# ON FINANCING ECONOMIC ACTIVITY AND DEVELOPMENT IN AFRICA

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# ABOUT THE AUTHOR

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# ON FINANCING ECONOMIC ACTIVITY AND DEVELOPMENT IN AFRICA

# ABSTRACT

A ccess to finance is a crucial part of any economic development. In most developing countries, especially in Africa, however, access to finance remains a challenge. This poses a myriad of growth and economic development challenges for such countries. Economic transformation and development also require a financing mechanism that understands the context of this transformation and development. Such transformation and development involve innovative ways of financing individuals, firms, infrastructure projects and the public sector within the socioeconomic and development frame of the respective economies. In this lecture, I probe into the nature of the finance problem in Africa and provide models and possible solutions based on research (including my own work) and recent innovations in financial markets. Financial institutions and policy makers in Africa need to rethink and redesign modes of intervention in financing economic activities in Africa. These interventions have to be innovatively centred on the socioeconomic and cultural context of the respective countries. This is the main tenet underlying development finance in Africa.

## I. INTRODUCTION

he importance of finance in growth and economic development cannot be overemphasised, following Schumpeter's exposition on the role that finance plays in stimulating industrial activity and economic development. Several authors (King and Levine, 1993; Levine, Loayza and Beck , 2000; Loayza and Ranciere, 2006; Rajan and Zingales, 1998) have shown that finance stimulates growth and development by providing firms with opportunities for new investment and growth plans, helping households and individuals to invest in their welfare and helping governments to cofinance public investments. Ayyagari, Demirgüç-Kunt and Maksimovic (2008a) have also established that without access to finance, firms face the challenges of stifled growth. Access to finance (or, to use the most recent term, 'financial inclusion') is therefore a crucial part of any economic development. Not all economies, however, possess the needed or required levels of access to finance. Most developing countries have low access to finance. Africa, in particular in recent times, presents us with an interesting case. As seen in Table I, sub-Saharan Africa is currently amongst the fastest growing economic regions globally, coming third after South Asia, East Asia and the Pacific. Yet African economies lag behind in access to finance and use of finance on almost all levels of economic activity: firm, household and individual.

Table	I: Global	growth	trends
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Region	Gross domestic product		
	%	Per capita %	
	Growth	Growth	
	2014	2014	
Sub-Saharan Africa	4.3	١.5	
South Asia	7.1	5.7	
Latin America and the Caribbean	1.7	0.6	
Europe and Central Asia	2.1	1.4	
Euro area	0.9	0.4	
East Asia and the Pacific	6.8	6.1	

Source: World Development Indicators (2015)

On average, less than half of the adult African population have access to a formal account at a financial institution; about 70% of small, medium and micro enterprises (SMMEs), which form the bulk (close to 90%) of firm activity in Africa, do not have access to credit from banks. Consequently, the financial system in most African countries has been unable to stimulate economic growth and development on large and wide enough scales. It is therefore not surprising that substantial poverty (close to 60% on average) and high inequality exist in Africa, even though some gains in poverty reduction have been made. Access to finance thus remains a challenge. With low access to finance, structural gaps have also widened in most of Africa; there are gaps in education, health and public infrastructure. The following burning research and policy questions remain: Why is there such low access to finance and why has the impact of the financial system on growth and development been so low in the African context? Has the financial system been unsuitable for growth and development within the context of developing countries? If so, how should the financial system be redesigned or restructured to increase access and to finance economic activity more effectively and extensively?

In this lecture, I try to provide answers to these questions based on research (including my own work) and recent innovations in financial markets. I first briefly provide some background analysis of stylised facts about the African financial system and access to finance. I then discuss the problems of access and structure concurrently; I do this by examining how financial markets finance economic development by using selected economic channels, namely individuals and households, firms, public sector infrastructure and trade. These sectors have been chosen because of the vital role that they play in stimulating economic activity, thus creating wealth and increasing general development. Next, I discuss and show how the problem of access to finance could be resolved from the perspective of research and practical cases. Finally, I present my concluding thoughts.

# 2. STYLISED FACTS

Financial sector development and access to finance have been very low in most African countries. Research on African financial markets showed that most of the financial systems were underdeveloped and in some cases repressed.<sup>1</sup> This led to widespread financial sector reforms to restructure and build the financial system to enable it to play its rightful role in the economy. By the late 1980s to early 1990s, there had been a wave of liberalisation policies, backed mostly by the World Bank and the International Monetary Fund, to reform the financial sector with a view to increasing access and deepening the level of intermediation. Studies<sup>2</sup> since then have been testing the accessibility of finance as well as the role of financial markets in economic growth in Africa.

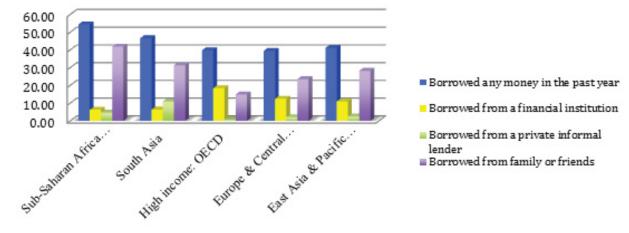
Although these reforms have caused some positive impact of the financial system on growth, this impact still appears to be weak and partial. A quick overview of the financial sector in Africa gives us some current stylised facts about financial access. Access to finance in this case can be considered with reference to a number of indicators, namely the level of account penetration, the proximity of financial institutions and the amount of credit provided to the private sector by financial institutions. Table 2 provides information from which one can glean a snapshot of stylised facts about access to finance at household, individual and firm level. At individual level, just a little over a third (34.2%) of the population (aged 15 and above) have an account at a formal financial institution. This does not compare favourably with the rest of the regions within Africa's league of developing countries. For instance, account penetration is higher for East Asia and the Pacific (68.96%), Europe and Central Asia (51.43%) and South Asia (46.4%). The situation is no different with regard to the number of bank branches per 100 000 adults. Africa still lags behind the rest of its developing economy peers. Again, this shows difficulty in access (in this case due to distance) to the formal financial system in most African economies. From Table 2, it also appears that domestic credit to the private sector for African countries is about 48% of gross domestic product (GDP) and only slightly better than for South Asia (46.7%). This statistic is an indicator of the depth of financial intermediation at the private sector level, especially with regard to firms, and also shows the low level of access to firms. Clearly, access to finance in African countries is a challenge.

Table 2: Regional trends in access to finance in	12014
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Region	Domestic credit to private sector (% of GDP)	Commercial bank branches (per 100 000 adults)	Account at financial institution (%)
Sub-Saharan Africa (developing only)	48.14	3.71	34.21
South Asia	46.71	8.70	46.40
High income: Organisation for Economic Co-operation and Development (OECD)	159.15	29.18	94.01
Europe and Central Asia (developing only)	56.59	20.63	51.43
East Asia and the Pacific (developing only)	128.66	6.06	68.96

Source: World Development Indicators (2015)

The issue of access to finance becomes more complex when juxtaposed with that of sources of debt financing. Exclusion from the financial system does not mean that individuals or households in Africa do not attempt to access finance. Figure I shows that compared to the rest of the regions (even including OECD countries), more individuals and households in Africa borrowed money. What is more significant is the source of such debt finance. Unlike other developing regions and the OECD countries, less of the debt was incurred from financial institutions. Indeed, 40% of these loans came from family or friends in the case of Africa. This is an indication and confirmation of the challenges in accessing finance in Africa. Therefore, the issue is not whether there is a need for finance; it is rather the disturbingly low level of access to finance.



#### Access to finance- sources of debt

Figure 1: Regional trend in sources of debt finance for individuals in 2014 Source: World Development Indicators (2015)

#### 3. THE PROBLEM OF FINANCE

#### 3.1 Firm level

R esearch has shown that smaller firms in particular frace more severe financial obstacles (Beck, Demirgüç-Kunt and Maksimovic, 2005). African firms are composed mainly (up to 90%) of SMMEs, and as stated earlier, most of these have little or no access to finance. This is a serious obstacle to developing firmlevel activity in Africa. A firm that is constrained in accessing finance has a low probability of investing to grow in extent and depth of activity. Such a firm has a high probability of failure, a situation commonly found amongst micro and small firms in Africa. A prime reason for this financing constraint is information asymmetry. The role of information asymmetry in the development and effectiveness of financial markets is expounded in the seminal work by Akerlof (1970), Rothschild and Stiglitz (1976) and Stiglitz and Weiss (1981). Information asymmetry between lenders and firms has largely resulted in a high cost of access to finance or rejection of loan applications. This has been the typical problem facing most African SMMEs. However, what has been

unexplored is the nature and origin of the information asymmetry and interventions to deal with it. The problem of information asymmetry, although very real, is mostly misinterpreted or misapplied to African micro and small enterprises. The assumption is mostly that the borrower (firm) has private ex ante information that may adversely affect the returns from the project and the loan in question.

Therefore, the problem of information gap results in a perceived problem of the probability of low return, high transaction costs and hence high risk. This thus warrants a host of mitigating factors, interest rates, collateral, and so forth. The possession of ex ante information may be true but poorly understood or wrongly evaluated by the lender. Here again the issue of understanding the socioeconomic context has been largely ignored. What is seen as information gaps or asymmetry may largely be arising from the lender's ignorance or misjudgement of a microenterprise context. The microenterprise also has poor knowledge of what the lender demands, and the consequent result is an information gap, a deepening of which increases suspicion, mistrust and poor judgmental decisions. This information gap can be large and can result in credit constraint and financial disintermediation.

# 3.2 Household and individual level

he situation regarding access to finance by individuals and households in Africa is similar to the firm level access to finance situation. As I have shown earlier, most individuals and households are either severely constrained financially or are completely unable to access any form of finance. This situation is quite bleak although the effect on welfare and economic development should have been obvious. Yet until recently, very few studies and policy work have considered the importance of financial access in enhancing the welfare, growth and development of individuals and households, particularly in African countries. Not much has been done by way of considering the role of finance in poverty reduction and welfare enhancement. Today there is a persistent buzz about financial inclusion and the need to equip individuals and households financially. Unfortunately, a huge challenge has been the traditional issue of information asymmetry and the associated division between lenders and borrowers. This information problem has resulted in the perception that most African individuals and households are risky and hence lending in such circumstances comes with high transaction costs and risk, which makes it difficult to extend credit. Associated with this is the perception that such individuals may not be creditworthy and are unfit for credit extensions.

### 3.3 Public sector level infrastructure

nfrastructure plays a pivotal role in enhancing economic growth and development. Most African economies are, however, saddled with large infrastructure deficits. These deficits range from yawning gaps in transportation systems to huge energy gaps. Infrastructure projects require financial outlay. According to Africa Infrastructure Country Diagnostic estimates, Africa's total infrastructure financing needs amounted to \$93 billion in 2008, with only \$45 billion financed. However, given the public nature of infrastructure projects and the associated information asymmetry regarding the risk and returns of such projects, financing of these projects is left more to the public sector than the private sector. In this case, the information problem that banks and the private sector face concerns the risks and returns surrounding the projects. Financial returns generated from project cash flows are of prime importance to banks and the private sector when it comes to infrastructure projects. Such returns are used to evaluate the feasibility of projects and to ascertain the probability of covering the cost of such projects.

One major problem is that infrastructure projects are not homogeneous in nature and the typical project cash flows differ according to infrastructure type. For instance, infrastructure projects in education, health, energy, transportation and water will generate different cash flows and therefore will ultimately generate different types of interest from financial markets. Closely related to this is the associated demand risk, which also makes cash flows irregular and lumpy. This poses a risk for financial markets and private financing of most infrastructure projects. The socioeconomic context of an infrastructure project such as, for instance, a school or health project means that the project will not generate returns that will enable the financier to recoup financial outlays within a short period. Returns go beyond immediate financial outlays and must be looked at from a long-term socioeconomic perspective. Such a perspective would have to take into account issues regarding the lumpiness of some cash flows and the corresponding demand side challenges. In this regard, projects will typically need a profile that incorporates social, economic and developmental objectives or returns rather than simply short-term financial returns. Unfortunately, most financial institutions and the private sector do not seem to understand or appreciate such returns and hence have less appetite for financing such projects. This relegates the financing of such projects to governments. Unfortunately, African governments face one of the greatest challenges with regard to fiscal space. Most governments do not have enough room to manoeuvre fiscal policies to generate revenue to finance infrastructure developments. Simply put, the governments cannot afford the large fiscal outlays required to finance infrastructure projects. Clearly, there is a need to find ways of financing such projects as well as to understand the socioeconomic context of countries where infrastructure projects have to be financed.

## 3.4 Trade

Recent trade theories have shown the importance of trade in development and economic transformation. Indeed, trade is a means to an end (development and economic transformation) and not an end in itself. Except for the last decade or so, Africa's trade performance has not been particularly impressive. Africa still lags behind most regions in the world when it comes to its contribution to global trade or intraregional trade. Of course, it is not by accident that Africa happens to be amongst the least developed regions of the world as well. As stated earlier, trade boosts growth and development and a country or region that strengthens its trade should witness rapid economic growth and development.

Africa's poor trade performance over the decades has been attributed to a host of factors. However, what has largely been absent in understanding this poor trade performance is the poor or constrained financing of trade. Trade and by implication entering into the international market involves huge sunk costs plus operational costs without which firms or countries cannot engage competitively in international markets. These costs pose risks that have to be accounted for in financing trade activities. Unfortunately, financing international market activities in Africa experiences the same predicament as financing SMMEs, individuals and households and infrastructure projects. Indeed, compared to typical firm finance issues, the problems of trade finance may be much more deep seated since the credit or financial requirements may be larger than those of typical firms focused only on domestic markets.

#### 4. RESOLVING THE PROBLEM OF FINANCE

#### 4.1 Finance at firm level

ne way to deal with the creditworthiness, risk and information asymmetry problems and their associated transaction costs is through an understanding of the social and economic context of markets. Financial markets and structures must be designed and built around economic contexts and local conditions. This demands a more nuanced approach. Take the case of most small African firms whose loan requests are rejected due to a lack of creditworthy business plans. Arguments have been raised about the effectiveness of granting loans to microenterprises without sound business plans or sound financial projections. What has been missing in this thinking is the notion of what constitutes a business plan or financial projection. A sound business idea and its projected financials always originate from a specific socioeconomic context. Such business ideas will be based on needs that accord with the social and economic norms and practices and the psyche of the particular community where the idea originates. These sociocultural issues are deeply embedded in the economic and political tissues of communities. The idea of opening up a small business to sell small quantities of groceries (a quarter loaf of bread or a few grams of salt) is rooted in a socioeconomic context in which not everyone can afford to buy 1-2 loafs of bread weekly. One can therefore start a small business to provide bread in accordance with community needs.

Similarly, returns on an investment must be understood from the socioeconomic context. Whilst the grocery shop owner may be embarking on a business for financial profit, there are other real returns from a socioeconomic perspective. The grocery business enhances the welfare of the community by providing products in an affordable manner and also by enhancing the welfare of the household of the grocery owner. These are returns that are grossly underestimated by financial institutions.

Another example is that of financing agricultural activities in Africa. One of the frequently cited reasons for low appetite for financing agricultural activities in most African countries is the smallness of the businesses and the perceived low returns, as well as the usual risks and transaction costs related to their financing. Although agricultural businesses in Africa may be small and seemingly risky with 'paltry' returns, these risks in most cases can be minimised and the returns have more social, developmental and long-term sides to them. Risks can be minimised through interventions such as lease financing, warehouse financing, e-financing, weather insurance, commodity markets, and so forth. Returns are also not just financial but social too. One need not finance a single farmer only (in most cases farmers work in groups or associations, whether formal or informal); it is the collective effort of multiple farmers via a social pact that yields bigger returns.

Similarly, these farmers do not just run smallholder farms for profit; they consider the important factor of feeding and running their respective households via the farm business as well as being able to cater for community needs. However, these factors are all clearly missing in the understanding of such businesses and together with the mistrust and poor appreciation of smallholder farmers, this culminates in little or no credit extension to support agribusiness in Africa. In this regard, the only way to understand sound business ideas from a lender's perspective is to know and understand the context and model financial products to suit it. In this manner, the three problems of creditworthiness, risk and information asymmetry are dealt with. The Ethiopian Commodities Exchange is a unique and novel example of a finance-based intervention that has positively changed the landscape for smallholder farmers in Ethiopia. This intervention has helped to remove excessive market segmentation via agents, huge transaction costs, poor market accessibility, poor and low reliability of prices and credit constraint problems faced by farmers. A similar but earlier intervention by Mohammed Yunus, the Nobel laureate, started the Grameen Bank to finance the production of stools by women microentrepreneurs in Bangladesh.

Equally, foreign direct investment (FDI) also helps with the access to finance problem. FDI brings in scarce capital into the host country and helps to ease the home country's financing constraints (Harrison et al, 2004). More importantly, FDI when structured to suit the local context offers further advantages to local firms through a number of linkages and transmission channels to economic activity. These linkages create contacts between domestic suppliers of intermediate inputs and their multinational clients in downstream sectors (backward linkage) or between foreign suppliers of intermediate inputs and their domestic clients in upstream sectors (forward linkage). FDI also has potential for enhancing the welfare of host countries by upskilling previously unskilled labour and narrowing the wage inequality. However, for FDI to be effective, financial systems must develop in tandem with the socioeconomic and development context of the country to augment FDI linkages and accentuate impact. As has been shown,<sup>3</sup> in the absence of a poorly structured or developed financial system, FDI is not fully exploited to enjoy the full impact of its intervention.

# 4.2 Household and individual level finance

Cimilar to the firm level situation, financial markets in JAfrica have been unable to provide finance to lowincome households and individuals because of issues of cost-effectiveness and creditworthiness. Closely related to this is the phobia about so-called consumption loans as against production loans. The example of consumption loans phobia presents an interesting perception deeply rooted in the misconception of the socioeconomic context of low-income individuals and households. A typical individual or household in Africa needs to be able to survive on consumption patterns as well as productive ventures. Production enables the individual to generate revenues (through employment or microenterprise), and this is usually a desirable focus of financial institutions. However, a crucial part of an individual's or a household's welfare is its consumption patterns. The ability to meet basic needs with regard to food, education, health, shelter, social amenities, and so forth is an important requirement for remaining active in the productive space and also to contribute more productively or efficiently. Typically, a shock to the individual or household will inadvertently result in denigration of income resources, reduction in

individual and household consumption and a complete shutdown of productive engagements. The result is a rapid downward spiral in the welfare status of such individuals and households. Given that most traditional financial markets do not cater for an intervention that also addresses the welfare of individuals and households, this is a challenge that most financial markets in Africa have been unable to address or grasp.

At the household and individual level, there are also microfinance interventions. The Grameen intervention applies here. Microfinance has the capability to provide access to finance for low-income and poor households and individuals in Africa via unique means and models tailor-made to meet the specific socioeconomic contexts of clients. Finance is structured around consumption and microenterprise activity, whilst monitoring and recovery costs are in a large number of cases built around group (social, cultural and community-based associations) mechanisms. Studies<sup>4</sup> have shown the historical and socioeconomic importance of understanding the background and potential impact of microfinance in Africa. Recent studies in this area have also shown that microinsurance is a crucial aspect of microfinance in enhancing access to finance and wealth (Akotey and Adjasi, 2014). Indeed, Akotey and Adjasi (2016) have further demonstrated that the success of microfinance in increasing household welfare largely hinges on combining it with microinsurance.

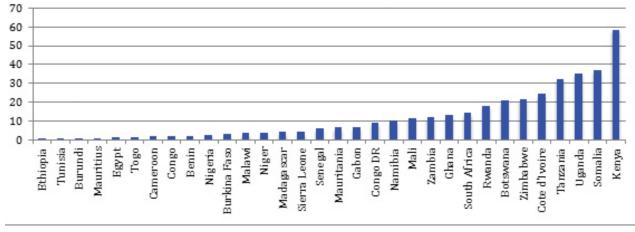
A recent much-celebrated microfinancial innovation is that of M-PESA and its recent M-KESHO financial models, originating from Kenya. M-PESA is a unique intervention that enables individuals to transfer money for payment purposes in a fast, easy, less costly and less burdensome way via means of mobile phone applications. Simple as it may sound today, payments and money transfer was a huge, burdensome and extremely expensive activity for poor and low-income individuals in African countries. Mobile phones make it easy for most African countries to transit from financial exclusion to inclusion and access.

Africa compares favourably with other regions when it comes to mobile banking. Table 3 shows how mobile phones help to solve the problem of access to finance in African countries. Africa is clearly a leader in mobile phone banking; 11.51% of people (aged 15 and above) have a mobile account and 14.68% of people (aged 15 and above) have received money transfers using mobile phones. No other region comes close in this regard.

Region	Account transaction at a financial institution using a mobile phone	<b>M</b> obile account	Mobile phone used to pay bills	Mobile phone used to receive money
East Asia and the Pacific (developing only)	17.08%	0.40%	1.32%	1.21%
Europe and Central Asia (developing only)	8.73%	0.26%	3.77%	3.28%
High income: OECD countries	22.08%		1.01%	0.86%
South Asia	5.98%	2.65%	2.06%	I.89%
Sub-Saharan Africa (developing only)	21.09%	11.51%	3.07%	14.68%

Source: Global Financial Inclusion Database (2015)

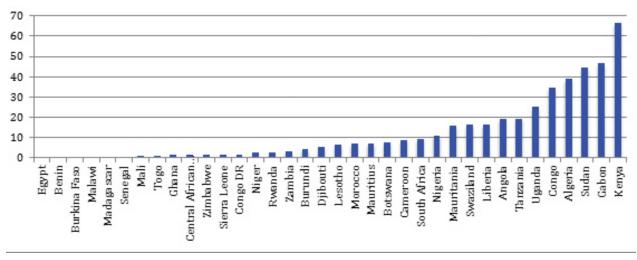
Figure 2 shows that in Africa, Kenya leads with 58% of people (aged 15 and above) having a mobile account. Thirteen African countries have more than 9% of people with a mobile account. Figure 3 also shows Kenya leading with 66.65% of people having used mobile phones to receive money. Again thirteen African countries have more than 9% of people who have also received money using mobile phones. These trends show the potential of context driven innovations such as mobile money in unlocking financing obstacles in African countries.



#### Percentage of people aged 15+ with mobile account

Figure 2: Trends in mobile account usage across Africa

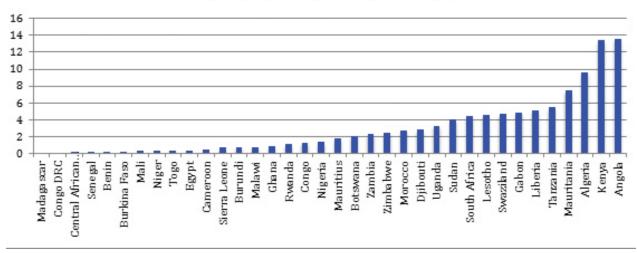
Africa ranks second only to Europe and Central Asia with regard to the use of mobile phones to pay bills. Angola leads in Africa with 13.6% of people using mobile phones to pay bills (Figure 4). Twelve African countries are above the African average of 3.07% with regard to using mobile phones to pay bills.



#### Percentage of people using mobile phones to receive money

Figure 3: Mobile phone as medium to receive remittances in Africa in 2014 or most recent values Source: Global Financial Inclusion Database (2015)

Again with regard to using mobile phones for account transactions at a financial institution, the only region that performs better (marginally) than Africa is the OECD countries at 22.08% as compared to 21.09% for Africa.



#### Percentage of people using mobile phones to pay bills

Figure 4: Using mobile phones to pay bills in Africa in 2014 or most recent values Source: Global Financial Inclusion Database (2015)

What is the meaning of this trend? Does it signify a passionate love for mobile phones in Africa? Whilst most of these indicators may not be fully captured (due to regulatory and supervisory challenges), under formal financial market access and activity in African countries, there is a unique message in this trend. Context-specific (home-grown) solutions to dealing with the cost of accessing finance are important in addressing the problem of access to finance. Mobile phones provide a unique way to reduce the cost associated with accessing finance in the African context. For instance, evidence from Kenya (the originator of and global leader in mobile banking) indicates that the challenge of high transaction costs can be dealt with through mobile banking technology such as M-PESA and M-KESHO. M-PESA alone covers about 9.5 million of the 39 million residents of Kenya. Mobile banking lowers transaction costs, improves security related to money transfers and facilitates households' ability to self-insure and share risk quite easily through regular remittances (Blumenstock et al, 2011; lack and Suri, 2014). Equity's M-KESHO has revolutionised and increased financial access to many households, especially to low-income households living and working in the informal sector.

M-KESHO is a mobile banking service that links M-PESA subscribers to a bank account held at Equity Bank, which allows clients to deposit, withdraw and transfer money via a mobile phone. M-KESHO is the outcome of a partnership between Equity Bank and Safaricom to extend financial inclusion to the lower end of the market. Although M-KESHO is doing very well, Equity Bank's determination to cut down on transaction costs and bring about greater financial inclusion has motivated it to set up its own mobile virtual network operator.

It has also been argued that mobile banking enables households to separate shocks in income from shocks in consumption, thereby improving households' capacity to smoothen consumption. Mobile banking can also encourage the poor to save smaller amounts in a much more secure way (Mas and Meyer, 2011). Recent successful interventions of a similar nature but designed within country-specific contexts are those of WIZZIT and Capfin in South Africa, and ECONET in Zimbabwe. Clearly, mobile and microfinance banking create unique context-specific financial models that address the problem of finance in Africa in a succinct and yet comprehensive manner.

# 4.3 Public sector level infrastructure finance

A unique and arguably first development in finance strategy or intervention in this space has been project finance. Project finance deals with the challenges of project cash flows and risks that make it difficult for financial markets and or governments to single-handedly finance projects. A unique feature of project finance is the design that takes into account the socioeconomic and developmental issues associated with a project in country context. Project finance typically involves a consortium of financiers (government, financial markets, and aid and development finance institutions) that sets up a special project vehicle that truly understands the social, economic and developmental issues regarding a particular country project and by extension the infrastructure project involved.

A well-designed project finance vehicle takes into account the valuations that should match respective infrastructure projects from a country perspective and thus incorporates provisions for social and developmental returns that may be ignored by a typical financial market intervention. Project finance also helps to reduce transaction costs from information asymmetry and risk. Indeed, the design of project finance is based on effectively dealing with risk. It is adaptable and flexible in this regard; for instance, specific project finance modes (e.g. public-private partnerships) deal with effective pricing and sharing of risk across the private and public partners. Another unique feature of project finance is the ability to rope in financial markets together with governments and in some cases international aid or development finance institutions to form a unique financing consortium for such projects. In this way, project finance is able to deal with the public nature of projects, the information problems as well as the different cash flows to be expected from different infrastructure projects.

Again on infrastructure, FDI when structured, harnessed and channelled properly to suit the local context can finance infrastructure developments. FDI typically comes in to finance firm growth and development, as highlighted earlier. However, FDI also takes into account the need to augment productivity and growth by easing or removing challenges and obstacles that affect transactions and the efficiency of growth. A typical example of such obstacles is poor infrastructure in transportation, power and health, to name but a few. In this regard, FDI can aid investment in infrastructure projects that will help free up bottlenecks associated with firm productivity.

### 4.4 Trade finance

inancing trade in Africa also requires appreciation of the risks inherent in trade activities, the level of financial intermediation in Africa as well as the social and economic context within which trade occurs in Africa. Typical trade finance instruments often used in African countries are cash in advance (importer finance), preshipment export finance and in some cases bank finance (letters of credit). However, in a severely constrained financial system like Africa where most trade occurs from small enterprises, such instruments are minuscule and also not suited to the risks associated with small and microenterprises that may want to enter the export market. The result is a huge lacuna in trade finance and stifled trade growth. Finding innovative ways to finance trade in Africa is therefore extremely important. Factoring and reverse factoring are just a few examples of innovative financing interventions that deal with the contextual challenges of trade in African countries. Unfortunately, only a few countries, namely South Africa, Morocco and Egypt, lead in Africa when it comes to factoring. There is also an increasing and rekindled interest in the promotion of local export credit agencies since these can be used to directly address the finance gaps in trade.

In addition, trade finance must be able to cater for value addition in trade. Value addition in trade from backward and forward integration is important to deepen Africa's regional and global value chain in trade. Properly structured FDI to suit the local context again provides a good case for financing Africa's value chain in trade. FDI augments domestic capital for exports, and FDIrelated firms are motivated to enter the international market, thus promoting trade (Abor et al, 2008). Aside from making it easier for local firms to enter the export market, the backward and forward linkages created by FDI also assist local firms to add value to their products and services, thereby increasing and deepening the entry into and participation in regional and global trade of local firms. The absence of innovative trade finance interventions rooted in the socioeconomic context of African countries will not help in extensively deepening the value chain. Suffice it to say that the ability to engineer innovative financing of firm activity in African countries could jumpstart a progressively sustained internationalisation of African firms and the deepening of Africa's trade both regionally and globally.

# 5. CONCLUDING THOUGHTS

n Africa it is important to understand the economic development and transformation issues of a country and by extension the financing of development and transformation within a specific socioeconomic framework and cultural fabric. Economic transformation and development require a financing mechanism that understands the context of the transformation and development. Such transformation and development involve innovative ways of financing individuals, firms, infrastructure projects and the public sector within the socioeconomic and development frame of the respective economies. This is the main principle underlying the emerging discipline of development finance. In the last couple of decades, research, policy and business cases have provided evidence to support this. However, there is still a substantial amount of work to be done in this area, and this cannot be ignored, especially given the impact that this has on Africa's growth and development.

Financial institutions and policy makers in Africa need to rethink and redesign modes of intervention in financing economic activities. They need to first understand the social and economic context of societies, households and businesses, and the developmental challenges and contexts of their respective African environments. This will require and result in the upskilling and training of expertise and human capital in financial institutions. The remarkable impact of M-PESA and mobile banking in Africa is a clear case. However, innovative thinking with regard to regulation is also essential. Regulation in this case transcends three sectors, namely financial, telecommunications and competition regulators, and coordination among the different regulators is critical. An important part of the socioeconomic context in Africa is respect for cultural nuances, trust, reputation and relationship. Building financial solutions around these factors is crucial for enhancing access to finance.

<sup>1.</sup> See Odedokun (1996) and Nissanke and Aryeetey (1998).

See Adjasi and Biekpe (2006), Green et al (2006), Yartey and Adjasi (2007) and Odhiambo (2008).

<sup>3.</sup> See Adjasi et al (2012) and Agbloyor et al (2014).

<sup>4.</sup> Buckley (1997) and Copestake et al (2001).

#### REFERENCES

- Abor, J., Adjasi, C.K.D. and Hayford, M. (2008). How does foreign direct investment affect the export decisions of firms in Ghana? *African Development Review*, 20(3), 446–465.
- Adjasi, C.K.D., Abor, J., Osei, K. and Nyavor-Foli, E. (2012). FDI and economic activity in Africa: The role of local financial markets. *Thunderbird International Business Review*, 54(4), 429–439.
- Adjasi, C.K.D. and Biekpe, N. (2006). Stock market development and economic growth: The case of selected African countries. *African Development Review*, 18(1), 144–161.
- Agbloyor, E.K., Abor, J., Adjasi, C.K.D. and Yawson, Y. (2014). Private capital flows and economic growth in Africa: The role of domestic financial markets. *Journal of International Financial Markets, Institutions & Money*, 30, 137–152.
- Akerlof, G. (1970). The market for 'lemons': Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 488–500.
- Akotey, J.O. and Adjasi, C.K.D. (2014). The impact of microinsurance on household asset accumulation in Ghana: An asset index approach. *The Geneva Papers*, 39, 304–321.
- Akotey, J.O. and Adjasi, C.K.D. (2016). Does microcredit increase household welfare in the absence of microinsurance? World Development, 77, January, 380–394.
- Ayyagari, M., Demirgüç-Kunt, A. and Maksimovic, V. (2008). How important are financing constraints? The role of finance in the business environment. World Bank Economic Review, 22(3), 483–516.
- Beck, T., Demirgüç-Kunt, A. and Maksimovic, V. (2005). Financial and legal constraints to firm growth: Does size matter? *Journal of Finance*, 60, 137–177.
- Blumenstock, J., Eagle, N. and Fafchamps, M. (2011). *Risk and reciprocity over the mobile phone network: Evidence from Rwanda*. Centre for the Study of African Economies Working Paper WPS/2011–2019 Oxford, Oxford University.
- Buckley, G. (1997). Microfinance in Africa: Is it either the problem or the solution? World Development, 25, 1081–1093.
- Copestake, J., Bhalotra, S. and Johnson, S. (2001). Assessing the impact of microcredit: A Zambian case study. The Journal of Development Studies, 37, 81–100.
- Global Financial Inclusion Database (2015) Global FINDEX World Bank Databank, Washington DC, World Bank
- Green, C.J., Kirkpatrick, C.H. and Murinde, V. (2006). Finance for small enterprise growth and poverty reduction in developing countries. *Journal of International Development*, 18, 1017–1030.
- Harrison, A.E., Love, I. and McMillan, M.S. (2004). Global capital flows and financing constraints. *Journal of Development Economics*, 75(1), 269–301.
- Jack, W. and Suri, T. (2014). Risk sharing and transaction costs: Evidence from Kenya's mobile money revolution. American Economic Review, 104(1), 183–223.
- King, R.G. and Levine, R. (1993). Finance, entrepreneurship, and growth: Theory and evidence. *Journal of Monetary Economics*, 32(3), 513–542.
- Levine, R., Loayza, N. and Beck, T. (2000). Financial intermediation and growth: Causality and causes. Journal of Monetary Economics, 46(1), 31–77.
- Loayza, N. and Ranciere, R. (2006). Financial development, financial fragility, and growth. Journal of Money, Credit and Banking, 38, 1051–1076.
- Mas, I. and Mayer, C. (2011). Savings as forward payments: Innovations on mobile money platforms. <u>http://dx.doi.org/10.2139/ssrn.1825122</u>. Proceedings of the Second European Conference on Microfinance, Groningen (pp. 1–37).
- Nissanke, M.K. and Aryeetey, E. (1998). Financial integration and development: Liberalization and reform in sub-Saharan Africa. Routledge: London.

- Odedokun, M. (1996). Alternative econometric approaches for analysing the role of the financial sector in economic growth: Time-series evidence from LDCs. *Journal of Development Economics*, 50, 119–146.
- Odhiambo, N.M. (2008). Financial depth, savings and economic growth in Kenya: A dynamic causal linkage. *Economic Modelling*, 25, 704–713.
- Rajan, R.G. and Zingales, L. (1998). Financial dependence and growth. American Economic Review, 88, 559-587.
- Rothschild, M. and Stiglitz, J.E. (1976). Equilibrium in competitive insurance markets: An essay on the economics of imperfect information. *Quarterly Journal of Economics*, 90(4), 630–649.
- Stiglitz, J. and Weiss, A. (1981). Credit rationing in markets with imperfect information. *American Economic Review*, 71(3), 393–410.
- World Development Indicators (2015) World Development Indicators, World Bank Databank, Washington DC, World Bank
- Yartey, C. and Adjasi, C.K.D. (2007). Stock market development in sub-Saharan Africa: Critical issues and challenges. International Monetary Fund Working Paper WP/07/209.