



**4<sup>TH</sup> FMO's FUTURE OF FINANCE CONFERENCE**  
*TheaterHangaar, Katwijk, Netherlands*

**Keynote Address by Dr. Patrick Njoroge**

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*As Prepared for Delivery*

**Good morning!**

I am greatly honored to be here today. I would like to thank the Dutch Development Bank (FMO) for organizing this conference on the important theme *Future of Finance*, their gracious hospitality, and the invitation to speak to such a distinguished audience on the impact of disruptive technology on financial inclusion.

New technologies have profoundly transformed societies the world over. In the last decade, we have witnessed an unprecedented upsurge of technology-driven innovations that are transforming Africa's economic landscape. Coupled with globalization—the other significant trend of our time—these innovations offer immense possibilities for achieving inclusive economic growth, sustainable development, and poverty reduction. The outcomes with respect to financial services in Kenya and the rest of Sub-Saharan Africa, have so far been astounding. In the words of Nelson Mandela, “*it always seems impossible until it is done.*” This conference provides an excellent opportunity to reflect on Kenya's journey of embracing innovative and disruptive technology as a tool for financial inclusion, and the challenges and opportunities that lie ahead.

An analogous example may be appropriate and illustrative. It is evident how profoundly Dutch Masters changed the art of painting, as their disruptive innovations challenged the existing paradigms and offered new possibilities that were previously unimaginable. It is also significant that Rembrandt and Van Gogh absorbed studiously the methods of the time before launching their careers and developing their own innovative approaches. Embracing this same spirit, let me first turn to a few considerations of the current setting.

*First, mobile phone technology has allowed Kenya to make substantial progress in financial inclusion.* There are some 38.3 million mobile phone subscribers in Kenya, a penetration rate of 89 percent. In addition, the network of mobile money agents has grown significantly, from 527 agents in June 2007 to 164,465 in June 2016. These factors have allowed access to formal financial services to expand from 26 percent in 2006 to over 75 percent currently.<sup>1</sup> Similar improvements in financial inclusion have been witnessed in other countries in the region—recently reported numbers are Mauritius at 88 percent, South Africa at 83 percent, Rwanda at 68 percent, Tanzania at 57 percent, and Nigeria at 48 percent, and Democratic Republic of Congo at 36 percent.

*Second, compared to similarly-situated countries, Kenya has a relatively small gender gap of about 7 percent.*<sup>2</sup> Additionally, data from a large integrated banking and payments platform in Kenya indicates that 41 percent of users are women. However, 99 percent of these women users are active users, whereas 59 percent of users are men but only 77 percent of them are active users. Similarly, women account for 58 percent of the number of transactions and 51 percent of transaction value. Astonishingly, women account for 82 percent of total savings.

The *Groupe Speciale Mobile Association* (GSMA) study attributes the small gender gap in Kenya to the success of mobile money, which provides women and their families a distinct reason to own and use a mobile phone. The study ranked Kenya's women among the most connected in the world. In contrast, there is a sizeable gender gap in mobile phone ownership and usage in low- and middle-income countries. There is evidence to suggest that women in those countries are on average 14 percent less likely to own a mobile phone than men. For instance, gender gaps in Mexico and Egypt are 6 percent and 2 percent respectively, and reported at 41 percent in Niger and 21 percent in Jordan. The study noted that countries with higher per capita GDP generally have smaller gender gaps in mobile phone ownership. Jordan, however, is a middle-income country whose high gender gap is likely due to the social barriers women face relative to their male counterparts. More generally, successfully targeting women would not only advance

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<sup>1</sup> The 2015 *FinAccess Geospatial Mapping Survey* by FSD Kenya, confirmed that 86 percent of the population were within 5 kilometers of a mobile money agent. The survey also revealed that 73 percent of the population is living within 3 kilometers of a financial services access touch point, increased from 59 percent in 2013.

<sup>2</sup> Groupe Speciale Mobile Association (GSMA), "Bridging the Gender Gap: Mobile Access and Usage in Low- and Middle-income Countries", 2015.

women's digital and financial inclusion, but also deliver significant socio-economic benefits to families and households.

*Third, mobile phone financial services have supported reduction in poverty.*

Significantly, low-income households and vulnerable groups have created their own social networks which have enabled them to diversify risk within their social pools, and thereby also enhanced their resilience to unexpected negative shocks.<sup>3</sup> Mobile money appears to increase the number of active participants and effective size of risk-sharing networks, without increasing information, monitoring, and commitment costs. Another study has correlated improved access to mobile phones with living standards, which in turn is one of the dimensions of poverty.<sup>4</sup>

*Fourth, the expansion of financial services to small and medium-sized enterprises (SMEs) have been weak.* This is in contrast to the remarkable increase in micro-lending to microenterprises. This is of concern as, micro- small- and medium-sized enterprises (MSMEs) account for about 90 percent of business enterprises in sub-Saharan Africa, they account for about a third of GDP, and contribute about 45 percent of employment and job creation.<sup>5</sup>

Studies from various African countries have established the key impediments to SME financing to include; their perceived high risk profile, information asymmetry, and the lack of traditional collateral. To protect themselves against default, financial institutions place onerous requirements on SMEs including proof of regular income, collateral, and a long credit history.

**Ladies and Gentlemen,** while the gains over the last few years are remarkable, the question at hand is how to sustainably expand digital financial services beyond the basic services of money transfer, savings, and microcredit. With innovation, is it possible to unbundle financial services into their core elements and functions, from settling

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<sup>3</sup> Suri, T. "The Mobile Money Revolution in Kenya: Can the Promise Be Fulfilled?" 2015, FSD Kenya.

<sup>4</sup> Oxford Poverty and Human Development Initiative "Global Multidimensional Poverty Index Databank" 2016, University of Oxford. The MPI is a measure of acute poverty, complementing income-based measures by reflecting the multiple deprivations that people may face. It uses ten indicators across three dimensions (education, health, and living standard), with access to a mobile phone an indicator of "asset ownership" which impacts "living standard". It reveals that multidimensional poverty in Kenya has fallen, with an MPI of 0.244 in 2009 and 0.187 in 2014.

<sup>5</sup> <http://www.worldbank.org/en/topic/financialsector/brief/smes-finance>

payments to risk management, from maturity transformation and intermediation to capital allocation? How will the unique concerns of SMEs be addressed? What framework should be developed to ensure that the benefits of financial inclusion are sustainable and distributed equitably? How should the regulator react in face of the shifts that may occur? Clearly, substantial work remains, and in the words of Rembrandt, “*Practice what you know, and it will help to make clear what now you do not know.*” I offer some reflections on the way forward.

- *It is important that innovators and financial service providers listen and understand the concerns of their prospective customers.* This will generate a wider range of appropriately-designed financial products, based on customers’ diverse needs and characteristics. These services will also need to be affordable by low-income households and vulnerable groups, and the consumers should also benefit from reduced marginal cost of additional digital financial services, as provided by the underlying technologies. Going back to the example of art, the benefits of the artists’ innovations would be felt more widely if more people can see and enjoy these masterpieces.
- *In light of the successes in improving financial inclusion, more attention should be given to expanding financial services in the lagging areas.* Of particular importance is the extension of financial services to SMEs, women, and those living on US\$2 to 5 per day (*the cusp group*). The latter group of consumers represent 23 percent of the population in sub-Saharan Africa, comprising of economically active persons in both the formal and informal sectors who lack meaningful assets and remain vulnerable. As an example of such targeted financial services, Kenya will allow the public to purchase government securities through their mobile phone money transfer services, with a minimum investment amount of US\$30. This will be transformational—in addition to promoting financial inclusion, it will strengthen the population’s savings culture and ultimately lead to an increase in national savings.
- *Standardization of technologies will likely yield benefits in the short term, but this should not be allowed to stifle the emergence of new technology.* Technological standards support the production process and market penetration of products, and thereby has a significant effect on innovation, productivity, and market structure.

However, coupled with dominant leaders in the industry, this would increase considerably switching costs and network effects, and conflicting with the long-term objective of greater market access with evolving technology.

- *Innovations need to deal adequately with the risks arising from these financial services.* The most significant risks currently relate to cybercrime and data privacy, even as customers navigate a landscape strewn with hidden risks. A number of other consumer protection concerns have also emerged, including: the lack of safeguards for funds held by non-prudentially regulated providers; limited disclosure of fees, terms and conditions; insufficient agent liquidity; irresponsible lending through the digital channels; and unclear or limited recourse in case of disagreement with the provider. What is clear is that building a sound consumer and data protection framework with evolving capabilities is critical.

Before I conclude, a few words are in order about the role of regulators in the sector. It is essential that they ensure the innovations in the financial sector are conducted safely, i.e., without jeopardizing financial stability or consumers. This requires that regulators remain knowledgeable of the new and emerging technologies, in addition to being nimble so as to provide timely guidance. Given the unknown risks with these innovations, a pilot “*test and learn*” approach may be adopted, and through which the necessary safeguards are applied to mitigate the potential risks. This approach worked for us at the Central Bank of Kenya when we took the initial steps with mobile money services.

As regulatory perimeters become blurred, financial sector regulators must establish links with other regulators, governments, private sector, and other stakeholders. In this complex scenario, consumers will become more vulnerable and will rely on the regulators to protect them. Regulators will also need to guide the maintenance of sound governance and practices at all levels.

In closing, I want to underscore that a great deal of innovation and innovative thinking is needed to ensure that the benefits from greater financial inclusion are fully realized. There are risks, but in the words of Van Gogh, “*The fishermen know that the sea is dangerous and the storm terrible, but they have never found these dangers sufficient reason for remaining ashore.*”

Thank you!