

**FinTech – Decoding the Effect of Regulatory Sandboxes in South Africa: A
Comparative Study of the Financial Services Sector Laws in Context**



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Plagiarism Declaration

Research dissertation presented for the approval of the Senate in fulfilment of part of the requirements for the Master of Laws in approved courses and a minor dissertation. The other part of the requirement for this qualification was the completion of a programme of courses.

I hereby declare that I have read and understood the regulations governing the submission of Master of Laws dissertations, including those relating to length and plagiarism, as contained in the rules of this University, and that this dissertation conforms to those regulations.

Signature: TW Dambuza

Date: 24 January 2023

Dedication

I dedicate this research to my family. My late father Abram. My awesome mother Regina. My siblings, Lorraine, Solomon, Ivy, Barry, and Emma. My late son, Odin. My amazing nieces and nephews.

Ke a leboga!

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Thank you! Ke a leboga! Ngiyabonga!

List of Abbreviations and Acronyms

AFIN	ASEAN Financial Innovation Network
AI	Artificial intelligence
AML	Anti-money laundering
APIX	API Exchange
B2B	Business to business
B2C	Business to consumer
CBT	Cross-border testing
CFT	Counter Financing of Terrorism
CGAP	Consultative Group to Assist the Poor
CMA	Kenya's Capital Markets Authority
COFI	Conduct of Financial Institutions
DET	Digital Economy Taskforce
DP	Digital platforms
eKYC	Electronic know-your-customer
FAIS	Financial Advisory and Intermediary Services Act
FATF	Financial Action Task Force
FCA	Financial Conduct Authority
FICA	Financial Intelligence Centre Act
FINTECH	Financial technology
FSA	Financial Services Act
FSCA	Financial Sector Conduct Authority
FSMA	Financial Services and Markets Act
FSRA	Financial Sector Regulatory Act
GDP	Gross domestic product
GFC	Global financial crisis
GFIN	Global Financial Innovation Network
GFR	Global Findex Report
ICO	Initial Coin Offerings
IDB	Inter-American Development Bank
IFWG	Intergovernmental FinTech Working Group
INSURTECH	Insurance technology
IPA	Innovations for Poverty Action

KYC	Know-your-customer
MAS	Monetary Authority of Singapore
ML	Machine learning
NCA	National Credit Act
NCR	National Credit Regulator
NILS	No Interest Loan Scheme
PA	Prudential Authority
PRA	Prudential Regulation Authority
R&D	Research and development
REGTECH	Regulatory technology
SARB	South African Reserve Bank
SMME	Small, medium, and micro enterprise
SUPTECH	Supervisory technology
UNSGSA	United Nations Secretary-General's Special Advocate for Inclusive Finance for Development

FINTECH, FINANCIAL REGULATORY FRAMEWORK AND FINANCIAL INCLUSION

CHAPTER ONE

1. INTRODUCTION AND THEME OF THE DISSERTATION

1.1. General Introduction

For many years now, the end goal for global expansion in the financial society has been implementing greater financial inclusion, educating vulnerable consumers and ensuring a safe financial market for all participants.¹ Demir suggests that a significant keystone in finance theory is “[that] financial institutions and markets play a crucial role in the efficient allocation of capital resources, in the absence of asymmetric information, transaction costs and other market imperfections.²” To simplify, for there to be equality in the financial sphere, there needs to be a balance on how the market allocates or controls the flow of funds, thus creating an option or opportunity to eradicate possible market imperfections which usually tip the scales toward inequality. These imperfections are vast, including geographical disadvantages, lack of proper documentation and a general lack of funds.³

Demir further argues that the concept of the flow of funds uses financial theory to make sense of how households and businesses divide up their capital, which, in turn, drives economic growth.⁴ In theory, financial inequality both in emerging and developed economies can be explained by looking at how people and businesses use their money. In emerging economies,

¹ According to the World Bank, Financial Inclusion means that individuals and businesses get to have access to useful and affordable financial products and services that meet their needs, transactions, payments, savings, credit, and insurance being delivered responsibly and sustainably, available at <https://www.worldbank.org/en/publication/globalfindex/interactive-executive-summary-visualization#>, accessed on 22 May 2022.

² Ayse Demir, Vanesa Pesqué-Cela, Yener Altunbas & Victor Murinde ‘FinTech, financial inclusion and income inequality: a quantile regression approach’ (2022) 28(1) *The European Journal of Finance* at 87.

³ Chitimira Howard & Magau Phemelo T ‘A legal analysis of the use of innovative technology in the promotion of financial inclusion for low-income earners in South Africa’ (2021) 24 *PER / PELJ* at 15.

⁴ Demir op cit note 2 at 87.

and more specifically in low-income households, the flow of capital is in a loop. Whatever money is received, is immediately used for daily living costs, which include (in most instances) the purchase of food, transport costs and, in applicable cases, electricity. There are many ways to measure the level of inequality in impoverished households. One of the ways is by looking at the income and expenditure reports, considering that, globally, finance and development are intertwined.⁵

Impoverished households need effective and affordable tools to access finances,⁶ for instance, mobile money. Creating a link to connect those in critical need of access to financial services with those with the means of providing such access to financial services is imperative. It might influence to what extent the distribution of capital is measured in the global context, providing a solution to the people who need it the most. This might expand the reach of financial services and improve financial inclusion.⁷ The concept of the flow of funds expands beyond the fundamental aspect of establishing this connection from just the provision of sending and receiving payments to other factors, such as the management of risk.⁸ Research conducted by organisations such as the Innovations for Poverty Action (IPA)⁹ suggests that “access to financial services has increased because of the expansion of digital finance and efforts of service providers and governments to reach the unbanked.”¹⁰

The purpose of establishing this connection is that, over time, it will make it possible and easy for those in disadvantaged geographical areas to be reached. For instance, marginalised consumers who are deemed as high-risk or thin-file consumers can easily access alternative financial assistance. The problem in South Africa is financial exclusion in an unequal financial sector landscape. Therefore, there is a need for a solution for consumers, especially low-income households, and small-business owners to achieve some equality in the

⁵ Demir op cit note 2 at 87 – ‘at the global level, it is not surprising that there are concerns between the interaction of finance and development, especially where financial exclusion and income inequality are persistent.’

⁶ Innovations for Poverty Action ‘Financial Inclusion Program Areas’ 2018, available at <https://www.poverty-action.org/publications>, accessed on 15 May 2022.

⁷ Demir op cit note 2 – ‘increasingly, FinTech is seen as a key enabler of financial inclusion, and mobile financial services as the type of FinTech with the greatest potential to bring the remaining under-banked into the formal financial system and, ultimately, to achieve more equitable growth.’

⁸ Ibid.

⁹ IPA op cit note 6 – ‘the IPA is a research and policy non-profit that creates and shares evidence while equipping decision-makers to use evidence to reduce poverty. With a long-term presence in 22 countries in Africa, Asia, and Latin America, IPA leads to the field of development in innovative research quality, innovation, and impact.’

¹⁰ World Bank op cit note 1.

financial sphere. One way of achieving this would be to level the playing field by improving access to financial products and maintaining a high level of financial inclusion. The discussion then shifts to establishing how to improve financial inclusion in an unequal financial sphere, with the use of financial technology¹¹ (FinTech). The question then becomes: How is the use of FinTech able to assist in successfully achieving this goal?¹²

According to the World Bank Global Findex Report¹³ (GFR), there are currently 1.4 billion¹⁴ people worldwide¹⁵ who have no financial account at a bank. However, two-thirds of these people own a mobile phone that could help them access financial services, mobile money providers or other formal institutions.¹⁶ The natural follow-up question would be: What is the issue and why do these people remain unbanked? In the South African context,¹⁷ Chitimira argues that one of the reasons could be due to the uneven balance and concentration of financial institutions in urban regions rather than in informal or rural settlements;¹⁸ thus, leading to an indirect perpetuation of financial exclusion in low-income areas.¹⁹ Even though some great strides have been noted by most financial service providers, such as banks, by upgrading their services to include web-based transactions and application-based transactions, the infrastructure remains unsuitable to accommodate consumers from informal or rural areas.²⁰ The issue of financial exclusion goes further than the inability to access financial services due to the physical barriers caused by the consumers' geographical settings, amongst others, including the lack of proper internet connection. The level of consumer financial literacy also

¹¹ Julia Kagan 'M-Pesa' *Investopedia* 31 October 2020, available at <https://www.investopedia.com/terms/m/mpesa.asp>, accessed on 30 June 2022.

¹² Ibid. '[O]ne of the drives for FinTech innovations, like M-Pesa, is financial inclusion, which is mostly geared toward an underbanked or unbanked group of people. Financial inclusion is an initiative that seeks to include residents who have no access to banks or who can't afford the required minimum deposits in the digital banking era. For this initiative to succeed, different sectors must collaborate in sharing data with each other and build a meaningful digital platform.'

¹³ The World Bank 'The Global Findex Database 2021', available at <https://www.worldbank.org/en/publication/globalfindex/interactive-executive-summary-visualization#>, accessed on 30 June 2022.

¹⁴ Ibid. '[T]he World Bank Group released the latest Global Findex announced on 29 June 2022, the 2021 World Bank Global Findex report (Findex21) sounded a call to join the global policymakers for a discussion on how financial inclusion can help foster a resilient and inclusive development paradigm.'

¹⁵ Global Findex Database op cit note 13.

¹⁶ Demir op cit note 2.

¹⁷ Chitimira op cit note 3 at 8.

¹⁸ Idem at 7.

¹⁹ Ibid.

²⁰ Chitimira op cit note 3 at 8.

speaks to the level of engagement the consumers will have when communicating with the financial service provider.²¹

For South Africa to realise a tangible goal, a sophisticated regulatory framework was implemented to address some of the pressing issues regarding financial inclusion.²² An example of this was building a robust framework concentrating on consumers' financial literacy and the close monitoring by the regulators, of fair market conduct by financial institutions. Chitimira outlines several regulatory structures, including legislation, to deal with specific issues in the financial sector,²³ and many of these regulatory bodies and authorities have clear mandates on how to promote and improve sustainable financial inclusion.²⁴ There have been many projects in the South African context to realise an integrated society, which includes all consumers as market players. Products like the mobile money market²⁵ in retail shopping chains are one example of introducing alternative ways of financial transactions for low-income consumers.²⁶ Scholars have made predictions on how the future might look for financial inclusion in emerging economies, like South Africa, given the advent of technological innovations and the digitalisation of banking and financial products.²⁷

The Consultative Group to Assist the Poor (CGAP)²⁸ has produced invaluable research outputs that assist, amongst others, many financial sector regulators to implement long-term

²¹ Yoke Wang Tok & Dyna Heng 'FinTech: Financial Inclusion or Exclusion?' (2022) WP80 *International Monetary Fund* at 5, available at <https://www.imf.org/en/Publications/WP/Issues/2022/05/06/FinTech-Financial-Inclusion-or-Exclusion-517619>, accessed on 15 September 2022.

²² Howard Chitimira & Menelisi Ncube 'The Role of Regulatory Bodies and Other Role-Players in the Promotion of Financial Inclusion in South Africa' (2020) 16(1) *Acta Universitatis Danubius Juridica* at 7.

²³ *Idem* at 8 – 'Various efforts have been made by the government and other relevant role-players to curb financial exclusion in South Africa. For instance, see legislation listed at 8.'

²⁴ *Idem* at 12 – 'the NCFEC seeks to eliminate financial exclusion through its financial educational programs that teaches financial customers to avoid reckless lending and over indebtedness (OECD, 2016, pp. 1-62; the Department of Trade and Industry, 2019, pp. 2-12; Atkinson & Messy, 2013, pp. 7-49).'

²⁵ MG Van Niekerk & NH Phaladi 'Digital Financial Services: Prospects and Challenges' (2021) 24 *PER / PELJ* at 2.

²⁶ *Idem* at 7.

²⁷ See Purva, Khera; Stephanie, Ng; Sumiko, Ogawa & Ratna, Sahay 'Measuring Digital Financial Inclusion in Emerging Market and Developing Economies: A New Index' (2021) WP90 *International Monetary Fund* at 3 & Purva, Khera; Stephanie, Ng; Sumiko, Ogawa & Ratna, Sahay 'Is Digital Financial Inclusion Unlocking Growth?' (2021) WP167 *International Monetary Fund* at 4, available at <https://www.imf.org/en/Publications/WP/Issues/2021/03/19/Digital-Financial-Inclusion-in-Emerging-and-Developing-Economies-A-New-Index-50271>, accessed on 15 September 2022.

²⁸ The CGAP develops innovative solutions through practical research and active engagement with financial service providers, policymakers, and funders to enable approaches at scale. They are housed at the World Bank.

solutions that could eradicate financial exclusion.²⁹ The most challenged people in the global financial context are those who do not have resources.³⁰ Financial inclusion bears potential development benefits for those who lack resources.³¹ The benefits stem from the use of digital financial services, including mobile money services, payment cards, and other FinTech innovations.³² The growth and penetration of FinTech innovations are so vast that we cannot group them into one category. According to Andresen, it is impossible to “classify them as one species.”³³

FinTech has evolved and morphed into many species,’ including e-commerce banks and insurance technology, “which refers to the use of technology innovations designed to find cost savings and efficiency from the current insurance industry model” (InsurTech).³⁴ Plus, regulatory technology “which is defined as the use of information technology to enhance regulatory and compliance processes”³⁵ (RegTech). Supervisory technology “is defined as the use of technologically enabled innovation by supervisory authorities”³⁶ (SupTech), which have all turned to big data, artificial intelligence (including machine learning and deep learning) and blockchain (DLT), amongst others, as a basis of operations. Andresen further argues that these technologies have far advanced and are better explained as an ‘ecosystem.’³⁷ Therefore, these innovations have created a life outside of the normal market rules. It then makes sense to monitor these developing trends for purposes of regulation and supervision in operational jurisdictions.³⁸

²⁹ Ibid.

³⁰ IPA op cit note 6 – ‘Lack of money, distance to the nearest financial institution, and insufficient documentation were consistently cited by the 1.4 billion unbanked adults as some of the primary reasons they did not have an account. There are clear opportunities to address some of these barriers. For example, global efforts to increase inclusive access to trusted identification systems and mobile phones could be leveraged to increase account ownership for hard-to-reach populations.’

³¹ Demirgüç, Kunt, Asli, Leora Klapper; Dorothe Singer; Saniya Ansar & Jake Hess ‘The Global Findex Database 2017, Measuring Financial Inclusion and the FinTech Revolution’ 2018 *World Bank*, Washington, DC, available at [doi:10.1596/978-1-4648-1259-0](https://doi.org/10.1596/978-1-4648-1259-0), accessed on 6 April 2022.

³² Ibid.

³³ Svein Andresen (Secretary-General, Financial Stability Board) ‘Regulatory and Supervisory Issues from FinTech’ *Cambridge Centre for Alternative Finance Conference on Navigating the Contours of Alternative Finance*, available at <http://www.fsb.org/wp-content/uploads/Cambridge-Centre-for-Alternative-Finance-Regulatory-and-Supervisory-Issues-from-FinTech.pdf>., accessed on 12 May 2022.

³⁴ Investopedia available at <https://www.investopedia.com/terms/m/mpesa.asp>, accessed on 15 September 2022.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Andresen op cit note 33.

FinTech is a catalyst for development in a rapidly advancing ecosystem in the financial sector, and the regulators have often been far behind the technological advancement.³⁹ For example, COVID-19 has without a doubt catalysed the use of digital forms of payments and has increased the number of the use of alternative methods of financial transactions by a great margin.⁴⁰ The GFR confirms that a staggering 22 per cent growth was reported in developing economies, “the share of adults making or receiving digital payments grew from 35 per cent in 2014 to 57 per cent in 2021.”⁴¹ The global pandemic also increased the number of utility payments made in developing economies. The GFR confirms that “18 per cent of adult’s paid utility bills digitally.” “About one-third of these adults did so for the first time after the beginning of the pandemic. The share of adults making a digital merchant payment also increased after the outbreak of COVID-19.”⁴² The use of alternative payment methods rapidly increased within a short period and consumers who had never used a mobile banking application had no choice but to migrate to those services. Conversely, studies have shown that lower-income consumers with bank accounts and access to some form of mobile banking made available by the bank leave them unused as they simply find them useless.⁴³

For low-income consumers to be involved in the financial markets, many issues must be addressed. One of them is how to reach these consumers and breach the misunderstanding of how financial services initiatives work.⁴⁴ The need for financial literacy in South Africa is high and to make a dent in financial exclusion, the consumers, regulators, innovators, and financial service providers must have a harmonious relationship. Studies have shown that FinTech could be that middle ground, where technology meets the needs of both consumers and financial service providers.⁴⁵ However, the regulators and market authorities must ensure the safe usage of these inventive ways to promote financial inclusion. This dissertation, therefore, looks at, amongst others, some of the ways in which the regulation of these innovations can be tested and approved as market ready, and analyses the impact thereof on

³⁹ Demir op cit note 2.

⁴⁰ Global Findex Database op cit note 13.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Chitimira op cit note 3.

⁴⁴ Antonique, Koning; Juan Carlos, Izaguirre & Aveesha Singh ‘Customer Outcomes-Based Approach to Consumer Protection: A Guide to Measuring Outcomes’ 2022 CGAP: Research & Analysis Reading Deck, available at <https://www.cgap.org/research/reading-deck/customer-outcomes-based-approach-consumer-protection-guide-measuring-outcomes>, accessed in June 2022.

⁴⁵ Ibid.

the market soundness, consumer safety and promotion of competition for market entrants.⁴⁶ The FinTech ecosystem has differing effects on the advancement of financial inclusion, including the regulatory developments in South Africa that promote the use of innovation. Since innovation does not always follow the deeply entrenched contours of the laws and might threaten the well-being of the very society it aims to develop,⁴⁷ the answer to moulding these innovations lies in a safe space created to analyse and test them against the current regulatory requirements.⁴⁸

There are various ways for regulators to harness the innovations and test their feasibility before they are released for public use. The World Bank has identified four regulatory approaches that regulators can utilise when dealing with FinTech.⁴⁹ The first is the ‘Wait-and-See’ method, which is basically a ‘do nothing’ method because regulators just watch the new ideas from afar.⁵⁰ The second approach is the ‘Test-and-Learn’. This method involves actual innovations being released into the market under a special framework only meant for that business, with a ‘no obligation letter’ issued by the regulator.⁵¹ The third approach is familiar: the ‘Innovation Facilitators’. As the name suggests, the regulator facilitates the innovations.⁵² There are various facilitators, like regulatory sandboxes, innovation hubs/offices, and accelerator programmes.⁵³ The fourth approach is the ‘regulatory laws and reforms.’ This

⁴⁶ Appaya, Mandepanda Sharmista; Gradstein, Helen Luskin; Haji Kanz, Mahjabeen ‘Global Experiences from Regulatory Sandboxes (English)’ FinTech Note, No. 8 World Bank Group, Washington, D.C., available at <http://documents.worldbank.org/curated/en/912001605241080935/Global-Experiences-from-Regulatory-Sandboxes>, accessed on 8 May 2022.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Sharmista et al op cit note 43.

⁵⁰ Ibid. [T]he Wait-and-See approach observes and monitors the trend(s) of innovation from afar before intervening where and when necessary. However, as regulators gain capacity for innovation, and technology becomes more commonly adopted by licensed entities, policymakers may incrementally change regulations over time. A “wait-and-see” approach has commonly emerged when there is regulatory ambiguity on whether an activity falls under the remit of a particular institution.

⁵¹ Sharmista op cit note 43. “[F]or regulators to use the ‘Test-and-Learn’ approach, they must prepare to offer extensive supervision and oversight, as well as put in place the safeguard measures. This varies across jurisdictions. Sometimes, policymakers have followed a ‘light-touch’ without close supervision, and in others, policymakers have followed more extensive frameworks on a case-by-case basis that involved stringent supervisory attention and oversight.

⁵² Sharmista op cit note 43. An ‘Innovation Facilitator’ is essentially a point of contact or a structured framework environment to promote innovation and experimentation.

⁵³ Koning op cit note 41.

method applies in jurisdictions whereby regulators amend, prohibit, or extend the parameters of the existing regulatory framework.⁵⁴

1.2. Research Question

This dissertation aims to answer the question of the feasibility of the use of regulatory sandboxes in South Africa to help relevant stakeholders⁵⁵ improve financial inclusion through FinTech in an unequal financial landscape. The answer to this question will come from a comparative analysis of the use of regulatory sandboxes to advance financial inclusion in the United Kingdom (UK). A sandbox is a safe space for innovators to test their inventions without incurring expenses and without fear of violating regulations.⁵⁶ Further, a regulatory sandbox also provides the regulator with a safe space to assess and test the operational capabilities of the invention and the extent of consumer protection, against already established regulations and rules.⁵⁷

Regulators also admitted that they have little knowledge of regulating these new market entrants.⁵⁸ There is a record of 73 regulatory sandboxes globally,⁵⁹ including the operational and announced, 50 of which have taken the UK's Financial Conduct Authorities (FCA) approach. Operational sandboxes are those that have been in operation for a few years and have innovations that have successfully exited the hub and are operating in the market.⁶⁰ Even though the announced projects have not started yet, applications are being taken to get innovations in the hub so that the testing period can begin.⁶¹ This is also a sign that many financial regulatory systems have accepted the change that these innovations have introduced and have, as a result, prepared or are preparing to include these FinTech solutions in the market.

⁵⁴ Ibid. Some jurisdictions have applied new laws or regulations to directly support the development of the legal and regulatory framework to respond to the contextualized FinTech market and adjust accordingly, particularly in areas where the regulatory framework is either inflexible, unclear, or not present.

⁵⁵ These include amongst others, the Financial Sector Conduct Authority (FSCA), Prudential Authority (PA), consumers, innovators, investors, financial services providers, SMEs, and government initiatives to provide equal financial standing to the South African people.

⁵⁶ Lauren Fahy 'Regulator Reputation and Stakeholder Participation: A Case Study of the UK's Regulatory Sandbox for FinTech' (2022) 13(1) *European Journal of Risk Regulation* at 138.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ The World Bank Brief 'Key Data from Regulatory Sandboxes from across the Globe' November 2021, available at <https://www.worldbank.org/en/topic/FinTech/brief/key-data-from-regulatory-sandboxes-across-the-globe>, accessed on 8 May 2022.

⁶⁰ Ibid.

⁶¹ Ibid. The World Bank collected the research on the brief from 57 jurisdictions, including South Africa. It also shows different graphs showing a timeline of the sandbox creation from 2016 from both advanced economies (AE), for example, the UK and emerging markets and developing economies (EMDEs) like South Africa.

The initiatives employed by different regulators impact the financial industry and consumers based on FinTech's disruptive technologies. We can interpret the term disruptive technology as a disruption in the way innovations will influence the regulatory framework. Also, the term can be directly related to the disruption of the financial stability that all the financial regulators are working so hard to protect. Either definition leads us in pursuit of how best to navigate the impact these innovations have on consumer safety, investors, financial stability, and financial inclusion.⁶² Therefore, FinTech must be regulated. However, the regulation should not impede or dissuade competition and innovation.⁶³ It is difficult to measure the impact of innovations based just on one method or approach of testing. However, some understanding can be ensued based on the results gathered from studying the regulatory sandboxes in different jurisdictions.⁶⁴

Due to the expansion of access, not only to the financial tools and services but also to the regulators, market entrants now have a direct line to the regulators.⁶⁵ This creates an opportunity for all parties to gain an understanding of each other's industry so that they can implement change. Thus, the relationship between the parties involved in the hubs is no longer defined as regulator and regulated.⁶⁶ However, the goal is to effectively assist the poor in managing and growing their money, by working together in harmony and not against each other.⁶⁷ As new technologies change the face of finance, financial transactions are dominated by digital new players.⁶⁸ The rise of FinTech can be seen everywhere, including retail chains, electronic money issuers, and social media platforms, to name a few.⁶⁹ Products offered by FinTechs like *TymeBank*, *BankZero*, *MoneyMarket*, *Pineapple Insurance*, *Ikhokha*, and so many more have entered the South African financial arena. It is noteworthy that these FinTechs are not products of the regulatory sandbox testing, and that some of these firms act as intermediaries between the financial service provider and the consumer. With that in mind, the

⁶² Sharmista op cit note 43.

⁶³ Fahy op cit note 53.

⁶⁴ Fahy op cit note 53.

⁶⁵ World Bank Brief op cit note 56.

⁶⁶ Jayoung James, Goo & Joo-Yeun, Heo 'The Impact of the Regulatory Sandbox on the FinTech Industry, with a Discussion on the Relation between Regulatory Sandboxes and Open Innovation' (2020) 43(6) *Journal of Open Innovation: Technology, Market, and Complexity* at 2.

⁶⁷ Van Niekerk & Phaladi op cit note 25.

⁶⁸ Goo & Heo op cit note 63 at 7.

⁶⁹ Mishra R & S Bvuma 'Conceptualising the Relationship between Mobile Money Banking and Financial Inclusion to Support Sustained Economic Growth' (2022) 13(1) *African Journal of Public Affairs* at 66.

dissertation will also address the extent to which national influence and cross-border data harvested⁷⁰ from both consumers and the new market players globally help promote financial inclusion.

1.3. Contextual Overview of the United Kingdom and South African Financial Sector Laws

Several bodies govern the UK financial sector, each with their responsibilities and objectives. After the 2008 financial crisis, many jurisdictions sought to tighten their financial laws. In response to the Global Financial Crisis (GFC), the UK consequently implemented a ‘Twin Peaks’ model to regulate the UK financial services sector, dividing both prudential regulation on the one hand and market conduct and consumer protection on the other.⁷¹ The government announced that it had implemented the regulatory system reform to avoid a repeat of the financial crisis, bringing forward proposals to give the Bank of England control of macro-prudential regulation and oversight of micro-prudential regulation.⁷² Thus, the Financial Services and Markets Act (FSMA)⁷³ was amended in 2012 by the Financial Services Act (FSA).⁷⁴ The new Act provides a framework for financial regulation in the UK. The Act further makes the Bank of England responsible for ensuring and protecting the stability of the financial systems in the UK and provides for the independent conduct of the business regulator.⁷⁵

Section 6, Part 2, of the FSA deals with the FSMA amendment and introduces three chapters addressing how each of the independent regulators will operate under Part 1A, titled ‘The New Regulators’. The FCA and the Prudential Regulation Authority (the PRA) were officially formed on 1 April 2013, with the primary aim of promoting good market conduct and ensuring consumer protection and innovation.⁷⁶ The FCA, as one core of the regulatory services authorities, is an independent entity, and the PRA is housed as the other core financial

⁷⁰ The World Bank GFR op cit note 13.

⁷¹ Ben, Shenglin; Kuna, Khatri & Kieran, Garvey ‘Guide to Promoting Financial and Regulatory Innovations’ 2018 *Cambridge Center for alternative finance*.

⁷² UK Public General Acts ‘Explanatory Notes’ available at <https://www.legislation.gov.uk/ukpga/2012/21/notes/division/2>, accessed on 22 May 2022.

⁷³ UK Act 2000.

⁷⁴ UK Act 2012.

⁷⁵ Sharmista op cit note 43.

⁷⁶ Koning ‘CGAP’ op cit note 41.

services regulatory authority as a division within the Bank of England.⁷⁷ Chapter 1 addresses the first head of the regulatory framework, the FCA.⁷⁸ Section 1B deals with the general duties of the FCA and outlines the regulators' objectives and purposes. Chapter 2 deals with the second head of the regulatory framework, the PRA.⁷⁹ Sections 2B and 2C provide the PRA's general objectives and insurance objectives.⁸⁰ Finally, Chapter 3 deals with further provisions relating to the FCA and PRA, including the definition of the regulator,⁸¹ and provides further regulatory principles to be applied by both regulators. Both regulators have their independent mandates and have dedicated platforms to provide further information regarding the supervisory and regulatory functions in the financial sector. The FCA is also supposed to make markets more competitive. To do this, it has identified innovation as an important part of the process and a tool.⁸² While the PRA's objectives include, amongst others, ensuring the safety, soundness and security of regulated firms and competition, the PRA is also in charge of making sure that the insurance companies it oversees are safe and sound and that policyholders are protected.⁸³

In South Africa, the Financial Sector Regulatory Act⁸⁴ (FSRA) governs the financial sector, which repealed, amongst others, the Financial Services Board Act.⁸⁵ The FSRA was published and came into effect on 22 August 2017. The 2017 Act introduces the 'Twin Peaks' model of financial sector regulation in South Africa. This model, like in the UK, places an equal yet independent focus on prudential and market conduct supervision. This means that there are dedicated authorities responsible for each of these objectives.⁸⁶ Therefore, advancing the purpose of the Act is to "establish a stable financial system that prioritises the interests of financial customers and supports secure and sustainable economic growth."⁸⁷ To enhance financial stability in the Republic, the Act conferred powers of administration on the South

⁷⁷ *Idem*.

⁷⁸ Section 1A (1) states that it renamed the body corporate previously known as the Financial Services Authority the Financial Conduct Authority.

⁷⁹ Section 2A (1) states that a body corporate originally incorporated as the Prudential Regulation Authority Limited is renamed as the Prudential Regulation Authority.

⁸⁰ The World Bank GFR op cit note 13.

⁸¹ Section 3A (2) states that the FCA and the PRA are the 'regulators', and references to a regulator are to be read accordingly.

⁸² *Idem*.

⁸³ Koning 'CGAP' op cit note 41.

⁸⁴ Act 9, 2017.

⁸⁵ Act 97 of 1990 [repealed].

⁸⁶ Momentum 'legal updates' no. 23 of 2017, available at https://eb.momentum.co.za/webDocumentLibrary/LegalUpdates/2017/Legal_Update_23-2017_Financial_Sector_Regulation_Act_September_2017.pdf accessed on 15 May 2022.

⁸⁷ Sharmista op cit note 43.

African Reserve Bank (SARB). Therefore, the Prudential Authority (PA), which is a core regulatory body, is housed in the SARB. The Financial Sector Conduct Authority (FSCA) replaced the Financial Services Board.⁸⁸ The SARB also has powers to regulate and supervise financial product providers and financial services providers through the Financial Stability Oversight Committee. The purpose of the Act is to improve market conduct and to protect financial customers. The Act also aims to provide for coordination, cooperation, collaboration and consultation among the regulators and other organs of state concerning financial stability and the functions of these entities.⁸⁹

Chapter 3 of the Act deals with the operation of the PA's establishment, objectives and functions, governance, staff, resources, and financial management. Amongst others, these include cooperating with and assisting other regulators such as the Council for Medical Schemes, Competition Commission, and the National Credit Regulator on matters of common concern and as required in the Act. The PA's main objectives are promoting and enhancing the safety and soundness of financial institutions that provide financial products and securities services; protecting financial customers against the risk that they cannot meet their obligations; and helping maintain financial stability.⁹⁰ Chapter 4 deals with the FSCA's establishment, objectives and functions, governance, staff, and resources.

The FSCA regulates and supervises the conduct of financial institutions. There is a long list of Acts administered by the FSCA, like the Insurance Act,⁹¹ the Financial Advisory and Intermediary Services Act (the FAIS Act),⁹² and the Financial Intelligence Centre Act (FICA),⁹³ to name a few. The main objectives of the FSCA are to promote the fair treatment of financial customers by financial institutions; to provide financial customers and potential financial customers with financial education programmes; and to promote financial literacy.⁹⁴ Chapter 5 deals with cooperation and collaboration.⁹⁵ Lastly, the FSCA and the PA may make joint standards on matters of common interest, such as the licensing of organisations, the provision of guidance notes, and the interpretation of rulings.

⁸⁸ The FSCA Regulatory Framework website also provides greater detail on how the Twin Peaks model operates, available at <https://www.fsca.co.za/Regulatory%20Frameworks/Pages/default.aspx>, accessed on 15 May 2022.

⁸⁹ Shenglin op cit note 68.

⁹⁰ Idem.

⁹¹ Act 18 of 2017.

⁹² Act 37 of 2002.

⁹³ Act 38 of 2001.

⁹⁴ Momentum op cit note 83.

⁹⁵ Section 76.

1.4. *Justification for Comparing the South African and the United Kingdom's Financial Sector Laws*

A comparative analysis of the financial sector laws in the UK and South Africa makes sense as the two legal systems complement one another. South Africa has a mixed legal system that is influenced by 'various roots' spanning over centuries. A mixed legal system or mixed jurisdiction, according to Zimmermann and Visser is one where the legal systems are at an intersection of civil law and common law.⁹⁶ Amongst the many influences the South African legal system has followed, a big portion comes from the Roman-Dutch Law and the English Common Law transplants.⁹⁷ The intersection of civil law and common law's legal existence has a fascinating impact on the outcomes for different branches of the law due to the applicable laws and how these laws interact with one another. It has been argued by many that South African law is "fundamentally and characteristically British: since the Union of South Africa was created in 1910, it was, in essence, a British state created by Britain for British imperial purposes."⁹⁸ The Common Law has been deeply earthed into English law doctrines and some laws have had a direct impact on the codification and implementation of certain rules, meaning that this is a situation of the imperial law without the imperialists. Although the colonialists have left, the laws that they came with are so deeply entrenched that it is not easy to remove them.⁹⁹

As outlined above, both the UK and South Africa's financial sector laws are similar, as they both utilise the Twin Peaks model to regulate the financial sector. Thus, understanding the effect of the regulatory sandboxes as governed by the FCA and the PRA will prove beneficial to South Africa's method. Since 2016, the FCA has overseen and been running regulatory sandboxes as part of Project Innovate, whereas the South African approach is different since the FSCA did not necessarily launch the regulatory sandbox. Instead, it was launched under the Innovation Hub as a joint effort by a group of regulators who came together and formed a larger oversight group housing six regulators, including the FSCA. This group is

⁹⁶ Richard Zimmermann & Daniel Visser *Southern Cross Civil Law and Common Law in South Africa* (1996) 2.

⁹⁷ *Idem* at 3.

⁹⁸ *Idem* at 4.

⁹⁹ *Idem* at 7.

called the Intergovernmental FinTech Working Group (IFWG)¹⁰⁰ and has just recently launched the Innovative Hub in 2020, which houses its first regulatory sandbox and two other inter-agency coordinators.

The IFWG, unlike the FCA, houses six other regulators as members and in a joint effort established an oversight/supervisory role. The IFWG was formed in 2016, but it only launched the innovation hub in 2020. The IFWG tries to understand the growing role of FinTech and innovation in the South African financial sector and explores how regulators can proactively assess emerging risks and opportunities in the market. It is, therefore, reasonable to base a comparative study on a jurisdiction that has so much legal influence on South Africa, even though the formation of the sandbox is slightly different. It is, after all, the purpose of this research to understand how sandboxes operate in each context. It is also imperative and practical to compare the impact of introducing regulatory sandboxes in the UK to promote innovation and, in the long term, create a link for financial inclusion. South Africa is on a fresh path to utilising regulatory sandboxes and this comparative study will provide a viewpoint on how these sandboxes can improve the FSCA's objectives for the financial sector as they manage the challenges faced in the regulatory sandboxes.

1.5. Objectives and Scope of the Dissertation

The main objective of the dissertation is to consider whether it is feasible to use regulatory sandboxes in South Africa to help relevant regulators and stakeholders improve financial inclusion through FinTech in the current unequal financial landscape. In doing so, other subsidiary objectives arise. The dissertation aims to understand the impact of the regulatory sandbox, as opposed to other innovative methods, to test the market entrants against the existing regulatory framework.¹⁰¹ This includes discussing the advantages and disadvantages of having the sandbox as opposed to, for instance, the test and learning method.¹⁰² Furthermore, it is important to understand the effect of the sandbox programme on the participants as they enter the financial market for the first time upon their successful exit from the sandbox cohort. Analysing the data to test if the regulators in South Africa and other

¹⁰⁰ IFWG 'Media Statement on the Launch of the Intergovernmental FinTech Working Group (IFWG) Innovation Hub' 7 April 2020, available at <http://www.ifwg.co.za/>, accessed on 3 June 2020.

¹⁰¹ Shenglin op cit note 68.

¹⁰² Goo & Heo op cit note 63 at 7.

jurisdictions, specifically the UK, can be used to amend the existing rules to accommodate the new financial products in the market or to make new rules. The dissertation will also look at the implementation procedure to effect changes in the regulatory sphere. It will also look at how the changes will affect consumers and market stability, including promoting financial inclusion. Lastly, the dissertation aims to show the effect on competition between market entrants and incumbents as far as acceptance of innovation and to assess whether there has been any unfair or unlevel playing created by the regulators by only including certain kinds of innovations and not testing the others.¹⁰³

Attention is also given to what South Africa can learn from the UK's position on regulatory sandboxes, given the similarities in their legal systems. The study inevitably also briefly contextualises the distinctive similarities and subtle differences in how the Twin Peaks were adopted in the respective regulatory frameworks in both jurisdictions to further accommodate the distinct financial markets. Furthermore, the study will discuss the practicality of using regulatory sandboxes to understand FinTech innovations, to offer regulators a better understanding not only of the different innovations but also to test the feasibility and potential for expanding financial services to larger numbers of people, especially the financially excluded. The study will further help prepare the markets for the new financial products as the sandbox assists in policymaking in an environment that was largely built for market incumbents such as traditional banks.

1.6. Methodology

Methodology refers to the strategy employed in conducting research.¹⁰⁴ There are different types of research methodologies. Based on the research objectives, the methodology used in this minor dissertation will be based on a combination of a variety of doctrinal research, mostly desktop-based and comparative legal research. The doctrinal legal research methodology, also called the "black letter" methodology, focuses on the letter of the law rather than the law in action.¹⁰⁵ This method involves considering a variation of journal articles

¹⁰³ IFWG op cit note 97.

¹⁰⁴ Legal Dissertation: Research and Writing Guide, available at <https://law.indiana.libguides.com/dissertationguide#:~:text=Doctrinal%20legal%20research%20methodology%2C%20also,%2C%20statutes%2C%20or%20regulations>), 10 June 2022.

¹⁰⁵ Ibid.

comprising contributors in the FinTech field, textbooks, as well as online resources, including online books, web-based articles, and reports. The author will give a detailed description of the legal rules that can be found in primary sources.¹⁰⁶ Although most of the information gathered is from internet-based web searches, some recently published academic journals will be utilised to support some of the author's claims. Furthermore, there will be legislation used from both the UK legal framework and the South African legal framework. Theophilopoulos's review of Mark van Hoecke's book shares insightful knowledge on the different kinds of methodological comparative law, that can be utilised in one's research.¹⁰⁷

The comparative legal research methodology involves critical analysis of different bodies of law to examine how the outcome of a legal issue could be different under each set of laws. The comparison is between different jurisdictions: In this case, the UK, and South Africa. The comparison will include a legal issue and will also note historical issues. Van Hoecke says that most theorists see functionality as a basic tool for doing comparative law research.¹⁰⁸ Therefore, he suggests the focus should not be on the rules themselves, but on a comparison of what the rules signify in terms of the political, social, economic and ideological content from which they have emerged.¹⁰⁹ Since South Africa has recently launched its regulatory sandbox, there is limited literature on this aspect. The materials chosen also provide a strong influence on how to develop the financial sector legal framework in South Africa. Therefore, the context of the minor dissertation relies on the distinction of the countries' applicable laws as they are used in adjudication and practice.

¹⁰⁶ Ibid.

¹⁰⁷ C Theophilopoulos 'Book Reviews: Epistemology and Methodology of Comparative Law. Edited by Mark van Hoecke, Katholieke Universiteit Brussel. Oxford and Portland, Oregon: Hart Publishing' (2005) *SALJ* at 254.

¹⁰⁸ C Theophilopoulos op cit note 104 at 114. 'The comparatist cannot simply compare rules since these rules are nothing more than a string of words or the surface appearance of law. The comparatist is required to go below the surface to discover the cultural milieu that the rule expresses.'

¹⁰⁹ Ibid.

CHAPTER TWO

2. REGULATORY SANDBOXES IN THE UNITED KINGDOM

2.1. *Innovative Facilitators*

This chapter will focus on the World Bank's third approach to the financial sector's regulatory reform, the 'Innovative Facilitators', by having a closer look at the FCA's regulatory sandbox from inception until now. The chapter analyses the sandbox/innovation hub's impact on corporations, consumers, and the regulatory framework in general. The study discusses the changes the regulators may have made to accommodate market entrants and promote consumer protection. Finally, the chapter discusses why the UK chose the innovative facilitation approach and the benefits and disadvantages thereof.

The UK FSMA¹¹⁰ outlines the principles encompassing safe and secure access to financial products and aims to prevent another financial market collapse. Most emerging economies, like South Africa, struggle to close the gap between producing certain financial products and facilitating suitable consumer distribution to those who need the financial products the most. These consumers have been tagged as vulnerable since they have limited financial literacy or do not have any financial history.¹¹¹ So, access to financial products is severely restricted, leading to poor living conditions, little to no business growth, especially for small, medium and micro enterprises (SMMEs), limited resources to assist in community growth, and a proverbially endless list of disadvantages.¹¹² The author contends this barrier can be overcome by including inventive and innovative products that promise to help improve service delivery and access to finance for vulnerable groups across South Africa. Although the UK has a developed economy, the lessons learned from its inclusive regulatory approach can be helpful to South Africa by providing a directive on how to implement the systems to better facilitate the financial markets in the country. These financial products, however, are not limited to FinTech, but include RegTech, SupTech and InsurTech, to name a few, as defined

¹¹⁰ FSMA op cit note 70.

¹¹¹ IPA op cit note 6.

¹¹² Ibid.

in Chapter 1. These different technologies' effects on the financial market can be assessed and critiqued, as some have been implemented and tested in many jurisdictions.

The 2008 global financial crisis prompted the move to incorporate and collaborate with innovators worldwide. The UK's decision for the regulators to start collaborating with the innovators was novel and bold since regulators are notorious for being unyielding. However, this has helped both sides gain a wealth of knowledge by testing products in a safe, steady, and controlled environment. This change in the financial regulatory and supervisory legal framework was a challenge that all financial services regulators faced throughout the global financial market. The UK's leap to regulatory change was also to avoid a repeat of the financial crisis's domino effect on the marketplace.

The financial market collapses disarmed investors, consumers, and regulators alike. As a result, financial market stability and consumer protection were viewed as the most critical aspects of a healthy fiscal year. Australia pioneered technological innovations, but the UK amplified the concept to provide consumers with alternative financial products better. So, the author will focus on important changes to the UK's financial regulatory framework and how technology is being used in the regulatory field.¹¹³ After this move, many jurisdictions changed their financial sector laws and made their regulatory frameworks stricter.¹¹⁴ The sandbox concept is by no means novel, with its origins in computer science and other applications beyond financial services.¹¹⁵

¹¹³ Jo Ann Barefoot 'Regulation Innovation: The FCA's Christopher Woolard' 2017 Barefoot Innovation Group, available at <https://www.jsbarefoot.com/podcasts/2017/12/10/regulation-innovation-the-fcas-christopher-woolard>, accessed on 25 June 2022.

¹¹⁴ The version in the United States is called the Consumer Financial Protection Bureau's Project Catalyst, which influenced the FCA to introduce its innovative division. However, the UK's intrepid approach ignited the world's attention and has inspired many jurisdictions to follow this bold move.

¹¹⁵ The government of the Australian state of New South Wales has proposed, as part of its innovation strategy, a regulatory sandbox applying to all provincial rules and regulations, including those on data privacy, and other potential barriers to innovation. See *Bringing Big Ideas to Life: NSW Innovation Strategy*, NSW GOVERNMENT available at https://www.innovation.nsw.gov.au/sites/default/files/NSW_Government_Innovation_Strategy_Document.pdf, accessed on 25 June 2022.

2.2. *The Legal Framework*

The UK updated its financial laws in 2012, when the FSA amended the FSMA, and introduced a dual regulatory body, replacing the FSA. The set of regulators, commonly known as the Twin Peaks, ensures good market conduct and a healthy prudential record. These peaks oversee and regulate different aspects of the financial sector, which comprises, amongst others, banks, insurance companies, financial service providers and intermediaries. The FSA and the Bank of England allowed the FCA and PRA's formation in 2013. Although these regulatory bodies enjoy independence, they operate in tandem in facilitating financial regulations and supervisory roles. The FCA was faced with a new challenge as a successor to the FSA after the financial crisis. The legislature had to introduce a new model of absorbing the risk rather than having this risk fall on the consumers.¹¹⁶

The challenge for the FCA was to gain the public's trust as a regulator, given the regulator's previous reputation for dealing with consumers. It was then a strategic and calculated move by the FCA to incorporate FinTech into the regulatory sphere, although it was delving into uncharted territory. As challenging as this was, the support from senior FSA members was crucial at this stage, and their risk-averse approach served the open-minded and risk-accepting attitude of the new players in the game. It was a giant leap from being risk-averse to embracing a risk-accepting approach that came with new vibrant technological market entrants, which also included increased risks. However, the dual mindsets in the new agency's design helped prepare the members involved to plan accordingly and to adequately protect all the stakeholders. This meant that there could not be operational silos. Every move the team made was clear and made sense so that the agency could work well.¹¹⁷

The industry incumbents were not keen on changing their risk profiles from being risk-averse to incorporating a risk-accepting operational framework. This did not deter the newly formed agency, as it was determined to improve not only the financial markets and ensure financial stability, but also envisioned including all the players in the market in the planning

¹¹⁶ Andrew Bailey's 'Financial Conduct Authority Mission: Our Future Approach to Consumers' 2017 is available at <https://www.fca.org.uk/news/press-releases/fca-publishes-future-approach-consumers>, accessed on 10 June 2022.

¹¹⁷ Barefoot op cit note 110.

and decision-making.¹¹⁸ The new agency proposed a two-way communication system instead of the traditional top-down approach. Regulators act in the consumer's best interest by enforcing stringent rules and regulations on market players. It was then seen as a drastic shift in this functional space when the regulator opened its door to dialogue with all market stakeholders. A recent study conducted by the Alliance for Innovative Regulation¹¹⁹ shows that the description of the FCA by other regulators has included phrases such as "open, creative, curious, proactive, transformational, a paradigm shift, bold, insightful, collaborative, a catalyst, transparent, global influencer, risk-takers, a game-changer, brave, and a triumph."¹²⁰ This is because of the FCA's approach to nurturing innovation, which other regulators would not, primarily since regulators are notoriously known for being strict and risk-averse and shutting the door on regulatory mistrust by the market players. So, the above statement that a regulator is bold and willing to take risks is a disruptive statement.

The FCA has leapt to promote opportunity over stifling growth by overregulation. However, the drastic change does not diminish the FCA's aim, which is to protect consumers and promote competition in the financial market framework. The risk management approach observably creates risks for regulators since they lack the adeptness and data analytics skills to efficiently supervise progressively technological and digitised firms, thus the birth of regulatory sandboxes. These innovative hubs made it possible for a safe space to manage the potential risks involved with these new products before they were released for commercial consumption. In an increasingly technological world, the risk of "not innovating is often greater than the risk of unintended consequences associated with innovation."¹²¹

2.3. *Operational Objectives*

The FCA's operational objectives promote innovation and consumer protection. Although the dissertation aims to analyse, in part, the relationship between the regulator and stakeholders, the focus is limited only to the three core objectives as outlined by the FCA. The

¹¹⁸ Bailey op cit note 113.

¹¹⁹ Amy Friend 'The Financial Conduct Authority's Innovation Journey: Moving Forward in the Face of Uncertainty Alliance for Innovative Regulation' 2021 available at <https://www.fca.org.uk/publications>, accessed on 3 June 2022.

¹²⁰ Ibid.

¹²¹ Ibid.

first aim is to be able to secure consumer protection, which is included in the FSMA’s amendments under operational objectives outlined in Chapter 1, Sections 1 C, D, and E.¹²²

Section 1 C provides as follows:

Section 1 C: Consumer Protection

1. *The consumer objective is securing an appropriate degree of protection for consumers.*
2. *In considering what degree of protection for consumers may be appropriate, the FCA must have regard to —*
 - a) *the differing degrees of risk involved in different kinds of investments or other transactions.*
 - b) *the differing degrees of experience and expertise that different consumers may have ... c) to h.*

The FCA issued a mission statement discussing its approach to consumer safety in 2017. The statement is envisioned to ensure consumers that the regulator is working tirelessly to keep the financial marketplace safe and that firms also respect this objective. The chief executive of the FCA stated that “markets can only work well if consumers are treated fairly, that financial products and services should also be available, marketed, and sold in a way that allows consumers to make informed choices. Further, to better understand the experiences of different consumers, including those potentially vulnerable or struggling to access financial services.”¹²³ This is an essential aspect of the FCA in its journey to build rapport with innovators and, by extension, with consumers. The FCA views customer service and protection as one of the most critical objectives, just like any other regulator would, following the collapse of the financial markets. As a follow-up, the FCA closely monitors the enforceability of these objectives in all the 56 000 firms it regulates. However, what is essential is monitoring some of the technology firms entering the regulatory framework for the first time.

¹²² Chapter 6 ‘the new regulators’ Part 1 A – ‘FCA Mission: Approach to Competition’.

¹²³ Barefoot op cit note 110 at 11.

The FCA does not compromise the supervisory levels during testing, and this not only solidifies consumer trust in the regulatory system, but also helps enhance consumer experiences and strengthens the relationship between all stakeholders. The FCA expanded their reach by including a duty of care in its consumer safety campaign, which is not unusual for a regulator. Section 1C sets out how consumers must be treated and how firms should render services to consumers.¹²⁴ Additionally, the FCA expects firms to exercise a higher degree of care when dealing with vulnerable consumers and consumers that may fall under vulnerable groups in the future.¹²⁵ This will be discussed as one of the reasons that prompted the creation of the regulatory sandbox and following their mandate as set out in Section 1 C, Subsection 2 (b), which deals with the differing expertise consumers may have with whatever financial products they are utilising. Because of this, firms must make complex and well-balanced decisions about what consumers can reasonably expect in any given situation,¹²⁶ an exercise that falls within the purview of the sandbox's mandate.

Section 1 D provides as follows:

Section 1 D: Integrity

1. *The integrity objective is to protect and enhance the integrity of the UK financial system.*
2. *The "integrity" of the UK financial system includes—*
 - a) *its soundness, stability, and resilience,*
 - b) *it is not being used for a purpose connected with financial crime,*
 - c) *... d and e.*

Section 1 E: the competition objective

1. *The competition objective is to promote effective competition in the interests of consumers in the markets — "FCA Mission: Approach to Competition."*
 - a) *regulated financial services, or*
 - b) *....*
2. *The matters to which the FCA may have regard in considering the effectiveness of competition in the market for any services mentioned in subsection (1) include —*

¹²⁴ Barefoot op cit note 110 at 15.

¹²⁵ FSMA op cit note 70.

¹²⁶ Ibid.

- a) *the needs of different consumers who use or may use those services, including their need for information that enables them to make informed choices,*
- b)
- c)
- d) *the ease with which new entrants can enter the market, and*
- e) *how far the competition is encouraging innovation.*

The FSMA's mandate, outlined in the vision statement, includes promoting effective competition in the interests of consumers in the markets for regulated financial services and services provided by recognised investment exchanges in carrying on certain regulated activities. The financial sector needed diversity in the products offered, and the FSMA's directive stresses the need for competition. Sections D and E provide rules that apply in respect of market integrity and promote healthy competition, which is good for consumers since the rules provide freedom of choice.¹²⁷ FinTech companies, as market entrants, diversify the services offered in the marketplace by introducing targeted, affordable products that solve specific issues for consumers. These profound changes in the financial sector have forced incumbent financial service providers to either scale, make room for innovation, or underwrite innovative ventures.¹²⁸ New players in the market have previously viewed the regulatory framework as a barrier to entering the market. The strict and dogmatic rules meant newcomers had to go through bureaucratic bottlenecks and red tape to see the light of day.¹²⁹ The FCA's approach makes it possible for market entrants to penetrate the market. Section 1 E subsection 2 (a) deals with a fundamental objective, one reason for forming the Innovation Hub.¹³⁰

The FCA's executive researched several financial service providers to forge a working relationship between the regulator and the companies. They discovered that companies were spending money and wasting time trying to comply and align their products with the new

¹²⁷ FCA 'Promoting competition' 2016, available at <https://www.fca.org.uk/about/promoting-competition>, accessed on 10 May 2022.

¹²⁸ Goldman Sachs is a prime example of a big company that had to adjust to the rapidly changing business atmosphere, and they have had great success. A full report is available at <https://www.goldmansachs.com/insights/pages/survivors-guide-to-disruption.html>.

¹²⁹ Ibid.

¹³⁰ FCA op cit note 124.

regulations. The wasted time and resources potentially deprived consumers of access to financial services because of the unavailable products that have been bottlenecked and cut off by the red tape. The FCA realised there was no place for new firms and their technology to showcase their inventions, and the regulator faced a similar conundrum as they did not understand the new technology and had no way of regulating these new players;¹³¹ thus the inception and implementation of the regulatory innovation hub.

2.4. *The Regulatory Sandbox*

In terms of Section 1 E, subsections 2 (c)(d) and(e),¹³² consumers are meant to have the ease of choosing service providers. A conducive market that enables entrants to access the market and a market that supports competition quickly encourages innovation. The FCA honed and boasts a different lens from the standard regulator's perspective. It gives new market entrants a legal framework to think about and a playing field promoting participation and prompt invention. When the FinTech wave went live, and no new products were made available to consumers for safe consumption, the FCA realised that the new firms were afraid of approaching them for advice.¹³³ The FCA had to make themselves more approachable and advise on how they could help the new entrants; thus, the birth of the sandbox.

Sandboxes are distinct frameworks which, by providing a structured context for testing, enable a real-world environment whereby the testing of innovative technologies, products, services or approaches for a limited time and in a limited part of a sector or area under regulatory supervision ensures that appropriate safeguards are in place.¹³⁴ The sandbox created a safe space for innovators and regulators to test out-of-the-box innovations and inventions that have never been seen before and, thus, have not been regulated. There is a criterion for who can join the sandbox, and this is done through selected cohorts where innovators apply to join the sandbox, which operates like an accelerator programme to not only fast-track the innovation but also works out any irregularities that may be in the product design. The regulator works

¹³¹ Ibid.

¹³² Chapter 6 op cit note 119.

¹³³ Fahy op cit note 53 at 138.

¹³⁴ Ibid.

closely with the tech company to make sure that all compliance issues are taken care of before the product is put on the market.¹³⁵

The first selection criteria focused on firms introducing a new way of dealing with financial services, and the product had to be consumer-friendly or propose features that would benefit the most vulnerable consumers.¹³⁶ As discussed above, these would include thin-file consumers with no financial background and, thus, would not generally qualify for the usual credit checks for already available financial services. These inventions had to work around these barriers; they had to introduce ways in which these vulnerable consumers and many more would be able to access financial services without the burden of regulatory red tape. As technology continued to improve and new ways of financial transactions emerged, so did the selection criterion. So far, there have been seven cohorts in the FCA sandbox programme, and they have tested a wide range of financial products, amongst other applications that offer a ‘cross-border’ money transfer service powered by digital currencies or blockchain technology,¹³⁷ to an application¹³⁸ “that offers a No Interest Loan Scheme (NILS) to customers in vulnerable circumstances.”

This is both cost-effective for participants and resource-efficient for regulators, allowing for easier comparison among potential sandbox entrants. Providing an option to customers who have a need but cannot access or afford existing forms of credit and who can afford to repay the capital of the loan, and more recently, a service that “uses AI-based technology to assess intelligibility called Amplified,¹³⁹ which tests how simplified terms and regulated notices from lenders can improve comprehension and lead to improved consumer outcomes.” These products have been under the guidance of the FCA and have undergone long-term testing to ensure their market viability and ensure compliance with the regulator, but most importantly, they need to pass the consumer safety test before being released to the public.¹⁴⁰

¹³⁵ Ibid.

¹³⁶ Ibid.

¹³⁷ BitX, which has now rebranded as LUNO, is one such story. This was a breakthrough for a South African company to make it into the FCA sandbox. A market report is available at the company’s trajectory at <https://www.coindesk.com/markets/2017/01/11/bitx-rebrands-as-luno-reveals-bitcoin-sandbox-project/>, accessed on 5 June 2022.

¹³⁸ Fair4All Finance is working with organisations to pilot the No Interest Loan Scheme.

¹³⁹ Amplified Global seeks to help companies communicate more simply with their customers to understand and act on what they have read.

¹⁴⁰ Bailey op cit note 113.

The success of a sandbox depends a lot on how well the hosting regulator can get stakeholders to take part.¹⁴¹ The literature confirms that the historic voluntary participation by private stakeholders has been less due to the lack of trust from the participants and, as such, caused reluctance, which impeded the regulator's ability to sufficiently guide some aspects of these technological operations.¹⁴² However, the UK's sandbox did not suffer from this withdrawal or apathy. As it stands,¹⁴³ the FCA reported that it had received 550 applications since its inception.¹⁴⁴ This claim is supported not only by the amount of uptake the sandbox has received, but also by the level of innovative engagement from the private sector. This indicates that there is never a shortage of stakeholder participation, and private firms are eager to collaborate with the regulator to offer better financial solutions to consumers and accelerate access to those who need it. So far, this is in line with the three FSMA goals listed above, which include easy access to financial services, fair competition, and room for new players to join the market.¹⁴⁵

These products have surpassed the FCA's mandate in creating a safe space for inventive ideas meant to assist in eradicating consumer barricades by accessing safe financial products tailored to cater to their needs and remaining compliant with the regulatory framework. The sandbox has proven to be a better alternative than the other models in that it is controlled and provides an opportune solution to both the regulators and FinTechs. The improvement, as discussed in the Kalifa review, is to promote a digital sandbox that will be open throughout and stop the limitation of having cohorts.¹⁴⁶ The testing would be done throughout the year, and more participants could join the sandbox at any time. Another improvement is exploring the cross-border sandbox that will deal with multi-jurisdictional international financial transactions in the hope that it will accelerate market penetration and hopefully bring more

¹⁴¹ Idem at 140. 'The UK's sandbox is targeted to a particular subset of stakeholders – private firms – and thus, the case study analysis focuses on regulatory participation by this group. Participation by private firms is a salient issue for regulators supervising innovation. This case study draws on data from a document study and questionnaire to investigate their motivations for the participation of thirty-six UK FinTech firms and qualitative interviews with twenty-one firm senior managers.'

¹⁴² Ibid.

¹⁴³ Cohort 7 – 2021/2022 there are currently 13 firms chosen out of 58 applications.

¹⁴⁴ FCA Regulatory Sandboxes Accepted Firms, Cohort 7, and New Firms 2022 available at <https://www.fca.org.uk/firms/innovation/regulatory-sandbox/accepted-firms#webform-submission-page-feedback-form-node-94006-add-form> accessed on 16 August 2022.

¹⁴⁵ FCA Accepted Firms op cit note 141 – The primary type of innovation continues to be dominated by data and technology infrastructure, with firms using AI/machine learning, DLT/blockchain technology, open banking, API, digital ID, and predictive analytics.

¹⁴⁶ Ron Kalifa 'Kalifa Review of UK FinTech' Policy Paper HM Treasury 2021 available at <https://www.gov.uk/government/publications/the-kalifa-review-of-uk-FinTech#full-publication-update-history>, accessed on 1 August 2022.

businesses to migrate to the UK. This will also bring skilled and talented workers from other jurisdictions, which will improve financial inclusion and help reach more consumers.¹⁴⁷

2.5. Critiques and Lessons Learned

To some, sandboxes may seem like a great idea, but being part of sandbox testing has involved relaxing a few regulations. Some authors have suggested that the formation of the regulatory sandbox created an unfair playing ground for market entrants.¹⁴⁸ Because the rules are not as strict in the sandbox, it could also be seen as a way for companies to get around the regulatory system.¹⁴⁹ This has also raised the question of the intention of these inventions, as some purport to bridge the gap between consumers who are vulnerable and have no way to access financial services. They purport to promote financial inclusion.¹⁵⁰ However, they do not even know what an SMME stands for.¹⁵¹ This is strange for the financial inclusion aspect of FinTech's purpose and the competition aspect. The other critique is that the relaxation of the regulations within the sandbox is unfair to the start-ups that have not been accepted into the sandbox.

The start-ups that get accepted often gain more traction with investors and consumers because of their association with the FCA.¹⁵² Although, the FCA has repeatedly confirmed that acceptance in the sandbox does not mean that the start-up receives special treatment,¹⁵³ there have been differing opinions on this aspect, as it has been proven that the firms that have been accepted into the sandbox have indeed received public approval and are deemed to be trustworthy since the FCA has approved their ideas.¹⁵⁴ This is, of course, a subjective analysis

¹⁴⁷ Ibid.

¹⁴⁸ Kelly Jemima 'A "FinTech sandbox" might sound like a harmless idea. It's not' 2018 Financial Times, available at <https://www.ft.com/content/3d551ae2-9691-3dd8-901f-c22c22667e3b>, accessed on 11 July 2022.

¹⁴⁹ Ibid.

¹⁵⁰ Chegade, Nadine & Notta, Sabaa 'How Are FinTech's Tackling the Arab World's \$123B SME Finance Gap?' 2021 CGAP, available at <https://www.cgap.org/blog/how-are-FinTechs-tackling-arab-worlds-123b-sme-finance-gap>, accessed on 10 June 2022.

¹⁵¹ Ibid – "During a webinar, we recently attended on small and medium enterprise (SME) finance, someone commented: "SMEs are like the Kardashians. We follow them, but we do not really know why."

¹⁵² Friend op cit note 116.

¹⁵³ David, Strachan; Suchitra, Nair; Valeria, Gallo & Morgane, Fouché 'A Journey Through the FCA Regulatory Sandbox the Benefits, Challenges, and Next Steps' 2018 Centre for Regulatory Strategy EMEA, Deloitte, available at <https://appgFinTech.org.uk/reports/a-journey-through-the-fca-regulatory-sandbox/>, accessed on 10 June 2022.

¹⁵⁴ Ibid.

as the aim of creating the sandbox was to improve market access for new entrants and not to serve as a stamp of approval for the accepted few.¹⁵⁵ It is also important to look at why the FCA wants to accept the FinTech sandbox applicants and how they can help consumers by not only making new, innovative products but also making it easier for people to get access to financial services.

The other critique falls under assisting the SMMEs in accessing the sandbox. Most of the market entrants serve as financial support systems to SMMEs and, thus, also need to test their innovations in the hub. What has been a trend among technology firms is that the applicants claim to support SMMEs in the future or after they exit the testing phase. This, as discussed by CGAP, has been “nothing but a farce as most firms preach that their end goal is to improve and help facilitate financial inclusion by assisting SMMEs, which are at the heart of reaching remote consumers.”¹⁵⁶ Therefore, this begs the question of how the sandbox is promoting financial inclusion by accepting firms that purport to achieve a specific goal but, in fact, just want to be part of the cohort to receive the public’s trust and possibly attract investment opportunities they would have otherwise not have garnered before being associated with the FCA. Many have seen the acceptance into the sandbox as a hindrance to the competition aspect due to this fact.

There have been numerous critiques of the possibility of offering free advertising, public relations, and support by the FCA to the chosen firms by the mere fact of publicising the participants on their official websites.¹⁵⁷ Some authors have suggested that the FCA sandbox cohort participants remain anonymous to avoid the unwanted traction the announcement garners. This sentiment has been echoed by firms that have also not been accepted into the programme for various reasons.¹⁵⁸ However, the FCA upholds that the reason for publishing the firms in the respective cohorts has nothing to do with promoting these firms or approving them as the next best thing, but that it is the FCA’s mandate to remain transparent and, thus, cannot keep the participating firms anonymous.¹⁵⁹ Again, the FCA reiterates the fact that being part of the sandbox testing does not automatically mean that the firm is without fault.

¹⁵⁵ Ibid.

¹⁵⁶ Chegade & Notta op cit note 147.

¹⁵⁷ Strachan et al op cit note 150.

¹⁵⁸ Ibid.

¹⁵⁹ FCA Promoting Competition op cit note 135.

In fact, some firms change their initial business models after testing to exit the financial services industry entirely.¹⁶⁰ Therefore, there are many ways to look at the participants in the sandbox. Some view participation as a catalyst for change, and some view it as a catalyst for increasing the share price of approved firms.¹⁶¹

However, the reasons for accepting or rejecting these firms provide lessons learned from the previous cohorts that have undergone these tests and come out the other side. The recent review¹⁶² of the FinTech sector in the UK, headed by Kalifa, outlines many aspects whereby the FinTech space can improve and offers suggestions on what may be some of the best ways the UK can move forward in this sector.¹⁶³ In his address, Kalifa stated:

“[F]inTech is not a niche within financial services. Nor is it a sub-sector. The way we finance is changing because of a continuous technological revolution. Its essence is in both fast-growing FinTech companies and the investment and use of technology by our incumbent financial institutions. It is in the way we regulate previously unknown technology and set new standards. However, it is about delivering better financial outcomes for customers, especially consumers and SMMEs. We want to deliver these outcomes across the UK and export them to the world.”¹⁶⁴

The UK, as previously mentioned, is a global leader in the FinTech sector, and the FCA realises that the world is watching and learning from its experiences. As such, Her late Majesty's Treasury commissioned the FinTech Review to assess the economic and technological effects since the inception of the regulatory sandboxes. The review lists several important factors that the FCA can improve, and it suggests a five-point plan to do so.

The first point is policy and regulation that would deal with delivering a digital finance package that creates a new regulatory framework for emerging technologies; then implement a ‘Scalebox’ that supports firms focusing on scaling innovative technology; then establish a Digital Economy Taskforce (DET) to ensure alignment across the government; and finally ensure that FinTech forms an integral part of trade policy.¹⁶⁵ The review discusses an important issue that the UK faces, which is scaling the firms that enter the sandbox are usually start-ups,

¹⁶⁰ Ibid.

¹⁶¹ Jemima op cit note 145.

¹⁶² Ron Kalifa Review op cit note 143.

¹⁶³ Ibid.

¹⁶⁴ Kalifa op cit note 143.

¹⁶⁵ Ibid.

and the testing ends when these firms exit the test.¹⁶⁶ The UK has developed a reputation for being a very desirable location to start a business, but there are challenges in implementing scaleups. The review calls for the implementation of a ‘Scalebox’ to support firms focusing on innovative technology that will assist with company growth. The key initiatives such as the regulatory sandbox and open banking have set a precedent that many others have started to learn from, as seen by the 50 countries around the world that have got their own sandboxes.¹⁶⁷

The second point is skill transfer. The review outlines that there will be about a 90% need to retrain and upskill adults in support of UK FinTech by ensuring access to short courses from high-quality education providers at a low cost.¹⁶⁸ Furthermore, the review calls for the creation of a new visa stream to enhance access to Global Talent for FinTech scaleups.¹⁶⁹ Due to the uncertainty of regulation created by the UK exiting the European Union, the review suggests building a pipeline of FinTech talent by supporting FinTech scaleups to offer embedded work placements to further education and higher education students and kick-starters.¹⁷⁰

The third point is an investment. The revenue calculated from the investments includes expanding research and development (R&D) tax credits. The review says that an Enterprise Investment Scheme and Venture Capital Trusts could free up institutional capital to create a £1 billion ‘FinTech Growth Fund’ that would be big enough to help build a world-leading ecosystem.¹⁷¹ Accordingly, improve the listing environment through free float reduction and attract investors to stay in the UK.

The fourth point is to deliver an international action plan for FinTech, which will help launch an international ‘FinTech Credential Portfolio’ (FCP) to support international credibility and increase the ease of doing business. The review suggests that this will drive international collaboration through the Centre for Finance, Innovation and Technology, and by launching an International FinTech Taskforce.¹⁷² Lastly, national connectivity is a point that

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid.

¹⁶⁹ Idem at 7 – “Brexit has created regulatory uncertainty in specific areas relevant to FinTech. Firms must navigate the immigration system for European Union talent for the first time – whilst rival jurisdictions are rolling out aggressive attempts to lure talent in.”

¹⁷⁰ Ibid.

¹⁷¹ Kalifa op cit note 143.

¹⁷² Ibid.

will help to nurture the high growth potential of the top 10 FinTech clusters, spread across the UK and not only in London, which will drive the national coordination strategy through the Centre for Finance, Innovation and Technology, and speed up the development and growth of FinTech clusters through further investment, such as in R&D.¹⁷³

2.6. Conclusion

Because of the COVID-19 pandemic, which practically forced the traditional way of doing business to a halt, approximately 71 per cent of adults in the UK downloaded¹⁷⁴ a banking application for the first time. Before 2008, consumers' interface with technology was different in how they were driving forward their own experience with FinTech. One could almost say that consumers were limited in what they could or should expect from their financial service providers. Some argue that FinTech came in to fill that niche where people wanted better customer service. They wanted to have more online interaction, businesses wanted to get SMME financing, and people wanted to transact payments across the world.¹⁷⁵ It is fascinating to note how far technological influence has come in just 12 years.¹⁷⁶ Even though COVID-19 brought irreparable damage to families and some businesses, it changed the acceleration of innovation in financial services.¹⁷⁷

The observation has been that there is an incredible financial services ecosystem across the UK, but FinTech is coming in to showcase the amazing ways technological entrepreneurs, consumers and businesses are demanding change. It then becomes a hybrid or evolving ecosystem, whereby it is not only the innovators taking charge, but it is the actual people who are demanding that innovation. This means that consumers welcome the change, and this will only accelerate the FinTech wave.¹⁷⁸ What emerged during the COVID-19 pandemic was the opportunity to solve problems in a short amount of time. This includes the banking perspective, technology entrepreneurs, and consumers having an opportunity to bring up problems and

¹⁷³ Ibid.

¹⁷⁴ Ibid. Translating to an estimated 6 million adults.

¹⁷⁵ Kalifa Review of UK FinTech Webinar launch available at <https://www.gov.uk/government/publications/the-kalifa-review-of-uk-FinTech#full-publication-update-history>, accessed on 1 August 2022.

¹⁷⁶ Ibid.

¹⁷⁷ Kalifa Review op cit note 172.

¹⁷⁸ Ibid. The products coming out of this data can help fix a problem with consumers credit record from repayments or help identify consumers who are under banked and so forth, but FinTech is still quite nascent in that part of the journey.

solutions in a few days, including technology that could help businesses verify income, how to verify consumer identity and so on. This aspect showed that the UK FinTech's future is arguably bright, and the fact that there was an increased percentage of job creation during the pandemic is admirable.¹⁷⁹

The regulatory UK sandbox has so far, faced criticism for having preferred some firms over others, thus inadvertently boosting those in the respective cohorts' credibility by association. However, these criticisms have not deterred the FCA's objectives. As we have seen, there are many positives in the FinTech sector, and the next step for the sandbox is the Scalebox. The recommendation from the review is that regulators, programmers, and consumers continue the dialogue to further collaboration in financial services. There must be continuous consultations that will help drive forward cutting-edge technology and service delivery, which will also continue to improve financial inclusion and improve financing for SMMEs. There is incredible potential to drive the FCA forward and the points alluded to in the review prove that there is more to come, and that the UK may still be a global leader in FinTech even though the future is not guaranteed.¹⁸⁰ As such, the next steps in the FCA regulatory sandbox include several players and, as we have seen, most of the new players are international. Thus, the introduction of the digital sandbox and a global Scalebox to deal with cross-jurisdictional finance is seen as just the beginning of an amazing journey full of firsts.

¹⁷⁹ Ibid.

¹⁸⁰ Kalifa Review op cit note 172.

CHAPTER THREE

3. REGULATORY SANDBOXES IN SOUTH AFRICA

3.1. *Overview of the Legal Framework*

Due to the nature of FinTech transactions, the regulators cannot draft regulations to suit each kind of FinTech product. FinTech has morphed into an ecosystem, meaning it cannot be categorised into a singular form.¹⁸¹ The rapid changes in technology and consumer needs vary to suit these technological advancements and differing needs.¹⁸² A prime example of changing circumstances was witnessed during the COVID-19 outbreak. Consumer needs changed and suppliers had to adjust to these needs.¹⁸³ Technology firms had to get solutions within a short period to provide these services in a time whereby contact was limited. The financial market and its participants appreciated the flexibility that technology made available to ease their lives and, to an extent, help contain the spread of the virus. Mobile application users increased, new users were introduced into the market, sending, and receiving remittances was easier, and consumers were comfortable with facial recognition software to assist with electronic know-your-customer (eKYC) compliance and other digitalised identification issues.¹⁸⁴

There is no straightforward application to regulating FinTech and it is, therefore, relevant to properly understand the critical role regulatory sandboxes play in the future of financial technology. As Kalifa argues, FinTech is here to stay¹⁸⁵ and there is no reason to deny the development in this sector. Consequently, constant monitoring and supervision must become the norm. Therefore, it is imperative to understand how the FSRA cultivates the way for FinTech to establish roots in the South African financial system. There are four known financial regulatory models, namely: the silo model, the functional model, the unified or

¹⁸¹ Svein Andresen op cit note 33.

¹⁸² Benjamin, Roberts; Jarè, Struwig; Steven, Gordon & Thobeka, Zondi 'Financial Literacy in South Africa: Results from the 2020 Baseline Survey' 2021 Report prepared by the Human Sciences Research Council (HSRC) Developmental Capable and Ethical State (DCES) Research Division for the Financial Sector Conduct Authority available at

<https://www.fscamymoney.co.za/Research%20Documents/Financial%20Literacy%20in%20South%20Africa%20Results%20from%20the%202020%20Baseline%20Survey.pdf>, accessed on 2 September 2022.

¹⁸³ Idem at 18.

¹⁸⁴ Koning op cit note 41.

¹⁸⁵ Kalifa op cit note 143.

integrated model, and the Twin Peaks model.¹⁸⁶ Many jurisdictions had to adopt and implement new rules for protecting market soundness. As such, there have been many discussions in terms of how to effectively regulate the financial sector to promote better consumer safety and further provide safety to other stakeholders in the market.

The South African regulatory model was adapted to mimic the UK's regulatory framework in terms of adopting a dual regulatory system called the 'Twin Peaks' model of financial regulation. Before the adoption of the Twin Peaks, South Africa operated an institutional or silo model, which functioned as multiple separate specialist regulators provided for each institution.¹⁸⁷ Qumba provides a succinct note on the dissolution of the silo model of regulation.¹⁸⁸ The silo method is defined as "[a] sectoral regulatory approach which allows entities to be regulated according to their legal form."¹⁸⁹ The South African National Treasury described the silo model as a fragmented model, resulting in a silo approach to the regulation of various industries, with different standards and regulations applying to different industries, thereby causing a 'regulatory arbitrage.'¹⁹⁰

The financial regulatory sector chose to implement the Twin Peaks model, thus moving away from the silo model, to have a well-structured regulatory framework. There have been many discussions on the adoption of earlier versions of the Twin Peaks model from other jurisdictions. However, the author will only focus on the UK model for the purposes of providing a comparative analysis.¹⁹¹ In the South African context, these peaks are the PA, which is a division of the SARB and the FSCA, which is responsible for safeguarding consumers, ensuring good market conduct, and improving financial inclusion.

After the collapse of the global financial market, there was a shift towards a more holistic regulatory framework being adopted in several financial markets, aimed at properly

¹⁸⁶ Andrew Schmulow 'The four methods of financial system regulation: An international comparative survey' (2015) 26 *Journal of Banking and Finance and Practice* 151 at 158.

¹⁸⁷ Ibid.

¹⁸⁸ Mmiselo Freedom Qumba 'A Comparative Analysis of The Twin Peaks Model of Financial Regulation in South Africa and The United Kingdom' (2022) 139 *SALJ* 84.

¹⁸⁹ Ibid.

¹⁹⁰ Ibid.

¹⁹¹ Qumba op cit note 185 at 78.

safeguarding the stakeholders in the marketplace. This was the reason for the inception of the Financial Sector Regulation Act¹⁹² (FSRA), which was adopted in 2017, following many discussions on the best way to regulate the financial services sector in the country. This was the first step in the grand scheme of the National Treasury's plan to create a comprehensive regulatory framework. Even though the FSRA is still in its infancy, there has been some development in the financial regulatory framework. The FSRA implemented the FSCA and PA under the Twin Peaks regulatory model, which is the ultimate regulatory framework. One of the FSCA's objectives is to promote fair treatment of financial customers by financial institutions.¹⁹³ This already presents an issue to the FSCA due to the historical marginalisation that caused inequality in the creation of wealth and distribution of capital. Simply put, there is already a barrier for the regulator in achieving fair treatment of financial institutions to consumers. Therefore, a call to enact the Conduct of Financial Institutions Bill (COFI Bill)¹⁹⁴ to help the FSCA achieve its mandate by creating a new environment will help create a clean slate for operations.

Chapters 4¹⁹⁵ and 5¹⁹⁶ of the FSRA outline the establishment, objectives, functions, cooperation, and collaboration of the FSCA. The focus of this chapter, therefore, is only on the FSCA as the regulator tasked with overseeing consumer protection, financial inclusion, market conduct and financial technology. The FSCA is charged with facilitating growth, planning and strategic promotion of transformation, and development in the sector by harnessing innovation and creating a competitive playing field for all the stakeholders in the market. The only sections chosen for analysis relevant to this research play a pertinent role in the advancement of the regulatory sandbox culture in South Africa and, as such, will be discussed briefly.

¹⁹² FSRA supra note 81.

¹⁹³ Ibid.

¹⁹⁴ The South African Department of National Treasury Notice 'Explanatory Policy Paper Accompanying the Conduct of Financial Institutions Bill' (GN 808 in GG 42114 of 14 December 2018), available at www.treasury.gov.za/twinpeaks, accessed in June 2020.

¹⁹⁵ Section 4 focuses on the regulatory framework initiatives that will inform the development of the conduct framework.

¹⁹⁶ Section 5 focuses on the regulatory framework initiatives that will inform the development of the financial markets (market efficiency and integrity) framework.

3.2. Sections 57 and 58 of the FSRA

Section 57 provides as follows:

Objective

57. *The objective of the Financial Sector Conduct Authority is to—*

- (a) enhance and support the efficiency and integrity of financial markets; and*
- (b) protect financial customers....*
- (c) assist in maintaining financial stability.*

The primary objective of the FSCA is to promote fair treatment of consumers by financial institutions and, by extension, to promote financial literacy to consumers and enhance market stability.¹⁹⁷ Upon reading the objectives set out above there is a clear distinction from the objectives set out by the FCA.¹⁹⁸ Even though these objectives are set to achieve a similar goal, it is argued that the FCA's approach is direct and consumer friendly. For instance, Section 57 (b)(i)(ii) of the FSRA only mentions educating customers and potential customers about money,¹⁹⁹ while Section 1 C (2) of the FSA mentions and specifies what kind of customers they will serve, which includes a wide range of consumers.²⁰⁰

The UK's approach in drafting the FCA's objectives is clear and consumer-focused, but also boasts an explanatory nature of the provisions that make it easy for consumers of 'differing degrees of experience and expertise' to understand. Furthermore, in providing a holistic regulatory framework, the FCA calls for a higher level of care from financial service providers when dealing with consumers. So, by comparison, there is a gap in the FSCA's goals in that it is not clear what the FSCA must do to protect a wide range of consumers, which is especially important given the country's history of inequality.²⁰¹ Section 57 purports to provide a solution to financial inclusion by introducing financial literacy, but this is too broad and not specific to

¹⁹⁷ Momentum op cit note 83.

¹⁹⁸ Koning 'CGAP' op cit note 41.

¹⁹⁹ FSRA supra note 81.

²⁰⁰ FSA supra note 71.

²⁰¹ Roberts et al op cit note 179 at 24.

any group or group of consumers.²⁰² It would, therefore, be prudent in the implementation of the COFI Bill to be specific when dealing with consumers to expressly note the varying levels of consumer expertise and level of experience. As it stands, Section 57 applies to all consumers, which is a problem since the main goal is to protect vulnerable consumers and get previously disadvantaged consumers involved in the financial system. Therefore, identifying consumers as either vulnerable or thin file consumers will influence the degree of care to be provided to these consumers, including SMMEs without any collateral or financial history, for instance.

Section 58 provides as follows:

Functions

58. (1) To achieve its objective, the Financial Sector Conduct Authority

must—

(a) regulate and supervise, in accordance with the financial sector laws, the conduct of financial institutions;

(d) promote, to the extent consistent with achieving the objective of the Financial Sector Conduct Authority, sustainable competition in the provision of financial products and financial services, including through co-operating and collaborating with the Competition Commission;

(e) promote financial inclusion;

(h) conduct and publish research relevant to its objective;

(i) monitor the extent to which the financial system is delivering fair outcomes for financial customers, with a focus on the fairness and appropriateness of financial products ...; and

(j) formulate and implement strategies and programs for financial education for the public.

Whilst the FSRA's mandate is broad and involves a complex staggered approach in that some parts of the functions have not yet been implemented; it has been proactive in ensuring

²⁰² FSRA supra note 81.

consumer safety while the next phase is being prepared to launch. The FSCA has achieved this objective by creating workable solutions and ensuring that the South African market is on par with its international counterparts. The FSCA recently released a paper²⁰³ on an investigation into FinTech digital platforms (DPs)²⁰⁴ and their regulatory implications and, as such, is carrying out some of the functions provided for in Section 58 (1) of the FSRA. The paper highlights the importance of regulating financial products that use DPs to perform a service. For instance, the FAIS Act²⁰⁵ regulates the intermediary services between a consumer and a supplier. The function of an intermediary is analogous to that of an agent, in that the intermediary links a consumer to the product supplier.

Furthermore, the intermediary offers advice to consumers to guide them to a specific financial product. In South Africa, there is a mix of these DPs being used by FinTechs; as such, there is a need for close regulation. These DP services have a significant impact on consumer safety as most consumers do not understand the services or do not know the implications of using them. However, because these DP intermediaries have a vast reach and offer unmatched convenience, they are widely used. They must be properly regulated to protect the consumer. There has been a major shift in trends globally from FinTechs offering single-use applications evolving into SuperApp service providers, like Tencent²⁰⁶ in China and M-Pesa in Kenya.²⁰⁷ The South African market has also experienced significant growth in DP and the FSCA conducted a study in 2020 to gauge the level of financial inclusion through alternative finance structures. The survey proved that credit and capital raising through the banking sector is a challenge to SMMEs because it does not accommodate thin-file consumers without collateral, unproven business models and the bank's risk appetite.²⁰⁸ However, lending and capital-raising

²⁰³ Kagiso, Mothibi; Dino, Lazaridis 'FinTech Digital Platforms – An Investigation into FinTech Digital Platform Activity in South Africa and Their Regulatory Implications' 2021 IFWG Research Document, available at <https://www.fsc.co.za>, accessed on 12 September 2022.

²⁰⁴ Idem at 6 'a digital platform can be defined as a technology-enabled business model that creates value by facilitating exchanges (the intermediation of services) between consumers and financial product producers.'

²⁰⁵ Act 37 of 2002.

²⁰⁶ Strachan et al op cit note 150 at 13 'as of Q4 2019, 1 billion WeChat Pay transactions take place per day. A total of 72 million merchants are registered on the digital platform payment app. WeChat started off as a messaging app but today has vast array of services. Some key features include: a digital wallet service which allows users to perform mobile payments and send money between contacts.'

²⁰⁷ Idem at 14 'M-Pesa allows users to deposit, withdraw, transfer money, pay for goods and services, access credit and savings.'

²⁰⁸ Jan Augustyn "SMME Credit Information Assesnt in South Africa" December 2019 Research Report prepared for Finfind, available at <https://rebels.co.za/resources/Safari/15-Feb/Claire-Hayworth.pptx>, accessed on 10 June 2022.

platforms were the most prevalent platform segments surveyed, offering SMMEs an attractive alternative capital-raising mechanism to the banking sector.²⁰⁹

The survey showcases some crucial benefits and risks posed to the customer and the financial sector at large. The following benefits were identified from the use of DP as an alternative to traditional financing; improved financial inclusion, personalisation, convenience, and affordability, among others, that regulators find beneficial for consumers. However, the survey showed risks that will need to be fixed, such as customers being locked into digital platforms, lack of data privacy, lack of consumer education and conflicts of interest, to name a few.²¹⁰ On the other hand, the COFI Bill and the FSCA promise to enhance consumer safety by tightening the use of data and fostering ethical innovation by financial institutions.²¹¹ It is noteworthy that the FSRA does not specifically mention innovation anywhere in the Act. The FSRA merely mentions competition as an objective confined to collaborating with the Competition Commission to attain the Commission's purpose.

Despite criticisms of how the FSRA has outlined the action plan and its implementation, the FSCA has made numerous recommendations. One noteworthy recommendation aims to close the gap created by the FSRA's failure to fully discuss FinTech objectives. The FSRA is seen as 'regulator facing' and provides the regulators with certain powers concerning regulated entities; for instance, permitting the FSCA to set standards for banks.²¹² According to the three-year regulation plan, from 2022 to 2025, there will be 'Joint Standards' which include: culture and governance, information technology governance and risk management, and cyber security and cyber resilience requirements.²¹³ The regulation plan further discusses the implementation of information technology-related standards, which largely focus on technical work. The COFI Bill, by contrast, will primarily be 'entity facing' and will set the requirements that financial institutions under the FSCA must meet and the outcomes they are expected to deliver. The FSRA provides consumers and financial institutions with an indication of what to expect from

²⁰⁹ *Idem* at 16.

²¹⁰ Mothibi & Lazaridis *op cit* note 200.

²¹¹ FSCA Regulation Plan 1 April 2022 – 31 March 2025.

²¹² Mothibi & Lazaridis *op cit* note 200 at 21.

²¹³ FSCA Regulation Plan *op cit* note 209.

regulators in the financial sector. The COFI Bill,²¹⁴ on the other hand, will provide consumers and industry stakeholders with an indication of what is expected of financial institutions.²¹⁵

3.3. *FinTech and Financial Inclusion*

Regulatory sandboxes provide a safe space for innovators and regulators to test never-seen financial products to better understand their regulatory application, reach and risks associated with the product.²¹⁶ The firms enter the sandbox because their products or services have never been regulated before, or the product does not fit properly into the contours of the current regulatory framework. Thus, sandboxes provide space for regulators to assess the regulatory limits of the ‘finished product ready to launch’ into the market. The sandbox is, therefore, not suitable for firms with unfinished products or those that only have prototypes, which means they cannot be tested against the market and the regulatory framework in real time. These firms or start-ups would thrive in an incubator hub where they would be provided with financial and business remodels if accepted.

The regulatory sandbox is suitable in instances where the product offers a regulatory or supervisory challenge to the market and requires further experimentation or examination before being released to the public for consumption.²¹⁷ The financial services sector is the backbone of the country’s economy as a contributor of capital and one of the most important players in the economy.²¹⁸ The nature of the financial sector’s services and the risks associated with consumer safety, investor confidence and market stability depend on an excellent regulatory framework. Throughout the years, especially after the 2008 GFC, financial regulators sought to implement safer mechanisms in the financial sector to help prevent another market collapse.²¹⁹

²¹⁴ FSCA Regulation Plan op cit note 209 at 32.

²¹⁵ Ibid.

²¹⁶ Jon Truby ‘FinTech and The City: Sandbox 2.0 Policy and Regulatory Reform Proposals’ (2020) 34 (4) *International Review of Law, Computers & Technology* at 277, available at <https://doi.org/10.1080/13600869.2018.1546542>, accessed on 10 June 2022.

²¹⁷ Ibid.

²¹⁸ Qumba op cit note 185 at 78.

²¹⁹ Tebatso Mmereki Draft for Public Comment: FSCA Strategy for Promoting Financial Sector Transformation’ 2022 *Policy and Research* at 3.

The best way to transform the financial sector is by including new market entrants and introducing new financial products. However, this issue, to the FSCA, presents a stumbling block due to the historical market rules that not only prevent new market entrants from penetrating the financial sector, but also make it impossible for small businesses to even compete in this market. Therefore, as a young regulatory authority, the FSCA is already faced with a multitude of market conduct complications and, as such, cannot liberally operate in the same environment that was created by its predecessors.²²⁰ There are many issues to be cleared within the financial sector. According to the draft paper on transformation, the FSCA notes that the importance of driving financial transformation lies in the inclusivity component, which will, if successfully implemented, ensure greater financial activity in the economy.²²¹ The National Treasury plans to have a staggered approach to the financial sector reform to ensure a smooth transition.²²²

The second phase of the regulatory reform is the harmonisation of the financial sector laws by implementing the COFI Bill.²²³ The Bill is still in draft form and a few drafts have been made available for public comment and review. Nevertheless, the COFI Bill promises to offer a solution to “better regulation, improved financial sector conduct, and more financially resilient South Africans.”²²⁴ This is a huge undertaking from the regulatory authority, and it is welcomed. After the 2008 GFC, the need for long-term regulatory solutions is crucial. The bill aims to continue with the policy development that will help the FSCA and, by extension, the FSRA reach new heights. The FSRA, as the first leg of the financial sector’s regulatory framework, provides the structural reform, whilst the COFI Bill will provide the rest of the components, such as consolidation of market conduct rules, as required by the National Treasury.²²⁵ It is difficult now to engage with the COFI Bill as it has not been finalised and may change. However, from the discussions in the policy paper, the second phase holds much promise for consumers.

²²⁰ Ibid.

²²¹ Mmereki op cit note 217.

²²² Ibid.

²²³ Idem at 6.

²²⁴ Ibid.

²²⁵ Idem at 3.

According to the FSCA policy paper on the financial sector transformation, “the next phase will streamline and harmonise the legal landscape that financial institutions will operate within. This entails a comprehensive review of existing financial sector laws, with the aim of developing a single, holistic legal framework for market conduct regulation in South Africa that is consistently applied to all financial institutions.”²²⁶ This is exciting and would be an amazing reform that would be copied by many jurisdictions if properly implemented. The vision that the FSRA has for the future of the South African financial sector is overwhelming, and its proposal for a new legal framework is sophisticated, clean, and elegant. However, this all remains to be seen as we are still in the first leg of the comprehensive financial sector framework reform. It will be interesting to see how well these changes are made and to what extent financial inclusion is improved.

Furthermore, it will be interesting to see how new products will tackle problems causing financial exclusion, intermediary regulations, investments, cross-border transactions and so forth.²²⁷ The FSRA, proverbially speaking, is a diamond in the rough and the COFI Bill is the polisher.²²⁸ The FSRA was enacted to guide the rapidly evolving financial sector, which is increasingly becoming an international and cross-border sector player due to the new multi-jurisdictional financial products available in the marketplace. As such, to keep up with the rapid changes, a sophisticated market regulator had to be implemented to also enshrine trust in consumers and investors alike. One of the many goals of the FSRA is to protect customers by implementing the treating customers fairly policy in financial institutions and providing financial education programs to consumers, which also helps to improve financial inclusion.²²⁹

Financial inclusion is an evolving concept and, as such, needs constant monitoring and policy regulation. To keep up and be better prepared for new challenges largely focused on shifting the onus from the customer to the financial institutions, the regulators must stay one step ahead of the challenge, by conducting ongoing research.²³⁰ Therefore, this chapter assesses

²²⁶ *Idem* at 8.

²²⁷ COFI Bill Purpose – ‘To provide for a regulatory framework for the conduct of financial institutions that will, amongst others support sustainable competition in the provision of financial products and financial services - promote financial inclusion.’

²²⁸ Mmereki *op cit* note 217 at 4.

²²⁹ Koning *op cit* note 41.

²³⁰ Arif Ismail, Caroline da Silva, Kershia Singh and Pieter Smit ‘FinTech Workshop 19-20 April 2018’ IFWG, available at <http://www.ifwg.co.za/>, accessed on 10 June 2022.

the testing of the inventive and innovative FinTechs in the regulatory sandbox and contrasts the FSCA's operation of the regulatory sandboxes with the FCA. Finally, the primary question focused on understanding how regulatory sandboxes help improve market penetration for market entrants and improve financial inclusion for consumers. The introduction of these technologies was met with disparagement and distrust as machines were behind the operations and, therefore, could not be trusted.

These technological advancements have become the standard of living and constitute, to some extent, a basic need. Given this intricacy, the IFWG has emphasised attaining input on three significant topics. These include private cryptocurrencies and initial coin offerings²³¹ (ICOs), financial inclusion and innovation facilitators.²³² This conversation had many layers that once again revealed the unequal status quo the country has gotten used to. At the heart of this exclusionary exclusive gesture is financial exclusion, from state-owned public schools with limited facilities to a child living in a remote village without any internet coverage. Technology breaches this gap, or at least it can if used properly and if it is used to help eradicate inequality in society. These trends showcase how the interaction between machines and consumers has evolved.

3.4. *The Intergovernmental FinTech Working Group (IFWG)*

3.4.1. *The IFWG Structure*

In 2016, the IFWG was created to encourage responsible innovation in the financial sector.²³³ The main objective behind forming the entity was to have the regulators available to assist. It is, therefore, a larger concept than just having a regulatory sandbox as there are various cross-sectoral regulators involved in the success of South Africa's financial market. The IFWG consists of six member regulators who all play a vital role in, to list a few, financial inclusion, consumer protection and honing innovation. These members are the Financial Intelligence Centre, the Financial Sector Conduct Authority, the National Credit Regulator, the National Treasury, the South African Revenue Service, and the South African Reserve Bank.²³⁴ By

²³¹ Truby op cit note 214.

²³² Ibid.

²³³ IFWG 'Media Statement on the Launch of the Intergovernmental FinTech Working Group (IFWG) Innovation Hub' 7 April 2020 available at <http://www.ifwg.co.za/>, accessed on 10 June 2022.

²³⁴ Ibid.

having every major player in the operating room and, by implication, destroying the operational silos created by each regulator by joining the IFWG, these regulators committed to a common goal of advancing the South African financial sector into the technological era. Of course, many arguments stem from having too many parties participating in one project and the danger of such an entity becoming a tick-box exercise in the future.

These arguments are warranted, given the history of governance, or the lack thereof, in some organisations in the South African context and the history of compliance failures²³⁵ in the financial sector. However, an alternative to the proposed arguments would be that the risk of the IFWG becoming a mundane task is not completely eradicated, but for now, it is abated. Simply put, there is hope that the structure will be able to encourage innovation by getting people to work together to reach the same goal. Thus, the launch of the innovation hub creates the space for innovators, regulators, and consumers to test their ideas and find solutions to future problems.²³⁶

3.4.2. Exploring The Innovation Hub

The innovation hub was launched in 2020, to open a forum for participants to join the technology conversation and contribute to the future of FinTech in South Africa.²³⁷ The innovation hub has three substructures, each mandated to deal with a specific issue affecting the financial market. The first part is the regulatory guidance unit, followed by the regulatory sandbox, and finally the innovation accelerator. These three units provide different services to FinTech start-ups, firms that are entering the market for the first time or incumbents looking to scale to accommodate FinTechs in their legacy models.²³⁸ As highlighted above, the inter-governmental FinTech working group is home to six different regulators and it makes provisions for multipurpose users.²³⁹ Qumba's argument becomes relevant here. The first leg

²³⁵ V Comply – Compliance Insights 'Five Reasons for Compliance Failure' 4 March 2021, available at <https://www.v-comply.com/blog/five-reasons-for-compliance-failure/>, accessed on 1 September 2022.

²³⁶ Ibid.

²³⁷ Ismail et al op cit note 228.

²³⁸ Ibid - The Innovation Accelerator is a space for regulators to proactively research cutting edge innovations to craft new regulations and conduct research.

²³⁹ Kagiso Mothibi 'Covid-19 Triggers Quick Innovation, Disruption, and Re-Invention in Financial Services Sector' FSCA 2020 available at <https://www.fsca.co.za> accessed on 12 September 2022. The Innovation Hub is a collaborative effort of the IFWG, which includes participation from National Treasury (NT), the Financial Intelligence Centre (FIC), the Financial Sector Conduct Authority (FSCA), the National Credit Regulator (NCR), the South African Reserve Bank (SARB), and the South African Revenue Service (SARS).

of the FSRA includes relevant regulatory bodies, which can blur some lines and have some functions overlap.²⁴⁰ Under the usual Twin Peaks model, there are only two authorities who oversee the financial regulatory sphere and, as such, each peak will be the primary regulator. However, when a FinTech's function involves credit regulation, the National Credit Regulator (NCR), which is responsible for regulating consumer credit, becomes relevant. The NCR also oversees the National Credit Act (NCA). The aim of involving FinTechs in the financial market is to promote and boost financial inclusion. It, therefore, becomes important to educate previously disadvantaged consumers on the dangers of over-indebtedness and reckless credit.²⁴¹ Some argued that the Twin Peaks have more than two peaks as different aspects of the financial sector affect the consumers in differing ways.²⁴²

So, the FSCA under the guidance of the COFI Bill will handle this as soon as it is enacted and would monitor the market conduct and all the legislation dealing with such matters, as consumer protection, financial inclusion, treating customers fairly, competition laws, and so forth, are important for financial inclusion. The PA monitors the financial stability of market players to prevent another market collapse. The National Treasury has lamented that “though some authorities have noted that innovation in financial services is best left to market forces and competitive dynamics, some authorities are fully aware that regulation needs to keep pace with innovation, due to equal potential risks.”²⁴³ Therefore, the regulatory sandbox has been designed to fit the South African financial sector environment.

There is no special way one jurisdiction can set up a regulatory sandbox, as each jurisdiction has specific needs that relate to the financial sector and different regulations. It depends on what objectives the financial sector wants to release. The CGAP team has outlined some of the frequently cited overarching objectives for most of the creation of regulatory sandboxes. These are to promote innovation and/or competition; address regulatory barriers to innovation; and learn about developments in the marketplace.²⁴⁴ Other jurisdictions have

²⁴⁰ Qumba op cit note 185.

²⁴¹ Ibid.

²⁴² See André, Boraine & Jani, van Wyk ‘Credit bureaus in South Africa and Namibia: a comparative analysis of the regulatory frameworks evaluated against the World Bank’s principles for credit reporting — part I and part II’ (2017) 50 (L2) *CILSA* 147 [W]here the author discusses the role of the NCR in Twin Peaks.

²⁴³ Jeník, Ivo, and Schan Duff ‘How to Build a Regulatory Sandbox: A Practical Guide for Policy Makers’ 2020 Technical Guide Washington, D.C.: CGAP.

²⁴⁴ Idem at 10.

shown how regulatory sandboxes work with only one or two regulators, and it would be interesting to see how these collaborations with six regulators under the purview of the FSCA will improve financial inclusion in South Africa. The FSCA has been granted power by the FSRA to implement, include and promote financial services to vulnerable consumers, and to promote financial literacy to South African consumers. The FSCA has also been granted power to make the entrance to the financial markets easy by promoting a competitive market that will include new entrants and accommodate market incumbents.

The use of the regulatory sandbox has been noted by the FCA as a way for the regulators to understand how the technology applies within a test-proof environment. This process also helps the regulators to understand how the product will work when it has been released to the commercial markets. It also shows if it will be possible to improve the consumers' reliance on technology and if it will improve financial inclusion for vulnerable or thin-file consumers.²⁴⁵ In the regulatory guidance unit, the South African innovation hub is distinguishable because it provides regulated guidance to those FinTechs that have already established a firm or that are in the process of establishing a firm but need clarity on regulatory issues.²⁴⁶ These firms do not necessarily need to be part of the regulatory sandbox as they can simply send an application to the regulatory guidance unit for policy considerations and to see if their product needs further testing, or if the regulatory guidance unit can provide in-depth guidance on the regulatory compliance or lack thereof for the FinTech start-up or incumbent.²⁴⁷

The IFWG has received applications from 60 firms,²⁴⁸ asking for clarity from the regulatory guidance unit regarding the policy developments in their business models. Some firms have received feedback to apply to the regulatory sandbox because their product has never been tested before, meaning that the regulatory guidance unit²⁴⁹ cannot provide clarity. The IFWG further provides an innovation accelerator which helps the financial sector regulators to learn from each other and to include a broader financial sector ecosystem on emerging innovations in the industry.²⁵⁰ This innovation accelerator is where all stakeholders

²⁴⁵ Truby op cit note 214.

²⁴⁶ IFWG media statement op cit note 231.

²⁴⁷ Mothibi op cit note 237.

²⁴⁸ Ibid.

²⁴⁹ Ibid.

²⁵⁰ IFWG media statement op cit note 231.

in the financial regulatory framework can come together to discuss new ideas that are imagined by global financial markets and that are emerging from technologically influential places such as the UK and China.²⁵¹ Several other countries are market leaders in this aspect as well (i.e., Brazil). Showcasing its new approach to financial technology, South Africa has also taken a front-row seat to improve financial inclusion for its consumers by improving the way financial transactions happen, which can be seen as one of the basic objectives of the FSCA and the aim of the FSRA, which will be discussed in detail below.

3.4.3. Lessons From the FCA Innovation Hub

The clear difference is that the FCA employed the facilitative method of harnessing FinTech growth in the financial sector by implementing Project Innovate, which then pioneered the regulatory sandbox for testing new ideas and regulating the new ideas. Project Innovate has a straightforward mandate to assist market entrants with regulating their new products before they are released to the public.²⁵² The sandbox was originally for never-before-seen ideas that had not been regulated before and, thus, needed guidance from the market conduct regulator on how to proceed. There is a clear line of steps to be followed by market entrants, consumers, investors, and regulators. The scope of the application is set out and easy to follow as it was created to benefit various consumers with varying levels of financial knowledge.²⁵³ The South African approach is a bit more complex to understand for a rational consumer with reasonable financial knowledge. The South African financial regulatory framework presents a unique challenge in the way powers are spread out in the sector.²⁵⁴

There is a myriad of problems latched within the system that was created to prevent the market collapse. The first is the Twin Peaks financial model and the staggered approach of the FSCA which is still at its initiation level. There is more regulatory reform to be included in this sphere. This means that now the financial sector regulatory system is fluid and can shift in any direction. However, navigating through the labyrinth of regulators and regulations, one simply might lose focus along the way. The sector presents a puzzle that has too many moving parts and one that is still too young to complete since some parts have not yet been discovered, like

²⁵¹ Ismail et al op cit note 228.

²⁵² Friend op cit note 116.

²⁵³ Ibid.

²⁵⁴ FSCA Framework op cit note 86.

how the COFI Bill will be accepted by consumers and financial institutions. As such, that remains to be seen, which presents a further problem for analysing the effectiveness thereof.

The author likens the current regulatory framework to a ‘Russian Nesting Doll’,²⁵⁵ which can be a metaphor for a visual illustration of various topics embedded within each other. The issues become convoluted, and lines get blurred when there are too many regulations and confusing outlooks from various regulators, thus resulting in a supervisory problem. However, as we have seen, the new regulatory reform is working towards harmonising financial sector laws and having a holistic standpoint when it comes to financial services. There are many suggestions like introducing a scalebox, including FinTechs in trade and industry, improving competition and so forth. However, taking the challenges as they arise will assist South Africa to rise to the occasion and become a leading FinTech sector with a multi-layered innovation hub which is evolving every day. Again, at this stage, it is premature to judge the effectiveness of the system since it is still in its infancy and as alluded to before, some parts of the puzzle are yet to be formed. As such, it is difficult to comment on the success or failures of the new legal framework, as there is not enough evidence to prove either, which therefore leaves the question open. At this stage, there is no way of knowing how many pieces can fit into this nesting doll as the financial sector framework keeps evolving.

²⁵⁵ The ‘nested doll principle’ denotes a recognisable relationship of ‘object-within-similar-object’ that appears in the design of many other natural and crafted objects.

CHAPTER 4

4. CROSS-BORDER REGULATORY SANDBOXES: THE EFFECT OF A SUPRANATIONAL SANDBOX

4.1. *Global Reach*

Business and international commercial transactions have evolved in the previous years and continue to expand operations globally. It is not a new idea to have multi-jurisdictional operating bases. Most companies have regional offices in other countries, and they have successfully been in operation by following the region's jurisdictional rules. However, the pace of the global expansion of FinTech companies is rapid. Therefore, the regulators do not have sufficient time to regulate all the new and innovative products that are entering their jurisdictions. The ways of doing business impact the ways the businesses are regulated, and this is further complicated by using technology. The web-based, data-driven, AI, machine learning, blockchain structures, and open financing (to name a few) have complicated how these products can be regulated. The problem started at the primary regulator where the product was created and did not fit into the regulatory framework. Now a firm faces further complications when it is due to expand its operations in a different jurisdiction.²⁵⁶

As the author discussed in previous chapters, regulatory sandboxes were set up to better understand the new products, risks, and implications thereof for the market and the consumers. The same issue is met at an international level when the start-up is looking to scale and expand its operations in other countries. For instance, in South Africa, there have been long-established regulations for businesses coming into the market which they have to comply with to successfully trade in the country. At first, businesses are required to register as external companies in terms of the Companies Act,²⁵⁷ which sets out the timeframe for registration. Then, other regulatory compliance includes direct marketing to customers, in terms of the

²⁵⁶ The Kalifa Report op cit note 170.

²⁵⁷ No 73 of 2008 – e.g., within 20 business days after it first begins conducting business within SA.

Consumer Protection Act²⁵⁸ and the Protection of Personal Information Act,²⁵⁹ and so forth. Businesses must understand the regulations so that they comply with the local rules. Further, new players or new businesses have to comply with the FICA²⁶⁰ due to the nature of the financial services industry, which makes it a global issue to keep an eye on money laundering.²⁶¹ However, in South Africa, the exchange control system is still applicable and monitors people wishing to use cross-border money remittances and similar transactions and, thus, would have to apply for permission.²⁶² International trends and FinTech business models have an increased potential for growth, and their perception of the regulatory environment helps them decide on which path to scale and grow their businesses. In South Africa, the FICA controls the know-your-customer (KYC) rules that make it possible for authorities to track money flows and stop money laundering, funding terrorism and organised crime.²⁶³

In June 2019, the Financial Action Task Force (FATF) announced a note on new technologies that establishes ‘binding measures to all members’, which requires countries to, among other things, (i) assess and mitigate risks associated with virtual asset activities and service providers; (ii) license or register service providers and subject them to supervision; (iii) implement sanctions should they fail to comply; and (iv) ensure that service providers implement the full range of Anti-Money Laundering and Counter Financing of Terrorism (AML/CFT) preventive measures under the FATF Recommendations.”²⁶⁴ In South Africa, these measures are under the purview of FICA, Financial Intelligence Centre and FSCA.

Most countries, like the UK, have welcomed these new market entrants to join their innovative market and bring new ideas into their jurisdiction. They have done this to attract not only new products, but also to retain foreign talent because they know that the future is in technology and they want the best people for the job.²⁶⁵ Therefore, since regulation does not end at a regional phase and most of these products are cross-sectoral, cross-jurisdictional, and

²⁵⁸ Act 68 of 2008 – e.g. The Consumer Protection Act establishes the right of consumers and the responsibilities of product and service providers.

²⁵⁹ Act 4 of 2013 – e.g., POPI codifies the way organisations can source and use entities’ personal information, including digital information.

²⁶⁰ Act 38 of 2001.

²⁶¹ FICA – e.g. – ‘Accountable institutions’ under law are subject to compliance requirements when accepting new customers. Not all FinTech’s fall into the category of ‘accountable institutions’ making it difficult to screen transactions for potential money laundering activities.

²⁶² The World Bank ‘FinTech Scoping in South Africa’ 2019.

²⁶³ Ibid.

²⁶⁴ The World Bank op cit note 260.

²⁶⁵ Ibid.

multifunctional, a need for a comprehensive international watchdog was necessary. For instance, super applications that have been developed apply cross-jurisdictionally, which means they need to comply with multiple regulatory frameworks. All these products “needed a place to go for guidance”, as stated by the United Nations Secretary-General’s Special Advocate for Inclusive Finance for Development (UNSGSA) FinTech Working Group.²⁶⁶ These firms had to comply with complicated and convoluted legal frameworks, and it was impossible sometimes to fit in most of these new jurisdictions, which of course stifled the possibility to grow and scale. FinTechs assisted and continue to assist in improving financial inclusion and stabilising the financial markets by introducing innovations that can be easily accessible and improve inclusivity. However, if they face barriers to entering new markets, this assistance is limited to each region and, as such, deprives the global community of the opportunity to experience better financial products.

The technology that has driven financial inclusion across the globe has revolved around three kinds of financial products. From these, we can learn the key challenges for consumers and the challenges for incorporating these products within the existing regulatory frameworks. We can also learn about having the products rework their structure to fit into the regulatory framework.²⁶⁷ Therefore, the need and relevance of creating a supernational sandbox was critical to global financial consumers and it was a way to create an inclusive environment for FinTechs.²⁶⁸ The global sandbox terms of reference are analogous to an international law treaty in that the states who ratify and assent to the network are bound by the provisions thereof.²⁶⁹ However, unlike a treaty, companies and central banks become parties to the multilateral agreement instead of a state. This includes a memorandum of agreement and once a company is part of the agreement, it expands its financial ecosphere and agrees to be part of the FinTech global conversation. The central banks represent the primary countries, as they are the monetary authorities that are usually inextricably linked with the rest of the financial regulatory

²⁶⁶ UNSGSA FinTech Working Group and CCAF ‘Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech’ 2019 Office of the UNSGSA and CCAF: New York, NY and Cambridge, UK.

²⁶⁷ Ibid.

²⁶⁸ GFIN ‘Terms of Reference for Membership and Governance of the Global Financial Innovation Network’ 2019 available at <https://www.fca.org.uk/firms/innovation/global-financial-innovation-network>, accessed on 10 June 2022.

²⁶⁹ Ibid – ‘if accepted by the Coordination Group Members, the Chair shall recommend to the GFIN that the applicant be invited to become a Member. Members may submit written comments on any applicant to the Coordination Group after receiving the Chair’s notification. Following a time specified by the Chair for comments by the Network, the Chair shall issue an invitation to the applicant to join the GFIN as a Member unless the comment(s) received require further decision by the Coordination Group.’

framework.²⁷⁰ The relevance of these connections is to learn from one another and offer advice on how technologies involving payments, lending, savings, and insurance have been or currently are regulated. The information shared through this platform is invaluable to easing how we do business and sharing information with the rest of the interested parties. In terms of the FSRA.²⁷¹

Section 58 provides as follows:

(4) The Financial Sector Conduct Authority may do anything else reasonably necessary to achieve its objective, including—

(a) cooperating with its counterparts in other jurisdictions; and

(b) participating in relevant international regulatory, supervisory, financial stability and standard setting bodies.

This is relevant to the research as it furthers the mandate of the FSRA and promotes international collaboration for the greater good of consumers.²⁷² Therefore, participation in the global sandbox ensures that the start-ups or inventions will encourage cross-border regulatory harmonisation and permit pioneers to scale swiftly on a local or international basis,²⁷³ introducing a convergent way of regulating a fast-paced industry that relies on multi-jurisdictional acceptance to achieve growth is a legal triumph. This ensures the consumers and the market entrants that innovation is welcomed, and the growth thereof is important. That said, these multi-jurisdictional sandboxes have proven to be attractive for consumers and regulators alike.

In terms of the UNSGSA, which focuses its research on Latin America-Caribbean regions “close to 20 per cent of all FinTech operate in more than one jurisdiction, because individual regional markets, in some instances, proved to be too small.”²⁷⁴ This is also true for other jurisdictions like Bali,²⁷⁵ for instance, where according to the FinTech scoping report,

²⁷⁰ Ibid.

²⁷¹ FSRA – s 58(4).

²⁷² Ibid.

²⁷³ GFIN op cit note 266.

²⁷⁴ Ibid.

²⁷⁵ UNSGSA FinTech Working Group op cit note 264.

has embraced the promise of FinTech.²⁷⁶ “The ability to deliver a financially sustainable solution, for many innovators, necessitates a scale beyond the range of country-level markets.”²⁷⁷ It is then imperative that “multi-jurisdictional sandboxes facilitate cross-border expansion through shared testing programs that have the potential to reduce the regulatory arbitrage across individual sandbox jurisdictions.”²⁷⁸ According to the Global Financial Innovation Network (GFIN), “multi-jurisdictional sandboxes can function as product assessment or policy testing sandboxes or both.” Currently, “two multi-jurisdictional sandboxes are currently underway” within the network,²⁷⁹ propositioned as a ‘global sandbox.’ The GFIN expedites information ‘transfer and learning within its stakeholders’ on common concerns, including RegTech, AML/CFT initiatives, and new product trials for innovative companies intensifying throughout the borders.²⁸⁰ The GFINs early individual sandbox initiatives attracted largely advanced economic regulators. However, it has eventually matured to incorporate a larger financial inclusion focus.

Like the IFWG, the GFIN has three main functions to realise the goal of facilitating a successful global sandbox. They are outlined in the consultation document,²⁸¹ “the first one is forming a network of regulators, which includes a community of regulators and associated institutes that encourage data and knowledge sharing on evolving innovation trends, their local testing, examinations and proposals, and the establishment of straightforward contact information for organisations.”²⁸² This is more like the regulatory unit in the IFWG innovation hub, in that it assists firms with gathering information from different jurisdictions. Secondly, “forming dual strategy work and regulatory trials by partnership among regulators on key policy requests to notify the method taken by regulators”,²⁸³ hoping to help the work of

²⁷⁶ Ibid – ‘The International Monetary Fund and the World Bank Group launched the Bali FinTech Agenda, a set of 12 policy elements aimed at helping member countries to harness the benefits and opportunities of rapid advances in financial technology, while at the same time managing the inherent risks. The agenda proposes a framework of high-level issues that countries should consider in their own domestic policy discussions and aims to guide staff from the two institutions in their own work and dialogue with national authorities.’

²⁷⁷ Idem at 28.

²⁷⁸ UNSGSA FinTech Working Group op cit note 263.

²⁷⁹ FCA ‘Global Financial Innovation Network’ 2019 available at <https://www.fca.org.uk/firms/innovation/global-financial-innovation-network>, accessed on 10 June 2022 – ‘The GFIN is a network of more than 70 organizations committed to supporting financial innovation in the interests of consumers. This includes the ability to conduct a cross-border test – a solution for firms wishing to test innovative products, services, or business models across more than one jurisdiction.’

²⁸⁰ Global Financial Innovation Network (GFIN), https://files.consumerfinance.gov/f/documents/bcfp_global-financial-innovation-network_consultation-document.pdf.

²⁸¹ Ibid.

²⁸² Ibid.

²⁸³ Ibid.

standard-setting bodies, ²⁸⁴ including regulators collaborating on RegTech and SupTech resolutions. This would be like the accelerator hub, where regulators come together and test solutions. The last function is the establishment of “cross-border trials, which help businesses in managing trials or testing across multiple jurisdictions, that will allow the GFIN to traverse multi-jurisdictional regulatory concerns.”²⁸⁵ The testing will be conducted for both the business-to-business models (B2B) and business-to-consumer (B2C).

Other supernational sandboxes have been started by other jurisdictions, focusing on cross-border testing like the API Exchange (APIX).²⁸⁶ This was launched by the ASEAN Financial Innovation Network (AFIN) as a cross-border, open architecture platform to improve financial inclusion.²⁸⁷ Using the APIX network, financial institutions and FinTech firms can link with one another through a cross-border marketplace and conduct collaborative experiments in a sandbox among financial industry participants.²⁸⁸ This forum also enables the regulators to facilitate the adoption of application programming interfaces “to push digital transformation and financial inclusion across the Asia Pacific region.”²⁸⁹ This forum also enables the regulators to facilitate the adoption of application programming interfaces to drive digital transformation and financial inclusion across the Asia Pacific region.²⁹⁰ APIX and GFIN are both multijurisdictional sandboxes and they are capable of assisting economies to scale because they are run by more than one regulator at the same time, which provides unlimited access to regulators and firms.

The preliminary resources in developing a multiple jurisdictions sandbox framework required are significant, given the challenges in incorporating all the financial laws from differing jurisdictions. As an alternative, therefore, “developing a policy testing sandbox may be less resource intensive than a product testing sandbox if the regulator admits only a small number of firms to test a policy.”²⁹¹ However, this is not a hard and fast rule, because regulators can if they must, admit an unlimited number of firms to a sandbox. Eventually, whatever model of the regulatory sandbox the regulators select will best suit their needs at that time.²⁹² We have

²⁸⁴ Ibid.

²⁸⁵ UNSGSA FinTech Working Group op cit note 264.

²⁸⁶ Idem.

²⁸⁷ Ibid.

²⁸⁸ Ibid.

²⁸⁹ Ibid.

²⁹⁰ Ibid.

²⁹¹ FCA GFIN op cit note 277.

²⁹² Ibid.

seen that regulatory sandboxes make it possible for financial institutions to connect with FinTech start-ups around the world. This is an example given by “the Inter-American Development Bank (IDB) that sponsored FinConecta.²⁹³ This is a paramount example of this sandbox integrating financial institutions in Latin America and the Caribbean with FinTechs around the world.”²⁹⁴ Finally, industry sandboxes would enable firms in different countries to conduct cross-border experiments in a cloud-based environment.²⁹⁵ Cross-border trials increase firms’ ability to “scale new technologies in multiple jurisdictions” and in-turn develop cross-border applications that can satisfy consumers’ needs for cross-border financial services or solutions.²⁹⁶

A cross-border industry sandbox also provides regulators with the information necessary to inform the licensing processes and further reduce entry barriers to the market for newcomers. Cross-border industry sandboxes simply work if there is a sufficient level of collaboration among regulators across borders. We saw this with the FCA. The same is required by a global sandbox. The GFIN proposes to facilitate the operation of cross-border industry sandboxes,²⁹⁷ by providing clarity on regulators' expectations about the firm’s use of innovative technologies and novel business models.²⁹⁸

4.2. *GFIN – Cross-Border Testing*

The GFIN had its first cohort in 2020, with 23 regulators across eight regions participating in the initiative.²⁹⁹ There were a total of 38 applications that showed interest in products and ideas to experiment in multiple jurisdictions in real-time.³⁰⁰ The participating regulators include some of the most progressive and influential market conduct authorities,

²⁹³ FinConecta provides a platform and program through which FinTechs, and financial institutions can integrate with one another.

²⁹⁴ Ibid.

²⁹⁵ UNSGSA FinTech Working Group op cit note 264.

²⁹⁶ Ibid – ‘More than 50 percent of the regulators interviewed for this report privately mention that it is difficult to develop the required depth of knowledge of the FinTech space to inform sound policymaking.’

²⁹⁷ Global Financial Innovation Network ‘Consultation document’ August 2018 – ‘The desired outcome of this initiative is a global financial services system that better serves broader society through harnessing new technology to provide an overall improved level of service and experience, and integrity. It is also to create a new framework for cooperation between financial services regulators, which complements the work of other standard setting organisations who are assessing financial innovation.’

²⁹⁸ Cheng-Yun Tsang ‘From industry sandbox to supervisory control box: rethinking the role of regulators in the era of FinTech’ 2019 Journal of Law, Technology and Policy at 356–403.

²⁹⁹ GFIN ‘The GFIN Cross Border Testing Lessons Learned – Cohort 1.0’ available at <https://www.thegfin.com/crossborder-testing>, accessed on 10 August 2022.

³⁰⁰ Ibid.

including the UK's FCA, Singapore's Monetary Authority of Singapore (MAS) and Kenya's Capital Markets Authority (CMA).³⁰¹ Unfortunately, South Africa was not part of the first cohort, possibly since the IFWGs regulatory sandbox is still in its infancy and is still conducting its first regional regulatory sandbox testing. The FCA, on the other hand, has had more than seven cohorts and is looking to scale and include operations in different jurisdictions. This is the reason why a global sandbox is necessary to understand how a multi-jurisdictional product can operate in more than one jurisdiction at the same time, and in real time.

This kind of collaboration would assist the GFIN in realising one of its terms of reference, including acting as a network of regulators to collaborate and share the experience of innovation in respective markets, including emerging technologies and business models, and providing accessible regulatory contact information for firms.³⁰² The most effective and recent testing took place in 2019 with Cross Border Testing (CBT), and the following experiences were observed from the members that participated in the pilot, where the regulators made several changes to improve the application stage of the CBT.³⁰³ These changes include 'agreeing upon a common understanding of the concept of CBT and issuing additional guidance to firms.' This provided firms with greater clarity on what CBT was and how it would work in practice.³⁰⁴

The second one was developing a digital GFIN Single Application Form that allowed firms to submit their applications to multiple regulators using one form. This made it much easier for companies because they did not have to do the same work twice. It also made it easier for regulators to review and evaluate applications in a way that was more efficient and effective.³⁰⁵ Finally, creating a regulatory compendium³⁰⁶ allows participants to access documents that provide details of each regulator's jurisdiction, the types of innovation services it offers, and its requirements for cross-border testing. These provided firms with the relevant key information in one easy-to-access document to help them identify the most appropriate regulator to collaborate with on their propositions.

³⁰¹ Ibid – for a more comprehensive list of all the participating regulators.

³⁰² GFIN op cit note 278.

³⁰³ Ibid.

³⁰⁴ Cheng-Yun Tsang op cit note 294.

³⁰⁵ Ibid.

³⁰⁶ GFIN 'Regulatory Compendium' 2021 available at <https://www.thegfin.com/compendium-1>, accessed on 10 August 2022. 'this compendium includes each regulator's geographical jurisdiction, the types of innovation services it offers, whether it participates in the cross-border testing programme, it's specific requirements for cross-border testing and its contact information.'

Although the CBT trial went well, the regulators had incredible success in running the pilot and the first cohort. There were some challenges, but these challenges were not enough to deter the mission and mandate set out by the GFIN in creating a global testing sandbox to ease the burden of jurisdictional barriers. Of all the suggestions that were made by the participants in the cohort, the regulatory compendium must be one of the most progressive ideas in regulatory development. The compendium not only allows participants to choose the jurisdictional partners they want to test with; this informative pool also informs potential investors when a regulation is explicitly required and when a regulation is heavily implied. This is incredible in the global sphere, and it makes it easier for innovators and members to base their choices of partners on accurate information and gauge market expectations. However, a huge challenge that was picked up was at the application stage. This is where firms were required to select the regulators that they wanted to collaborate with and test their propositions.

In many instances, firms selected many regulators in their applications to collaborate with, with some selecting over 12 different regulators.³⁰⁷ However, many of these firms had either not adequately prepared for or were practically unable to meet the specific eligibility criteria for each of the jurisdictions they had applied to. Because of this, the GFIN received many applications that were not good enough, and many firms could not move on to the next step.³⁰⁸ This then becomes a user error. The regulatory framework has been properly set up and the trial-and-error phase has been completed.³⁰⁹ However, some participants were either too eager or did not apply their minds to the application, which compromised their applications. This is also a lesson learned for future cohort applicants to take care of when sending their applications to the GFIN for CBT.³¹⁰ The participants also lamented that they made these mistakes due to the lack of information from the GFIN, like sharing relevant information with the applicants, such as websites or contact persons in respective jurisdictions.

However, the first cohort was a mixture of applicants, and this provided a much-needed variety to properly assess how each service could be regulated and how each service could be used in each jurisdiction.³¹¹ These sectors include retail lending, wholesale financial markets,

³⁰⁷ GFIN op cit note 278.

³⁰⁸ Ibid.

³⁰⁹ Ibid.

³¹⁰ Ibid.

³¹¹ Cheng-Yun Tsang op cit note 294.

retail banking, general insurance and RegTech, with different underlying enabling technologies being put forward for potential testing. Most applications received were from the RegTech sector.³¹² The GFIN said this was not surprising because many of the participating jurisdictions did not require RegTech firms to be licensed or authorised to provide their services.

This made it easier for these firms to test across borders.³¹³ This also helped the participating regulators focus their resources elsewhere, especially where the applicants faced challenges where, in some instances, the innovation was novel and required regulatory approval that did not have a precedent in the jurisdiction that they had applied to.³¹⁴ This also made it difficult for the regulators to fully anticipate the level of resource requirements, regulatory involvement and support that would be required and appropriately factor these into their plans.³¹⁵ Therefore, this also raised challenges for regulators and firms in being able to align to broader CBT timelines and deadlines.³¹⁶ Many challenges could be noted by a single form to apply to join the global sandbox. However, this has improved the level of participation in the financial sector and has raised the level of globalisation to its maximum.

Nowadays, being connected to the world does not have to take hours of travel and thousands of rands to go and learn new things. There are so many opportunities for businesses and consumers to do things online. The world of technology has progressed so much that people are now buying properties in the metaverse; shopping malls and airstrips have been sold; and the internet is the place to be. Branding includes growing in the technology space. Nothing is happening anywhere right now that does not have an online copy. Yes, this is fast-paced growth and regulators must be working tirelessly to regulate these spaces. There is an issue that begs the question that, everything is coded and, therefore, the code is the law. That is a complex issue of governing AI, ML and Big Data, since these technologies tend to develop faster than the regulator can keep up with all the updates, all the plugins, and all the cookies. Some may even wonder if it is not easier to let the code be the law.

Even though that is a fascinating question, it is philosophical and requires a comprehensive study of what the law is and what a computer code is. However, it is undeniable

³¹² Ibid.

³¹³ GFIN 'Regulatory Compendium' op cit note 302.

³¹⁴ Ibid.

³¹⁵ Ibid.

³¹⁶ Ibid.

what technology has been able to achieve in such a short timeframe. The way of doing business has improved and now includes one form that can be completed to expand and scale your business in other jurisdictions without the added costs and hours of research on the applicable laws in each jurisdiction. This information is available on demand, and consumers can also learn how these products work in each jurisdiction. The opportunities are endless, and the world has become accustomed to technology. Consumers and regulators have become accustomed to being part of the rotating technological world. However, with change comes challenges, and we have experienced many challenges regarding online safety and consumer privacy.

There is always a negative to a positive and the problem faced by regulators is safeguarding consumers when using these online platforms. Although FinTech has introduced a better way of doing business both for consumers and firms, there is always an underlying threat to using the applications. The acceptance of FinTech firms has greatly increased competition in the market, putting new entrants in direct competition with established companies, and innovation has helped a lot of people get access to finance and financial products. FinTech has increased productivity in some sectors and has improved working relations by providing firms with the ability to work or operate remotely.

However, there has been a wave of internet fraud, scams and data breaches that have affected not only the consumers but the companies themselves, causing the companies to lose credibility, profits, and the most important aspect of online presence: consumers' private information. Information or data collected by multiple jurisdictions at the same time has become a commodity. Scammers or hackers use this data in malicious ways to access private information.³¹⁷ This is not a new problem. It has, however, been magnified by the amount of data that is being shared or is being required from the user to ensure the application is operational. However, when there is a data breach and users or consumers cannot trust a product, then the firm faces a reputation damage issue.³¹⁸ It is different when talking about a breach in the financial sector because the reason for the updated regulatory reforms was to prevent another market collapse like the 2008 GFC. However, it seems like the financial sector

³¹⁷ Anastasiia Yevdokimova 'Uber Breach 2022: Detect the Destructive Cyber-Attack Causing the Complete Organization's System Takeover' 19 September 2022 SOC Prime available at <https://socprime.com/blog/uber-breach-2022-detect-the-destructive-cyber-attack-causing-the-complete-organizations-system-takeover/#:~:text=On%20September%2015%2C%20Uber%20officially,to%20the%20company's%20critical%20infrastructure>, accessed on 19 September 2022.

³¹⁸ Ibid.

market is looking at a different kind of collapse if consumers and investors are harmed because of a data breach. The issue now is whether these multi-jurisdictional firms will uphold their reputation and the integrity of the product in a technological world.

Will this fear be abated by being part of a sandbox and will testing assist in preventing future problems? Research suggests that continuous testing is prudent to ensure market stability, consumer safety and investor satisfaction. Firms that have been part of some form of testing or those that have participated in a regulatory sandbox have been seen to have received a seal of approval, which garners user confidence and market acceptance. Therefore, it is my conclusion that with technology comes greater risks. However, these risks do not have to be compliant in nature. The least that firms can do to protect their consumers is to use the available resources such as global sandboxes or innovation hubs to educate themselves on the implied risks of operating in certain jurisdictions.

It is unfair to assume that all consumers who use the technology will be doing so at their own risk. Some consumers, as we have discussed above, do not have a clear understanding of the implications of using those platforms. It is, therefore, important for the regulators to continuously receive user reports, including user errors and application errors, that could help future firms and improve RegTech going forward. It is also the author's contention that the sandbox can provide a testing section for FinTechs that have fallen victim to hacking or have been breached to learn how future attacks can be prevented. This will also boost the financial literacy campaign that many regulators in emerging economies have already embarked on.³¹⁹

³¹⁹ Cheng-Yun Tsang op cit note 294.

CHAPTER 5

5. CLOSING REMARKS AND RECOMMENDATIONS

5.1. *Regulating the future*

The question of who is regulating who is the same as asking if the code is the law or if the law is the code. All these questions present a paradox and, as such, are asked rhetorically to point out the perplexing complication they bring. It is trite that regulators have always been seen and regarded as the bad guy for merely doing their work and it took just about a decade to remove that tag. It will take longer, no doubt, as new problems emerge that need to be solved and so the cycle continues. The law has certain core principles that apply either in contract law, delict, or property law; these principles are so deeply entrenched in each jurisdiction and form part of the jurisprudence of that country.

Should a conflict arise in these parts of the law, the rules to follow are in most instances clear and require no further explanation to the trained eye.³²⁰ However, this notion does not apply to FinTech; there are no set principles or doctrines that have been developed over the years or precedent that can lead to a straightforward answer. The issue is not only that one must understand FinTechs, but also to remain up to date with the latest upgrade, new features and the law that governs these applications.³²¹ Dissecting a FinTech matter is, to use the same metaphor above, like opening a nesting doll.³²² The layers of different laws that apply in one application are many and, in some cases, also involve cross-border transactions.

Accordingly, can we say we are truly regulating when in fact the very thing that is being regulated can change or develop in a few months? Is the regulator doomed to be left behind when technology advances or will regulators also keep up and perhaps have measures in place for future designs? We have seen that much work has been done to incorporate the regulators

³²⁰ The World Bank op cit note 260.

³²¹ Idem at 16 ‘Several factors have been identified that collectively contribute to, or detract from, FinTech growth in South Africa going forward. These are: The macroeconomic environment Funding options, the competitive environment, digital readiness, and the innovation ecosystem.’

³²² IFWG media statement op cit note 231.

into the technology sector. For instance, we now have RegTech and SupTech, which brings comfort about the future that these entities will not be left behind as they improve, grow, and learn as they progress. The IFWG has the mandate to record new market entries and discuss the implications for the consumers thereof. Other organisations are conducting independent studies regarding the use of alternative means of financial transactions and how that will likely improve in the future or decline.³²³ The future of regulation is in the hands of the innovators and the willingness of the consumers to accept new ways of doing business. The question of costs always arises, as implementing these new ways of doing business is expensive. The aim of including digital finance solutions is to improve reach to those in remote areas and to include them in the financial markets. The other aim is for small businesses to have a means of providing a safe environment for both their employees and customers from robbery or fraudulent activities.³²⁴

Implementing and implanting new systems from other jurisdictions is not a new practice for South Africa and other jurisdictions borrowing from our laws and techniques is admirable. However, this time, implanting a digital framework that learns on the job and is both forward-thinking and consumer conscious seems like a daunting task. The FSCA has assured a smooth and decongested financial services sector framework to enable FinTech to thrive in a fertile environment. Further, it allows new and better ways to reach those who have remained unbanked or disconnected due to their financial status or geographical location. Regulating the future and the future of regulation is expensive and comes with immense risks. However, it is a chance to take in securing a financially inclusive society, including thin-file consumers and funding SMMEs.

5.2. *The Next Best Thing*

During its six years of operating regulatory sandboxes, the FCA has been referenced and copied many times, which proves to the UK that they are on the right path. They also are looking for the next best thing, they have completed six cohorts and are now in the seventh,

³²³ Hayworth op cit note 205 at 13 ‘To better understand the barriers limiting uptake of digital solutions by both merchants and customers we have started a pilot project called Cashless Khayelitsha,’ available at <https://www.71point4.com/digital-payment-solutions-for-informal-businesses/>, 10 June 2022.

³²⁴ Idem at 19.

but what is the next step? From the Kalifa report,³²⁵ digital sandboxes and scaleboxes are next on the agenda for thinking about the future. This is, as the report said, in the pipelines and the UK is also thinking about introducing a trade law aspect to FinTech, which not only solidifies the bond between jurisdictions, but also legitimises the transactions. For South Africa, the next best thing is still a work in progress. The FSCA is working tirelessly to ensure a safe space for consumers to work and a market that conducts itself accordingly.³²⁶ There have been many success stories coming from the public about the new ways of transacting. The IFWG Regulatory Sandbox's first cohort received an aggregate of 54 exclusive submissions from 49 candidates.³²⁷

The applicants were selected from either the primary or secondary industry segment, which included “payments; lending; savings and deposits; insurance; investments; financial planning and advisory services; capital raising; and B2B technology.”³²⁸ Only nine applicants reached the Regulatory Sandbox for testing.³²⁹ This was the very first instalment of the sandbox testing and from the failures and successes; albeit small, there is hope that the Regulatory Sandbox can work going forward. However, for the Sandbox to be useful in accommodating and servicing the financial sector, the innovation hub must provide support to firms and an easier method of application during the early stages to retain a higher number of applicants and to help solidify the notion of the regulatory sandbox in the financial sector.

FinTech is a vital method to improve financial inclusion. For instance, parking guards are now able to collect the parking fee via a handheld card machine that customers can tap and go. The same goes for the windshield wiper at the traffic lights, who can quickly earn a few rands by wiping your windows and windshield before the light turns green. Previously, these transactions were one-sided meaning that the window is wiped, but there is no money changing hands. Not to suggest that this was an agreement, to begin with, rather good practice and so to speak an unspoken arrangement. Now, the man with the sponge at the traffic light can show a

³²⁵ Ron Kalifa Review op cit note 143.

³²⁶ Hayworth op cit note 205 at 13.

³²⁷ Lyle Horsley ‘Feedback on the Intergovernmental FinTech Working Group’s first regulatory sandbox initiative’ 12 October 2022 IFWG available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2022/IFWG-First-Regulatory-Sandbox-Report-and-media-release-October-2022>, accessed on 30 November 2022.

³²⁸ Idem at 9.

³²⁹ Ibid.

motorist a card machine (*Yoco* or *Ikhokha*)³³⁰ and the driver can decide whether to tip and go or not.³³¹ Card machines are also useful on street vendors. Digital platforms have helped legitimise informal businesses and have made capital redistribution a reality. These machines help generate data for the FSPs and the regulator to gauge the penetration and hopefully help the regulator implement safer mechanisms to protect the SMMEs, and even informal business owners; thereby ensuring financial inclusion regionally and then hopefully looking into international scale.

5.3. *Conclusions and Recommendations*

Is it feasible to use regulatory sandboxes in South Africa to help relevant regulators and stakeholders improve financial inclusion through FinTech in the current unequal financial landscape? It is not only feasible but recommended to embrace the regulatory sandboxes initiative in South Africa. Sandboxes have assisted stakeholders involved with understanding the varying financial products that can be made available to help with financial inclusion, affect policy decisions and boost the regulatory toolset. Financial inclusion is an important aspect to consider in a country such as South Africa. The historical injustices have left deep scars on the financial sector, which are visible even today. According to the FinTech Scoping Report “[the], real GDP growth is expected to remain below 2 per cent in the medium term.”³³²

This does not bode well for the already low per capita income which is predicted to remain significantly low and will not make a serious dent in families’ finances for the next few years. This, by extension, does not mean well for the FinTechs in the market, who will be starved due to the lack of uptake from the consumers they are trying to include. The number one cause of the slow rate of GDP growth lies in the barriers to financial inclusion. However, if there is no employment, then families lose the ability to earn a living; therefore, cannot help redistributing capital by buying bread from the spaza shop and paying the taxi driver, and so forth. This is bad for everyone in the market, because prices go higher as fewer people are engaging in the

³³⁰ Tage Kene-Okafor ‘South African payments start-up Yoco raises \$83M Series C backed by Dragoneer’ 27 July 2021, TechCrunch+ available at <https://techcrunch.com/2021/07/27/south-african-payments-startup-yoco-raises-83m-series-c-led-by-dragoneer/>, accessed on 10 June 2022.

³³¹ Hayworth op cit note 205.

³³² UNSGSA FinTech Working Group op cit note 264.

market.³³³ The worst of it all is that local FinTechs may have to look to regional expansion and demand in global markets to scale organically.³³⁴

Therefore, to ensure that FinTechs have a chance of success in South Africa, like in other jurisdictions (i.e., the UK, Brazil, Uganda, and Singapore), changes in the way we view technology must be made. The Kalifa report refers to ‘upskilling’ the workforce, which means teaching people new tricks and involving them in the creation of a new world. For there to be a great fourth industrial revolution, the government, the regulators, private companies, innovators, and investors must ensure that there is room for people (old and young) to learn new skills and create space for new positions to be open in departments all over the country. It is impossible to have a technological revolution in a country lacking basic financial literacy. Thus, my suggestion is to implement the upskilling/reskilling or even just skill transfer programmes to the masses to ensure that as many people are receiving the best of the new technology wave. FinTech can create many more jobs,³³⁵ as seen in the UK during the COVID-19 pandemic, when many people were able to get a job working for FinTech companies. The barriers to learning, skills transfers and financial inclusion need to be broken for the new era of financial sector reform to fully emerge.

³³³ Ibid.

³³⁴ Ibid.

³³⁵ Ron Kalifa Review op cit note 143.

BIBLIOGRAPHY

A. Primary Sources

Legislation

Companies Act 73 of 2008.

Consumer Protection Act 68 of 2008.

Financial Advisory and Intermediary Services Act 37 of 2002.

Financial Markets Act 19 of 2012.

Financial Sector Regulation Act 9 of 2017.

Insurance Act 18 of 2017.

National Payment Systems Act 78 of 1998.

Protection of Personal Information Act 4 of 2013.

Financial Intelligence Centre Act 38 of 2001.

Financial Intelligence Centre Amendment Act 1 of 2017.

National Credit Act 34 of 2005.

Bills

Conduct of Financial Institutions Bill GN 808 in GG 42114 of 14 December 2018.

International Legislation: United Kingdom

Financial Services Act 2012.

Financial Services and Markets Act 2000.

B. Secondary Sources

Books

Richard Zimmermann & Daniel Visser *Southern Cross Civil Law and Common Law in South Africa* (1996) 2.

Journal Articles

Amy Friend 'The Financial Conduct Authority's Innovation Journey: Moving Forward in the Face of Uncertainty Alliance for Innovative Regulation' 2021.

Anastasiia Yevdokimova 'Uber Breach 2022: Detect the Destructive Cyber-Attack Causing the Complete Organization's System Takeover' 19 September 2022 SOC Prime.

André, Boraine & Jani, van Wyk 'Credit bureaus in South Africa and Namibia: a comparative analysis of the regulatory frameworks evaluated against the World Bank's principles for credit reporting — part I and part II' (2017) 50 (L2) *CILSA*.

Andrew Bailey 'Financial Conduct Authority Mission: Our Future Approach to Consumers' 2017.

Andrew Schmulow 'The four methods of financial system regulation: An international comparative survey' (2015) 26 *Journal of Banking and Finance and Practice*.

Antonique Koning, Izaguirre; Juan, Carlos & Singh, Aveesha 'Customer Outcomes-Based Approach to Consumer Protection: A Guide to Measuring Outcomes.' 2022 Reading Deck. Washington, D.C.

Appaya, Mandepanda Sharmista; Gradstein, Helen Luskin; Haji Kanz, Mahjabeen 'Global Experiences from Regulatory Sandboxes (English)' FinTech Note, No. 8 Washington, D.C. World Bank Group.

Arif Ismail, Caroline da Silva, Kershia Singh and Pieter Smit 'FinTech Workshop 19-20 April 2018' IFWG

available at <https://www.gov.uk/government/publications/the-kalifa-review-of-uk-FinTech#full-publication-update-history>.

Ayse Demir, Vanesa Pesqué-Cela, Yener Altunbas & Victor Murinde 'FinTech, financial inclusion and income inequality: a quantile regression approach' *The European Journal of Finance* vol 28:1 (2022).

Ben Shenglin, Kunal Khatri & Kieran Garvey 'Guide to promoting financial and regulatory innovations' Cambridge Center for alternative finance 2018.

Benjamin, Roberts; Jarè, Struwig; Steven, Gordon & Thobeka, Zondi 'Financial Literacy in South Africa: Results from the 2020 Baseline Survey' 2021 Report prepared by the Human Sciences Research Council (HSRC) Developmental Capable and Ethical State (DCES) Research Division for the Financial Sector Conduct Authority available at

<https://www.fscamymoney.co.za/Research%20Documents/Financial%20Literacy%20in%20South%20Africa%20Results%20from%20the%202020%20Baseline%20Survey.pdf>.

C Theophilopoulos, Book Reviews: Epistemology and Methodology of Comparative Law. Edited by Mark van Hoecke, Katholieke Universiteit Brussel. Oxford and Portland, Oregon: Hart Publishing (2005) SALJ.

Chehade, Nadine & Notta, Sabaa 'How Are FinTech Tackling the Arab World's \$123B SME Finance Gap? 2021 CGAP, available at <https://www.cgap.org/blog/how-are-FinTechs-tackling-arab-worlds-123b-sme-finance-gap>.

Cheng-Yun Tsang 'From industry sandbox to supervisory control box: rethinking the role of regulators in the era of FinTech' 2019 Journal of Law, Technology and Policy at 356 – 403.

Chitimira Howard & Magau Phemelo T 'A legal analysis of the use of innovative technology in the promotion of financial inclusion for low-income earners in South Africa' (2021) 24 PER / PELJ.

Claire Hayworth 'Alternative Data Landscape in South Africa' February 2022, 71point4 numbers to life.

David Strachan et al. 'A Journey Through the FCA Regulatory Sandbox the Benefits, Challenges, and Next Steps' 2018 Centre for Regulatory Strategy EMEA, Deloitte, available at <https://appgFinTech.org.uk/reports/a-journey-through-the-fca-regulatory-sandbox/>.

Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess 'The Global Findex Database 2017: Measuring Financial Inclusion and the FinTech Revolution' Washington, DC: World Bank 2018 doi:10.1596/978-1-4648-1259-0 Creative Commons Attribution CC BY 3.0 IGO.

Digital Financial Inclusion Trends Presentation and Panel Discussion 21 July 2022, FSCA.

FATF (2021), Anti-money laundering and counter-terrorist financing measures – South Africa, Fourth Round Mutual Evaluation Report, FATF, Paris.

FCA 'Global Financial Innovation Network' 2019 available at <https://www.fca.org.uk/firms/innovation/globalfinancial-innovation-network>.

FCA 'Promoting competition' 2016.

FCA Regulatory Sandboxes Accepted Firms, Cohort 7, and New Firms 2022 available at <https://www.fca.org.uk/firms/innovation/regulatory-sandbox/accepted-firms#webform-submission-page-feedback-form-node-94006-add-form>.

FSCA Regulation Plan 1 April 2022 – 31 March 2025.

Global Financial Innovation Network ‘Consultation document’ Global Financial Innovation Network (GFIN), https://files.consumerfinance.gov/f/documents/bcftp_global-financial-innovation-network_consultation-document.pdf.

Howard Chitimira & Menelisi Ncube ‘The Role of Regulatory Bodies and Other Role-Players in the Promotion of Financial Inclusion in South Africa’ (2020) 16(1) *Acta Universitatis Danubius Juridica*.

IFWG ‘Media Statement on the Launch of the Intergovernmental FinTech Working Group (IFWG) Innovation Hub’ 7 April 2020, available at <http://www.ifwg.co.za/>, accessed on 3 June 2020.

IFWG ‘Media Statement on the Launch of the Intergovernmental FinTech Working Group (IFWG) Innovation Hub’ 7 April 2020 available at <http://www.ifwg.co.za/>.

Innovation for Poverty Action ‘Financial Inclusion Program Areas’ 2018 is available at <https://www.poverty-action.org/publications>.

Jan Augustyn, “SMME Credit Information Assessment in South Africa” December 2019 Research Report prepared for Finfind.

Jayoung James, Goo & Joo-Yeun, Heo ‘The Impact of the Regulatory Sandbox on the FinTech Industry, with a Discussion on the Relation between Regulatory Sandboxes and Open Innovation’ (2020) 43(6) *Journal of Open Innovation: Technology, Market, and Complexity*.

Jeník, Ivo, and Schan Duff. 2020. “How to Build a Regulatory Sandbox: A Practical Guide for Policy Makers.” Technical Guide. Washington, D.C.: CGAP.

Jo Ann Barefoot ‘Regulation Innovation: The FCA’s Christopher Woolard’ Barefoot Innovation Group, 2017.

Jon Truby ‘FinTech and The City: Sandbox 2.0 Policy and Regulatory Reform Proposals’ 2018 *International Review of Law, Computers & Technology* 2020.

Julia Kagan ‘M-Pesa’ *Investopedia* 31 October 2020, available at <https://www.investopedia.com/terms/m/mpesa.asp>.

Kagiso Mothibi ‘Covid-19 Triggers Quick Innovation, Disruption, and Re-Invention in Financial Services Sector’ FSCA 2020.

Kagiso Mothibi, Dino Lazaridis ‘FinTech Digital Platforms – An Investigation into FinTech Digital Platform Activity in South Africa and Their Regulatory Implications’ 2021 IFWG Research Document, available at <https://www.fsca.co.za>.

Kalifa Review of UK FinTech Webinar launch

- Kelly Jemima, 'A "FinTech sandbox" might sound like a harmless idea. It's not' 2018 Financial Times, available at <https://www.ft.com/content/3d551ae2-9691-3dd8-901f-c22c22667e3b>.
- Lauren Fahy 'Regulator Reputation and Stakeholder Participation: A Case Study of the UK's Regulatory Sandbox for FinTech' European Journal of Risk Regulation vol 13 issue 1 (2022) Cambridge University Press.
- Legal Dissertation: Research and Writing Guide, available at <https://law.indiana.libguides.com/dissertationguide#:~:text=Doctrinal%20legal%20research%20methodology%2C%20also,%2C%20statutes%2C%20or%20regulations>.
- Lyle Horsley 'Feedback on the Intergovernmental FinTech Working Group's first regulatory sandbox initiative' 12 October 2022 IFWG available at <https://www.resbank.co.za/en/home/publications/publication-detail-pages/media-releases/2022/IFWG-First-Regulatory-Sandbox-Report-and-media-release-October-2022>.
- MG Van Niekerk & NH Phaladi 'Digital Financial Services: Prospects and Challenges' (2021) 24 *PER / PELJ*.
- Mishra R & S Bvuma 'Conceptualising the Relationship between Mobile Money Banking and Financial Inclusion to Support Sustained Economic Growth' (2022) 13(1) *African Journal of Public Affairs*.
- Mmiselo Freedom Qumba 'A Comparative Analysis of The Twin Peaks Model of Financial Regulation in South Africa and The United Kingdom' (2022) 139 *SALJ*.
- Momentum 'legal updates' no. 23 of 2017, available at https://eb.momentum.co.za/webDocumentLibrary/LegalUpdates/2017/Legal_Update_23-2017_Financial_Sector_Regulation_Act_September_2017.pdf.
- Purva, Khera; Stephanie, Ng; Sumiko, Ogawa & Ratna, Sahay 'Measuring Digital Financial Inclusion in Emerging Market and Developing Economies: A New Index' (2021) WP90 *International Monetary Fund* at 3 & Purva, Khera; Stephanie, Ng; Sumiko, Ogawa & Ratna, Sahay 'Is Digital Financial Inclusion Unlocking Growth?' (2021) WP167 *International Monetary Fund* at 4, available at <https://www.imf.org/en/Publications/WP/Issues/2021/03/19/Digital-Financial-Inclusion-in-Emerging-and-Developing-Economies-A-New-Index-50271>.
- Ron Kalifa 'Kalifa Review of UK FinTech' Policy Paper HM Treasury 2021.
- Svein Andresen (Secretary-General, Financial Stability Board) 'Regulatory and Supervisory Issues from FinTech' Cambridge Centre for Alternative Finance Conference on

Navigating the Contours of Alternative Finance, 29 June 2017, available at: <http://www.fsb.org/wp-content/uploads/Cambridge-Centre-for-Alternative-Finance-Regulatory-and-Supervisory-Issues-from-FinTech.pdf>.

Tage Kene-Okafor ‘South African payments start-up Yoco raises \$83M Series C backed by Dragoneer’ 27 July 2021, TechCrunch+ available at <https://techcrunch.com/2021/07/27/south-african-payments-startup-yoco-raises-83m-series-c-led-by-dragoneer/>.

Tebatso Mmereki ‘The Financial Sector Conduct Authority: Draft for Public Comment: FSCA Strategy for Promoting Financial Sector Transformation’ FSCA 2022 Policy and Research at 3.

The FSCA Regulatory Framework website also provides greater detail on how the Twin Peaks model operates, available at <https://www.fsc.co.za/Regulatory%20Frameworks/Pages/default.aspx>.

The GFIN Cross Border Testing Lessons Learned – Cohort 1.0’ available at <https://www.thegfin.com/crossborder-testing>.

The Global Financial Innovation Network reflects on the cross-border testing pilot available at <https://www.thegfin.com/publications>.

The World Bank ‘The Global Findex Database 2021’, available at

The World Bank Brief ‘Key Data from Regulatory Sandboxes from across the Globe’ November 2021, available at <https://www.worldbank.org/en/topic/FinTech/brief/key-data-from-regulatory-sandboxes-across-the-globe>.

The World Bank Brief ‘Key Data from Regulatory Sandboxes from across the Globe’ November 2022, available at <https://www.worldbank.org/en/topic/FinTech/brief/key-data-from-regulatory-sandboxes-across-the-globe>.

UNSGSA FinTech Working Group and CCAF. (2019). Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech. Office of the UNSGSA and CCAF: New York, NY and Cambridge, UK.

Yoke Wang Tok & Dyna Heng ‘FinTech: Financial Inclusion or Exclusion?’ (2022) WP80 *International Monetary Fund* at 5, available at <https://www.imf.org/en/Publications/WP/Issues/2022/05/06/FinTech-Financial-Inclusion-or-Exclusion-517619>.

Internet Resources

Interesting Engineering ‘the fascinating history of the creation of the ATMs’ 2019 available at https://www.youtube.com/watch?v=0oqbd4TNic0&ab_channel=InterestingEngineering.

V Comply – Compliance Insights ‘Five Reasons for Compliance Failure’ 4 March 2021, available at <https://www.v-comply.com/blog/five-reasons-for-compliance-failure/>.

Government Gazettes

The South African Department of National Treasury Notice ‘Explanatory Policy Paper Accompanying the Conduct of Financial Institutions Bill’ (GN 808 in GG 42114 of 14 December 2018), available at www.treasury.gov.za/twinpeaks.