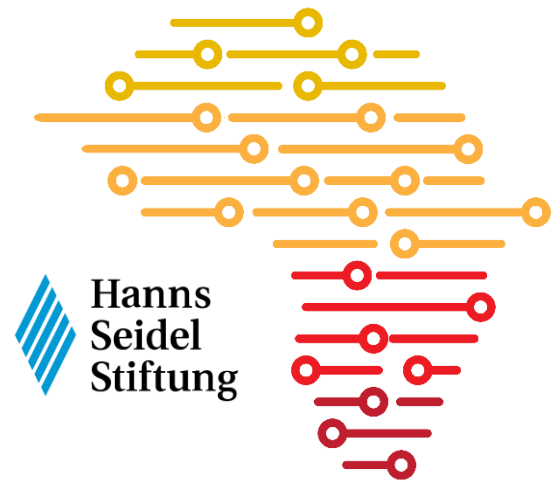


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# African Governance in the Digital Age



## Illusions of inclusion: Fintech in Africa

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# **Illusions of inclusion: Fintech in Africa**

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## **Abstract**

*Can fintech deliver on its promise of achieving financial inclusion in Africa? This working paper advances the argument that the heady optimism around fintech is over enthusiastic. It provides an overview of the fintech landscape in southern Africa, focusing specifically on mobile money, which it posits fits more accurately within imaginaries of modernity and inclusion. Employing a mixed methods approach, the paper examines subscription data to highlight that the rural poor are still excluded. Additionally, ignoring the differences between rural and urban locales, including differing social and cultural contexts, exacerbates financial exclusion. The discussion is framed by the emerging concept of digital political economy.*

**Keywords:** Fintech, mobile money, financial inclusion, digital political economy

## Introduction

The rapid expansion of digital technologies and platforms has had a profound impact on the global economy in the 21st century. The convergence of traditional functions, such as financial services with electronic communications technology, presents opportunities and risks, particularly for African countries. On the one hand, the emerging digital ecosystem offers immense potential for innovation in traditional sectors, allowing less-resourced countries to provide services to their citizens more efficiently than ever before. On the other hand, the pace of change may outstrip the state's regulatory capacity and ability to deploy the necessary infrastructure to support this transformation. Therefore, policymakers must carefully balance the potential benefits of digitalisation with the need to mitigate its risks.

The sustainability of economic interventions has been a critical concern since the 1980s, in the aftermath of a world that had to deal with multiple financial crises, including the collapse of the crude oil price, the Latin American debt crisis, and one of the most acute global recessions since World War II. These crises occurred against the backdrop of an intensifying Cold War and well-reported famine in Ethiopia (which arguably gave birth to a development complex). There was a global recognition of the need for fundamental change in how the world operates if there was to be a future, a world that is underpinned by social justice and inclusivity (Du Pisani, 2006: 83-96; Haider, 2021). The problem with the nebulous concept of sustainability is that it covers a multitude of sins, the worst being the marginalisation, or even exploitation, of the most vulnerable in society – the rural poor, under the umbrella of sustainable development.

Financial inclusion, the provision of formal financial services to underserved or excluded populations, is crucial to sustainable development (Nguyen and Le, 2022; Ozili, 2022). Financial inclusion programmes aim to provide access to a range of financial services, including insurance, credit, and savings facilities (Sithole et al., 2021). Research has shown that financial inclusion can positively affect poverty reduction, economic growth, and social welfare (Duvendack and Mader, 2019; Ozili, 2022). In sustainability, financial inclusion is seen as a means of achieving the United Nations' Sustainable Development Goals (SDGs), such as poverty eradication and gender equality (Yin et al., 2019). By providing access to formal

financial services for those who have traditionally been excluded, such as rural populations and the poor, financial inclusion can help promote more significant economic and social equity.

Africa and Asia are home to nearly two billion people who are not part of the formal financial system; in other words, they are unbanked (Demirguc-Kunt et al., 2015). In sub-Saharan Africa, financial inclusion involves numerous challenges, including limited access to financial services due to gender disparities, geographic barriers, and social constraints (Aterido et al., 2013; Rooyen et al., 2012). In many parts of the continent, these challenges are compounded by structural impediments rooted in historical factors. Addressing these challenges will require targeted interventions that consider different populations' specific needs and circumstances, and broader efforts to address the underlying structural barriers to financial inclusion. Exclusion from the formal financial system – be it voluntary or involuntary – is expensive, as access to financial products and loans becomes more expensive.

The digitalisation of the exchange of money, in terms of sending, receiving and saving, is sometimes positioned as a solution to the challenge of financial exclusion. By offering developing economies an opportunity to leapfrog from the periphery of the global financial system to the centre, more companies are afforded the opportunity to innovate while also providing services for more of its citizens.

Fintech is a catch-all term that refers to technology-enabled financial services. The Financial Stability Board defines fintech as ‘... technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services’ (Financial Stability Board, 2022). By implication, fintech revolutionises how financial services are provided and opens up an avenue to ‘bank the unbanked’ and ease cross-border remittances.

Exclusion from traditional ‘bricks and mortar’ financial systems can significantly affect an individual’s ability to build assets, generate income, and participate in the broader economy. Removing barriers to participation in the formal financial system, and promoting greater

access to financial services, is crucial to providing opportunities for economic advancement and social equity (Omar & Inaba, 2020).

The advent of mobile money products such as M-PESA were received with much fanfare because of the opportunities for financial inclusion. M-PESA is mobile phone-based money transfer service that also allows for payments, and microfinancing; it was launched in 2007 by Vodafone and Safaricom in Kenya. This opened up possibilities for users who would traditionally not have been able to access banking services. Mobile money and related services have played a pivotal role in promoting financial inclusion, by enabling individuals previously excluded from traditional financial systems to overcome barriers to entry through mobile phones. These services have increased citizen agency (Wijesiri and Meoli, 2015) and reduced the costs associated with accessing financial services (Museba et al., 2021). Furthermore, financial service providers have also benefited from adopting mobile money, as evidenced by increased profitability and diversification of deposits (Ky et al., 2019). Still, the excitement masks the challenges associated with introducing such services – with most of the population being on the periphery of the economy and still excluded from it – those who are undocumented or have poor communications infrastructure (more specifically, digital infrastructure).

Therein lies the danger of failing to consider the context in which fintech (and related technologies) exist in developing economies. On the one hand, it is home to ground-breaking innovation and a green market. Yet, it is also home to structural inequality and what the Huawei Global Connectivity Index (GCI) 2017 report describes as a ‘digital chasm’. Developing countries that are not early adopters may not be able to catch up to better-resourced countries as they still need to deliver basic infrastructure such as electricity, Internet and telecommunications.

Drawing on a combination of literature from developmental studies, the social theory of technology, development geography, political economy, and anthropology, this working paper contributes to the growing discourse around digital financial inclusion in southern Africa. It creates an elastic frame around the concept of ‘inclusion’, which it contends is not inclusion in the truest sense of the word if it does not consider the social and cultural context

of those being 'included'. Moreover, it spotlights the dangers of not taking a keen look at products and services packaged as inclusion solutions but that are essentially part of what can be described as the 'development-industrial-complex' (see Isenberg, 2016; Nagaraj, 2015; Varrow, 2017).

This paper's methodology is primarily centred on qualitative desk-based research, including policy reports from multilateral institutions such as the World Bank; company reports; academic literature; and news reports. The secondary approach is quantitative data analysis from the World Bank and Afrobarometer. This working paper employs the nascent term 'digital political economy' as a lens to understand how digital resources are deployed in southern Africa and the implications of this distribution on society. Essentially, the paper looks at the structural determinants of the region's political economy beyond traditional powers to include marginalised ones. The question underpinning this paper is: does fintech offer financial inclusion for the poor in southern Africa?

The paper attempts to answer this question in four steps. First, the paper begins by setting out the digital political economy framework by broadly discussing the terms and issues. Second, it considers the concept of financial inclusion and how it applies in the southern African sub-region, where the mobile money adoption rate is not as high as in other sub-regions. Third, it looks at digital financial inclusion in the sub-region, bolstered by subscription data in urban and rural settings. Finally, it offers a cautionary tale on digital optimism.

## **Digital political economy**

Digital political economy is a tool that can be used to examine how the deployment of digital technologies interfaces with government, business, and society. In other words, similarly to classic international political economy, it makes sense of the relationships between economics, society and politics. Other tools, such as Platform Governance (Gorwa, 2019; Ciligot, 2020; Etlinger, 2021), have emerged to help interpret what is happening in the digital ecosystem or digital economy. It details the decision-making frameworks around digital platforms (or technical systems), information capitalism which relates to the commodification

of information (Ignatow, 2012; Ellenwood, 2020) and surveillance capitalism which refers to the commodification of personal data (Zuboff 2015, 2019).

However, these tools only speak to one aspect of the political economy. Milton Mueller, positing the digital political economy within the more prominent Internet governance discourse, argues for employing digital political economy as a framework. Mueller contends that the various activities within the 'digital ecosystem' are essentially about 'production' and 'exchange'. Therefore, a digital political economy framework captures the relational aspect of markets and states within the larger digital ecosystem (Mueller, 2022).

There may be disagreement with Mueller's use of digital political economy; for instance, Louise Marie Hurel (2022) suggests it narrows the scope of inquiry into Internet governance. However, this paper takes the view that there are benefits to the digital political economy as an instrument to understand the intersection between regional and national public policy, fintech applications, and financial inclusion. The Internet, and its accompanying digital technologies, do not exist in a vacuum.

Thanks in part to emerging technologies, the changing nature of the political economy has compelled scholars and practitioners to grapple with developing new relationships between the state and companies, with multinational enterprises becoming increasingly influential in various governance fora. Raymond Vernon (1971, 1993) predicted that multinational enterprises would become a critical factor in the global political system and a source of conflict.

In the 21st century, we see the blurring of lines between the state system, international civil society and technology companies, as evidenced by the fact that Microsoft has a United Nations Affairs office (Plentz, 2021) and the near omnipresence of 'Big Tech' across the globe.

Articulating concerns about the growing influence of large technology companies, Ian Bremmer (the Eurasia Group President) cautions that due to their increasing geopolitical influence, tech companies such as Meta (Facebook), Twitter, Google, Apple, etc, are 'poised to compete for influence' against nation-states (Bremmer, 2021). This observation is a key

element in understanding the changing dynamics in global economic affairs. In other words, the study of non-state actors as an influence on the interaction between markets and states has become part of the political economy. Nowhere is this observation as salient as it is in the examination of fintech.

Fintech lies at the intersection of financial service provision and digitalisation. It is touted and criticised as an instrument to advance financial inclusion (Langley and Leyshon, 2020; Makina, 2019; Sayeh, 2022), and is closely interlinked with digital inclusion. However, a deterministic view of this new technology obscures wider issues in the broader digital ecosystem. For instance, difficulties around the accessibility and availability of digital technologies continue to mar any progress towards digital financial inclusion on the continent. Who decides who gains access to these technologies? Is there sufficient infrastructure to ensure technologies, including fintech, are widely available? How are decisions regarding technology deployment made?

Mariele Kaufmann and Julian Jeandesboz (2017) remind us that 'the digital is best examined in terms of folds within existing socio-technical configuration'. Digital technologies, though contingent on inclusion, are not divorced from social or political realities. Emmanuel Frimpong Boamah et al. (2021) contend that the uneven access to fintech instruments in the Global South mirrors and replicates existing inequalities. Does this mean fintech should be abandoned as an instrument for financial inclusion? Not at all. It means there needs to be a more nuanced approach to studying, advocating and deploying a particular form of technology.

Examining fintech in southern Africa gives us unique insight into the interactions between finance, digital innovation, telecommunications and infrastructure deployment. Drawing on scholars in the field of development studies, such as Langley and Leyshon (2021), who critique digitally-based financial inclusion, allows us to explore how digital determinism can obscure the gulf between rural, urban, and peri-urban locales.



The development of fintech products, such as mobile money, has allowed for the evolution of other development technologies, such as pay-as-you-go electricity, which is not necessarily available among the poorest communities (Baker, 2022; GSMA, 2016).

## **Financial inclusion**

Financial inclusion gained attention in the early 2000s, when the World Bank and the United Nations started to underscore the relationship between involuntary exclusion from formal financial products and services, and poverty. On 29 December 2003, United Nations Secretary-General Kofi Anan contended that:

The stark reality is that most poor people in the world still lack access to sustainable financial services, whether it is savings, credit, or insurance. The great challenge is to address the constraints that exclude people from the financial sector. Together, we can build inclusive financial sectors that help people improve their lives. (Annan, 2003)

Integrating more people, as well as small and medium enterprises (SMEs), into formal financial systems means more people would have access to finance and instruments to participate in the global economy.

In 2014, the World Bank's Global Findex showed that approximately two billion adults were involuntarily excluded from the formal financial system (Global Findex, 2014). As a consequence of concerted efforts by both the private and public sectors, including 60 countries which set formal targets, the rate of account ownership increased between 2017 and 2021. However, the African continent still lags behind the rest of the world.

Southern Africa is home to over 300 million people; about 4% of the global population (SADC, 2022). In line with international trends, there has been a move towards urbanisation: Between 2000 and 2022, urban centres grew by approximately 100 million people, with estimates indicating that the urban population is about 47% of the region's population (Le Roux and Napier, 2022).

This urban transition belies two key facts: firstly, most of the region’s population lives in rural communities and, secondly, as Alize Le Roux and Mark Napier (2022) illustrate, the urban transition is characterised by many people in peri-urban (or more informal)<sup>1</sup> settings. These numbers are set to grow; UN-HABITAT and UNICEF (2020) estimate that by 2050, six out of 10 people in Africa will live in urban areas, and 70% will be youths. The implication of having such a large number of people living in urban and peri-urban settings is that poverty (living on less than US\$2 a day) would increase without proactive intervention and financial inclusion. Extensive literature illustrates the relationship between financial inclusion and poverty reduction in line with sustainable development (SDG) goal 7 (Oerchtati, 2020; Tran and Le, 2021).

An examination of survey data from select countries in southern African countries (Lesotho, Southern Africa, Malawi, Tanzania, Zimbabwe and Zambia) illustrates that there is still a long way to go regarding financial inclusion for rural residents, who are predominantly poor (see Table 1). The survey queried whether respondents were close to some form of banking services, including mobile banks and ATMs. Most respondents in rural areas answered no, with the worst rates of access present in rural Lesotho, where a staggering 99.3% of respondents reported that they were not near any banking service. This demonstrates the need for alternate mechanisms for financial inclusion. Many of the reasons for this gap in access are partly geographical.

**Table 1:** Access to banking or money services in select southern African countries

	Urban	Rural	Peri-urban
No	36,9%	68,0%	39,5%
Yes	63,1%	32,0%	60,5%

Source: Data from Afrobarometer 2019/2021, Survey Round 8

An extensive literature review conducted by Ahmad, Green and Jiang (2020) found that ‘population density’ is more closely linked to bank branch penetration in Africa than in other

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<sup>1</sup> Peri-urban areas are transitional zones between urban centres and rural environments. Peri-urbanisation refers to the dispersed urban growth that results in hybrid landscapes with both urban and rural characteristics (see Eyita-Okon, 2022; Shaw et al.,2020).

developing economies. Both are more strongly related to business access to external finance in Africa than elsewhere (Ahmad, Green and Jiang, 2020: 756). They point to the fact that low population density is not a factor in bank penetration, looking to countries such as the US with similar density issues to far-lying African geographic locales. The problem is poverty, as poor communities in more developed countries suffer similarly regarding financial exclusion.

Historically, rural African communities have been the most economically vulnerable due to endemic poverty and inequality. Moreover, bank penetration is low due to poor infrastructure, including roads, electricity, and information and communications technologies (ICTs). Furthermore, the lack of legal tenure in rural areas has also hampered bank penetration. Gerard van Empel points out that:

Insecure property rights – especially land titles in rural areas – limit any bank’s collateral options; combined with poor contract-enforcement opportunities, this takes away a bank’s incentive to provide credit, especially for long-term loans. (van Empel, 2010: 1)

Even when there are banks available, people in rural areas may be hesitant to use them for various reasons. Studying rural Malawi, Mtambalika et al (2016) argue that many ‘prefer banking through retail agents than going to a bank branch because banking through retail agents is cheaper, more convenient and efficient than traditional banking’. Moreover, rural communities have gotten the short end of the stick when banking services are developed.

Often the banks are too far away, and several exogenous and endogenous pressures prevent rural residents from using formal banking services. Considerations such as cultural preferences, for example informal savings clubs or banks opening at inconvenient times for rural workers are not factored into provision designs (Choga et al.,2017). Additionally, low-income bank clients, particularly in peri-urban and rural settings, have been negatively affected by bank failure rates. In South Africa alone, over 13 banks, such as VBS Mutual Bank, Saambou Bank and African Bank, which serviced poorer clients, have closed since 1990, ultimately failing due to poor management and liquidity shortages (Business Tech, 2018; Tjiane, 2015; ).

The VBS liquidity crisis was caused by mismanagement and by National Treasury instructing municipalities to withhold new deposits from the bank (Masondo, 2018). In contrast, the Saambou Bank liquidity crisis, which set off a chain of other closures, was caused by the government failing to bail out solvent banks in distress, while also increasing interest rates (Haveman, 2021).

Recently, attention has returned to rural communities because of national and international policy pressure. Additionally, in the South African context, 'social grants have injected money into rural communities on a scale previously unimaginable' (Finmark Trust, 2012).

Informal savings clubs, or stokvels, are the most common financial system on the African continent and have become a convenient avenue for social grant recipients to save money. But, as Finmark Trust points out, even though 'more than one in three rural households' have specialised saving accounts created by legacy financial institutions, they are not a popular option for the poor because the cost to travel to branches is a low-interest rate (Ibid.). By 2018, South Africa's financial inclusion rate was around 80%, but a 2019 SA FinScope Survey showed an increase in the number of people engaged in stokvels (Mashigo, 2020). This speaks to the community and cultural aspects surrounding money, and illustrates the need for a fundamental rethink about how financial products are offered in urban and peri-urban settings.

South Africa's stokvels, which number in the hundreds of thousands, are worth over US\$3 billion annually (Rumney, 2021). Banks and mobile network operators (MNOs) have been looking forward to tapping into this very lucrative market, while banks in South Africa are starting to offer accounts tailored towards stokvels and to roll out similar initiatives into other markets across the continent (Ibid).

### **Social and cultural aspects of money**

Financial practices among the rural poor are often informal and culturally entrenched, and thus socio-cultural aspects of money cannot be divorced from financial inclusion

programmes. Yet within the political economy paradigm, culture is often ignored as an aspect of this framework. However, as technology, financial inclusion, and the very design of products interface with social and political determinants, this paper puts forward that this consideration should be part of the digital political economy paradigm. Money is not merely a source of exchange, it underpins social relationships and, similarly, there are also cultural implications to the exchange of money in rural settings.

For instance, in looking at practices around money in Ethiopia, Woldmariam F. Mesfin maps out the various cultural transactions – documented and undocumented – among the rural poor (Mesfin, 2012). Mesfin argues that ‘understanding these practices would provide important input for the design of new financial services (eg, mobile money systems)’ (Ibid: 2-3).

The need for the exchange of money and the financial exclusion of people from conventional forms of banking and insurance has led to the creation of alternate payment services.

Mobile money is not an economic add-on to a social tool, but in a cultural context where material transactions (money transfers) are seen as a fundamental indicator of the quality of the social relationship, this functionality is an amplification of the sociality of the tool. (Burrell, 2018: 153)

This paper takes a similar view to Mesfin (2012) in that it agrees that the design of financial products should consider cultural practices. Alternatively, digitally-based financial products like M-Pesa in Kenya may absorb different cultural values or even cement others. Research by Kusimba et al. (2018) examining the ubiquity of mobile money in Kenya has drawn out new cultural practices linked to mobile money. For instance, mobile money allows for community or family activities, such as payments for public ceremonies, or as ‘part of a culture of entrustment’ where people pool resources through an informal savings arrangement. As the authors succinctly point out:

The real ‘inclusion’ that 21<sup>st</sup> century information and communications technologies (ICTs) provide is into a culture of entrustment that is surely centuries old. In western

Kenya, men and women participate in frequent borrowing and lending of value in everyday and ceremonial contexts. Through these exchanges, value is stored or saved through gifts to others until it is repaid at an unspecified time in the future – often in a different form or value. (Kusimba et al, 2018: 182)

Importantly, Kusimba et al. make an important observation about the gap in ‘[f]inancial inclusion and empowerment narratives’ about the fact that it ignores the importance of ‘collectivities and that mobile money in specific settings is social (Ibid, 182-193). This observation may also point to why mobile money applications, initially designed and packaged in southern Africa, did not take off the same way as they did in East Africa. This will be discussed further in the paper.

## Digital financial inclusion

Mobile telephony is responsible for increased access to the Internet and, consequently, fintech mobile money solutions. It is potentially an alternative mechanism for rural communities to access banking services. However, these services are limited and expensive compared to legacy banking services. In the last 20 years, the number of mobile subscribers and Internet users in southern Africa has increased exponentially (see tables 3 and 4). The existence of mobile subscribers implies that there is mobile telephone access. This is particularly important because fixed-line telephony is not pervasive across the continent, particularly in rural areas.

**Table 2:** Mobile cellular subscribers, number of subscriptions in SADC, 2000-2020

Country	2000	2020
Angola	25 806	14 645 050
Botswana	106 029	3 819 019
Comoros		472 815
Democratic Republic of Congo	15 000	n. a
Eswatini	33 000	n. a
Lesotho	27 000	1 562 648

<b>Madagascar</b>	63 094	n. a
<b>Malawi</b>	38 202	10 004 680
<b>Mauritius</b>	174 500	1 912 900
<b>Mozambique</b>	51 065	15 463 226
<b>Namibia</b>	82 000	2 594 382
<b>Seychelles</b>	25 961	183 498
<b>South Africa</b>	8 339 000	94 952 509
<b>United Republic of Tanzania</b>	110 518	51 220 233
<b>Zambia</b>	98 853	19 104 208
<b>Zimbabwe</b>	266 441	13 191 708

Source: World Bank Databank, 2021

Table 2 highlights the boom in mobile subscription services on the continent (there are no figures for the DRC and Eswatini owing to ongoing conflict). But, when you cross-reference the World Bank data on mobile subscriptions with Afrobarometer survey data on access to mobile phone services, with urban and rural sampling as a variable, the picture changes significantly. This speaks to the fact that there is an acute gap in access between urban and rural populations. If there is no access to a mobile phone, either individually or in a household, how do people engage with fintech solutions such as mobile money?

**Table 3:** Rural and urban access to mobile phone services

	Urban	Rural	Peri-urban
<b>Angola</b>			
<b>No</b>	42,9%	71,9%	-
<b>Yes</b>	55,5%	28,1%	-
<b>Botswana</b>			
<b>No</b>	-	5,0%	-
<b>Yes</b>	100,0%	95,0%	100,0%
<b>Eswatini</b>			

	Urban	Rural	Peri-urban
<b>No</b>	-	6,4%	-
<b>Yes</b>	100,0%	93,6%	-
<b>Lesotho</b>			
<b>No</b>	-	7,5%	-
<b>Yes</b>	100,0%	92,5%	100,0%
<b>Malawi</b>			
<b>No</b>	-	4,3%	-
<b>Yes</b>	100,0%	94,7%	100,0%
<b>Mozambique</b>			
<b>No</b>	11,9%	28,5%	-
<b>Yes</b>	88,1%	69,3%	-
<b>Namibia</b>			
<b>No</b>	9,2%	28,5%	-
<b>Yes</b>	87,8%	67,9%	-
<b>South Africa</b>			
<b>No</b>	13,8%	26,7%	-
<b>Yes</b>	85,2%	73,3%	-
<b>Tanzania</b>			
<b>No</b>	7,5%	22,4%	-
<b>Yes</b>	92,5%	76,2%	-
<b>Zambia</b>			
<b>No</b>	-	7,8%	-
<b>Yes</b>	100,0%	92,2%	-
<b>Zimbabwe</b>			
<b>No</b>	-	12,0%	-
<b>Yes</b>	100,0%	88,0%	-

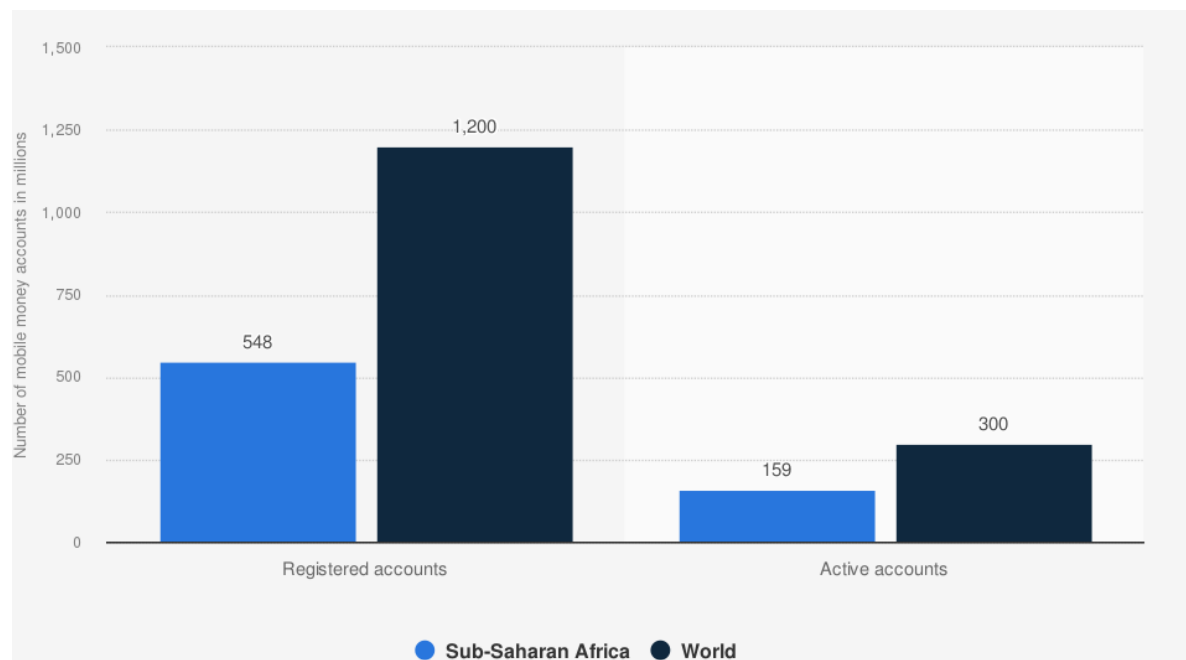
Source: Afrobarometer Round 8 2019/2021



Therein lies the difference between those who live in urban and peri-urban communities, and those who live in rural areas: Mobile phone penetration is lower than that of more developed economies. The reasons for this are a function of history and the failure of contemporary African governments.

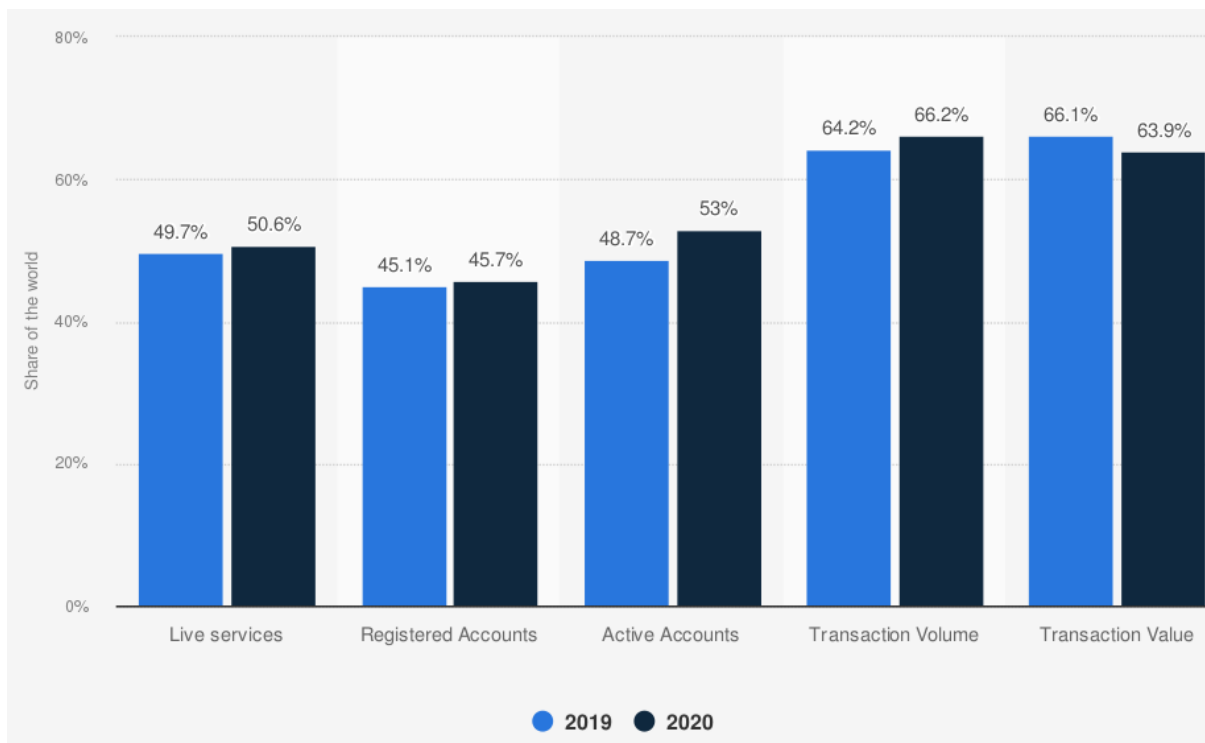
Mobile money has been particularly successful in Africa, compared to the rest of the world, with a considerable percentage of users active on the continent (see Figures 1 and 2).

**Figure 1:** Number of registered and active mobile money accounts in sub-Saharan Africa compared to the world in 2020 (in millions)



Source: GSMA, 2021

**Figure 2:** Sub-Saharan Africa mobile money figures as a share of the world in 2019 and 2020



Source: Statista, 2022

These figures also obscure a twofold contrast: on the one hand, even though digital services have increased in volume, on the other hand, they have not increased at the expected level – particularly in southern Africa. There have been many success stories, such as in West Africa which, according to the 2019 GSMA report, had the most significant increase in registered users, with a 14% increase, leading to 163 million users. MTN and Airtel have grown and had a sixfold market increase in Ghana between 2017 and 2017 (Ozyurt, 2019). Asravor et al. find that mobile money adoption among smallholder farm households is relatively high; 80% of adults in rural areas do not own a conventional bank account but have a mobile money account, owing to ease of use. Some of the crucial determinants they found were that access to electricity and living near a mobile money agent were positively correlated with registering and being active on a mobile money platform. Another key determinant is the type of job the household heads' (usually the ones with the mobile money) account has affected, whether the household head registers for a mobile money account. They point to trading as a vital part of the rural economy, which thus makes access to a mobile phone imperative (Asravor et al. 2022: 213).

## **Digital financial ecosystems**

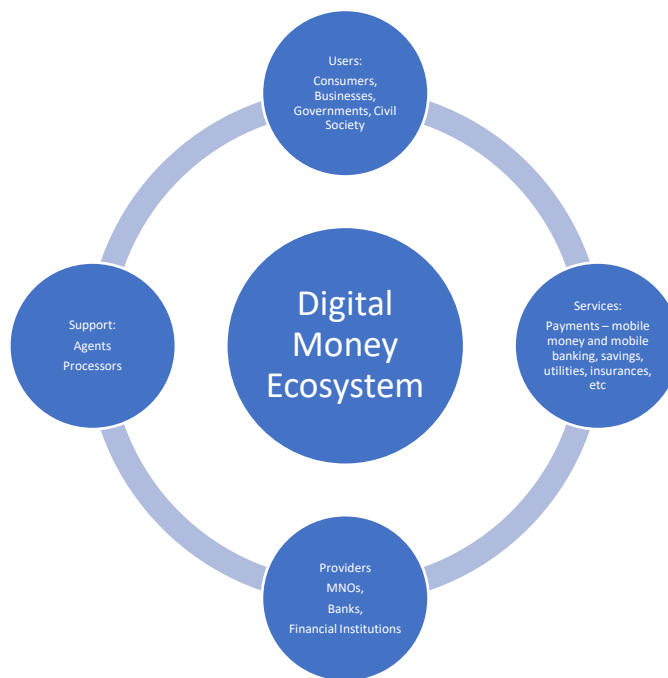
The digital financial ecosystem is complicated by several players and disparate regimes. The essential components of the ecosystem include providers, banks, other financial institutions, and mobile network operators (MNOs), which are heavily involved in the sector. The users in the ecosystem include consumers, merchants, small to medium enterprises (SMEs) and large enterprises (LEs), governments, and civil society groups. The types of accounts include payment services, transaction accounts, mobile money, mobile banking, loans and insurance. Moreover, there are different modalities for offering services that do not necessarily need access to the internet.

The most pervasive digital money services include mobile money (m-money) and mobile banking (m-banking). But other benefits exist, including insurance and pay-as-you-go utility services such as alternate power and water provision (Baker, 2022; GSMA, 2016: 17-23). The key players in this ecosystem include mobile network operators (MNOs). They offer a variety of m-money offerings, mainly via pay-as-you-go offerings.

...funds may have been originally purchased as airtime or have been deposited directly into the customer's mobile wallet for future uses in m-money transactions. Customers are not required to have an account at a financial institution to own and operate m-money accounts. The regulatory framework is based on company law and a telecoms regulator. (Ahmad et al, Ibid: 762)

Mobile money platforms allow for leveraging its technologies for other uses such as utilities and gathering consumer information. For instance, Kenya's M-Pesa, which began as a mobile microfinancing platform, can offer various other financial services, including insurance, virtual savings account, cross-border payments and international remittances (Baker, Ibid: 9). Another example of leverage technology is KopaGas, a mobile for development utilities innovation that allows customers to buy small amounts of liquid petroleum gas (LPG) via mobile money. The pilot in Tanzania deployed a smart metre attached to LPG gas canisters that used SMS for mobile-to-mobile connectivity, which allowed gas consumption to be monitored and credit information updated (GSMA, 2018).

**Figure 3:** Rudimentary digital money ecosystem



Source: author's own depiction

### **The M-Pesa miracle**

M-Pesa, one of the first mobile telephony-based fintech companies, launched in 2007 in partnership with the Kenyan Commercial bank of Africa (Baker, Ibid: 9), has not been able to replicate its same degree of success outside of its sub-region. There are many reasons, including different cultures regarding money, and differences in the platform's origin story.

M- Pesa, which stands for 'mobile' and 'money' (Pesa is money in Swahili), has been the poster child for financial inclusion. As one of the first mobile phone-based fintech in Africa, the m-money system has become part and parcel of the economic ecosystem of Kenya. In 2016, there were only a few thousand reported ATMs, but there were over 120 000 M-Pesa agents. Through these agents, Kenyans can exchange cash for mobile money, using their phones to pay for services and transfer cash, including receiving salaries. A study by Tavenet Suri and William Jack (2016) showed that access to M-Pesa has improved financial stability for Kenyan households by offering financial services that would otherwise have been unavailable.

Besides being a tool of inclusion, the M-Pesa platform improved e-government in Kenya. The eCitizen platform has allowed citizens to access and pay for government services through their mobile phone. Moreover, Kenya's social protection programmes have been bolstered by the government's use of the platform (Ndung'u, 2018: 49). M-Pesa became successful because it operated in a regulatory black space, as there were no legal frameworks around mobile money in Kenya until 2014 (Baker, 2022: 9).

The M-Pesa model did not work in southern Africa for a variety of reasons, including regulatory and cultural differences. Southern Africans are more financially included in the formal system than on digital platforms. Moreover, the regulatory requirements to register a phone line outside the cost of a phone are prohibitive. M-Pesa's success was mainly because it was given free rein to innovate and set up networks without any competition. At the time of writing, Vodacom is launching another fintech lifestyle and payments app in partnership with China's Alipay (EWN, 2020; Kene-Okafor, 2020).

Suppose the Southern Africa Development Community (SADC) and the rest of the continent want to pay more than lip service to the notion of a digitally inclusive economy. In that case, they have to insist on applying the quite extensive policy plans that they already have available, such as the 2012 Regional Infrastructure Development Masterplan, the Digital SADC 2027, and the SADC policy guidelines on interconnection for SADC countries (2000).

As the global economy becomes subsumed by the digital economy, Africa's accelerated digital transformation has become urgent for two main reasons: integration into the global economy – not just as a node on the global value chain – but also to address Africa's growth and poverty reduction goals. The continent's digital economy is set to hit US\$180 billion by 2030 (Buckholtz and Oloo, 2020).

That is why the plans detailed in the African Union Digital Transformation Strategy (2020–2030) must be achieved. There is a desperate need to build a robust and resilient digital economy that would include access to appropriate infrastructure in rural and urban settings. In the southern Africa sub-region, SADC has long recognised, at least on paper, the need for a 'coherent regional policy' as declared in its 2001 information and communication

declaration. The declaration underscored the importance of infrastructure and enabling regulation. The 2020-2030 Regional Indicative Strategic Development Plan envisions a SADC that has yet to exist. The real question is why SADC has been slow to optimise the instruments that it already has, to improve ICT infrastructure in the region.

One such mechanism is Universal Access Funds (UASF), multi-stakeholder funds (financed by telecommunications firms and other donors) to pay for infrastructure in areas the private sector would not go. South Africa, Botswana, Mozambique, Malawi, Lesotho and Namibia have all adopted similar policies with varying results. The major problem is that many countries, barring South Africa and Botswana, struggle to initiate and implement infrastructure projects. This points to a lack of political will and capacity in the region.

Arguably, this behaviour deviates from SADC's regional and African continental visions.

For instance, in SADC, at the time of writing, there was no regional law regulating data protection. As a result, we have to look to domestic frameworks within the region. According to research by Gabriella Razzano et al., only seven of the 11 countries within the SADC region have data protection legislation. Still, only Mauritius has fully implemented their law (Razzano et al., 2020: 37). Razzano et al argue that:

...certain data protection and privacy laws in SADC have still to establish adequate notification mechanisms in the event of data breaches. This might be due to difficulties in establishing the Data Protection Authorities (DPAs) who will be the entity to whom such breaches are reported. (Razzano, Ibid: 37)

Markets and firms innovate and are responsible for developing technologies, but must respond to available regulatory frameworks. Of course, the relationship between the State and the firms is not binary. Discussions around their interactions must be seen through a nuanced lens, not even considering the effects of geopolitics, including international and regional relations.

## Digital payments: A cautionary tale from South Africa

The move to electronic or digital payments has underpinned digital financial inclusion discourse. The problem with digital evangelism is that it prevents closer scrutiny of the behaviours of the service providers. Baker offering a cautionary perspective on the ‘fintech-philanthropy-development complex’ citing Pasquale (2015), argues that ‘this should be understood against the backdrop of the rapid growth of a digital underworld that feeds available data into opaque algorithmic processes that are increasingly used to organise economic life’ (Baker, 2022: 2).

The poor, including the rural poor, must be accommodated in digital product planning, design and rollout. However, scholars and practitioners must be cautious about the implications of the technologies being rolled out. Do they genuinely offer inclusion, or do they create new forms of dependencies or new intermediaries, instead of providing true inclusion or emancipation?

Jenna Burrell (2018) points to Kevin Duncan’s (2018) description of the implementation of the South African government’s social grant programme (which can also be described as a cash transfer programme), through a third-party vendor, as evidence of the need to be circumspect when creating and deploying financial inclusion programmes. The vendor, Cash Paymaster Services (CPS), linked the creation of bank accounts for grantees as evidence of accomplishing financial inclusion. But as Duncan illustrates, the decision to merge the social grant payment to loan provision was a double-edged sword. Although, the electronic payment system underpinning the social grant programme offered the poor (both urban and rural) access to financial services, including a ‘formal bank account and a MasterCard-branded debit card’, at the same time, the system ‘signalled peril to some grant recipients’ (Duncan, 2018: 156). As Burrell points out, the ‘formalisation’ of the financial practices of the poor by offering ‘formal’ loans instead of ‘informal’ loans through local lenders, called ‘*mashonisas*’, put grant recipients within a system that they did not understand.

Furthermore, the technological distancing of grantees from their grant also involved a streamlining of claims by third parties to these funds, through automated deductions (Burrell,

Ibid: 152). This worked in practice because the grants administered by CPS were issued with an account offered by Grindrod Bank. CPS was a subsidiary of Net1 technology group, and the bank was one of their partners. After winning the grant-delivery contract, CPS revealed that it would offer a financial instrument to grantees leveraged off their grants, including to insurance firms and microlenders. With 10 million grantees at the time of the award (2012), the contract was very lucrative, although many grantees ended up saddled with deductions they did not understand. (Duncan, Ibid: 157–168).

In 2013, the South African Constitutional Court declared the CPS contract with the State invalid. In a 2014 ruling, it 'noted that CPS had no right to benefit from an unlawful contract' and demanded that it file audited financial reports (GroundUp Editors, 2019). CPS administered South Africa's social grants from 2012–2018. By 2020, CPS went into liquidation after the State withdrew the contract, as the State pointed out that 'profits made from the social grants contract are a liability on the company's balance sheet because the Constitutional Court has ordered that these must be repaid' (Postman, 2020). As a result of the court order, CPS had to reveal that it 'maintained a 12.2% profit margin' throughout its contract with the South African Social Security Agency (SASSA), equating 'to a pre-tax profit of R1.1 billion' [approximately US\$63,5 million] (De Wet, 2017). This case underscored the danger inherent in the digital money infrastructure, which can masquerade as financial inclusion when it is the precursor to exploitation of the most vulnerable. Kgomoco Diseko, a SASSA national spokesperson at the time, writing on the Net1 CPS scandal, pointed out that:

The poor and unbanked have been denied access to finance for decades. Financial inclusion on the face of it sounds like a remedy for the discrimination that poor people have suffered for years. Enter Net1, with its plethora of financial service subsidiaries, with packages targeting the poor in the low living standard measure (LSM) levels. Now this outfit is very cunning and introduced its products as the antithesis of the financial exclusion the poor have historically experienced. In fact, they sugar-coated their marketing with noble notions of financial inclusion. You'd be crazy to find fault with those who took the bait hook, line and sinker (Diseko, 2018).



Besides, the CPS case was one of 'smoke and mirrors' where the language of financial inclusion was used to sugar coat the true intention of formalisation.

Referring to this case, as Duncan explains: '[f]inancial inclusion was erecting intermediaries that separated the poor from their money and who were thus positioned to profit from, and arbitrarily interfere, in their affairs' (Duncan, *Ibid*: 156). The question that flows from this case is: do mobile money providers act as 'intermediaries' in ways that would disadvantage the poor? Preliminary findings would suggest yes, for two reasons: firstly, the costs of access to mobile money, and secondly, mobile money providers have access to all customer data, which allows them to 'upsell' services that might not be in the client's best interests.

## **Conclusion**

It cannot be denied that digital financial inclusion has been made possible, thanks in no small part to the development and deployment of mobile telephony services. MNOs dominate the African communications landscape, involving everything from broadband access to financial services. As a natural extension, digital financial products such as m-money (mobile money) have filled the gap left by conventional financial services.

This working paper contributed to two ongoing discussions. Firstly, the paper added to the critique against a deterministic view of fintech – particularly in southern Africa. It suggests that a social and cultural lens be applied to the design and deployment of fintech solutions in addition to improvements in infrastructure, such as mobile phone provision and internet access for the rural poor. Fintech solutions, such as mobile money, have not taken off in southern Africa in the same manner as they have in other sub-regions. Further research into the cultural and material impediments to mobile money adoption is needed to allow for a truly inclusive digital solution. Another vital area that warrants further attention is the need for an ethnographic investigation into the agility of rural agent networks in southern Africa. Agent networks may be integral to ensuring that rural clients can open and use their digital money accounts effectively.

Secondly, the paper posits that financial inclusion is not adequately addressed outside the political economy approach in the risks and benefits of digital technologies to society. In the

context of this paper, the digital political economy would help explain why states would allow for the continued marginalisation, for instance, of rural populations. Failure to prioritise access to sophisticated technologies, not ensuring agility in the deployment of internet access, and not being agile in finding ways to ensure the financial inclusion of citizens on the state's economic periphery is ultimately dependent on the state's choices.

The key tool for holistic inclusion lies in a mix of regulatory frameworks, an agile private sector and an agile environment in which decisions around the deployment of information and communications infrastructure are made. Riquet and McKay (2019), looking at the success of mobile money in Côte d'Ivoire, illustrate how this mix works in practice. In the Côte d'Ivoire case, in 2015, the Central Bank of West African States (BCEAO) issued regulations that all the non-banking sectors issue mobile money. The 2011 political crisis in the country illustrated that mobile money is an alternative to legacy banking. In times of crisis, people were still able to transact.

A key factor for countries with poor internet provision is ensuring mobile money is built to cater to the specific settings. For instance, ensuring that solutions available do not only rely on the internet – options for conducting transactions via SMS should continue to be offered. True inclusion does not try to transform communities into something they are not, but meets their needs holistically.

## References

- Afrobarometer Data, Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Tanzania, Zambia, Zimbabwe. Round 8: Mobile phone service in the PSU/EA, 2019/2021. Available at <http://www.afrobarometer.org> (R8 2019/2021).
- Afrobarometer Data, Lesotho, Malawi, Tanzania, South Africa, Zambia, Zimbabwe. Round 8: Banking or money services in the PSU/EA, 2019/2021. Available at <http://www.afrobarometer.org> (R8 2019/2021)
- Ahmad A.H., Green C. and Jiang F. 2020. Mobile money, financial inclusion and development: A review with reference to African experience. *Journal of Economic Surveys* 34(4): 753–792.
- Asravor R.K., Boakye A.N. and Essuman J. 2022. Adoption and intensity of use of mobile money among smallholder farmers in rural Ghana. *Information Development* 38(2): 204–217.
- Aterido R., Beck T. and Iacovone L. 2013. Access to Finance in Sub-Saharan Africa: Is There a Gender Gap? *World Development* (47): 102–120.
- Baker L. 2022. New frontiers of electricity capital: energy access in sub-Saharan Africa. *New Political Economy*.
- Bremmer I., 2021. The Technopolar Moment: How Digital Powers Will Reshape the Global Order. Foreign Affairs. <https://www.foreignaffairs.com/articles/world/2021-10-19/ian-bremmer-big-tech-global-order>
- Buckholtz A. and Oloo K. 2020. Tapping Africa’s \$180 Billion opportunity. International Finance Corporation (IFC). November 2020.
- Burrell J. 2018. Infrastructures of Digital Money. In Maurer B., Musaraj S. and Small I.V. (eds.). *Money at the margins: Global perspectives on technology, financial inclusion, and design* (Vol. 6): 151–154. Berghahn Books.
- Business Tech. 2018. All the South African banks that have failed in the last 30 years. Business Tech. 12 March. <https://businesstech.co.za/news/banking/231009/all-the-south-african-banks-that-have-failed-in-the-past-30-years/> [Accessed 17 November 2022]
- Ciligot C. 2022. What Is Platform Governance and Why is it a Big Deal? <https://learn.g2.com/platform-governance> [Accessed 12 November 2022]

- De Wet P. 2017. For Net1 a big profit is a problem. Mail & Guardian. 30 May.  
<https://mg.co.za/article/2017-05-30-for-net1-a-big-profit-is-a-big-problem/> [Accessed 14 November 2022]
- Demirguc-Kunt A., Klapper L., Singer D. and Van Oudheusden P. 2015. The Global Findex Database 2014: Measuring Financial Inclusion around the World. *Policy Research Working Paper 7255*. World Bank. Washington.
- Du Pisani J.A. 2006. Sustainable development – historical roots of the concept. *Environmental Sciences* 3(2): 83–96.
- Duvendack M. and Mader P. 2019. Impact of Financial Inclusion in Low- and Middle-Income Countries: A Systematic Review of Reviews. *Campbell Systematic Reviews* 1–2(15).
- Ellenwood D. 2020. Information Has Value: The Political Economy of Information Capitalism – In *The Library with the Lead Pipe*.  
<https://www.inthelibrarywiththeleadpipe.org/2020/information-has-value-the-political-economy-of-information-capitalism/> [Accessed 12 November 2022]
- Etlinger S. 2021. 14 May. The next wave of platform governance. Centre for International Governance Innovation. <https://www.cigionline.org/articles/next-wave-platform-governance/> [Accessed 12 November]
- Eyita-Okon E. 2022. Urbanization and Human Security in Post-colonial Africa. *Frontier Sustainable Cities* (4). <https://doi.org/10.3389/frsc.2022.917764>
- Financial Stability Board. 2022. <https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/#:~:text=The%20FSB%20defines%20FinTech%20as,the%20provision%20of%20financial%20services> [Accessed 16 October 2022]
- FinMark Trust. 2012. Savings Groups: the silver bullet for rural development? FinMark Trust Blog 14 August. <https://finmark.org.za/knowledge-hub/publications/savings-groups-the-silver-bullet-for-rural-development?entity=blog> [Accessed 17 November 2022]
- Frimpong Boamah E., Murshid N.S. and Mozumder M. G. 2021. A network understanding of FinTech (in)capabilities in the global South. *Applied Geography* 135: 102538.  
<https://doi.org/10.1016/j.apgeog.2021.102538>
- Gorwa R. 2019. What is Platform Governance? Information, Communication & Society: doi:10.1080/1369118X.2019.1573914.

- GroundUp Editors. 2019. Will Net1 have to pay back the money? 29 October.  
<https://www.groundup.org.za/article/will-net1-have-to-pay-back-money/> [Accessed 14 November 2022]
- GSMA. 2021. Number of registered and active mobile money accounts in Sub-Saharan Africa compared to the world in 2020 (in millions) [Graph]. In *Statista*.  
<https://www.statista.com/statistics/1187120/number-of-mobile-money-accounts-in-sub-saharan-africa/> [Accessed 16 November 2022]
- GSMA. 2018. KopaGas Mobile-enabled Pay-as-you-Cook™ service in Tanzania.  
<https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2018/02/KopaGas-Mobile-enabled-Pay-as-you-Cook%E2%84%A2-service-in-Tanzania.pdf> [Accessed 17 November 2022]
- GSMA. 2016. Mobile for development utilities, unlocking access to utility services.  
<https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/07/Mobile-for-Development-Utilities-Unlocking-access-toutility-services-The-transformational-value-of-mobile.pdf>.
- GSMA. 2021. State of the industry report on mobile money. GSMA. [https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/03/GSMA\\_State-of-the-Industry-Report-on-Mobile-Money-2021\\_Full-report.pdf](https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2021/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money-2021_Full-report.pdf).
- Haidar H. 2021. Historical Perspectives and the Emergence of the Sustainability Concept in Organizations. *Open Journal of Business and Management* 9: 2277—2298.
- Hurel L.M. 2022. Panel Discussion on Internet Governance and the Digital Political Economy. 17 October. Hague Conference Center, The Netherlands.  
<https://youtu.be/wTEH9tnnKaU?t=121>
- Ignatow G. 2012. Information capitalism. *The Wiley-Blackwell Encyclopedia of Globalization*.
- Isenberg D. 2016. The Rise of the Development Industrial Complex. 2016.  
<https://lobelog.com/the-rise-of-the-development-industrial-complex/> [Accessed 17 November 2022]
- Kene-Okafor T. 2020. 22 July. After its failed stint with M-Pesa, Vodacom is planning to launch another fintech service in SA. *Techpoint Africa*.  
<https://techpoint.africa/2020/07/23/vodacom-super-app-plans-alipay> [Accessed 18 November 2022]

- Ky S., Rugemintwari C. and Sauviat A. 2019. Is Fintech Good for Bank Performance? The Case of Mobile Money in the East African Community. *SSRN Journal*.  
<https://doi.org/10.2139/ssrn.3401930>
- Langley P.A. and Leyshon A. 2020. The Platform Political Economy of FinTech: Reintermediation, Consolidation and Capitalisation. *New Political Economy* 26: 376– 388.
- Makina D. 2019. The Potential of FinTech in Enabling Financial Inclusion. In Makina D. (ed.). *Extending Financial Inclusion in Africa. Academic Press: 299–318.*
- Mashigo L. 2020. South Africa’s informal savings market thrives despite high financial inclusion levels. 2022. FinMark Trust Blog 14 June. <https://finmark.org.za/knowledge-hub/blog/south-africa-s-informal-savings-market-thrives-despite-high-financial-inclusion-levels?entity=blog> [Accessed 17 November 2022]
- Masondo S. 2018. What happened at VBS Bank? News24.  
<https://www.news24.com/fin24/what-happened-at-vbs-bank-20180701-2> [Accessed 16 July 2023]
- Mesfin W.F. 2012. Understanding social relationships and payments among the poor in Ethiopia. Institute for Money, Technology & Financial Inclusion Working Paper 2012-6.  
[https://www.imtfi.uci.edu/files/blog\\_working\\_papers/2012-6\\_mesfin.pdf](https://www.imtfi.uci.edu/files/blog_working_papers/2012-6_mesfin.pdf). [Accessed 13 November 2022]
- Mtambalika A.T., Manda T.D. Gombachika H. and Kunyenje G. 2016. Branchless banking in rural Malawi: Potential customers' perspective on bank-led mobile banking. 2016 IST-Africa Week Conference, 2016: 1–11.
- Mueller M. 2022. Panel Discussion on Internet Governance and the Digital Political Economy, 17 October. Hague Conference Center, The Netherlands.  
<https://youtu.be/wTEH9tnnKaU?t=121>
- Museba T. J., Ranganai E. and Gianfrate G. 2021. Customer Perception of Adoption and Use of Digital Financial Services and Mobile Money Services in Uganda. *Journal of Enterprising Communities People and Places in the Global Economy* 2(15): 177–203.
- Nagaraj V.K. 2015. ‘Beltway Bandits’ and ‘Poverty Barons’: For-Profit International Development Contracting and the Military-Development Assemblage. *Development and Change* 46: 585–617.

- Ndung'u N. 2018. The M-Pesa technological revolution for financial services in Kenya: a platform for financial inclusion. In Chuen D.L.K. and Deng R. (eds). Handbook of blockchain, digital finance, and inclusion, volume 1: cryptocurrency, FinTech, InsurTech, and regulation: 37–56. London: Academic press.
- Nguyen H. T., Le K.O.D. 2022. How Do Socio-demographic Characteristics Influence the Probability of Financial Inclusion? Evidence From a Transitional Economy. *Dalat University Journal of Science*: 42–59.
- Omar A. H. and Inaba K. 2020. Does Financial Inclusion Reduce Poverty and Income Inequality in Developing Countries? A Panel Data Analysis. *Economic Structures* 1(9).
- Ozyurt S. 2019. Ghana is now the fastest-growing mobile money market in Africa. Quartz. 9 July 9. <https://qz.com/africa/1662059/ghana-is-africas-fastest-growing-mobile-money-market> [Accessed 17 November 2022]
- Plentz M. 2021. Microsoft to Open UN Office This Coming Summer. <https://theunbrief.substack.com/p/microsoft-to-open-un-office-this> [Accessed 15 November 2022]
- Postman Z. 2020. Net1's Cash Paymaster Services to go into liquidation. TechCentral. 30 September. <https://techcentral.co.co.za/net1s-cash-paymaster-sercices-to-go-into-liquidation/177183/> [Accessed 14 November]
- Rumney E. 2021. 7 October. Big Banks Target South Africa's informal saving clubs' cash. Reuters. <https://www.reuters.com/world/africa/big-banks-target-south-africas-informal-saving-clubs-cash-2021-10-07/> [Accessed 17 November 2022]
- Sayeh A.M. 2022. Fintech and Financial Inclusion and the Case of Bangladesh: Peer-Learning Series. 28 September. Opening Remarks by Deputy Managing Director Antoinette M. Sayeh. IMF. <https://www.imf.org/en/News/Articles/2022/09/28/sp092822-dmd-sayeh-fintech-financial-inclusion-bangladesh>
- Shaw B.M., Vliet. and J.v. Verburg P.H. 2020. The Peri-urbanization of Europe: a systematic review of a multifaceted process. *Landscape and Urban Planning* (196): 103733.
- Sithole N., Mort G.S. and D'Souza C. 2021. Building Blocks of Financial Inclusion Through Customer Experience Value at Financial Touchpoints in Southern Africa. *International Journal of Bank Marketing* 3(39): 360–380.

- Statista. 2021. 25 March. Sub-Saharan Africa mobile money figures as a share of the world in 2019 and 2020 [Graph]. In *Statista*. <https://www.statista.com/statistics/1187244/sub-saharan-africa-mobile-money-share/> [Accessed 16 November 2022]
- Suri T. and Jack W. 2016. The long-run poverty and gender impacts of mobile money. *Science* 354(6317): 1288–1292.
- Kusimba S., Chaggar H. Gross E. and Kunyu,G. Social Networks of Mobile Money in Kenya, Institute for Money, Technology & Financial Inclusion Working Paper 2013-1. [https://www.imtfi.uci.edu/files/2013-1\\_kusimba\\_1.pdf](https://www.imtfi.uci.edu/files/2013-1_kusimba_1.pdf) [Accessed 13 November 2022]
- Ozili P.K. 2022. Financial Inclusion in Nigeria: An Overview. *International Journal of Banking and Finance* 17. [https://repository.up.ac.za/bitstream/handle/2263/53196/Tjiane\\_Curatorship\\_2016.pdf?sequence=1&isAllowed=y](https://repository.up.ac.za/bitstream/handle/2263/53196/Tjiane_Curatorship_2016.pdf?sequence=1&isAllowed=y)
- Tran H.T. and Le H.T. 2021. The Impact of Financial Inclusion on Poverty Reduction. *Asian Journal of Law and Economics* 12: 95 –119.
- UN-Habitat and UNICEF. 2020. Analysis of Multiple Deprivations in Secondary Cities in Sub-Saharan Africa. <https://www.unicef.org/esa/media/5561/file/Analysis%20of%20Multiple%20Deprivations%20in%20Secondary%20Cities%20-%20Analysis%20Report.pdf>
- Van Empel G. 2010. Innovations in Rural and Agriculture Finance for Food, Agriculture, Rural Banking in Africa: The Rabobank Approach. Brief 4. [http://cdm15738.contentdm.oclc.org/utills/getfile/collection/p15738coll2/id/2607/file\\_name/2608.pdf](http://cdm15738.contentdm.oclc.org/utills/getfile/collection/p15738coll2/id/2607/file_name/2608.pdf)
- Van Rooyen C., Stewart R. and Wet T.D. 2012. The Impact of Microfinance in Sub-Saharan Africa: a Systematic Review of The Evidence. *World Development* 11(40): 2249–2262.
- Vernon R. 1971. The Multinational Enterprise: Power versus Sovereignty. *Foreign Affairs* 49: 736.
- Vernon R. 1993. Sovereignty at bay: twenty years after. In *Multinationals in the Global Political Economy*: 19–24. London: Palgrave Macmillan.
- Wijesiri M. and Meoli M. 2015. Productivity Change of Microfinance Institutions in Kenya: A Bootstrap Malmquist Approach. *Journal of Retailing and Consumer Services* 25: 115– 121.



World Bank. <https://data.worldbank.org/indicator/> except for Mauritius, Mozambique and Zimbabwe. [Accessed 2 November 2021]

Yin X., Xu X., Chen Q. and Peng J. 2019. The Sustainable Development of Financial Inclusion: How Can Monetary Policy and Economic Fundamental Interact With It Effectively? *Sustainability* 9(11): 2524. <https://doi.org/10.3390/su11092524>

Zuboff S. 2015. Big other: surveillance capitalism and the prospects of an information civilisation. *Journal of information technology* 30(1): 75–89.

Zuboff S. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Profile Books.