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FINANCIAL INCLUSION: GLOBALLY IMPORTANT DETERMINANTS

Peterson K. Ozili[1]

Abstract

This paper highlights the globally-important determinants of financial inclusion. The determinants identified in this paper are formal account ownership; demand for formal savings; demand for formal borrowing; financial literacy and education; debit and credit card usage; the need to receive remittances from family and friends; size of the financial system; number of automated teller machines (ATMs); number of bank branches; proximity to a bank; availability and access to mobile phones; availability of digital financial products and services; technology infrastructure; government policy; culture and traditional belief systems; national financial inclusion strategy and implementation; and direct legislation.

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[1] Central Bank of Nigeria, Abuja, Nigeria, e-mail: petersonkitakogelu@yahoo.com, ORCID: 0000-0001-6292-1161.

Introduction

This paper discusses the globally important determinants of financial inclusion. Financial inclusion is achieved when there is timely provision of affordable formal financial services to people in all segments of society. Financial exclusion – the opposite of financial inclusion – is a global problem which financial inclusion programs seek to address (see Collard et al., 2001; Koku, 2015; Chaia et al., 2009; Ozili, 2021a). Policymakers in many countries are taking targeted actions to improve citizens' livelihoods for greater sustainable economic development, and they consider financial inclusion to be a critical factor in improving the livelihood of citizens. Given that international policymakers continue to embrace financial inclusion as an important development priority (Alliance for Financial Inclusion, 2013; World Bank, 2013), it is important to identify the globally important determinants of financial inclusion that cut across all country and regions.

Many countries have achieved remarkable success in financial sector development (Guiso et al., 2004; Levine, 1999), but these developments have not transformed the lives of poor people in a positive way, especially people outside the formal financial sector. This has led financial regulators to pressure financial institutions to do more to reach the unbanked population by expanding banking and credit services to poor households in rural and remote areas.

Policymakers also have a role to play. Policymakers in advanced countries are seeking ways to deepen the financial sector and increase the provision of micro-credit and micro-insurance to the rural population while policymakers in developing countries are learning from the financial inclusion strategies adopted in advanced countries in order to adapt those strategies to meet their country-specific needs. This suggests that there are uniform determinants or factors that promote or hinder financial inclusion irrespective of country. These factors are the globally important determinants of financial inclusion. These factors are discussed in this paper.

The discussion in the paper contributes to the financial inclusion literature in the following ways. One, it contributes to the policy literature that examines the determinants of financial inclusion (see Barajas et al., 2020; Ozili, 2021a; Arun & Kamath, 2015; Ozili, 2018; Mehrotra & Yetman, 2015; Ozili, 2021c). These studies seek policy solutions to the financial exclusion problem. Two, it contributes to the broad financial inclusion literature by exploring more explicitly the global determinants of financial inclusion (see, for example, Cull et al., 2014; Ozili, 2018; Allen et al., 2016; Demirguc-Kunt & Klapper, 2012; Ozili, 2020b). Finally, this study provides additional insights to improve our understanding of the benefits of financial inclusion for society and for socio-economic development.

The rest of the paper is structured in the following way. Section 2 presents the recent literature on financial inclusion. Section 3 presents a summary of studies that identify some financial inclusion determinants. Section 4 discuss the globally important determinants of financial inclusion. Section 5 concludes.

Recent Literature

Several studies in the literature identify some determinants of financial inclusion. Xu (2020), in a cross country study, examines the role of social trust in financial inclusion, and observes that social trust has a positive impact on financial inclusion, and social trust supplements weak formal institutions and low educational levels. Senyo and Karanasios (2020) show that Fintech firms act as innovators and aggregators, they leverage existing infrastructure of incumbents and deploy cooperative strategies to meet financial inclusion objectives. Ozili (2021c) shows that although Fintech firms helped to improve the level of financial inclusion, the presence of Fintech firms pressured financial institutions to smooth their income over time. Barajas et al (2020) point out that structural factors and policy-related factors, such as encouraging banking competition or channeling government payments through bank accounts, played an important role for greater financial inclusion.

Ozili (2021a) identifies some issues with the policy-driven global financial inclusion agenda. The issues are how to determine the optimal level of financial inclusion, extreme financial inclusion, how financial inclusion might transmit systemic risk to the formal financial sector, and whether financial inclusion and exclusion are pro-cyclical with changes in the macroeconomy. Duvendack and Mader (2020), undertook a survey of previous studies, and show that the effects of financial inclusion on poverty indicators such as income, assets, spending, health status and other social outcomes, are small and inconsistent. Moreover, they did not find evidence for meaningful behavioural change leading to further positive effects.

Oz-Yalaman (2019) shows that greater financial inclusion leads to higher tax revenues. Cabeza-García et al. (2019) show that greater financial inclusion of women, through more access to a bank account and access to credit cards, has a positive effect on economic development. Zhang and Posso (2019) find that financial inclusion has a positive effect on household income, and low-income households benefited more from financial inclusion than high and mid-level income households. The implication is that financial inclusion helps in reducing income inequality. Chai et al. (2019) explore the heterogeneous impact of social networks on informal financial inclusion for Chinese urban and rural households. They find that social networks significantly increase the probability of household participation in the informal financial market.

Birkenmaier et al. (2019) argue that achieving financial inclusion will require participation from many different types of formal financial institutions, such as banks, credit unions, community development finance institutions and national credit bureaus. Ozili (2021e) shows that higher formal account ownership leads to higher financial risk through high nonperforming loans and cost inefficiency in developed countries and transition economies. Zins and Weill (2016) show that being a man, richer, more educated and older favors financial inclusion in Africa while the determinants of informal finance differ from the determinants of formal finance. Eldomiaty et al (2020) examine the institutional determinants of financial inclusion using data from the world governance indicators (WGIs) for the years 2011, 2014 and 2017. They find that control of corruption, government effectiveness, political stability and voice and accountability are significant institutional determinants of the level of financial inclusion.

Globally important determinants: supporting literature

Based on a survey of the recent studies in the financial inclusion literature, a number of globally important determinants of financial inclusion were identified as shown in Table 1.

Table 1: Globally important determinants of financial inclusion

S/N	Globally important determinants	Supporting literature
1.	Formal account ownership	Allen et al. (2016); Demirguc-Kunt and Klapper (2012); Ozili (2021a); Wale and Makina (2017)
2.	Need for formal savings	Ouma et al. (2017); Fungáčová and Weill (2015); Ozili (2018)
3.	Need for formal borrowing	Xu (2020); Chen and Jin (2017); Allen et al. (2016)
4.	Financial literacy and education	Grohmann et al. (2018); Bongomin et al. (2018); (Ozili 2018); Kodongo (2018); Ozili (2021a)
5.	Debit and credit card usage	Chen and Jin (2017); Ozili (2020a); Demirguc-Kunt et al. (2017)
6.	Need to receive remittances from family and friends	Ajefu and Ogebe (2019); Naceur, et al. (2020); Tu et al. (2019); Wellalage and Locke (2020)
7.	Size of the financial system	Owen and Pereira (2018); Chakrabarty (2011); Chauvet and Jacolin (2017)
8.	Number of automated teller machines (ATMs)	Neaime and Gaysset (2018); Bachas et al. (2018)
9.	Number of bank branches	Kumar (2013); Ozili (2018); Chikalipah (2017)
10.	Proximity to a bank	Ozili (2021d); Bhuvana and Vasantha (2016); Ghosh (2020); Sarma (2015)

11.	Availability and access to mobile phones	Lenka and Barik (2018); Donovan (2012); Ozili (2018); Klein and Mayer (2011)
12.	Availability of digital financial products and services	Klein and Mayer (2011); Ozili (2018); Ozili (2020d)
13	Technology infrastructure	Diniz et al. (2012); Mushtaq and Bruneau (2019); Bisht and Mishra (2016); Ozili (2018)
14.	Government policy	Arun and Kamath (2015); Marshall (2004); Aggarwal and Klapper (2013); Staschen and Nelson (2013)
15.	Culture and traditional belief systems	Ozili (2018); Okello and Munene (2019); Ozili (2020a)
16.	National financial inclusion strategy and implementation	Apramuka and Kusuma (2020); Secretariat (2015); Lakew and Azadi (2020); Güngen (2018); Joshi (2014)
17.	Direct Legislation	Simpson (2015); Lee (2020); Stănescu and Gikay (2020); Ozili (2021f)
18.	State of the economy	Ozili (2021b)

Source: Own elaboration.

Discussion on the globally important determinants

Demand-side determinants

Formal account ownership

Ownership of a formal account is the first step and the most basic step to financial inclusion in any society. Owning a formal account gives the individual, household or firm access to a wide variety of financial services in the formal financial system (Allen et al., 2016; Ozili 2021a). Individuals are able to open an account in a formal financial institution of their choice, and financial institutions will offer an array of formal accounts from which customers can choose the type of formal account they want (Ozili, 2018). Examples of formal accounts available to customers include a loan account, savings account, deposit account, transaction account and corporate account. Individuals who own a formal account are able to perform financial transactions that improve their welfare such as taking loans, saving for the future, paying bills, etc. Therefore, there is a positive relationship between formal account ownership and access to finance for greater financial inclusion.

Need for formal savings

Individuals, households and firms may wish to own a stock of savings in a formal financial institution which allows them to plan for the future and take advantage of attractive interest rates on formal savings accounts as opposed to saving money using informal channels. Individuals, households and firms who have formal savings can use their savings to invest in new projects. They can also use formal savings to meet sudden emergency expenditure. Examples of formal savings products include: certificate of deposit, high-interest savings account, rewards savings account, joint savings account and health savings account. Therefore, a positive relationship between demand for formal savings and the level of financial inclusion is expected.

Need for formal borrowings

Individuals, households and firms may also wish to have a formal loan account in a financial institution. Such formal loan accounts will give them access to formal credit which they can use to meet their recurrent and capital expenditures when there is a shortfall in current disposal income. Individuals, households and firms who have a formal loan account will have access to a variety of loan products such as personal loans, credit card loans, home loans, car loans, small business loans, payday loans, and cash advances. Therefore, a positive relationship between demand for formal borrowings and the level of financial inclusion is expected.

Financial literacy and education

The propensity for individuals, households and firms to join the formal financial sector is higher when individuals, households and firms have greater financial literacy and education such as knowledge about financial concepts, financial numeracy, the ability to make informed judgments, money management skills, and awareness of financial products and services (Ozili, 2021a). Grohmann and Menkhoff (2017) find evidence that financial literacy for the general population promotes financial inclusion. Therefore, a positive relationship between financial literacy and financial inclusion is expected.

Debit and credit card usage

For safety and convenience reasons, individuals and households who own a checking account may prefer to hold cash equivalents rather than having cash-in-hand (Ozili, 2018). They may choose to own card products, particularly debit cards and credit cards. Debit cards allow users to buy things without carrying cash. Users can use debit cards to pay for goods in most stores by swiping their card or by entering their PIN number on a key pad into a payment device. Debit cards take money out of users' checking account immediately and this provides convenience to customers as it allows them to have unfettered access to the money in their checking account without having to visit the bank to collect money to make payment for goods and services. On the other hand, credit cards are the most common way to enter the formal credit sector especially in developed countries. Credit cards allow customers to use money they do not own to meet current expenditure with the possibility of repaying the money in the nearest future. Some benefits of using credit cards include an initial one-time bonus, minimal fees and low interest rates. Also, there are safety reasons for using credit cards. Paying with a credit card makes it easier to avoid losses from fraud compared to debit cards which can be stolen. Overall, a positive relationship between debit and credit card usage and the level of financial inclusion is expected.

Need to receive remittances from family and friends

Many individuals and households in developing countries have migrant relatives living and working abroad. The migrant relatives often send remittances back home (Ben Naceur et al., 2020; Gautam, 2019). Individuals and households in developing countries will have an incentive to join the formal financial sector as it offers one of the most secure way for them to receive the remittances sent to them from their migrant relatives living and working abroad. Migrant workers take on foreign jobs to improve their own lives and the lives of those back home. The remittance flows sent back home by migrant workers will encourage their dependents to join the formal financial sector so that they can receive the remittance. The received remittances can then be used to pull people out of poverty (IFAD, 2015). Therefore, a positive relationship between remittance flows and the level of financial inclusion is expected.

Supply-side determinants

Size of the financial system

A large financial system is beneficial for financial inclusion. This is because a large financial system has many financial instruments, financial institutions and financial markets which offer a wide array of financial products and services that meet the needs of a wide variety of consumers including poor households and individuals. Large financial systems usually have a market for both sophisticated customers, low-income customers and poor customers. Poor customers will benefit from the wide array of financial products and services offered in large financial systems. They will also benefit from the products and services offered at the lower end of the market. However, a large financial system may promote financial inclusion only up to a certain extent due to inherent risks and concerns that 'too much finance' may hinder financial inclusion.

Number of automated teller machines (ATMs)

Many urban and rural communities in most countries remain heavily dependent on physical cash. Automated teller machines (ATMs) provide a convenient way for people to collect cash without visiting the bank. The ATM is a tool to drive financial inclusion because it offers efficiency and affordability for achieving financial inclusion. ATMs can dispense cash to customers, accept deposits, process money transfers and offer customized self-service options to customers (NCR, 2017). ATMs also give customers the ability to control their financial transactions on the desktop of the ATM. This helps customers to understand and monitor their expenses. Also, for banks that cannot expand their branch network to remote and rural areas, such banks will rely on deploying affordable ATMs to remote and rural communities to serve people in those communities (NCR, 2017). Therefore, greater supply of ATMs, in both urban and rural communities, can improve the level of financial inclusion.

Number of bank branches

Despite the growth in the use of digital banking applications, many individuals and households still prefer to visit a physical bank to perform transactions, for many reasons. One, some customers in urban areas value interpersonal relationship with bank staff as it gives them assurance that their transactions will be processed, and they also want to be able to reach out to bank staff to get updates on whether their complaints have been resolved. Two, other customers prefer to visit a bank branch to perform transactions to avoid falling in the hands of internet fraudsters who lurk around the internet banking platforms to defraud unsuspecting customers. Three, customers in remote communities may prefer to visit a bank branch to receive guidance from bank staff when depositing money or making payments. The three examples above show that physical banking through branch networks will continue to play a big role in promoting financial inclusion despite the growth of digital banking applications that offer remote banking. Therefore, a greater number of physical bank branches should have positive effects for financial inclusion.

Closeness to a bank

Individuals and households are more likely to join the formal financial sector if a formal financial institution is located very close to where they live. This will save transportation costs for community members, improve their accessibility to a bank, and increase their access to basic financial services such as opening a bank account and owning an ATM card. Similarly, financial institutions located in residential areas and in small communities will be able to launch promotional campaign activities targeted at community members to persuade them to join the formal financial sector through account ownership and other available services.

Availability and access to mobile phones

Mobile phones also play an important role in promoting financial inclusion. Mobile phones are becoming cheaper due to competition among mobile phone providers. Poor individuals and households can purchase cheap mobile phones which they can use to access banking services remotely. Mobile phones permit customers to interact directly with their bank through easy-to-use banking applications and quick codes such as “unstructured supplementary service data” (USSD) code provided by banks for customers to use on their mobile phones. Through these channels, bank customers are able to check account balances and initiate transactions from wherever they are. The mobile phone becomes the access point through which individuals and households can access banking services, and it offers a level of convenience and control that no other channel can provide (Mas, 2012). Therefore, greater availability and access to mobile phones will improve the level of financial inclusion.

Availability of digital financial products and services

Available digital financial products and services offer several benefits to individuals and households. They offer enhanced decision making, simplicity and efficiency. Digital financial products and services help to increase access to financial services among poor individuals and reduce the cost of financial intermediation for banks and Fintech providers for the benefit of customers. Digital financial products include a broad range of financial products used to access digital channels, such as, point-of-sale (POS) terminals, debit cards, credit cards, payment tokens, card readers, etc. Digital financial services, on the other hand, refer to a broad range of financial services accessed and delivered through digital channels, such as credit, savings, remittances and insurance.

Non-market determinants

Technology infrastructure

Technology infrastructure such as the internet physical hardware, software, transmission media, broadband and internet protocols are important for sustained technological development. Improved technology infrastructure can help to uplift people from poverty by providing new tools that give poor people greater access to the capital market, credit market and a wide variety of financial services to choose from.

Government Policy

Government policy is important for financial inclusion. Government policies can create an enabling environment for financial institutions to thrive, which can encourage financial institutions to offer cheaper financial services to customers including poor individuals and households. Government policies such as low taxes, low cost of regulatory compliance for financial institutions, fewer regulations, easy-to-get licenses, low energy prices, good infrastructure, good transportation infrastructure, low transportation costs, government policy consistency, and economic policy certainty, can encourage financial institutions to expand financial services to local communities to serve people in such communities. In the absence of enabling government policies, financial institutions will be reluctant to expand into remote communities that do not have proper infrastructure to support their business.

Culture and traditional belief systems

Belief systems are powerful. They can encourage or discourage a large number of people from using certain financial services. In the literature, there is evidence that belief systems limit the use of basic financial services not only in rural areas but also in urban areas, too (Demirgüç-Kunt and Klapper, 2013; Ozili, 2018; Kim et al, 2020; Ozili, 2021a).Certain traditional and religious belief systems oppose the use of digital technology in finance. Followers of such belief systems refuse to use mobile apps or digital channels to check their account balances, instead they prefer to visit the bank to check their account balance. They will refuse to use digital payment channels to transfer funds to a third-party, instead they will visit the bank to make transfers.

National financial inclusion strategy and implementation

A country's national financial inclusion strategy is also important because it prioritizes the most important government interventions needed to achieve financial inclusion objectives. For example, policymakers in a country may introduce a national financial inclusion strategy that prioritizes agency banking, mobile banking, mobile payments, financial literacy programs and consumer protection as its strategy to achieve high levels of financial inclusion. Other countries may adopt a different financial inclusion strategy based on the peculiarities of the unbanked population in the country. After a national financial inclusion strategy has been chosen, implementation must be effective to achieve the desired results. The government may need to grant new licenses to many small financial institutions, payment solution providers, bank agents and rural microfinance institutions willing to extend their services to the unbanked population. Also, fewer regulations and more regulatory sandboxes may be needed at the early stages to allow the agents of financial inclusion to expand their services to a large segment of the unbanked population. The government also needs to monitor the progress made, and identify lessons learned from a failed or successful strategy.

Direct Legislation

Certain legislation can help to promote or hinder financial inclusion. Policymakers can pass laws that require all employers to pay workers' wages and salaries into the bank account of workers. Such laws can promote financial inclusion, especially for workers in the informal sector, as all workers will receive their wages and salaries in a bank account as required by law, thus leading to higher financial inclusion. On the other hand, policymakers may pass laws that compel financial institutions to increase the documentation requirements for opening a formal account. For example, lawmakers may enact new anti-money laundering (AML) laws that require banks to collect additional information about customers' personal life, source of income, and location, which customers may not want to disclose. Customers may feel that the documentation requirements are excessive and burdensome, which can discourage them from joining the formal financial sector.

Conclusion

This paper identified the globally-important determinants of financial inclusion. The determinants were divided into three broad categories: demand-side determinants, supply-side determinants, and non-market determinants. The identified determinants are: formal account ownership; demand for formal savings; demand for formal borrowings; financial literacy and education; debit and credit cards usage; the need to receive remittances from family and friends; size of the financial system; the number of automated teller machines (ATMs); the number of bank branches; proximity closeness to a bank; availability and access to mobile phones; availability of digital financial products and services; technology infrastructure; government policy; culture and traditional belief systems; national financial inclusion strategy and implementation; and direct legislation.

The implication is that there are uniform determinants that serve as a benchmark in assessing the extent of financial inclusion across countries. Policymakers need to also take into account a wide array of factors when choosing which financial inclusion objectives to pursue and when choosing a strategy to achieve financial inclusion objectives. Policymakers also need to find a way to balance the needs of financial institutions who seek an enabling business environment as well as the needs of poor individuals and households who need cheaper financial services.

One limitation of the study is that the financial inclusion determinants discussed in this paper may not be applicable to all countries. Arguably, the determinants of financial inclusion in specific countries may be influenced by unique country characteristics or other differences, especially demographic differences. These differences may also affect the effectiveness of financial inclusion policies and outcomes in each country.

Future research can explore other structural factors that affect the level of financial inclusion. Future studies can also explore how the financial inclusion determinants differ in developing and developed countries. Finally, future studies can also examine the cross-country determinants of financial inclusion in regional blocs.

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