Two Perspectives on the Field of African FinTech

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Introduction

Without too much fanfare, the South African competition regulator embarked in 2021 upon an investigation of the competitive dynamics and potential monopoly problems in the fast-emerging area of online markets.[1] This move brought the Competition Commission into alignment with numerous other jurisdictions around the world that are examining economic issues regarding big tech and its regulation. In its online intermediation platform market inquiry (OIPMI or online market inquiry), the South African agency has chosen to focus on e-commerce (online classifieds, travel bookings, and e-commerce outfits such as Takealot).[2] However, also of interest – but not receiving immediate attention – are the fintech and the big tech sectors (e.g. those firms deriving revenue from digital advertising). The inquiry indicated its willingness to engage forcefully, noting "competition law [is required] to not only consider new theories of harm but also to act proactively against potential entrenchment strategies to ensure markets are contestable and prevent irreversible concentration. Ensuring markets are contestable also requires competition policy tools to facilitate access by potential entrants."[3]

Two Perspectives on Fintech

We welcome the boundary-drawing exercise among e-commerce, fintech, and what one might call big tech given the sheer size of the revenues derived by several American-based globally-operating firms from digital advertising and other sources.[4] Attention by this economic regulator -- a well-resourced organization relative to its continental peers -- to the field of fintech comes at an opportune moment for informing policy developments on the African continent.

While a variety of perspectives can assist in this task and other drivers must be identified and explored (and we are assembling a cast of characters to do provide just such a spectrum), we focus in this conversation-opening piece on how economic history and a soft technological determinism can provide a perspective on developments in the field of fintech as identified by the online market inquiry.[5]

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[1] Sasha Planting, "Competition Commission Steps Carefully into the Fast-Growing Online Retail Space," *Daily Maverick* (blog), March 14, 2021, https://www.dailymaverick.co.za/article/2021-03-14-competition-commission-steps-carefully-into-the-fast-growing-online-retail-space/.
[2] "OIPMI Statement of Issues," May 2021.
[3] "Online Intermediation Platforms Market Inquiry Terms of Reference," April 2021, 4.
[4] Keith Breckenridge, "Capitalism without Surveillance?," 2020, 19 (detailing the size of the digital advertizing market).
[5] Edward J. Balleisen and Elizabeth K. Brake, "Historical Perspective and Better Regulatory Governance: An Agenda for Institutional Reform," *Regulation & Governance* 8, no. 2 (June 1, 2014): 222–45, https://doi.org/10.1111/rego.12000; Jonathan B. Wiener, "The Regulation of Technology, and the Technology

From a technological point of view, much of the current fintech developments are part and parcel of the elaboration of biometric technology. An unmistakable shift to mass biometric surveillance is currently underway on the African Continent. Governments are using biometric technologies to re-issue existing documents, regulate the state bureaucracy, track artisanal miners, authenticate SIM card owners, attach individuals to bank accounts, and issue new voter credentials and identity cards to tens of millions of people. Firms (both global and Africa-based) are increasingly using digital technologies as part of their business models, changing and linking hitherto distinct African commercial markets.[6] The success of the Indian Aadhaar project –in the standardisation of databases, the commodification of biometric peripherals and software, and the expansion of project management skills –is being intensely felt across the continent.

While much of this is obvious and well-documented in the media, less well-known is the long–and globally distinctive – history of very weak paper-based state registration (and derived forms of surveillance) on the continent.[7] We would argue that the rush to biometrics is in part an effort to remedy what one might term an African registration deficit, a deficit seen initially in the public sector but existing also in the private sector. It is an attractive remedy because – unlike the expensive and difficult administration of birth and death recording, land-titling or the handling of debtors' court proceedings – biometric registration scales widely at low and fixed costs, is rapid, and is very largely automated. From the public interest point of view, these biometric platforms on the continent are often also the first realistically viable attempt to build officially recorded credentials that support citizens' claims for entitlements and resources from the state (at all levels) and from each other.

The campaign to adopt biometrics is of course also linked to – and motivated by – the expansion of digital communications and the spread, along those networks, of digital money forms and digital credit. The new banking technologies – combined with machine learning of credit worthiness and biometric identification – are encouraging new forms of lending that manage at the same time to be both profitable and wildly popular. They are also (as African competition regulators in addition to the South African one have realized) sources of new forms of monopoly power as the dominant firms (Capitec, MTN, Net1, Safaricom) seek to exploit their control of the information about borrowers's behaviour.[8] A host of fundamentally shared technopolitical problems are surfacing: opportunities for rent seeking in the issue of contracts, vendor and infrastructure lock-in as governments find

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of Regulation," *Technology in Society*, Technology and Science Entering the 21st Century, 26, no. 2 (April 1, 2004): 483–500, https://doi.org/10.1016/j.techsoc.2004.01.033.

[6] Keith Breckenridge, "What Happened to the Theory of African Capitalism?," *Economy and Society* 50, no. 1 (January 2, 2021): 9–35, https://doi.org/10.1080/03085147.2021.1841928; Jonathan Klaaren, "The Emergence of Regulatory Capitalism in Africa," *Economy and Society* 50, no. 1 (January 2, 2021): 100–119, https://doi.org/10.1080/03085147.2021.1841934.

[7] Keith Breckenridge, *Biometric State* (Cambridge University Press, 2014).

[8] Genna Robb and Thando Vilakazi, "Mobile Payments Markets in Kenya, Tanzania and Zimbabwe: A Comparative Study of Competitive Dynamics and Outcomes.," December 15, 2016, https://doi.org/10.23962/10539/21630; Keith Breckenridge, "The Failure of the 'Single Source of Truth about Kenyans': The NDRS, Collateral Mysteries and the Safaricom Monopoly," *African Studies* 78, no. 1 (January 2, 2019): 91–111, https://doi.org/10.1080/00020184.2018.1540515.

themselves trapped into ongoing licensing arrangements, as well as issues of information security, privacy, and data protection. Finally, the new banking technologies are simultaneously sources of new forms of social exclusion (as human rights advocates have documented) as millions of borrowers incapable of servicing the debts that are distributed on their phones are blacklisted or otherwise rendered non-participating.

From the viewpoint particularly of those (like us) interested in the dynamics and directions of the fintech field, what makes this biometric arrangement so important on the African continent – and more extreme than what is happening in the Americas, Asia, and Europe – is the absence of alternative sources of formal banking credit and formalised property. New forms of biometric identification and credit surveillance dominate and are transforming African economies because of the weakness of others forms of registration. Home-owners without title cannot secure mortgages, firms without documented collateral cannot access trade or bank credits, children without birth certificates cannot find places in schools or hospitals. This prior condition of registration weakness – what we term the African registration deficit – means that the current projects of mass digital identification present intriguing risks and opportunities.

A historical lens is also useful in informing policy formulation regarding fintech on the African continent. While a myriad of frames may be adapted, from a policy point of view, a national one is a good place to start. Limited by space considerations, we take as an example here South Africa, our home jurisdiction and one which for obvious reasons is of primary interest to the Competition Commission running the online market inquiry.

South Africa shares the same problems of formalisation and visibility with nations located on the rest of the continent, albeit with some nuances. SA firms such as Net1 and others have successfully deployed innovative networked database tracking systems to track, service and extract profits from millions of people. The most powerful of the database tracking instruments of this kind are maintained by the credit reference bureaus (which have grown since 2000 to follow the borrowing of 25 million account holders and support 5 million database updates every South African day). Like the credit infrastructure, the national population register – HANIS – has become (after a decade of bitter difficulties) a widely cited global example of how to combine systematic identification spanning a population. At the same time, numerous areas of registration and surveillance are weak. Nearly 40% of the population living on tribal land have no legal instruments for securing, collateralising or transferring to another the land they live on. And the building of over three million RDP houses has generated an informational mess, with an estimated 70% mismatch between occupants and formal titles, casting old policy problems in new forms and creating wholly new ones as well.[9] This informational disorder, and the growing sense that the state will never be able to repair it, has been an important element in the rapid movement by firms such as Capitec towards unsecured, algorithmic lending. The contrast with the generally meticulous, if lawyerly and expensive, titling of suburban properties is striking and an important, hidden, element in the country's notorious difficulties at

[9] Maxim Bolt and Tshenolo Masha, "Recognising the Family House: A Problem of Urban Custom in South Africa," *South African Journal on Human Rights* 35, no. 2 (April 3, 2019): 147–68, https://doi.org/10.1080/02587203.2019.1632737.

addressing inequality. From a continental perspective, none of the South African features we have noted are distinctive.

Conclusion

The project of informing policy interventions into the new forms of digital surveillance on the African continent in the fintech field is and should be recognized as a global imperative. The rush by the large firms – from biometric systems to bank operations – to the continent is motivated in part by the realisation that the new forms of unsecured, mobile, biometric finance that are prevalent and dominant here may be crucially significant in the future of finance everywhere. The joint problems of demographic growth and migration – and the overlapping use of widely-shared biometric registrations in humanitarian relief, counter-terrorism policing and the regulation of migration – combine to make African surveillance a matter of global geopolitical significance. As the regulation of data-sharing and the protections of privacy grow more influential in Europe and the Americas, African countries – as discussed in venues such as the World Economic Forum – are becoming attractive additionally as laboratories for de facto unregulated digitial surveillance experiments. A practice of regulatory arbitrage between the continentally defined regions may well be emerging globally.

Several questions are of particular interest:

How does the specific economic history and particular placement on the shift from paper-based registration to biometric identification systems of each African polity shape that nation's current fintech regulatory regime, influence the digitalization of formal banking credit, and set the possibilities of responding to the digital economy?

Are competition officials, corporate lawyers and other relevant actors identifying a set of legal and policy issues in the fintech field that go beyond the existing frames of financial regulation, of competition law, and of privacy concerns? If so, what are they? If not, why not?

What laws do countries in Africa need to write for the digital economy as they relate to tech companies and platforms and what issues are being (and likely will be) contested between tech companies beyond data protection and privacy?

To take one particular category of actor peripherally involved in the current online market inquiry, to what extent are African data protection agencies aware of, interested in, and engaging with issues such as those we have sketched out above in the field of fintech? Are these African public organisations aware of, interested in, and engaging with associated issues such as the scale and power of big tech and those operating the "free" platforms, the dynamics of e-commerce, and misinformation from social media?