THE DETERMINANTS OF FINANCIAL INCLUISION IN EMERGING MARKETS "JORDANIAN CASE"

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Abstract

The aim of this paper is to examine the level and determinants of financial inclusion in Jordan based on the Global Findex database. Financial inclusion is critical because it helps to foster economic growth by increasing the possibilities for education and entrepreneurship in addition it could be contributing to alleviate poverty; therefore understanding the determinants of financial inclusion in Jordan is a major issue. We found that income, education, but also being a man and being older, contribute to greater financial inclusion, as they are positively related to having a formal account and this finding supports the view that policies favoring financial inclusion should target certain groups of population like women and young people. Our main conclusion is thus that the level of financial inclusion in Jordan is low relative to comparable countries. Financial inclusion, as measured by the ownership of a formal account, does not create a major problem in Jordan. Jordanian authorities could nonetheless improve the ownership of a formal account by dismantling obstacles related to gender, income and education, all of which found more long-run issues.

Keywords: Financial inclusion, Economic growth, Development, Poverty, Entrepreneurship.

1- Introduction:

The efforts to include the financially excluded segments of the society in Jordan in particular and Middle East in general are not new as we can say the economists note that the financial sector is continuously coming up with new and seamless ways to provide services to the global population not only for Middle East. The increase in the use of technology and other factors related to the financial industry seems to have filled the void of inaccessibility to financial services. The Concept of Financial inclusion related to individuals and businesses that have access to useful and affordable financial products and services that meet their needs transactions, payments, savings and credit in a responsible way. Based on World Bank reports since 2010, more than 55 countries have made commitments to financial inclusion, and more than 30 have either launched or are developing a national strategy. But, what is the importance of financial inclusion? Economists found out that having an access to financial services enables the poorest in society to step out of poverty**;** Also, financial inclusion is about enabling and empowering people and communities and Participation within the financial system may lead to all kinds of individual benefits such like the ability to start and grow a business, which gives people an opportunity through micro-financing schemes. Focusing on determinants of financial inclusion was the biggest concern since there was a few papers have examined the individual determinants of financial inclusion; Allen et al. (2016) analyze these individual characteristics on a global scale. They find that the probability of owning an account at a formal financial institution is higher for richer, more educated, older, urban, employed, married or separated individuals, while Fungácová and Weill (2015) study financial inclusion in China and find that richer, more educated, older men are more likely to be financially included. Concerning barriers to financial inclusion, poorer people care more about their lack of money and the fact that another member of the family has an account while more educated people are more concerned about cost and trust in the banking system The main question here is what the major points in the Literature Review was and in this part we should mention that Bhanot et al (2012) study concluded that financial inclusion in these remote areas of India was very low. Income levels, awareness regarding financial products through various sources, information about Self Help Groups (SHGs) and education levels of the respondents were concluded to be influential in determining financial inclusion. The association between financial development and growth has since remained topical in the finance literature and till today, experts have not been able to reach consensus on this relationship. The finance-growth nexus are not only based on old evidences but new interrelationships also expose the same trend (Gründler & Weitzel, 2013). Whereas the concept of financial development has not been doubtful, the concept of growth has remains grossly controversial to development economists and has even make earlier view of financial development to be less holistic. Financial inclusion is regularly considered as a key element that makes growth inclusive as access to finance can allow economic agents to make longer-term consumption and investment decisions, contribute in productive activities, and deal with unexpected short-term shocks.

Kohli (2013) highlighted the factors which significantly enhance financial inclusion in India. The author identified relationship between financial inclusion and levels of human development in India. Socio-economic factors, income levels among individuals were found to be influential factors on the level of financial inclusion in India and Mendoza (2009) examined the factors which influenced enhancing financial inclusion. The author has observed that micro finance was a significant tool for enhancing financial inclusion. In summary, our work on this paper contains findings of particular interest to design policies to foster financial inclusion in Jordan. It stresses the role of policies targeting groups of population particularly affected by financial Inclusion and identifies the main obstacles they face.

2- Financial Inclusion: Literature Review:

Financial inclusion can be defined as “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). However, monetary policy is conducted by the central banks in order to control the money supply, and inflation rates in the economy, through controlling the level of interest rate (Milton Friedman, 1964).

The effectiveness of this policy in influencing individuals and institutions behavior increases by the increase of financial inclusion. Interest rate changes will affect the consumption saving behaviors of the individuals through smoothing their consumption behavior. (Mehrota and Yetman.2014) provide evidence that “only financially included households are able to smooth their consumption in response to income volatility, whereas financially excluded households consume their entire labor income each period”. As a result of that monetary authority can focus on stabilizing inflation. Indeed as central bank looking for protecting the banking sector stability the increase of financial inclusion will support this stability through expanding the savers base and provide a diversified source of deposits for the banks (Allen, Kunt, Klapper, 2016), which will increase the banks’ ability to provide credit and diversify its investment, beside that deposits accounts play another role through acting as a median for payment. This saving base can be expanded if it was companied with deposit insurance. The financial sector plays a significant role in the economic growth through acting as intermediary between the economic parties by aggregating deposits from savers and providing credit to borrowers. The empirical research provide evidence that developed financial intermediation system will leads the long run economic growth through capital accumulation and enhancing productivity by providing financing for the investors (King and Levine, 1993). Moreover, Banks also are looking to diversify their investment through reduce the concentration of specific type of customer in their credit portfolio in order to reduce the risks associated with their portfolio, this objective could not be achieved unless there is an easy access to banking financing for a wide base of customers in the financial market. (Morgan and Pontines (2014) find that providing credit to greater number of (SMEs) is associated with a reduction in the default risk in the banking portfolio as the percentage of nonperforming loans is reduced.

The Global Financial Inclusion (Global Findex) provide a wide range of indicators that can be used to measure the financial inclusion in deferent countries around the world these indicators are: Account at a formal financial institution, Loan from a financial institution in the past year, Electronic payments used to make payments, Firms with a checking or savings account Firms with a bank loan/line of credit Firms using banks to finance investments.On the other hand, the data available on the Global Financial Inclusion (Global Findex) (Demirgüc¸-Kunt, A., Klapper, L.) tried to explain the factors affecting the saving borrowing, making payments, and managing risks in 148 countries some of these were on the individual such as gender, richer, more educated and older favor financial inclusion with a higher influence of education and income, Other institutional factors and country characteristics which play significant role in determining the level of trust and the costs of dealing with the bank sector (Allen et al. 2016) provide evidence that the quality of the institutions, legal rules, strong contract enforcement and political stability are positively related to financial inclusion.

The banking sector in Jordan consists of 16 local banks and 9 foreign banks with 786 branches distributed around the county (ABJ annual report, 2015), and 10 microfinance institution (MPIC, 2012) despite that %25 of individuals have formal account and %14 formal borrowing. Jordanian policy makers tried to develop the institutional environment through establishing the Jordan Deposit Insurance Corporation who increased the maximum limit for compensating the depositors to 50000 in 2010. In order to encourage banks to expand their lending to small and medium businesses, The Jordan Loan Guarantee Corporation providing highly diversified guarantee programs for banks. The monetary policy represented by the central bank of Jordan (CBJ) took the initiative to expand the financial inclusion through the issuance of many instructions in order to provide the necessary protection to the financial sector customers through the issuance of the Instructions for dealing with customers with fairness and transparency (2012), and the instruction for financing the SMEs, they also issued a project to expand the financial knowledge around the college students.

3- The Data, Methodology and Estimated Results:

In this section we document financial inclusion in Emerging Markets especially in Jordan. We describe the data and then examine the main financial inclusion indicators. We use the World Bank’s 2014 Global Findex database to realize our analyses. The database is obtained thanks to surveys realized in more than 140 countries and covering almost 150,000 persons worldwide representing more than %97 of the world’s population. The survey was carried out by Gallup, Inc., in association with its annual Gallup World Poll. Using randomly selected, nationally representative samples, roughly 1000 people in each economy have been questioned using over 140 languages.

The target population is the entire civilian, non-institutionalized population aged 15 and above. The Global Findex database provides a large number of indicators on financial inclusion enabling to assess the amount of account penetration, the use of financial services, the purposes and motivations, the alternatives to formal finance, etc. It also provides information on some characteristics of individuals such as (income, education, age, and gender) that will be used in our estimations. In line with previous literature, we focus on the main measures of financial inclusion. Formal account refers to the fact that the individual has an account at a financial institution.

To provide insights on the level of financial inclusion in Emerging Markets, we measure financial inclusion from different perspectives. We focus on one main indicator, in line with Demirgüc-Kunt and Klapper (2013).The ownership of an account in a formal financial institution (formal account) which considers as the most traditional indictor to measure the financial inclusion. This is defined using the following survey question: Do you currently have a bank account at a formal financial institution?

Table 1: Main indicators for financial inclusion in Emerging Markets

	Formal account		
	Obs.	Mean	Std. dev.
Jordan	1000	0.31	0.46
Egypt	1000	0.20	0.40
Kuwait	1013	0.77	0.42
Lebanon	1000	0.54	0.50
Tunis	1056	0.29	0.45
Middle East	6007	0.26	0.44
World	129082	0.53	0.50

Data source: World Bank Global Findex database.

This table shows the descriptive statistics for the main financial inclusion indicator “Formal account”. Formal account refers to adults reported to currently have a bank account at a formal financial institution. Financial inclusion can take diverse forms, the broader one being the ownership of an account in a formal financial institution.

A formal account serves as an entry key to the banking industry because it allows the individual to open a savings account and to apply for a loan. We observe that %31 of Jordanian individuals have an account at a formal financial institution. This figure is lower than the average for Emerging Markets. Only %20 of Egyptian and %29 of Tunisian individuals have a formal account, which is still smaller than figures reported in the other countries. The Jordanian figure is also low in comparison with the world average, as half of the world adult population still does not have a formal account (Demirgüc-Kunt & Klapper, 2013).

Table 2: Descriptive statistics for the main variables in the estimations (Jordan)

Variables	Definition	Obs.	Mean	St. dev.
Gender	= 0 if female, =1 Male	1000	0.48	0.50
Age	age in number of years	1000	37.34	15.57
Income - poorest 20%	=1 if income in the first income quintile, = 0 otherwise	1000	0.16	0.37
Income - second 20%	=1 if income in the second income quintile, = 0 otherwise	1000	0.18	0.38
Income - third 20%	=1 if income in the third income quintile, = 0 otherwise	1000	0.22	0.41
Income - fourth 20%	=1 if income in the fourth income quintile, = 0 otherwise	1000	0.20	0.40
Secondary education	=1 if secondary education, = 0 otherwise	1000	0.67	0.47
Tertiary education	=1 if tertiary education, = 0 otherwise	1000	0.13	0.34

Data source: World Bank Global Findex database.

This section is devoted to the presentation of our main empirical findings. We first describe the methodology. We then present the results for the determinants of the main financial inclusion indicator. In order to evaluate the determinants of financial inclusion in Jordan, we perform logit estimations and use the following equation:

$$\mathbf{X_i = \alpha + \beta * Genderi + \sigma * Age_i + \Phi * Income_i + \rho * Education_i + \varepsilon_i}$$

Where X is the financial inclusion variable and i represents one given individual. The individual characteristics are the explanatory variables. Gender is a dummy variable equal to zero if the individual is a woman (Female) and one else. Age is represented with one measure: one with the number of years (Age). Taking income into account, we use four dummy variables (poorest 20%, second 20%, third 20% and fourth 20%). The fifth richest quintile is the omitted dummy variable. Poorest 20% is a dummy variable equal to one if income is in the first income quintile, zero elsewise, and so on for the other dummies. Regarding to education, we use two dummy variables: Secondary education and Tertiary education. Secondary education is equal to one if the individual has completed secondary education, zero elsewise. Tertiary education is equal to one if the individual has completed tertiary education or more, zero elsewise. The omitted dummy variable is primary school or less. Table 2 reports the descriptive statistics for the individual characteristics.

Table 3: Determinants of Financial Inclusion in Jordan

Variables	Account at formal financial institution
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***
Constant	-3.66***
Pseudo R^2	0.31
Log likelihood	984.979

***Denotes significance at the 1% level. ** Denotes significance at the 5% level.

* Denotes significance at the 10% level.

Data source: World Bank Global Findex database.

We found that women are less likely to report having a formal account in Jordan. Hence gender exerts an impact on financial inclusion as regards formal account. The impact of age is identical for the financial inclusion indicators. We found significant effects for age, which are positive. Hence there is a nonlinear relation between age and financial inclusion. This means that older people use more formal financial services than does the rest of the population, but this obtains only up to a certain age. Older individuals might be more unenthusiastic to use formal financial services as they are not used to using them. Alternatively, financial institutions might put less effort into attracting older clients.
We observe significantly positive coefficients for Secondary education and Tertiary education for the indicator of financial inclusion, with higher coefficients for the latter one. Like Allen et al. (2016) worldwide and Fungácová and Weill (2015), we find that more educated adults are more likely to be financially included and that age has a non-linear relation with financial inclusion. Overall, these endings raise further questions. We wonder if individuals' characteristics also determine the barriers to financial inclusion and the use of alternative sources of borrowing in Jordan.

Table 4: Determinants of financial inclusion for Females in Jordan

Variables	Account at formal financial institution
	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***
Constant	-3.39***
Pseudo R^2	0.20
Log likelihood	432.595

***Denotes significance at the 1% level. ** Denotes significance at the 5% level.

* Denotes significance at the 10% level.

Data source: World Bank Global Findex database.

Table 5: Determinants of financial inclusion for males in Jordan

Variables	Account at formal financial institution
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	2.08***
Constant	-2.39***
Pseudo R^2	0.28
Log likelihood	549.110

***Denotes significance at the 1% level. ** Denotes significance at the 5% level. * Denotes significance at the 10% level.

Data source: World Bank Global Findex database.

The tables 4 and 5 results shows that if we want to measure the determinants of financial inclusion by using samples consist from either a females or males, this will give us a robust results in line with the general model to confirm our previous findings and to confirm that the sex in the sample is less likely effect the general conclusion which stems from the previous analysis.

4- Summary and Conclusion:

In this paper we examine the level and determinants of financial inclusion in Jordan based on the Global Findex database. Financial inclusion is critical because it helps foster economic growth by increasing the possibilities for education and entrepreneurship in addition it could be contributing to alleviate poverty; therefore understanding the determinants of financial inclusion in Jordan is a major issue. We found that income, education, but also being a man and being older, contribute to greater financial inclusion, as they are positively related to having a formal account and this finding supports the view that policies favoring financial inclusion should target certain groups of population like women and young people.

Our main conclusion is thus that the level of financial inclusion in Jordan is low relative to comparable countries. Financial inclusion, as measured by the ownership of a formal account, does not create a major problem in Jordan. Jordanian authorities could nonetheless improve the ownership of a formal account by dismantling obstacles related to gender, income and education, all of which found more long-run issues. In summary, our work contains findings of particular interest to design policies to foster financial inclusion in Jordan. It stresses the role of policies targeting groups of population particularly affected by financial Inclusion and identifies the main obstacles they face.

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