COMPARATIVE ANALYSIS OF FINANCIAL INCLUSION IN DEVELOPING REGIONS AROUND THE WORLD

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ABSTRACT

Financial inclusion is perceived as an enabler of poverty reduction around the world and today is in agenda of all policy makers in both developed and developing countries. In order to emphasize the importance of financial inclusion and provide an insight to the level of financial inclusion around the world, this paper investigates the extent of financial inclusion in different developing regions around the world. The paper investigates developing regions (Eastern, South and Central Asia, Latin America, Sub-Saharan Africa, and the Western Balkans) because population of these regions is at the highest risk of financial exclusion. Using secondary data from existing the Global Findex data base, this paper shows low levels of financial inclusion in developing regions.

Keywords: financial inclusion, developing regions

JEL: G21, O16

INTRODUCTORY CONSIDERATIONS

In today's world when financial markets grow rapidly in terms of asset value and revenues, more than one quarter of the world's population is excluded from financial system. This part of the world population mainly comes from developing regions of the world and is related to the poorest part of population. Improving access and building inclusive financial systems is a goal that is relevant to economies at all levels of development (World Bank 2008, p. 21) aiming to include the poorest part of the population in the financial streams. One of the early attempts to create more inclusive financial system is establishment of *Grameen Bank* in Bangladesh by Muhammad Yunus in 1974. Yunus was a founder of microcredit – a specific loan for the poor and those who were unable to get conventional loan from commercial bank. Concepts of "microcredit" and "microfinance" evolved and nowadays the focus of scholars and practitioners have shifted to financial inclusion, focusing on "financial ecosystem and how financial markets can work better for the poor."

In order to enlighten the problem of financial exclusion, the aim of this paper is to address the issue of financial inclusion and provide information on the level of financial inclusion in different regions, mainly in developing regions of the world. Financial inclusion has several dimensions that will be discussed later, but for the purposes of this paper financial inclusion will be analyzed in respect to the extent of access to different most common financial products available within the financial system such as account, debit and credit cards, savings, borrowing and mobile banking. It is assumed that the level of financial inclusion in developing countries is much lower than in the developed part of the world, which is one of the reasons why population of developing regions is poorer than in developed parts of the world.

This paper is divided into three parts. The first part of the paper provides theoretical background on financial inclusion, focusing on different definitions of financial inclusion, its importance, and the financial inclusion measurement. The second part of the paper summarizes previous researches on financial inclusion. In the third part of the paper the comparative analysis of financial inclusion in developing regions is presented.

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1. THEORETICAL BACKGROUND – DEFINITION, IMPORTANCE AND MEASUREMENT OF FINANCIAL INCLUSION

According to the World Bank, financial inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.[1] This definition shows that financial inclusion can be defined at the level of individuals and firms. In general, most of the researches investigate and measure financial inclusion at the level of individuals, although these researches can be applied at the firm level.

The Center for Financial Inclusion (CFI) furthermore defines full financial inclusion as a state in which everyone who can use them has access to a range of quality financial services at affordable prices, with convenience, dignity, and consumer protections, delivered by a range of providers in a stable, competitive market to financially capable clients. CFI's definition of financial inclusion includes the following elements:[2]

1. Access to a full suite of financial services (including credit, savings, insurance, and payments),
2. Provided with quality (convenient, affordable, suitable, provided with dignity and client protection),
3. To everyone who can use financial services (excluded and under-served people, special attention to rural, people with disabilities, women, and other often-excluded groups),
4. With financial capability (clients are informed and able to make good money management decisions), and
5. Through a diverse and competitive marketplace (a range of providers, robust financial infrastructure and clear regulatory framework).

The term financial inclusion needs to be interpreted in a relative dimension. Depending on the stage of development, the degree of financial inclusion differs among countries. For example, in a developed country non-payment of utility bills through banks may be considered as a case of financial exclusion. However, the same may not (and need not) be considered as financial exclusion in an underdeveloped nation as the financial system is not yet developed to provide sophisticated services. Hence, while making any cross country comparisons due care needs to be taken (Mehrotra et. al. 2009, p.14).

In order to be able to assess the level of financial inclusion at a regional or national level, some measurements need to be installed. The Alliance for Financial Inclusion (AFI) identifies the four key dimensions of financial inclusion that need to be measured (Alliance for Financial Inclusion 2010, p. 8):

1. Access – This component is concerned primarily with the ability to use available financial services and products from formal institutions. Understanding levels of access may therefore require insight and analysis of potential barriers to opening and using a bank account for any purpose, such as cost and physical proximity of bank service points (branches, ATMs, etc.). A very basic proxy for access can be derived through counting the number of open accounts across financial institutions and estimating the proportion of the population with an account.
2. Quality – As a measure of the relevance of the financial service or product to the lifestyle need of the consumers, quality encompasses the experience of the consumers, demonstrated in attitudes and opinions towards those products that are currently available to them. The measure of quality would therefore be used to gauge the nature and depth of the relationship between the financial service provider and the consumer as

well as the choices available and their levels of understanding of those choices and their implications.

3. Usage – Concerned with more than basic adoption of banking services, usage focuses more on the permanence and depth of financial service/product use. In other words, determining usage requires more details about the regularity, frequency and duration of use over time. Usage also involves measuring what combination of financial products is used by any one person or household.

4. Welfare – The most difficult outcome to measure is the impact that a financial device or service has had on the lives of consumers, including changes in consumption, business activity, and wellness. Distinguishing the role of financial services on people's lives, without mistaking it for another concurrent factor, such as increased income, requires a certain research design, discussed in section 3.1. In order to acquire information on quality, usage, and welfare, it is critical to have information from the user's point of view, i.e. data gathered through a demand-side survey.

The following table provides overview of the most relevant databases which provide information on different financial inclusion dimensions are summarized.

Table 1. Financial inclusion databases

Supply- side Research	**Demand-side Research**
1. Global indicators - Financial Access 2009 and 2010– CGAP (Consultative Group to Assist the Poor) and World Bank - Financial Access Survey – International Monetary Fund 2. National surveys 3. Self-reported databases of non-regulated providers. - MIX - SAVIX – Savings Groups Information Exchange - Microcredit Summit - World Council of Credit Unions - World Savings Banks Institute	1. Global indicators - Global Findex – World Bank - FinScope– South Africa 2. National surveys - Defining and monitoring specific financial inclusion indicators - Financial diaries

Source: Adapted based on Lagerwood, 2013

2. PREVIOUS RESEARCH

Financial literacy is a rather new topic among scholars academics. Its importance increased in the last decade as a result of the global financial crisis. Most of academic research is mainly focused on measurements of financial inclusion, in other words, on creating integrative measures of financial literacy that can be both internationally comparable and that can capture the specifics of particular national economy that is the subject of the research.

Until recently, the measurement of financial inclusion around the world has focused on usage and access to the formal financial services by using supply-side aggregate data, meaning that data were collected directly from financial institutions. These are the so called density indicators, such as the number of bank branches or automatic teller machines (ATMs) per capita. Data of this type have been compiled by surveying financial service providers (e.g. Beck, Demirgüç-Kunt, and Martínez Pería 2007; Honohan 2008; Kendall, Mylenko, and Ponce 2010; Chakravarty and Pal 2010; Sarma and Mandira (2012); Amidžić et. al. 2014, etc.). Demand-side (provider side) information on financial inclusion is now collected as part of the IMF's Financial Access Survey, which has annual data for 187 jurisdictions from 2001 up to date.[3]

While these indicators have made it possible to obtain basic provider-side information on the use of financial services, relatively little has been known until recently about the global reach of the financial sector, that is, the extent of financial inclusion and the degree to which the poor, women, and other population segments are excluded from formal financial systems (World Bank 2014, p. 39).

World Banks' Global Findex database released in 2011 helped to overcome the problem of better understanding the underlying reasons of financial exclusion among different population groups. According to Demirguc-Kunt and Klapper (2012), "The Global Findex fills a major gap in the financial inclusion data landscape and is the first public database on demand-side indicators that consistently measures individuals' usage of financial products across countries and over time. Covering a range of topics, the Global Findex can be used to track global financial inclusion policies and facilitate a deeper and more nuanced understanding of how adults around the world save, borrow, and make payments."

Most of recent research on financial inclusion levels around the world relies on the data from Global Findex database. Most of the research provides analysis of several usage and barriers related indicators on countries and regional levels. (Demirguc-Kunt and Klapper, 2013, Demirguc-Kunt et al., 2015). Some of the research addresses gender, age, and income inequalities in financial inclusion (e.g. Aterido, Beck, and Iacovone 2011; Demirguc-Kunt, Klapper and Singer 2013), but on the regional level. Still there is no more detailed research on individual level.

3. EMPIRICAL EVIDENCES ON FINANCIAL INCULUSION IN DEVELOPING REGIONS

3.1. Research method and data

As stated in the introduction of the paper, the aim of this research is to examine differences in the levels of financial inclusion in developing regions. In that respect, the following regions have been selected for comparison: Eastern Asia, South Asia, Central Asia, Latin America, Sub-Saharan Africa, and the Western Balkans. Furthermore, for the purposes of data comparison with the developed world, the level of financial inclusion for high income countries is also presented.

For the purposes of comparing levels of financial inclusion in developing regions around the world, the Global Findex database was used. As earlier explained, the Global Findex indicators measure the use of financial services, which is distinct from access to financial services. Access most often refers to the supply of services, whereas use is determined by demand as well as supply factors (World Bank 2008). This database tracks the following sub-indicators of financial inclusion: use of bank accounts, savings, borrowing, payments, and insurance.[4]

Being the most important indicators of financial inclusion levels, the following are being compared:

- Formal account – holding an account (savings or checking) at a financial institution

- Formal savings – savings at financial institution
- Formal borrowing – loan at financial institution
- Debit Card – holding a debit card
- Mobile account usage.

All indicators are related to the percentage of population above 15 years of age. Data presented in this paper are related to 2014.

3.2. Research results

Table 2 summarizes financial inclusion indicators for the chosen developing regions. As it can be observed, the level of financial inclusion measured by presented indicators shows that the level of usage of financial services is much lower in developing regions than in high income countries. Also, differences in the level of usage of different financial services vary among developing regions.

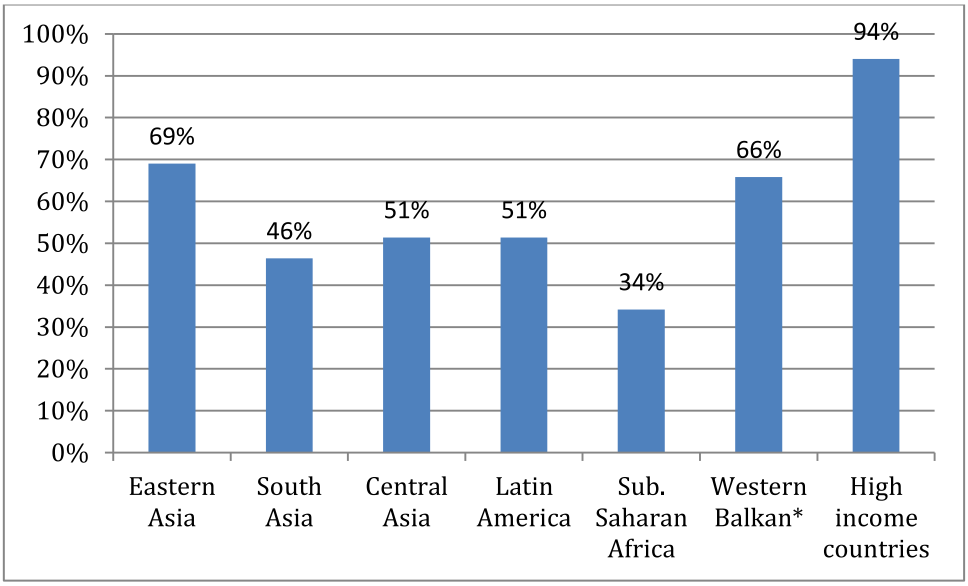
Table 2. Financial inclusion indicators by region

Region	Eastern Asia	South Asia	Central Asia	Latin America	Sub-Saharan Africa	The Western Balkans*	High income countries
Formal account	69.00%	46.40%	51.40%	51.40%	34.20%	65.80%	94.00%
Formal savings	36.50%	12.80%	8.40%	13.50%	15.90%	11.31%	51.60%
Formal borrowing	11.00%	6.40%	12.40%	11.30%	6.30%	14.04%	18.40%
Debit cards	42.90%	18.00%	36.90%	40.40%	17.90%	45.06%	79.70%
Mobile account usage	0.40%	2.60%	0.30%	1.70%	11.50%	N/A	N/A

* Data for the Western Balkans calculated as an average of particular indicator for the Western Balkan countries (Bosnia and Herzegovina, Serbia, Croatia, Montenegro, FYR Macedonia, Albania, Kosovo, and Greece)

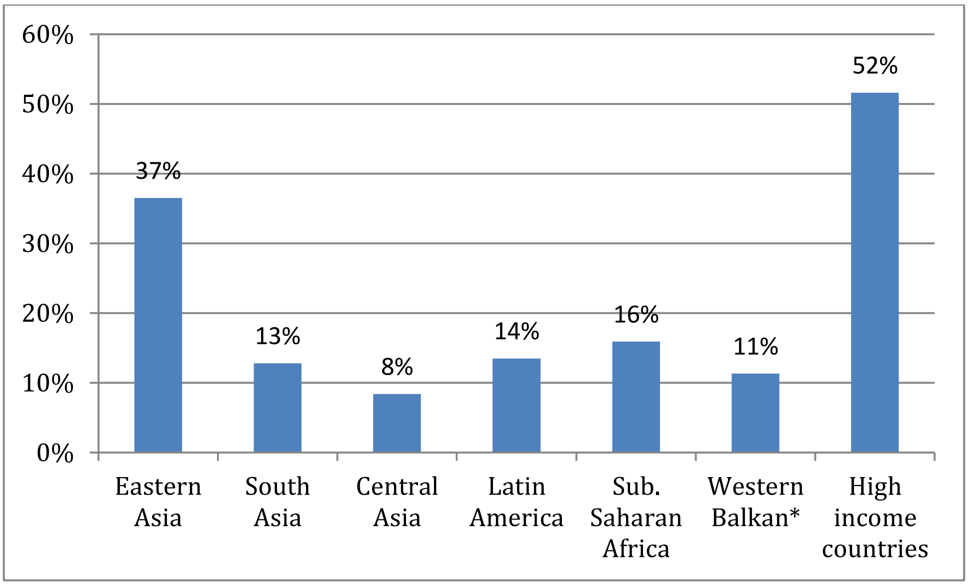
Source: Global Findex database and authors' calculations

The level of usage of formal account at financial institution is the highest in Eastern Asia or precisely 69 percent of the population and the Western Balkans is only 3 percent behind. In Central Asia and Latin America 51 percent of the population holds a formal account at financial institution, while this level is below 50 percent in South Asia and Sub Saharan Africa (graph 1).



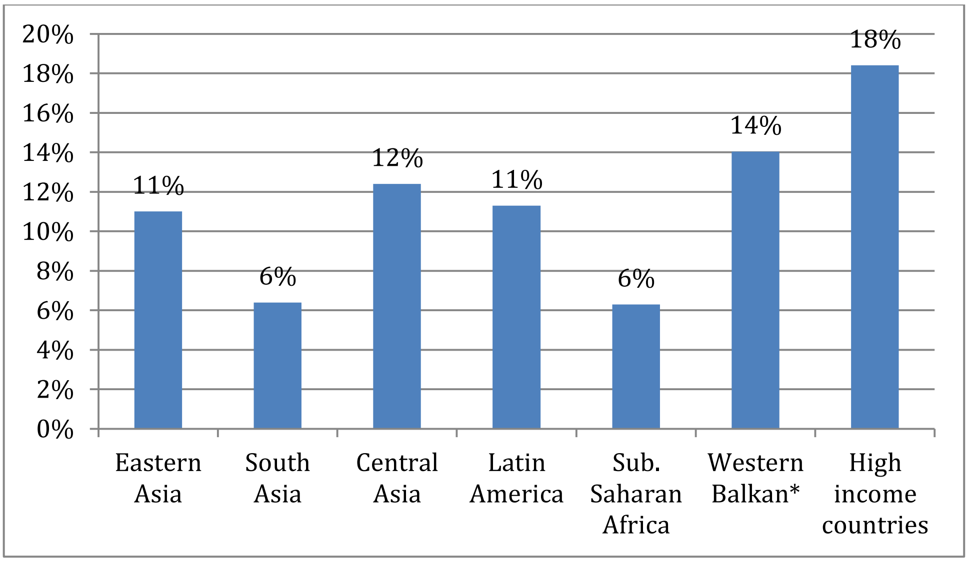
Graph 1. Percentage of population holding a formal account at financial institution
Source: Global Findex database

Eastern Asia has 37 percent of the population owning a formal savings at financial institution, which is at least two times higher compared to other developing regions and even more than four times higher than the region with the lowest level of using a formal savings at financial institution, Central Asia (graph 2).



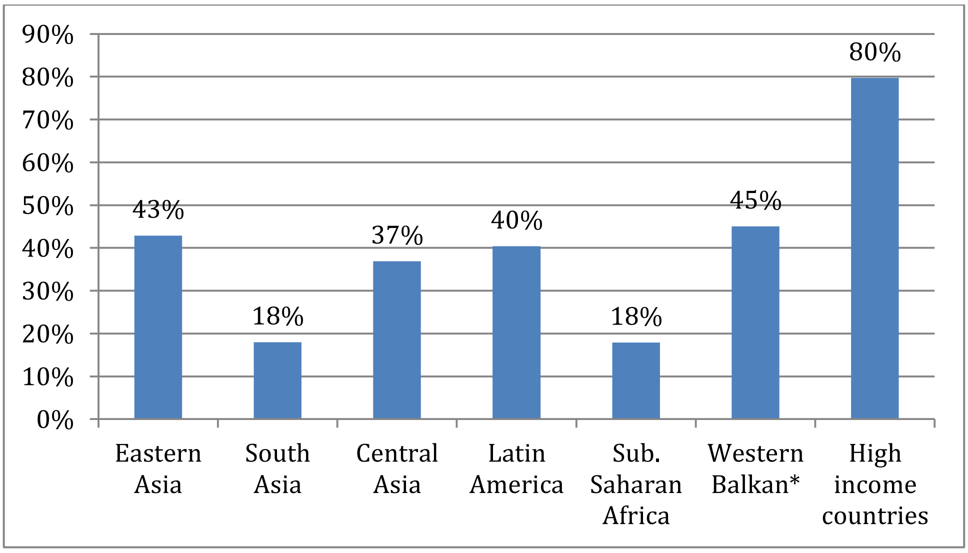
Graph 2. Percentage of population having a formal savings at financial institution
Source: Global Findex database

Levels of formal borrowing at financial institution in developing regions are not much lower compared to high income countries. The Western Balkans has the highest percentage of the population borrowing at financial institution, 14 percent, which is only 4 percent lower than high income countries. The lowest level of formal borrowing is in South Asia and Sub Saharan Africa, 6 percent (graph 3).



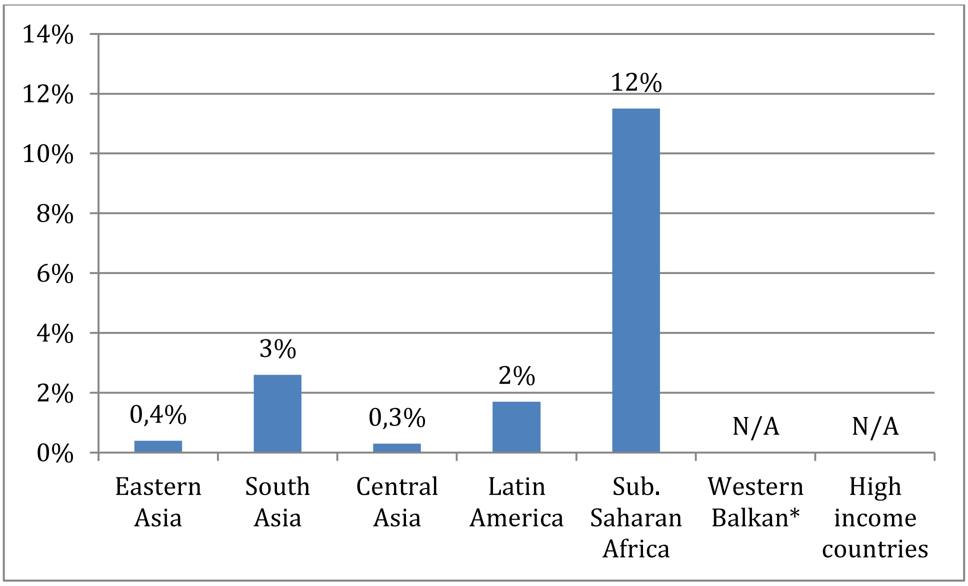
Graph 3. Percentage of population borrowing at financial institution
Source: Global Findex database

From graph 4 we can see the levels of usage of debit card in developing regions and high income countries. While 80 percent of the population in high income countries uses debit card, this level in developing regions is significantly lower and varies a lot: 40 to 45 percent in Latin America, Eastern Asia and the Western Balkans, 37 percent in Central Asia, to the lowest 18 percent in South Asia and Sub Saharan Africa.



Graph 4. Percentage of population holding a debit card
Source: Global Findex database

The fifth indicator of financial inclusion is the usage of mobile account. The data on the population using mobile account were not available for high income countries and the Western Balkan region, so we analyzed the remaining five developing regions (graph 5). Using mobile money is most often in Sub Saharan Africa. In South Asia and Latin America only 3 and 2 percent of population uses mobile account, while in other two regions - Eastern Asia and Central Asia mobile money is used by a very low percentage of the population, below 1 percent.



Graph 5. Percentage of population using mobile account
Source: Global Findex database

It is not surprising that Sub-Saharan Africa is the region with the highest usage of mobile accounts. Bank offices as well as ATMs in Africa are often far away from the place where user lives, while a huge area is covered with wireless internet connection and that is why it is easier to use mobile phone as a platform for financial transactions.

CONCLUSIONS AND RECOMMENDATIONS

Due to its impact on economic growth and poverty reduction, financial inclusion is one of the global issues that are currently in the focus of decision-makers, social policy makers and researchers around the world. How much and in what way do people use financial services is no longer a topic only for economic researchers, because the increase of financial inclusion has become a global agenda that aims to reduce poverty and inequality, and accelerate economic growth. The benefits of financial inclusion are not only important for individuals but also for the overall economy.

Based on the research, it is clear that the level of financial inclusion measured by the presented indicators in developing regions is much lower than in high income countries and that there is a need to improve financial inclusion in these regions. Improvement of financial inclusion requires national and regional strategies, whose success requires government support as well as involvement of the private sector that will be interested only if the strategy corresponds to the market. New products should be adapted to the poor population, and the financial authorities of the region should participate in developing and implementing strategies to maintain the stability of the financial system and protect consumers from abuse and over-indebtedness. Legislation concerning new financial services and products should be created and the existing regulation should be adapted and fully applied.

It is necessary to provide access to financial institutions and services to every individual. Although the breakthrough of smart phones and falling prices of Internet data led to the strengthening of digital forms of payment, but still only a small part of the population use this form of access to finance. Some effort needs to be done to make these forms of financial services available to their users. Also, there is a need for promotion of most common financial services: bank accounts, savings, and debit card usage. Credits should be adapted to the needs of potential users, with affordable interest rates. Banks and other financial institutions should be stimulated to create simple financial products for poor clients with little education.

Demand-side of financial services must be promoted even more, because it is not enough only to broaden the access to finance; real usage of the services must exist. Some of the ways to do that are improvement of financial literacy through formal and informal financial education programs. People should be taught and stimulated to use digital platforms for financial transactions.

Crucial for the provision of financial services, including poor customers, is understanding their needs and the development of financial products and services adapted to their circumstances. This concept is a key part of providing financial resources to the poor.

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[3] More on IMFs Financial Access Survey data can be obtained from the following website: http://data.imf.org/?sk=E5DCAB7E-A5CA-4892-A6EA-598B5463A34C
[4]The indicators in the Global Financial Inclusion (Global Findex) database are drawn from survey data covering almost 150,000 people in more than 140 economies—representing more than 97 percent of the world's population. The survey was carried out over the 2014 calendar year by Gallup, Inc. as part of its Gallup World Poll, which since 2005 has continually conducted surveys of approximately 1,000 people in each of more than 160 economies and in over 140 languages, using randomly selected, nationally representative samples. The target population is the entire civilian, non-institutionalized population aged 15 and above. More on Global Findex methodology and questionnaire can be obtained from the following web-site: http://www.worldbank.org/en/programs/globalfindex/methodology