



United Nations Economic Commission for Africa

No. ECA/18/001

# ECA POLICY BRIEF

### Promoting Financial Technology Startups in Africa

### 1. Introduction

Finance is identified as a means of implementation of the United Nations Sustainable Development Goals (SDGs), the Outcomes of Rio+20; and the Paris Agreement on Climate Change. It is also identified by the African Union as one of the means for realizing the Aspirations of the African Union Agenda 2063: "The Africa we Want". Financial inclusion is necessary to ensure that finance fulfills its purpose, that economic growth performance is inclusive and sustained. Evidence suggests that Africa is lagging behind in this score. But new, emerging technologies and organizational setups such as financial technology (FinTech) may help to reduce financial exclusion on the continent.

FinTech is a term generally used today to describe an industry composed of companies that use new technology and innovation with available resources to compete in the marketplace previously dominated by traditional financial institutions and intermediaries such as banks, in the delivery of financial services. Financial technology companies consist of both startups and established financial and technology companies trying to replace or enhance the usage of financial services of incumbent companies. Today, there are over 301 Fintech startups in Africa. A range of systems and processes in areas including payment, lending, retail banking, asset management, fraud protection and regulatory compliance is now operated, not just by well-known and established institutions, but also by challenger startups vying for a say in the future. These new entrants, alongside reconfiguring incumbents, are reformulating service design and delivery through technological developments and advancements in software, user experience and data mining.

The spread of mobile phones and the high rate of adoption of mobile Internet in Africa have played a huge part in laying the groundwork for FinTech to grow. The mobile penetration rate of 80 per cent<sup>1</sup> makes the continent one of the fastest growing mobile markets globally. With 1 billion SIM cards,<sup>2</sup> the mobile phone is the most used communication medium in the region; it is instigating and driving the adoption of Internet at an exponential rate.

Financial technology has developed on a large scale in Africa for several reasons. With approximately 80 per cent of adults in Africa not having access to formal banking services, according to McKinsey and Company, the continent is facing an extremely low rate of bank access. This means low access to networks of bank branches and embryonic ATMs,<sup>3</sup> unreliable postal mandate services, for the majority of the working population in the informal sector with irregular income and cash payments and micro payments. According to the African Development Bank, for example, sub-Saharan Africa has the lowest penetration rate of depositary institutions with an average of 16.3 per cent compared to 63.3 per cent for all developing countries.<sup>4</sup> Financial technology has radically changed Africa's financial services ecosystem by bringing major innovations in the areas of utility bills

<sup>1</sup> Jumia mobile trend report for Africa.

<sup>2</sup> Ovum, Africa Market Outlook, 2016.

<sup>3</sup> Beck, Thorsten – Cull, Robert, Banking in Africa, CSAE Working Paper, WPS/2013-16, First Draft August 2013, Centre for the Study of African Economies.

<sup>4</sup> https://www.afdb.org/en/news-and-events/fostering-financial-inclusion-with-mobile-banking-12125/

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payment, merchant payments, money transfer, banking services, insurance, international remittances, among others. FinTech is playing a demonstrable role in facilitating access to financial services and allowing banks to grant and monitor microloans easily and quickly while reducing operational costs.

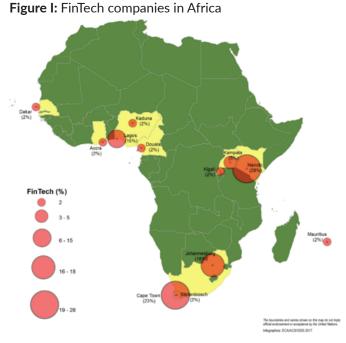
As a result, today in sub-Saharan Africa, 12 per cent of adults have access to financial services via FinTech, especially in rural areas through 140 mobile money schemes deployed in 39 African countries. More than 40 per cent of adults in the region use mobile money services on a regular basis. With the mobile phone as a "bank terminal" Africa leads the world in money transfers using mobile phones, with 14 per cent of all Africans receiving money through mobile transfers<sup>5</sup> and 134 million active mobile money accounts in 2016. These services increase not only financial but also social inclusion with products that facilitate access to basic services in health, agriculture and education. To this end, key policy issues are emerging from promoting innovation to creating enabling regulatory environments to address competition and enhance capacity and skills both to accelerate growth and manage regulatory issues.

This present policy brief is drawn from a recent study by the Economic Commission for Africa (ECA) on: "*Emerging issues in ICT in Africa*". It summarizes the available evidence and provides some policy recommendations for consideration by African policymakers and decision makers.

### 2. Overview of FinTech in Africa

In the last couple of years, Africa has seen a boom in FinTech startups across the continent. According to the *Finnovating for Africa Exploring the African FinTech Startup Ecosystem Report 2017* released by Disrupt Africa, there are 301 African FinTech startups currently active. The data from across the African continent, show that the Southern, West and Eastern African regions are active, while North Africa lags behind. Among the countries, South Africa leads as the top destination for FinTech startup activity, hosting 31.2 per cent of the continent's FinTech startups, while Nigeria and Kenya follow in the second and third positions, respectively.<sup>6</sup>

Furthermore, a number of countries have also emerged as vibrant destinations for FinTech, particularly in West Africa where Ghana and Cameroon are increasingly becoming prominent markets. Among the nine FinTech categories



Source: ECA, Report on Blockchain Technologies, 2017.

considered in the report, payments and remittances startups dominate the market, with 41.5 per cent of all startups focused in these areas. Lending and financing services also prove a popular priority for Africa's FinTech innovators. African banks have adapted to modern technologies by increasingly collaborating with FinTech to embed new services and technologies that ensure an enhanced customer experience and drive efficiency. In that regard, major African banks are starting to explore digital technologies and solutions (wealth management, lending payment, mortgage, among others) to optimize their operations. The FinTech sector is experiencing an explosive growth, attracting \$414 million in 2014 to \$608 million in 2018, according to the Financial Times. The FinTech revolution may not have come to an end, but its benefits are already evident in several countries, as seen in Kenya with the M-Pesa system. Today, more than 80 per cent of the continent is covered by mobile money services and mobile money accounts ranging from 10 per cent in Namibia to 58 per cent in Kenya.

In Kenya, the rate of banking increased by 19 per cent in 2007 (the year of launching the national unicorn M'Pesa) to 58 per cent in 2015. Undeniably, access to basic services has increased on the continent with 15.4 per cent of the total value of transactions in 2014 going back to bill payments and market transactions. In Gabon, Ghana, Kenya, Namibia, Uganda, the United Republic of Tanzania and Zimbabwe, more than 40 per cent of adults pay all their daily bills directly through the mobile money

<sup>5</sup> UNCTAD Information Economy Report 2015.

<sup>6</sup> See also http://disrupt-africa.com/finnovating-for-africa/

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application: tuition fees, electricity bills and even simple taxi rides. In that regard, FinTech service has become a powerful lever for growth and financial inclusion in Africa by providing a large number of services to people excluded from basic financial services.

Access to basic services has increased on the continent, with 15.4 per cent of the total value of transactions in 2014 using these services for bill payments and market transactions<sup>7</sup> Mobile money has also been seen as a lifeline to a number of social and economic clusters in Africa, from the increasing number of agents, growing from 100,000 agents in 2011 to 1.5 million in 2016, and 47 per cent of revenues from mobile money in the region going to agents.<sup>8</sup> The impact on macroeconomic development is real in several countries, for example, as a proportion of the GDP: Togo (10.7 per cent), Cabo Verde (9.4 per cent), Senegal (9.3 per cent), and the Gambia (8.2 per cent).<sup>9</sup>

#### 3. Challenges

FinTechs have had a positive impact on Africa's banking sector and mobile money remains the most advanced platform today for financial inclusion in Africa through the variety of services offered to users. To promote the development of these innovations, many issues need to be resolved to increase the coverage of FinTech services and their accessibility to all. Despite the efforts put in place, there are some noticeable challenges of implementation. Among them:

• **Poor regulation**: Regulation is a big challenge when technology is moving quickly and developing across so many different jurisdictions. Indeed, this new financial ecosystem, which involves entities such as telecommunications operators, whose transactions are partly regulated by central banks and partly by telecom regulatory agencies, creates a paradigm shift because financial regulation has so far been built around existing actors. On the one hand, the interoperability of the platform is not effective and hampers the transfer of domestic and international money. The taxation of mobile money and other similar services is often beyond the control of States that do not have exact information on the volume of transactions. On the other hand, the majority of FinTech startups

are unlikely to be regulated in the same way as official banks and often fail because of the instability of regulatory frameworks and huge legal risks. These range from enabling access to digital services, making infrastructure available, regulating prices and making it affordable, and, finally, to introducing new regulatory mechanisms for financial services enabled by FinTech, including e-money, and processing data from Big Data in compliance with the Data Protection Act.

- Limited infrastructure: While the Internet is likely to be a huge accelerator of FinTech, as it reduces transaction costs and brings financial services to people in remote locations from the nearest financial service facilities, adequate infrastructures to support the FinTech services (power, telecommunications network, broadband technology penetration, quality of IT) remain difficult.
- **High cost of bandwidth**: The major problem among African FinTech startups today is the high cost of bandwidth, because of the high cost of international connections to the global telecommunication backbones, which in turn affects access to FinTech services in Africa. Users in landlocked countries in Africa pay on average \$232 more per month for fixed broadband access than those living in coastal areas.<sup>10</sup>
- **Cybersecurity**: With the development of FinTech and the rise of virtual currencies, such as Bitcoin, which do not depend on any issuing institution and have no legal status, cybersecurity is the biggest concern when it comes to financial transactions and services. Mobile money fraud, intrusions, attacks, money-laundering and terrorism are the major concerns on the continent and could put Africa in danger. According to the Central Bank of Kenya, for example, 37 per cent of mobile transactions are fraudulent compared to 10 per cent when done by traditional banking institutions.

The rise in FinTech opens up vast horizons and at the same time poses significant challenges in the fight against cyberfraud. These FinTech platforms, especially crowd funding sites, can be used to finance activities related to terrorism. In addition, these services, which make it possible to withdraw cash at points of sale using codes exchanged by SMS, present the largest risks in terms of money-laundering.

<sup>7</sup> GSMA

<sup>8</sup> Source GSMA : https://www.gsma.com/mobilefordevelopment/ page/13?cat=vmfwerppz

<sup>9</sup> https://www.oecd.org/aidfortrade/casestories/casestories-2017/ CS-15-AfDB-Mobile-payments-and-banking-on-the-unbanked-in-African-countries.pdf

<sup>10</sup> World Bank, 2016 Digital Dividends.

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• Skills and digital literacy: Other factors that are considered barriers to digital financial inclusion include the level of education to enable people to benefit from the opportunities of being online; availability, affordability and relevance of the services or content on the Internet.

## 4. Policy implications and recommendations

The following are some of the policy recommendations for consideration by African policymakers and decision makers, including other public-private stakeholders. This includes building the capacities of regulators both in the ICT and financial sectors to catch up with new and emerging technologies and startups, administrative and legal frameworks to promote the development of FinTech startups, as well as creating concrete incentives and making better connectivity available to promote innovation.

- **Policy** ICT policies should be continually reviewed to adapt to new and emerging technologies. ICT policies must also be linked to investments in education in order to develop the necessary skills and raise levels of education, and thus bring more people online. Furthermore, harmonizing the financial system policy and regulatory mechanism with the legal and regulatory environment for the development of the ICT sector, specifically with respect to new and emerging FinTech technologies is of paramount importance. African Governments need to develop policy guidelines to encourage the use and the development of FinTech services, enhance competition and protect customers against fraud, terrorism finance and money-laundering.
- **Regulation** The role of Governments will be important, both from an adoption perspective, as well as the creation of an enabling policy and regulatory environment in encouraging innovation to strengthen FinTech. Efforts should be made to reflect international

best practices in the development of new legislation on, for example, blockchain, digital banks, mobile wallets, and coupon. African regulators should assess the potential of FinTech technology to reduce costs and enhance transparency within multiple sectors of the economy. Effective coordination between telecom and financial regulators is also needed. As FinTech may involve international transactions, regulatory issues such as cross-border enforcement and regulations, data security and data privacy laws, and globally recognized certification and standards should be put in place.

- Improving access to broadband For FinTech applications to run, users need to have access to high quality and high speed Internet. To this end, African policymakers and decision makers need to enhance their efforts in expanding connectivity among the population, particularly by ensuring reliable and affordable broadband infrastructure, which is key, to facilitate use of applications that require high bandwidth and quality broadband services.
- The promotion of a safe and efficient payment system - Governments, banks and other stakeholders have a significant role to play in the development and the improvement of the payment system infrastructure, by ensuring their robustness and effective mitigation of systemic risks in the payment systems. By so doing, consumers will have confidence in the systems.
- **Promoting FinTech startups** the role of the private sector in investing in new and emerging technologies plays a great role in promoting financial digital inclusion. Partnerships between banks, financial institutions, telecom operators and FinTech startups should be encouraged. At the technical level, it is necessary to make the digital payments ecosystem interoperable to ensure that the products and services are linked, not only within a country but also across borders.

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