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Examining the Management Impact: A Literature Review on the Phasing out of Cheques in South Africa

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ABSTRACT: South African Reserve Bank, along with other financial authorities, announced that as of December 31, 2020, the acceptance or issuance of cheques as a valid form of payment would cease. This study seeks to explore the management implications of this decision, considering the developing economic landscape of this country. A qualitative approach was employed, utilizing existing literature to gain insights into the potential impact of discontinuing cheques. The findings suggest that changes will be necessary for businesses and financial houses to accommodate new digital payment solutions and educate vulnerable persons.

Keywords: Digital Payment; Developing Country, Banking, Cheque Payment.

INTRODUCTION

During the third quarter of 2004, triple-digit growth in electronic banking already appeared in South Africa. As profit margins and revenues steadily increased, the South African banks could have an extra option to make money by assessing its core customers: when is that customer ready for new service delivery channels? The extant evidence related to the diffusion of information and communications technology (ICT) banking services seems to believe that they are increasing with the increase in demand for digital banking services, even though reports show that there is a reduction in banking costs. As a result of the increased deployment and accessibility of digital banking services and other self-service banking technologies, such as the automatic teller machine (ATM), electronic funds transfer (EFT), internet, and mobile devices, transaction costs between the banks and the customers started to decrease which, in turn, made face-to-face branch banking expensive for banks (Burns, 2022; Howell, 2020; Bosompem & Nekhwevha, 2023).

As the global spread of the COVID-19 virus extended to South Africa, financial institutions responded by implementing measures aimed at mitigating transmission risks. Consequently, infected citizens and the broader populace began to curtail face-to-face banking activities as a precautionary measure to safeguard public health. In response to the constraints imposed by the COVID-19 pandemic, financial institutions sanctioned the utilization of alternative banking channels such as Automatic Teller Machines (ATMs) and Electronic Funds Transfers (EFTs) to facilitate ongoing banking operations. However, notwithstanding these provisions, segments of the population, particularly the elderly and individuals with low socio-economic status, encountered challenges in availing themselves of digital banking options due to deficiencies in digital literacy and limited access to digital devices. Consequently, reliance on traditional cheque-based transactions persisted among these demographics. This scenario unfolded amidst the backdrop of the South African Reserve Bank's deliberations on the phased discontinuation of cheques, a policy initiative propelled by multifarious considerations (James, 2021; Matli & Ngoepe,2020; Pazarbasioglu et al.,2020).

At this point in time, a study of its nature has not been conducted that seeks to review and provide reflection and illuminations on how the discontinuation of cheques has been managed by countries around the world. Cheques used to be widely utilized as a payment option in South Africa. Over the past few years, rapid government, regulatory, and marketplace developments have laid the groundwork for the phasing out of cheques. South Africa transitioned from using cheques as a primary mode of payment to using modern, digital payments. The phasing out of cheques will bring relevant implications to financial institutions, businesses, and consumers. The study aims to contribute by bringing to light the management aspects that countries would have focused on during the discontinuation process to gradually phase out cheque services. The study will also make assessment checks against both the South African Reserve Bank's (SARB's) objective rationale of phasing out cheques during the proposed timeframe as well as the stakeholders' responses either through submissions during the review period or consultations between 2018-2019. Furthermore, consultative engagements have occurred within industry forums, and inclusive of SARB's other role players. (Coffin et al., 2020; Isniah et al., 2020; Frederiksen et al., 2020).

The Financial Sector Conduct Authority (FSCA), South African Reserve Bank (SARB), Banking Association South Africa (BASA) and the Payments Association of South Africa (PASA) issued a mutual public statement that the use of cheques as a method of disbursement or compensation will no longer be accepted, commencing on the 31st of December 2020 (SARB, 2020). The South African Reserve Bank (SARB) announced in June 2020 that the country would start taking steps to discontinue cheque services. While some have been able to fully function without cheques, others still rely on it based on the current cheque clearing and payment process. These groups include beneficiaries, such as the elderly, businesses, and government organizations. There remain risks and challenges as the financial and banking industry, in collaboration with the government, work to implement alternative solutions, ensuring that nobody is left behind. (Urban & Townsend, 2021; Khambule, 2021; Gronbach et al., 2022; Webb & Vanqa Mgijima, 2024; Simatele & Maciko, 2022; Ntimane, 2020; Bisong et al., 2020; Gelb & Mukherjee, 2020; Loewald et al., 2022; Ndikumana et al., 2020).

The review sought to answer three questions: First, the extent of usage of cheques in South Africa (or its relative importance). Second, assess the impact of discontinuation of cheques. Third, examine the implications of the discontinuation of cheques. Introducing less risky payment instruments, especially for making cash-like payments (customers and merchant payments) will foster the pursuit of a less cash society initiative. Reducing fraud associated with and protecting both the customer and merchant in the process will be necessary. Another major implication is that electronic payment systems must have the same seamless offering as analog instruments (cheques). This review has elicited valuable insight into fostering moderation of payment policy in the broader quest to achieve financial stability. (Foster et al., 2021; Gainsbury & Blaszczynski, 2020; Pazarbasioglu et al., 2020).

METHOD

The study utilized existing data and case studies to assess the management impact resulting from the discontinuation of cheques. A qualitative desk review was conducted to access existing data, chosen for its efficiency and rapidity (Clark, 2005, p. 2). To collect data on the research topic, relevant literature such as books, journal articles, dissertations, and regulatory publications will be reviewed. The study aims to acquire background information concerning the usage of cheques, the process of discontinuing cheques, and its associated implications.

RESULT AND DISCUSSION

Cheques made their debut in South Africa during the late 1790s. Approximately three decades later, the emergence of the second oldest bank in the nation assumed a pivotal role in shaping the trajectory of cheque usage within the country. Originally conceived as a mechanism through which issuing banks provided their clientele access to securely held funds, the initial introduction of cheques lacked a formalized framework. It wasn't until 1921 that the first legislative enactment delineating rules and protocols governing cheques in South Africa materialized. This legislative measure was crafted to curtail the practice whereby enterprises disbursed cheques as remuneration to their employees, necessitating subsequent cashing at banks and granting issuing enterprises access to extended credit. Furthermore, the legislation mandated the inclusion of an authorized signatory's signature on every issued cheque (Alvaredo & Atkinson, 2022; Mabin, 2020; Cronin, 2022; Vermeulen, 2021).

The establishment of the Cheque Office, a clearing mechanism, in 1839 marked a pivotal development in streamlining cheque processing operations within Cape Town. Nevertheless, individual banks maintained distinct procedures through their respective Payments or Discounts Offices. It was not until 1894 that all banks universally adopted a standardized British model incorporating wording and signature strokes for cheques cleared via the Cheque Office. This initiative heralded the formal commencement of the clearing system, which attained full institutionalization in 1906 by establishing a central bank tasked with managing the accounts of various group banks. Initially comprising 11 member banks alongside Jersey and three Irish banks, the Cheque Office witnessed exponential growth, swelling to 25 member banks by the conclusion of 1848. Subsequently, the Cheque Office amalgamated with the Bank of England, consolidating its operational framework within a broader institutional context. (Kinns, 2021; Parry, 2024; Festo et al., 2023; Haddad et al., 2023; Zitha, 2023).

South Africa has placed itself on a development pathway that involves advanced adaptation from traditional methods to the advancements of more technologically oriented modes of payment. However, it is clear from other countries that have embarked on cheque discontinuation that the cheque is still favored due to its reliability and security features. Cheques were most popular in rural areas and predominantly used by elderly South Africans, pensioners, the informal sector, the so-called "unbanked communities," and even the further economically challenged and financially underserved. The rural and poorer demographics rely heavily on cheques to settle accounts. For example, school fees, rental, municipal charges, or receiving wages or subsidies. These individuals might be negatively affected, raising the costs and the lower volumes for the banks in terms of using cash, autoteller machines, or electronic debits like EFTs.

The decline in cheque usage over time can be attributed to various factors. Firstly, the issuance of cheques was perceived as cumbersome and time-consuming, leading to decreased adoption. Additionally, the populace's lack of widespread education on cheque preparation contributed to diminishing familiarity and usage. Moreover, consumers faced limited fraud protection when using cheques, diminishing their appeal. The interbank cheque processing infrastructure became outdated and unable to keep pace with rapid digital advancements. The onset of the COVID-19 pandemic in 2020 exacerbated the downward trend in cheque usage.

In response to these trends, the consultation paper "The phasing out of cheques in the national payment system," issued on October 2, 2020, delineated the circumstances surrounding the discontinuation of cheques. December 31, 2020, marked the final day South African banks accepted cheques for deposit or encashment. Banks must communicate broadly with their clients to prepare them for this transition, guiding alternative digital payment methods. Stakeholders are urged to cease issuing and accepting cheques after December 31, 2020, and engage with their banks to learn about electronic payment alternatives (SARB, 2020).

Cheques were once a prevalent form of payment in South Africa, peaking in popularity during the 1990s, constituting nearly 80% of non-cash payments. However, technological advancements over recent decades, such as increased internet access and the proliferation of internet-enabled mobile devices, have transformed business practices and payment preferences. Consumers have shifted towards electronic payment transactions due to the stability and reliability of digital infrastructure. Consequently, cheque usage has declined, with businesses and individuals favoring online payment methods like debit/credit cards and electronic fund transfers. This transition to digital payment methods has been further accelerated by global economic crises and the COVID-19 pandemic, with consumers considering digital methods more efficient and user-friendly (Alalwan, Dwivedi, Rana, & Algharabat, 2018; Alalwan, Baabdullah, Rana, Tamilmani, & Dwivedi, 2018; Goel, Sahai, Vinaik, & Garg, 2019; Aladwani, 2001; Leong, Hew, Ooi, & Wei, 2020).

The unprecedented COVID-19 pandemic has ushered in a new era for businesses and interpersonal relationships, fundamentally altering society's operations. South Africa has endured some of the most stringent lockdown measures and restrictions to combat the virus. This highlights the stark gap between those with access to technology and those without access. Given this reality, planning to phase out cheques has become even more complicated. It's important to note that the decision to get rid of cheques was made solely by the South African Reserve Bank without consulting the people directly affected by it. This lack of involvement makes the potential hardships they might face even worse. Originally, the plan was to eliminate cheques by 2025, a decision made in June 2012. It's crucial to fully understand the consequences and develop a plan that ensures everyone has fair access to other payment methods. Finding a balance between advancing technology and ensuring everyone, especially those in rural areas, can still access financial services is key. By doing this, South Africa can reduce the negative impact on marginalized individuals and create a more inclusive society. (Torkelson, 2020; du Plessis et al., 2022; Cipriani et al., 2023). The discontinuation of cheques will increase financial and organizational costs.

Discontinuation of payment instruments or methods is seen as a normal, natural progression in the evolution of payment systems. It reflects the social needs of consumers and society at large to simplify their payment-making process.

The advent of technological innovations has significantly improved payment processes. The national monetary authority or major commercial banks process many electronic payment methods. Payment instruments serve various essential functions, including their non-negotiable nature, widespread acceptance, and the distinction that cheques are used for payment rather than as debt instruments. Consumer Transaction Account Charges (CTAC) typically cover most credit transfers, while banks are introducing the Faster Payment Solution (FPS) to expedite payment processing, aiming for transactions to match the speed of incoming funds. With the introduction of FPS, the CTAC, which usually allows 7-9 direct debits, undergoes a review to modernize its operations. Another improvement stems from the National Clearing System (NCS) agreement, a four-party clearing scheme implemented by commercial banks. (Kollamparambil & Oyenubi, 2021; Bargain & Aminjonov, 2021).

Many businesses, nonprofit organizations, and individuals still depend on cheques for part, if not all, of their payment and receipt requirements. A similar scenario can be anticipated in South Africa, where the relevant financial institutions have already decided and commenced preparations to discontinue the processing and clearing of cheques. The approach of these institutions is to discontinue cheques in a phased manner. This is not so much to ease the administrative burden to both the financial institutions and their customers due to the elimination of cheques, but rather to migrate the customers to alternative payment and receipt mechanisms, which they may not yet be familiar with (Cipriani et al., 2023; Gronbach et al., 2022; Li, 2022; Santoro et al., 2022; Uddin et al., 2022; Asah & Louw, 2021).

Implementing such a strategy sustainably holds the potential to yield valuable insights for financial institutions engaging in analogous discontinuation initiatives. The efficacy of the discontinuation strategy hinges significantly upon the behavioral dynamics of the affected clientele. It is imperative to recognize that the mechanisms and frameworks governing these behavioral responses substantially influence the discontinuation strategy's effectiveness. Notably, varying customer segments exhibit distinct behavioral tendencies, underscoring the importance of tailored management approaches to address their expectations.

As elucidated, protracted preparation periods coupled with sustained awareness initiatives tend to yield more favorable outcomes among customers. Managing affected customers' emotional reactions and apprehensions throughout the transitional phase is paramount. Moreover, enterprises must adapt their operational frameworks to accommodate heightened reliance on electronic processes. Ensuring uninterrupted working capital flow necessitates formulating and implementing robust contingency plans within business operations (Naim, 2023; Janiszewski & Laran, 2024).

Electronic Funds Transfer (EFT) is a general term that refers to the movement of funds from one account to one or more other accounts. EFTs are commonly used for small and recurring payments, such as paying wages or allowing members to pay subscriptions and make loan repayments. There are various forms of EFT, including bank drafts, wire transfers, direct deposits, ATM transfers, and electronic clearing or settlement processes such as ACH (Automated Clearing House). The ACH is an electronic network that processes large volumes of credit and debit transactions in batches. The EFT (EFTPOS) electronic payment system allows consumers to conduct financial transactions using a debit or credit card equipped with a magnetic stripe or chip. The state-of-the-art EFTPOS system was patented in 1982 and became available in Australia in 1984. EFTPOS payments are made at a peripheral device specifically designed to process card purchases at retail outlets and are accessed by the outlets' customers. Solutions have been developed to enable the EFTPOS capabilities available on a merchant's smartphone. This may enable the payment on a customer's mobile phone. Australia has placed an opportunity for growth in EFTPOS systems in the future.

A real-time transfer of funds can signify the realization of convenient cash equity, cash analysis, and real-time settlement. In South Africa, efforts are underway to achieve this for certain transactions. For instance, the Johannesburg Stock Exchange's Strate CSD and the South African Reserve Bank's SARB-RTGS are involved, with over 70 South African banks and other financial institutions being authorized users of the SARB-RTGS system. Additionally, transactions involving 25 Automatic Clearing Bureau (ACBs), such as the South African Postbank, are facilitated via the Strate CSD.

An intriguing advancement in the electronic fund transfer realm is utilizing blockchain technology. Blockchain, known for underpinning Bitcoin, finds application in digital currency, reminiscent of the Electronic Funds Transfer (EFT) mechanism using bearer instruments like cheques. The potential applications of blockchain are vast, and future developments and integrations into daily transactions could reduce reliance on general bearer instruments like cheques. Through consensus mechanisms, blockchain can replace individual intermediaries or auditing groups, ensuring fiat currency transfers meet the necessary criteria. Three dimensions - EFT, Equity, and Settlement - interact to provide the regularity of electronic value transfers (Bisht et al., 2022; Gentilini, 2022; Mhlanga, 2023).

Mobile payments are digital payments processed over the mobile network that do not pass through bank clearing systems. Transactions may be cleared in peer-to-peer or real-time payments, between consumers and Internet merchants, and for in-store, proximity and MPOS purchases. Mobile payments can be subdivided into basic, SME and large corporate payments. The lowest-value transactions are basic payments, while SME and large corporate payments account per unit for the highest and second-highest-value transactions, respectively. Mobile payments can be used to buy goods and services, and there are advanced mobile person-to-person (P2P) services if the recipient has a bank account, the same bank as the sender, or a different bank from the sender. These transactions occur in various clearing times, such as real-time payments, two-hour payments to the same-bank recipient, and next-day payments to a different-bank recipient (RBA, 2019). Real-time payments are the most common mobile payments. (Pairman & Sanggita, 2021; Regragui, 2022; Jean Pierre & Mombeuil, 2023; Afeti & Amanfo, 2021; Mahakittikun, 2020; Xu & Gao, 2021; Moonde, 2023).

In South Africa, the majority of those without bank accounts are unbanked people and youth in the informal sector receiving wages and sending remittances. These various types of mobiles money solutions are categorized as follows: (1) centered traditional banking, (2) telecommunication company (telco)–bank partnership solutions, (3) partnerships between banks and the retail sector, and (4) retail sector/supermarket. Over the last decade, mobile payments using airtime, electronic fund transfers, telco–bank cross-selling agreements, and bank-driven mobile applications have quickly grown in South Africa (Fienup, 2016; Woolman, 2018; Mikosz, 2019; TechCentral, 2019). Mobile payments benefit society, businesses, and financial institutions. Some of the main drivers making mobile payments successful include (1) the personal, intimate, always-on single identity, (2) legal compliance, the single identity, guaranteed proof of delivery, and an automated banking guarantee for documentation, (3) enabling all types of payments with confirmation, (4) the economic dividend payment to the identities, and (5) instant settlement and reconciliation data. Mobile payments, while promising benefits for various segments of society including recipients, small-scale merchants, and providers of goods and services, also present numerous advantages for financial institutions (Barrett and Kone, 2015; Bojjagani et al., 2023; Siano et al., 2020; Ahmed et al., 2021; Torkelson, 2020).

Online banking is growing dramatically. A Banking Supervision report of payment distribution systems in 2021 indicates that the number of online card payments is expected to exceed 100 million for the first time. This has been fueled by more consumers enjoying subscription-based services, an increasing e-commerce market, and the utilization of split payments by retailers. Despite the smaller number of digital services, online banking and bill payment services have seen strong growth through the past decade, averaging more than 20 million transactions per year (Demirgüç-Kunt et al., 2022; Bukvic2021; Simatele & Maciko, 2022; De et al., 2021; Demirgüç-Kunt et al., 2021; van Zanden, 2023; Eksteen & Humbani, 2021; Onyango, 2021).

One of the oldest services in the online banking space is customer-initiated payments, which allow customers to make payments to both banked and unbanked beneficiaries. Payments initiated by the customer are split into real-time payments, batch, and large volume payments. The latter refers to accounts for most corporate clients into corporate-to-corporate payments or business to business services, commonly known as EFT. EFT utilizes debit card and regular overnight settlement mechanisms. Furthermore, the majority of payment transactions in South Africa are normal, recurring payments customers make to a predefined list of beneficiaries. These have seen an average of 32 million transactions per year. (Torkelson, 2020; Simatele & Maciko, 2022; Gronbach, 2020).

Several countries have made significant strides in discontinuing the usage of cheques, including Sweden, Canada, and Singapore. In 2012, Sweden implemented a complete cessation of bank cheques, driven by major banking entities such as Nordea, Skandinaviska Enskilda Banken (SEB), Handelsbanken, Swedbank, and Danske Bank, in collaboration with the Swedish Bankgirocentralen responsible for cheque clearing. This decision stemmed from growing concerns regarding cheque fraud, prompting a collective initiative to halt cheque clearing operations.

Similarly, in 2020, all three major banks in Canada ceased the issuance of cheques. This strategic move aims to incentivize businesses to transition to digital payment solutions, thereby reducing associated costs linked with cheque processing for enterprises.

Moreover, in Singapore, United Overseas Bank (UOB) and DBS Bank have fully discontinued cheque usage. This decision aligns with evolving consumer and business preferences favoring expedient payment alternatives such as instant e-payments, which offer accessibility and convenience. Safety considerations also play a pivotal role in the adoption of these faster payment modalities. (Deep,2022; Auer et al., 2020; Kang et al., 2021; Tetlow & Dalton, 2020; Balliester Reis, 2022; Skovgaard-Smith, 2023; Bilotta & Botti2021; Náñez et al., 2020).

The South African Reserve Bank (SARB) is responsible for drawing up, announcing, and directing the strategy and framework relating to the national payment system (NPS). The government, in consultation with the SARB and other oversight bodies of the NPS, has to draw up policy and law dealing with matters of banking, the SARB, and NPS. Payments under the national payment system are subject to the NPS Act, as well as payments under any system declared by the Minister in terms of section 7 of the NPS Act. An overarching policy framework is necessary to guide bank behavior in relation to cheques upon discontinuation. Some industry measures align with what is set out in Regulation 444 of the Banks Act 94 of 1990 (hereinafter referred to as Regulation 444), but some still are not fully aligned. As the directive on the discontinuation of cheques is not clear nor prescriptive enough, it can complicate the way adverse clients' effects are mitigated (Coco & Viegi, 2020; Zhang & Huang, 2022; Loewald et al., 2022; Fantacci & Gobbi; Ozili, 2023; Opare & Kim, 2020; Cant et al., 2021; Tut, 2023).

Due to the introduction and adoption of e-payments, payment regulation boards within countries have realized that it is costly to process and manage the e-payment channels. In the case of South Africa, the Financial Intelligence Anti-Money Laundering and Countering the Financing of Terrorism Act (FIC Act 38 of 2001) was thus imposed in 2013 to address the FICA stamps on cheque payers.

The electronic clearing of cheques was found costly, including the items (including the e-cheques) on the e-debiting order dispatch system (ODS), and thus was not secured or protected to the payees or payers (Chitimira & Munedzi, 2023; Chitimira, 2021; Gaviyau & Sibindi, 2023; Yozi, 2020; Smith, 2021; Van Wyk, 2020; Booysen, 2022; Ojukwu-Ogba & Osode, 2020; Gaviyau & Sibindi, 2023; Chitimira & Munedzi, 2021).

Users, fund administrators, and payment banks proved that there was a need to review and assess the current regulatory environment that could better facilitate customers to switch to electronic payment instruments. When the banks did not achieve the specified payment obligations, the Reserve Bank had no option but to enforce compliance. This had a significant influence on the total probability of cheques bouncing in the banking system, which increased risk in the clearing of cheques. The national payment system banks had to provide funds to clear the cheques, shifts, or reserves to the clearing bank and (or) reserve banks in order to show that they could indemnify the customers that would be at risk of banking account debits and dishonours as a pre-payment notification. (Mbah et al., 2021; Bowden et al., 2021; Mamudu, 2021).

The Reserve Bank enforced the Reserve Bank of South Africa Act, implying that all South Africans are mandated to use e-payment methods. The success of this policy implied that all partnerships, such as the South African government tax invoices, would be converted to the cheapest e-payment costs – electronic funds transfers (EFT). If there were no imposed policies, then the objectives stated by the regulators in their charter would not be achieved. If the regulations were not enforced, users would continue to pay expensively as the payments were (and are) still clearing and floating (Schulze, 2020; Olukayode2021; Gronbach, 2020; Ntimane, 2020; Chitimira & Ncube2023; Simatele & Mbedzi, 2021; Domingo et al., 2023).

The Protection of Personal Information Act No. 4 of 2013 (POPI) addresses the right to privacy and secure consumer protection for personal information processed by businesses. It also promotes the protection of personal information and regulates how it is processed. This act establishes a standard for the protection of personal information and defines responsible parties, private bodies, and the processing of information for its protection. Processing of information involves any person who processes information in South Africa. Any person is defined as an individual, body corporate, partnership, trust, or any form of association (Fryer, 2021; Netshakhuma, Da et al., 2020).

The POPI Act allows for the retention of paper-based records. However, once information is captured in electronic form, these paper-based records may be destroyed. The records should be retained if required by law, contract, or any agreement with a third party.

Consumer protection is increasingly important for both businesses and consumers. The Consumer Protection Act No. 68 of 2008 (LCPA) came into effect on 1 April 2011. This act provides a new regulatory regime for the protection of consumers in South Africa. It explains how businesses relate to consumers, including advertisements, marketing, and promotional activities. It prevents businesses from discriminating against consumers and helps prevent the exploitation of developing consumer power. The act also promotes positive business and consumer relations and social and economic welfare. It emphasizes that all electronically stored records must meet specific technological standards to be valid and effective. This act particularly affects businesses where records are transferred electronically during business transactions. It promotes consumer protection interests and considerations and applies to businesses, consumers, and property transactions. It provides consumer education and promotes consumer rights. It also governs complaints to the National Consumer Commission. (Potwana, 2022; Tentu, 2023; Laing, 2021).

Many small and medium enterprises (SMEs) prioritize managing cash flow, recognizing that hoarding cheques can be a common oversight in SME operations. It's evident that relying heavily on cheques can hinder a business's future growth potential. Cash management strategies should ensure that highly liquid cash needs can be met promptly, ideally within two to three days, and no longer than five trading days. The objective is to minimize the amount of cash tied up, thereby mitigating cash flow challenges and potential liquidity issues.

Simply accelerating the speed of fund clearance through banking operations does not address the underlying issue of cash lock-up. The rules governing the Reserve Normal Clearance (RNC) process stipulate that insufficient cleared funds are the primary factor contributing to liquidity strains. Online payment solutions, such as electronic funds transfers (EFTs) and instant payments, facilitate rapid settlement of funds between different bank platforms, often within hours or even seconds. This inherently reduces cash lock-up, as funds are swiftly transferred between banks, enhancing liquidity and minimizing cash flow disruptions (Tut, 2023; Mann, 2023; Kronick & Koeppl, 2023; Oluwasegun et al., 2021; Una et al., 2020; Khan; Faccia, 2023; Maghsoudi et al., 2023).

Most SME payment systems are not the most efficient, and often the costs of processing these payment systems are not taken into consideration. Cash management costs in an SME environment have a hidden cost: this includes their own and interbank transaction charges, fraud costs, and bank account administration fees that banks charge on transactions. SMEs will need to implement cost-effective payment system solutions that will enable the efficient collection and payment of funds to and from their clients and debtors. If SMEs do not adapt to low-cost and easy-to-manage and reconciled payment systems, the cost of payment processing that is facilitated by SME companies could become an industry barrier in the South African economy landscape (Botha et al., 2021; Chingapi & Steyn, 2022; Telukdarie et al., 2023; Msomi & Olarewaju, 2021; Khoase et al., 2020; Nazir & Roomi, 2020; Rajagopaul et al., 2020).

Discontinuing cheques is one of the FSCA recommendations for the South African market. Cheques play a critical role among vulnerable and underserved populations. Vulnerable persons and underserved populations include older adults, youth, those living in poverty, and those living in rural settings. With rapid globalization, digitalization is inevitable, including in developing markets such as South Africa. Leadership and a collaborative stakeholder approach are required to address these problems. In order to avoid these underserved individuals being even further left behind in poverty, due to the emerging trend of financial exclusion, it is essential to keep cheques accessible and affordable. Financial services, of which payment mechanisms are part of, provide access to economic security and social safety, especially for vulnerable and relatively disadvantaged persons and groups. Indeed, poor individuals and those lacking access to economic resources, services, and markets are typically reliant on cash for their survival. Despite the benefits thereof, cash usage incurs opportunity costs and/or the risk of predatory crimes (Abrahams & Pretorius, 2023; Mavhuru, 2022; Huneberg, 2020; Chisiiwa, 2023).

Cheques serve as a means to compensate individuals or entities, such as small spas or informal microenterprises, for services rendered or goods provided. They are also used to distribute social security benefits, welfare payments, or pensions to individuals residing in countries other than their own. Typically, these payments are processed through banks, often without direct supervision, which offer various services to facilitate these transactions.

Individuals and groups receiving payments via cheques commonly deposit their funds in bank accounts or invest in savings products rather than keeping cash at home. In such cases, there is a need for innovation and broader adoption of alternative payment methods, including electronic transactions and initiatives like general-purpose reloadable cards. These alternatives offer lower transaction costs and can potentially benefit individuals financially.

However, it is essential to respect the autonomy of individuals and groups receiving these payments, even if their financial circumstances are relatively less favorable. For instance, recipients of social welfare grants in South Africa are entitled to bank their monthly payouts independently, without being required to wait until the end of the year to access their accumulated funds. Additionally, recipients should have the freedom to decide how they wish to utilize their payments, without interference from municipalities or other intermediaries dictating how the funds should be spent or allocated (Coibion et al., 2020; Chen et al., 2021; Zhang et al.,2020; Ahmad et al., 2020; Alzoubi et al., 2022).

South Africa is breaking away from its previous stance of maintaining the status quo, which is unprecedented. Recognizing that existing payment solutions, including cash, have not been fully optimized, presents an opportunity for improvement. Urgent action is needed to mitigate risks, and both professional and public organizations must proactively seek collaborative solutions.

A crucial decision point involves setting national policies to ensure that all electronic payment options are accessible to everyone and to promote competition in payment markets. Banks play a vital role in addressing adverse consequences and fulfilling their social responsibilities. Additionally, addressing educational challenges is essential (Maphosa, 2020; Megannon, 2022).

Three main categories of challenges face individuals in this context. Firstly, there are challenges related to credit, savings, and investment decision-making, which can burden consumers. It is important to examine the distributional impacts of discontinuing cheques and address issues of financial inclusion. The elderly, who may lack digital skills and technology knowledge, are particularly vulnerable to the discontinuation of cheque payments. Furthermore, reduced access to bank branches may exacerbate exclusionary practices, especially impacting minority racial deposit groups and the elderly, as highlighted by previous research. (Ranchhod & Daniels, 2021; Gronbach et al.,2022; Schotte & Zizzamia, 2023).

CONCLUSION

The study specifically focused on the management impacts of the discontinuation of cheques in South Africa. The discontinuation of cheques is expected to have widespread impacts across various social and business sectors. Currently, most research in this area relies on qualitative methods, aiming to capture the perspectives of affected parties. However, this study, conducted in South Africa, takes a different approach, focusing specifically on the intangible impacts on human labor and technology management.

The key findings from the literature analysis highlight several areas of concern regarding human labour management. These include workforce-related business cultures adapting to the digital age, potential losses of valuable skill sets leading to challenges in digital inclusivity, workforce education and retention, and heightened stress levels among employees despite the growing importance of cybersecurity management.

On the technology front, impacts are expected to center around system upgrades leading to revenue losses, increased monopoly power favoring network operators, potential limitations in access to banking services, and a potential rise in the overall cost of payment tools.

However, it's important to note that the literature analyzed in this study is limited in scope due to a lack of interdisciplinary collaboration. Future research should strive to be more comprehensive, including in-depth interviews with key stakeholders from various organizations.

Furthermore, it's crucial to consider the potential implications of government regulations and policies, as well as the broader economic impact both locally and globally. With technology constantly evolving, organizations must adapt and innovate to remain competitive. This necessitates collaborative efforts between government bodies, businesses, and financial institutions. By taking a proactive approach and addressing challenges head-on, it's possible to mitigate risks and ensure a smooth transition to alternative payment methods. Through thorough research and understanding of the multifaceted impacts, organizations and policymakers can make informed decisions to navigate the changing landscape of digital transactions, ultimately fostering a more inclusive and resilient society.

REFERENCES

Abrahams, E. & Pretorius, T. (2023) The outcome of the discontinuation of cheques on bank reconciliation in South Africa. SAIMS. saims.org

Adinolfi, M.C., Harilal, V. and Giddy, J.K. (2021) Travel stokvels, leisure on lay-by, and pay at your pace options: The post COVID-19 domestic tourism landscape in South Africa. *African Journal of*

Hospitality, Tourism and Leisure, 10(1), pp.302-317. uj.ac.za

Afeti, E.Y. and Amanfo, J.O. (2021) Enablers and inhibitors of merchant adoption of Mobile payments: A developing country perspective. *In Research anthology on concepts, applications, and challenges of FinTech* (pp. 535-558). IGI Global.

Agur, I., Peria, S.M. and Rochon, C. (2020) Digital financial services and the pandemic: Opportunities and risks for emerging and developing economies. International Monetary Fund Special Series on COVID-19, Transactions, 1, pp.2-1. imf.org

Ahmad, A. H., Green, C., & Jiang, F. (2020) Mobile money, financial inclusion and development: A review with reference to African experience. *Journal of economic surveys*. wiley.com

Ahmed, W., Rasool, A., Javed, A.R., Kumar, N., Gadekallu, T.R., Jalil, Z. and Kryvinska, N. (2021) Security in next generation mobile payment systems: A comprehensive survey. IEEE Access, 9, pp.115932-115950. ieee.org

Alvaredo, F. & Atkinson, A. B. (2022) Top incomes in South Africa in the twentieth century. Cliometrica. springer.com

Alzoubi, H., Alshurideh, M., Kurdi, B.A., Alhyasat, K. and Ghazal, T. (2022). The effect of e-payment and online shopping on sales growth: Evidence from banking industry. *International Journal of Data and Network Science*, 6(4), pp.1369-1380. growingscience.com

Ardizzi, G., Nobili, A., & Rocco, G. (2020). A game changer in payment habits: evidence from daily data during a pandemic. Bank of Italy Occasional Paper. sipotra.it

Arnaiz, P., Seelig, H., Gerber, M., Adams, L., Degen, J., Dolley, D., Joubert, N., Nienaber, M., Nqweniso, S., Steinmann, P. and Utzinger, J. (2023). Intervention effects and long-term changes in physical activity and cardiometabolic outcomes among children at risk of noncommunicable diseases in South Africa: a cluster-randomized controlled trial and follow-up analysis. *Frontiers in Public Health*, 11, p.1199381. frontiersin.org

Asah, F.T. and Louw, L. (2021). Guidelines and criteria used by formal financial institutions to assess credit applications from small and medium enterprises in South Africa. *The Southern African Journal of Entrepreneurship and Small Business Management*, 13(1), p.9. sajesbm.co.za

Auer, R. & Böhme, R. (2020). The technology of retail central bank digital currency. *BIS Quarterly Review*. bis.org

Auer, R., Cornelli, G., & Frost, J. (2020) Rise of the central bank digital currencies: drivers, approaches and technologies. econstor.eu

Balliester Reis, T. (2022). Socio-economic determinants of financial inclusion: An evaluation with a microdata multidimensional index. *Journal of International Development*. soas.ac.uk

Bargain, O. & Aminjonov, U. (2021). Poverty and covid-19 in africa and latin america. *World development*. sciencedirect.com

Bech, M. L., Faruqui, U., & Shirakami, T. (2020). Payments without borders. *BIS Quarterly Review*. bis.org

Bilotta, N. and Botti, F. (2021). CBDCs: The (Near?) Future of a cashless economy. The (Near) Future of Central Bank Digital Currencies. *Global Politics and Security*, pp.15-40. oapen.org

Bisht, D., Singh, R., Gehlot, A., Akram, S. V., Singh, A., Montero, E. C., Priyadarshi, N., & Twala, B. (2022). Imperative role of integrating digitalization in the firm's finance: A technological perspective. *Electronics, 11*(19), 3252. https://doi.org/10.3390/electronics11193252

Bisong, A., Ahairwe, P. E., & Njoroge, E. (2020). *The impact of COVID-19 on remittances for development in Africa*. Maastricht: European Centre for Development Policy Management. Retrieved from https://ecdpm.org

Bojjagani, S., Sastry, V. N., Chen, C. M., Kumari, S., & Khan, M. K. (2023). Systematic survey of mobile payments, protocols, and security infrastructure. *Journal of Ambient Intelligence and Humanized Computing, 14*(1), 609–654. Retrieved from https://www.researchgate.net

Booysen, S. L. (2022). A comparative analysis of the aspects of the law of South Africa and the United States of America regarding money laundering and the financing of terrorism. Retrieved from https://www.uj.ac.za

Bosompem, H. K., & Nekhwevha, F. H. (2023). Bridging the disconnection between donor support and democratisation in South Africa: The case of the Buffalo City Metropolitan Municipality. *Cogent Social Sciences*. Retrieved from https://www.tandfonline.com

Botha, A., Smulders, S. A., Combrink, H. A., & Meiring, J. (2021). Challenges, barriers and policy development for South African SMMEs–Does size matter? *Development Southern Africa, 38*(2), 153–174. Retrieved from https://www.tandfonline.com

Bowden, J., King, T., Koutmos, D., Loncan, T., & Stentella Lopes, F. S. (2021). A taxonomy of fintech innovation. In *Disruptive Technology in Banking and Finance: An International Perspective on FinTech* (pp. 47–91).

Bretas, V. P. G., & Alon, I. (2020). The impact of COVID-19 on franchising in emerging markets: An example from Brazil. *Global Business and Organizational Excellence, 39*(6), 6–16. Retrieved from https://www.wiley.com

Bukvic, I. B. (2021). Adoption of online payments during the COVID-19 pandemic. In *Economic and Social Development: Book of Proceedings* (pp. 58–67). Retrieved from https://www.researchgate.net

Burns, S. (2022). The Silicon Savannah: Exploring the promise of cryptocurrency in Africa. In *The Economics of Blockchain and Cryptocurrency*.

Cantó, C., Cavallino, P., De Fiore, F., & Yetman, J. (2021). A global database on central banks' monetary responses to Covid-19. Retrieved from https://www.yale.edu

Chen, Y., Kumara, E. K., & Sivakumar, V. (2021). Investigation of finance industry on risk awareness model and digital economic growth. *Annals of Operations Research.* Retrieved from https://www.springer.com

Chingapi, A., & Steyn, A. A. (2022). SMEs in South Africa: The era of adopting mobile payment solutions. In *Proceedings of Sixth International Congress on Information and Communication Technology: ICICT 2021, London, Volume 1* (pp. 429–447). Springer Singapore. Retrieved from https://www.up.ac.za

Chisiiwa, W. (2023). Regulation of the cryptocurrency in South Africa towards a legal framework. Retrieved from https://www.nwu.ac.za

Chitimira, H., & Munedzi, S. (2021). Selected challenges associated with the reliance on customer due diligence measures to curb money laundering in South African banks and related financial... *Journal of Comparative Law in Africa.*

Chitimira, H., & Munedzi, S. (2023). Historical aspects of customer due diligence and related anti-money laundering measures in South Africa. *Journal of Money Laundering Control.* Retrieved from https://www.emerald.com

Chitimira, H., & Ncube, M. (2023). The prospects and challenges for mobile money regulation and the promotion of financial inclusion in Zimbabwe. In *Financial Inclusion and Digital Transformation Regulatory Practices in Selected SADC Countries: South Africa, Namibia, Botswana and Zimbabwe* (pp. 125–140).

Chitimira, H. (2021). An exploration of the current regulatory aspects of money laundering in South Africa. *Journal of Money Laundering Control.* Retrieved from https://www.academia.edu

Chowdhury, E. K., Khan, I. I., & Dhar, B. K. (2022). Catastrophic impact of Covid-19 on the global stock markets and economic activities. *Business and Society Review, 127*(2), 437–460. Retrieved from https://www.nih.gov

Cipriani, M., Goldberg, L. S., & La Spada, G. (2023). Financial sanctions, SWIFT, and the architecture of the international payment system. *Journal of Economic Perspectives, 37*(1), 31–52. Retrieved from https://www.aeaweb.org

Coco, A., & Viegi, N. (2020). The monetary policy of the South African Reserve Bank: stance, communication and credibility. Retrieved from https://www.resbank.co.za

Coffin, P. O., Rowe, C., Oman, N., Sinchek, K., Santos, G. M., Faul, M., Bagnulo, R., Mohamed, D., & Vittinghoff, E. (2020). Illicit opioid use following changes in opioids prescribed for chronic non-cancer pain. *PLOS ONE, 15*(5), e0232538. Retrieved from https://www.plos.org

Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). How did US consumers use their stimulus payments? Retrieved from https://www.nber.org

Cox, N., Ganong, P., Noel, P., Vavra, J., Wong, A., Farrell, D., Greig, F., & Deadman, E. (2020). Initial impacts of the pandemic on consumer behavior: Evidence from linked income, spending, and savings data. *Brookings Papers on Economic Activity, 2020*(2), 35–82. Retrieved from https://www.uchicago.edu

Cronin, J. (2022). Review: Tom Lodge, *Red Road to Freedom, A History of the South African Communist Party 1921–2021*, Jacana, Johannesburg. *Journal of Asian and African Studies.*

Al-Tayyar, R. S., Abdullah, A. R. B., Abd Rahman, A., & Ali, M. H. (2021). Challenges and obstacles facing SMEs in the adoption of e-commerce in developing countries: A case of Saudi Arabia. *Studies of Applied Economics, 39*(4). Retrieved from https://www.ual.es

Da Veiga, A., Vorster, R., Li, F., Clarke, N., & Furnell, S. M. (2020). Comparing the protection and use of online personal information in South Africa and the United Kingdom in line with data protection requirements. *Information & Computer Security, 28*(3), 399–422. Retrieved from https://www.port.ac.uk

De Girancourt, F. J., Kuyoro, M., Ofosu-Amaah, N. A., Seshie, E., & Twum, F. (2020). How the COVID-19 crisis may affect electronic payments in Africa. *McKinsey & Company.* Retrieved from https://www.mckinsey.com

Deep, N. (2022). Socio-economic impact and analytics of cashless economy. *ACADEMICIA: An International Multidisciplinary Research Journal, 12*(7), 82–88. Retrieved from https://www.saarj.com

Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2021). Financial inclusion, digital payments, and resilience in the age of COVID-19. *World Bank Report.* Retrieved from https://www.worldbank.org

Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19.* Retrieved from https://www.google.com

Domingo, E., Arnold, S., & Apiko, P. (2023). Interoperability of digital payment systems: Lessons from the East African Community. Retrieved from https://www.ecdpm.org

du Plessis, M., Jansen van Vuuren, C. D., Simons, A., Frantz, J., Roman, N., & Andipatin, M. (2022). South African higher education institutions at the beginning of the COVID-19 pandemic: Sense-making and lessons learnt. In *Frontiers in Education* (Vol. 6). Frontiers Media SA. Retrieved from https://www.frontiersin.org

Effiom, L., & Edet, S. E. (2022). Financial innovation and the performance of small and medium-scale enterprises in Nigeria. *Journal of Small Business & Entrepreneurship.*

Eksteen, C., & Humbani, M. (2021). Understanding proximity mobile payments adoption in South

Africa: A perceived risk perspective. *Journal of Marketing and Consumer Behaviour in Emerging Markets, 2*(13), 4–21. Retrieved from https://www.icm.edu.pl

Faccia, A. (2023). National payment switches and the power of cognitive computing against fintech fraud. *Big Data and Cognitive Computing.* Retrieved from https://www.mdpi.com

Fantacci, L., & Gobbi, L. (n.d.). Stablecoins, central bank digital currencies, and US dollar hegemony: The geopolitical stake of innovations in money and payments. *Accounting.* Retrieved from https://www.degruyter.com

Festo, C., Vannevel, V., Ali, H., Tamrat, T., Mollel, G. J., Hlongwane, T., Fahmida, K. A., Alland, K., Barreix, M., Mehrtash, H., & Silva, R. (2023). Accuracy of a smartphone application for blood pressure estimation in Bangladesh, South Africa, and Tanzania. *npj Digital Medicine, 6*(1), 69. Retrieved from https://www.nature.com

Foster, K., Blakstad, S., Gazi, S., & Bos, M. (2021). Digital currencies and CBDC impacts on least developed countries (LDCs). *The Dialogue on Global Digital Finance Governance Paper Series.* Retrieved from https://www.hku.hk

Frederiksen, K. S., Cooper, C., Frisoni, G. B., Frölich, L., Georges, J., Kramberger, M. G., Nilsson, C., Passmore, P., Mantoan Ritter, L., Religa, D., & Schmidt, R. (2020). A European Academy of Neurology guideline on medical management issues in dementia. *European Journal of Neurology, 27*(10), 1805–1820. Retrieved from https://www.wiley.com

Fryer, C. E. (2021). The effect of the Protection of Personal Information Act of 2013 on the short-term insurance industry. Retrieved from https://www.nwu.ac.za

Gainsbury, S. M., & Blaszczynski, A. (2020). Digital gambling payment methods: Harm minimization policy considerations. *Gaming Law Review.* Retrieved from https://www.greo.ca

Gaviyau, W., & Sibindi, A. B. (2023). Anti-money laundering and customer due diligence: Empirical evidence from South Africa. *Journal of Money Laundering Control.* Retrieved from https://www.emerald.com

Gaviyau, W., & Sibindi, A. B. (2023). Global anti-money laundering and combating terrorism financing regulatory framework: A critique. *Journal of Risk and Financial Management.* Retrieved from https://www.mdpi.com

Gelb, A., & Mukherjee, A. (2020). Digital technology in social assistance transfers for COVID-19 relief: Lessons from selected cases. *CGD Policy Paper.* Retrieved from https://www.ictworks.org

Gentilini, U. (2022). Social protection and jobs responses to COVID-19: A real-time review of country measures. Retrieved from https://www.ueh.edu.vn

Gronbach, L. (2020). Social cash transfer payment systems in sub-Saharan Africa. *CSSR Working Paper.* Retrieved from https://www.researchgate.net

Gronbach, L., Seekings, J., & Megannon, V. (2022). Social protection in the COVID-19 pandemic: Lessons from South Africa. *Center for Global Development Policy Paper, 252*. Retrieved from https://www.cgdev.org

Haddad, C. R., Prendini, L., Neethling, J. A., & Dippenaar-Schoeman, A. S. (2023). The non-acarine Arachnida of the Amathole Mountains, South Africa. *Bothalia-African Biodiversity & Conservation, 53*(1), 1–33. Retrieved from https://www.scielo.org.za

Hoosain, M. S., Paul, B. S., & Ramakrishna, S. (2020). The impact of 4IR digital technologies and circular thinking on the United Nations sustainable development goals. *Sustainability*. Retrieved from https://www.mdpi.com

Howell, L. (2020). Does online banking technology at low-income credit unions promote financial inclusion? Retrieved from https://www.unc.edu

Huneberg, S. (2020). SA Mercantile Law Journal. Published March 2021.

Isniah, S., Purba, H. H., & Debora, F. (2020). Plan Do Check Action (PDCA) method: Literature review and research issues. *Jurnal Sistem dan Manajemen Industri, 4*(1), 72–81. Retrieved from https://www.lppmunsera.org

James, J. (2021). Confronting the scarcity of digital skills among the poor in developing countries. *Development Policy Review*. Retrieved from https://www.wiley.com

Janiszewski, C., & Laran, J. (2024). A behaviorist perspective on how to address negative consumer behaviors. *Consumer Psychology Review*.

Jean Pierre, S., & Mombeuil, C. (2023). Factors affecting merchants' acceptance of P2P m-payments: A multigroup moderating effect of gender, age, and experience. *International Journal of Bank Marketing*.

Kang, H. N., Thorpe, R., Knezevic, I., Casas Levano, M., Chilufya, M. B., Chirachanakul, P., Chua, H. M., Dalili, D., Foo, F., Gao, K., & Habahbeh, S. (2021). Regulatory challenges with biosimilars: An update from 20 countries. *Annals of the New York Academy of Sciences, 1491*(1), 42–59. https://www.wiley.com

Khambule, I. (2021). COVID-19 and the counter-cyclical role of the state in South Africa. *Progress in Development Studies*. https://www.sagepub.com

Khan, I. (n.d.). The electronic payment systems in a developing economy with reference to Guyana. *Academia.edu*. https://www.academia.edu

Khan, M. A., Máté, D., Abdulahi, M. E., Sadaf, R., Khan, M. A., Popp, J., & Oláh, J. (2024). Do institutional quality, innovation, and technologies promote financial market development? *European Journal of International Management, 22*(3), 484–507. https://www.researchgate.net

Khoase, R. G., Derera, E., McArthur, B., & Ndayizigamiye, P. (2020). Barriers to start-up and sustainable growth of SMMEs: A comparative study between South Africa and Lesotho. *African Journal of Business and Economic Research, 15*(2), 135–155.

Kinns, R. (2021). Time signals for mariners in South Africa. *Journal of Astronomical History and Heritage.* https://www.harvard.edu

Klein, A. (n.d.). China's digital payments revolution. *Brookings Institution.* https://www.brookings.edu

Kollamparambil, U., & Oyenubi, A. (2021). Behavioural response to the Covid-19 pandemic in South Africa. *PLOS ONE.* https://www.plos.org

Kongsamut, P., Monaghan, D., & Riedweg, L. (2021). Unwinding COVID-19 policy interventions for banking systems. *Monetary and Capital Markets Department Special Series on COVID-19.* International Monetary Fund, Washington DC. https://www.imf.org

Kronick, J. M., & Koeppl, T. (2023). The need for speed: The benefits of faster payments and how to achieve them. *Commentary-CD Howe Institute.*

Laing, H. C. (2021). The efficacy of the enforcement mechanisms provided for in terms of the Consumer Protection Act 68 of 2008. https://www.uct.ac.za

Levy, B., Hirsch, A., Naidoo, V., & Nxele, M. (2021). South Africa: When strong institutions and massive inequalities collide. *Carnegie Endowment for International Peace.* https://www.carnegieendowment.org

Li, L. (2022). Reskilling and upskilling the future-ready workforce for Industry 4.0 and beyond. *Information Systems Frontiers.* https://www.springer.com

Loewald, C., Makrelov, K., & Pirozhkova, E. (2022). The short-term costs of reducing trend inflation in South Africa. https://www.researchgate.net

Ma, Q., Tariq, M., Mahmood, H., & Khan, Z. (2022). The nexus between digital economy and carbon dioxide emissions in China: The moderating role of investments in research and development. *Technology in Society.*

Mabin, A. (2020). A century of South African housing acts 1920–2020. *Urban Forum.* https://www.springer.com

Maghsoudi, A., Harpring, R., Piotrowicz, W. D., & Kedziora, D. (2023). Digital technologies for cash and voucher assistance in disasters: A cross-case analysis of benefits and risks. *International Journal of Disaster Risk Reduction, 96,* Article 103827. https://www.sciencedirect.com

Mahakittikun, T. (2020). Mobile payment and firm performance: From the perspective of retail and service sectors. https://www.nida.ac.th

Mamudu, Z. U. (2021). Electronic banking payment system and its impact on the Nigerian economy.

Journal of Emerging Trends in Economics and Management Sciences, 12(1), 8–26. https://www.researchgate.net

Mann, R. J. (2023). *Payment systems and other financial transactions: Cases, materials, and problems.*

Maphosa, M. (2020). Lending booms and bank fragility: The South African experience. https://www.sun.ac.za

Marwala, T. (2022). *Closing the gap: The fourth industrial revolution in Africa.*

Matli, W., & Ngoepe, M. (2020). Capitalizing on digital literacy skills for capacity development of people who are not in education, employment, or training in South Africa. *African Journal of Science, Technology, Innovation and Development, 12*(2), 129–139.

Mavhuru, L. (2022). A comparative analysis of the regulations governing mobile money services in South Africa and Zimbabwe and their impact on sustainable financial inclusion. https://www.uct.ac.za

Mazur, Z. M. (2022). The consumer lending protection: How to prevent predatory lending and "debt slavery" on the small-dollar lending market. *Finanse i Prawo Finansowe.* https://www.lodz.pl

Mbah, P. C., Ezuwore, O. C. N., Diele, U. J., Nwatu, E. C., Okwor, E. O., Ebeke, O. I., Iwu, F., & Umah, S. S. (2021). The effect of cashless policy implementation and the treasury workload on tertiary institutions in South East, Nigeria. *Solid State Technology, 64*(2), 6164–6182. https://www.researchgate.net

Megannon, V. (2022). Experiences of accessing the COVID-19 Social Relief of Distress Grant in South Africa. https://www.researchgate.net

Mhlanga, D. (2023). Blockchain technology for digital financial inclusion in Industry 4.0: Towards sustainable development? *Frontiers in Blockchain.* https://www.frontiersin.org

Moonde, C. (2023). Secure mobile payment system based on blockchain technology for higher learning institutions. https://www.dspace.unza.zm

Mouna, A., & Jarboui, A. (2022). Understanding the link between government cashless policy, digital financial services, and socio-demographic characteristics in the MENA countries. *International Journal of Sociology and Social Policy, 42*(5/6), 416–433.

Msomi, T. S., & Olarewaju, O. M. (2021). Evaluation of access to finance, market, and viability of small and medium-sized enterprises in South Africa. *Problems and Perspectives in Management, 19*(1). https://www.dut.ac.za

Msomi, T. S., & Olarewaju, O. M. (2021). Factors affecting small and medium enterprises' financial sustainability in South Africa. *African Journal of Inter/Multidisciplinary Studies, 3*(1), 103–117. https://www.journals.co.za

Naim, A. (2023). Consumer behavior in marketing: Patterns, types, and segmentation. *European Journal of Economics, Finance and Business Development, 1*(1), 1–18. https://www.europeanscience.org

Nanda, A., Xu, Y., & Zhang, F. (2021). How would the COVID-19 pandemic reshape retail real estate and high streets through the acceleration of e-commerce and digitalization? *Journal of Urban Management.* https://www.sciencedirect.com

Náñez Alonso, S. L., Echarte Fernández, M. Á., Sanz Bas, D., & Kaczmarek, J. (2020). Reasons fostering or discouraging the implementation of central bank-backed digital currency: A review. *Economies, 8*(2), Article 41. https://www.mdpi.com

Nazir, M. A., & Roomi, M. A. (2020). Barriers to adopting electronic commerce for small and medium-sized enterprises in emerging economies. *EMAJ: Emerging Markets Journal.* https://www.pitt.edu

Ndikumana, L., Naidoo, K., & Aboobaker, A. (2020). Capital flight from South Africa: A case study. https://www.umass.edu

Netshakhuma, N. S. (n.d.). Assessment of a South Africa national consultative workshop on the Protection of Personal Information Act (POPIA). *Global Knowledge.*

Ntimane, L. M. (2020). Disruptive innovation in the South African banking sector: A case study of Capitec Bank. https://www.sun.ac.za

Ojukwu-Ogba, N., & Osode, P. C. (2020). The legal combat of financial crimes: A comparative assessment of the enforcement regimes in Nigeria and South Africa. *African Journal of Legal Studies.*

Olukayode, O. (2021). An appraisal of the legal framework for online banking in Nigeria and South Africa. *Chukwuemeka Odumegwu Ojukwu University Journal of Commercial and Property Law, 3*(1). https://www.nigerianjournalsonline.com

Oluwasegun, G., John, O. O., & Segun, A. (2021). E-banking system and financial performance in Nigerian banking sector. *Dutse International Journal of Social and Economic Research, 6*(1), 16–29. https://www.fud.edu.ng

Onyango, B. M. A. (2021). The South Africa-Zimbabwe remittance corridor: An analysis of its characteristics and the cost of remittance payments. https://www.uct.ac.za

Opare, E. A., & Kim, K. (2020). A compendium of practices for central bank digital currencies for multinational financial infrastructures. *IEEE Access.* https://www.ieee.org

Ozili, P. K. (2023). Global central bank digital currency research and developments: Implications for cryptocurrency. In *Cryptocurrency Concepts, Technology, and Applications* (pp. 59–73). Auerbach Publications.

Pairman, S., & Sanggita, W. (2021). Instant payments in Asia are changing business models. *Journal of Digital Banking.*

Parry, J. (2024). The Third Earl Grey, Liberalism, and the British Empire. *Modern Intellectual History*. https://www.cambridge.org

Pazarbasioglu, C., Mora, A. G., Uttamchandani, M., Natarajan, H., Feyen, E., & Saal, M. (2020). Digital financial services. *World Bank, 54*. https://www.worldbank.org

Pillay, D., Stankevitz, K., Lanham, M., Ridgeway, K., Murire, M., Briedenhann, E., Jenkins, S., Subedar, H., Hoke, T., & Mullick, S. (2020). Factors influencing uptake, continuation, and discontinuation of oral PrEP among clients at sex worker and MSM facilities in South Africa. *PLOS ONE, 15*(4), Article e0228620. https://www.plos.org

Potwana, A. (2022). Enforcement of consumers' rights under the Consumer Protection Act 68 of 2008. https://www.up.ac.za

Rajagopaul, A., Magwentshu, N., & Kalidas, S. (2020). How South African SMEs can survive and thrive post COVID-19: Providing the right support to enable SME growth now and beyond the crisis. *McKinsey & Company*. https://www.mckinsey.com

Raman, P., & Aashish, K. (2021). To continue or not to continue: A structural analysis of antecedents of mobile payment systems in India. *International Journal of Bank Marketing*.

Ranchhod, V., & Daniels, R. C. (2021). Labour market dynamics in South Africa at the onset of the COVID-19 pandemic. *South African Journal of Economics*. https://www.nih.gov

Regragui, M. K. (2022). The African mobile wallets: An empirical analysis of the services and the anticipated trends. https://www.polimi.it

Rogerson, J. M., Lekgau, R. J., Mashapa, M. M., & Rogerson, C. M. (2021). COVID-19 and local business responses: Evidence from South Africa's most tourism-dependent locality. https://www.uj.ac.za

Santoro, F., Munoz, L., Prichard, W., & Mascagni, G. (2022). Digital financial services and digital IDs: What potential do they have for better taxation in Africa? https://www.core.ac.uk

Schotte, S., & Zizzamia, R. (2023). The livelihood impacts of COVID-19 in urban South Africa: A view from below. *Social Indicators Research*. https://www.springer.com

Schulze, W. G. (2020). The reversal of electronic payments under South African law: Possible guidance from recent developments in European Union law. *SA Mercantile Law Journal*.

Siano, A., Raimi, L., Palazzo, M., & Panait, M. C. (2020). Mobile banking: An innovative solution for increasing financial inclusion in Sub-Saharan African countries: Evidence from Nigeria. *Sustainability, 12*(20), Article 8685. https://www.mdpi.com

Simatele, M., & Maciko, L. (2022). Financial inclusion in rural South Africa: A qualitative approach. *Journal of Risk and Financial Management*. https://www.mdpi.com

Simatele, M., & Mbedzi, E. (2021). Consumer payment choices, costs, and risks: Evidence from Zimbabwe. *Cogent Economics & Finance*. https://www.tandfonline.com

Skovgaard-Smith, I. (2023). Transnational life and cross-border immobility in pandemic times. *Global Networks*. https://www.researchgate.net

Smith, K. (2021). Challenges combating money laundering in the real estate sector in South Africa. https://www.uwc.ac.za

Srouji, J. (2020). Digital payments, the cashless economy, and financial inclusion in the United Arab Emirates: Why is everyone still transacting in cash? *Journal of Risk and Financial Management, 13*(11), Article 274. https://www.mdpi.com

Telukdarie, A., Dube, T., Matjuta, P., & Philbin, S. (2023). The opportunities and challenges of digitalization for SMEs. *Procedia Computer Science, 219,* 1018–1024. https://www.sciencedirect.com

Tentu, L. (2023). Consumers' rights and challenges of the socio-economically disadvantaged: Implications of the Consumer Protection Act 68 of 2008. https://www.dut.ac.za

Tesche, T. (2022). Pandemic politics: The European Union in times of the coronavirus emergency. *JCMS: Journal of Common Market Studies*. https://www.wiley.com

Tetlow, G., & Dalton, G. (2020). Support for business during the coronavirus crisis: An international comparison.

Torkelson, E. (2020). Collateral damages: Cash transfer and debt transfer in South Africa. *World Development*. https://www.opensecrets.org.za

Tut, D. (2023). FinTech and the COVID-19 pandemic: Evidence from electronic payment systems. *Emerging Markets Review*. https://www.nih.gov

Uddin, M. H., Akter, S., Mollah, S., & Al Mahi, M. (2022). Differences in bank and microfinance business models: An analysis of the loan monitoring systems and funding sources. *Journal of International Financial Markets, Institutions and Money, 80,* Article 101644.

Una, G., van Eden, H., Singh, A., Bardella, F., & Verma, A. (2020). Enhancing digital solutions to implement emergency responses. *Special Series on Fiscal Policies to Respond to COVID-19*. International Monetary Fund. https://www.imf.org

Urban, B., & Townsend, S. A. (2021). TymeBank: Digital disruption in SA's banking sector. *Emerald Emerging Markets Case Studies.*

Van Wyk, A. (2020). An analysis of anti-money laundering measures in the South African real estate sector. https://www.nwu.ac.za

van Zanden, J. L. (2023). Examining the relationship of information and communication technology and financial access in Africa. *Journal of Business and Economic Options.*

Vermeulen, C. (2021). One hundred years of private shareholding in the South African Reserve Bank. *Economic History of Developing Regions*. Retrieved from https://journals.co.za

Webb, C., & Vanqa Mgijima, N. (2024). Financial inclusion and the contested infrastructures of cash transfer payments in South Africa. *Global Social Policy*.

Xu, J., & Gao, X. (2021). E-payment systems, e-marketing, and e-advertising. In *E-business in the 21st Century: Essential topics and studies* (Vol. 7, p. 125).

Yozi, M. (2020). The identification and verification of clients by banks in South Africa: A Financial Intelligence Centre Act requirement. *University of Johannesburg*. Retrieved from https://uj.ac.za

Zhang, L., Xie, Y., Zheng, Y., Xue, W., Zheng, X., & Xu, X. (2020). The challenges and countermeasures of blockchain in finance and economics. *Systems Research and Behavioural Science, 37*(4), 691-698. https://doi.org/10.1002/sres.2672

Zhang, T., & Huang, Z. (2022). Blockchain and central bank digital currency. *ICT Express*. https://www.sciencedirect.com

Zitha, M. G. (2023). The impact of Millennium and Sustainable Development Goals on women leaders within South African schools. *Post-independence development in Africa: Decolonisation and transformation prospects* (pp. 279-299). Springer International Publishing. https://doi.org/10.1007/978-3-030-96139-2_14