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RDF-71; No. of Pages 12
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ScienceDirect

Review of Development Finance xxx (2016) xxx–xxx

Review of DEVELOPMENT FINANCE

www.elsevier.com/locate/rdf

The determinants of financial inclusion in Africa

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Abstract

The objective of this paper is to examine the determinants of financial inclusion in Africa. We use the World Bank's Global Findex database on 37 African countries to perform probit estimations. We find that being a man, richer, more educated and older favor financial inclusion with a higher influence of education and income. Mobile banking is driven by the same determinants than traditional banking. We observe that the determinants of informal finance differ from those of formal finance. Our work therefore contains findings to design policies to foster financial inclusion in African countries.

JEL classification: G21; O16

Keywords: Financial inclusion; Financial institutions; Africa

1. Introduction

At the G20 Summit in Seoul in 2010, financial inclusion, i.e. the use of formal financial services, has been recognized as one of the main pillars of the global development agenda.

In its most basic definition, financial inclusion refers to the fact that a person owns an account at a formal financial institution. Such an account allows to save and borrow money formally, to contract insurance or to use payment services. Being financially included leads therefore to economic benefits. It can favor disadvantaged and poor people allowing them to increase their income and the probability of being employed (Bruhn and Love, 2014). Indeed, in the absence of inclusive financial systems, poverty traps can emerge and hamper economic development since access to financial tools allows people to invest in their education, finance projects and become entrepreneurs (Demirgüç-Kunt and Klapper, 2012b). In addition, financial inclusion can favor women empowerment (Swamy, 2014) and contribute to financial stability (Han and Melecky, 2013).

Financial inclusion is a particular concern in Africa. Beck and Cull (2015) observe that African banking systems are less inclusive than those outside Africa. Once they drop upper middle-income countries, they observe that 21 percent of firms affirm they have a line of credit and 16.5 percent of households report having an account with a formal financial institution in the median African country, while the figures are respectively 43 percent and 21 percent in the median non-African country. Mlachila et al. (2013a) point out that financial sector development has contributed to improve the growth process but financial services are clustered around major urban areas. There are, however, current evolutions which can foster or at least transform the situation of financial inclusion in Africa with the emergence of mobile banking and the rising economic growth in many of these countries.

Therefore, to understand what influences financial inclusion is a major question to favor economic development in Africa. The objective of this paper is to contribute to the understanding of the determinants of financial inclusion in Africa. In this aim, we use data from the 2014 World Bank's Global Findex database to answer four key questions for financial inclusion in Africa. We realize probit estimations to assess the impact of individual characteristics – gender, age, income and education – on

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Peer review under responsibility of Africagrowth Institute.

http://dx.doi.org/10.1016/j.rdf.2016.05.001

financial inclusion indicators. Our sample covers 37 African countries representing 37,102 individuals.

First, we examine the individual determinants of the three main financial inclusion indicators: ownership of a bank account, saving on a bank account, and use of bank credit. We are then able to identify if some individuals are particularly affected by lack of access to the formal banking industry. Second, we analyze how barriers to financial inclusion are associated with individual characteristics. It helps identifying policies to promote financial inclusion. Third, we investigate the determinants of informal saving and informal credit. It is of importance to check if these alternative forms of finance are associated with different individual characteristics. It is notably of interest to know if gender types differ in the form of finance they mainly use, following the finding from Demirgüç-Kunt et al. (2013b) of a gender gap in the use of informal financial services in some countries. Fourth, we study the motivations for saving and credit and check how they are related to individual characteristics. We can then provide a better knowledge of the financial behavior of individuals in Africa.

Our paper provides several contributions to the literature. First, it contributes to the expanding literature on the determinants of financial inclusion by focusing on Africa in addition to former works worldwide (e.g., Allen et al., 2016, Demirgüç-Kunt and Klapper, 2012b) or analyzing one country (e.g., Fungáčová and Weill, 2015, for China). Demirgüç-Kunt and Klapper (2012) provide an investigation of financial inclusion in Africa, but they only provide statistics on this issue and do not aim to identify the determinants of financial inclusion. Second, our analysis contributes to the literature on key current finance issues for African countries: informal finance, and mobile phone banking. African financial markets are dualistic markets organized around the interaction between formal financial institutions and informal agents. According to Steel et al. (1997), increasing the role of informal institutions can enhance access of the broader population to financial tools but this requires a good understanding of the phenomenon. We provide new analysis of the determinants of informal finance in Africa. We also give new evidence on the determinants of mobile money banking. Such analysis is of prime interest, considering for instance the success of the Kenyan mobile phone-based payments system M-PESA and the potential of mobile banking among the continent (Mlachila et al., 2013b).

The paper is organized as follows. Section 2 is dedicated to the related literature. Section 3 provides descriptive statistics on our sample. Section 4 presents the main estimations. Section 5 provides additional estimations to dig deeper what shapes financial inclusion. Section 6 concludes.

2. Related literature

In this section we provide an overview of the literature on financial inclusion. We present the main findings for our questions related to levels of financial inclusion, determinants of financial inclusion, and informal financial inclusion.

2.1. Levels of financial inclusion

Demirgüç-Kunt et al. (2015) give global statistics about financial inclusion with 2014 data from the Global Findex database. First, 62 percent of adults globally own an account at a formal financial institution, either at a bank or with a mobile money provider. Account ownership has been substantially increasing in the developing world, reaching 54 percent of the population in 2014, notably thanks to innovations like mobile banking. However, the share of the population with a formal account is still far lower than in high-income economies (94 percent). Second, 56 percent of adults worldwide declared having saved money aside in the past 12 months in 2014. One quarter of adults reported having saved money at a formal financial institution, representing half of the savers. However, the percentage of formal saving varies greatly between high-income economies (70 percent among savers) and developing economies (40 percent among savers). Finally, 42 percent of adults worldwide declared having borrowed money in the past 12 months. Formal credit at a financial institution has only been used by 9 percent of adults in developing countries while it has been used by 18 percent in high-income economies.

Financial inclusion varies greatly on the African continent between regions and also between countries (Demirgüç-Kunt and Klapper, 2012a). For example, while 51 percent of Southern Africans owned an account in 2011, only 11 percent of Central Africans did. Concerning formal saving, only 4 percent of North Africans saved money at a formal financial institution while 18 percent of Western Africans did.

Africa is at the leading position in terms of mobile banking with all 13 countries with the highest share of the population owning a mobile money account – 10 percent or more – being African (Demirgüç-Kunt et al., 2015). In a few African countries (Côte d'Ivoire, Somalia, Tanzania, Uganda, and Zimbabwe), more people declared owning a mobile money account than a formal account at a financial institution. The phenomenon is especially important in Eastern Africa, but also in Southern Africa.

2.2. The determinants of financial inclusion

A few studies have examined the individual determinants of financial inclusion.

Using the 2012 World Bank Global Findex Database, 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. The likelihood of saving formally is higher for the same individual characteristics. Finally, the probability of borrowing formally increases for older, educated, richer and married men.

Using the 2012 Global Findex, Fungáčová 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