mastercard foundation

Partnership for FINANCE in a DIGITAL AFRICA

Ecosystem

What is the role of regulation in digital finance?

Caribou Digital

Learning Themes 14

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ABOUT THE PARTNERSHIP

The Mastercard Foundation Partnership for Finance in a Digital Africa (the "Partnership"), an initiative of the Foundation's Financial Inclusion Program, catalyzes knowledge and insights to promote meaningful financial inclusion in an increasingly digital world. Led and hosted by Caribou Digital, the Partnership works closely with leading organizations and companies across the digital finance space. By aggregating and synthesizing knowledge, conducting research to address key gaps, and identifying implications for the diverse actors working in the space, the Partnership strives to inform decisions with facts, and to accelerate meaningful financial inclusion for people across sub-Saharan Africa.

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What we know

Enabling regulation is critical for the success of digital financial inclusion

The shift to a digital ecosystem brings new entrants, technologies, and innovative business models—it also brings new challenges to policymakers and regulators who want to manage the risks to stability and integrity without stifling innovation.[1]

For more traditional digital finance providers—such as banks, mobile network operators, microfinance institutions, and third-party providers—the role and impact of enabling regulation for digital finance, and the parameters within it, are more established. For instance, Gutierrez and Singh assessed regulatory frameworks for mobile banking and found that, on average, regulatory frameworks that are open and progressive are associated with greater mobile banking usage.[2] They also found that countries whose regulations included simplified Know Your Customer (KYC) requirements and interoperability and that enabled providers other than banks to issue e-money had higher rates of mobile money service usage among the unbanked population.[3] In fact, in countries with regulatory frameworks that support "certainty," mobile money users are more likely to conduct every transaction using mobile money services.[4]

Additionally, the GSMA defines enabling regulatory environments[5] in terms of an open and level playing field that lets non-bank providers, including mobile operators, into the market.[6] Of the 92 countries where mobile money was available in 2016, 52 had an enabling regulatory approach,[7] and research has shown that this is a principal factor in the success of mobile money.[8]

For newer entrants, such as FinTech players, enabling regulatory frameworks are less clear. For instance, FIBR found a lack of regulatory clarity for specific FinTech business models in Ghana—citing online peer-to-peer lending as an example—which has likely discouraged entrepreneurs from entering the market.[9] Elsewhere, discussions of FinTechs and regulation are underway. Yet whether this will lead to "evolutionary or revolutionary" approaches is less certain.[10] For example, the UK's Financial Conduct Authority (FCA) recently voiced concerns about the potential "wild west" of FinTechs in some countries due to a lack of supervision from regulators.[11]

However, two elements that positively shaped enabling regulatory approaches for digital finance will likely continue to play significant roles in the future by:

- establishing an open dialogue and consultative process between regulators and industry;[12]

1 He et al., "Fintech and Financial Services: Initial Considerations."
2 Gutierrez and Singh, "What Regulatory Frameworks Are More Conducive to Mobile Banking."
3 Ibid.
4 Ibid.
5 According to GSMA, regulation should: 1)"Permit non-banks to issue electronic money (or equivalent)[iv] by allowing them to: be licensed directly, OR, set up a subsidiary for this business, OR, apply for a payments bank (or equivalent) license, OR, provide the mobile money service under a letter of no-objection to the non-bank or its partner bank, pending the approval of a specific regulation; 2) AND impose initial and ongoing capital requirements that are proportional to the risks of the e-money business; 3) AND permit them to use agents for cash-in and cash-out operations 4) AND do not prescribe the implementation of specific interoperability models without allowing for a market-led approach." (Di Castri, "Is Regulation Holding Back Financial Inclusion? A Look at the Evidence.")
6 Di Castri, "Mobile Money: Enabling Regulatory Solutions."
7 GSMA, "State of the Industry Report on Mobile Money: Decade Edition: 2006-2016."
8 Naghavi et al., "Success Factors for Mobile Money Services: a Quantitative Assessment of Success Factors"; Evans and Pirchio, "An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most."
9 FIBR, "The Environment for 'FIBR FinTech' in Ghana."
10 He et al., "Fintech and Financial Services: Initial Considerations."
11 Williams-Grut, "Britain's Finance Watchdog Is Worried about 'Wild West' Fintech in Some Parts of the World."
12 Di Castri, "Mobile Money: Enabling Regulatory Solutions."

- and adopting a "test and learn" approach, whereby regulation follows innovation, while ensuring sufficient safeguards are in place.[13]

It seems likely that future entrants into the regulatory discussion will have strong vested interests in shaping the understanding of the 'enabling regulatory environment'. Looking ahead, while risks covering all aspects of an enabling regulatory framework should continue to be mitigated with the shift to a digital ecosystem, two aspects in particular stand out: consumer protection and the relationship between competition and innovation.

Consumer protection and the role of regulation for individuals

With the rise of innovative technologies and new services, regulators will continue to be responsible for ensuring that the issue of consumer protection and digital finance is increasingly on their radar.[14] Additionally, without appropriate treatment of consumers and their trust in digital finance, the digital ecosystem is unlikely to thrive.[15] As business models transform and the complexity of offerings increases, it will be harder to regulate and ensure consumer protection.[16] This puts regulators in a difficult position: they must weigh social inclusion and commercial benefit against protecting citizen privacy, choice, and control.[17] There are three goals when it comes to consumer protection regulation:

- Ensure consumers are informed,
- Prevent unfair practices by providers, and
- Ensure consumers have access to dispute and complaint mechanisms (while balancing onerous provider restrictions). [18]

Providers (especially new entrants) and regulators will need to work together to ensure that these three goals are realized with new offerings.

Past research has identified key potential risks that citizens face when using digital finance, ranging from inadequate information to make informed decisions, to risks associated with complex user interfaces, liquidity, data protection and security, and fraud.[19] Generally, regulators and digital finance providers must ensure that minimum consumer protection requirements are met. For digital finance providers, this includes minimum capital requirements, effectively safeguarding customer funds against risk of loss, internal control mechanisms for data privacy and effective internal complaints systems, among others.[20] For example, in Liberia, "*…providers must ensure customers understand the terms and general features of the service; a customer's acknowledgment of understanding must be captured when a mobile money account is opened.*"[21] Among other requirements, regulators should also ensure that a regulatory framework is in place for consumer protection which also allows for innovation, that all digital finance providers are licensed to operate and do so on a level playing field that promotes competition and efficiency, and that there are simplified consumer protection rules for low-value transactions.[22]

However, despite ensuring minimum requirements are met by both regulators and providers, consumer education and awareness is also key, particularly as consumer data and smartphone technology continues to drive services like 'Big Data, Small Credit' firms (see text box below). For instance, the Colombian Financial Supervisor (SFC) developed a strong complaints mechanism, whereby a customer complaint would enable the SFC to issue a legally-binding ruling against the provider—yet few consumers complained via this channel, suggesting a lack of awareness.[23] Going forward, consumer data protection and privacy will be especially critical.

While digital delivery of services can offer greater privacy and convenience for users, it can also create challenges for disclosing terms and conditions, due to limited space on menus, or with SMS, when a customer enrolls.[24] Additionally, researchers argue that there

13 Muthiora, "Enabling Mobile Money Policies in Kenya: Fostering a Digital Financial Revolution"; Di Castri and Gidvani, "Enabling Mobile Money Policies in Tanzania"; Global Partnership for Financial Inclusion, "G20 Principles for Innovative Financial Inclusion"; Ndungu, "Balancing Financial Inclusion and Stability."

14 McKee, Kaffenberger, and Zimmerman, "Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks."

15 Malady, Buckley, and Tsang, "Regulatory Handbook: The Enabling Regulation of Digital Financial Services."

16 Mas, "Strains of Digital Money."

17 Costa, Deb, and Kubzansky, "Big Data, Small Credit: Digital Revolution and Its Impact on Emerging Market Consumers."

18 Alliance for Financial Inclusion, "Mobile Financial Services—Consumer Protection in Mobile Financial Services."

19 McKee, Kaffenberger, and Zimmerman, "Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks"; Arenaza, "Potential Risks to Clients When Using Digital Financial Services: An Analysis Report to Inform the Evolution of the Client Protection Standards."

20 Alliance for Financial Inclusion, "Mobile Financial Services—Consumer Protection in Mobile Financial Services"; Muthiora and Sanin, "Safeguarding Mobile Money: How Providers and Regulators Can Ensure That Customer Funds Are Protected."

21 UNCDF, "Liberia: Financial Diagnostic Update & Feasibility Study for the Possible Entry of a Third Party Cash Management Partner or Agent Aggregator."

22 Alliance for Financial Inclusion, "Mobile Financial Services—Consumer Protection in Mobile Financial Services."

23 Bankable Frontier Associates, "Emerging Risks to Consumer Protection in Branchless Banking: Key Findings from Colombia Case Study."

24 Tamara Cook and Claudia McKay, "How M-Shwari Works: The Story So Far"; Mazer and Fiorillo, "Digital Credit: Consumer Protection for M-Shwari and M-Pawa Users."

is a lack of safeguards for personal data protection in Africa and that the rapid growth of mobile technology *"heightens the risk to consumers operating in an ecosystem without protection."*[25] Globally, data privacy laws are accelerating, and, within Africa, 26 jurisdictions now have data privacy legislation.[26] For example, Ghana passed a comprehensive data protection bill in 2012 that established users' rights of data access, control, and consent of use.[27]

One way—albeit more exploratory—that policymakers can better protect consumers is through behavioral research. This is a growing trend in emerging markets, particularly where *"financial systems are evolving rapidly and integrating large numbers of BOP consumers with limited formal financial experience."*[28] Similarly, mystery shopping can also be a valuable tool for regulators to understand consumer experience with digital finance, by identifying problems, informing regulations, and monitoring compliance. The industry has also increased interest in best practices, codes of conduct, and standards initiatives for ensuring consumer protection. CGAP identified 14 digital finance best practices and standards initiatives—the majority of which have launched in the last five years.[29]

Regulatory implications for 'Big Data, Small Credit' firms

'Big Data, Small Credit' (BDSC) providers collect and use non-traditional, alternative data, such as mobile usage data or social media data, to assess the creditworthiness of consumers and lend to those who would likely be unable to access more traditional loans.[30] Zollmann and Collins argue that the highest consumer protection risks for digital finance are with credit, after observing that Kenyan consumers paid little attention to interest rates.[31] Similarly, a study of M-Shwari found that users misunderstood loan limits and what would happen if they did not repay.[32] In 2014, the Commercial Bank of Africa forwarded the names of 140,000 M-Shwari loan defaulters to credit reference agencies in Kenya.[33] Moreover, FiDA discusses how **over 400,000 Kenyans have been blacklisted by the credit rating bureaus for outstanding mobile loans of less than KES 200** (about $2). Accordingly, whether credit reference reporting by digital lenders is helping or hurting low-income individuals is debatable.

Particularly for BDSC, policymakers should focus on systemic risk but allow space for innovation, monitor for traction and unintended consequences, and provide clarity on intentions and rules.[34] Similarly, regulators should improve their credit market monitoring by refining lender reporting requirements, allowing them to better track market developments in terms of product type and market segment.[35] Recent developments in this particular space are discussed in the Notable New Learning section of this Snapshot. Additionally, to drive growth in this space, regulators should invest in digital identification and digital asset registries because outdated and largely manual systems limit market development.[36]

Competition, innovation, and the role of regulation for institutions

In addition to the impact of regulation on consumers, with the increasing shift to the digital ecosystem, regulation also has a role to play in facilitating competition and innovation for digital finance providers.

Competition is an important element of increasing financial inclusion. With digital finance, competition in markets can lead to positive outcomes on price, quality and diversity of products, and service, in addition to driving innovation.[37] While overall, competition is usually healthy, there is some cause for concern for digital finance, discussed broadly in FiDA's Snapshot 10, **What makes a successful**

25 Harris, Goodman, and Traynor, "Privacy and Security Concerns Associated with Mobile Money Applications in Africa."
26 Greenleaf, "Global Data Privacy Laws 2017: 120 National Data Privacy Laws, Including Indonesia and Turkey."
27 Harris, Goodman, and Traynor, "Privacy and Security Concerns Associated with Mobile Money Applications in Africa."
28 Kaffenberger and Sobol, "Mystery Shopping for Digital Financial Services: A Toolkit."
29 McKee, Kaffenberger, and Zimmerman, "Doing Digital Finance Right: The Case for Stronger Mitigation of Customer Risks."
30 Costa, Deb, and Kubzansky, "Big Data, Small Credit: Digital Revolution and Its Impact on Emerging Market Consumers."
31 Zollmann and Collins, "Financial Capability and the Poor: Are We Missing the Mark?"
32 Intermedia, "Value-Added Financial Services in Kenya: M-Shwari."
33 Ibid.
34 Costa, Deb, and Kubzansky, "Big Data, Small Credit: Digital Revolution and Its Impact on Emerging Market Consumers."
35 Zollmann et al., "Credit on the Cusp: Strengthening Credit Markets for Upward Mobility in Africa."
36 Ibid.
37 Mazer and Rowan, "Competition in Mobile Financial Services: Lessons from Kenya and Tanzania."

commercial partnership? Some of these concerns include network effect (whereby, in the absence of interconnection or interoperability, consumers will join the largest network, creating a monopoly) as well as bundling (whereby market power for one product can be leveraged for a single combined bundle).[38] However, Bourreau and Valletti suggest that an after-the-fact "ex-post" approach to regulation results in more appropriate and proportionate interventions, and that the anticipatory "ex-ante" approach should be the exception for extreme cases.[39]

That said, Sitbon argues that regulators have a role to play in addressing digital finance competition bottlenecks, which can include 1) connectivity and channel issues, particularly for USSD; 2) agent network issues, such as exclusivity; 3) account-level barriers, such as interoperability; and 4) application level issues, such as APIS.[40] However, the biggest challenges for regulators and policymakers in addressing these bottlenecks lie in determining the right moment of growth to foster change; defining the right positions to facilitate (rather than stall) growth; and resolving uncertainty between the roles of banking and telecoms regulators.[41] More recently, CGAP also identified data sharing as a key competition issue, explaining that improving standards for permitted and non-permitted uses of consumer data should be a priority, adding that authorities will likely need to coordinate how data is owned, accessed, and shared.[42]

Mas argues that regulation is behind the "great competition and innovation deficit," explaining that innovators like Google and PayPal do not target the financially excluded in order to avoid dealing with regulators for licenses, KYC requirements, and dealing with customers' cash.[43] Similarly, regulation can hamper innovation and growth in markets, as examples from Sri Lanka and Ghana, among others, have illustrated.[44]

How regulatory sandboxes and accelerators can encourage innovation

To avoid stifling innovation and to encourage safe and responsible development, a growing number of regulators are turning to a 'sandbox' approach. Initially launched by the FCA in the UK in 2014, a sandbox allows businesses to test out new services, business models, and delivery channels in a live environment where consumers are protected.[45] Since then, other markets have followed this approach, and initiatives in Australia, Hong Kong, Malaysia, Singapore, Switzerland, Thailand, and United Arab Emirates are underway.[46] It remains to be seen whether these sandboxes do indeed harness innovation as this space is still relatively new and lacks the data to measure the success of sandbox approaches. What is known so far indicates that sandboxes are an important complement to policymakers' existing approaches to dealing with innovation.[47] For example, in May 2018, the Bank of Sierra Leone announced the inaugural cohort of its regulatory sandbox pilot program. The Bank is employing the sandbox to inform innovative approaches to financial inclusion[48] and demonstrate its commitment to financial inclusion, given that less than 20% of adults have a financial account.[49]

Additionally, Kenya is known for endorsing innovative solutions—such as the development of mobile money—outside the existing regulatory framework until the framework could be modernized.[50] M-Pesa, Kenya's giant mobile money service, was initially simply given a 'No Objection Letter' at its start. Eventually, the Central Bank of Kenya (CBK) developed specific regulations that clarify the standards for mobile money providers. However, FinTechs struggle with regulations in Kenya because the country does not have a unified body to regulate financial services. However, the Capital Markets Authority (CMA) announced that by July 2018 Kenya will have a regulatory sandbox in place to regulate FinTech firms, including startups in the cryptocurrency space, that introduce their products in the Kenyan market.[51]

38 Bourreau and Valletti, "Enabling Digital Financial Inclusion through Improvements in Competition and Interoperability."
39 Ibid.
40 Sitbon, "Addressing Competition Bottlenecks in Digital Financial Ecosystems"; and Mas, "What Is the Telecom's Regulator's Role in Fostering Mobile Money?"
41 Ibid.
42 Mazer and Rowan, "Competition in Mobile Financial Services: Lessons from Kenya and Tanzania."
43 Mas, "The Great Competition and Innovation Deficit."
44 Pénicaud, "State of the Industry 2012: Results from the 2012 Global Mobile Money Adoption Survey"; and Claudia and Zetterli, "Unintentional Consequences: Branchless Banking In Ghana."
45 "Financial Conduct Authority Unveils Successful Sandbox Firms on the Second Anniversary of Project Innovate."
46 Williams-Grut, "Britain's Finance Watchdog Is Worried about 'Wild West' Fintech in Some Parts of the World."
47 Jenik and Lauer, "Regulatory Sandboxes and Financial Inclusion."
48 Massally and Duff, "What Can We Learn from Sierra Leone's New Regulatory Sandbox?"
49 Demirguc-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Richard Hess, "The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution."
50 Jenik and Lauer, "Regulatory Sandboxes and Financial Inclusion."
51 Angeline, "Kenya Markets Regulator to Roll Out Fintech Sandbox Policy By July 2018."

In countries that do not have sandboxes in place, many have adopted other mechanisms that support financial innovation, which include "(FinTech) innovation hubs," "(FinTech) incubators," "(FinTech) accelerators," and "industry sandboxes."[52] These programs can complement a regulatory sandbox because they have the landscaping potential to inform broader FinTech policy development (and the selection of companies to participate in the sandbox).[53]

In a recent discussion note on FinTech, the IMF points to four considerations for financial regulatory authorities going forward[54]: complementing a focus on entities with increased attention to activities, due to the increasing diversity of firms (previously suggested by Voorhies et al.);[55] strengthening rules and standards to guarantee integrity for data, algorithms, and platforms; considering policy options to support open networks; and modernizing legal principles to clarify the rights and obligations of financial service providers in this new landscape. [56]

52 Jenik and Lauer, "Regulatory Sandboxes and Financial Inclusion."

53 Ibid.

54 He et al., "Fintech and Financial Services: Initial Considerations."

55 Voorhies, Lamb, and Oxman, "Fighting Poverty Profitably."

56 He et al., "Fintech and Financial Services: Initial Considerations."

Notable new learning

RegTech is gaining momentum as new solutions are developed and tested

A portmanteau of 'regulatory technology', RegTech was first established as a subset of FinTech in 2015 by the UK's FCA and has since gained momentum for financial policymaking and supervision. RegTech is centered around technology that allows financial service providers to meet regulatory requirements in a more effective and efficient way—this includes risk identification, management tools, and quantitative- and information-based obligations.[57] Generally, four key characteristics are attributed to RegTech: it is agile, fast, integrative, and it relies on analytics.[58] These characteristics have driven services like Troolio, a global identity verification service, and Qumram, which captures session recording for all customer digital interactions.

RegTech has the potential to change the financial supervisory landscape, but CGAP argues that "to fully benefit from these new solutions, further changes are necessary" from supervisors, including organizational culture shifts, building new data analytics and communications skills, and allowing for a greater reliance on technology.[59] Similarly, Porteous suggests that the biggest barrier preventing regulators and providers from adopting RegTech are *"established processes and entrenched mindsets."*

More recently, BFA launched the RegTech for Regulators Accelerator (R2A), which partners with financial sector authorities to help them reimagine their operations and prototype innovative solutions to strengthen capacities for monitoring and understanding increasingly complex financial marketplaces.[60] Currently, **R²A is partnering** with financial authorities in Ghana, Mexico, and the Philippines, and applications could address issues ranging from consumer protection—such as chatbots to triage customer communication—to Fraud and AML/CFT—such as machine learning for transactional data—to data analysis. For instance, Mexico recently (March 2018) approved a bill to regulate FinTechs, providing FinTechs more certainty around crowdfunding and payment methods.[61] The law permits open banking and sharing user information (with users' consent) by financial institutions through APIs.[62]

Interest rate caps in sub-Saharan Africa may be hurting financial inclusion and lending may have some unintended consequences

After a 25-year gap, in August 2016 the government of Kenya passed an amendment to its banking law, reintroducing interest rate limits for commercial lending, which were removed in 1991.[63] The law now caps commercial bank lending at four percentage points above the Central Bank's benchmark rate (currently at 9.5%[64]). Kenya's Central Bank, commercial banks, and economists opposed the law, saying that it would discourage lending, particularly

57 Deloitte, "RegTech Is the New FinTech: How Agile Regulatory Technology Is Helping Firms Better Understand and Manage Their Risks"; Zmitrowicz, "RegTech: Are Supervisors Ready for the Data Revolution?"

58 Deloitte, "RegTech Is the New FinTech: How Agile Regulatory Technology Is Helping Firms Better Understand and Manage Their Risks."

59 Zmitrowicz, "RegTech: Are Supervisors Ready for the Data Revolution?"

60 RegTech for Regulators, "RegTech for Regulators Accelerator."

61 "Mexico Financial Technology Law Passes Final Hurdle in Congress."

62 Ibid.

63 Doe Ouma and Genga, "Kenya Reintroduces Interest Rate Caps Abandoned in 1991."

64 "Kenya Could Scrap or Modify Interest Rate Cap Law – Uhuru."

to riskier customers, and that similar laws in other countries had been reversed to promote financial inclusion.[65] Earlier this year, the IMF asked that the rate caps be removed, explaining that the controls *"posed a risk to financial stability in East Africa's biggest economy and that they had slowed its leadership in the journey to financial inclusion."*[66] Accordingly, in April 2018 Kenya's President noted that: *"we recognise there is a need to repeal it altogether or modify it to deal with some of the issues and the concerns that have been raised, especially from the financial sector."*

However, these lending rate caps do not apply to financial service providers outside the Central Bank of Kenya's remits—banks and digital lenders like Tala and Branch. These providers can navigate around the government cap on interest by four points above the benchmark rate of 9.5%. The proliferation of digital lenders coupled with the ease of obtaining digital loans has also resulted in over 400,000 Kenyans being blacklisted with the credit reporting bureaus for outstanding mobile loans of less than KES 200 (about $2).[67] Perhaps for this reason, the Kenyan government recently drafted a bill that will mandate that digital lenders be licensed by a new Financial Markets Conduct Authority and that lenders will be bound by any interest rate caps the Authority sets.[68] However, it is not clear if digital lenders are subject to interest rate caps.[69]

Interest rate caps for lending in the region are not new, but given the rise of alternative lending companies coupled with the persistent lack of finance access for micro, small, and medium enterprises (MSMEs),[70] these could exacerbate challenges for digital finance providers and consumers alike. Although declining, a 2014 World Bank research paper found that these instruments were present in 74 countries globally, including 50% of countries in sub-Saharan Africa. While interest rate caps were primarily introduced to *"protect consumers from excessive interest rates, to increase access to finance, and to make loans more affordable,"* empirical evidence on the effects of caps in certain countries is predominantly negative.[71] Previously, CGAP suggested that the "worrying trend" of interest rate caps hurts low-income people by limiting access to finance and reducing price transparency.[72] For example, in the West African Economic and Monetary Union, microfinance institutions withdrew from poor and remote areas after interest rate caps were placed on loans. While not necessarily correlated, the World Bank also observed that in 83% of the sub-Saharan African countries with interest rate caps, financial inclusion was lower than the regional average based on account penetration indicators.[73] Elsewhere in the region, rate caps have meant that access to microfinance for low-income people is lowered, transparency has decreased, and equity impact investors have left.[74]

65 "Kenya Could Scrap or Modify Interest Rate Cap Law – Uhuru."
66 Mwaniki, "Get Rid of Interest Rates Cap, Says IMF."
67 Ngigi, "Pain of Kenyans Blacklisted for Amounts as Small as Sh100 in Mobile Loans, Bank Fees."
68 "Kenya Moves to Regulate Fintech-Fuelled Lending Craze."
69 Ibid.
70 "SME Finance."
71 Maimbo and Henriquez Gallegos, "Interest Rate Caps around the World Still Popular, but a Blunt Instrument."
72 Maguette Mbengue, "The Worrying Trend of Interest Rate Caps in Africa."
73 Maimbo and Henriquez Gallegos.
74 van de Walle, "Interest Rate Caps in Nigeria May Not Be Good for Clients."

Implications

Burdensome or overly proscriptive regulatory requirements stifle mobile money innovation and scale; these lessons can be applied to the growing FinTech space

Past examples and research have shown that where regulation is burdensome or overly proscriptive, mobile money innovation and scale is often stifled. Evans and Pirchio, for instance, found that heavy regulation—*"an insistence that banks play a central role in the schemes, together with burdensome KYC and agent restrictions"*—was generally fatal to mobile money.[75] For example, in the Philippines, growth was limited by the regulation of agent network sizes.[76] In Sri Lanka, an initial regulatory framework required customers to have a bank account to sign up for a mobile banking service; the service never gained traction.[77]

More importantly, with the torrent of new entrants in digital finance that are non-banks and non-MNOs, there's a need to re-examine what lessons from mobile money can be transferred to these players, while still encouraging innovation. Developments in the UK and Singapore, as well as in emerging economies like Mexico, in providing FinTechs more certainty and room to innovate are encouraging. Moreover, the Cambridge Analytics data fiasco combined with Facebook's complicity and complacency regarding how its software treats personal data have **brought concerns around privacy and personal data usage to living rooms and boardrooms alike**. Consequently, regulation will likely focus more on consumer protection for credit products and privacy than it did in the early stages of mobile money.

FiDA discusses privacy concerns, particularly focusing on digital credit lending and the use of mobile behavior patterns, in its blog, **"Virtue and Value of Mobile Operator Big Data,"** and concludes that despite obvious privacy concerns, the sector shouldn't be over-regulated. Digital lending on the back of alternative data is still a relatively new experiment, and many are still hopeful that the business incentives will drive providers to target farmers and small businesses with attractively priced credit. A light-touch approach, such as personal data privacy standards and recourse for people who have been blacklisted for low value loans, would help to make the market more predictable and tell providers exactly what they need to do to comply.

While it is very clear that China's protectionist policies allowed local players to flourish without facing competition from global competitors, Chinese regulators' "wait and see" approach sparked the FinTech boom in China, as **FiDA's Live Learning trip to China** recently learned. They began with an incredibly open framework, allowing models to evolve before tightening regulation, and when regulation was introduced over **200 licenses** were granted to non-bank institutions. Moreover, FinTechs know about upcoming rule changes and regulators are **up-to-speed with new innovations**; regulatory sandboxes help facilitate this mutual understanding.

Nevertheless, because consumer data moves across systems in unanticipated ways, as the digital credit lending story and the Facebook fiasco demonstrated, regulation will play a growing role but will need to walk a tightrope, balancing between protecting consumers and encouraging scale and innovation.

75 Evans and Pirchio, "An Empirical Examination of Why Mobile Money Schemes Ignite in Some Developing Countries but Flounder in Most."
76 di Castri, "Mobile Money: Enabling Regulatory Solutions."
77 di Castri, "Enabling Mobile Money Policies in Sri Lanka: The Rise of eZ Cash."

Conclusion

While regulatory sandboxes can harness innovation and promote financial inclusion, it is too early to measure its impact and success in emerging markets. Accelerator programs can complement sandbox efforts in encouraging innovation, but regulators in emerging markets will need to create an enabling environment to nurture innovation, and this will likely require a holistic approach. Recently, BFA outlined nine ways that governments and investors can intervene to catalyze innovation in digital finance which largely entail considering measures to support FinTech startups, improving and simplifying legal frameworks, and improving digital and financial infrastructure.[78]

78 di Castri and Plaitakis, "What's Next for Financial Technology Innovation."

1 Alliance for Financial Inclusion.
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2 Bourreau, Marc, and Tommaso Valletti.
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CGD Policy Paper 65 (2015): 1–30.

3 Di Castri.
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GSMA, February 28, 2013.

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10 Must Reads in this space

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