

revenues (McKinsey & Company, 2016b). Cross-border payment processes have already undergone significant changes over the last decades with the emergence of new players that provide customers and businesses with alternative, enhanced value propositions to process cross-border payments over the internet or via mobile phones. E-payment alternatives such as PayPal, Amazon Payments and AliPay are now widely used. In developing countries, and particularly in Africa, the low level of banking penetration has led mobile service providers to develop mobile banking solutions as an alternative, and complement, to traditional banking. The use of mobile banking, i.e. of mobile phones, to send and receive payments and conduct other banking transactions, has been soaring in recent years and is acquiring a cross-border dimension (WTO, 2016c). M-Pesa, which was launched in Kenya in 2007 by Safaricom, the country's leading mobile service providers, is now used by 70 per cent of the Kenyan population and has spread to 10 countries (Adegoke, 2017).

An increasing number of companies is now turning to Blockchain to further improve cross-border payments. A variety of non-bank actors are developing new business models to make cross-border payments quicker and cheaper, leading well-established institutions to adjust.

(i) The growing non-bank offer

The non-bank offer is diverse and falls into three main categories.

The first category includes companies that offer the possibility to process cryptocurrency payments, such as AliPay, which recently integrated a Bitcoin option for its customers. Numerous startups, many of which are based in developing countries, are proposing crypto-based global payments, such as BitPesa in Kenya, BTCGhana, Bitso in Mexico, BitSpark in Hong Kong, China, OkCoin in China, OkLink/Coinsure in India, Rebit and Coin.ph in the Philippines, Remit.ug in Uganda, and Abra and Ripple in the United States, and the list goes on. The exploding number of startups offering crypto-based cross-border payments in developing countries would seem to suggest that the use of blockchain technology and cryptocurrencies could have a strong impact on markets that are underserved by traditional financial institutions. Many see in Blockchain a tool to further promote financial inclusion – to “bank the unbanked” – and an opportunity for developing countries to leapfrog traditional technologies (see, for example, International Finance Corporation (IFC) (2017)). Blockchain and cryptocurrency enthusiasts note that the technology enables customers to establish a digital identity easily, making it simpler for unbanked people to acquire access to financial services, and can further drive down the cost of cross-border payments. However, whether the use of