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Can Regulation Promote Financial Inclusion?

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Abstract

Despite the commitments of the development community toward broader access to finance, financial inclusion rates worldwide are rather unsatisfactory. To date, around two billion adults do not have access to basic financial services such as savings and checking accounts. Attempting to bridge such gap between policy objectives and outcomes, several economists have probed the determinants of financial inclusion. This paper contributes to the debate by investigating the role played by financial regulation. First, the paper proposes a broad index of regulatory quality for financial inclusion, emphasizing the role of nontraditional delivery models, for example, branchless banking, and actors, for example, nonbank lending institutions. Second, the paper tests the relationship between regulatory quality and financial inclusion outcomes. The analysis finds that in countries where regulatory quality is within the top quartile, individuals are 12.4 percent more likely to have an account at a financial institution with respect to bottom quartile countries.

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Development Economics, World Bank[1]


I. Introduction

Financial systems support livelihood enhancement and economic development by offering savings, payment, credit and risk management services to households and firms (Čihák et al, 2013). Variable incomes and cash flows associated with sporadic and seasonal employment impose challenges on households lacking access to credit and financial services. Through saving accounts households can manage risk, absorb shocks, and plan for emergencies (Gjertson, 2016). Affordable credit and financial services enable individuals to obtain health and education to improve their standard of living (Demirguc-Kunt et al, 2008). Empirical studies suggest that households lacking access to financial services incur higher cost of credit, particularly when relying on informal mechanisms such as money lenders and retailers (Ghosh, 2013). Access to payment mechanisms and checking accounts also supports core business operations and boosts productive investment and consumption (Demirguc-Kunt et al, 2015). Undertaking financial sector reforms to relax financing constraints is likely the most effective means of promoting firm growth (Ayyagari et al, 2006).

In recent years, the development community has increased its interest in financial inclusion. At the 2013 World Bank Group-IMF Spring Meetings, World Bank Group President Jim Kim called for achieving Universal Financial Access by 2020 (UFA2020). He committed to enable 1 billion people who currently are not part of the formal financial system to have access to a transaction account to store money and send and receive payments. At the country level, today about two-thirds of the national regulatory and supervisory agencies worldwide are directly supporting financial inclusion by easing entry barriers to non-traditional financial service providers, increasing consumer protection standards and improving financial literacy (World Bank 2012). In 2015 Ghana adopted the Guidelines for E-money Issuers, allowing both banks and non-bank institutions to issue electronic money (e-money). Myanmar has rolled out several financial literacy and awareness programs, such as distributing the Basic Financial Literacy Booklet in rural communities to enhance households' knowledge and capacity on financial planning since 2013. In 2015 Mozambique established a legal framework to regulate agent banking activities, allowing agents to provide a wide range of financial services, including cash deposits, cash withdrawals, bill payment, transfer, etc. to those who are in need. In 2014 Tanzania enacted dedicated legislations to regulate microcredit activities and microfinance companies. The importance of financial inclusion is also recognized in the 17 Sustainable Development Goals (SDGs) adopted by world leaders in 2015. These state that by 2030, all women and men shall have access to basic economic resources including financial services such as microfinance, implying financial services' role to end poverty and promote gender equality. Goals 8(10) and 9(3) emphasize the need to strengthen domestic financial institutions to encourage and expand access to banking, insurance and financial services, especially towards small-scale industries and small and medium-size enterprises. The G20 also committed to advanced financial inclusion through the implementation of the

G20 High-Level Principles for Digital Financial Inclusion. Among others, these Principles focus on enacting an enabling regulatory framework for digital financial inclusion, expanding the financial and information and communications technology infrastructure, and managing potential risks imposed by innovative digital financial service initiatives.

Despite such commitments, financial systems still fall short in many developing countries. To date, around 2 billion adults in the world do not have access to basic financial services such as savings and checking accounts. Except for high-income countries and the Europe and Central Asia region, in most of the regions and income groups, on average half or more of the population are excluded from the formal financial system (Figure 1). Common obstacles include physical distance from providers, lack of trust and lack of the necessary documentation. Businesses also face constraints. More than 200 million micro, small and medium-size enterprises in developing economies are either financially unserved or underserved due to lack of collateral, limited or no credit history and their informal status (IFC, 2013).

Figure 1. Share of adults with an account at a financial institution
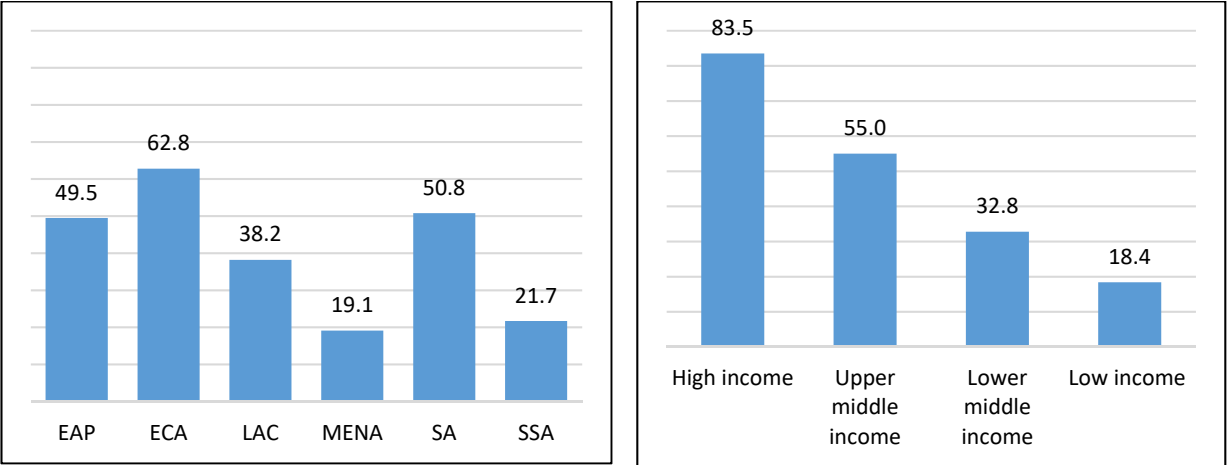
Source: Findex 2014

Such unsatisfactory figures have motivated researchers to better understand the mechanisms to achieve better financial inclusion. Sarma and Pais (2011) find that financial inclusion is positively related to socio-economic variables such as income, employment, lower inequality, and literacy and to physical infrastructure such as electronic connectivity and road networks. They also find that the proportion of non-performing loans and the capital adequacy ratio are negatively associated with financial inclusion. Government ownership of banks is not significantly associated with financial inclusion, while foreign ownership is found to be negatively associated. Beck, Demirguc-Kunt and Peria (2007) investigate the role of institutions and find that a positive institutional environment is more conducive to financial outreach and

depth. Laha and Kuri (2011) find that greater degree of awareness of basic banking services, diversification of the rural non-farm sector, and an expansion of household-level assets are some of the crucial factors that have significant bearings to create an enabling environment in reducing the obstacles in the process of financial inclusion. Kumar (2013) argues that the process of financial inclusion can be accelerated if banks pay more attention towards providing modern banking facilities, e.g., internet banking, mobile banking, and ATM facilities. Allen et al. (2014) provide evidence showing that population density is important for financial inclusion, as banks cannot achieve minimum viable scale in sparsely populated, low income areas; however, the recent innovation in financial services, mobile banking, has helped to overcome infrastructural problems and improve financial access.

Other studies have focused on the role of regulation in promoting financial inclusion. An enabling regulatory environment is essential to ensure an inclusive financial system that supports the development of various financial service providers and new delivery channels in order to meet the financial needs of different customers, while at the same time ensures financial stability and consumer protection (Ammar and Ahmed 2014; Alexandre, Mas and Radcliffe 2010; IFC & GPFI 2011). Cull, Demirguc-Kunt and Morduch (2009) analyze the effects of prudential supervision – in the form of regular reporting and onsite supervision requirements – on MFI profitability and outreach. They find that regular onsite supervision is positively associated with average loan size and negatively associated with the share of lending to women, while there is no significant relationship between supervision and profitability. Gutierrez and Singh (2013) show that regulation can support mobile banking development. They stress the importance of rules on e-contracting/e-signature usage, consumer protection, interoperability, KYC (Know Your Customer) /CDD (Customer Due Diligence), the use of agents for cash in/out operations and e-money issuance. Beck, Demirguc-Kunt and Peria (2007) show that the quality of the institutional environment and the degree of credit information sharing are positively associated with financial depth and outreach, reflected by higher bank branch and ATM penetration, as well as higher deposit accounts per capita.

A common pitfall of the mentioned literature is to focus on a few specific regulatory features to examine their association with financial inclusion. Two trends point at the need for a more comprehensive framework to examine the regulation versus financial inclusion linkage. First, the importance of non-bank financial service providers, such as deposit-taking MFIs and financial cooperatives, is rising in developing countries. Second, there has been rapid emergence of new financial services delivery channels, such as agent, mobile and electronic banking. Such trends have great potential for financial inclusion but imply new and more complex sets of rules to ensure their success.

This paper contributes to the debate on the role of regulation for financial inclusion in two steps. First, we propose a broad index of regulatory quality for financial inclusion covering the non-traditional delivery models – e.g. branchless banking – and actors – e.g. non-bank lending institutions. Second, we test the

relationship between regulatory quality and financial inclusion outcomes. The remainder of the paper is organized as follows. The next section describes the regulatory index constructed, with explanations on the rationale of selection, scoring methodology and general trends. Section III presents the econometric models used and the results of the estimations. Section IV contains some concluding remarks.

II. Data description

To construct our regulatory measures, we employ data from the World Bank's Enabling the Business of Agriculture (EBA) project. EBA finance data are collected through standard questionnaires, which are completed by three main types of respondents: financial sector supervisory authorities, financial lawyers, and legal officers of financial institutions. All data are supported by official regulations and cover 62 economies.[2] The EBA data set features finance indicators benchmarking regulations in areas that are key to promote access to financial services by unserved or underserved customers (table 1). Six indicators are developed from three different aspects that affect financial inclusion: 1) local providers of financial services, including MFIs and financial cooperatives; 2) delivery channels of financial services, with focus on the booming branchless banking activities; and 3) movable collateral facilitating access to credit.

Table 1. EBA Finance indicators

NON-BANK LENDING INSTITUTIONS
1) Operation and prudential regulation of MFIs
— Prudential rules (capital adequacy ratio, minimum capital, loan loss provisioning)
— Loan size limits
— Consumer protection (effective interest rate disclosure, deposit insurance)
2) Operation and governance of financial cooperatives
— Prudential rules (minimum capital, solvency/liquidity ratio)
— Consumer protection (effective interest rate disclosure, deposit insurance)
— Ability to merge
BRANCHLESS BANKING
3) Agent Banking
— Minimum standards to operate as an agent and services offered by agents
— Exclusivity of agent contracts
— Financial institution liability for agent actions
4) E-money
— Allowing e-money activities (issued by either financial or non-financial institutions)
— License requirements (interoperability, internal controls, consumer protection mechanisms) for non-financial institution e-money issuers
— Safeguards for customer funds
MOVABLE COLLATERAL
5) Warehouse receipts

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[2] See Annex I for the list of countries included in the EBA sample. The 62 countries are chosen to represent all country groups based on income level, geographical position and role of the agriculture sector as defined by World Bank (2007). For full information on EBA data and underlying methodology, see World Bank (2017).

> — Quality standards for warehouse receipts
> — Performance guarantees on warehouse operator
> — Receipt negotiability
> *6) Getting credit*
> — Security interest granted to movable assets and future assets
> — Collateral registry
> — Credit information from non-banks institutions

MFIs play an important role in promoting financial inclusion. They substitute for moneylenders and help provide financial services to those who are excluded from the traditional banking system (Dev, 2006). Accessing microfinance credits has significant impacts on improving the livelihood of the poor, by enabling them to smooth consumption, better manage skills and diversify their economic activities (Bakhtiari, 2011). The microfinance regulator's challenge is to adopt a regulatory framework with appropriate prudential and non-prudential regulations to balance the multidimensional goals of financial access, financial stability, and consumer protection (Christen et al., 2003). The MFI indicator measures the regulatory environment for deposit-taking microfinance institutions, including prudential regulations such as minimum capital adequacy ratios and provisioning rules imposed on those MFIs, as well as consumer protection requirements focusing on interest rate disclosure and enrollment in a deposit insurance system.

Financial cooperatives serve large numbers of low-income customers; however, constrained by obsolete governance structure, low capacity, lack of an appropriate regulatory framework, and poor supervision, financial cooperatives in most developing countries are underdeveloped and not fulfilling their potential to serve the unbanked population (Nair and Kloeppinger-Todd, 2007). This indicator measures the existence and content of financial cooperative regulations, including the minimum requirements to establish a financial cooperative, prudential ratios and consumer protection requirements.

Agent banking allows agents to provide financial services on behalf of a financial institution in areas where physical branches do not reach. It provides the poor with more economical options of accessing financial services, as they do not need to spend out of pocket to reach a bank branch (Barasa and Mwirigi, 2013). Strong legislation fosters a positive customer experience that creates trust in the system. At present, the agent banking indicator examines the extent to which countries have enacted some good legal/regulatory practices to better enable third-party agents to provide financial services on behalf of financial institutions. It includes the minimum standards to qualify and operate as an agent, type of contracts that can be signed between financial institutions and agents, the range of financial services agents can provide and financial institutions' liability for agent actions.

Nonbank e-money issuers (NEMI) can play an important role in providing an array of financial services — particularly payments, transfers, and savings—for those who are currently excluded from the formal financial system (Lauer and Tarazi, 2012). It is important for governments to adequately supervise non-
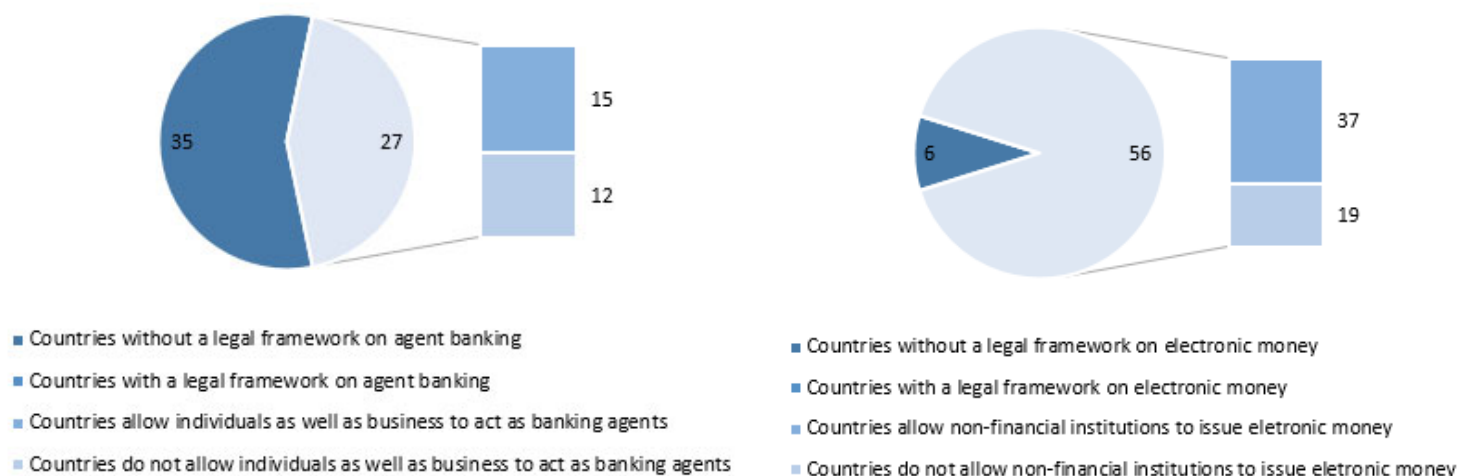
bank e-money issuers to protect against liquidity risk and loss of customer funds. The electronic money indicator measures the entry and operational requirements for non-bank institutions issuing e-money. It covers the licensing and operational standards, as well as requirements on safeguarding funds collected by non-bank e-money issuers.

Lacking a legal system governing the use of movable collateral has been a constraint for small businesses and households at the low-income level to obtain a loan (World Bank, 2013). The movable collateral indicator has two dimensions: warehouse receipt and getting credit. Warehouse receipt is an effective financing tool for creating liquidity and easing access to credit. An appropriate legal framework is a prerequisite for a functioning warehouse receipts system. Legislation protects the rights of depositors and lenders and facilitates easy enforceability of the security (i.e. a few days after the default, without court intervention) and, thereby, makes warehouse receipt good collateral (EBRD, 2004). The warehouse receipt sub-indicator covers the existence and scope of rules regulating warehouse receipts systems, including insurance and other performance guarantee requirements for warehouse operators, and the form and content required for legally valid receipts. The getting credit sub-indicator uses data from the Doing Business data set and measures the legal rights of borrowers and lenders in secured transactions and bankruptcy laws and the strength of credit registries and bureaus.

Data collected have shown that regulations for deposit-taking MFIs have been established in 33 countries of the sample. Financial cooperatives are regulated in 56 of the sampled countries either through a general cooperative law or a specific financial cooperative law. Most countries establish capital adequacy requirements for MFIs as a stabilization and protection mechanism. Though less than 50% of the sampled countries have established a capital adequacy ratio requirement for financial cooperatives, other risk management options, such as reserve ratio and insolvency ratio, are common. It is worth noting that less than half of the countries with legislation on MFIs and financial cooperatives require those institutions to disclose the full cost of credits to customers. Furthermore, although a majority of countries require traditional banks to participate in a deposit insurance scheme, only 14 countries in the sample also require MFIs and only 11 countries require financial cooperatives to enroll. Regulations on agent banking and e-money have not caught up with the boom of branchless banking activities. Only 27 countries in the sample have a legal framework for agent banking, and among them, only 15 allow individuals as well as businesses to act as banking agents. Of the 56 countries with laws on e-money, only two-thirds allow non-financial institutions to issue e-money (Figure 2). Romania and Colombia score high in e-money – they both allow non-financial institutions to issue e-money, require e-money institutions to safeguard customer funds at a prudentially regulated financial institution and protect e-money balances under the deposit insurance system. Legal frameworks for warehouse receipts (WHR) are still uncommon. Only 35 countries have a legal framework for warehouse receipts and most do not have stand-alone regulations governing WHR systems:

10 countries have stand-alone warehouse receipts regulation, 9 have WHR regulations embedded in general warehouse legislation, 8 regulate WHR through the commercial or civil code and 8 have WHR regulation embedded in other legislations. Requiring warehouse operators to insure the warehouse and stored goods against theft and natural disasters is the most common form of performance guarantee to engender trust to the warehouse receipt system, and around two-thirds of countries have an established requirement on this regard.

Figure 2. Regulatory landscape for agent banking and e-money activities

- Countries without a legal framework on agent banking
- Countries with a legal framework on agent banking
- Countries allow individuals as well as business to act as banking agents
- Countries do not allow individuals as well as business to act as banking agents

- Countries without a legal framework on electronic money
- Countries with a legal framework on electronic money
- Countries allow non-financial institutions to issue eletronic money
- Countries do not allow non-financial institutions to issue eletronic money

Source: EBA17 database

We build our regulatory measures by looking at the number of regulatory good practices in place in each country in the six areas covered by EBA finance indicators. For each indicator i, we compute the score for country j as follows:

$$X_{ij} = 100 * \left[\frac{GP_{ij} - GPmin_i}{GPmax_i - GPmin_i} \right]$$

where GP is the number of the adopted regulatory good practices in country j under indicator i, GPmin, and GPmax are the minimum and maximum number of regulatory practices measured under indicator i. The obtained scores are normalized between 0 and 100, with 100 (0) representing the best (worst) practice. Averaging the six indicator-scores, we obtain the overall Regulation Index.

Figure 3 displays the averages of our measure of financial regulatory quality by income and regional groups. It is shown that though regulatory quality varies among income and regional groups, there are also significant differences within each region and income group.

Figure 3. Regulation Index by region and income group
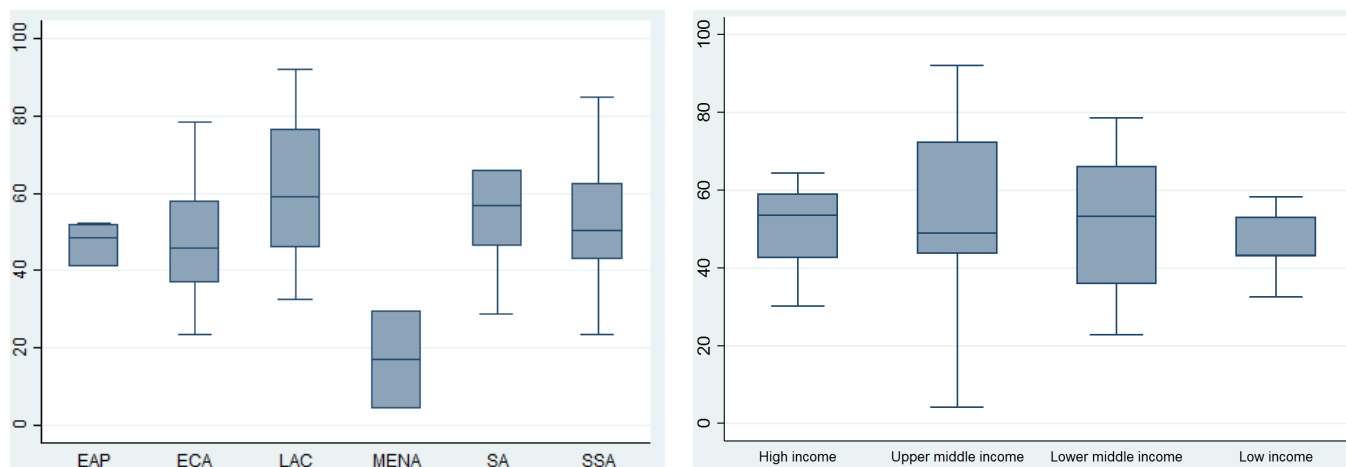
Source: Authors' calculations based on EBA data

Table 2 shows the correlations between the six different components of the overall regulation index. These are in general low, indicating that regulatory quality tends to vary across different types of regulations that are relevant for financial inclusion (table 2).

Table 2. Correlation across EBA Finance indicators

	MFI	Financial cooperatives	Agent banking	Electronic money	Warehouse receipts
Financial cooperatives	0.17	1			
Agent banking	0.03	0.18	1		
Electronic money	-0.04	0.27	0.06	1	
Warehouse receipts	-0.25	0.12	0.26	-0.01	1
Getting credit	0.12	0.05	0.34	0.20	0.20

Source: EBA17 database

III. Model and results

Following the approach of Gutierrez and Singh (2013), we quantify the effect of financial regulation on account penetration and usage through the following model:

$$FINC_{ij}=\alpha_0+ \alpha_1(Regulation)_j+\alpha_2\{Individual\ Controls_i\}+ \alpha_3\{Country\ Controls_j\}+ Region+ \epsilon_{ij} \quad (1)$$

$FINC_{ij}$ is a binary variable that equals 1 if individual i in country j has an account at a financial institution. To estimate equation (1), we employ a logit model with sample weights to reflect the total population of the countries covered. In order to avoid omitted variable bias due to unobservable factors being correlated with regulatory quality, we include regional fixed effects. Further, we use clustered (country) robust

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standard errors because individuals' financial behaviors are likely to depend on unobserved country-characteristics.

We use data from the World Development Indicators, the Global Findex database and the EBA database (table 3).

Table 3. Data description

Variable	Definition, year	Source
FINC	Respondent has an account at a financial institution, 2014	Demirguc-Kunt et al. (2015)
REGULATION	Regulation index obtained from EBA Finance data, 2017	World Bank (2017)
Individual controls		
FEMALE	Respondent is female, 2014	
AGE	Respondent age, 2014	
AGESQUARE	Squared value of AGE, 2014	Demirguc-Kunt et al. (2015)
EDUCATION	Respondent completed secondary school or higher, 2014	
INCOME	Within-economy household income quintile, 2014	
Country controls		
LOGGDPCAP	Log value of GDP per capita in current US$, 2014	World Development Indicators (2015)
LOGPOP	Log value of total population, 2014	

Column (1) in table 4 presents the estimations on account penetration using the continuous score of the regulatory index. The results indicate that the regulatory index score (0-100) for a country is positively associated with an individual within this country having an account at a financial institution. However, the association is not significant. We then try to divide the sample into four quartiles based on their scores of the regulation index. Column (2) in table 4 displays the results with the further segmentation. The estimations for regulatory quality have higher significance level, as shown in column (2), implying that radical rather than incremental changes in the regulatory framework reflected as significant change in the score of the regulation index are necessary to improve the financial inclusion scenario. For instance, adopting a dedicated legislation to regulate electronic money activities would engender more trust in the market and promote the uptake of various financial services by individuals. Further marginal effects results (Annex 1) indicate that if a country improves its regulatory framework so that its standing on the regulatory index jumps from the first to the fourth quartile, the probability of individuals within this country having an account at a financial institution increases by 12.4%, and the probability increases by 10.7% if it jumps from the first quartile to the third quartile. As expected, being poor, female, young, or relatively less schooled decreases the likelihood of an individual holding an account at a financial institution.

In order to address the potential endogeneity in the model, we instrument the EBA Regulation index with the legal origin of a country's commercial code or company law.[3] This reflects the overall substantive and procedural aspects of a legal system, and therefore is fundamentally related to the complexity of legal aspects measured under the EBA Regulation index. Meanwhile, it is arguable that legal origin, usually established centuries ago, does not have a direct impact on individuals' recent financial behavior. Column (3) in table 4 shows that the effect of more a comprehensive and supportive regulatory framework on financial inclusion remains positive and significant under the instrumental variable method.

Table 4. Regression results

VARIABLES	(1) FINC	(2) FINC	(3) FINC
REGULATION	0.00926		0.590***
	(0.00676)		(0.0235)
REGULATION			
--II quartile		0.358	
		(0.267)	
--III quartile		0.654**	
		(0.285)	
--IV quartile		0.757**	
		(0.309)	
FEMALE	-0.266***	-0.267***	-0.141***
	(0.0559)	(0.0567)	(0.0136)
AGE	0.101***	0.101***	0.0515***
	(0.0101)	(0.0102)	(0.00215)
AGESQUARE	-0.000975***	-0.000980***	-0.000499***
	(0.000127)	(0.000128)	(2.33e-05)
EDUCATION	0.898***	0.900***	0.453***
	(0.0742)	(0.0689)	(0.0172)
INCOME			
--II quintile	0.109**	0.110**	0.0601***
	(0.0428)	(0.0427)	(0.0226)
--III quintile	0.390***	0.389***	0.203***
	(0.0506)	(0.0505)	(0.0224)
--IV quintile	0.644***	0.649***	0.344***
	(0.0634)	(0.0646)	(0.0223)
--V quintile	1.120***	1.128***	0.600***
	(0.0744)	(0.0747)	(0.0228)
LOGGDPCAP	1.079***	1.079***	0.567***
	(0.105)	(0.112)	(0.0117)
LOGPOP	-0.0966	-0.144*	-0.266***
	(0.0805)	(0.0801)	(0.0117)
Constant	-10.31***	-9.469***	-2.621***
	(1.275)	(1.251)	(0.238)
Regional FE	Yes	Yes	Yes
Observations	60,490	60,490	60,490
No. of Countries	58	58	58
R-squared	0.266	0.271	

Robust standard errors in parentheses
*** $p<0.01$, ** $p<0.05$, * $p<0.1$

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[3] Our legal origin variable categorizes countries into three groups: common law, civil law and socialist.

IV. Conclusions

Having access to transaction accounts, affordable credit and financial services enables individuals, households and businesses to plan for long-term goals and better prepare for unexpected emergencies. Affordable credit and financial services enable individuals to obtain health and education to improve their standards of living. Despite the recent commitments of the development community, around 2 billion adults worldwide still do not have access to basic financial services such as savings and checking accounts. In order to help bridge the gap between commitments and outcomes, economists have enquired over the mechanisms that can promote financial inclusion. We test the hypothesis that policy makers can facilitate financial inclusion by enacting more friendly regulations. Focusing on regulatory areas that are critical to financial inclusion (e.g. MFI, financial cooperatives, agent banking, e-money, warehouse receipts, secured transactions), we find that individuals are more likely to have an account at a financial institution in countries that adhere to a higher number of regulatory good practices. Incremental improvement of the regulatory framework does not seem to have a significant impact. Only when a country significantly improves its regulatory framework, so that its standing on the regulatory index jumps from the first to the fourth quartile, does the probability increase that individuals within this country have an account at a financial institution.

Annex 1. Marginal effects table

	Predicted probability	OLS coefficient
REGULATION		
--*II quartile*	0.0586	0.358
	(0.0437)	(0.267)
--*III quartile*	0.107**	0.654**
	(0.0467)	(0.285)
--*IV quartile*	0.124**	0.757**
	(0.0506)	(0.309)
FEMALE	-0.0438***	-0.267***
	(0.00929)	(0.0567)
AGE	0.0165***	0.101***
	(0.00167)	(0.0102)
AGESQUARE	-0.000161***	-0.000980***
	(2.10e-05)	(0.000128)
EDUCATION	0.147***	0.900***
	(0.0114)	(0.0689)
INCOME		
--*II quintile*	0.0180**	0.110**
	(0.00707)	(0.0427)
--*III quintile*	0.0637***	0.389***
	(0.00878)	(0.0505)
--*IV quintile*	0.106***	0.649***
	(0.0115)	(0.0646)
--*V quintile*	0.185***	1.128***
	(0.0130)	(0.0747)
LOGGDPCAP	0.177***	1.079***
	(0.0153)	(0.112)
LOGCAP	-0.0236*	-0.144*
	(0.0130)	(0.0801)
Constant		-9.469***
		(1.251)
Regional FE	Yes	Yes
Observations	60,490	60,490
R square		0.271

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

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Annex I. List of countries covered by EBA data

High income	Upper middle income	Lower middle income	Low income
Chile	Bosnia and Herzegovina	Armenia	Benin
Denmark	Colombia	Bangladesh	Burkina Faso
Greece	Georgia	Bolivia	Burundi
Italy	Jordan	Cambodia	Ethiopia
Korea, Rep.	Kazakhstan	Cameroon	Haiti*
Netherlands	Malaysia	Côte d'Ivoire	Liberia
Poland	Mexico	Egypt, Arab Rep.	Malawi
Spain	Peru	Ghana	Mali
Uruguay	Romania	Guatemala	Mozambique*
	Russian Federation	India	Nepal
	Serbia	Kenya	Niger
	Thailand	Kyrgyz Republic	Rwanda
	Turkey	Lao PDR*	Senegal
		Morocco*	Tanzania
		Myanmar	Uganda
		Nicaragua	Zimbabwe
		Nigeria	
		Philippines	
		Sri Lanka	
		Sudan	
		Tajikistan	
		Ukraine	
		Vietnam	
		Zambia	

*Excluded from the logit model estimations due to lack of data on other variables.