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A Statutory Analysis of the Role of the South African Reserve Bank and Other Role-Players in the Promotion of Financial Inclusion Through the Regulation and Use of Central Bank Digital Currencies in South Africa[1]

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Abstract: Financial inclusion has emerged as a critical goal for policymakers in many countries, including South Africa. Notably, low-income earners are still underserved and excluded from accessing traditional banking services in South Africa. On the other hand, central bank digital currencies (CBDCs) provides innovative financial technology solution which could be utilised to promote financial inclusion through providing a secure, affordable and accessible payment solution. This article provides a statutory analysis of the role of the South African Reserve Bank (SARB) and other financial sector regulatory bodies and role players in promoting financial inclusion through the adoption and use of retail CBDCs in South Africa. Moreover, this article seeks to examine the current enforcement approaches and the duties of regulatory bodies and other role-players in the promotion of financial inclusion for low-income earners in South Africa. Furthermore, the role of the SARB, regulatory bodies and other role players involved in the promotion of financial inclusion through the use of retail CBDCs is investigated. Such regulatory bodies include the Financial Sector Conduct Authority, the Prudential Authority, the Financial Intelligence Centre, the National Credit Regulator, and the Independent Communication Authority of South Africa. Other role-players include the National Consumer Tribunal, the National Consumer Commission and the Banking Association of South Africa. This investigation is conducted to determine whether the statutory mandates of these regulatory bodies and role players enable them to support the adoption of retail CBDCs to curb the financial exclusion of low-income earners in the South African financial sector. This is done to recommend reforms that may be necessary should the SARB opt to adopt retail CBDCs following their feasibility study on the desirability of issuing a retail CBDC in South Africa.

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1. Introduction

Financial exclusion continues to negatively affect low-income earners despite various efforts that were adopted by South African policymakers and other relevant role players to promote financial inclusion such as the National Development Plan 2030 (NDP) that is aimed at combating poverty and inequality by 2030 and the Financial Sector Code (FSC) of 2012 (s 9 of the Broad-based Black Economic Empowerment Act 53 of 2003 "BBEE Act", 2003; Chitimira & Ncube, 2020, pp. 337-355). Financial exclusion refers to the lack of access to affordable and appropriate financial products and financial services provided by regulated financial institutions within a financial sector and/or by the government for some persons in the society (Wentzel et al., 2016, pp. 203-214). In November 2023, the National Treasury reported that 97% of adults had access to a bank account in South Africa (National Treasury, 2023, pp. 1-83). However, mere access to a bank account does not translate to financial inclusion as the usage and uptake of financial products such as insurance, credit and savings ranges from 31% to 64%, especially among the poor and low-income earners (National Treasury, 2023, pp. 1-83). The aims and objectives of financial inclusion are inconstantly enforced in South Africa as evidenced by too much reliance on the informal credit sector on the part of the poor and low-income earners, which exposes them to abusive and unscrupulous practices by informal lenders (Schoombee, 2004, pp. 581-603). The 2022 Financial Sector Outlook Study indicated that about 63% of formal credit applications were rejected. This pushes more people into informal credit and poses a threat to the sustainable and responsible use of credit in South Africa (Financial Sector Conduct Authority, 2022, 6-92). Given the various challenges that affect low-income earners and the poor in accessing financial products and financial services, innovative measures such as retail central bank digital currencies (retail CBDCs) should be employed to curb financial exclusion of low-income earners and the poor in South Africa (see related comments by Chitimira & Magau, 2021, pp. 1-27). In this regard, it is argued that South African policymakers, regulatory bodies and other relevant stakeholders should consider the adoption, regulation and use of retail CBDCs to promote financial inclusion of the poor and low-income earners. Notably, retail CBDCs are typically government-backed digital currencies that are utilised by consumers and businesses to avert systemic risks and intermediary risks. They are utilised as a digital means of payment in some countries. Retail CBDCs have less barriers to opening and maintaining bank accounts. This enhances financial inclusion and alleviates poverty among the poor and low-income earners. The promotion of financial inclusion will give rise to achievement of other policy objectives such as eradicating the socio-economic inequalities of previously disadvantaged persons, alleviating poverty and promoting the economic empowerment of black persons in South Africa (Louis & Chartier, 2017, pp. 170-196).

The promotion of financial inclusion is necessary to improve the economic welfare of low-income earners in South Africa (Omar & Inaba, 2020, pp. 1-25). The provision of access to appropriate and affordable financial services and financial products empowers low-income earners to actively and formally participate in the South African financial sector (Girón et al., 2022, pp. 1198-1211). In this regard, the term low-income earners refer to natural persons who earn below the national minimum wage of approximately R4000.00 per month. These low-income earners have limited expendable income for their daily necessities (Chitimira & Magau, 2021, pp. 1-27). Thus, notwithstanding the importance of financial inclusion, most low-income earners continue to face challenges of financial exclusion in South Africa because they earn below the minimum wage. For instance, the concentration of automated teller machines (ATMs) in urban areas excludes low-income earners, especially those residing in rural areas and informal settlements from gaining physical access to banks and the relevant bank-related financial products and financial services conveniently (Arshad et al., 2021, pp.1-19). Additional hurdles to achieving financial inclusion for all persons in South Africa include high bank fees, the lack of access to verifiable identity documentation and the lack of trust in formal financial institutions (Chitimira & Ncube, 2020, pp. 337-355). In light of these challenges, the government, policymakers, regulatory bodies and other relevant role players should consider adopting retail CBDCs to curb financial exclusion, especially among the poor and low-income earners in South Africa.

The adoption and use of retail CBDCs could provide the relevant South African authorities with a viable mechanism to combat financial exclusion of the poor and low-income earners. The regulation and use of retail CBDCs in South Africa could enable low-income earners and the poor to transact person-to-person or person-to-business through a digital wallet application on their mobile phones (Adams et al., 2021, pp. 287-304). Notably, all retail CBDC transactions that are provided on a retail CBDC platform such as merchant services and savings could be performed on a smart device without the need to visit a physical bank branch. In comparison to other innovative payment methods such as cryptocurrencies (which do not have a legal tender status and are volatile and/or not robustly regulated), retail CBDCs are issued by the central bank of a country which provides a high level of trust and stability (Hamukuaya, 2021, pp. 1-23). Additionally, retail CBDCs could be specifically designed to reach underserved communities through offering more affordable and inclusive access to financial services in comparison to traditional financial institutions (Folwarski, 2021. pp. 459-467). The use of retail CBDCs during crises such as the coronavirus (COVID-19) pandemic could reinforce the resilience of South African retail payment systems (Adams et al., 2021, pp. 287-304). This follows the fact that retail CBDCs are an alternative to formal financial institutions that may be utilised during extraordinary circumstances such as social distancing (Prasad, 2021, pp. 251-258).

However, the use of retail CBDCs may give rise to risks such as fraud, cyber security threats and causing financial instability by displacing banks as intermediaries (Ballaschk & Paulick, 2021, pp. 277-286). Robust regulation and enforcement of the relevant laws by regulatory bodies could curb these risks and promotes the use of retail CBDCs to curb financial exclusion and related challenges for low-income earners in South Africa.

It is against this background that this article examines the role of the relevant regulatory bodies and other role players in curbing financial exclusion for low-income earners in South Africa through the regulation and use of retail CBDCs. This is done to determine the adequacy of these regulatory bodies and investigate the suitability of the adopted enforcement approaches in promoting financial inclusion of low-income earners in South Africa, particularly through retail CBDCs.

2. The Role of the SARB

The South African Reserve Bank (SARB) is the central bank of South Africa. It was founded in 1921 under the Currency and Banking Act 31 of 1920 (see s 2). The powers of the SARB under the Currency and Banking Act included restoring and maintaining order in the issuing and circulation of the domestic currency (s 2 of the Currency and Banking Act 31 of 1920). The Currency and Banking Act was repealed and replaced by the South African Reserve Bank Act 29 of 1944 (see s 1; Vermeulen, 2021, pp. 254-263). This followed the resolution by policymakers to extend the period which the SARB was authorised to issue banknotes from 25 years to an indefinite period (Vermeulen, 2021, pp. 254-263).

Currently, the SARB is empowered to perform its functions through the South African Reserve Bank Act 90 of 1989 ("SARB Act", see ss 1, 2,10 and 14). The SARB Act provides that the SARB is a juristic person mandated to achieve various objectives in the financial sector such as promoting sustainable economic growth and protecting the value of the South African currency (ss 2 and 3 of the SARB Act, 1989; s 224 of the South African Constitution, 1996 "Constitution"). The SARB Act empowers the SARB to restore and maintain order in issuing currency as originally set out in the Currency and Banking Act (s 2). Other mandates of the SARB include supervising banking institutions that provide financial services and financial products to financial consumers in South Africa (s 10 of the SARB Act, 1989). Additionally, the SARB is empowered to perform functions and duties that are necessary to establish, monitor and supervise payment or clearing and settlement systems (s 10 of the SARB Act, 1989). The SARB is responsible for the regulation of currency and exchange rates to enable financial consumers to conclude their financial transactions lawfully (s 10 of the SARB Act, 1989).

Moreover, the Constitution provides that the SARB is obliged to carry out its functions independently and without fear and favour (ss 223 & 224). The SARB is a critical role-player in the financial sector and its functions and powers should be robustly regulated and consistently enforced to combat systemic risks. This should be done to ensure that all financial consumers, especially low-income earners are afforded an opportunity to formally participate in the financial sector and/or the economy in South Africa. This is currently not done as the SARB Act does not specifically recognise financial inclusion as a policy objective (Chitimira & Ncube, 2020, pp. 7-20). Considering this, it is submitted that policymakers should include financial inclusion as a policy objective under the SARB Act and introduce innovative measures such as the use of retail CBDCs to promote financial inclusion for low-income earners in South Africa. This should be done to ensure that low-income earners in South Africa are integrated into the financial sector in order to combat financial exclusion and related challenges such as poverty and lack of financial education.

Currently, the SARB Act does not provide for the regulation and use of retail CBDCs to promote financial inclusion for low-income earners in South Africa. Put differently, the SARB is currently not mandated to implement retail CBDCs to curb financial exclusion of low-income earners (s 3 of the SARB Act, 1989). There are no regulatory guidelines in place to support the regulation and use of retail CBDCs to curb financial exclusion and related challenges under the SARB Act. It is against this background that we submit that the policymakers should consider amending the SARB Act to introduce provisions on retail CBDCs to promote the regulation and use of retail CBDCs to curb financial exclusion for low-income earners in South Africa. The policy makers should also provide some regulatory guidelines that specifically empower the SARB to provide direction to all financial institutions under its jurisdiction to promote the distribution and use of retail CBDCs to curb financial exclusion of low-income earners in South Africa. These retail CBDCs should be designed to enable financial institutions to play an intermediary function so as to avoid the risk of bank disintermediation (Schwarcz, 2022, pp. 1037-1081). The provision of robust regulatory guidelines will ensure that the

South African financial sector is characterised by efficient payment systems that enable low-income earners to access basic and affordable financial services and financial products (Chitimira & Ncube, 2020, pp. 7-20). Efficient payment systems should ensure that financial consumers, especially low-income earners enjoy swift and affordable access to financial services and financial products (Babu & Abraham, 2021, pp. 85-89). The SARB should be statutorily obliged to promote financial inclusion through the use of retail CBDCs to enable the poor and low-income earners in the South African financial sector. This requires the SARB Act to be amended to empower the SARB to embrace financial inclusion as one of its policy goal and legally adopt and issue retail CBDCs as legal tender in South Africa. The SARB should carefully adopt technological and/or innovative measures to promote financial inclusion of the poor and low-income earners in South Africa (Van Niekerk & Phaladi, 2021, pp. 1-19). This follows the adoption of the SARB's policy and action plan entitled: "The National Payment System Framework and Strategy: Vision 2025 Action Plan" in 2018 ("Vision 2025", see SARB, 2018, pp. 1-15). Vision 2025 highlights the need for enhanced functionality of the national payment systems and the promotion of financial inclusion in South Africa (SARB, 2018, pp. 1-15). Under Vision 2025, the SARB additionally seeks to accommodate the growing number of financial technology innovations in the country such as blockchain technology, digital identification systems and smart contracts (SARB, 2018, pp. 1-15). Accordingly, the regulation and use of retail CBDCs could achieve the aims of Vision 2025 by improving the national payment system and promoting financial inclusion of low-income earners and the poor in South Africa.

As the central bank in South Africa, the SARB should be directly involved in the regulation and use of the retail CBDC in South Africa (s 10 of the SARB Act). The SARB Act empowers the SARB to issue currency, determine legal tender, ensure financial system stability and promote the development of electronic payments system (s 10 of the SARB Act). Therefore, it is submitted that the mandate of the SARB in relation to the issuing of currency should be extended to regulate and implement retail CBDCs in South Africa. Thus, like the position Nigeria (see the relevant provisions of the Central Bank of Nigeria Act 7 of 2007), South Africa should consider implementing retail CBDCs to assist the SARB in achieving its objectives and promote financial inclusion (Babu & Abraham, 2021, pp. 85-89). Adopting retail CBDCs will promote financial inclusion for low-income earners by providing them with access to engage in the digital economy as well as build up a transaction history that could enable them to gain access to financial services such as credit (Babu & Abraham, 2021, pp. 85-89).

3. The Role of the Financial Sector Conduct Authority (FSCA)

The FSCA was introduced under the Financial Sector Regulation Act 9 of 2017 (FSR Act) to replace the Financial Services Board (FSB), which was the former market conduct regulator in South Africa (ss 56-75). The FSR Act established the FSCA as the regulatory body with an oversight role over financial institutions in the South African financial sector as well as to implement the twin peaks model of financial regulation (see the preamble of the FSR Act).

The FSCA is obliged to maintain financial stability in the South African financial markets and economy (s 57 of the FSR Act). Additionally, the FSCA is mandated to promote the integrity and efficiency of the South African financial markets (s 57 of the FSR Act; Huneberg, 2022, pp. 1-10). The FSCA is also required to promote the fair treatment of financial consumers by financial institutions in the South

African financial sector (s 57 of the FSR Act). This is done through various initiatives and/or conduct standards such as the Treating Customers Fairly (TCF), which was established by the FSCA to encourage regulated financial institutions to provide fair outcomes to all financial consumers in South Africa (s 106 of the FSR Act; Schmulow, 2020, pp. 11-18). The TCF conduct standards should be carefully utilised to enable banks to serve as intermediaries in the distribution of retail CBDCs in South Africa. Accordingly, low-income earners who opt to utilise traditional banking channels to gain access to retail CBDCs should be protected and treated fairly. The TCF conduct standards are vital for promoting financial inclusion of low-income earners because they ensure that banks do not engage in discriminatory lending. The TCF conduct standards obliges financial institutions to have clear and transparent information about terms, fees and conditions associated with banking services to promote financial inclusion of low-income earners and the poor. This is vital for building trust among the poor and low-income earners to encourage them to have formal access to financial products and financial services (s 58 of the FSR Act; Goodwin et al., 2017, pp. 665-702; Van Heerden et al., 2020, pp. 491-513).

The FSCA also monitors the provision of financial services and financial products to all financial consumers in the South African financial sector to promote the efficiency and integrity of the financial and consumer markets (ss 57 and 58 of the FSR Act; Van Heerden et al., 2020, pp. 491-513). If retail CBDCs are adopted, financial institutions such as banks should leverage their role as intermediaries and improve their offering to low-income earners by providing low-cost services to promote financial inclusion. The FSCA and the SARB should ensure that retail CBDCs are fairly and cheaply provided in order to protect low-income earners and the poor so as to combat their voluntary exclusion in the South African financial sector (Chitimira & Ncube, 2021, pp. 337-355). The FSCA is further obliged to oversee the regulation of the South African financial sector so as to identify systemic risks and take appropriate steps to mitigate such risks (ss 58(1)(f) of the FSR Act). This role is crucial in the regulation and use of retail CBDCs as financial institutions and other designated financial services providers which may be authorised to distribute retail CBDCs should be closely supervised to ensure the implementation and use of retail CBDCs does not negatively affect financial stability in South Africa (ss 57 and 58 of the FSR Act; Schwarcz, 2022, pp. 1037-1081). Retail CBDCs could curb financial exclusion by providing an alternative distribution channel, simplified onboarding and reduced cost that go beyond the full-service bank accounts to enable low-income earners and the poor to formally access financial services and financial products in South Africa.

The FSR Act statutorily obliges the FSCA to promote financial inclusion by developing and implementing strategies for the promotion of financial education of all financial consumers in South Africa (ss 58(1)(e); 7(1)(f) and 57 of the FSR Act; Heydenrych & Luiz, 2018, pp. 1-5). Financial education is crucial to the promotion of financial inclusion, especially for low-income earners in South Africa. This follows that financially literate low-income earners will have a better understanding of vital information such as the terms and conditions that enable them to acquire and/or formally access appropriate financial services and financial products that are offered by financial institutions (ss 57 and 58(1)(e) of the FSR Act; see related comments by Chitimira & Magau, 2021, pp. 1-27). It is submitted that the FSCA should consider implementing robust financial education initiatives to enable all financial customers, especially low-income earners, to make informed financial decisions. Financial education initiatives could be additionally utilised to support the use of retail CBDCs to promote financial inclusion in South Africa. Thus, financial education could empower low-income earners with the knowledge of the various financial products and services that are offered by financial institutions on their retail CBDCs platforms (Folwarski, 2021. pp. 459-467). The FSCA and other relevant stakeholders should consider implementing robust digital literacy programmes in schools, tertiary institutions and community libraries to increase financial education in order to effectively promote financial inclusion. Digital literacy programs for retail CBDCs will enable low-income earners to be able to utilise various technological innovations which may be introduced in the financial sector to enhance the promotion of financial inclusion for low-income earners in South Africa (Folwarski, 2021. pp. 459-467). Depending on the retail CBDC design, some of the benefits of retail CBDCs include that they may be used with or without a bank account. Additionally, retail CBDCs do not require a minimum holding balance. They can be designed to support transactions in fully offline environments. Thus, where low-income earners do not have access to smartphones, laptops and computers, access to retail CBDCs may be achieved through unstructured supplementary service data (USSD) which offers low-tech accessibility through feature phones (non-smart phones) that have the basic capabilities to perform the relevant functions.

The FSCA is not adequately empowered by the FSR Act to promote financial inclusion of low-income earners in South Africa through the use of retail CBDCs in South Africa. This follows the fact that there is no specific provision that deals with the combating of financial exclusion through the use of retail CBDCs or any other financial technology product in South Africa under the FSR Act. Consequently, the FSCA is currently not expressly empowered to enforce the regulation and use of retail CBDCs to curb financial exclusion and related challenges affecting low-income earners in South Africa. In this regard, the FSR Act should be amended to enact provisions that promote the regulation and use of retail CBDCs to improve financial inclusion in South Africa. Notwithstanding the lack of clarity on how financial inclusion may be improved in the South African financial sector under the FSR Act, the FSCA has made some efforts to curb financial exclusion. Such efforts include the collaboration of the FSCA with other regulatory bodies to investigate and develop ways in which financial technology could be used to promote financial inclusion in the South African financial sector. The FSCA is statutorily obliged to collaborate with the SARB, the Financial Intelligence Centre (FIC), the South African Revenue Service (SARS), the National Credit Regulator (NCR), the Competition Commission and the National Treasury (ss 58 and 26 of the FSR Act; Reddy and Lawack, 2019, pp. 1-28). This collaboration led to the formation of the Intergovernmental Fintech Working Group (IFWG) which was established in 2016 to research and understand the growing role of fintech so as to advance innovation in financial services (ss 58(1)(b) & (d) of the FSR Act; Reddy & Lawack, 2019, pp. 1-28). The innovation hub of the IFWG supports the financial sector by introducing financial innovations that promote the core mandates of the financial sector regulators such as financial stability, financial inclusion and fair lending practices (Spruyt, 2018, pp. 707-725). The IFWG also drive learning initiatives for regulators and other financial sector stakeholders in areas of crypto-assets, fintech data, stable-coins and numerous peer-to-peer platforms (Spruyt, 2018, pp. 707-725). The IFWG should assist the SARB in its research efforts to regulate and use retail CBDCs in South Africa. It is argued that the SARB should also involve the FSCA to conduct feasibility study in order to establish which type of retail CBDC could be best suited for curbing financial exclusion in the South African financial sector. This could enhance cooperation and collaboration between the IFWG, the SARB and the FSCA to maintain, protect and enhance financial stability in South Africa (see related comments by Ukwueze, 2021, pp. 1-38). Similarly, the IFWG should also research and consider the regulation and use of retail CBDCs to curb financial exclusion of low-income earners in South Africa. This will benefit various regulators involved, especially the FSCA in establishing the rationale for the regulation and use of retail CBDCs to promote financial inclusion of the poor and low-income earners.

4. The Role of the Prudential Authority (PA)

The PA was established to oversee the prudential regulation of the financial services sector in South Africa (s 32 read with ss 33 and 34 of the FSR Act; Van Heerden et al., 2020, pp. 491-513). The PA is an independent juristic body that operates under the administration of the SARB (s 32 of the FSR Act; Goodwin et al., 2017, pp. 665-702). In other words, the PA is not an independent institution like the FSCA because it is administered by the SARB to ensure the safety and soundness of financial institutions that provide financial products and securities services in South Africa (s 33(a) of the FSR Act). The PA has a crucial role to play in the use of retail CBDCs to promote financial inclusion for low-income earners. For instance, the PA is required to maintain financial stability and enhance the safety, transparency, and soundness of regulated financial institutions (s 33(a) and (d) of the FSR Act; Chitimira & Magau, 2022, pp. 360-374). Additionally, the PA has a duty to protect financial consumers against systemic risks and the failure of financial institutions to meet their operational and legal obligations in the South African financial sector (s 33(c) of the FSR Act; Goodwin et al., 2017, pp. 665-702). The PA is also mandated to enhance the safety and soundness of market infrastructures and regulate financial institutions that provide financial products and securities services in South Africa (ss 33(b) & 34(1)(a) of the FSR Act; Qumba, 2022, pp. 78-113). The PA is obliged to collaborate with other financial sector regulators on matters of mutual interest in relation to the provision of basic and affordable financial products or securities services (s 34(1)(b) and (c) of the FSR Act). These regulatory bodies include the SARB, the FSCA, the NCR, the FIC, the Financial Stability Oversight Committee (FSOC), the Competition Commission and the Council for Medical Schemes (CMS) (s 34(1)(b) and (c) of the FSR Act).

Moreover, the PA is required to support the promotion of financial inclusion in South Africa (s 34(1)(e) of the FSR Act; Chitimira & Ncube, 2020, pp. 337-355). However, the FSR Act does not clearly stipulate how the PA should promote financial inclusion of low-income earners in South Africa. In this regard, policy makers should consider amending the FSR Act to enhance the regulation and promotion of financial inclusion in South Africa through the adoption and use of retail CBDCs. Thus, policy makers should provide guidelines on how the PA should exercise its powers and functions to promote financial inclusion of low-income earners through the use of retail CBDCs in South Africa. The PA should have adequate measures in place to circumvent financial instability and banking disintermediation challenges that may occur if retail CBDCs are improperly regulated and/or implemented. Such measures should include ensuring that financial institutions have sound risk management practices, ensuring safe and reliable information technology systems to support interoperability and clear rules for dispute resolution on matters relating to the distribution of retail CBDCs in South Africa (Buckley et al., 2021, 7-22). This will enable the PA to effectively regulate retail CBDCs to maintain financial stability so as to promote the financial inclusion of low-income earners in South Africa. For instance, in times of crisis such as the COVID-19 pandemic, retail CBDCs could be used to provide direct financial support to low-income earners and the poor (Morales-Resendiz et al., 2021, pp. 1-10).

5. The Role of the FIC

The FIC is a regulatory body established under the Financial Intelligence Centre Act 38 of 2001 ("FICA", s 2). Notably, the FICA was mainly enacted to curb money laundering and terrorist financing in banking institutions. This is done by, inter alia, requiring the verification of financial consumers to be conducted when they open bank accounts (s 21 of the FICA; Chitimira & Ncube, 2020, pp. 7-20). The FIC is required to identify any proceeds of unlawful activities and combat illicit financial activities such as money laundering and the financing of terrorism in the South African financial sector (s 195 of the Constitution; Chitimira & Ncube, 2020, pp. 7-20). The FIC is also mandated to monitor and guide accountable institutions, regulatory bodies and other role players to comply with the provisions of the FICA (ss 4 & 5 of the FICA). The FICA currently does not adequately provide for the regulation of retail CBDCs to combat financial exclusion of low-income earners. Consequently, the FIC does not have any measures in place to compel financial institutions to identify and report suspicious activities which may specifically occur in retail CBDC transactions. In this regard, it is submitted that the Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) guidelines are also relevant to retail CBDCs and they should be utilised for the maintenance of integrity in the financial sector (Li & Huang, 2021, pp. 67-77). Moreover, the FIC has a vital role to play in the adoption and use of retail CBDCs to curb financial exclusion. Therefore, the FIC should effectively curb illicit financial activities that impede financial inclusion of low-income earners in South Africa. This follows the fact that retail CBDCs may be used in illicit financial activities such as terrorist financing and money laundering. Financial inclusion cannot be robustly promoted in a financial sector where illicit financial activities are rife (Ahiabenu, 2022, pp. 235-249). Accordingly, the FIC should be statutorily empowered to carefully enforce AML/CFT legislation to curb money laundering and other illicit financial activities that relates to retail CBDCs.

The FIC is required to cooperate with other enforcement bodies such as the National Prosecuting Authority (NPA), the SARS, the Independent Police Investigative Directorate (IPID), the Intelligence Service, the Intelligence Division of the National Defence Force, the Special Investigating Unit and the Public Protector (s 3(2)(a) of the FICA). Furthermore, the FIC may refer suspected offences of money laundering, financing of terrorism and other related illicit activities to the South African Police Service (SAPS) and other law enforcement agencies (ss 44 & 45 of the FICA). This shows that the FIC is statutorily empowered to collaborate with other law-enforcement bodies so as to ensure the timeous identification, detection, investigation and prosecution of illicit financial activities, especially in the adoption and use of retail CBDCs. Additionally, the FIC is empowered with the extra-territorial power to cooperate with regulatory bodies and/or enforcement authorities with similar objectives in other jurisdictions (s 3(2)(b) of the FICA; Chitimira & Ncube, 2020, pp. 7-20). This collaborative approach could be helpful to South African policymakers if they adopt cross-border retail CBDCs. The effective collaboration between the FIC and other enforcement authorities is crucial for the detection and combating of money laundering, the financing of terrorism and other related illicit financial activities in South Africa (s 3(2)(b) of the FICA; Chitimira & Ncube, 2020, pp. 7-20).

The FICA should be effectively enforced to promote financial inclusion and market integrity in the South African financial sector (De Koker & Jentzsch, 2013, pp. 267-280). The promotion of financial integrity encourages low-income earners to trust financial institutions and utilise formal financial services to curb financial exclusion (Chitimira & Ncube, 2021, pp. 67-87). However, the FIC is not statutorily obliged to promote financial inclusion programmes for the benefit of low-income earners who struggle to comply with the FICA provisions (Chitimira & Ncube, 2021, pp. 67-87). Furthermore, the FICA has no specific regulations and/or guidelines that deals with the verification of customers to curb money laundering and terrorist financing in the use of retail CBDCs (s 21 of the FICA). This follows that retail CBDCs are yet to be adopted in the South African financial sector. It is submitted that the FIC should carefully develop best standards, practices and/or guidelines that could be utilised to ensure that financial institutions comply with all the know-your-customer (KYC) and AML regulations without excluding low-income earners from using retail CBDCs. Low-income earners usually face financial inclusion challenges such as not being able to comply with stringent identification requirements. Accordingly, they should be enabled to access and use retail CBDCs so as to access formal financial services and financial products. The current risk-based approach and/or the three tier KYC regime which is employed by the FIC should apply to retail CBDCs to promote financial inclusion under the SARB (Schwarcz, 2022, pp. 1037-1081). The risk-based approach provides flexible account opening requirements for low-value customers who are subjected to less stringent identification requirements based on their risk level (Gladstein, 2021, pp. 271-289). In this context, low-value customers refer to customers who typically engage in small financial transactions and do not pose a significant money laundering risk due to the nominal amounts involved in their transactions (Chitimira & Munedzi, 2022, pp. 53-62). This approach balances the promotion of financial inclusion for low-income earners in South Africa and the need to comply with AML/CFT guidelines to mitigate money laundering and terrorist financing risks which could potentially rise depending on the adopted CBDC in South Africa.

6. The Role of the NCR

The NCR is an independent regulator established in terms of the National Credit Act 34 of 2005 (“NCA”, see s 12). The NCR is responsible for the regulation and enforcement of all credit-related matters in South Africa (s 13 of the NCA; Pearson et al., 2017, pp. 1-55). The NCR has various functions which include licensing and/or registering credit providers and financial consumers (s 13 of the NCA; Pearson et al., 2017, pp.1-55). Credit providers emanates are registered so as to monitor and ensure that they provide legal and affordable access to credit, especially to the poor and low-income earners in South Africa (Chitimira & Ncube, 2020, pp. 337-355). Registered credit providers are obliged to comply with the provisions of the NCA on fair lending practices to prevent predatory lending such as high interest rates, hidden fees and dubious collection methods that are popular in informal lending. The NCR also has the authority to suspend and/or cancel any registration that was issued to any registrants and/or various participants in the credit market under the NCA (s 14 of the NCA). These registrants and participants include any debt counsellors and credit providers (s 14 of the NCA; Renke et al., 2007, pp. 229-270). Moreover, the discrimination of financial consumers based on one or more grounds set out in the constitution when determining any aspect of the cost of a credit agreement amounts to a contravention or non-compliance under the NCA (s 9 of the Constitution; s 61 of the NCA; Renke et al., 2007, pp. 229-270). The licensing function of the NCR is of paramount importance in the offering of retail CBDCs. This follows that credit providers operating on retail CBDC platforms need to comply with existing credit legislation while adapting lending practices to the unique characteristics of retail CBDCs such as data security.

The NCR is further empowered to prevent, investigate and detect credit-related consumer complaints (ss 14-15 read with ss 16-25 of the NCA; Chitimira, 2020, pp. 269-284). The NCR may also act as a complainant in credit-related disputes to ensure compliance with the provisions of the NCA by all relevant participants (ss 15(i) and 136 of the NCA; Renke et al., 2007, pp. 229-270). The NCR's ability to act as a complainant is important as it suggests it need not to wait for a consumer to complain. Where the NCR is aware of non-compliance with the provisions of the NCA*,* it may protect the consumers by ensuring compliance and require the offender to cease unlawful conduct in its capacity as a regulator. The NCR may also refer any prohibited conduct in terms of the NCA to the NCT for adjudication (ss 14-15 read with ss 16-25 of the NCA; Renke et al., 2007, pp. 229-270). Such prohibited conduct includes the provision of credit by unregistered persons who unlawfully conduct their businesses to the detriment of financial consumers, especially low-income earners. The prevention, detection and investigation of credit-related consumer complaints by the NCR helps to promote integrity and consumer protection. The NCR should be specifically empowered under the NCA to prevent, detect and investigate consumer complaints emanating from credit provision on retail CBDCs platforms. The NCR should adopt adequate awareness measures regarding its role and functions to enable the poor and low-income earners to know their available rights and dispute resolution options.

The NCR is obliged to conduct research on any matter affecting the consumer credit industry and subsequently report its findings to the Minister of Trade and Industry (s 13(d) of the NCA). This could be useful in understanding the various ways that may be utilised to provide credit through retail CBDCs in the South African financial sector. Policymakers should also conduct research on credit trends from other jurisdictions that have implemented retail CBDCs to keep abreast of recent developments and improve access to formal credit for low-income earners in South Africa. The retail CBDCs transaction history of low-income earners should be recognised as a credible and legitimate means to determine their eligibility for accessing appropriate credit facilities (Auer & Böhme, 2021, pp. 1-16). If retail CBDCs are adopted in South Africa, the NCA should be amended to expressly provide for the regulation and use of retail CBDCs to curb financial exclusion of low-income earners. This will empower the NCR and financial institutions to introduce innovative ways on how retail CBDCs could be utilised in the South African financial sector to combat financial exclusion.

7. The Role of the National Consumer Tribunal (NCT)

The NCT is an adjudicative body that was established under the NCA to adjudicate upon any disputes between financial consumers and credit providers (ss 26 & 27 of the NCA). The NCT is established as a juristic person and a tribunal of record under the NCA (s 26 of the NCA; Whittaker, 2008, pp. 561-582). Put differently, the NCT has the jurisdiction and enforcement powers to resolve credit-related matters and provide redress for aggrieved credit consumers in the South African financial sector. While the NCT protects consumers through the provision of a redress platform, it has no specific mandate to promote financial inclusion (see related comments by Chitimira & Magau, 2021, pp. 1-27). The NCT does not currently have a specific mandate to hear matters arising from retail CBDC credit transactions. Accordingly, further guidelines should be developed to enable the NCT to hear credit-related matters that may arise in the use of retail CBDCs. This will ensure the protection and redress of low-income earners in credit-related matters that could arise from retail CBDC transactions.

The NCT may hear any complaints referred to it for the adjudication (s 75 of the Consumer Protection Act 68 of 2008 "CPA"). The NCT may adjudicate any matter referred to it by the NCR in the provincial consumer court where a respondent has a primary place of business or in the provincial consumer court where a respondent resides (s 141 of the NCA). Consumers may approach the NCT for adjudication in instances where the complaint was not first laid with the NCR (ss 140 & 141 read with section 61 of the NCA). The CPA provides consumers with the right to refer certain disputes directly to the NCT (s 75 of the CPA). The NCT is crucial for enforcing the compliance of credit providers who may operate on retail CBDC platform to promote the integrity of the credit markets and protect low-income earners against unfair lending practices.

The NCT is obliged to conduct its hearings fairly, transparently and according to all the procedures and provisions stipulated under the NCA and subject to the provincial legislation that governs the relevant consumer court (ss 141-147 of the NCA). The NCT is further empowered with the authority to grant cost orders and exercise its powers against the offenders (s 147 of the NCA; Chitimira & Ncube, 2020, pp. 7-20). All cost orders that are granted and/or any decision of the NCT is enforceable as though it was an order of the High Court and is binding on all the relevant persons (s 147 of the NCA; Chitimira & Ncube, 2020, pp. 7-20). The NCT could serve as a platform for resolving credit-related disputes that deals with retail CBDCs so as to build trust among low-income earners and promote financial inclusion in South Africa.

8. The Role of the National Consumer Commission (NCC)

The NCC is an independent body that promotes fair and accessible markets for consumer services and products in the South African consumer markets (ss 85-98 read with ss 3-4 & 8-78 of the CPA; Chitimira & Magau, 2021, pp. 1-27). It appears that the CPA broadly applies to the promotion, sale and supply of goods and services. This suggests that the NCC does not have jurisdiction on all financial transactions and/or financial products that are offered in South Africa (s 5 of the CPA). In this regard, we argue that the NCC and Provincial Consumer Protection Authorities (PCPAs) should play a big role in the regulation and use of retail CBDCs to curb financial exclusion of low-income earners in South Africa (Ballaschk & Paulick, 2021, pp. 277-286). The NCC should drive consumer trust in the regulation and use of retail CBDCs to combat financial exclusion of low-income earners in South Africa. This could be done by developing robust codes of good conduct and consumer protection guidelines regarding consumer rights in respect of the regulation and use of retail CBDCs to promote financial inclusion of the poor and low-income earners.

The NCC has jurisdiction to promote consumer protection and collaborate with the PCPAs across South Africa (ss 84 & 85 of the CPA; Magaqa, 2015, pp. 32-57). The NCC and the PCPAs are obliged to detect and combat all illicit activities that contravene the provisions of the CPA (s 83-85 of the CPA; Magaqa, 2015, pp. 32-7). Additionally, the NCC is obliged to have regard to international developments on consumer protection and develop codes of practice on the consumers' right to disclosure and information (ss 93 & 97 of the CPA; Jacobs et al., 2010, pp. 302-406). The NCC should be expressly empowered to promote the regulation and use of retail CBDCs to curb financial exclusion of low-income earners in South Africa (Du Plessis, 2022, pp. 70-90).

The NCC is further required to conduct research on the promotion of consumer protection in order to suggest legislative reform and/or make recommendations to the relevant Minister (s 98 read with ss 91-96 of the CPA; Magaqa, 2015, pp. 32-57). This enables the NCC to keep up to date with recent developments in the consumer markets so as to adopt consumer protection best practices and promote robust enforcement of consumer protection measures, especially in relation to retail CBDCs in order to increase financial inclusion of low-income earners in South Africa. The NCC may further cooperate with other regulatory authorities and/or role-players on common matters regarding to the promotion of consumer protection in South Africa (s 97 of the CPA).

The CPA should be amended to expressly provide for the regulation and use of retail CBDCs to curb financial exclusion of the poor and low-income earners in South Africa (see the preamble of the CPA). The adoption and use of retail CBDCs could promote the economic integration of historically disadvantaged persons in the South African financial sector. The use of retail CBDCs could increase access to formal financial services and promote entrepreneurship among low-income earners through the provision of affordable and efficient payment systems (Chitimira & Ncube, 2020, pp. 7-20). The NCC should be expressly empowered to protect consumers against any challenges that could be associated with the use of retail CBDCs in South Africa.

9. The Role of the Independent Communication Authority of South Africa (ICASA)

The ICASA was established under the Independent Communication Authority of South Africa Act 13 of 2000 ("ICASA Act", see s 3). It is responsible for the enforcement of postal, telecommunications and broadcasting regulations in South Africa (ss 3 & 4 of the ICASA Act; Gillwald, 2005, pp. 469-491). The Constitution also recognises the ICASA as a sovereign regulatory body that oversee ICT regulation in South Africa (s 192 of the Constitution; Seadira & Heuva, 2021, pp. 72-98). The ICASA Act enumerate the powers and functions of the ICASA (s 4 of the ICASA Act; Moyo & Hlongwane, 2009, pp. 279-294). These powers and functions include protecting consumers from unfair practices, licensing services and prescribing regulations in the South African ICT sector (s 4 of the ICASA Act; Sibanda, 2008, pp. 212-227). The ICASA may conduct inquiries into matters regarding the adjudication of licensing disputes and complaints that are brought against licensees (s 4 of the ICASA Act; Sibanda, 2008, pp. 212-227). In this regard, it is key to note that the Complaints and Compliance Committee (CCC) is an independent body established to deal with complaints and related matters referred to it by the ICASA (s 17A of the ICASA Act).

To date, the ICASA has not adequately delivered on its mandate to regulate telecommunications in the public interest because it has failed to promote digital inclusion for previously disadvantaged persons (s 2 of the ICASA Act, Oberholzer et al., 2014, pp. 97-107). This follows the fact that there is a lack of ICT infrastructure development and maintenance, especially in poor and remote areas of South Africa (Seadira & Heuva, 2021, pp. 72-98). Digital inclusion is important to promote financial inclusion since the poor and low-income earners require stable and reliable Internet and mobile devices (Oberholzer et al., 2014, pp. 97-107). These and other challenges such as the lack of ICT infrastructure in rural areas, the cost of maintaining existing ICT infrastructure and the stifled competition in the ICT sector due to challenges in facilities leasing and issuing the allocation of spectrum licensing have impeded digital inclusion in South Africa (Howell & Potgieter, 2022, pp. 1-15). Accordingly, the challenge of access to affordable and reliable Internet connection for low-income earners would require immediate resolution by the ICASA to enable the SARB to adopt and regulate the use of a retail CBDC to promote financial inclusion for all financial consumers. This will enable the SARB to effectively operate retail CBDCs online through mobile phones, which requires stable Internet connection (Arauz et al., 2021, pp. 1-10). The 2022 census revealed that 21.1% households had no access to the Internet. The ICASA and the government should ensure that low-income earners have reliable and affordable Internet access (Chitimira & Magau, 2021, pp. 1-27). It is submitted that the relevant role-players such as the government, the ICASA and telecommunications companies should effectively deal with spectrum licensing to promote financial inclusion through the provision of Internet access to those who reside in rural areas and informal settlements. Low-income earners generally have smartphones which empower them to have access to the Internet so as to utilise various financial services and products that are offered online (Omar & Inaba, 2020, pp. 1-25).

Although some low-income earners have smartphones, their access to digital financial products and financial services remains restricted due to high data costs, unreliable Internet and/or poor Internet access (Ahiabenu, 2022, pp. 235-249). The ICASA and the government should intervene to curb unreliable Internet connections and exorbitant data costs challenges so as to increase financial inclusion for low-income earners.

Notably, mobile network operators (MNOs) such as Vodacom Group Limited (Vodacom) and Mobile Telephone Network (MTN) provide access to financial services and products by leveraging their telecommunications networks to provide e-wallet and other financial services such as micro-loans (Ahiabenu, 2022, pp. 235-249). Additionally, both MNOs and fintech companies provide services that utilise mobile phones and mobile networks are subject to the regulatory powers of the ICASA (s 2 of the ICASA Act). For instance, fintech companies utilising mobile networks are required to obtain operating licenses from the ICASA in terms of the ICASA Act. As such, it is pertinent to ensure that the ICASA efficiently regulate the telecommunications sector to ensure that the poor and low-income earners have adequate access to affordable data so that they can access digital financial services and/or utilise retail CBDCs on their mobile phones.

10. The Role of the Banking Association South Africa (BASA)

The BASA was originally named the Council of South African Banks (COSAB). Notably, the COSAB was established in March 1992 after four separate banking associations, namely the Association of Mortgage Lenders, the Merchant Bankers Association, the Clearing Bankers Association and the Association of General Banks, were merged. The COSAB was originally established to address various regulatory aspects affecting the South African banking sector (Verhoef, 2000, pp.134-158; Chitimira & Magau, 2022, pp. 360-374). For instance, South Africa's banking sector had complex regulatory flaws and the COSAB provided a platform for banks to engage with regulators to ensure compliance with the relevant laws (Carrim, Fubbs & Wicomb, 2017, pp. 1-31). In 1998, the COSAB was revamped to address particular challenges such as financial exclusion in the banking sector before it was renamed the BASA (Antonie, 2001, pp. 39-43). Both the COSAB and the BASA have not been successful in promoting financial inclusion in the South African financial sector (Carrim, Fubbs & Wicomb, 2017, pp. 1-31; Chitimira & Ncube, 2020, pp. 7-20).

The BASA currently comprises of over 30 registered banks in South Africa (Van Niekerk & Phaladi, 2021, pp. 1-19). It is submitted that the BASA actively promotes the policy objective of financial inclusion through its various programmes and collaborations (Van Niekerk & Phaladi, 2021, pp. 1-19). For instance, the BASA has reportedly collaborated with other stakeholders on the drafting of the Conduct of Financial Institutions Bill (COFI Bill), which is intended to, inter alia, improve financial inclusion in the South African banking sector (see the preamble of the COFI Bill; Chitimira & Ncube, 2020, pp. 7-20). The COFI Bill also seeks to promote the free treatment of financial consumers in the South African financial sector (Carrim, Fubbs & Wicomb, 2017, pp. 1-31). The BASA further requires financial institutions to comply with the Financial Sector Code and the Broad-Based Black Economic Empowerment Codes of Good Practice (BEE Code) to transform the South African financial sector through the promotion of financial inclusion (s 9(1) of the BBEE Act; Carrim, Fubbs & Wicomb, 2017, pp. 1-31). Notably, the Financial Sector Code was built on seven pillars which include ownership, management control, access to financial services, corporate social investment, empowering financing, human resource development and procurement and enterprise development (s 9(1) of the BBEE Act). The BEE Code seeks to empower the previously disenfranchised persons through providing empowerment financing and access to financial services (GG 1325, No 41287, 1 December 2017). Despite this, the BASA has not yet adopted adequate measures to guide banks on their role when issuing retail CBDCs to curb financial inclusion for low-income earners in South Africa. Given the lack of clarity on which retail CBDCs design the SARB may adopt in South Africa and how that will impact traditional banking, we submit that banking institutions should be ready to utilise any type of retail CBDCs. This could enable banks and other related financial institutions to develop appropriate retail CBDCs architecture to curb financial exclusion of the poor and low-income earners in South Africa.

11. Concluding Remarks

As indicated above, the effective enforcement of the policy goal of financial inclusion is key for policymakers to promote and achieve transformation and equitable economic development among all persons, especially the poor and low-income earners in the South African financial sector. This follows the fact that the poor and low-income earners are still underserved since they are largely excluded from accessing formal traditional banking services in South Africa. This has been exacerbated by the fact that there is no statute that expressly empower the SARB to adopt and regulate the use of retail CBDCs and/or other innovative financial technology to promote financial inclusion for the poor and low-income earners in the South African financial sector. Given this status quo, the role of the SARB and other financial sector regulatory bodies and/or role-players should be statutorily revamped to expressly empower them to promote financial inclusion through the adoption and use of retail CBDCs in South Africa. Moreover, the relevant legislation should be amended to enact adequate provisions that provide appropriate enforcement approaches and empower regulatory bodies and/or other role-players to effectively promote financial inclusion of low-income earners in South Africa. The adoption of robust laws and regulations for the use of retail CBDCs could empower the SARB and other role-players to adopt and consistently enforce adequate measures that curb financial exclusion of the poor and low-income earners in South Africa.

Furthermore, the SARB, regulatory bodies and other role-players involved in the promotion of financial inclusion should carefully co-operate together to utilise retail CBDCs in order to combat financial exclusion of the poor and low-income earners in the South African financial sector. This will curb possible duplication and overlapping challenges among the relevant parties. The SARB, regulatory bodies and other role-players should develop and utilise appropriate guidelines on the regulation and use of cryptocurrencies and/or retail CBDCs to curb financial exclusion of the poor and low-income earners in South Africa. For instance, the PA should develop adequate measures specifically aimed at curbing financial exclusion of the poor and low-income earners through retail CBDCs in accordance with the FSR Act (s 34(1)(e)). The FSR Act should also be amended to provide adequate guidelines on the functions of the PA and the FSCA regarding the adoption and use of retail CBDCs to promote financial inclusion in the South African financial sector.

The FIC should also provide specific guidelines dealing with the verification of financial customers to curb money laundering, terrorist financing and other illicit financial activities that could arise from the use retail CBDCs in the financial sector. In this regard, the SARB should adopt retail CBDCs and utilise the risk-based approach for financial customer verification to curb money laundering and terrorist financing (Ballaschk & Paulick, 2021, pp. 277-286, for related comments). All retail CBDC distributors should consistently comply with the relevant financial customer verification standards to curb money laundering and the terrorist financing activities in all retail CBDC platforms.

The NCR should also establish how retail CBDCs could be utilised to improve appropriate credit extension to the poor and low-income earners in the South African financial sector. Furthermore, the NCT should be statutorily empowered to adjudicate upon all credit-related matters that may arise from the use of retail CBDCs in South Africa. Likewise, policymakers should consider introducing some statutory provisions that adequately empower the NCC to protect financial consumers against various challenges they may arise from using retail CBDCs in South Africa. The ICASA, the government and other relevant stakeholders should provide affordable Internet access to the poor and low-income earners to enable them to utilise retail CBDCs to promote financial inclusion (Chitimira & Magau, 2021, pp. 1-27). Additionally, the SARB and the BASA should adopt adequate measures to guide banks on how to utilise retail CBDCs to curb financial exclusion of the poor and low-income earners.

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