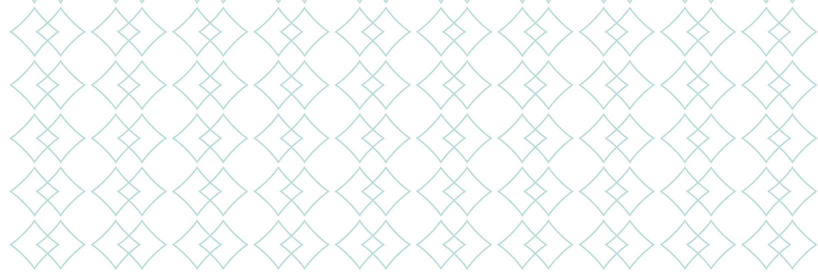
5 Finance



GADCO, a major rice processor in West Africa, buys rice from thousands of smallholder farmers. In the past, farmers had to travel, sometimes long distances, to the GADCO offices to receive payment in cash. However, in 2013, GADCO partnered with Tigo, a leading mobile operator in the region, to compensate farmers via mobile payments. Today farmers benefit from the convenience of accessing their money via agents who are available 24 hours a day, rather than waiting in line at a bank, and from the simplicity of buying mobile airtime directly with their Tigo-Cash virtual wallet, rather than having to buy and load airtime from a scratch card. Furthermore, because GADCO distributes monthly account statements, the program improves farmers' ability to monitor their accounts.[1]

Finance is a key element of agricultural development. Farmers require working capital, seasonal loans, and medium- to long-term credit to finance production, harvest, storage, transport and marketing. In addition to loans, farmers need access to payment services to expand operations. In this regard, reduction of rural poverty and increases of total per capita output can be achieved through enhancements in rural credit.[2] However, rural and agricultural finance are among the most challenging fields of financing. Agricultural production activities are seasonal, weather-dependent and spatially dispersed, making agricultural loans riskier and costlier than loans for business activities operated in urban locations. Formal financial institutions, especially commercial banks, have limited reach in rural areas.[3] Furthermore, farmers often have difficulty obtaining loans due to inadequate collateral. In developing countries, 78% of the capital stock of business is in the form of movable assets such as machinery, equipment or receivables, yet most financial institutions do not consider these assets as good sources of collateral.[4]

Innovation in the design and provision of financial services improves access to finance. Regulations need to be adapted to allow financial institutions, mobile operators and retailers to explore new services and partnership models, while protecting the integrity of transactions and the safety of customers' deposits.[5] Therefore, a strong legal framework is necessary to increase access to financial services. Laws and regulations should also provide farmers with the ability to use movable collateral to obtain a loan, while protecting lenders.

Farmers in Kaolack, Senegal.
Photo: Daniella Van Leggelo-Padilla / World Bank.

What do the EBA finance indicators measure?

EBA finance indicators measure laws and regulations that affect access to financial services for farmers and agribusinesses (table 5.1).

The indicators are organized as follows:

Non-bank lending institutions: This indicator measures the regulatory framework for deposit-taking microfinance institutions (MFIs) and financial cooperatives. MFIs and financial cooperatives are important providers of financial services to agribusinesses and farmers, especially those that cannot access financial services through commercial banks.[6]

Operation and prudential regulation of MFIs. This sub-indicator measures the requirements to establish an MFI and prudential regulations including minimum capital adequacy ratios and provisioning rules, as well as consumer protection requirements focusing on interest rate disclosure and enrollment in a deposit insurance system.

Operation and governance of financial cooperatives. This sub-indicator focuses on the regulatory framework for financial cooperatives including the minimum requirements for their establishment, prudential ratios, the ability to merge and consumer protection requirements similar to those measured for MFIs.

Branchless banking: Branchless banking, which consists of agent banking and e-money, can play an important role in providing financial services to clients who are traditionally excluded from formal financial services.[7] Strong regulations on branchless banking protect against the loss of customer funds,[8] fostering a positive customer experience that creates trust in the system.

Agent banking. This sub-indicator focuses on the regulations that allow third-party agents to provide financial services on behalf of financial institutions. It covers the minimum standards to qualify and operate as an agent, exclusivity of agent contracts, the range of financial services agents can provide and financial institution's liability for agent actions.

Table 5.1 | What do the EBA finance indicators measure?

NON-BANK LENDING INSTITUTIONS	***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) ***Operation and governance of financial cooperatives*** • Prudential rules (minimum capital, prudential standards) • Consumer protection (effective interest rate disclosure, deposit insurance) • Ability to merge
BRANCHLESS BANKING	***Agent Banking*** • Minimum standards to operate as an agent and services offered by agents • Exclusivity of agent contracts • Financial institution liability for agent actions ***E-money*** • License requirements (interoperability, internal controls, consumer protection mechanisms) for non-financial institution e-money issuers • Safeguards for customer funds
MOVABLE COLLATERAL	***Warehouse receipts*** • Elements of a valid warehouse receipt • Performance guarantees • Receipt negotiability ***Legal rights and credit information*** • Security interest granted to movable assets and future assets • Collateral registry • Credit information from non-bank institutions

Sources: EBA database, *Doing Business* database.

E-money. This sub-indicator covers the regulations for the provision of e-money by non-financial institution issuers. It covers licensing and operational standards, as well as requirements on safeguarding customer funds and deposit insurance protection.

Movable collateral: The movable collateral indicator focuses on provisions relating to the use of collateral categories that are relevant to agricultural enterprises and smallholders. A warehouse receipts system creates the possibility for using agricultural products (such as crops) as collateral—farmers deposit products in a licensed warehouse in exchange for a warehouse receipt, which they can use to obtain a bank loan.

Warehouse receipts. This sub-indicator measures specific legal provisions governing the use of warehouse receipts as movable collateral. It covers the elements of a valid warehouse receipt, performance guarantees and receipt negotiability.

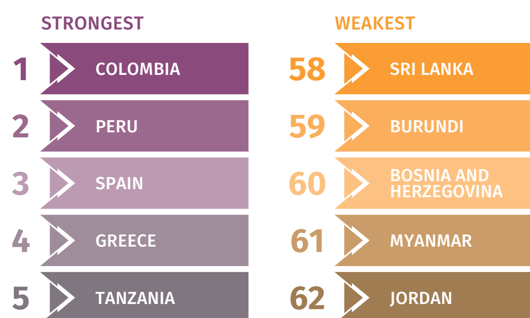
Legal rights and credit information. This sub-indicator takes some of the measures of legal rights of borrowers and lenders with respect to secured transactions and depth of credit information from the *Doing Business*–Getting Credit topic. It covers regulation on movable collateral, security rights on future and after-acquired assets, and the depth of credit information on small loans and availability of credit information from non-bank institutions.

How do countries perform on the finance indicators?

Countries from OECD high-income and the Latin America and the Caribbean regions perform the best on the finance topic, driven largely by the strength of regulations on MFIs and financial cooperatives, and a regulatory environment that enables branchless banking. Most OECD high-income countries have established a comprehensive regulatory environment for financial cooperatives and regulations that enable branchless banking, mainly for e-money. Meanwhile the Europe and Central Asia region earned the second highest score on the movable collateral indicator including the *Doing Business*–Getting Credit indicator and regulation of warehouse receipts. Although low-income countries score poorly on average, Tanzania emerged as one of the top five performers in the finance indicators (table 5.2). Tanzania earned high scores for its regulations on MFIs and financial cooperatives, as well as its warehouse receipt regulations, which describe the elements of a valid receipt and require the warehouse operator to provide multiple performance guarantees.

At the indicator level, countries' scores on non-bank lending institutions, branchless banking and movable collateral indicators do not correlate significantly among themselves, suggesting that countries rarely score universally well on the indicators. For instance, Uganda has comprehensive legislations regulating the operation of warehouse receipts, but it lacks a regulatory framework for agent banking activities and does not allow non-financial institutions to issue e-money.

Table 5.2 | Where are finance regulations strongest according to the finance indicators?



STRONGEST		WEAKEST	
1	COLOMBIA	58	SRI LANKA
2	PERU	59	BURUNDI
3	SPAIN	60	BOSNIA AND HERZEGOVINA
4	GREECE	61	MYANMAR
5	TANZANIA	62	JORDAN

Source: EBA database.

Between March 2015 and June 2016, a total of 16 countries conducted regulatory reforms to align with certain good practices (box 5.1) in areas that are measured by the finance indicators. E-money was the area with the highest number of reforms: nine countries in Sub-Saharan Africa (SSA) (Ghana, Tanzania, West African Monetary Union [WAMU] members,[9] and Zambia), and Myanmar reformed their e-money laws. Other reforms in the past year include Côte d'Ivoire, which adopted a new law regulating warehouse receipts; Ghana and Mozambique adopted new legal frameworks for agent banking; and Myanmar adopted a new banking regulation.

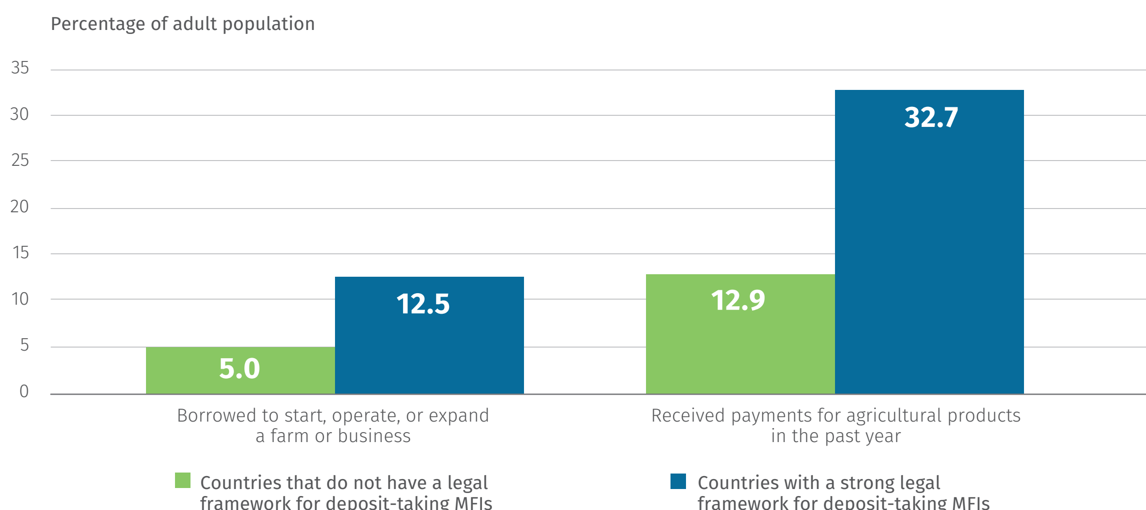
In addition to enacting legislative reforms and regulations to enable agriculture financing, countries also explored other policy measures such as state-sponsored Partial Credit Guarantees Schemes (PGCSs) and mandatory lending quotas to promote agricultural finance. There is strong evidence suggesting that the simple existence of a PCGS does not guarantee increased lending to the agriculture sector and that lending quotas for agriculture lead to low profitability for banks and high non-performing loans.[10] As country context and implementation details significantly affect the results of such policies, EBA did not score this data. Data collected show that 18 of the 62 countries studied have a PCGS specialized for agricultural loans lent by commercial banks. The SSA region has the highest number of countries (6 of 21) with PCGSs, followed by Latin America and the Caribbean (4). Only eight countries, mostly in SSA, allow MFIs to participate in the scheme. For lending quotas, only seven countries have policies requiring commercial banks to

Box 5.1 | What are the regulatory good practices for finance?

	REGULATORY GOOD PRACTICES FOR FINANCE	SOME COUNTRIES WHICH IMPLEMENT THE PRACTICE
NON-BANK LENDING INSTITUTIONS	MFIs can take deposits and maintain a capital adequacy ratio (CAR) that is equal to or slightly higher than the CAR for banks. MFIs also disclose the full cost of credit to loan applicants and participate in a deposit insurance system.	CAMBODIA, KENYA, PERU, TAJIKISTAN, TANZANIA
	Financial cooperatives disclose the full cost of credit to loan applicants, participate in a deposit insurance system and can merge to create a new financial cooperative.	BOLIVIA, COLOMBIA, MEXICO, POLAND
BRANCHLESS BANKING	Financial institutions can hire agents to provide services on their behalf. Regulations identify minimum standards to qualify and operate as an agent; allow agents to offer a wide range of services such as cash-in, cash-out, bill payment, transfers, account opening and “Know Your Customer” due diligence; and hold financial institutions liable for agent actions.	ETHIOPIA, INDIA, MEXICO, PERU
	Non-financial institutions can issue e-money. Regulations specify minimum licensing standards for non-financial institution e-money issuers (such as existence of internal control mechanisms that comply with anti-money laundering and combatting the financing of terrorism laws—Anti-Money Laundering and Combatting Financing of Terrorism (AML/CFT)—and consumer protection and recourse mechanisms) and require e-money issuers to safeguard customer funds in a prudentially regulated financial institution.	CÔTE D’IVOIRE, DENMARK, ROMANIA, SERBIA, SPAIN
MOVABLE COLLATERAL	A legal framework exists for a warehouse receipts system. Regulations require warehouse operators to obtain either insurance, pay into an indemnity fund or file a bond with the regulator to secure performance of obligations as an operator; define the elements of a valid warehouse receipt; and allow both paper and electronic receipts.	ROMANIA, TURKEY, UGANDA, UKRAINE, ZAMBIA
	A legal framework exists for secured transactions that grant security interest in movable and future assets. Credit information can be distributed by non-banking institutions such as retailers and borrowers can access their data through the credit bureau or credit registry.	COLOMBIA, MEXICO, RWANDA

Sources: EBA database , *Doing Business* database.

Figure 5.1 | Strong regulation for deposit-taking MFIs enables agribusiness activities



Sources: EBA database; Findex database.

Note: Countries with a strong legal framework for deposit-taking microfinance institutions (MFIs) are those that have a score standing in the first quartile of the MFI scores. Countries classified with a high level of financial inclusion are not measured under the MFI and agent banking indicators. Countries that score 0.8 or higher, as measured by the average of the normalized value of the Findex variables "account at a financial institution (% of rural adult population)" and "account at a financial institution (% of adult population)," are classified as having a high degree of financial inclusion. Countries under this classification are as follows: Denmark, Greece, Italy, Korea, Rep., the Netherlands and Spain. Lao PDR, Liberia, Morocco and Mozambique are not included in the sample as data are missing from the Findex database.

lend a percentage of their portfolio for the purposes of promoting agricultural activities—namely, Bangladesh, Bolivia, India, Nepal, the Philippines, Sri Lanka and Zimbabwe. Bolivia is the only country that also requires MFIs to lend a percentage of total loans to the agricultural sector.

What are the regulatory good practices?

Box 5.1 highlights regulatory good practices and some countries that implement these practices.

Adopting a tiered approach for regulating deposit-taking financial institutions

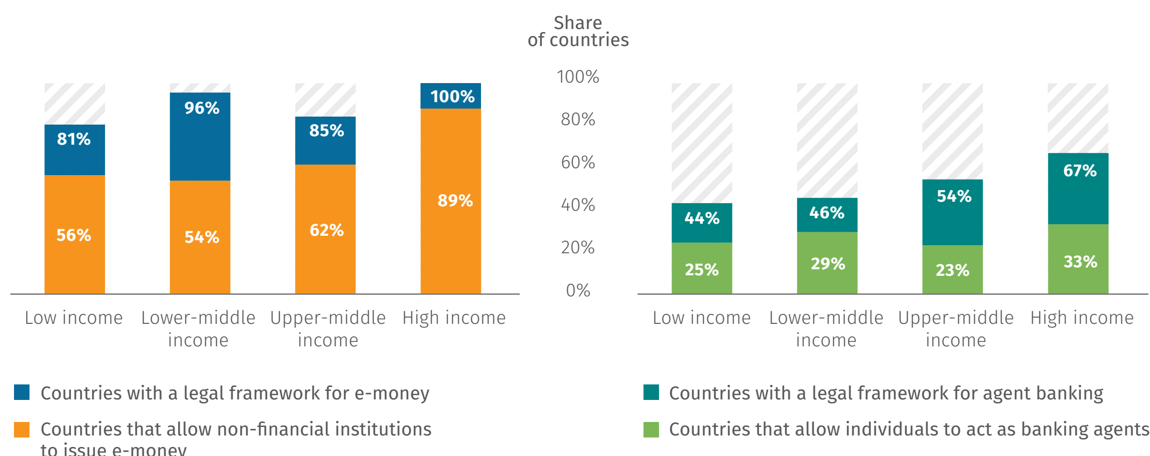
The non-bank lending institution indicator measures consumer protection and prudential regulation for deposit-taking MFIs and financial cooperatives. Countries with a strong legal framework for deposit-taking MFIs in particular tend to have a higher share of the adult population that borrows to start, operate or expand a farm or business, or received payment related to agribusiness products (figure 5.1). This situation suggests that strengthening the legal framework for deposit-taking MFIs has great potential for enabling agribusiness activities.[11]

In establishing a regulatory framework for deposit-taking institutions, it is a good practice to adopt a tiered approach that corresponds with the financial institution's risk portfolio. Prudential regulation such as capital requirements, capital adequacy ratio (CAR) and loan loss provisioning are important components of a legal framework that limits risk-taking of deposit-taking institutions. These regulations are risk management tools that ensure that financial institutions are well-capitalized in the event of a financial shock. Given their tendency to have riskier portfolios and higher operating costs,[12] a good practice for regulating deposit-taking MFIs is to establish capital adequacy requirements and provisioning rules that are equal to or slightly more aggressive than those of commercial banks.[13] Among the 33 countries with a legal framework for deposit-taking MFIs, nearly 90% include capital adequacy requirements for MFIs. In contrast, countries have adopted diverse risk management practices for regulating financial cooperatives. While 26 out of the 56 countries with a legal framework for financial cooperatives have established minimum capital adequacy requirements for financial cooperatives, the remaining 30 have adopted various other risk management practices, such as establishing a minimum liquidity requirement or a maximum credit exposure.

Increasing consumer protection through deposit-insurance scheme and transparency in pricing

Financial consumer protection ensures that customers receive clear information on products and services to allow them to make informed decisions, and increases trust in the banking system. Regulations can help improve consumer understanding of terms and products and increase market competition by requiring financial institutions to disclose the effective interest or full cost of credit to the customer. While 76% of countries studied require commercial banks to disclose the full cost of

Figure 5.2 | Countries that lack regulations that enable non-traditional financial service providers to perform branchless banking



Source: EBA database.

Note: Countries classified with a high level of financial inclusion are not measured under the agent banking indicator. If a country earns a score of 0.8 or higher, as measured by the average of the normalized value of the Findex variables "account at a financial institution (% of rural adult population)" and "account at a financial institution (% of adult population)," it is classified as having high degree of financial inclusion. Countries under this classification are Denmark, Greece, Italy, Korea, Rep., the Netherlands and Spain.

credit to customers, only 39% require MFIs to disclose this information (42% for financial cooperatives). These requirements are either embedded in the legal framework regulating the specific financial institution or can be found in the general consumer protection laws.

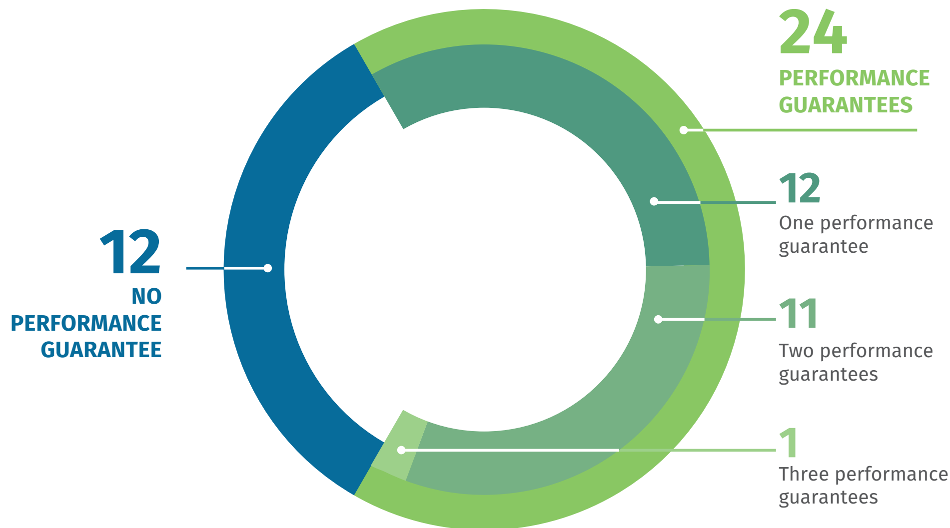
In addition, although a majority of countries (69%) require traditional banks to participate in a deposit insurance scheme, only 14 countries also require MFIs and only 11 countries require financial cooperatives[14] to participate in a deposit insurance system. Mexico is one of the countries that scores highest on the non-bank lending institutions indicator and it requires both MFIs and financial cooperatives to participate in a deposit insurance system.

Diversity of financial service providers in branchless banking operations

Strengthening regulation on branchless banking operations such as e-money and agent banking promotes greater financial inclusion. Countries with an enabling legal framework for branchless banking activities tend to have a higher share of adult population with an account at a financial institution.[15] E-money and agent banking benefit farmers by enabling them to receive payments through mobile phone-based accounts or via a local agent rather than having to travel to a financial institution or to a producer to obtain payment, which reduces transaction costs and the risks associated with holding cash.
Countries should adopt branchless banking frameworks that include a wide array of financial service providers, as this encourages competition and reduces transaction costs for customers.[16] In the past year, 10 countries reformed their e-money regulations including Ghana, Tanzania and Zambia. Of the 56 countries that now have laws on e-money, only two-thirds allow non-financial institutions to issue e-money. In addition, only 15 of the 27 countries with laws on agent banking allow individuals, as well as businesses, to act as banking agents (figure 5.2).

Ghana scores well in branchless banking due to amendments to both its "Agent Guidelines" and its "Guidelines for E-money Issuers in Ghana, 2015." The new "Agent Guidelines" allow both individuals and businesses to operate as agents and increases the number of minimum standards required to qualify as a bank agent. The "Guidelines for E-money Issuers in Ghana, 2015" allow non-financial institutions to issue e-money and provide high standards such as a minimum capital requirement, existence of internal control mechanisms to comply with anti-money laundering and combatting of financing terrorism (AML/CFT) standards and consumer protection mechanisms to obtain a license. In addition, in 2015, WAMU countries strengthened their e-money regulations when they adopted a regulation governing the conditions and terms of e-money issuers' activities in WAMU. The regulation set new requirements for interoperability and consumer protection measures to obtain a license as an e-money issuer. Previously there were no such requirements. The regulation also strengthens consumer protection standards for e-money issuers by requiring 100% of consumers' funds to be safeguarded in a prudentially regulated financial institution.

Figure 5.3 | Most countries require at least one performance guarantee in a warehouse receipts system



Source: EBA database.

Reducing risk through performance guarantees for warehouse receipts

A performance guarantee is a requirement placed on a warehouse operator to secure performance of obligations as an operator. Performance guarantees reduce both the depositor's risk in depositing goods in a warehouse and the bank's risk in lending against a warehouse receipt.[17] Therefore, a strong legal framework for warehouse receipts includes at least one performance guarantee. The finance topic measured the existence of the following three types of performance guarantees, namely: 1) filing a bond with the regulator; 2) paying into an indemnity fund; and 3) insuring the warehouse and stored goods against fire, theft and natural disasters. Among the 36 countries with a legal framework for warehouse receipts, 24 require at least one performance guarantee, among which 11 countries require two (figure 5.3). Requiring warehouse operators to insure the warehouse and stored goods against theft and natural disasters is the most common form of performance guarantee, with almost 60% of countries requiring insurance, including Colombia, Ethiopia and Romania. Filing a bond with the regulator is the second most common form of performance guarantee, with 28% of countries requiring this option.

Conclusion

Financial regulations are rarely established to serve certain sectors. Instead, a comprehensive financial regulatory environment can have beneficial effects for all sectors, including agriculture.

For example, regulations that are appropriate to the portfolio risks and operating characteristics of MFIs and financial cooperatives are essential to ensure their smooth operation serving generally across all sectors. Having these regulations in place is particularly important for agriculture because it enables these institutions to better provide credit and financial services to smallholder farmers and agribusinesses who are usually excluded from traditional banking credit or services. Kenya and Vietnam are among the countries that have established either the same or slightly more stringent requirements on the capital adequacy ratio and provisioning rules for MFIs, as compared with commercial banks. In response to the recent boom in branchless banking activities, regulations are needed to engender trust and transparency in such systems, promote innovation, as well as minimize risk, protect customers and ensure system stability. The majority of OECD high-income countries have established legislation regulating e-money activities, which helps to create a level playing field for financial institutions and non-financial institutions that are active in this area. With regards to movable collateral, comprehensive legal frameworks on secured transactions and warehouse receipts, such as in Rwanda, allow borrowers to use their agricultural assets to obtain essential credit.

NOTES

1 CTA 2015.

2 Burgess and Pande 2005.

3 Rabobank Nederland 2005.

4 Alvarez de la Campa 2011. "While in the developing world 78% of the capital stock of a business enterprise is typically movable assets such as machinery, equipment or receivables and only 22% immovable property, financial institutions are reluctant to accept movable property as collateral."

5 Alexandre, Mas and Radcliffe 2011.

6 CGAP 2012.

7 Mahmood and Sarker 2015.

8 Dias and McKee 2010.

9 ***EBA17*** covers the following 6 WAMU members: Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger and Senegal.

10 Rani and Garg 2015.

11 The correlation is 0.55 between the *EBA17* finance indicator score of MFI and the FINDEX data on the percentage of adult population that have borrowed to start, operate or expand a farm or business. The correlation is 0.58 between the *EBA17* finance indicator score of MFI and the FINDEX data on the percentage of adult population that have received payment related to agribusiness products. Both correlations are significant at 1% level after controlling for GNI per capita.

12 CGAP 2012.

13 *Ibid.*

14 Countries classified with a high level of financial inclusion are not measured under the agent banking and MFI indicators. If a country earns a score of 0.8 or higher as measured by the average of the normalized value of the FINDEX variables "account at a financial institution (% of rural adult population)" and "account at a financial institution (% of adult population)," it is classified as having high degree of financial inclusion. Countries under this classification are Denmark, Greece, Italy, Korea, the Netherlands and Spain.

15 The correlation is 0.46 between *EBA17* finance-branchless banking score and the FINDEX data on the percentage of adult population having an account at a financial institution. The correlation is significant at 5% level after controlling for GNI per capita.

16 Tarazi and Breloff 2011.

17 Wehling and Garthwaite 2015.

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