On The Financial Inclusion in Jordan

In a Nutshell

AUGUST 2017

منتدى الاستراتيجيات الأردني
JORDAN STRATEGY FORUM

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JORDAN STRATEGY FORUM

The Jordan Strategy Forum (JSF) is a not-for-profit organization, which represents a group of Jordanian private sector companies that are active in corporate and social responsibility (CSR) and in promoting Jordan's economic growth. JSF's members are active private sector institutions, who demonstrate a genuine will to be part of a dialogue on economic and social issues that concern Jordanian citizens. The Jordan Strategy Forum promotes a strong Jordanian private sector that is profitable, employs Jordanians, pays taxes and supports comprehensive economic growth in Jordan.

The JSF also offers a rare opportunity and space for the private sector to have evidence-based debate with the public sector and decision-makers with the aim to increase awareness, strengthening the future of the Jordanian economy and applying best practices.

For more information about the Jordan Strategy Forum, please visit our website at www.jsf.org or contact us via email at info@jsf.org. Please visit our Facebook page at Facebook.com/JordanStrategyForumJSF or our Twitter account @JSFJordan for continuous updates aboutJordan Strategy Forum.

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Executive Summary

At the most basic level,

> "Financial inclusion means that adults have access to and can effectively use a range of appropriate financial services… Financial inclusion starts with having a deposit or transaction account at a bank or other financial institution"
> (Demirguc-Kunt et al., 2017)

The international evidence shows that access to financial services promotes household welfare, reduces income inequality, encourages small enterprise activities and promotes real economic growth. This is why the World Bank, for example, has given special attention to the issue of financial services and established the "Global Financial Inclusion Index (Global Findex)" for over 140 countries.

One of the main indicators of this index is the percentage of people (15 years or more) with an account at a formal financial institution (such as bank, credit union, post office or microfinance institution).

The World Bank estimates that about 2 billion adults globally have no access to the types of financial services delivered by regulated financial institutions. Between 2011 and 2014, 700 million individuals worldwide became account holders. Globally, 62 percent of individuals aged 15 and above have an account, up from 51 percent in 2011 (Demirguc-Kunt et al., 2017).

Financial inclusion varies incredibly around the world. In high-income countries, account ownership is almost universal. However, number of accounts in other parts of the world ranges between 14 percent in the Middle East to 69 percent in East Asia and the Pacific.

It is unfortunate to note that financial inclusion in Jordan is relatively low. Account ownership amongst the 15 years old or above is equal to 24.6 percent. For females this percentage is even more disappointing (15.5 percent).

Based on the FINDEX dataset (survey of 1000 Jordanians), the results of JSF analysis indicate that:

1. **More-educated individuals are more likely to have a bank account.**
2. **Being a woman reduces the probability of having a formal account.**
3. **Higher income is associated with more financial inclusion.**

The low financial inclusion in Jordan provides stakeholders with an interesting issue. Indeed, the available evidence shows that inclusive access to financial services has a positive impact on the size of bank credit. Given that higher levels of inclusion promote the growth of retail banking, the JSF examines the impact of bank credit to individuals on the performance of Jordanian banks. The results could not be more encouraging. Indeed, they reveal that retail banking positively affects banks' performance (return on assets).

Retail banking positively affects banks' performance (return on assets). It is a fact that banks incur higher administrative costs when they deal with the retail end of the market. Not surprisingly, it is also found that banks that lend more to individuals tend to have wider net interest margin [(Interest Income – Interest Expenses) / Total Assets].

The JSF findings imply that banks, as well as decision makers, must seek greater levels of financial inclusion. This issue (inclusion) has some direct and positive impacts on the national economy, average citizen, as well as on the banks themselves.

The less educated, females, and people with low income must be especially encouraged to become financially included. Within this context, and following a brainstorming session with more than 10 heads of retail banking, held at the premises of the JSF, a number of options were recommended, including the followings that can increase financial inclusion in Jordan:

1. **It would be useful to look into how to simplify the requirements and procedures to open a bank account.**

2. **To open a bank account in Jordan, one needs to be 18+ years old. Stakeholders must re-examine this rule and possibly change it to 15+.**

3. **Regulate and promote pre-paid banking as a way to increase financial inclusion.**

4. **Electronic verification (e-signature) must be regulated and adopted.**

5. **Banks should be given "incentives" to widen their regional coverage through the opening incentives of additional branches, or greater use of mobile branches.**

6. **Many employees still receive their wages in the form of cash. This "norm" should be discouraged and transferring all wages and salaries other than bank transfers to employees' accounts must be encouraged.**

Introduction

Without banks (and stock markets), it would be difficult, if not impossible, for economic agents to meet and discuss business opportunities and enter into business agreements and contracts. Specifically, these financial institutions respond to two basic practical problems:

1. Those with surplus funds to invest must know and meet with those who need capital for either personal or business purposes. Clearly, this is not a practical process.
2. Suppliers of funds need to know relevant financial and other information about who needs capital. Again, this is not an easy task to accomplish.

Agents with surplus funds must also monitor and evaluate the financial performance of fund users. After all, they need to get their money back with fair returns. Naturally, without the expertise of banks, this process is not easy to carry out.

For the above-mentioned reasons, and motivated mostly by profits, individuals, businesses, and governments have always worked at establishing and developing banks (and other financial institutions), and creating financial products and services. Naturally, these activities come under the supervision of regulatory authorities like central banks.

As a major part of any financial system and its development, the role of banks in economic growth has been a topic of interest to researchers, policy-makers, think tanks, and international organizations. Indeed, it is stated that “a large body of economic literature supports the premise that, in addition to many other important factors, the performance and long-term economic growth and welfare of a country are related to its degree of financial development” (World Economic Forum).

To measure the development of a financial system, one cannot rely on one single indicator. However, access to, and size of, financial services are the most important measures in evaluating such development. Additionally, access and size are not useful if the system is not efficient.

To compare countries in terms of the quality of their respective financial development, the World Bank launched the online database on financial development in 205 countries in terms of four main dimensions and these are:

1. Financial Depth
2. Financial Access
3. Financial Services Efficiency
4. Financial Stability

Within the context of benchmarking financial systems around the world, financial inclusion has resulted in a great deal of interest. Whilst this concept involves a variety of definitions, it is enough to state that "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" (World Bank).

The global financial inclusion index (Global Findex) is a global index issued by the World Bank.The core indicators of the Global Findex include five basic dimensions of the use of financial services and these are: (1) Bank Accounts (2) Savings (3) Borrowing (4) Payment Patterns (5) Insurance. Naturally, each of these dimensions includes a number of sub-indicators.

The main selected indicator for the Use of Bank Accounts is the percentage of people (age 15 and above) with an account at a formal financial institution (such as bank, credit union, post office or microfinance institution).

Based on the World Bank's cumulative experience in analyzing financial inclusion worldwide, four statements are relevant:

1. An estimated 2 billion adults worldwide do not have a basic account.

2. In 2014, 46 percent of youth (ages 15-24) worldwide own a financial account, compared to 66 percent of people (age 25 and above).

3. Since 2010, more than 55 countries have made commitments to financial inclusion. More than 30 have launched (or are developing) a national strategy.

4. Globally, 59 percent of people without an account cite a lack of enough money as a key reason.

In addition to the above-mentioned statements, it is important to note that **the growing international evidence shows that access to financial services promotes household welfare, reduces income inequality, encourages small enterprise activities and promotes real economic growth**. Within this context, it is unfortunate to realize that financial inclusion in Jordan is relatively low. Account ownership amongst individuals who are 15 years old or above is equal to 24.6 percent. For females this percentage is even more disappointing (15.5 percent).

This paper examines the issue of financial inclusion in Jordan. The analysis is composed of two parts.

In the first part, we consider how gender, income, education, and age affect financial inclusion.

In the second part, we examine the impact of retail banking on the performance of licensed Jordanian banks.

The aspect of retail banking and bank performance is interesting because the available evidence shows that greater inclusiveness positively affects the size of bank credit, and given that higher levels of inclusion promote the growth of retail banking, it would be useful to examine the impact of bank credit to individuals on the performance of Jordanian banks.

Financial Inclusion in Jordan

1. Current Situation

Based on the World Bank estimation results, financial inclusion in Jordan is equal to 24.6 percent. More disappointing is the fact that financial inclusion amongst females and males are equal to 15.5 percent and 33.3 percent respectively.

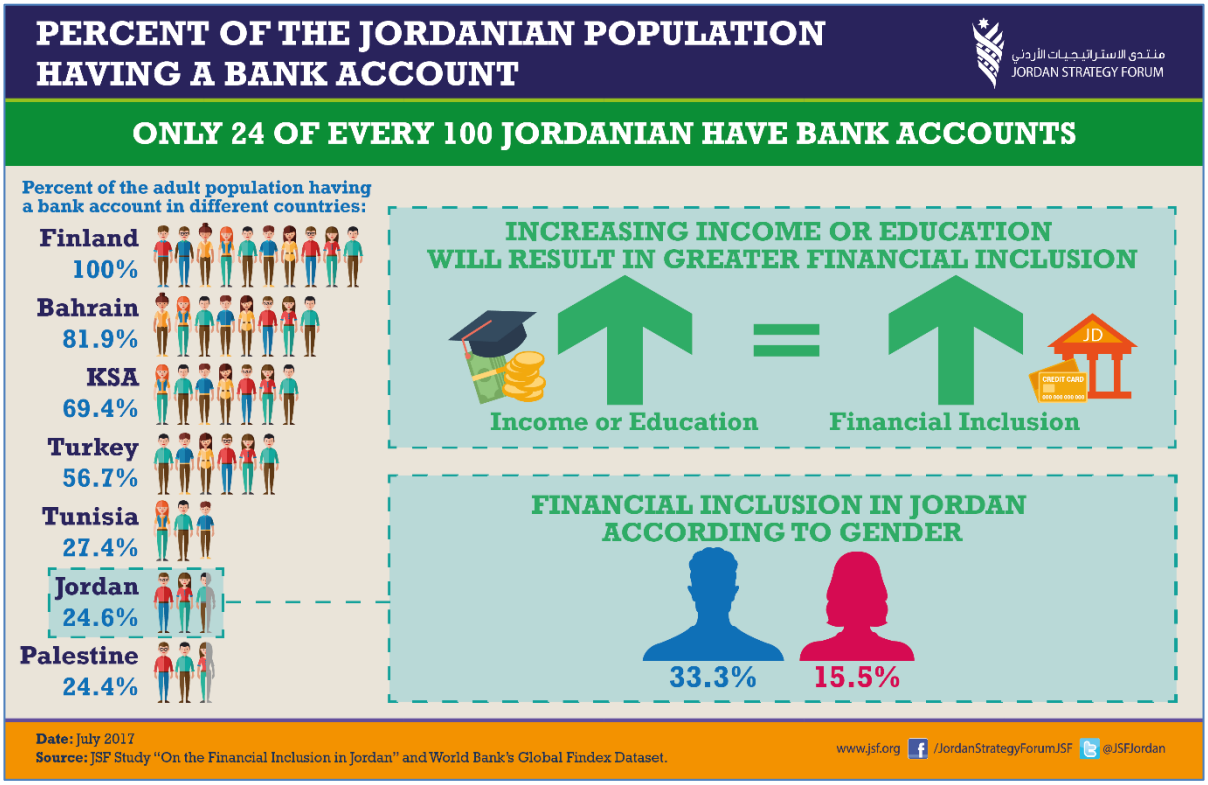
15.5% Financial Inclusion Amongst Females

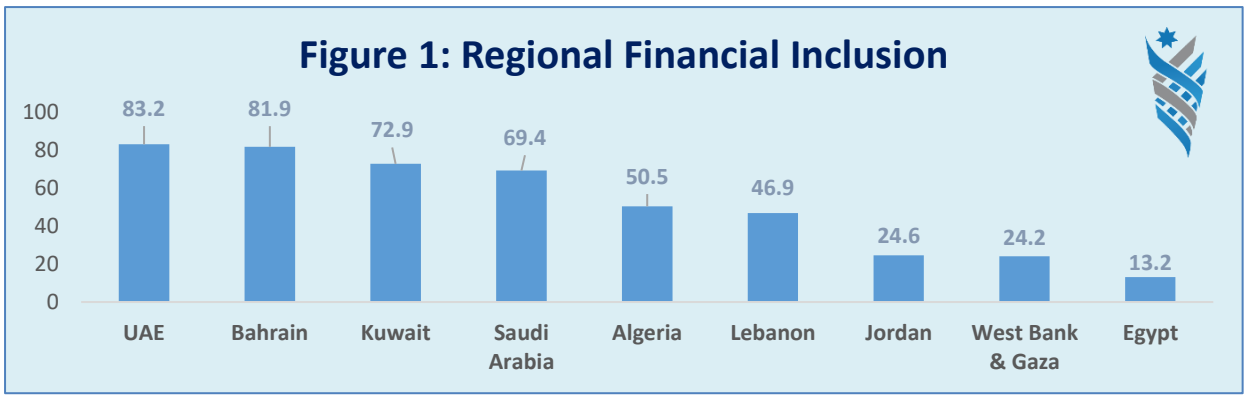
33.3% Financial Inclusion Amongst Males

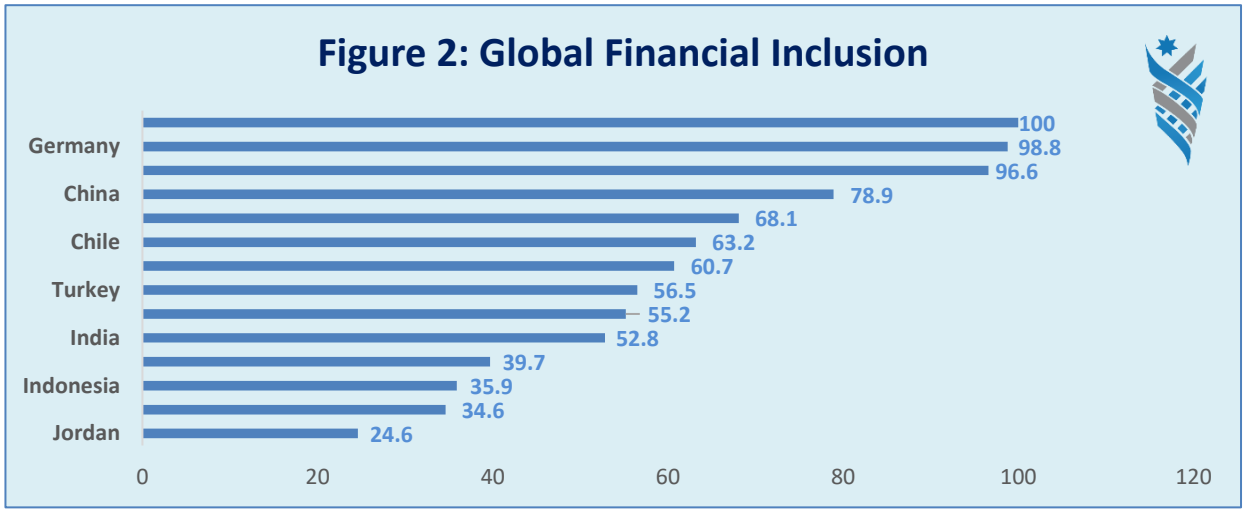
The currently existing 24.6 percent of inclusion is much lower than those, which exist in, for example, Finland (100 percent), Bahrain (81.9 percent), Saudi Arabia (69.4 percent), and Turkey (56.7 percent). In actual fact this low proportion is close to only those in Palestine / West Bank and Gaza (24.2 percent), and higher than in Egypt (13.2 percent).

The relatively low financial inclusion in Jordan is very discouraging. Indeed, this issue is important for several reasons:

1. "Our estimates offer evidence of a strong correlation between financial access and poverty rates." (Park and Mercado, 2015)
2. "Increasing financial inclusion or reducing financial exclusion lowers income inequality in developing Asia." (Park and Mercado, 2015)
3. "Greater inclusion should make interest rates more effective as a policy tool and it may facilitate central banks' effort to maintain price stability." (Mehrota and Yetman, 2015)
4. Financial inclusion increases total factor productivity (efficiency) "as talented entrepreneurs, who desire to operate firms on a larger scale, benefit disproportionately" (Dabla-Norris et al., 2015)







2. Factors Affecting Financial Inclusion

The World Bank surveyed 1,000 Jordanian individual to measure financial inclusion. According to the survey's findings, JSF studied how individual characteristics impacts financial inclusion. The basic demographic characteristics of the individuals who responded to the survey are reported in Table 1. The technical results are reported in Appendix A (BOX 1 and Tables 1-3).

From Table 1, we see that the sample is divided equally between males and females. The mean value of gender (0 for females and 1 for males) is very close to 0.50 (0.48). In addition, the values of income groups indicate that 16 percent and 24 percent of the respondents belong to the poorest 20 percent and top 20 percent of income quantiles respectively.

Table 1: Basic Descriptive Statistics

Variables	Definitions	Mean
Gender	0 if female, =1 Male	**0.480**
Age	age in number of years	**37.34**
Income - Poorest 20%	1 if income in first income quintile and 0 otherwise	**0.160**
Income - Second 20%	1 if income in second income quintile and 0 otherwise	**0.180**
Income - Third 20%	1 if income in third income quintile and 0 otherwise	**0.220**
Income - Fourth 20%	1 if income in fourth income quintile and 0 otherwise	**0.200**
Income – Top 20%	1 if income in top income quintile and 0 otherwise.	**0.240**
Secondary Education	1 if secondary education and 0 otherwise	**0.670**
Tertiary Education	**1 if tertiary education and 0 otherwise**	**0.130**

Finally, Table 1 reveals that 67 percent of the respondents have secondary education and less.

As far as the impact of individual characteristics that might have an impact on financial inclusion, the results indicate five main conclusions. These factors are listed below according to the degree of their impact on financial inclusion (greatest to least):

1. **More education increases the chance of having a bank account.**
2. **Being a female reduces the probability of having a formal account.**
3. **Higher income is associated with more financial inclusion.**
4. **Older people are more likely to be financially included.**

Finally, and based on the analysis of the male sample alone and the female sample alone, we can also report that being educated is more relevant for males than for females in financial inclusion. Other variables' impact of financial inclusion did not reflect significant differences between the two sets of samples.

3. Implications of Financial Inclusion

The relatively low financial inclusion that prevails in Jordan provides us with an interesting case. Indeed, the available evidence shows that the impact of inclusive access to financial services has a positive impact on bank credit. Relative to this observation, it is stated that a "significant evidence is found that inclusive financial systems have more explanatory power than both creditor rights and information sharing" (DeHan, 2016).

Given that greater levels of financial inclusion promote bank credit, the JSF examined the 13 Jordanian commercial banks during the period 2008-2015 in terms of the impact of retail banking (credit to individuals) on their accounting performance.

The results of the technical analysis are presented in Appendix B (BOX 2 and Table 4).

Based on the reported statistics in Table 2, we provide several comments:

1. **During the period 2008–2015, the overall mean value of bank profitability (ROA) for all 13 banks is equal to 1.29 percent. However, there banks differ in terms of their performance. For example, the maximum (minimum) ROA achieved by one bank during the period 2008–2015 was equal to 2.51 percent (–0.2 percent).**
2. **There is a noticeable difference between these banks in terms of their credit portfolio. As the minimum and maximum values of bank credit to individuals to total credit are equal to 1.1 percent and 54.3 percent respectively.**
3. **In common with retail banking, credit to the corporate and SME sectors differ in terms of their proportion to total credit amongst our sample of banks.**

TABLE 2: Bank Performance Descriptive Statistics

	MEAN	MEDIAN	MAXIMUM	MINIMUM
Return on Assets	0.0129	0.0139	0.0251	**-0.002**
Foreign Exchange	0.2616	0.2766	0.6488	**0.0010**
RETAIL	0.1917	0.1694	0.5428	**0.0108**
SME	0.0932	0.0884	0.2968	**0.0000**
CORPORATE	0.4623	0.4423	0.8325	**0.1185**
BONDS	0.2189	0.2117	0.3662	**0.0222**
EQUITY	0.0788	0.0707	0.2086	**0.0218**
SIZE	21.3216	21.3089	23.9759	**19.4353**
COM	0.0068	0.0065	0.0200	**0.0016**
OVERHEAD	**0.0252**	**0.0252**	**0.0429**	**0.0101**

Return on Assets is equal to (net income divided by total assets). Foreign Exchange is equal to foreign exchange deposits to total deposits). Credit to individuals to total credit (RETAIL), credit to SMEs to total credit (SME), credit to the corporate sector to total credit (CORPORATE), bank investment in bonds to total assets (BONDS), equity capital to total assets (EQUITY), natural logarithm of total assets (SIZE), net commission income to total operating income (COM), and total operating expenses to total assets (OVERHEAD).

4. **The mean ratio of foreign exchange deposits to total deposits is equal to 26.16 percent. Whilst this proportion is high, it is not as high as that which prevails in, for example, Lebanon (more than 150 percent), and in Egypt (about 90 percent).**

5. **There are some banks in the surveyed sample where government securities (bonds) make up a large proportion of their assets. As the maximum value of this measure is 36.62 percent.**

As far as the performance of banks is concerned, the results indicate three main conclusions:

(1) On average, banks that lend more to individuals earn higher return on assets. It is a fact that banks incur higher administrative costs when they deal with the retail end of the market. However, the turnover of business in the retail sector is higher, and as a result, retail banking is more profitable. It is also found that banks that lend more to individuals tend to have wider net interest margin [(Interest Income – Interest Expenses) / Total Assets].

(2) Banks that lend proportionately more to the SME and corporate sectors do not achieve superior performance.

(3) As far as the other variables are concerned, they reflect what one would expect:

1. **First, foreign exchange deposits positively affect bank profitability (ROA).**
2. **Second, less efficient banks (higher overhead expenses) realize lower accounting returns.**
3. **Third, banks that rely more on commission income (more diversified income) tend to achieve higher profits.**
4. **Fourth, banks benefit from economies of scale. The impact of bank size (SIZE) on return on assets is positive.**
5. **Fifth, the impact of banks' investment in government securities (BONDS) on return on assets is negative.**
6. **Finally, equity capital has no impact on profitability.**

Summary of Findings and Recommendations

"Access to financial services plays a critical role in the development process through the facilitation of economic growth and reduction in income inequality. Inclusive financial systems allow the poor to smooth their consumption and insure themselves against the many economic vulnerabilities they face, from illness and accidents, to theft, to unemployment. It enables poor people to save and borrow to build their assets and to make educational and entrepreneurial investments to improve their livelihood. Inclusive finance is particularly important to disadvantaged groups: the poor, women, youth, and rural communities. For these reasons, financial inclusion has gained prominence in recent years as a policy objective to improve the lives of the poor" (Demirguc-Kunt and Klapper 2017)

In a Nutshell, based on the World Bank's Global Findex Dataset, it is unfortunate to note that financial inclusion, in its Use of Bank Accounts form, in Jordan is relatively low. Account ownership amongst 15 years old or above is equal to 24.6 percent. This proportion is not only lower than those in, for example, Finland (100 percent) and Germany (98.8 percent), but also lower than in India (52.8 percent) and Ghana (34.6 percent).

Utilizing the World Bank's Global Findex Dataset (survey of 1000 Jordanians), our statistical analysis indicates that education, gender, and income are critical individual characteristics that affect financial inclusion in Jordan.

Given that greater levels of financial inclusion promote the growth of retail banking (credit to individuals), we also examine the impact of bank credit to individuals (retail banking) on the performance of licensed Jordanian banks. The results could not be more encouraging. Indeed, they reveal that retail banking positively affects banks' performance (return on assets).

Based on our findings, a number of policy recommendations can be provided.

First, it is in the interest of the banking system in Jordan to promote financial inclusion. Indeed, this aspect is important to, not only the concerned individuals (prospective customers), but also to the performance of the banks themselves. Together with the CBJ and other stakeholders, if they succeed, licensed banks in Jordan can "kill two birds with one stone". Banks can promote the economic benefits from financial inclusion while benefiting themselves.

Second, to promote inclusion, the **less educated, females, and people with low income must be encouraged to become financially included.**

The **"real obstacles"** that prevent Jordanian adults from financial inclusion must be determined, and relevant policies adopted. Within this context, and following a brainstorming session with more than 10 heads of retail banking, held at the premises of the Jordan Strategy Forum, a number of options were recommended including the followings:

1. **It would probably be useful to look into how to simplify the requirements and procedures to open a bank account.**
2. **To open a bank account in Jordan, one needs to be 18+ years old. Stakeholders must re-examine this rule and possibly change it to 15+.**
3. **Regulate and promote pre-paid banking as a way to increase financial inclusion.**
4. **Electronic verification (e-signature) must be regulated and adopted.**
5. **Banks should be given "incentives" to widen their regional coverage through the opening of additional branches, or greater use of mobile branches.**
6. **Many employees still receive their wages in the form of cash. This "norm" should be discouraged and bank transfers must be encouraged.**

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Appendix A

BOX 1

To evaluate the determinants of financial inclusion, we perform logit estimations of the following equation:

$$X_i = \alpha + \beta^* \text{Gender}_i + \sigma * \text{Age}_i + \Phi^* \text{Income}_i + \rho^* \text{Education}_i + \varepsilon_i$$

where X is the financial inclusion variable and i represents one given individual. As expected in such exercises, income is divided into quintile (first poorest category to fourth category) and these are given dummy variables. In addition, the gender issue is introduced by a dummy variable (1 if female and 0 otherwise). Similarly, education is divided into two variables (1 if the individual has secondary education or tertiary education and 0 otherwise). As for age, it is equal to number of years.

The results are as follows:

1. In Table 1, we include all individuals (males and females).
2. In Table 2 we include females only
3. In Table 3 we include males only

Table 1: Determinants of Financial Inclusion (Overall Sample)

Variable	Coefficient
Gender	1.29*
Age	0.05*
Income — Poorest 20%	-1.22*
Income — Second 20%	-1.15*
Income — Third 20%	-0.99*
Income — Fourth 20%	-0.37*
Secondary Education	1.07*
Tertiary Education	2.23*
Psedo R^2	0.31
Log Likelihood	984.98
* Implies significance at the 99 percent level.	

Table 2: Determinants of Financial Inclusion (Females Only)

Variable	Coefficient
Age	0.04*
Income — Poorest 20%	-1.23*
Income — Second 20%	-1.59*
Income — Third 20%	-0.98*
Income — Fourth 20%	-0.31*
Secondary Education	1.13*
Tertiary Education	2.25*
Psedo R^2	0.20
Log Likelihood	432.56
* Implies significance at the 99 percent level.	

Table 3: Determinants of Financial Inclusion (Males Only)

Variable	Coefficient
Age	0.05*
Income — Poorest 20%	-1.27*
Income — Second 20%	-0.94*
Income — Third 20%	-1.04*
Income — Fourth 20%	-0.47*
Secondary Education	0.97*
Tertiary Education	2.8*
Psedo R^2	0.28
Log Likelihood	549.11
*Implies significance at the 99 percent level.	

Appendix B

BOX 2

To examine the impact of bank credit to individuals on bank performance, we estimate the following panel regression model:

$$ROA_{i,t}=\beta_1 FE_{i,t}+\beta_2 RETAIL_{i,t}+\beta_3 BONDS_{i,t}+\beta_4 EQUIT_{i,t}+\beta_5 SIZE_{i,t}+\beta_6 COM_{i,t}+\beta_8 OVERHEAD_{i,t}+\varepsilon_{i,t}$$

where, the subscripts i and t denote banks (i = 1, …, 13) and time (t = 1, …, T = 2008-2015) respectively.

The dependent variables is return on assets (ROA) which is equal to net income divided by total assets. The independent variables include the ratio of foreign exchange deposits to total deposits (FE), ratio of credit to individuals to total credit (RETAIL), bank investment in bonds to total assets (BONDS), equity capital to total assets (EQUITY), natural logarithm of total assets (SIZE), net commission income to total operating income (COM), and total operating expenses to total assets (OVERHEAD). The results are presented in Table 4 below.

TABLE 4: Regression Results of Retail Credit

Variable	Dependent Variable: ROA	
	Coefficient	t-Statistic
FE	0.0124	**4.4424***
RETAIL	0.0100	**2.4715****
BONDS	-0.0029	**-0.7737**
EQUITY	0.0001	**0.0120**
SIZE	0.0008	**9.7308***
COM	0.2284	**1.6984*****
OVERHEAD	-0.3729	**-8.5578***
Adj. R-Squared	0.7440	
F-Statistic	50.8844*	
D-W Statistic	1.9246	
,**, imply significance at the 99, 95, and 99 levels respectively.**		

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