35.2	7.9	10.4
High Income (GNI per capita-$39812)	84.8	90.6	58.4	75.1	-	68.5	40.9	46.7	13.3	17.3
Euro Area (GNI per capita-$39350)	94.8	90.6	68.5	81.1	73	-	40.8	47.6	11.8	15.8
World (GNI per capita-$10683)	50.6	60.7	30.5	40.1	-	48.3	22.6	27.4	9.10	10.7

Source: Global Findex Database 2015

GNI and Financial Inclusion Indicators

The GNI of economies and financial inclusion indicators like ownership of accounts, debit cards, savings accounts and credit availibility were tested for their correlation. From the Table 2

it is observed that GNI of a nation is highly correlated with financial inclusion indicators. Out of the five financial inclusion indicators, four indicators, namely, ownership of bank account in a financial institution, debit card users, number of savings accounts and number of credit accounts were found highly correlated with Gross National Income. The correlated factors alone were considered to ascertain the change in the demand dimension of financial inclusion growth all over the world from 2011 to 2014.

Table 2: GNI and Correlated Financial Inclusion Indicators

GNI &Financial Inclusion Indicators		GNI	Ownership of Accounts	Debit card Users	Savings Accounts	Credit Accounts
Types of Economies(GNI)	Pearson Correlation	1	**.950****	**.717****	**.935****	**.633***
	Sig. (2-tailed)		0	0.009	0	0.027
Ownership Accounts	Pearson Correlation		1	**.862****	**.979****	**.681***
	Sig. (2-tailed)			0	0	0.015
Debit Card Users	Pearson Correlation			1	**.838****	**.589***
	Sig. (2-tailed)				0.001	0.044
Savings Accounts	Pearson Correlation				1	**.786****
	Sig. (2-tailed)					0.002
Credit Accounts	Pearson Correlation					1
	Sig. (2-tailed)					0

Source: Little Data Book on Financial Inclusion (Global Findex-2015)

Financial Inclusion Indicators from 2011 to 2014

Table 3: Descriptive Statistics on Financial Inclusion Indicators by Period of Time Between 2011 & 2014

Financial Inclusion Indicators		N	Mean	Std. Deviation	Std. Error Mean
Ownership of Accounts	2011	83	45.6711	31.30310	3.43596
	2014	83	52.5843	31.05523	3.40875
Debit Card Users	2011	83	31.3795	28.66650	3.14656
	2014	83	37.9699	30.11278	3.30531
Savings Account	2011	83	19.5386	17.05880	1.87245
	2014	83	22.7566	18.22943	2.00094
Credit Account	2011	83	10.5554	6.31833	.69353
		83	12.3602	7.01481	.76998

Source: Little Data Book on Financial Inclusion (Global Findex-2015)

Table 3 showed that a higher mean score is observed for all the financial inclusion indicators of 2014 compared to 2011, indicating an increase in these factors in 2014. The result is also given in a bar diagram in Figure.1. However, to prove whether the change is significant or not, the paired t-test has been undertaken.

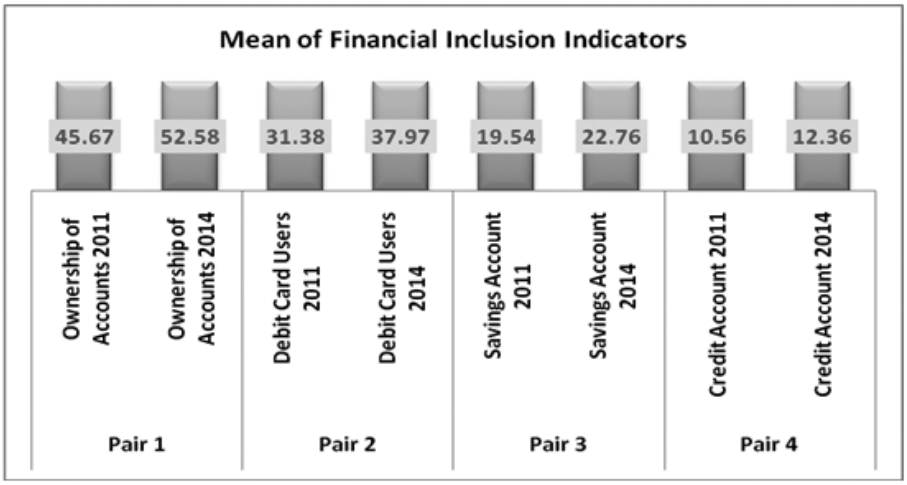

Figure 1. Mean of Financial Inclusion Indicators by Period of Time

Table 4 revealed that difference between the means of financial inclusion indicators of 2011 and 2014 were highly significant as the p-values for all four t-values are less than the significant level of 0.05 per cent. Hence, this test showed that financial inclusion indicators of 2014 have increased significantly compared to the year 2011 and the hypothesis 2 which states that there is no difference in the financial inclusion indicators from 2011 to 2014 stands rejected.

Table 4: Paired Sample t-Test for the Time Period between 2011 & 2014

		Paired Differences of Financial Inclusion Indicators					t	df	Sig. (2 tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Ownership of Accounts	-6.91325	7.57587	.83156	-8.56749	-5.25902	-8.314	82	.000
Pair 2	Debit Card Users	-6.59036	11.54410	1.26713	-9.11109	-4.06964	-5.201	82	.000
Pair 3	Savings Accounts	-3.21807	5.24251	.57544	-4.36281	-2.07334	-5.592	82	.000
Pair 4	Credit Accounts	-1.80482	4.64170	.50949	-2.81836	-.79128	-3.542	82	.001

Source: Little Data Book on Financial Inclusion (Global Findex-2015)

Financial Inclusion Indicators by Level of Development

Table 5 portrayed that mean score of financial inclusion indicators of developed economies are much higher than the developed economies. This shows a greater financial inclusion in developed economies compared to developing countries.

Table 5: Descriptive Statistic of Financial Inclusion Indicator by Level of Development

Financial Inclusion Indicators	Level of Development	N	Mean	Std. Deviation	Std. Error Mean
Ownership of Accounts	Developed	21	85.2286	20.61917	4.49947
	Developing	62	32.2726	21.36973	2.71396
Debit card Users	Developed	21	65.6667	27.65638	6.03512
	Developing	62	19.7661	17.66618	2.24361
Savings in Financial Institutions	Developed	21	39.4429	18.20721	3.97314
	Developing	62	12.7968	9.99538	1.26941
Credit from Financial Institutions	Developed	21	12.6571	6.09414	1.32985
	Developing	62	9.8435	6.28111	0.79770

Source: Little Data Book on Financial Inclusion (Global Findex 2015)

The result is also presented through a bar diagram given in the Figure 2. But it is essential to test the significance of the change observed between developed and developing countries. For this purpose an independent t- test was conducted to test the hypothesis.

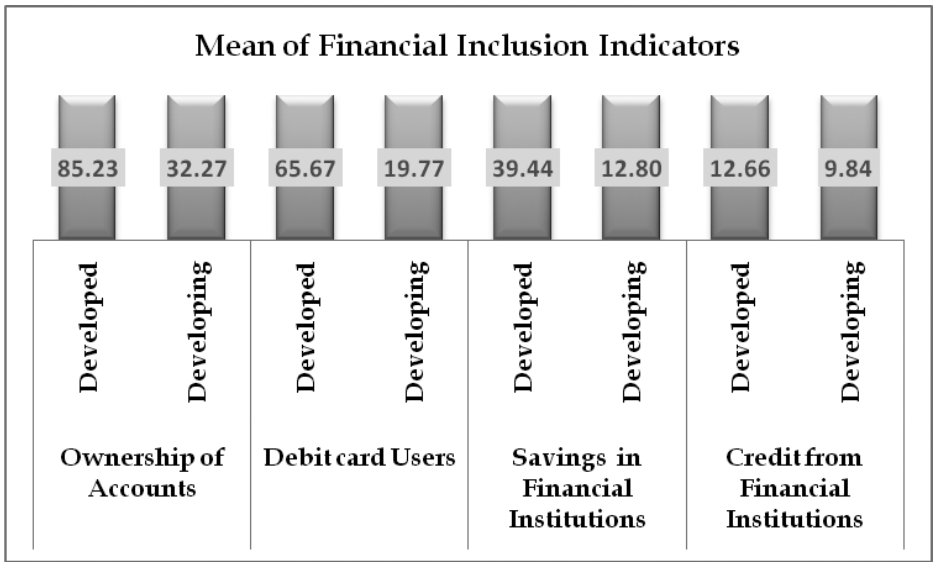

Figure 2. Mean of Financial Inclusion Indicator by Level of development

A closer look at Table 6 revealed that for all the financial inclusion indicators, t-values are highly significant as the p-values are within the significant level of 0.05 per cent. The study pointed out that, there is a significant difference in the financial inclusion indicators of developed and developing economies. As a result, the hypothesis 3 which states that there is no difference in the financial inclusion indicators of developed and developing countries stands rejected.

Table 6: Independent Sample t-test

Financial Inclusion Indicators		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Ownership of Accounts	Equal variances assumed	.260	.612	9.900	81	.000	52.95599	5.34934	42.31247	63.59951
	Equal variances not assumed			10.078	35.653	.000	52.95599	5.25460	42.29556	63.61642
Debit card Users	Equal variances assumed	8.774	.004	8.830	81	.000	45.90054	5.19830	35.55756	56.24352
	Equal variances not assumed			7.129	25.749	.000	45.90054	6.43867	32.65939	59.14169
Saving in Financial Institutions	Equal variances assumed	23.125	.000	8.420	81	.000	26.64608	3.16453	20.34965	32.94251
	Equal variances not assumed			6.388	24.209	.000	26.64608	4.17100	18.04149	35.25068
Credit from Financial Institutions	Equal variances assumed	.001	.971	1.787	81	.078	2.81359	1.57435	-.31888	5.94607
	Equal variances not assumed			1.814	35.476	.078	2.81359	1.55075	-.33309	5.96028

Source: Little Data Book on Financial Inclusion Indicators (Global Findex-2015)

Findings of the Study

The study hinted at the fact that the favourable changes in all four financial inclusion indicators by period of time are commendable. The paired sample t-test result revealed that there is a significant difference in the means of financial inclusion indicators from 2011 to 2014, indicating a progress in financial inclusion during this period.

But the Independent t-test conducted to compare the difference in the financial inclusion indicators by level of development of economies, showed a significant difference in the financial inclusion penetration. In short developed economies are better financially included than developing economies. A vast difference in the means of ownership of account in a financial institution is observed in developed countries (85.23) compared to developing countries (32.27) but by period of time, there is no significant difference. Another important result is that means of debit card users are more in developed economies (65.67) as compared to developing economies (19.77), as in the case of ownership of accounts. An analysis on the credit availability from financial institutions, it found that credit accounts are higher in developed economies compared to developing ones and the difference is significant as the p-value is less than the significant value of 0.05.

Further Discussion

Financial inclusion has become favourite area of research at regional, national, and international levels based on the data published by the various forums. Several studies have come up with socio-economic determinants at micro and macro levels that influence financial inclusion process. Moreover, extensive trials are on to find apt models of financial inclusion that bring about more people to the formal banking sector at the earliest. Evidences showed that economies with increased income equality have lower levels of financial inclusion. The present study also confirm to the fact that economies with greater GNI have higher number of ownership of accounts, savings and greater access to credit. Hence, financial inclusion process, in true sense, should have a multifaceted approach, achieved by multiple focuses, multiple plans and multiple players. All the resources and efforts should be directed to improve the socio-economic scenario, financial infrastructure, the financial education of the people and the financial stability of the nation simultaneously but not as a piecework.

Limitations of the Study

Although the present study is a cross-country analysis with new perspective of comparing status of financial inclusion indicators by period and by level of development, it is not free from limitations. One of the drawbacks this paper to be acknowledged is that the study is based on the secondary data of two periods. Secondly, an attempt was made to present a comprehensive view of the financial inclusion status of economies through various models like bank-led models, ICT-based models and mobile-based models. The study had to be limited to financial institutions defined in the Global Findex database due to the non-availability of the data of many economies.

Scope for Further Study

Areas which could be further explored in the light of these findings would be to conduct a study on the impact of Gross National Income on the financial inclusion indicators through all-inclusive models which have emerged till date to accelerate the spread and depth of financial inclusion.

Conclusion

Financial inclusion, a global goal, has attained a commendable progress in terms of ownership of accounts and debit card users. The technology deployment and new models of financial inclusion have quickened the penetration of financial services among the low-income groups across the globe. The study indicated that the first step of 'connecting people to the formal banking institutions' is progressing but yet to achieve steam. Even after a decade of resolute efforts for financial inclusiveness, there is a financial penetration gap among the continents and economies, for instance the ownership of accounts in Euro Area is 94.8 per cent and in Asian developing countries is only 27 per cent. The banking sector all over the world is striving for financial stability and integrity but are challenged by the benchmarks laid down for their performance at national and international levels. But the real yardstick for a formal financial institution is the expertise to reach out to the unbanked and under-banked with suitable products especially credit for livelihood and emergencies while attracting and retaining the high net wealth customers.

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APPENDIX-1

Global Findex Database on Financial Inclusion Indicators

Profile of Selected Economies					2011				2014			
Sl.No	Economies		Level of Development	GNI $ million	%of A/Cs	Debit Card	Saving	Credit	%of A/Cs	Debit Card	Saving	Credit
1	LI	Kenya	Developing	1160	42.00	30.00	23.00	10.00	55.20	34.70	30.20	14.90
2	LI	Uganda	Developing	600	21.00	10.00	16.00	9.00	27.50	17.80	16.80	15.70
3	LI	Bangladesh	Developing	1010	32.00	2.00	17.00	23.00	29.10	5.20	7.40	9.90
4	LI	Nepal	Developing	730	25.00	4.00	10.00	11.00	33.80	6.70	16.40	11.90
5	LI	Burkina Faso	Developing	750	17.00	9.00	8.00	9.00	13.40	**4.30**	8.70	7.90
6	LI	Malawi	Developing	270	16.50	9.40	8.20	9.20	16.10	11.70	7.10	6.00
7	LI	Rwanda	Developing	630	32.80	5.30	17.80	8.40	38.10	4.50	25.50	8.20
8	LI	Tanzania	Developing	860	17.30	12.00	11.90	6.60	19.00	11.50	9.00	6.50
9	LI	Guinea	Developing	460	3.70	2.30	2.00	2.40	6.20	3.70	2.90	2.00
10	LI	Madagascar	Developing	440	5.50	0.90	1.40	2.30	5.70	1.60	3.30	2.00
11	LI	Tajikistan	Developing	990	2.50	1.80	0.30	4.80	11.50	4.20	1.50	3.80
12	LI	Chad	Developing	1030	9.00	5.30	6.80	6.20	7.70	2.80	4.60	2.40
13	LI	Haiti	Developing	810	22.00	2.70	18.00	8.30	17.50	4.10	9.40	4.60
14	LI	Cambodia	Developing	950	3.70	2.90	0.80	19.50	12.60	5.40	3.60	27.70
15	LI	Mali	Developing	670	8.20	1.80	4.50	3.70	13.30	4.00	2.90	2.70
16	LI	Burundi	Developing	260	7.20	0.80	3.30	1.70	6.90	1.30	4.00	1.50
17	LI	Algeria	Developing	5330	33.30	13.50	4.30	1.50	50.50	21.60	13.80	2.20
18	LI	Afghanistan	Developing	690	9.00	4.70	2.80	7.40	10.00	1.70	3.60	3.60
19	LMI	Georgia	Developing	3560	33.00	20.20	1.00	11.00	39.70	3.70	1.00	3.70
20	LMI	Cameroon	Developing	1290	15.00	2.00	10.00	5.00	11.40	6.10	7.70	9.90
21	LMI	Nigeria	Developing	2710	30.00	19.00	24.00	2.00	44.20	35.60	27.10	5.30
22	LMI	India	Developing	1570	35.00	8.00	12.00	8.00	52.80	22.10	14.40	6.40
23	LMI	Ghana	Developing	1060	29.40	11.40	16.10	5.80	20.40	11.30	10.60	7.70
24	LMI	Guatemala	Developing	1770	22.30	13.00	10.20	13.70	34.60	9.80	18.60	8.10
25	LMI	Armenia	Developing	3340	17.50	5.20	0.80	18.90	40.80	16.20	15.10	12.30
26	LMI	Zambia	Developing	3800	21.40	15.70	11.80	6.10	17.20	8.40	1.60	19.90
27	LMI	Moldova	Developing	1810	18.10	16.00	3.50	6.40	31.30	18.70	16.80	4.80
28	LMI	Mongolia	Developing	2470	77.70	60.60	23.20	24.80	17.80	15.80	6.80	6.60
29	LMI	Pakistan	Developing	3770	10.30	2.90	1.40	1.60	91.80	65.70	33.20	23.20

(Continued...)

30	LMI	Bolivia	Developing	1360	28.00	12.80	17.10	16.60	8.70	2.90	3.30	1.50
31	LMI	Honduras	Developing	2550	20.50	11.10	8.50	1.40	40.70	23.10	23.50	19.70
32	LMI	Sri Lanka	Developing	2180	69.00	10.00	28.00	18.00	30.00	14.20	14.50	9.70
33	LMI	Indonesia	Developing	3170	20.00	26.00	15.00	9.00	82.70	24.90	30.90	17.90
34	LMI	Ukraine	Developing	3580	41.30	33.60	5.40	8.10	35.90	25.90	26.60	13.10
35	LMI	Vietnam	Developing	3960	21.00	15.00	8.00	16.00	52.70	24.60	7.80	8.30
36	LMI	El-Salvador	Developing	1740	14.00	11.00	13.00	17.00	30.90	26.50	14.60	18.40
37	UMI	Thailand	Developing	3720	73.00	43.00	43.00	19.00	34.60	21.80	14.00	3.90
38	UMI	South Africa	Developing	5340	54.00	45.00	22.00	9.00	78.10	54.80	40.60	15.40
39	UMI	Mauritius	Developing	7410	80.00	51.00	31.00	14.00	68.80	54.90	32.70	12.10
40	UMI	Romania	Developing	9570	45.00	28.00	9.00	8.00	82.20	62.00	35.50	17.10
41	UMI	Jordan	Developing	9050	26.00	15.00	8.00	5.00	60.80	45.80	13.30	11.80
42	UMI	Brazil	Developing	13260	56.00	41.00	10.00	6.00	72.30	59.90	19.30	8.70
43	UMI	China	Developing	4950	64.00	41.00	32.00	7.00	24.60	19.10	3.80	13.60
44	UMI	Azerbaijan	Developing	11690	14.90	10.00	1.60	17.70	68.10	59.20	12.30	11.90
45	UMI	Philippians	Developing	6560	26.60	13.20	14.70	10.50	78.90	48.60	41.20	9.60
46	UMI	Turkey	Developing	7350	57.60	56.60	4.20	4.60	29.20	15.70	5.30	18.90
47	UMI	Malaysia	Developing	3270	66.20	23.10	35.40	11.20	28.10	20.50	14.80	11.80
48	UMI	Iran Islamic Rep	Developing	10970	73.70	58.30	19.70	30.70	56.50	43.30	9.10	20.00
49	UMI	Botswana	Developing	10430	30.30	15.60	16.50	5.60	80.70	41.20	33.80	19.50
50	UMI	Jamaica	Developing	5780	71.00	41.10	30.40	7.90	92.20	75.10	21.60	31.60
51	UMI	Peru	Developing	7770	20.50	14.10	8.60	12.70	49.20	35.10	26.60	13.00
52	UMI	Venezuela	Developing	5220	44.10	35.10	13.60	1.70	78.30	45.00	29.70	11.10
53	UMI	Colombia	Developing	7590	30.40	22.70	9.20	11.90	29.00	21.40	12.30	11.20
54	UMI	Mexico	Developing	12550	27.40	22.30	6.70	7.60	56.90	49.60	22.80	2.00
55	UMI	Tunisia	Developing	7590	32.20	21.00	5.00	3.20	38.40	30.00	12.30	15.60
56	UMI	Albania	Developing	9940	28.30	21.10	8.60	7.50	38.70	26.80	14.50	10.40
57	UMI	Costa Rica	Developing	4200	50.40	43.80	19.90	10.00	27.30	12.30	10.30	8.00
58	UMI	Panama	Developing	4510	24.90	11.30	12.50	9.80	38.00	21.80	7.50	10.20
59	UMI	Peru	Developing	9550	20.50	14.10	8.60	12.70	64.40	53.60	24.20	12.70
60	HI	Uruguay	Developing	10700	23.50	16.40	5.70	14.80	43.40	25.30	20.40	11.80
61	HI	Chile	Developing	6270	42.20	25.80	12.40	7.80	29.00	21.40	12.30	11.20
62	LMI	Mauritania	Developed	65400	17.50	6.30	6.40	7.90	98.90	88.90	61.40	23.40
63	UMI	Hungry	Developed	46330	73.00	62.00	17.00	9.00	96.60	88.10	60.40	7.90
64	HI	Australia	Developed	45130	99.10	79.10	62.00	17.00	72.90	70.30	25.50	14.10
65	HI	Japan	Developed	41680	96.00	13.00	51.00	6.00	98.90	96.40	52.30	21.10
66	HI	Kuwait	Developing	20980	87.00	84.00	40.00	21.00	96.30	78.50	41.60	9.50

(Continued...)

67	HI	UK	Developed	51060	97.00	88.00	44.00	12.00	99.30	98.40	58.90	12.60
68	HI	Malta	Developed	48820	95.00	71.00	45.00	10.00	100.00	96.70	57.00	21.60
69	HI	Netherlands	Developed	48820	99.00	98.00	58.00	13.00	98.10	93.60	55.50	15.80
70	HI	Finland	Developed	29940	100.00	89.00	56.00	24.00	97.60	82.60	48.10	18.00
71	HI	Belgium	Developed	21270	96.00	86.00	43.00	11.00	87.40	66.70	24.90	9.50
72	HI	Spain	Developed	13240	93.30	62.20	35.00	11.40	77.90	49.50	20.80	18.90
73	HI	Portugal	Developed	47250	81.20	68.20	25.60	8.30	98.80	92.00	57.90	18.60
74	HI	Poland	Developed	35760	70.20	37.30	18.00	9.60	99.50	95.50	70.60	32.50
75	HI	Germany	Developed	43520	98.10	88.00	55.90	12.50	96.60	81.10	52.20	15.10
76	HI	New Zealand	Developed	50390	99.40	93.80	60.40	26.60	96.70	81.60	60.40	13.30
77	HI	France	Developed	22690	97.00	69.20	49.50	18.60	87.50	55.10	12.60	10.20
78	HI	Austria	Developed	53470	97.10	86.80	51.60	8.30	93.60	76.20	54.10	23.30
79	HI	Greece	Developed	15230	77.90	34.00	19.90	7.90	63.30	54.10	15.00	15.60
80	HI	USA	Developed	13850	88.00	86.90	50.40	20.10	67.40	44.30	15.50	10.30
81	HI	Russian Federation	Developed	15180	48.20	37.00	10.90	7.70	45.40	37.70	12.50	21.00
82	HI	Canada	Developed	52210	95.80	88.00	53.20	20.30	99.10	93.20	62.60	27.00
83	HI	Italy	Developed	35620	71.00	35.2	15.5	4.6	87.30	64.50	34.00	13.50

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