Mobile money discounting and currency abandonment: Livelihoods and monetary practices in rural Binga, Zimbabwe

by

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Abstract

The convergence of money with technology is dominated by the drive to eradicate cash by digitization, this is legitimised by arguments that digital forms of money will promote financial inclusion and, in the process, alleviate poverty in developing countries. However, the positive societal benefits attributed to digital money are increasingly being contradicted by empirical evidence from developing countries. The emerging contestation of digitization of money as a tool for poverty alleviation creates an opportunity to reconceptualise monetary innovations for people living in poverty. Thus, in this thesis I answered the following question; what new insights can monetary practices of rural households and persons reveal about money and monetary innovations (or needs) of the low-income group? To answer this question, I draw on the SLA and infrastructure concept not only to examine monetary practices of households and persons in Binga, a rural district of Zimbabwe with a colonial and postcolonial history of economic and political marginalization, but also to evaluate the technical and or functional properties of the money which they use. My research revealed a number of interrelated phenomena, the most important of which is currency abandonment phenomena. It takes two forms, namely, outright refusal to use and adopt a currency and or by discounting (price inflation of goods and services mediated in the currency that is being abandoned). Pertinent examples include; (1) mobile money discounting (this is due to excessive mobile money transaction fees), (2) financial disintermediation, in which users of both mobile and bank money deliberately made their financial affairs opaque by rejecting digital money in preference for cash and commodity money. There are historical antecedents for what I call currency abandonment, these include; (1) the black Friday (holders of capital devalued the Zimbabwe dollar by dumping it on the stock and money market after the Zimbabwe government paid out ex-combatant's gratuities from money that it did not have, (2) the catalytic role of households in dollarization, which is the rejection (by ordinary users) of the inflationary Zimbabwe dollar in preference for foreign currency. These activities were a means by ordinary users to resist the fact that digitization is experienced as a form of exploitation, in particular rent seeking and indiscriminate identity harvesting (monetization of personal identity) by both the government and mobile network operators. The most relevant research and policy theme which emerged from this study is the economic exclusion problem, in turn, the most important solution to economic exclusion was found to be sharing and redistribution, exemplified by provisioning of public infrastructures, Zimbabwe government elderly and disabilities cash grant, *mulala* cattle (livestock sharing), poor to poor mobile remittances and rotational saving scheme in which interest rates were not a reward for risk, but shared by all members as a reward for cooperation and collaboration. This study concludes by proposing a locally informed sociotechnical framework of monetary innovations for people living in poverty. The framework divides monetary needs into secondary and primary needs, the former consists of the Public Authority Deficit, which emphasises the need to address the subjugated position of developing countries in defining and addressing monetary needs of the unbanked-poor and the Quantitative Deficit (mutually exclusive relationship between the role of money as a medium of exchange and store of value) while the latter is represented by the Qualitative Deficit (failure of notes and coins to combine the unit of account role of money with the identity of transacting parties). The framework presented here relegates digital money to a secondary need (or innovation) which is inconsequential to poverty alleviation, but necessary only in facilitating remote payments.

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This research would not have been possible without my aunt Bekezela Mafu, I truly love you and thank you for stepping into my mother's shoes and for being part of this journey. To the rest of my family, I thank you all for being my pain in the ass and at the same time a much-needed source of support and inspiration. Through archival material, this research forced me to acknowledge my ancestors whom I was sadly raised and educated to forget. I'm glad that, from beyond, they are slowly demanding to be heard. They were fallible like we all are, but their bravery, humanity and much needed socioeconomic values remain untold or in some cases retold by those who least understood them.

Mayibuye iAfrica

Dedication

I dedicate this modest piece of work to my ancestors, long forgotten by history but proudly remembered by me today, a progeny of the silenced. To my maternal great great great grandfather Mkajana Mafu, great great grandfathers the twins Ncozana and Mtikana Mafu, and great grandfather Mahawu Mafu and their loved but unsung wives. Coming closer to my own time I dedicate this to my paternal grandparents, Mhindurwa Chipere and Rhoda Foto and my maternal grandparents Elizabeth Mtimkhulu and Jack Nankayi Mafu. Most importantly, to my late parents, Zenziwe Mafu and Richard Ngazimbi Chipere, whose most treasured inheritance is the life lesson that I should at all times see myself in other people's eyes.

Last but not least, to my late younger brother Musa, and my children, Zenziwe, Musa and Qhawe.

Abbreviations

ARPU	Average Revenue Per Unit
BRDC	Binga Rural District Council
CPI	Consumer Price Index
DDF	District Development Fund
DNS	Deferred net settlement
EFTPOS	Electronic Funds Transfer at Point of Sale
FCA	Foreign Currency Denominated Account
GER	Gross Enrolment Ratio
HVP	High Value Payments
ICES	Income Consumption Expenditure Survey
LVP	Low Value Payments
MDC	Movement for Democratic Change
MM$	Mobile Money Dollar
NCA	National Constitutional Assembly
NPS	National Payment Systems
OTT	Over-The-Top
P2B	Person to Business
P2P	Person to Person
POS	Point of sale
RBZ	Reserve Bank of Zimbabwe
RTGS	Real Time Gross Settlement
SC	Save the Children
TBF	Troubled Bank Fund
US$	United States Dollar
ZCTU	Zimbabwe Congress of Trade Unions
ZINATHA	Zimbabwe National Traditional Healers Association
ZWB$	Zimbabwe Bond Note

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Chapter 1: Introducing the research problems and methods

1.1 Introduction

The convergence of money and technology has been attracting both public and scholarly attention, particularly in the fields of Development Studies (DS) (World Bank, 2014), Information Communication Technologies for Development (ICT4D), Sociology and Economic Anthropology (Hart, 2000b; Maurer, 2015; Dodd, 2016). A central theme in the discussions regarding this convergence is claims made that the digitisation of money will promote financial inclusion and fight financial exclusion and thereby alleviate poverty, particularly in developing countries (World Bank, 2014). Unsurprisingly perhaps, such claims are made most loudly by some of the largest and most influential international financial institutions (IFIs) such as the World Bank, International Monetary Fund, World Bank Funded Consultative Group to Assist the Poor (CGAP), and the Centre for Financial Inclusion (CFI) at Accion. The latter describes itself as an action-oriented think tank working toward full global financial inclusion (ACCION, 2020). Such claims are further supported by an impressive range of international philanthropic and development organisations (for example, the Bill & Melinda Gates Foundation, USAID, the UN Capital Development Fund, Ford Foundation and the Omidyar Network), commercial banks (for example Citi), and private-run payment service providers (VISA, MasterCard etc). Similar claims are made by academics, particularly in the blossoming field of ICT4D studies (Heeks, 2007; Hughes and Lonie, 2007; Mas and Orawczynski, 2009; Mas and Radcliffe, 2011; Radcliffe and Voorhies, 2012).

The World Bank defines financial inclusion as the provision to individuals and businesses access to useful and affordable financial products and services (transactions, payments, savings, credit and insurance) and ensuring that these services are delivered in a responsible and sustainable way (World Bank, 2014, 2020). As Schwittay (2011) rightly states, this definition translated an absence (of the aforementioned financial products and services) into a need, in the process detaching the financial inclusion concept from real monetary needs of the poor.

The earlier optimism about the convergence of money with technology and the attendant bold claims about poverty alleviation, have however come under academic scrutiny. In his recent review, Mader (2016b) could not find any evidence to validate the following three important assumptions that underlie the financial inclusion narrative that has emerged from the dominant International Financial Institutions (IFIs): (1) that there is a causal relationship running from financial inclusion to developmental outcomes and broader benefits; (2) that the extension of financial services is directly beneficial to the poor, and (3) that there is an untapped business opportunity in providing financial services to the poor. Mader is not alone in this critical assessment of this narrative and the claims being made, his findings are corroborated by several others who include (Gabor and Brooks, 2017; Bateman, Duvendack and Loubere, 2019).

How is it that overly optimistic claims attributed to digital money as a tool in fighting poverty have gained and sustained such traction despite evidence to the contrary? The commercial success of mobile money in economies where markets are well developed, and the subsequent near eradication of cash by processes of digitisation in these economies, certainly play a role in bolstering and legitimising such claims. However, it also has to do with how societies and markets view and evaluate technological developments. Overvalued claims about the positive societal impact of technology is not a new phenomenon. Swanson & Ramiller (1997) explain this through what they call “organising visions”. They suggest that “organising visions” are comprised of three central strategies, namely interpretation, legitimation, and mobilisation. Interpretation consists of various strategies employed to broadcast a new uncertain innovation and present it as wholesome. Legitimation strategies attempt to justify why potential users should use the new innovation; lastly, mobilisation is concerned with coalescing entrepreneurial, marketing, economic, legal and financial resources necessary for the material realisation of a new innovation. Swanson & Ramiller (1997) emphasise that institutional processes are involved right at the beginning of the innovation process, not the mere heroic endeavours of individuals or a firm, as is often suggested. The driving force behind organising visions, they argue, are the persuasive discourses that arise within heterogeneous communities interested in a new innovation. This concept of “organising visions” is useful in answering the question as to the continued support of claims made about the poverty alleviation impact of digitisation of poor people’s money under the banner of financial inclusion. The (overvalued) claims about the societal benefits of digital money and the process of digitisation could be seen as serving the purpose of generating interest among potential customers, attracting funding, court support from policymakers and gain public legitimacy. All these processes are necessary for the material realisation of new technologies and the creation of new markets.

Scholars such as Borup et al. (2006), Geels & Smit (2000) and Deuten & Rip (2000) established that overvalued conceptions of technology futures are inherently a double-edged conundrum in the sense that inflated claims can be performative because of their potential to mobilise practical development of experimental technologies, some of which have had a positive impact on society. At the same time, hype and exuberance can also be harmful. Examples of overvalued promises made by technology and market entrepreneurs and politicians about the beneficial impacts of technology on society include the Dutch tulip mania (futures market) (Davies, 2002, p. 551; Kindleberger and Aliber, 2005, p. 115; Lietaer, 2013, p. 358), the financial bubbles that led to the mid- to late-1990s east Asia financial crisis (Mishkin, 1999; Dymski, 2005; Mellor, 2010; Dorman, 2014, p. 114), the late 1990s and early 2000s internet bubble, and more recently, the so-called "financial engineering" associated with complex and opaque financial instruments, in particular, the subprime mortgages that culminated in the 2007-2008 global financial crisis (GFC) (see French, Leyshon and Thrift, 2009; Tett, 2009; Hall, 2011; Mackenzie, 2011; Frerichs, 2013).

The "organising visions" framework not only assists me in thinking about the persistence of the claims made about financial inclusion and ICT, but it also resonates with me at a professional level. Before I enrolled as a PhD student, I worked for a mobile and web payment development start-up in London. In the work we did in this company, all three of the strategies highlighted by Swanson and Ramiller (1997) in their conceptualisation of 'organising visions' were of great importance. At the time, in the early 2000s, mobile money was rather new. Many of the actors we encountered at the time, from regulators to senior bank executives, could not conceive that it was possible to use a mobile phone to transfer cash from one location to the next instantaneously. In 2008, while running trials for mobile and web-enabled mobile payment systems for international remittances, a board chairman of a government-owned commercial bank in Zimbabwe with the largest urban and rural bank branch network laughed off the business development officer's suggestion that his bank become the company's local partner to act as a cash pay-out agent. Moreover, because of poor infrastructure development and hyperinflation in Zimbabwe, there was scepticism about the capacity of the Zimbabwe mobile network infrastructure's ability to support such an innovation. To overcome this initial resistance, my colleagues and I resorted to *interpretation* as a strategy to simplify the complexities of mobile money. We achieved this by not overplaying the scepticism and indisputable risks that they identified, and by framing mobile money as the innovation of the future, providing examples of how this new idea has worked in other countries even though the only known successful deployment at the time was G-Cash (see Maurer, 2010; UN, 2010; Gsma, 2012).

Other strategies we deployed included a design strategy in which the payment application was seamlessly embedded in everyday practices and routines to the point where it became invisible and thus difficult to contest. Furthermore, we also resorted to using a software demonstration platform that was robust but not utterly representative of the real demands of a live mobile payment system supporting a much higher level of traffic. This *interpretation* was a collective yet uncoordinated effort involving several institutions promoting mobile money – these included mobile payment networks, independent software providers and consumer research organisations who were at the time publishing white papers on the idea of mobile money. Besides the use of the phrase "mobile money", there were several other catchphrases that were deployed at the time, including "electronic money" and "digital and electronic cash". These catchphrases were intended to positively influence potential stakeholders such as partners and funders by rendering invisible the complexities, risks and uncertainties associated with new technologies. My experience as a professional working in the business of money and technology alerted me to how such visions come to shape reality and create needs and indeed markets.

The work of Swanson and Ramiller (1997) suggests that the technology development process starts before the technology is physically developed by organisations, individuals and groups. In other words, new technologies can be said to be spoken into existence. This aspect of the "organising visions" concept is in a way relatable to the recent work done in the social sciences and science and technology studies on "performativity", some of which suggests that economic models eventually create reality out of their own abstractions rather than merely reflecting a reality (Callon, 1998; Mackenzie, 2003; Ingham, 2004a, p. 148; Barnes, 2008).

Moving from my experiences as a professional in that field to studying financial exclusion in Zimbabwe, I could not help but notice the "performative" aspects of the claims that were being made about digitisation in the name of poverty alleviation. Here, a wide array of international financial institutions, multilateral aid and development organisations, private payment service providers, software developers and mobile network operators all proclaimed the near-magical benefits of money digitisation for poverty alleviation in developing countries. Noticing the performative aspects of this process did not leave me unaware of questions of power. For example, for the most part, the provision of technical solutions and some of the infrastructure that would validate these claims reside in private hands in what scholars have come to call the Global North. Those who produce knowledge to interpret the empirical experiences of the proposed beneficiaries of financial inclusion are also typically located in the Global North. Excluded from these critical predevelopment stages of digital futures of money are what business would call their "targeted user group", in this case, the "unbanked poor" or "financially excluded" in developing economies. Importantly, what is obscured by the "performative" aspects of the claims that are being made as the "organising visions" of financial inclusion and money digitisation come to fruition is the creation of various markets. We are confronted then with the reality, one that is often obscured, that issuers of digital money make money from the very same people digital money is meant to lift out of poverty.

As I conceptualised my research on monetary practices of low-income households in Binga District in Zimbabwe, I had assumed that my research proper would commence once I arrived at the fieldwork site. In hindsight, it probably started during my professional work in London, when I formulated a simplistic belief that poor people are excluded from formal financial markets because their economic and financial affairs are not knowable, but through digital technologies they can be rendered knowable. However, the realities of conducting field research started the day I caught a long-distance bus from Pretoria in South Africa to Bulawayo in southern Zimbabwe and then onwards to Binga in the north-west. I came face to face with the harsh reality that Zimbabwean migrants endure on this trip on the "chicken bus", a poor man's no-frills transport with no luxuries and comforts. This bus seemed a "world apart" from the newly introduced Gautrain which I had come to use for commuting short distances in and around my temporary home of Pretoria. As someone who had come from an environment where in the 1990's bus and train commuters quietly hid their faces in books and newspapers and more recently tablet computers and mobile phones, I was struck when I got into the bus to Zimbabwe to commence my fieldwork by how those commuters on the bus eased into conversations with strangers sitting next to them. Conversations ranged from the mundane to intellectual confabulations about the deteriorating Rand and its impact on US dollar-denominated Zimbabwe prices, to ideas on how one can smuggle high-value goods into the country without paying duty, cross the border without a passport and the cruelty and corruption of Zimbabwean and South African immigration officials.

Just as we were leaving Johannesburg on the way out, I was surprised when a lady who I assumed worked for the bus company started serving all passengers with sandwiches, a bottle of water, and giving out other complementary gifts of caps and water bottles. I thought to myself this "chicken bus" is not so chicken after all. Just as I settled into a long-distance phone conversation with a friend of mine, the lady I thought was the concierge came up to me and asked how I remit money from South Africa to Zimbabwe. Even though she could see I was on the phone and I tried to ignore her, she kept trying to talk to me. It seemed like she was demanding payment for the sandwiches that she had dished out earlier. As I was in the middle of a conversation, I had to reprimand her kindly. She apologised as if she had no sense of how intrusive she had been. She continued with her hard-selling routine and proceeded to talk to a man sitting right next to me but in order to compensate for the loud diesel engine noise, she shouted at the top of her voice. As a result, my phone friend was dragged into a private conversation on the bus about the other man's passport number, address, telephone numbers and having his pictures taken by mobile. It turned out the lady worked for a mobile money transfer company which was vying for a piece of cake out of the lucrative SA to Zimbabwe remittance corridor. Needless to say, my interest was piqued.

Just before we got to the Beitbridge border post between South Africa and Zimbabwe, the bus was stopped by South Africa immigration officials who demanded that everyone on the bus – including older women walking with the aid of walking sticks – exit the bus for on the spot passport checks. Before the stop, one of the bus conductors announced that anybody without a valid passport should approach him for "assistance". Over time, I learned that this is a common practice; passengers without valid passports will simply pay a certain amount to the bus driver or any of the bus company staff, who will then bribe immigration officials to put the necessary stamp on the passport or simply allow the passenger to cross the border without the necessary travel documents. As in many places all over the world, money certainly oiled all kinds of processes.

A few minutes after the check by the officials, we arrived at the South African side of the border, where we were sent from one queue to the other. All passengers, including the elderly, were asked to get off the bus and unload their luggage, which had to be run through an X-ray baggage scanner. Soon thereafter we were asked to queue next to the bus while one of the customs officials searched every bag, displaying private contents in full view of fellow passengers standing nearby. After about six hours, we finally managed to cross over to the Zimbabwean side of the border, only to go through the same ordeal again. During this process, there were transfers of money taking place between travellers and government officials. Some of these were official and recorded and made legible through receipts and invoices; other remained covert and illegal.

Once I got off that bus in the city of Bulawayo, what I had read in the online media about poverty, cash liquidity problems, and everyday corruption in Zimbabwe became a shocking reality. The first of many of these affirmations started when I decided to cycle from the city centre to my aunt's house in Nkulumane several miles away. I first had to take the bicycle for repairs because of a flat tyre. After the quick repair at a nearby tyre shop, I duly paid the tyre repairer US$1 as requested, but the workman quickly whispered asking me not to tell the cashier that I have paid him. Before I had time to protest, the cashier came over from the office demanding payment, but the mechanic suddenly claimed that I had not paid him anything, adding that he simply decided to help me because I had no money. The scarcity of money in Zimbabwe and the prevalence of poverty resulted in widespread concealment and the alteration of "business as usual" in that the underpaid employee had to form a temporary alliance with the customer to squeeze extra income from his struggling employer.

A similar incident played itself out the next day when I embarked on a six- to seven-hour journey from Bulawayo to Binga. The buses that operate on this route leave very early in the morning, and as I was not aware of that, I missed getting on the two larger and cheaper private and state-owned busses. As a result, I was forced to catch a ride on a much smaller long-wheelbase van operated by small businesses or individuals, colloquially called *umtshovha*. These private vans do not have scheduled departure times; they simply park at the main bus terminal until the bus is full and then departs. For the privilege of being squashed in a small van with no legroom at all, I paid a total of US$15 and an extra $5 for my bicycle. While we were waiting for the van to fill up, a young lady who looked physically unwell slowly approached me; her personal hygiene was poor, and her clothes were worn out and dirty. Speaking in a very low isiNdebele tone, she asked me for $3, explaining that she was running short of money for the full bus fare. I told her that I did not have enough cash at the time; she quickly moved on and proceeded to explain her predicament to the bus conductor. After a covert conversation, she was allocated a makeshift seat out of an empty twenty-litre cooking oil container which the conductor put in the isle. A few minutes later she called out to the conductor asking for her ticket, but the conductor hushed her up and said *hanti wena sisonke,* which translates to “don’t worry, we’re together”. I never saw her getting a ticket for the US$12 that she had handed over to him. Not having money but needing to get to Binga put her at the mercy of this bus driver. He, in turn, used the opportunity to flout the rules to earn some much-needed extra income; the informality seemingly working for both.

On the way to Binga, the *umtshovha* was stopped by state officials at about six different traffic police roadblocks. After a few of these stops, I learned that the interactions between the bus driver and police were predictable: the policeman or woman would come up to the driver and point out some mechanical problem with the van, or at times incorrect paperwork suggesting the bus company is committing an offence. If the situation was not resolved soon, the bus conductor would get off, follow the police and talk out of earshot for a few seconds, shake hands and then off we would go. After paying closer attention to these patterned interactions, I discovered that the handshake was a way to pass money from the bus conductor to the police, again revealing the importance of money passing hands in making life proceed: a system of informal taxation and tolling existed that effectively supplemented the income of state officials whose income had dramatically declined over the years.

Later in the journey, I was dramatically introduced to how mobile phones could function as collateral and not only a means of payment. At some point, the bus driver and his assistant were arguing with two male passengers who could not pay the US$10 bus fare. The passengers were begging the bus driver to let them off the bus, promising to pay the owed money the following day but the driver was not happy. He demanded that one of them should leave a small mobile phone as security for what he saw as a loan. One of the passengers eventually agreed to give up his mobile phone, but his fellow traveller claimed not to have a phone and pleaded with the driver to take his word that he would settle the debt the next day. The driver unrelentingly put his foot down and confiscated the passenger's rucksack, indicating that he would return the confiscated bag to its owner once the traveller had settled the outstanding bus fare. This did not stop the passenger from trying to negotiate a better deal, promising that he would bring him a goat as payment if he could only have his bag then. Alas, that did not get him anywhere. The two were dropped off in the middle of nowhere, and the story surely continued the next day. As I was getting off, I briefly spoke to the conductor about this incident, and he told me that because of the economic hardships it was widespread for passengers to ask for a reduced fee or take a ride on credit. However, it was difficult for the drivers because passengers do not make prior arrangements and their attempt to do so right at the end of their journey suggests that they had no intention to make the payment in the first place. Flouting rules may work at times, but it also come with risks.

There was yet more learning for me to take place on this long journey from my Pretoria office to my field site in Binga. As we crossed Gwai River, a tributary of the Zambezi River, a uniformed policeman who was quietly sitting next to me spontaneously narrated in detail a horrific traffic accident he had witnessed a few weeks back in March 2016. He explained in graphic detail how a lorry that was transporting ten heads of cattle to an abattoir in Bulawayo overturned into the river, killing three passengers, including the driver, as well as nine of the cattle; the one passenger who survived was severely injured. I was saddened by this tragedy, but little did I know that in the not-so-distant future, I would meet a wife of the single survivor and subsequently the survivor himself. I will tell his story and the reason he embarked on such a gruelling journey trying to secure medical treatment for him in a subsequent chapter. Already here, I was introduced to the dehumanising experiences that migrant labourers endure crossing the border, the precarious nature of their livelihoods, the problems they experience as a result of scarcity of money, how livestock and phones can become forms of collateral for loans, the cost of corruption and poor healthcare and the impact of an unaccountable political authority on institutions and ordinary people far removed from the centres of political power. While some of what I documented above is commonplace all over Zimbabwe, Binga is and has been for a long time an area that has been marginalised by the political authorities. As I will discuss later, the scale and extent of poverty here are more profound than in most other parts of Zimbabwe. As such, its impact on those who struggle daily to live healthy and dignified lives is very stark. As my ‘arrival story’ (see Jungnickel, 2014; Stevenson, 2017) demonstrates, the scarcity of money in a country experiencing high inflation, high poverty levels, and high unemployment after a process of deindustrialisation, shapes much of the dynamics of social and economic life.

In moments of economic crisis, the operation of markets and money and the infrastructures on which they depend achieves greater visibility and typically become sites of contestation. When the state is absent or incapable of acting, ordinary people are left to fend for themselves. This is certainly the situation in Zimbabwe today. Money is on everyone’s lips. Everyone is trying to make some money and is deeply concerned about it. Everyone is using their knowledge of people and prices to their own advantage; not because they are obsessed with self-interest but for the sake of their own survival. Money itself also becomes more valuable, and various actors may use the situation to their advantage. In light of this, this study examines monetary practices of rural households and persons in Binga in order to understand what they reveal about the monetary needs of “low-income” households, to understand better what the needs of the so-called “unbanked poor” may be, and to evaluate such needs against the claims that are being made by the international financial institutions.

While the “organising visions” framework helped me understand how claims about mobile money could be sustained despite evidence to the contrary, I had to find other frameworks to assist me in making sense of the data around the monetary practices and repertoires of households and persons. Here I found the sustainable livelihoods analysis (Scoones, 1998; Chambers & Conway, 1991) particularly helpful, even as I became aware of its limitations. It was most important to me in shedding light on the economic activities in which various monies mediate. I wanted to be able to connect the everyday livelihoods of rural persons and households to the emergence of a market in mobile money, examining how persons and households in Binga incorporate or reject mobile money. Here the social science literature on markets was useful but so too was the literature on infrastructure as discussed by among others Star (1999) and Simone (2004).

These interests and lines of investigation lead me to formulate my overall research question in the following terms: What new insights can the study of monetary practices of rural households and persons reveal about money and monetary innovations (or needs) of the low-income group?

Framing this question in this manner follows the opposite (not oppositional) approach to the current top-down speculative innovation model, in which proponents of the digital inclusion narrative have reduced the monetary needs of the unbanked poor to bank money and mobile money. It is important at this juncture to clarify how this study, and its bottom-up approach, will elicit new insights on monetary innovations or needs. The infrastructure scholarship acknowledges that the point at which infrastructures break down or malfunction is a very important locus. It presents an opportunity to gain new insight from observing how people bricolage and improvise in-order to cope with a broken or non-existent monetary infrastructure. Building on this idea, I propose to develop the concept of *disadvantages from use*, which I apply in this thesis to the various forms of money. This is another way of thinking about the reasons why persons and households in Binga use and do not use various forms of money. To answer this question, I would have to present evidence regarding the livelihoods of persons and households in Binga and describe how monetary practices incorporate or reject forms of monies. In this way, I want to arrive at a point where I can discuss the real monetary needs of rural persons and households in Binga. This entails closely examining use (or non-use) of various monies and articulating the challenges and constraints associated with them.

In the literature review I will explain in more detail how I draw on Mackenzie (1996) to engage more closely with debates regarding the material and functional properties of money (or technological artefacts of money). The point being that the use of or non-use of various forms of money is related to the material and functional properties of monies. Asking questions about the material and functional properties of monies allows me not only to discuss how money is used or incorporated and or rejected, but also to discuss the history of money, its properties and its functions. This is an important question to ask at this moment in history when Zimbabweans are increasingly being asked to and forced to incorporate mobile money into their livelihoods. What sort of money is mobile money? Where does it come from? What does it achieve? How well does mobile money fulfil the purposes for which it was intended by developers, designers and or issuers of money? In what new ways is mobile money actually being put to use by users? In this study, the term “users” refers to the users and non-users of the monetary infrastructure or a particular type of money under analysis.

1.2 Problem Statement

As discussed in the preceding introductory section, digitization of money via bank money and mobile money has been postulated as a desirable innovation for people living in poverty, however, this is increasingly being contradicted by empirical evidence from developing countries. This discrepancy or overvalued claims associated with digital money suggests that there is scope and need to reconceptualise monetary innovations for people living in poverty.

1.3 Research Questions

The primary research question I want to answer in this thesis can be formulated as follows: *What new insights can the study of monetary practices of rural households and persons in Binga reveal about the emerging market in mobile money and the monetary needs of rural and poor people?* In order to answer the primary research question, a number of secondary questions have to be addressed.

- How does the historical context of Zimbabwe contribute to an understanding of money?
- How do the claims that are being made in the literature regarding the relationship between financial inclusion, market development and poverty play out in Zimbabwe?
- What is the shape and form of the market in mobile money in Zimbabwe?
- How do livelihoods of households in Binga incorporate (or reject) various forms of money?
- What is the nature of monetary practices of household and persons in Binga?

- How does the relationship between wealth and money in rural Binga contribute to an understanding of monetary needs?
- How does mobile money and mobile technology in general interact with livelihood activities of rural households and persons in rural Binga?
- Why do positive technology claims ascribed to digital money persist despite contrary empirical evidence.
- How do technical and functional properties of money reflect monetary needs of rural persons and households in Binga?

1.4 Methodological Considerations

In answering the research questions noted above, the thesis relies on evidence I produced using a number of qualitative research methods and techniques. The strengths and weaknesses of quantitative studies versus qualitative studies have been reviewed at length elsewhere (see Bryman, 1984; Miles *et al.*, 1984; Sisimondo, 2004), therefore will not be reviewed in great depth. However, many influential studies on monetary practices of low-income groups in developing countries use only quantitative methods, focusing on understanding the financial behaviour, strategies and dexterity of poor people (Collins, 2005, 2008; Morduch and Siwicki, 2017). One of my primary concerns with quantitative methods is that in uncritical hands, the method reduces complexities associated with people's financial practices to numerical values. Also, it may inadvertently suggest that poverty and financial well-being are independent values; in other words, poverty tends to be conceived in quantitative studies as an outcome of people's decision-making and behaviour, neglecting the role that political, historical, socioeconomic and cultural factors outside the decision-making powers of individuals play in enabling or constraining well-being.

While the previous paragraph essentially describes a methodological framework of a rational utility maximising individual, in this study, the unit of analysis is the household which also happens to be the unit of production, reproduction and consumption. The term persons as it is used in the previous section emphasises the fact that a household unit is a complex aggregation of persons who have diverse interests and goals. Nevertheless, the complexities of a household as a unit of analysis will be analysed further in Chapter 4.

This study is affiliated with the humanist-interpretivist paradigm[1], in line with this paradigm, I opted to use ethnography, an established method in the social sciences in which the researcher participates in and join the lives of those they are interested in studying. Over time, the aim is to develop an insider's perspective as the researcher engages in participant observation and a great deal of listening (Hammersley, 2006; Hammersley and Atkinson, 2007). The "arrival story" I recounted earlier in this chapter is also about the onset of my use of this method as I relocated from Pretoria to Binga, planning to join the lives of those I wanted to understand better. The research also involved lots of reading, especially in relation to documents and other artefacts produced by actors involved in the creation of the mobile money market in Zimbabwe. As such, it involves powerful institutions. Mosse (2006: 938) astutely observes that ethnograph*y* "offers another means of public engagement with powerful institutions whose knowledge systems constantly organize attention away from the contradictions and contingencies of practice and the plurality of perspectives".

Besides affording me as the researcher, the opportunity to be a research tool or instrument, the main advantages of creating data through practising ethnography is its openness to other sources of and methods for data collection. These include semi-structured interviews and interview guides in which questions were set in advance. I found this to be quite useful, because I was specific about most of the questions that I wanted answered. Some scholars recommend open-ended questions to accompany semi-structured interviews (for example Lioness, 2020) but I found it appropriate to use both open and close-ended questions in my interviews. For example, when I asked respondents how many cattle they own, I would often follow up on this question by asking them how they acquired them. This procedure was partly shaped by the SLA in that I wanted specific information in order to understand the local economy in which various monies mediated (or did not). Another method I used for creating data included reading and analysing newspaper articles, policy documents from the Reserve Bank of Zimbabwe and other relevant published documents, especially relating to the monetary and fiscal history of Zimbabwe and Rhodesia. Another useful source in the making of data was focus groups interviews (FGIs). Throughout my

[1] However in chapter 2.7, I provide a more detailed critical review of the research philosophy pertinent to this study.

research, I formally convened two such groups, in which six to eight participants participated, while I took up the role of interviewer and moderator. Also, during the course of my stay in Binga, I spent a great deal of time 'hanging out' with people and in the process engaged in group discussions, during which I learnt a great deal. These conversations were often sparked by people's curiosity and interest in my presence in Binga and the research I was conducting. Following such informal interactions, some people invited themselves into a formal interview session. As someone relatively new to social science, I assumed that interviews and participant observations were the only means to capture data, but as time went on, I started to pay attention to general observations of the landscape and surroundings, my own feelings, and in some instances, what was not said out loud or made explicit. Just as others have experienced in previous studies (see Jungnickel, 2014), I recognised over time that something as mundane as "taking a bus" could be a rich source of unexpected insight.

1.5 Data Collection

While data was collected over a long period and in many places, including reading published material sourced from the internet, or on a bus in South Africa, I spent an extensive time "in the field" in Binga, Zimbabwe, where my primary data collection took place between 2016-2018 for a total period of sixteen months. In total, I conducted 51 recorded semi-structured interviews which each typically lasted between 30 and 90 minutes. Most of the interviews took place in one sitting, except for the longer ones, which I had to stretch over two or more days. This happened especially when interviews occurred during the rainy season, when most of my participants were busy with a range of agricultural activities, such as clearing, weeding and ploughing fields, and tending to cattle. For the most part, interviews with respondents were conducted at their homes, and because of the heat, we usually took place outside in the *lubuwa* (courtyard) under a shady tree. Besides providing an escape from the unforgiving heat of a lowveld region, *lubuwa* is a social space where people in rural Binga socialise.

After I conducted a number of the initial semi-structured interviews, I shifted my focus to informal open-ended interviews and participant observation. This entailed regularly visiting research participants at their homes and joining them in their day-to-day activities, which included clearing fields, participating in beer drinking sessions, river fishing and many other activities. This way, many participants did not cancel appointments, because they were aware that I would not negatively interfere with their plans for the day. It took some of my participants, particularly women, several weeks to develop a level of trust where they could involve me in some of their day-to-day activities. This was more prevalent in relation to activities which by law are considered criminal, such as brewing and selling illicit alcohol (*tototo*), sex work and selling marijuana. I realised gender played a role in the kind of data I was producing and access to some information. Some women sex workers, for example, understood my interest in money and markets as me being interested in soliciting sex. During the first interviews, I usually asked participants how they earn money, but avoided conversations regarding illicit income-generating activities unless participants volunteered the information. This typically happened during subsequent visits. Naturally, I also learned about some of these illicit activities through general gossip. During observations, I took brief notes in a small notebook but found my phone to be a better tool. It was less conspicuous than the notebook because it is not uncommon for people to look at their phones during conversations. This did not seem to interfere with the matter-of-fact manner of the interviews. Subsequently, I would transfer the notes into detailed weekly or fortnightly research memos for further analysis.

In addition to semi-structured interviews, FGIs, and conducting participant observations, I also read and analysed documents published by the Postal and Telecommunications Regulatory Authority of Zimbabwe (Potraz), such as their quarterly reports, the Reserve Bank of Zimbabwe (RBZ) Monetary Policy Statement (MPS) and Quarterly National Payments Systems Reports. These reports provided useful statistical information on the mobile money market, for example, the total number of subscribers, mobile money users, the monetary value of transactions and emerging trends. The RBZ reports provided similar information but on a broader scale, and included the payment activities of all financial institutions, monetary policies and strategies which underlie the reported statistics. Whether the statistics were more or less accurate was less important than the themes and trends that emerge from the statistics and reports. One example of this, which I will discuss later, is the exorbitant pricing by the largest mobile network operator, Econet. I found that reports suggest that this has been going on for several years, and yet the government has, on numerous occasions, refused to allow competitors to enter the market. Such market protection stances are usually put in place to give new industries an opportunity to grow. Given that the company has been in existence for over 21 years, that rationale does not seem to apply to Econet. As I will show, there are numerous reports in national newspapers about the exorbitant mobile network pricing. Despite these concerns, inaction by the government and its regulatory authorities such as the Competition and Tariff Commission suggests there might be some sort of collusion at a national level through corrupt officials. Reading such reports also informed the kinds of questions I asked respondents in interviews, and it also made me more interested in understanding how people in Binga related to the mobile money market and its infrastructures.

1.6 Fieldwork and Sampling

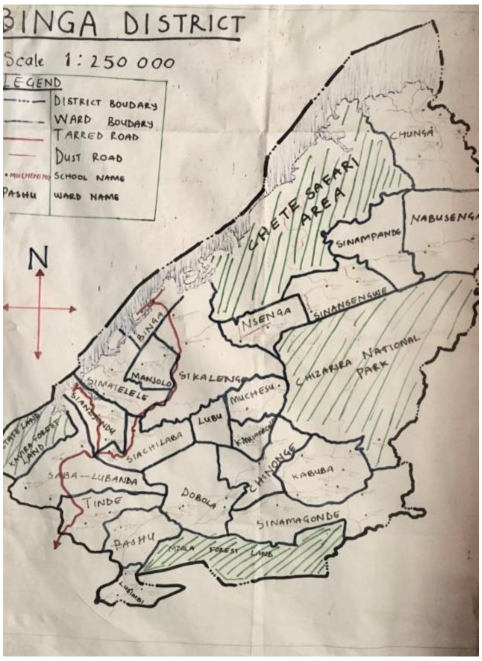

Figure 1: Binga District Map Drawn by local school children; Courtesy of Binga Museum

As mentioned above, the primary data collection or fieldwork on which this study is based took place over sixteen months in Binga. I did not experience a lot of difficulties entering the field, and this was in large part due to the support I received from people, most importantly my aunt who lives in Bulawayo. I informed her about my intention to conduct fieldwork in Binga and immediately thereafter, she introduced me to one of her friends who regularly travels there to buy fish for resale in Bulawayo. In turn, her friend helped me to secure temporary accommodation in Mlibizi, where I stayed in a disused dust mite-ridden youth hostel at a local hotel at the cost of US$5 per night payable in cash and where I cooked food with firewood on a portable barbeque stand. She also introduced me to several people, one of whom I recruited to assist me as an interpreter. He was a local Tonga fisherman who speaks fluent Shona, Ndebele and English. He was educated up to O Level but did not sit for his final exams due to financial hardship following the death of his father. As it turned out, my dependence on other people for my own work was reflected in the importance of social relations in the livelihoods of rural persons and households in Binga.

During the exploratory phase of my fieldwork in Binga, I restricted my research undertakings to familiarising myself with the general area and introducing my research to local fishermen and "traditional" leaders, headmen and the chief of my main research base. Throughout my fieldwork, my interpreter introduced me to a few key research participants who worked as senior teachers: two headmasters and a few teachers from local secondary schools. Some of them ended up assisting me with the translation of my interview transcripts from Tonga to English and by providing detailed explanations of Tonga practices relating to money, inheritance, marriage, the oral history of Binga and its economy and the educational system. After the two months' exploratory study, I went back to the University of Pretoria, where I refined my interview guide, which in its original form captured information about sources of money, and its flow within and outside the household over a specific period. I realised that this privileged the present or snapshot view of financial affairs of my research participants to the exclusion of past and future temporalities. After adjusting the interview schedule to be able to capture lives and livelihoods over time and in movement, I returned to Binga in August 2017, which lasted until October 2018. After this period and during the writing-up stage, I continued some limited form of data collection through staying in contact with my interpreter and other key informants who continued to help me in cases where I needed clarification.

Binga-Mlibizi became my main base but after a few weeks, I decided to have a second research base in Sebungwe Mouth, where I stayed rent-free with a second interpreter whom I will call Dhumalo to preserve his identity, he lived with his two wives and elderly paternal grandmother. The reason for securing another base was because Binga is sparsely populated, and it is expensive to commute across the region. I was introduced to Dhumalo by my Gweru-based motor mechanic, who met and made friends with him during one of his fishing trips to Sebungwe Mouth. Each time I stayed with his family, I contributed basic groceries which typically consisted of mealie meal, sugar, salt and cooking oil. His grandmother was kind enough to allow me to use one of her son's huts while he was away working in Victoria Falls. This kind of sharing and reciprocal acts of giving turned out to be quite important to the livelihoods of persons and households in Binga.

The two main sampling methods adopted in this study were snow ball sampling or the chain referral technique, which I usually followed up with purposive sampling in which I targeted persons from demographic backgrounds underrepresented in my growing sample. Snow ball sampling, also known as chain referral technique, is defined in the literature as a network sampling technique whereby a key informant or one or two research participants are asked to identify a list of potential interviewees (Bernard, 2006) while purposive sampling is a method whereby a sample is chosen based on a particular criterion, for example health condition, occupation, and so forth (Ibid). In my experience of using the snowballing technique, my two interpreters used their local knowledge to arrange for me the first interviews, but as time went on, I realised that they were directing me only to people they were related to or friends with. The reason for this was that, despite my explanations that my research was for academic purposes and that I could not reward participants for interviews, the expectation of some monetary gain unsurprisingly remained. I feared that this reliance on my two interpreters would cause a risk of oversampling, but there was also a possibility that the respondents would be coached to provide information that would be of interest to potential donors rather than an academic researcher.

To manage the risk of overrepresentation of people with similar social and demographic profiles, I started recruiting research participants without the aid of research assistants. This was a relatively straightforward process because, during the pilot stage, I came to know many people in the community. Moreover, following each interview, I always asked to be introduced to someone else. This snowball technique was very effective. At times, I used to deliberately break the chain referral by not always following them up, opting to approach people in a more targeted manner. As a result, I managed to include in my sample the disabled, female-headed households and the elderly.

During my fieldwork in rural Binga, I travelled a lot. Travel and commuting became even more important towards the end of my fieldwork during the Zimbabwe general elections in 2018 when I leased my car to the government but had to drive it. The government did not own enough cars to transports its election officials around the country; they, therefore, invited vehicle owners to register their vehicles with the Central Mechanical and Equipment Department (CMED), a state-owned enterprise responsible for providing transport for the government, repair and servicing of government vehicles and mechanical equipment, and so forth. Under this scheme, the government would hire private cars at US$70 per day and pay $0.60 per mile after the first 100 km. Furthermore, it took responsibility for all repairs, but the vehicle owner had to buy spares and other sundry expenses that may be required during the course of repair. The service and repair expenses that I incurred participating in this scheme cost all the money I earned, but it allowed me the opportunity to drive for over two weeks across the vast district, as shown in figure 1, and its remotest and inaccessible parts. In the process, I collected data on the state of infrastructure, agroecological resources and its connection with livelihoods, and the materialities of the mobile money market. As I took on driving assignments away from areas around the Zambezi River uplands to the border between Binga and other districts, I realised among other things that the further away from Binga I drove, the less sandy the soil became, and the less sandy the soil, the better infrastructure there existed for schools, hospitals, and retail buildings. The house structures also changed from basic shelters made from mud and pole thatched huts to fenced brick and mortar two- to four-bedroomed houses with asbestos or metal sheet roofing.

1.7 Data Analysis

Data management and thematic analysis of transcribed interviews and research memos were carried out using NVivoI qualitative data analysis software. I greatly anticipated this part of the research process based on conversations with past and current PhD colleagues, who gave me the impression that this stage of the research process would reveal unanticipated information. However, I realised two critical issues which may perhaps have been apparent to more experienced researchers. Firstly, semi-structured interviews are to some extent pre-coded, as a result, when I tried to search for common themes from the data, the computer system pulled out categories similar to the interview guide. Capturing this information is one thing but making sense of it is another. The computer-aided coding stage did not turn out as I expected. I realised that the beginning of the coding process or making sense of the data starts much earlier, as it is merely a continuation of a 'background' process that starts when interviews and observations begin. The actual computer coding phase did not reveal patterns and themes that were significantly different from what I anticipated, but it offered a better means to organise the data and speeded up the coding process. Perhaps my experience would have been different if all my interviews were unstructured and involved a significantly large volume of data involving many researchers. The other limitation I experienced was language. As a non-native English speaker, I realised that although I believe I have near enough competences in English there are critical linguistic nuances which I missed. The implication of this was that some of my (and possibly others') ideas remain tacit or unspoken and therefore unavailable for computer-aided coding.

After the coding process, I felt like the data had been dislocated from its context. It was somehow now less 'representative' of the people who represented it (Jackson, 1988; Fine, 1993), but as I continued with the coding process, I realised that detailed case studies and ethnographic vignettes could be an important way to not only give context to abstracted data but also to 'humanise' the people who participated in my research project.

1.8 Research Ethics

This study was approved by the Faculty of Humanities at the University of Pretoria, and the research was conducted in concordance with the dynamic informed consent principles which emphasise the need to continuously negotiate and reaffirm consent during the research process (AAA, 2009). Although the consent forms and research information sheets were written in English, they were both verbally translated to the first language of participants who were not proficient in English. At the time the research proposal for this study was approved, there was no requirements for the information sheets and consent forms to be translated into the native language of research participants. Due to illiteracy, some of my research participants were unable to sign the consent forms; they would simply put an X in the signature box. A few said they were incapable of putting the X, but all the same verbally agreed to participate in the research.

Anonymity and confidentiality were critical in this study because in the past the ruling party was accused of denying villagers food relief aid during a drought season as punishment for supporting an opposition party (see Dynes 2002; Raath 2001). No wonder some people were hesitant about participating because, as I later found out, rumours did make the rounds about me being a secret agent working for the ruling party. I therefore, had to reassure them that their confidentiality was not compromised: this entailed use of pseudonyms, and other strategies of anonymising participants e.g. full date of birth and address were not included on the interview schedule. However, initially I retained first names because I felt they were important in case I had to go back for further clarification, especially at the early stages of the research before I had established a good working rapport with some of them. Although I retained first names during research, I anonymised them in this thesis. Furthermore, permission to reproduce the images used in this study was not solely based on the signed consent form, but express permission of the people concerned. In light of the political violence in Zimbabwe, the images were also pixelated to preserve their confidentiality.

However, although I am confident that all identifiers were removed from the data (see Walford, 2005) there are inherent complexities associated with anonymity in research, (Van der Geest, 2003; Grinyer, 2009; Rosenbaum, 2018). In the case of this research, mentioning the district in which my research was conducted means that people familiar with the area may be able to identify some research participants. This is particularly relevant in Zimbabwe where rural areas are commonly identified by the chief's name. This became an ethical dilemma when some of the chiefs whom I had become acquainted with were accused of corruption. The accusations were corroborated by numerous first-hand accounts of how they demanded chickens or money in exchange for providing address verification letters required of voters as part of the voter registration process. Since this was not directly related to the questions I wanted to answer, I could also ignore some of these dilemmas. Ethical guidelines are guidelines and that as such new and unexpected ethical questions often arise during the fieldwork process (Grinyer, 2001; Rosenbaum, 2018). For purposes of this PhD, the precautions that I took to remove identifiers from data were sufficient to protect the research participants.

1.9 Research limitations

One of the limitations of this study was that the interviews were conducted in Tonga, a language in which I only have basic competency. To manage this, I recruited the help of a local teacher who offered me weekly reading and writing lessons for at least half of the fieldwork period. In addition to that, I also recruited two Tonga interpreters who fluently speak Ndebele, Shona and English – languages I can also speak. My interpreters were involved in all initial semi-structured recorded interviews and a few unstructured ones, especially at the beginning of the fieldwork. In some instances, I was able to conduct interviews on my own, especially in cases where the informants could speak Ndebele and Shona, which they acquired at school. Through this, I was able to transcribe all the interviews personally, but in addition to that, I also sent recorded interviews to be translated by a local teacher. Of course, the conclusions I draw here are valid for Binga, but I believe that some of the arguments I make may have wider applicability, because as I shall indicate in Chapter 3, some of the phenomena observed in Binga, in particular outright currency abandonment and abandonment via digital money discounting have also been taking place in other parts of Zimbabwe, which include urban areas.

1.10 Thesis Outline

This study straddles many disciplines (mostly Anthropology, Development Studies and Science and Technology Studies). Therefore, the primary purpose of the literature review in **chapter 2** is to situate my study in the relevant literature and to show how the literature informed my research questions. This chapter I bring together several divergent approaches to the study of money to answer my research questions. Money has many sides to it, for example technical, psychological, financial, socio-cultural and political. All these are usually studied separately and yet they deal with the same subject. The literature review in chapter 2 draws on Anthropology (specifically, its method of ethnography and its focus on the everyday in relation to the study of money and markets), Science and Technology Studies (with its emphasis on materiality and infrastructure) and Development Studies (through its focus on livelihoods and poverty) to examine the relationship between the monetary repertoires of households and persons in Binga and the mobile money market in Zimbabwe. My research respondents were both users of mobile phones and participants in the market for mobile money. They connected to this market through various infrastructures, material and cultural, that incorporated them unevenly into the local, national and regional economy. In this review, I offer a critique of social construction perspectives in relation to both money and technology. Adopting a critical realist stance, I also develop a critique of technological determinism with regard to money technologies. This chapter addresses the following question: What claims are being made in the literature regarding the relationship between financial inclusion, market development and poverty?

Chapter 3 introduces the monetary landscape and infrastructure of Zimbabwe today and during its colonial past. I offer a description of the various issuers of money, actors I also describe as "infrastructure builders": (1) state fiscal actors such as the Zimbabwe Ministry of Finance and monetary actors such as the Reserve Bank of Zimbabwe, which issues cash money in the form of notes and coins as well as bank money; (2) commercial banks and other financial institutions that are issuers of bank money (3) mobile money operators that issue mobile money; and (4) heads of households who issue and govern the use of cattle and livestock as both social money and social wealth. In order to understand the evolution of the issuing of money in Zimbabwe, the chapter offers a historical analysis of the monetary changes that occurred in Rhodesia during the colonial period and in Zimbabwe during the post-colonial period. Specific attention is paid to the history of political turbulence and how these related to monetary developments. I follow the existing scholarship in identifying exogenous and endogenous factors that lead to a history of political and economic crises. The chapter reveals shifts and contestation over power between fiscal authorities, private financiers and multilateral lenders, and ordinary users of money. Underlying these contestations and or collusion are conventions, classificatory systems, standards and goals that include classification of users of bank money into banked and unbanked categories, pursuance of profit maximisation as a goal for financial institutions and mobile network operators, colonisation as a goal by Rhodesian and English fiscal authorities, and other factors. The chapter also provides evidence to argue that historically the development of financial infrastructure in the country followed times of economic growth, which seems to contradict contemporary claims that investment in financial infrastructure will result in economic growth and poverty alleviation. The chapter also seeks to demonstrate the agency of ordinary users of money as they confront fiscal and monetary authorities and banks and financial institutions through various means. I pay specific attention to the dollarisation process, currency abandonment and financial disintermediation, whereby users of money take control over the management of their money rather than surrender that responsibility to experts. Lastly, it provides a brief account of the convergence of money with technology – in particular, the Real Time Gross Settlement (RTGS), which I argue was triggered by the *disadvantages from use* associated with the use of cash and bank cheques as a means of payment. In this chapter, I answer the following questions: What is the historical context for understanding the money in Zimbabwe? What is the shape and form of the market in mobile money in Zimbabwe?

Chapter 4 provides a brief history of the Binga region, including its infrastructural resources, which were found to be poorly developed, sparse and non-existent in some cases. This represents poor visibility of both the state and market. The chapter provides an opportunity to explore what people do to extend their economic and cultural space under such circumstances. The evidence provided shows that the inconveniences and costs associated with such infrastructures are transferred to poor and marginalised users of the poorly provisioned infrastructures. Most importantly, the chapter analyses the Binga household, which is an important institutional arena where goals of issuers of money can be reshaped, contested and repurposed. For example, the role of cash as a means of exchange is contested in that where possible cash is converted to livestock, which has cultural constraints against its use as a means of exchange. In this chapter, I answer the following question: What are the livelihoods of households in Binga?

Chapter 5 engages more closely with money practices nestled in the household economy of Binga. What stands out is the consumption deficit, which Swift (1989) describes as a sign of household vulnerability in which production output is insufficient to meet household consumption needs. I discuss how people access credit and savings outside the formal financial system on the levels of the household and the community. I describe how hustling and risk-taking have become important repertoires in the livelihoods of rural people. I offer some case studies that speak to different forms of wealth, especially the relationship between cattle, livestock and money. In this chapter I answer the following questions: What are the monetary practices of persons and households in Binga? What is the relationship between wealth and money in rural Binga?

Chapter 6 examines the claims that ICT has a transformative impact on livelihoods. The findings from this chapter dispute these claims, in particular the view that mobile phones contribute to information efficiency, or the belief that digital forms of money are preferable because they provide a digital record of poor people's monetary affairs. Instead, data is presented in this chapter on how fishermen who fish the Zambezi Rover and fish traders use and reject mobile money in their monetary practices. This chapter continues providing a question to the answer: What role does mobile money and mobile technology in general play in the livelihood activities of rural households and persons in rural Binga?

Finally, **Chapter 7** answers the following question: What are the monetary needs of rural persons and households in Binga? I also offer an answer to the primary research question this thesis is concerned with: *What new insights can the study of money practices of rural households and persons in Binga reveal about the emerging market in mobile money and the monetary needs of rural and poor people?*

Chapter 2: A review of the relevant literature and theoretical frameworks

2.1 Poor People, Markets and Exchange

The main debate that this thesis engages with concerns the relationship between poor people, money and markets, and all the claims that are being made about this relationship by scholars from a variety of disciplinary and theoretical perspectives. The introductory part of this chapter I provide a brief review of some of the ideas emanating from the Human Economy (HE) programme, paying attention to how it influenced this research. The bottom-up approach associated with the HE was relevant to this project in the sense that I do not ascribe epistemological privilege (see Spivak, 1988; Grosfoguel, 2007) to the dominant top-down innovations imposed on the poor by powerful social groups. In saying this, I am not arguing that top-down technology innovations are not credible sources of successful technologies, but in development finance, there is credible evidence to suggests that such (top-down) innovations are not properly aligned with poor people's needs. For that reason, this thesis is concerned with the multiple forms of monies that poor people in Binga use. This is obviously not a novel approach, as various studies that shall be reviewed in this chapter follow a similar approach but do so in the course of exploring opportunities to enhance financial inclusion and the digitisation of cash. In contrast, my interest and main goal are to understand the monetary practices of persons and households in Binga with the view to reconceptualise an alternative future money technology or monetary innovation that better meet the needs of the so-called unbanked poor.

Following that, the thesis will review the "bottom of the pyramid" literature and the World Bank-dominated "financial inclusion" narratives. Throughout this thesis, I argue that proponents of both bodies of literature do not recognise the critical role that society and the state play in protecting poor people from market dynamics. The last part of this chapter integrates some literature from Science and Technology Studies into the study of money. I argue that as money dematerialises into digital objects (bits and bytes), which are malleable and often opaque, its materiality matters even more. This is followed by a review of the infrastructure concept and how it will be applied in this study. This study draws on the older infrastructure literature such as Bowker and Star (1999) on the importance of classifications and categories and its relationship to power. Pertinent to this study is the segmentation by banks of citizens into users and potential users of bank money and further into categories of the "banked" and "unbanked". In turn, the categories and classificatory systems associated with mobile money are more complex.

2.2 Human Economy and the bottom-up approach

This study is influenced by some principles of the Human Economy Programme in which dominant narratives, theories and concepts relating to economic life are neither devalued nor privileged over contextual realities. Such an approach has been advocated by scholars such as Keith Hart (2008) and others (Sharp, Hart and Laterza, 2006). Inspired by the alter-globalisation movement (see Pleyers, 2010), some of the ideas have been influenced by activists and researchers from Latin America and Europe whose main goal was to develop and promote research themes that might introduce new perspectives which promote economic democracy (Hart, 2015). The Human Economy is not one approach and differs with some tendencies in the alter-globalisation movement that calls for a radical break with existing economic models (see Hart, Laville and Cattani, 2010). Hart (2015:5), for one, cautions against the vilification of bureaucratic institutions, urging among other things that corporations could be "be selectively combined with citizens initiatives to promote a more democratic world society".

Writing that this is not a novel idea, Hart states (2015: 5): "It is just that many activists in the SSE field ('social and solidarity economy' – see Racopoulos, (2015) in this volume), not to mention more radical groups, will not consider working with bureaucracies which they think of as the enemy. Yet the French Revolution only succeeded because it was backed by the shippers of Nantes and Bordeaux, the Italian Revolution by the industrialists of Milan and Turin. Kenya's world-leading experiment in mobile money, M-Pesa (M for mobile, Pesa is Swahili for money), was launched by a subsidiary of the communications group Vodacom. Hewlett-Packard has been developing research stations in outlying areas for some years now as part of an attempt to make computers accessible to the world's 'poorest four billion". However, in the conclusion of this thesis, I will point out my reservations about this optimistic perspective.

The ideas emanating from HE draws on several disciplines, including history, economic anthropology and development studies. Methodologically, it favours ethnographic fieldwork and participant observation. It also draws on the institutional approach, which, according to Hart and Sharp (2014), has its roots in German historicism, Marx Weber's historical sociology and Thorstein Veblen's institutional economics. The emphasis on fieldwork and participant observation directs empirical attention to the human prefix of the HE, which theoretically also seeks to privilege people, their hopes, aspirations and economic activities over abstract representations of the economy and livelihoods (Hart and Sharp, 2014). In this, they agree with many scholars who bemoan how economics and contemporary social science have become detached from lived social realities (Hart, 2008).

Furthermore, Hart argues that what people do in their actual lives and livelihoods is often marginalised by dominant ideologies, theories and models. Inspired by Marcel Mauss and Karl Polanyi's call for a return to social solidarity, the Human Economy approach seeks to conduct academic research that would "promote economic democracy by helping people to organise and improve their own lives" (Hart, 2015: 4), suggesting that this can be achieved through academic research, social activism and public outreach. Hart has also pioneered writing about "world society in the making" (Sharp, Hart and Laterza, 2006) and has sought to create theoretical connections between the local to the global, from the "minutiae of everyday life" to universal propositions; in other words to provide the link between what people know and the impersonal, which lies beyond an actor's point of view (Hart and Sharp, 2014, p. 3; Hart, 2015).

Some of the ideas embraced by scholars who are part of the HE programme briefly described above is relevant in this study. So is Development Studies, Development Finance and ICT4D, where discourses are defined by powerful western international development agencies together with scholars from or affiliated with universities and research organisations from the Global North. More specifically, as I shall show in the following parts of the review, at the forefront of the financial inclusion narrative and recent drive to eradicate cash by digitisation are powerful western international development agencies, global multinational companies, and scholars from all over the world. Roy (2010) points to the geopolitical marginalisation of Africa and rightly observed that the Global North through the World Bank and several of its arms, but most prominently CGAP promotes what she terms “poverty capital”, in other words supporting, promoting and moralising the idea of making profit out of poverty. This is gradually being contested by scholars from the Global North and the Global South, specifically Bangladeshi development organisations such as Bangladeshi Resource Across Communities (BRAC), Grameen Bank and its founder Professor Muhammad Yunus (Ibid).

2.3 “Bottom-up studies” and the “bottom of the pyramid”

There are many scholars who are interested in understanding markets and the poor, or those people who cannot participate in markets because they do not have money or other reasons. There are many reasons for this interest. Some want to be able to extend markets to poor people to make money, whereas others are interested in protecting the poor from markets. In many ways, it has to do with different ways in which scholars understand poor people and understand markets. This is a longstanding debate in the social sciences, economic history and development studies. Many scholars have written about the expansion of markets as part of capitalist development, including Marx in his writing on “primitive accumulation”, and more recently David Harvey on “accumulation by dispossession”. Marx and Harvey depict the violent and brutal side of market expansion on the poor, showing how it leads to dispossession of land, new forms of exploitation and dependencies, and ultimate in class oppression.

The debate surrounding the ‘bottom of the pyramid’ literature should, therefore, be discussed in this longer debate regarding the relationship between poor people and markets. The debate was triggered by the publication of a book titled *Fortune At The Bottom Of The Pyramid*; *Eradicating Poverty Through Profits*, written by Prahalad in 2005. The book was exalted by influential figures in the international development industries, some of whom are policymakers for powerful countries. The central idea expanded on in the book is not that multinational corporations, such as FinTech companies, Banks and Payment Service Providers (PSP) who are promoting and developing digital forms of money, can alleviate poverty while at the same time making a profit from the poor. The author argues that a section of the world's population – the four billion poor people who live on less than US$2 per day – presents an opportunity to markets rather than a risk. He argues that the poor should not be perceived as helpless but as micro-entrepreneurs and innovative consumers who through their social networks and relationships create markets that could be better exploited by multinational enterprises. Prahalad believes that markets are beneficial to poor people and argues that turning the poor into consumers will enhance their dignity in that markets accord them an opportunity to access goods and services that are traditionally reserved for the middle-class and wealthy.

In the process, Prahalad offers a critique of traditional approaches used in development aid agencies that rely on a philanthropic approach that involves funding bureaucracies such as states and non-governmental institutions. He suggests that markets are better suited to the needs of those 'at the bottom of the pyramid'. In the process, he claims to debunk several myths that scholars and policymakers hold about the poor, for example, the misconception that the poor do not have enough money to purchase products made by large corporations. He suggests innovative marketing solutions and sales strategies that suit the sparse infrastructure in developing countries. A better understanding of the needs of poor people will allow markets to penetrate the livelihoods of poor people better.

Unsurprisingly, the publication of his book ignited a considerable debate, some of which overlapped with previous disagreements concerning the effects of markets on the livelihoods of poor people. The debate was very polarised, with some taking Prahalad to be a prophet for market expansion whereas others saw in him a modern-day robber baron. Given that many anthropologists were working in parts of the world where they were witnessing the collision of poor people's livelihoods with rapidly expanding markets, they also joined the debate. They did not take a united position. Some criticised Prahalad, while others argued that despite the language used in the book, he was saying something new.

Some anthropologists (see Cross and Street, 2009; Roy, 2010; Schwittay, 2014) argue that claims that MNCs uphold social goals are secondary to the profit motive and has become a means to moralise making a profit from the poor. Cross and Street

(2009) highlight moral questions about making a profit from the poor, in particular the deliberate effort by corporations to decentre the profit motive in their private-public initiatives. Schwittay (2014) acknowledges these moral concerns and emphasises the fact that corporations are not inherently moral and ethical. Nevertheless, there are opportunities to inculcate humanitarian concerns into the designs of financial products of the poor. Although this brings to view some of the potential benefits of the concept, on the whole, the bottom of the pyramid (BoP) narrative overlooks complexity and lived realities. For example, exponents of the BoP conceive of poor people as both consumers and entrepreneurs, without articulating how someone who survives on US$2 can raise enough capital to start a business. There is also no explanation of how poor people happen to be naturally endowed with the necessary entrepreneurship skills. The channel through which consuming goods and services marketed by large multinational corporations leads to the alleviation of poverty remains obscure. Most importantly, asymmetric power relations between the most vulnerable members of the community and powerful large corporations have not been given enough attention. A more significant concern is that the concept undermines the potential role of the state in these complex relations while proffering only business centric proposals. The briefly identified weaknesses will become significant in the ensuing sections of this chapter, where statistical data in Zimbabwe suggests that payments are dominated by private forms of money issued by multinational corporations, namely banks and mobile network operators who are the most recent entrants into the country's monetary infrastructure.

2.4 The promises and pitfalls of 'financial inclusion/exclusion' narratives

As this thesis concerns an investigation of monetary practices of rural households in Zimbabwe in the context of a growing market in mobile money, the research questions I seek to answer speak directly to the literature on financial inclusion and exclusion, mobile money, information and technology, and markets. Financial inclusion is typically defined by its proponents as the provision and use of a full range of formal financial products and services to all at affordable prices, in a convenient manner, and with dignity for the clients (IFC, 2009; Cul, Ehrbeck and Holle, 2014; World Bank, 2014). Several scholars at, or affiliated with or funded by the World Bank (see Beck & De La Torre, 2007; Beck, Demirgüç-kunt & Peria, 2008; Christopoulos & Tsionas, 2004; Levin & King, 1993; World Bank, 2014) argue for the positive societal benefits of greater financial inclusion. They also speak of financial inclusion as increasing the rates of poor people's participation in markets, including financial markets. In arguing this point, these scholars often reference economics scholarship that suggests that investment in financial infrastructure is an important precondition for financial inclusion. They typically cite Schumpeter (1912), Gurley and Shaw (1955) and Blackburn and Hung (1996) as saying that greater investment in financial infrastructure leads to economic growth. They furthermore suggest, as many economists do, that such economic growth will trickle down to poor people via increased opportunities for entrepreneurship, employment, higher salaries, and so forth.

The trickle-down model has received its fair share of criticism. Studies have established that the channel of allocation of the proceeds of economic growth have a non-linear relationship with poverty (Fine, 2009; Greenwood and Jovanovic, 1990) suggesting that there is no necessary relationship between economic growth and wealth concentration. Relevant to this study, the argument that finance causes economic growth has been contradicted by several scholars, who argue that finance is subservient to economic growth (Robinson, 1952; Bauer, Meier and Seers, 1984; Lucas, 1988). But it is now widely accepted that with what has been called financialisation, finance is increasingly important to the growth of post-industrial and services-oriented economies. But what rings true for post-industrial economies may not be true for developing economies. This line of argument seems to be supported by historical evidence from Zimbabwe, which shows that historically, finance chases economic growth, not the other way around. For example, in the late nineteenth century in Zimbabwe, there was an attempt to open a stock exchange based on speculation that the country had vast mineral resources, but this attempt collapsed when it turned out that was not the case (see Karekwaivenani, 2003). The subsequent rapid expansion of financial institutions only took place during and after the expansion of industry in the 1950s (see Bond, 1998; Nyamunda 2017a). Lastly, and more recently, financial decline and forced closure of several banks took place in the past two decades amid economic decline.

Underlying claims about financial inclusion made by proponents are three important assumptions that were succinctly articulated by Mader (2016b) and which were raised in the introduction to this thesis: that there is a causal relationship running from financial inclusion to developmental outcomes and broader benefits; that the extension of financial services is directly beneficial to the poor; and that there is an untapped business opportunity in providing financial services to the poor. Despite Mader writing that these three assumptions could not be upheld, Mader (2016b) asserts that financial inclusion continues to be elevated to the top of the international development policy agenda. There is clearly some overlap between this literature and the 'bottom-of-the-pyramid' literature. In recent years, the proponents of financial inclusion in many ways felt bolstered by arguments presented by Prahalad (2005). In this study, I did not elicit any evidence to support financial inclusion as a top development priority, instead, the most important development priority that shall be examined in more detail in this thesis is economic exclusion.

2.5 Convergence of Money and Technology

As money and technology converge, mobile money increasingly became central to discussions about financial inclusion. Some promoters of financial inclusion have been advocating for the eradication of cash through a process of digitisation, arguing that digitisation will alleviate poverty. This line of argument became amplified after the successful launch of some pioneering experiments in mobile money, namely G-Cash in 2004 (GSMA, 2009) and M-PESA in 2007 (Hughes and Lonie, 2007; Morawczynski and Pickens, 2009; Mas and Radcliffe, 2011). These attracted favourable attention from academia – particularly from some scholars in information communication technology for development (ICT4D) studies (Heeks, 2007; Hughes and Lonie, 2007; Mas and Orawczynski, 2009; Mas and Radcliffe, 2011; Radcliffe and Voorhies, 2012).

Furthermore, the success of these mobile money businesses created opportunities for newer market players to promote the transition from cash to electronic payments. These include Better Than Cash Alliance, which express a strong view that digitisation is an important step in advancing greater financial inclusion. On their website, they claim that digital money leads to cost savings (increased efficiency and speed), increased accountability (for example, tracking reduces corruption), increases women's economic participation, and so forth. Similarly, MasterCard is committed to a "world beyond cash" through the Financial Inclusion Commission and MasterCard

Centre for Inclusive Growth & Financial Inclusion. This commission also airs claims suggesting that digital money increases savings opportunities for people without bank accounts. Reading through these claims, it is hard to miss the attendant evangelical flavour. As argued in the introduction, these activities can be seen as techniques to create new technologies and new markets.

Inclusion is about participating in markets, and increasingly markets are mediated by finance and not just money. In recent years, as Brett Scott (2015) and others have argued, there has emerged a concerted action by some powerful actors in the global economy to push for the eradication of cash. For Scott, it is erroneous to label this as the move to a "cashless society"; rather, this is a society where banks as the issuers of digital or electronic money play an ever-increasing and powerful role in the economy. Scott further argues that the eradication of cash will make citizens beholden to one form of money, that is bank money, which is effectively issued by private banks, thus making citizens beholden to private interest groups. In such a society it would be easy for banks and states not only to survey and monitor citizens through their finances, but also to penalise and starve political opponents by cutting them off from the money supply. When people use cash, in theory at least, banks and states cannot achieve such levels of control over citizens.

Thus far, the literature reviewed has centred on financial inclusion discourses, and debates about the role of markets in livelihoods and so forth. Clearly, these debates are important; however, the next section I focus my attention to relevant theories of money and the analytical framework that draw on to examine and also evaluate properties of money.

2.6 Competing theories about money and markets

Broadly speaking, theories that attempt to explain the ontology of money – its origins, development and nature – are developed along two incompatible[2] axes. One conceptualises money in symbolical terms as an abstract construct defined in social and cultural attributes. This conception is favoured by social scientists and historians

[2] I reuse the word incompatible as used by Ingham, (2006) in his discussion about the two irreconcilable perspectives about the ontology of money.

who refer to money as a social technology (for a more detailed history of money see Davies, 2002; Ingham, 2006; Graeber, 2011). The other theory privileges the material dimension. It is at times referred to as the commodity theory, which espouses the belief that money is a tangible material object that spontaneously emerged from markets. The most notable proponents of this position are neoclassical economists, such as Jevons (1885), Menger (1892), Smith (2005) and several others. The neoclassical economists situate the origins of money in inefficiencies of barter trading, particularly the double coincidence of wants. However, because of weak historical and archaeological backing, this argument about the origins and nature of money is widely dismissed as being ahistorical (Davies, 2002; Ingham, 2004; Graeber, 2011a, p. 361) historically inaccurate (Mauss, 2002; Graeber, 2011) and as deriving from a flawed and ethnocentric conception of human nature that views humans as instrumentalist and asocial (see Mauss, 2002; Hudson and Wunsch, 2004; Graeber, 2011). Although I agree with these criticisms of the barter origins of money theory, or 'myth' as some detractors call it, it also holds that those scholars who see money as a social technology tend to neglect the materiality of money. This neglect of the materiality of money in scholarship deepened with the demise of the gold standard in 1971 (see, Graeber, 2011a, p. 361) and increasingly money is now theorised as nothing but an agreement or social and symbolic construct. In the process, scholars have missed an opportunity to think carefully about the materiality of money and markets, including the functions of various forms of money. Also, for me the point does not seem to be whether a certain something qualifies to be money or not based on whether it meets the functional criteria posited by economists – money as a medium of exchange, unit of account, store of value and standard of deferred payment – but to ask different questions about how commodities or forms of wealth may function as money in specific contexts. What, for example, counts as money in an economy in crisis such as in Zimbabwe? How do people store wealth when state- and bank-issued money is both scarce and unreliable and unstable? How do liquidity crises affect how people value goods and services, and what becomes money?

In this sense, I agree with Hart (1986) that the point is not to figure out the best definition of money, but to remain open to the multiple forms that money can take. This means, in part, being open to how ordinary people view and use money. Moreover, it means accepting that there are multiple forms of money with a diverse (and equally limited) range of functions, purpose and meaning (see Graeber, 2014; Guyer, 2011; Hart, 1986). In a way, it means opening up the discussion about how to theorise money and wrest control away from the narrow economistic perspectives that have dominated theorising about money. In this, economic anthropologists such as Keith Hart, Bill Maurer, and Jane Guyer, as well as sociologists such as Viviana Zelizer, have played an important role. Maurer (2006, 2010) has drawn our attention to the “pragmatics of money” and “multiple monies”, by which he means the shift from questions about what money is to questions about various monies and the variable uses to which it is put. Guyer (2011) has written about “monetary ecologies” and “monetary repertoires”, by which she suggests we should pay attention to what users do with the various monies available to them. In other words, these scholars suggest that we should not only study money from the perspective of the issuers of money such as the state, or from the perspective of those scholars who have a great deal of money, but also from the perspective of the users of money. In this dissertation, I borrow terms from both Maurer and Guyer to describe and analyse the ways in which rural persons and households in Binga use the various forms of money available to them.

2.7 Technologies, materiality and the turn to infrastructure

So, while I am sympathetic to the critiques offered against the barter origins of money theory, I do think the proponents of the commodity theory of money had important insights regarding the function and pragmatics of money that speaks to the materiality of money. Thus, I will also pay attention to the narrow instrumental Aristotelian functions of money as a medium of exchange, unit of account, store of value and standard of deferred payment. I am not alone in being interested in questions of materiality; the field of ‘new materialism’, for one, is a burgeoning field of study. My interests in materiality, technology and technological artefacts were shaped by my postgraduate studies in Science and Technology Studies (STS), but most importantly from my experience designing mobile and web payment systems. Before I review the analytical framework used in this study, I will briefly review relevant schools of thought in which the infrastructure framework is subsumed. The relevant schools of thought or frameworks for analysing technologies are social constructivism and on the sociology of scientific knowledge (SSK) (the older infrastructure concept was aligned with this school of thought).

In brief, proponents of social constructivism argue that technology is constructed and shaped by society, while SSK scholars pay attention to the technical or practical capabilities of technological artefacts. In its origins (for more about its historical origins, see Shapin, 1982), SSK "consists of studying the development of a scientific field, and identifying points of "contingency" or "interpretative flexibility", where, at the time, ambiguities are present. Having identified such 'branch' points, the researcher then seeks to explain why one interpretation rather than another succeeded" (Williams and Edge, 1996, p. 869). Proponents of this school of thought extended their approach to the study of technological artefacts. It pays attention to the different technical choices concerning the design of technologies and offers sociological and technical explanations as to why specific design choices triumphed over others. Its analytical focus starts with the technology and proceeds to the context shaping it (Ibid).

Therefore, it has attracted scholars who deal in technological designs which are physical and or have practical implications, for example workplace studies (see D'Aderrio, 2011; Leonardi, Nardi, & Kallinikos, 2012; Orlikowski, 2007), Kling (1992), an Information Systems scientist; Mackenzie (1996), a mathematician turned sociologist of technology; Spinardi (2008), who studied sociology of technology, and Langton Winner (1986), a political scientist. This brief synopsis shows that several of the above scholarly contributors come from a background in which the limits of privileging social conception of technology were apparent. A more relevant example is Mackenzie's (2010) study about a mathematical model designed by Nobel Prize economists but resulted in investors losing over US$4 billion. Lastly, the workplace studies involved work technologies which have real consequences, such as increased productivity, but at times at the expense of workers' rights and freedom. In the analytical framework section, I will provide an account on how I draw on SSK to examine the content and technical properties of the money that the research participants use.

The two schools of thought differ about how to analyse technology, in other words, which is a better analytical frame: do we spotlight the social forces around a technological artefact (linguistic construct), or do we start with the content of a technological artefact (physical objects) then shift the analysis to social forces concerned with the development and use of a technological artefact? Similarly, the tension between the technical and the social is also common in the study of money.

In the previous section I mentioned Ingham, who referred to this tension as the incompatible axis in relation to money. It was a reference to the fact that some think of money in abstract terms, while for other scholars moneyness was once measured by the purity of gold and silver. This argument about the ontological status of linguistic constructs and that of physical objects is best illustrated by a heated debate in which Kling (1992:362), asserted that "….physical objects like guns and roses have some capabilities that are not only arbitrarily derived from the talk about them. It is much harder to kill a platoon of soldiers with a dozen roses than with well-placed high-speed bullets". In response, constructivist sociologists Grint & Woolgar (1992) attempted to provide an explanation about what makes being shot a social accomplishment rather than a technical episode, by tenuously arguing that the social relates to the production of the gun, not the consumption of its bullet.

The perspectives described above can be looked at as divergent positions between social constructivism and realism. I would describe my own position in relation to money and technological artefacts as critical realism, which, according to Bhaskar (2013:xvii) "espouses the concrete existence of possible worlds within this one, independently of our knowledge of them". In other words, empirical reality interacts with social laws, but those need not be universal (for a more detailed definition, see Hartwig, 2019). I accept the constraining and enabling effect of material objects – a gun can, as Kling asserts, splinter bones and can tear flesh; a payments software can be developed and deployed without express societal consent but ultimately will not be of use if potential users do not find enough reasons to adopt the payment application, or if the monetary authorities decide to prohibit the payment application. Pertinent examples that currencies can be developed without express prior societal consent – can be exemplified by Bitcoin (see Nakamoto, 2008) and the history of VISA (see Stearns, 2007) – affirms that it was developed by a single bank which in later years enrolled other banks. However, regulators only came into the scene after several years of successful operation.

My contention is that scholars of money and markets should not neglect the material aspects of technologies is boosted by recent scholarly interest in the social sciences in the topic of infrastructure. The emerging research strand on infrastructure was pioneered by the late Susan Leigh Star (see Star, 1999; Bowker & Star, 1999), a proponent of the sociology of scientific knowledge (SSK), rather than engaging with the new literature on infrastructures, this research draws on some of the foundational literature on infrastructure. Star was influenced by scholars from Science and Technology Studies and Social informatics (for example Kling, 1992; Kling, 2007; Latour, 1992; Winner, 1986). She took up the point made by scholars who argued that materiality matters in information systems and technology development in general. Drawing on ethnomethodology, Star & Ruhleder, (1996) and several other scholars contributed to a multidisciplinary research endeavour under the label of Computer Supported Cooperative Work (CSCW) and Participatory Design (PD) in which they conducted research predominantly in workplaces to study how socio-material relations are forged (see Berg, 2016; Schmidt & Bannon, 2008; Woolgar, Coopmans, & Neyland, 2009). This was an attempt to bridge the gap between users of technology, social scientists and software engineers, by creating opportunities in which they could work cooperatively to understand and at the same time influence the politics involved in information systems.

Susan Star writes that infrastructure can be understood as “a material artefact constructed by people, with physical properties and pragmatic properties in its effect on human organisation” (Bowker and Star, 1999:35). In her view, infrastructure involves the studying of “boring” and invisible aspects of daily life, for example bridges, power and telephone cables, underground sewage systems and mobile network cables. She writes that the visibility of these infrastructures that are usually considered boring typically increases when they malfunction, such as in moments of crisis. In a more detailed discussion, Bowker and Star (1999:35) point to the following important features of infrastructure: (1) its *embeddedness*, by which they mean the way it is sunk into, inside of, other structures, social arrangements, and technologies; (2) its *transparenc*y, by which they mean that infrastructure is transparent to use in the sense that it does not have to be reinvented each time or assembled for each task, but invisibly supports those tasks; (3) its r*each or scope,* which may be either spatial or temporal-infrastructure has reach beyond a single event or one-site practice; (4) it is *learned as part of membership* in that the taken-for-grantedness of artefacts and organisational arrangements is a sine qua non of membership in a community of practice (see also Lave and Wenger, 1991; Star, 1996) and strangers and outsiders encounter infrastructure as a target object to be learned about; (5) it *links with* *conventions of practice* in that it both shapes and is shaped by the conventions of a community of practice; (6) it *embodies standards* in that infrastructure takes on transparency by plugging into other infrastructures and tools in a standardised fashion; (7) it is *built on an installed base*, as it does not grow de novo but wrestles with the inertia of the installed base and inherits strengths and limitations from that base; (8) it *becomes visible upon breakdown*; and (9) it is *fixed in modular increments, not all at once or globally* because infrastructure is layered, and complex, and because it means different things locally, it is never changed from above.

How can I use some of these ideas about infrastructure to think about the materiality of money and money markets, and the different forms that money take, in the economic crisis in Zimbabwe? What are the strengths and weaknesses of thinking about money as a form of technology or an artefact? Firstly, the monetary crisis in Zimbabwe is equivalent to a breakdown and has therefore presented opportunities to make visible various monetary practices that were unseen before. These include currency discounting, currency abandonment and the emergence of an efficient people-driven and well-run street-based black-market foreign currency trading. Secondly, standards that are embodied in various monetary infrastructures or monies are at times taken for granted and yet are an important site of contestation.

A suitable example of categories and classificatory systems that became a standard in banking and finance is the know your customer (KYC)[3] regulations, which mobile money (mobile network operators) issuers and banks insist on before they can allow potential customers to access their financial products and services. The literature reviewed in this study (for example, GSMA, 2009; World Economic Forum, 2011; Maurer, 2015:123) do not approach KYC critically. It is taken for granted as an important requirement that facilitates financial inclusion. However, in this study, it emerges as a site of contestation and has become a significant site for categories and classificatory systems of exclusion and in some cases adverse inclusion of the poor. Furthermore, the infrastructure concept puts much emphasis on the embeddedness of infrastructures. In the data chapters of this thesis, I present cases where the cash

[3] A statutory regulation demanding that providers of financial services demand and retain personal identity documentation of customers.

infrastructure disembeds from the digital money infrastructure for various reasons that shall be examined in the thesis. This preference for cash (a public good) and rejection of digital money (a private form of money) feeds into the debate about the role of markets in future monetary innovations and international development in general.

In my reading of the infrastructure literature, I found the work of Abdumaliq Simone (2004:411) of interest, especially his notion of ‘people as infrastructure’. By this, he refers to social infrastructure, which he defines as the conjunction of objects, spaces, persons, and practices to “to derive maximal outcomes from a minimal set of elements” (2004:411). I saw some relevance in his emphasis on “minimal set of elements” because Binga is a remote and rural area, politically and economically marginalised, and with limited agroecological resources. In this context, people are left to their own devices and have to cope with the minimal, and it is perhaps not surprising that people and social relationships emerge as the most important source of support, especially given the economic crisis and the absence of a state. However, Simone could not assist in thinking about the material and functional properties of money. Other scholars such as Nick Long have argued that infrastructure is an excellent starting point in thinking about the financial crisis but that the concept does not “do very much to actually reconfigure our understanding of the political beyond a general attention to speculative capital” (Venkatesan et al., 2016:41). Moreover, he argues that what the concept allows us to see, or what the concept makes visible, is “political processes” such as “financialisation and securitisation” (Venkatesan et al., 2016:41). This is indeed a productive line of thinking. What does the financial crisis in Zimbabwe reveal, not about money’s properties or the values embedded in money, but the political processes that are play in the crisis, such as the creation of new markets in money, deepening financialisation coupled with the eradication of cash, mobile money markets as a new form of rent-seeking, and the steering away of public monies from investment in education and public health to infrastructures that would sever the private interests of the issuers of mobile money rather than the public good?

As I stated previously, the scholarly insight about the older infrastructure concept as envisaged by Star and Ruhleder (1996) and others was elicited through ethnomethodological research carried out during the design of infrastructures, in particular information infrastructure. Some of the studies were based on archival research, in particular, the classification systems associated with apartheid. However, the concept does not provide adequate attention to how infrastructures, their classificatory systems, categories, rhetoric and opinions embedded in them could be revealed when studying pre-existing technologies. This distinction is important because this study I examine various monetary infrastructures and monies: mobile money, bank money, notes and coins – forms of money which have long passed the design stage. Therefore, the question becomes how do I actually get to know their material properties? Not only that, but as I shall discuss in the data chapters, monetary affairs are shrouded in secrecy. How then will it be possible to put cash and coins or the bits and bytes that constitute mobile money into full view so that they can be fully examined?

In my view, the work of Mackenzie (1996), another SSK proponent, can assist in answering these questions. Mackenzie (1996) provides a useful guideline on the three means by which scholars can gain knowledge about the properties of technologies or technological artefacts during and after the design stage. He reasons that we know them by *authority of experts*; secondly, by *induction*, which entails using and testing the technology in question, and thirdly by deduction or making inference from models and theories. In this dissertation I use Mackenzie's guidelines to do the following. Firstly, there is authority of experts, in particular economists or government fiscal and monetary authorities who argue that money is a medium of exchange, unit of account, store of value, standard of deferred payments. Following this, I ask the question: How do the monies examined in this study fulfil (or fail to fulfil) those functions?

Besides government monetary and fiscal authorities, other experts on money are international financial institutions, international development practitioners, payment service providers and some academic disciplines in international development who are making claims that digital forms of money are beneficial to the poor. These expert claims are examined in various chapters of this thesis, including the conclusion. I then follow a process of induction, as suggested by Mackenzie (1996), in order to know the properties of money. This is represented by the data chapters in which I present evidence regarding the monetary practices of households and persons in rural Binga, and examine in particular how they adopt or refuse to use certain kinds of monies.

Now that I have discussed how the concept of infrastructure can assist me in thinking about the current crisis in Zimbabwe, including the political processes of financialisation, the thesis now turns to a discussion of monetisation of identity and behavioural attributes of users of mobile money. The current landscape of the mobile money market in Zimbabwe produces new forms of identities and objectifies persons in ways that conceive them only as a source of revenue.

2.8 Monetisation of identity and behavioural attributes

Linked to my discussion about the growing importance of financialisation in the global economy and its links to the emergence of new markets in mobile money in Zimbabwe is a series of questions regarding information and identity. In this study I am particularly interested in the development implications associated with digitization of money or the capacity to combine the unit of account property of money with personal and behavioural data. Not enough attention has been paid to this aspect of mobile money, but there is a large body of literature in the social science about the relationship between money, markets and identity, but given space constraints, I am unable to survey it all. In this dissertation I am not so much interested in exploring how persons and households in Binga perceive or talk about identity, but how markers of identity feature in the mobile money market in Zimbabwe. I am interested in how the use of mobile money alters social relationships, but also in how the issuers of money, most of whom do that through distant, impersonal bureaucracies, use “identity harvesting” in the context of mobile money markets.

Anthropologists typically distinguish between market exchange and gift exchange. These two forms of exchanges have been seen as diametrically opposed in terms of their effects on social relationships. Market exchange has been theorised as once-off, impersonal exchanges between parties who are not in a long-term relationship with each other, with corresponding duties and obligations. Gift exchange, on the other hand, has been theorised as exchanges between parties that lead to the creation and maintenance of social relationships, and typically occurs not between strangers but between parties who are in a long-term relationship with each other with corresponding duties and obligations (for example, kin or friends or neighbours). The stark contrast that a previous generation of scholars painted between these two forms of exchange is no longer accepted.

One of the first anthropologists to consider how changes in information technology and its greater convergence with money and markets will shape social relationships was Keith Hart. In his book *Money in an Unequal World*, Hart (2000) suggested rather optimistically that the key to the re-personalisation of money is through the opportunities that electronic monies such as credit cards present for the sharing of information between buyers and sellers. Electronic monies, he argued, could lead to the greater personalisation of money and market exchange, thus troubling the gift versus market exchange binary. Before electronic money, he suggested, money was impersonal because the objects exchanged needed to be detached from the parties involved. With electronic money exchanges, a great deal more information gets attached to the objects that are exchanged, possibly re-personalising money.

There is a vast scholarly literature on identity in relation to colonial and postcolonial Africa. This literature raises questions about how we should theorise identity, how markets construct identities, states and in everyday life, and the connection between identity and politics (Mamdani, Appiah, Mbembe, Nyamnjoh, and so forth). Scholars have shown how colonial authorities have produced many of the identity categories that people use in their everyday speech. In the same way that colonial authorities created arbitrary boundaries on physical maps to divide conquered peoples, so they created identity or “invented traditions” to divide and rule.

The scholarly literature shows that during Zimbabwe’s early colonial history, indigenous people commonly identified themselves along tribal and clan lines. Such identification became particularly important when social groups came into regular contact with each other. For example, during Mzilikazi and Lobengula’s reign in 1823 to 1890, people would self-identify as belonging to groups such as eZansi, Enhle and Holi. During the colonial era, new forms of self-identification emerged as persons would emphasise their connection to other identity formations. These include the nation-state of Zimbabwe, in which the first census which was carried out in the late 1800s (Cobbing, 1976), played an important role. According to a detailed historical study by Cobbing (1976), the purpose of the census was to estimate how the country’s population could be monetised through taxation, and reconceive a person as a production unit. This included measuring the fraction of the population that would contribute to the hut tax (in this case adult male Africans) and most importantly the amount of cheap labour that would accrue money for the colonialists (Ibid). After the census came the African (Registration and Identification) Act (1957) and various other pieces of legislation, whereby the colonial government increased control over people's identity. This control was in the form of compulsory registration of birth and death, the introduction of identity cards and control of people's movements, in which black people were relegated to newly established ghettos. In Zimbabwe, towns and cities are almost always located near smoke-infested industrial areas. In terms of what James Scott argued in 2000, the census seemed to make Africans more legible and open to appropriation as the white settlers and the colonial state saw fit.

There is no space here to review all the literature on this topic. In contemporary Zimbabwe, state tools for harvesting and monetising identity attributes have become very important for issuers of money (mainly financial institutions, mobile network operators and most recently payment service providers). In the case of these new financial entities, the unique innovation was that this created an opportunity whereby the unit of currency was coupled with personal identity; in other words, exchanges taking place in the mobile money market are not anonymous, like cash exchanges. As I show in the next chapters, the identity management technologies have also become tools of exclusion and control, whereby a citizen cannot open a bank account or mobile wallet account without a state-issued identification document, a state-sanctioned residential verification document, and in some instance formal proof of wage labour. Dressed up by the issuers of money as a Know Your Customer (KYC) protocol that is a claimed to be a means to control illicit flows of money, the issuers of money have turned identity into an essential resource in the management of data in the emerging mobile money market.

Several scholars, including Schwittay (2011), have pointed out that "the operation of markets is now the instrument of social control" (Deleuze, 1990:5). This has become a powerful source of control capable of determining the social distribution of life chances, and in the process structure individual life chances (Fourcade and Healy, 2013). Through ICT, these new modes of market-based stratification have acquired "distinctive and consequential class-like effects on life-chances and social identities" (Fourcade and Healy, 2013:560). This disproportionately high level of power is in the hands of just a few people, namely technology promoters, developers, and designers, who as innovators are capable of "inscribing" this vision of (or prediction about) the world in the technical content of the new object (Ackrich, 1992:208).

However, most people do not see innovators as “artefacts embodying moral and aesthetic choices that in turn craft people’s identities, aspirations and dignity” (Miller, 2002:6). This is reiterated by other scholars who argue that “technologies play an important role in constructing the identities of users” (Oudshoorn, Rommes and Stienstra, 2004:32). This worrying concentration of power in a few over many remains largely unchecked. In her book *The age of surveillance capitalism,* Zuboff (2019) highlights that the mechanisms of control are enabled by automation of identity and behaviour data, through the use of opaque algorithms that manipulate personal data without the consent of people from whom the data was extracted. In the thesis I identify some of these complexities, starting with a case where people from whom I bought goods and services during fieldwork erroneously believed me to be a high-income earner from a tribe and nationality that I do not belong to. I found that in the literature, this is characterised as dividualisation, which is the disembodiment of individuals by objectifying or partialising human beings (see Orito and Murata, 2014). From this, it is evident that the defining categories included tribe, nationality and perhaps some sort of class-based parameters. When it comes to the poor and markets that thrive on social differences (Fourcade and Healy, 2013), what will they be dividualised to and to what end? Throughout the thesis, I seek to understand in what ways are the ends to which poor people are dividualised compatible with claims that digital forms of money alleviate poverty. Through this dividualisation process, the “self is redesigned and regenerated” (Orito and Murata, 2014:5). The outcome of this is that the “person” or individual is becoming just as important as the household as a unit of analysis.

2.9 Households and Sustainable Livelihood Approaches

Money and or the monetary infrastructure is embedded in the local, national and global economy. Thus, in thinking about the relationship between poor people in rural Binga and how their participation or not in various markets using multiple monies shape their lives, I have thought it productive to think about persons and households. In the debate about how best to describe and analyse rural poverty in Africa, the concept of the households has always been crucial. This has been because historians and anthropologists have demonstrated that processes of production, distribution and consumption in rural society often take place in the context of existing social relationships where these processes are not mediated through anonymous markets. They have shown that decision-making as to what to plant, how to harvest, how to recruit labour and so on are deeply social questions. Whereas in societies where markets play a dominant role in how the economy is integrated and where decisions are often made by individual wage earners, in rural Africa (and elsewhere in the world) such decisions are often made at the level of the household. So, in order to avoid the methodological individualism that characterises many social sciences in industrial market societies, social scientists studying rural Africa prefer to deploy a locally relevant concept of the household.

In debates about rural poverty and economic development in Africa, the sustainable livelihood approach (SLA) that was developed over thirty years ago has proved to be very useful in thinking about households and poverty. The primary purpose of the SLA is to allow those using the framework to analyse the relationship between the national, local and household economy and is also an attempt to qualitatively understand poverty (or well-being) rather than over-reliance on quantitative measures only. This has become more important as households are becoming part of wider networks of market exchange and money flows. That is, after all, one of the characteristics of trade and market exchange, that it tends to push the boundaries of local households and social groups outwards.

In its origins, the SLA is an analytical process that was developed to assess people's capacity to access both physical and intangible assets and capabilities to mobilise them to partake in the act of making a living or livelihood activities that meet current and future basic needs without damaging or depleting the resources upon which they depend. While there are competing formulations of the SLA, I follow the one proposed by Chambers and Conway, who identify the following five concepts: (1) *context* (policy, history politics, macroeconomic conditions, agroecological conditions and so forth); (2) *livelihood resources* (natural capital, financial capital, human capital, social capital); (3) *institutional processes and organisational structure*; (4) *livelihood activities* (agricultural intensification, livelihood diversification, migration and so forth) and lastly (5) *livelihood outcomes* (decline or increase in poverty, increase in employment, increase in livelihood resilience and so forth) (Chambers and Conway, 1991; Scoones, 1998). Institutions are critical in this framework: "… *the institutional processes (embedded in a matrix of formal and informal institutions and organisations) which* *mediate the ability to carry out such strategies and achieve (or not) such outcomes…"* (Scoones, 1998, p. 3). This framework affords a detailed three-dimensional view of poverty (or affluence) in the sense that it accounts for the resources that households depend on, the livelihood activities that these resources enable, and most importantly the role of institutions and their contribution to vulnerability, poverty or household resilience.

2.10 Conclusion

In this review, I clarify that this thesis engages with debates about the relationship between poor people, money (in a variety of forms) and markets (especially market exchange), and all the claims that are being made about this relationship. Of interest in this study are money ecologies and repertoires, which I jointly refer to as monetary practices. This entails studying the various monies that poor households have access to, and understanding factors that influence their decision on whether to use it or not. Do they use money as intended by its issuers, designers and developers? If not, what new purposes do they put it to and how can this and other new insights contribute to monetary innovations which best meet the needs of the unbanked poor?

The slight difference between this study and other studies about money ecologies and repertoires is that I take an interest not only in the social consequences of various monies but also the content and or functional and technical properties. This is important because just as governments (particularly during the colonial era) constructed arbitrary identities, technology developers are also creating new identities or abstracting poor people's identities in pursuance of profit maximisation. Some of these activities are blurred by invisible and opaque processes. To shed light on these processes, the study draws on the infrastructure notion conceptualised by Star (1999) and Simone (2004). The former's ethnomethodological studies are based on research on information infrastructure carried out while they are being designed. This is problematic for in this research I analyse some forms of money that are well past their design stage and have been in existence for several centuries. To address this lack of conceptual clarity on how pre-existing technological artefacts can be examined, I also draws on Mackenzie's (1996) work, which provides step-by-step guidance on how to gain knowledge about technological properties of artefacts and or infrastructures during and after their design phase. He asserts that knowledge can be gained through experience from use (induction), from expert claims, in this instance the dominant claims are that digital forms of money will alleviate poverty in developing countries, and lastly deduction from theories. Simone's study about people as infrastructure is also relevant, because historically, the fieldwork site upon which this thesis is based has been and continues to be shunned by both the state and market. In this thesis I will attempt to answer the question: What therefore do the marginalised people of Binga do to deal with the infrastructural deficits that shall be discussed in the ensuing chapters? Money cannot be studied on its own, for it is embedded in the local and national economy; thus, to examine the national and local economies in which the various monies under study mediate (or do not), the study draws on the SLA.

Chapter 3: Monies and the Mobile Money Market in Zimbabwe

3.1 Introduction

In this chapter I provide the historical context for understanding the different forms of monies circulating in contemporary Zimbabwe, as well as the new market in mobile money. In particular, I offer the context needed to understand the role of money issuers as infrastructure builders, specifically fiscal and monetary authorities that issue notes and coins and bank money, financial institutions that privately issue bank money, mobile network operators that issue mobile money and household heads that regulate cattle as money and a form of wealth. This background is a primer to chapters five, six and seven, where I provide evidence of how persons and households in rural Binga incorporate different forms of money into their monetary practices for a variety of purposes.

While this thesis does not offer a historical argument about why and how persons and households in rural Binga use different forms of money, some historical context is necessary. I start this chapter with a brief history of fiscal and monetary policies, starting off with the monetary management under the sterling currency framework during the colonial era, and the transfer of regulatory powers from the Bank of England to the Reserve Bank of Rhodesia and eventually the Reserve Bank of Zimbabwe. In brief, I aim to demonstrate the connections between Rhodesian fiat money and the colonial system of the exploitation of black labour, in particular young males, and how this system accrued money and wealth to white settlers. Since independence, money and wealth are increasingly concentrated in the black ruling party political elites and their affiliates, not necessarily through labour exploitation in the course of production, but asset stripping and kleptocracy. In other words, I point to both continuities and discontinuities in the political economy of colonial Zimbabwe and post-independence Zimbabwe. The fact that I am writing from and about a region that has been marginalised by the Rhodesian and Zimbabwean states means that I am perhaps more likely to stress the continuities between these two regimes. Binga is, after all, a region saddled with deep poverty and hunger, over and above colossal unemployment. As a region, it is not important to those who control the levers of government and is not important to those who make decisions about where capital is invested. On the contrary, it is a region targeted by national and international NGOs for 'development'.

The chapter gives an account of unorthodox fiscal and monetary practices, the outcome of which I argue forms the genesis of what I conceptualise as the currency abandonment phenomenon, that is the refusal by users of money to adopt and use a particular currency. The abandonment process was predominantly actioned through various means but most significantly digital money discounting, that is price inflation of goods or foreign exchange trades mediated by digital forms of money. It was also actioned through financial disintermediation, that is the rejection of bank money by the banked in preference of cash. An additional digital money discounting strategy that developed was that of the *kubena mari* phenomenon, a parallel market activity in which the "officially" overvalued Zimbabwe dollar was deliberately devalued by users. Devaluation was achieved by several means, which will be discussed in more detail in the following sections. In brief, this was achieved by bypassing the formal banking institutions where the Zimbabwe dollar was artificially overvalued, and devaluing the exchange rate through the black market (illegal money market), where foreign and local notes and coins were exchanged/converted to bank money at a premium. These activities demonstrate that users of money or consumers of various monetary innovations have the agency to confront and complicate agendas of entities in which political-economic power is vested. Then I examine banking institutions and mobile networks' classificatory schemes and standards, in particular, risk management strategies such as risk aversion and creditworthy evaluation. These infrastructural features (or standards) are discussed in their ability to include and exclude people from accessing certain forms of money.

In the last part of this chapter, I shift focus to the local context and economy of Binga District, together with a brief history and demographic overview. This is important because the exchanges associated with the various forms of monies are embedded in social relationships and shaped by local material realities. This is important if we are to understand how rural households and persons in Binga incorporate or reject or shield the use of particular forms of money in relation to their livelihoods. Thus, some understanding of the broader environment of Binga is required.

3.2 Before there was the public state, there was the private company

For over three decades (1890 to 1924), the Zimbabwe of today was under the rulership of a large, powerful private corporation, namely the British South African Corporation (BSAC) (Austin, 1975). As a legal entity incorporated in England and South Africa (Ibid), the BSAC was set up as a company with the aim of making profits and distributing some of these to white settler populations in southern Africa. It formed an integral part of the colonising process and made huge profits from the creation of new markets across southern Africa. It worked closely with the colonial states in dispossessing indigenous peoples of land, commodifying their labour, and turning peasants into proletarians. What we know as Zimbabwe today was then named Southern Rhodesia, and later Rhodesia. A few years before independence was obtained in 1980, it was renamed Zimbabwe-Rhodesia. In other words, the birth of modern-day Zimbabwe and its monetary system has its origin in colonial Rhodesia which was established formally on September 12, 1890 (Austin, 1975; Cobbing, 1976; Hyam, 1987).

According to Cobbing's 1976 study of the Ndebele under the Khumalos, Cecil John Rhodes feared that the King Lobengula's territory would be annexed by the Germans, Portuguese or Boers. Thus, he conspired to manipulate the King into signing an agreement (also commonly referred to as the Rudd concession) granting his British South Africa Company (BSAC) mineral and mining rights over the Zimbabwe territory (ibid). After acquiring Lobengula's signature, he then approached the English Queen for a Royal Charter permitting him to colonise King Lobengula's territory on behalf of the British Empire. Soon after being granted the charter, he set up a private army (Pioneer Column) and tasked them to trek to Zimbabwe, where they immediately started to exploit the concession. After realising that he was tricked into handing over his dominion to the British, in 1893 King Lobengula sent his *amabuto* to expel the settlers. Armed with spears and shields, they did not stand a chance against modern military artillery, which included machine guns. After his defeat, King Lobengula decided to flee the city, and reportedly poisoned himself rather than be killed at the hands of the British (Scott, 1966; Cobbing, 1976; Fisher, 2010). Thereafter, several rebellions arose, even in the absence of a strong leadership in the calibre of

Lobengula, but they were immediately quelled, save for the 1960-70s Rhodesian Bush war, or *Imvukela* in IsiNdebele.

These rebellions were a direct result of unfair distribution of resources and the attendant discriminatory and racist laws promulgated by the BSAC. According to several historians (see Austin, 1975; Cobbing, 1976; Scott, 2000), the main one was land expropriations. Before the land theft carried out by BSAC, the land was held by the King on behalf of all his people. The BSAC, however, argued that the King forfeited the land, and therefore it belonged to the company to use it as it wished. The BSAC parcelled the land into pockets, which they distributed in the main to members of the pioneer column as a reward for invading the country. Some were allocated to the British Crown, and the remainder were sold to various entities, which included Christian missionaries. The unjust expropriation of African lands[4] was also linked to livestock raids on the pretext of land conservation in that settlers stole cattle from Africans to stock their newly designated farms or transported some to South Africa where prices were relatively higher (Cobbing, 1976). The white settlers had the land but did not have the labour to work it because Africans were not incentivised to enter the labour market because their needs were met through subsistence farming and barter exchange. To force them into the labour market, the Company introduced the Hut Tax in 1884 (see Zvobgo, 1980; Scott, 2000; James, 2015), but when the Africans refused to submit, they were met with various forms of recriminations which included publicly flogging chiefs who refused to facilitate forced labour or evacuate their ancestral lands. In 1902, the Company introduced pass laws, which restricted the movement of male Africans. This was followed by the Immorality and Indecency Suppression Act, which was passed in 1904. From that point on, it became illegal for blacks and whites to marry or have sexual relations. In 1906, the BSAC passed a law barring Africans from living in white-designated areas except when working as servants (Scott, 1966; Steele, 1972; Good, 1974). A few years later, the African Labour (Identification) Act was passed in 1911. It was introduced to bar Africans from emigrating and seeking work in South African mines (Ibid).

[4] As part of their reward for invading Lobengula's territory, members of the pioneer column were rewarded with over 1000 hectares and 15 mining claims each (Cobbing, 1976).

Based on the literature reviewed in this study, the legal entity of the BSAC, which was separate from the state in strictly legal terms, was responsible for some of the harshest and most racist laws the country has ever endured.[5] The discriminatory qualities specifically directed at Black Africans mirrored the interest of the BSAC and its shareholders. At one stage, the Company was even prepared to leave Africans completely landless, but this plan faced a severe impediment in the form of a 1919 court case in which a decision was made that all unallocated land belonged to the British Crown (Phiminister, 1974). In turn, the Crown insisted on a fairer distribution of land. Cobbing (1976) suggests that Dr Leander Starr Johnson, one of Rhode's associates, continued to allocate land as he wished because the ones who had title to it were not there to assert their rights. I return to this point in chapter 5, where I argue that persons and households in rural Binga have a strong preference for assets and monetary forms over which they have direct and autonomous control as opposed to ones under the control of others or outsiders.

After three decades of company rule, the British government in 1923 finally annexed SR as part of its colony. It was represented by the Legislative Assembly (LA), comprised of elected politicians, but with the British retaining the ultimate authority to veto legislation (Austin, 1975; Nyamunda, 2017a). This did not result in a change to the process of racial segregation of Southern Rhodesia's economy and society. For example, the 1930 Education Act made it compulsory for white, Indian and Coloured children to acquire education, while the education of black people was deemed voluntary. The total government education expenditure on the white population was 10 times that of on the black population and 75% of the education budget for blacks was spent on primary schooling. Furthermore, the new government introduced the Industrial Conciliation Act of 1934, which recognised the rights of white workers while treating blacks as servants under the Master and Servants Act of 1901 (Austin, 1975). Blacks were also excluded from working in the public service, but this was gradually relaxed around 1960. All the respective colonial Rhodesian governments embraced democracy but only for whites; blacks were excluded because of the stringent preconditions of wealth and education. Firstly, one had to be literate,

[5] Refers to a business law concept which bestows human status to corporations and classify them as separate from its shareholders, directors and promoters.

secondly, they needed to earn an annual income of £50, thirdly, they had to own property worth £75 or a mining claim. As a result, only 28 Africans (against 22 000 whites) could vote in 1928. A few years later, in 1939, the status quo had not changed much: out of the 24 626 voters, only 39 Africans could vote (see Austin, 1975, p. 69). In his biography, the former ruler of Rhodesia, Ian Smith (2001) strongly defended this system, which he described as a system of meritocracy.

Before establishing the colonial state in what we call Zimbabwe today, the country was ruled by indigenous authorities' structures and a foreign private company. The outcome of the bloody contest between various parties was the creation of a state structure, and much of the contestation in modern-day Zimbabwe has been about control over this state political organisation. As we know, state formation and market creation typically go hand in hand in colonial contexts. Arguably, this process is still unfolding in Zimbabwe, and the creation of new markets in mobile money is but another chapter in this long history.

3.3 Currency management in the British Empire and early independence

For the time that Southern Rhodesia and then Rhodesia formed part of the British Empire as a colony, its monetary affairs – like that of all the British colonies – were controlled by the British Sterling Group (BSG), housed at the Bank of England. According to Clauson (1944), the monetary affairs of members of the BSG were managed and regulated by what was referred to as the Currency Authority or Currency Board. On this board served representatives or agents of the Bank of England, bestowed with the responsibility of issuing and managing a dependency's legal tender needs. At the time, government-issued money was made up of gold, silver, and copper, but smaller amounts such as pennies and halfpennies were made from bronze and nickel (Ibid). To meet a British colony's currency needs, a banker, or merchant, would pay by bank transfer (debit or credit entry in international accounts) the face value of the amount required in London, after which the British Government would arrange and deliver the notes and coins to the destination where it was required. It would recoup all the expenses associated with such a transaction from seigniorage revenue, in other words, the difference between the face value and the cost of metal and manufacturing costs (Klasen, 1997; Nyamunda, 2017a).[6]

At its conception, Southern Rhodesia experienced severe liquidity problems and was forced to resort to the use of scrip known as the Marshal Hole card currency[7], which started circulating around 1896. In addition to that, the new colony was forced to depend on credit and bank cheques (Bond, 1998; Nyamunda, 2017b). However, the liquidity problems which the country experienced were gradually eased by the establishment of multinational banks. According to Nyamunda's (2017a) detailed historical study, these included Standard Chartered Bank, which first opened bank branches in Rhodesia around 1882. It was quickly followed by the African Banking Corporation in 1893 and Bank of Africa in 1895 (these two were subsequently bought by Barclays Bank), Dominion Colonial and Overseas Bank (DCO) in 1912, the BSAC (and now state-owned) and Post Office Savings Bank (POSB) in 1905. In 1912, the Land Bank was established to support the agricultural sector.

As the economy of the then Southern Rhodesia changed due to the presence of settlers and the creation of new markets and economic needs, the colonial political authorities gradually pushed for autonomous monetary regulations to free themselves from a dependency on the Bank of England. This push for greater autonomy was marked by, among other developments, the issuing of the Bank Notes Ordinance of 1922, which signalled the exit from the BSG and which authorised use of bank notes issued by two commercial banks, namely the Zimbabwe branch of London banks, namely Barclays Bank and Standard Chartered Bank (Nyamunda, 2017a). This

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[6] The flow of money in this regime was a one-way affair in which the currency issued would only move to the colony and not back to London (Ibid). The literature reviewed does not state why that was the case. However, at the time, the value of the currency was measured by the purity of the metal used. Therefore it is possible that the reason why it could not flow back to London for use as legal tender was due to increased seigniorage revenue opportunities because the likelihood is that monetary authorities in England used a much lower percentage of metal in their colonies than what was acceptable in England.

[7] According to an online source (Rhodesian Study Circle, no date), shortages were exacerbated by the outbreak of the Boer War in 1899. The Boers captured the railway link between Kimberley and Bulawayo, the railway fed supplies and mail from the Cape Colony to Rhodesia, as supplies became scare, so did gold and silver coinage. The lack of coinage threatened to strip farms and mines of African labourers, whose wages had to be paid regularly (See Appendix 3.1).

development also coincided with the referendum in which white settlers of Southern Rhodesia had to decide on whether or not to stay in the Union of South Africa, and become a fifth province of the then Union of South Africa. Fearful of being dominated by the Afrikaners from Pretoria, as Ian Smith (2001) the former Prime Minister of Rhodesia put it, the white settlers of Southern Rhodesia voted no, albeit with a very small margin.

The Bank Notes Ordinance Act of 1922 eased the pressure and costs associated with the importation of Pound Sterling from the Bank of England. Eventually, the arrangement came to an end when the Rhodesian government passed the Coinage and Currency Act (1932), which culminated in the creation of the Southern Rhodesia Currency Board (SRCB) in 1938 (Ibid). Thereafter, Southern Rhodesia declared the Rhodesian Pound as legal tender and immediately started to issue its own currency, which was pegged to the British Pound Sterling (Clauson, 1944). After about two decades under the administration of the SRCB, the monetary affairs of the country were taken over by the Reserve Bank of Rhodesia and Nyasaland in 1956 under the Federation of Rhodesia and Nyasaland government. After the dissolution of the federation, the central bank became the Reserve Bank of Rhodesia in May 1964, a year before the unilateral declaration of independence (UDI), in which Ian Smith's government declared that Rhodesia was no longer a British colony but an independent sovereign state. Thereafter, Rhodesia sought to take full control of its monetary affairs, and as a result, the UK government and UN immediately put the country under sanctions. Despite that, the economy thrived and managed to maintain high levels of economic growth, much higher than the years before the sanctions. After fifteen years of economic sanctions, Zimbabwe finally attained political independence in 1980. Thereafter, the monetary affairs of the new nation were taken over by the Reserve Bank of Zimbabwe.

The post-independence Zimbabwe government inherited an economy with a per capita income that was second from highest in sub-Saharan Africa, according to World Bank statistical records. Its per capita income remained consistently higher than that of sub-Saharan Africa until 2002 (World Bank, 2018). The rate of inflation was very low; it averaged 5.5% between 1968 and 1980 (Sheen and Erbmann, 1974; Bond, 1993). The economy was sustained through the manufacturing industry, mining, tourism and agriculture, which constituted the second largest proportion of GDP. This trend continued up to 1998, when it contributed 46.4% export earnings (Masiiwa, 2004).

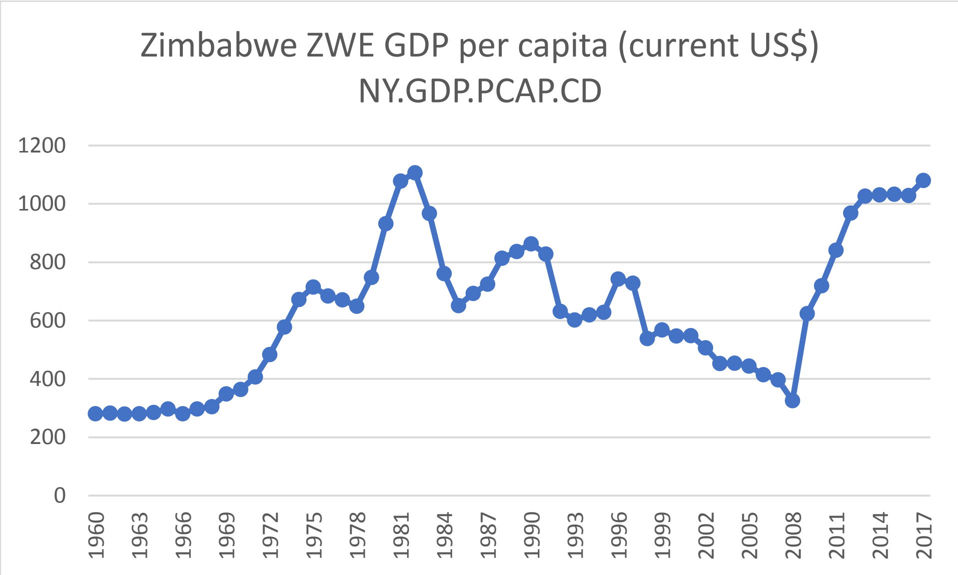

Figure 2: Zimbabwe GDP, Source, World Bank (2019)

In this section I showed how the political history of colonial Rhodesia was closely intertwined with struggles over the right to issue and control the issuing of money and currency. Even the white settler regime sought to affect some autonomy from the British Sterling Group, signalling the importance of political control over the issuing of money and controlling the flows of money and kinds of monies in circulation. As recent scholarship such as that by Nyamunda (2017a) has shown, control over monetary affairs is central to the strive for political and economic independence.

3.4 From the rhetoric of redistribution to enforced neoliberalism

The monetary and fiscal policies of the post-independence Zimbabwe government were described by Masiiwa (2004) as redistributive and interventionistic. As was the case with many post-independence governments in Africa that took control over the levers of power after having fought a liberation war, such policies cohered with Robert Mugabe and his ruling party's proclamation of Marxist-Leninist ideologies. However, Marxist scholars such as Patrick Bond (1998) have argued that allegiance to communist ideologies was all empty rhetoric because on a broader scale, particularly from the late 1980s onwards, the Zimbabwean economy was run along similar lines as the Rhodesian strict exchange control regime. Although I agree with Bond in that allegiance to communist ideologies was mere rhetoric to disguise right-wing authoritarian nationalism, the post-independence Zimbabwe government did make attempts to deracialise the economy by extending access to health, education, electricity and other infrastructural developments to the black population, which was previously excluded by Ian Smith's regime.

When Robert Mugabe and his government finally took over the reins of the Zimbabwe economy at independence in 1980, the country had 0% multilateral debt. After ten years, however, it had increased to 94% (see Bond & Manyanya 2002; Jones 2011). This rapid increase coincided with the increased involvement of the IMF and World Bank in the country's economic affairs (Ibid). Because of the political and economic power of these international financial institutions since the Bretton Woods era, the policy conditions they attached to their loan agreements severely undermined the country's democracy and sovereignty. Many African governments during this period gave up control over monetary and fiscal policymaking, lessening their autonomy to chart their own economic growth strategies. In the case of Zimbabwe, the IMF and World Bank refused to cancel a loan that they had made to the Rhodesian regime amounting to US$700 million (85% private sector, 15% bilateral debt). Since Rhodesia had been slapped with sanctions by the UN and international states, any loan made by the IMF and WB to Rhodesia would have been illegal. Smith circumvented these sanctions and the underlying rules by using intermediaries and sympathisers to access loans from these institutions (Jones, 2011). Despite such illegal practices by Smith, the international institutions refused to cancel the debt acquired by the corrupt colonial authorities.

Furthermore, there were good moral arguments for cancelling the loan. The loans illegally secured by Smith was used to fund the growing expenses related to the Rhodesian Bush War of the 1970s. Even though it was clear that colonial settlers used the funds obtained illegally from the international financing institutions to wage war against the indigenous people who wanted their freedom, the IMF – as it has done in several developing countries – had no qualms forcing the post-independence government to settle the debts of their colonisers. In addition to that, the IMF insisted on cost recovery in health services. The then minister of health, Dr Timothy Stamps, complained that because of the pressure from the IMF, per capita spending on health fell to 37% in 1990. This development coincided with increases in maternal mortality rates and other diseases, in particular HIV and AIDS (for a more detailed discussion, see Bond, 1998).

Ten years after Zimbabwe achieved political independence from the colonisers, the tables had turned in some respects, in that 94% of government debt was multilateral while 6% was private. The corollary of this development was that the new government did not have wealthy benefactors from either the Zimbabwe business sector or local financial institutions as Ian Smith did (Smith, 2001, p. 89). Some scholars argued that the increase in multilateral debt was linked to the redistributive policies the then government pursued, which led to an unsustainable budget deficit. Either way, and in a hostile international context, the government had to turn to the IMF for support to prevent the collapse of the economy. This was at the height of the IMF's experiment with Structural Adjustment Programmes (SAPs), which caused manifold miseries across Africa and Latin America. Inspired by the Washington Consensus that developed as Thatcher and Reagan took power in the UK and USA respectively, these programmes imposed a set of policy measures that countries who received loans from the IMF had to implement. These included the shrinking of the state's role in pursuing redistributive policies, removing social security provided by the state, lowering taxation, market liberalisation, fewer regulations for the flow of capital, the privatisation of state-owned assets and services, and creating the conditions for growing markets and the commodification of many more goods and services.

In terms of monetary policy, the IMF demanded that the government should float the Zimbabwe currency on the international currency market. In other words, it asked for the liberalisation of the currency, which meant removing the state's control over the price of currencies and handing over the power to the international currency markets. It involved the devaluation of the currency by 20%, and it was argued by the lenders that this prescription would promote exports, which would lead to economic growth. However, this led to a decline in developing agriculture and manufacturing as it increased the export of raw materials rather than capital goods. The IMF required that the government stop all social subsidies such as free primary school education and imposing examination fees, and all price regulations that protected vulnerable groups, such as that attached to paraffin, which was an important energy source for low-income households. Furthermore, the government had to introduce policies that relaxed import restrictions, reduced the size of the civil services, and so forth. The consequences were devastating to low-income households across the country. Bond (1998) argues that it effectively led to the deindustrialisation of Zimbabwe, as it was accompanied by the closure of capital-intensive mining companies and the selling of their assets, as well as the discontinuance of postal services by the Postal and Telecommunication Services (PTS).

The government of Zimbabwe had little room to move; defiance of the prescriptions attached to the IMF loans had terrible consequences. For example, a ZW$375 million standby credit facility that was originally approved in 1983 was withheld by the IMF to punish the Zimbabwe government for dragging its feet when ordered to devalue its currency and delays in the removal of some subsidies (Mlambo, 1997). In less than five years after the introduction of the ESAPs, overall industrial performance declined by 85%; textile companies were among the first to close (Mlambo, 1997; Kanyenze, 2006). The industrial decline contributed to the retrenchment of thousands of persons. Out of a total labour force of about 4.1 million, only 1.244 million were formally employed in 1991. By 1993, the number had dropped to 1.217 million (Bond, 1998). All this negatively impacted on the levels of poverty and inequality in Zimbabwe. In 1980, the labour share of output was 20%, yet ten years later, this plummeted to 14% (ibid). Similarly, Raftopoulos (2000) found that the share of wages in the gross national income fell from 54% in 1987 to 39% in 1997, while that of profits increased from 47% to 63% during the same period.

Inevitably, the unsustainable levels of inequality and hardships as a result of ESAP became a source of conflict between the labour force, its employers and the government. In 1996, this conflict was marked by the biggest civil strike that Zimbabwe had ever experienced in its short history. Teachers, nurses and several other government employees took to the street in protest of the unbearable rise in prices, drop in wages, retrenchments, tax increases and so forth. The civil unrest was immediately followed by food riots, which lasted five days from the 19th to the 23rd of January 1998 (CCJPZ, 1998).

The economic and financial decline exacerbated by ESAP was worsened by an increase in corruption within government and the corporate world. Top government ministers, most of whom were ex-combatants of the liberation war, were embroiled in numerous corruption infractions. One such instance relevant to the monetary history of Zimbabwe was the 1988 Willowgate scandal. Its origin lies in the foreign currency shortages the country was facing at the time. As part of its currency rationing approach, the government designated Zimbabwe's Willowvale car assembly to be the official importer of motor vehicles. Naturally, there was a long waiting list, so the ministers used their positions to jump the queue and acquire vehicles, which they then resold at over 100% of the purchase price (Raftopoulos, 1991; Smith, 2001, p. 579; Darnolf and Laakso, 2003). After allegations appeared in public, the then President Robert Mugabe set up a commission headed by Justice Sandura to investigate the scandal, which implicated several senior government ministers. However, for political reasons which included the risk of incriminating his own wife, the then president decided to pardon most of them (Ibid). In the process, corruption in the top echelons of Zimbabwean society was officially sanctioned. The monetary situation in Zimbabwe, coupled with fiscal policies, created a situation in which persons were willing to engage in criminal acts to secure their livelihoods and comfort.[8]

3.5 The financial crash known as Black Friday and the onset of hyperinflation

On the 14th of November 1997, the value of the Zimbabwe Dollar "crashed" on the international currency markets and its value plummeted to 74% of its earlier value (Bond and Manyanya, 2002; Mlambo, 2017). This episode is commonly referred to as Black Friday, a day which has firmly etched itself in Zimbabwe's economic history. This horrific day was followed by a rapid economic decline emblematised by

[8] Unsurprisingly, the 1988 Willowvale scandal was followed by yet another one relating to the looting of the ZWE$1.5 billion war victims compensation fund from 1993 to 1997 (Kriger, 2003). The fund was set up to compensate combatants and civilians injured during the liberation war but ended up lining the pockets of able-bodied elites such as the former deputy president Dr Joyce Mujuru, who claimed to be 55% disabled and was compensated ZW$389 472; the president's brother-in-law claimed to be 95% disabled and was compensated ZW$821 668, the former police commissioner Augustine Chihuri claimed 20% disability and was paid ZW$138 664. Several others were also implicated. Again the president set up the Chidyausiku commission to investigate but nothing came out of it and no one was prosecuted (Ibid).

Zimbabwe holding the record for the second-highest ever recorded inflation in world history. In 1999, inflation was 55.2%, but thereafter it rose exponentially, to the point that by July 2008 it was 231 150 808,87% (Hanke and Kwok, 2009). After that, the RBZ could not be bothered calculating it. However, some researchers persevered (see Hanke & Kwok 2009) and found it to be much higher at 89 sextillion percent (World Bank 2018; Robertson 2011). During this period, the standard currency denominations became useless because prices were too high[9], therefore the government introduced bearer notes and cheques denominated in billion and trillion dollars, the highest of which was a 100 trillion around mid 2009 (CNN, 2009). This, together with dollarization where the Zimbabwe dollar was demonetised, and in the process all bank account balances were reduced to zero overnight without notice or compensation of any sort. These dramatic events which will be examined further in the next section and also in chapter 5.4 further contributed to the loss of confidence in the Zimbabwe financial market.

This epic economic decline and increasingly violent political environment led to a mass exodus of Zimbabweans, most of whom were the beneficiaries of post-independence increased expenditure on education and health. From around early 2000 up to today, many young educated Zimbabweans, who by then had acquired work experience and achieved senior management positions in various sectors, started to migrate to South Africa, UK, USA, New Zealand, Australia, Zambia and several other African countries. During the period of economic decline and hyperinflation, the economy was in part sustained through international remittances by this diaspora community (Ersado, 2006). Even today, this continues to be the case. According to the RBZ MPS, the average remittances between 2014 and 2017 were ZW$1.66 billion every year.

The worst point of the country’s economic decline coincided with the 2008 general elections, which were marred by violence and intimidation, leading to an election runoff in which the main opposition party, the Movement for Democratic Change (MDC) refused to participate because of concerns about violence and vote-rigging by the

[9] For example, in mid 2009, a loaf of bread cost $300 billion dollars

ruling party. Consequently, the elections were disputed and led to the formation of a coalition government between ZANU-PF and the MDC (Pilossof, 2009).

3.6 Dollarisation as Currency Abandonment

In January 2009, the Government of National Unity (GNU) adopted a multicurrency regime (RBZ, 2009). The multicurrency regime was comprised of the South African Rand, British Pound Sterling, and Botswana Pula, but as time went on, the USD became the preferred currency, resulting in the economy becoming effectively "dollarized" (Pilossof, 2009). The extant scholarly literature on the Black Friday and dollarisation focuses on the descriptive narrative relating to the currency devaluation without paying adequate attention to the catalytic role of ordinary users of money in the abandonment of the highly inflationary Zimbabwe dollar and subsequent dollarisation. This is so because the GNU did not dollarise out of their own ingenuity, but were in some ways pushed by ordinary Zimbabweans, retailers and other companies who wilfully abandoned or stopped accepting the highly inflationary Zimbabwe dollar as a means of payment. As a Zimbabwean, on many occasions I was forced by some petrol stations to pay for fuel in US dollars as far back as late 2007. A close family member who had a transport company ferrying tobacco for small-scale farmers used to get paid in maize and small livestock. He, in turn, would only accept the Zimbabwe dollar in exceptional circumstances. On the few occasions that he did, like many others, he would change them to US dollars or Rands on the black market. Further evidence regarding the currency abandonment phenomenon will be examined in chapter 5, where I present evidence that suggests that even today, currency abandonment is a more widespread contemporary phenomenon (Mataranyika, 2020).

While there is no scholarship to back up my view, I believe that the crash was a deliberate action by the holders of capital in Zimbabwe and across the world, as they dumped the dollar in both the capital and money markets to make a statement about their unhappiness with the Zimbabwean government's kleptocracy. Unlike others forms of resistance to the government of the day, which took the form of political protests, strikes by workers and so forth, this was an act of coordinated political action by the holders of capital. A crucial trigger, in my view, was the announcement (by the then President Robert Mugabe) that the government would pay 50 000 ex-combatants unbudgeted gratuities amounting to ZW$50 000 (US$3 000), as well as a ZW$2 000 monthly pension[10]. Consequently, the Zimbabwe dollar crushed just four hours after the announcement. Several scholars show that this decision was not ratified by parliament (Bond, 1998; Onslow, 2011; Mlambo, 2017). While there is no clear evidence to support such an argument, it is now commonplace that in the era of financial liberalisation and indeed financialisation, companies and states and other interest groups engage in economic and increasingly "financial warfare" (Bracken, 2007).

Although resistance to the looting of state coffers was initially spearheaded by holders of capital, the unemployed together with workers joined, culminating in what is known as Red Tuesday, which involved a series of civil service strikes and food riots in protest about the consequent increase in the cost of living (Raftopoulos, 2000). That very same month, the government announced its intension to acquire 1,471 farms (nearly half the commercial farmland) without compensation (Masiiwa, 2004). As if that was not enough, the following year (1998) Robert Mugabe decided to send Zimbabwean troops to participate in a civil war in the Republic of Congo, where it was rumoured that the country was spending up to a million Zimbabwe dollars on a daily basis, but according to Bond (1998) the exact expenditure figures have never been made public.

3.7 Post-independence Monetary Policies in Zimbabwe

Under the GNU, monetarism was the dominant standard policy. In the literature, monetarism is often associated with neoliberalism and market fundamentalism, but more specifically, it is based on the belief that the money markets will function better by reducing the government's role in the management of its monetary affairs while promoting the control of broad money supply through various means, which include manipulation of interest rates and floating exchange rates (Graeber, 2011). In their adoption of monetarism, the Zimbabwean government followed the advice of international development agencies and their adherence to an orthodox policy of "balanced budgets". As in many countries, such as in Japan in the 1990s, there emerged a power struggle between the monetary authorities (Western-educated bank

[10] This announcement followed country-wide protests by ex-combatants in which they demanded pensions.

governors) and fiscal authorities (the Ministry of Finance). Such struggles are typically welcomed among proponents of central bank autonomy and independence, as was the case in Zimbabwe between 1980 and 2003. This kind of relationship between two critical centres of power ended following Dr L Tsumba's term as governor of the RBZ in 2003.

Under the stewardship of his successor, Gideon Gono, the tension between monetary and fiscal authorities lessened, in the process, the RBZ was effectively placed under the control of the Ministry of Finance. During this period, the monetary and fiscal authorities adopted an unorthodox monetary stance while also engaging in state-sanctioned criminality. In the process, the savings, pensions and monetary resources of ordinary Zimbabweans were eroded through inflation, equally, public trust in formal financial institutions was also eroded.

The unorthodox monetary activities were temporarily put on hold by the GNU. At the helm of the ministry of finance during the GNU and dollarised economy was Tendai Biti, a lawyer by profession. He was celebrated by the international community for going with the mantra, “We eat what we kill” (Biti, 2009). By that saying, Biti was expressing his belief that the government should only spend what it has earned, in other words, a strict and conservative fiscal regime coupled with the balancing of budgets. Under his stewardship, the country's GDP grew at an average of 12.08% per annum between 2009 and 2013. For the same period, the total GDP averaged US$12 billion, which is three times what it was immediately before the formation of the coalition government, when inflation was at its peak in late 2008. Inflation dropped right down to an average 3.45%, consumer confidence returned, and foreign aid also improved. The primary tool that Tendai Biti depended on for fiscal and monetary policy was cash budgeting (“eating what one kills”), which was achieved through a technical fix via US dollar cash budgeting constraints. By increasing or restricting the availability of US dollar to government departments, the government found itself in a position where it could not print its way out of budgetary constraints. The problem associated with this method of regulating money, in other words, monetarism, has been discussed in the literature (see Davies, 2002; Dorman, 2014). For one, very few countries have ever lived only on what they killed. Secondly, it puts too much emphasis on pure economics: narrow functions of money and the superiority of market principles, at the exclusion of social and institutional factors. Consequently, Zimbabwe's economic progress under GNU was reversed almost as soon as the government of national unity ended. This was because of the failure to address the underlying institutional factors that produced policies and personalities whose primary purpose was to ensure that the nation's financial resources serve only the ruling elites.

When the coalition government mandate expired in 2013, the ZANU PF-run government returned to power. A few months after their return in 2014, the government, under the guidance of John Magudy[11], the current Governor, a University of Zimbabwe-educated economist, introduced ZWB$1.8 million worth of "Bond" coins (5c,10c, 25c and 50c). The following year, the RBZ minted ZWB$2.5m worth of coins, which the bank decreed to be equivalent to US dollars and claimed that the newly minted money was supported by an equivalent loan in US dollar (RBZ, 2014). Initially, this was presented as a means to ease the small change shortages, where shoppers were forced to accept small value items in lieu of their change in small notes and coins. In this environment, some commodities started functioning as media of exchange, including supermarket credit vouchers, mobile network airtime, sweets, chewing gums, lollipops and other goods that shoppers would not ordinarily have wanted to purchase (Njanji, 2012; Bhebhe, 2014).

Zimbabweans used the new Bond coins, but the government and RBZ grew a bit too overconfident and started introducing higher denominations, namely the ZWB$1.00 coin and ZWB$2 in 2016 and lastly ZWB$5 note in 2017. It was at this point that US dollar bills started disappearing from ATMs and banking halls. Wholesalers in Harare started going around offering Bond notes in exchange for US dollar bills, because they preferred to hold US dollar, which was of practical use in meeting their import needs, rather than the Bond note, which had no use beyond Zimbabwe. I observed that in early to mid-2017, wholesalers and other businesses that depended on imports to replenish stock used to offer ZWB$112 in exchange for US$100. To execute a foreign currency trade, the buyer of foreign currency (wholesalers and other businesses) would simply approach businesses and individuals who routinely handle large volumes of cash, especially petrol attendants and till operators, and make an offer.

[11] Like his predecessor Gideon Gono, Magudya also claims to have a PhD in Economics from the same unaccredited American university where Gono reportedly attained his.

Currency trading became a commonplace action. A couple of months after that, black market foreign currency dealers were back on the streets of Harare operating independently. It was reported by Cross (2016) and several commentators that in some cases the dealers were acting on behalf of powerful entities such as the RBZ. It is difficult to draw any firm conclusions from such stories except to say that it would be unsurprising if actors within the Zimbabwean state were conspiring to use the liquidity crisis, the runaway inflation and the introduction of new monies to their own advantage. Economically the situation had become so dire that every intervention to support the economy became new opportunities for others to make a killing.

By the third quarter of 2018, illegal currency trading on streets had spread across all smaller towns. Once the government was back in full control of the printing machine, all the economic fundamentals started to deteriorate. Numerous official reports attest to this. For examples, the last quarter of 2018 (see RBZ, 2018b, 2018f), the inflation rate was 20.85%, which is the highest it has ever been in the last decade. According to the RBZ (2013) quarterly report, total government debt was less than US$6.5 billion, but it was estimated to be US$20 billion at the end of 2018, and most of it was due to domestic borrowing since the government could not access multilateral loans. Another RBZ (2017) quarterly report shows that the government accrued an RBZ overdraft facility amounting to ZWE$5.2 billion, but there is no corresponding issuance of treasury bills or short- or long-term government instrument which this overdraft facility may have been funded through. This suggests that the overdraft and possibly past and future ones were simply electronic money created out of thin air.

3.8 The Zimbabwean Cash and Digital Money Infrastructure

In Zimbabwe, and indeed most economies, government-issued cash (notes and coins) represent the smallest category of a country's monetary reserves, and yet it constitutes the foundation of the financial system (for a detailed review, see Dalinghaus, 2019). More specifically for this study, the cash infrastructure can be seen as an installed base which other monetary infrastructures plug into and out of, thus creating the financial system. As a public good and form of money for which a user does not incur a fee to make a payment, cash is even more important for the unbanked poor, who have limited access to other forms of money. In modern economies, government-issued money is basically an I Owe You (IOU), a promise composed of notes and coins held by members of the public, commercial banks and central banks (see Hoggarth & Phil, 1992; Clews & Hoggarth 1990; Mishkin 2004). Economists commonly classify it as narrow money, or outside money (Janssen, 1998; Thorp and Turnbull, 2000). Literally, this means currency circulating outside commercial banks.

Many government monetary authorities' statisticians classify it as M0 (Clews and Hoggarth, 1990) but in Zimbabwe and some countries, it is denoted as M1. In 2018 the amount of cash circulating outside the Zimbabwe Banking Institutions was only 4.1% of the nation's monetary reserves (RBZ, 2018b, 2018c). Comparatively, average world estimates put this at a much lower 1% (see Ingham, 2004). The lower levels of cash and coins are due to the fact that developed countries are less dependent on cash. This statistical category of government-issued money can be used to calculate, for example, the velocity of monetary circulation (value of consumer expenditure divided by M1). An upward trend in this ratio is usually explained by an increase in technological innovations in payments, for example ATMs, cheque books and debit cards, which leads to a reduction in use of cash for payments (Janssen, 1998; Jansen, 2013). Conversely, a decrease in the ratio signals overreliance on cash to purchase consumer goods and services as is the case in developing countries. For an more in-depth discussion on this topic (see, Clews & Hoggarth, 1990; Kavajecz & Anderson, 1994; Mishkin, 2004).

While notes and coins (M0) constitute the smallest category of a nation's monetary reserves, the largest category of every country's monetary reserves is bank money, which is stored as computer database entries or a digital record based on the double-entry system. Bank money is statistically marked as M2+M3+ up to M5 or more in some cases (see Di Muzio and Robins, 2017). It dwarfs most nations' cash reserves (M0/M1) by far (see Thorp & Turnbull 2000). Zimbabwe exemplifies this. According to the RBZ, from June 2017 to June 2018 M1 amounted to US$379.20 million, while for the same period, M3 was US$9.1 Billion (RBZ, 2018e)[12]. In other words, Zimbabwe

[12] This evolution whereby government-issued notes and coins were dematerialised from a physical to an electronic accounting record is not down to a single genius, but serendipity and convergence of inventions and innovations further afield. Nevertheless, it would not be an exaggeration to give credit to the mathematician Leonardo Pisano, who published the Liber Abachi around 1202 AD (Wray 2004; Davies 2002 p. 256). His book popularised the Hindu-Arabic numerals. Because of their simplicity and ability to handle large numbers better, their

had 23 times more bank money than it had notes and coins. The incremental categories (M2+M3+M4…) represent maturity of deposit, in other words, the minimum time that the bank or other financial institutions would be able to liquidate a long-term fixed bank deposit or other financial instrument into a more liquid form of money such as a demand deposit or checking account (M0 or M1). The previously discussed notes and coins (M0 or M1) form the base upon which banks can decide how much bank money to issue or create. This can be illustrated in the following simple example. If bank customers deposit cash amounting to $100.00, the bank can decide to advance loans or overdrafts amounting to $200.00 or more. This is enabled by the use of various payment technologies or tools such as the cheque book, direct bank transfers debit cards, and so forth, which in effect reduce the demand or need to withdraw physical cash. Based on long-term experience, banks in each country will know how much of the $100.00 will end up being demanded in cash. This is what commentators would be referring to when they comment on banks creating money from thin air; it explains a common practice whereby banks create new assets from money which they do not have. In the example given, depositors (bank creditors) deposited $100, and the bank created long-term assets (debtors' loans) amounting to $200.00.

The distinction between notes and coins and bank money illustrated above is a very important consideration in this study. Firstly, it affirms that monetary reserves of many nations were already digital even before mobile money, credit or debit cards and so forth. Secondly, it also illustrates that, effectively, calls for the digitisation of money in developed countries is a call to displace the 1% cash reserves and convert it into digital form. More specifically, in Zimbabwe, the call for the digitisation of money is a call to

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subsequent use and adoption led to the displacement of the roman numerals system in Europe. Consequently, this revolutionised transaction management systems, and contributed to the development of the double-entry bookkeeping system, which even today continues to dominate industry and commerce, including banking and finance (Carruthers and Nelson, 1991; Thompson, 1994). Additional consumer innovations such as automatic teller machines (ATM), international money transfers, debit and credit card systems owed their origin to this prior innovation, but in conjunction with advances in computing and information systems (Fincham et al., 1995).

convert notes and coins, which constitute 4% of the nation's monetary reserves, into an electronic form of money.

In Zimbabwe, the digitisation[13] of cash was in part triggered by inefficiencies or *disadvantages from use* of cash and bank cheques and other debit orders. The Zimbabwe interbank clearing system was based on a manual system referred to as the deferred net settlement (DNS). Through this system, the banks could only clear payments using cheques, which took about five days to process (RBZ, 2000). To overcome these inefficiencies or *disadvantages from use* of cash and bank cheques and other debit orders, the RBZ launched the National Payments System (NPS) project on the 20th of February 1997 (RBZ, 2000). It was designed to speed up payment and settlement processes, and also to reduce systematic risk in the financial services industry. To design and implement this system, the RBZ awarded Perago, a South African payments technology development company, the tender to set up what they called the Zimbabwe Electronic Transfer and Settlement System (ZETSS), commonly known elsewhere as the Real Time Gross Settlement (RTGS) system, in 2002 (RBZ, 2000). This was integrated into existing payment infrastructure owned by a consortium of Zimbabwe banks. These include the Automated Teller Machine (ATM), first introduced by Barclays Bank in 1993 and Point of Sale (POS) switching system for processing retail payments. Thus, the legacy infrastructure upon which the Zimbabwe electronic payments system depends on was a result of cooperation between the state and private banks.

A decade after the RTGS digital payment system was developed, mobile network operators also entered the digital money market space. This was unusual, because traditionally only central banks and banks played a dominant role in the fiat money-centric payment space. In the next section I will provide a more detailed explanation on how mobile network operators entered the digital money space. Some scholars argue that the absence of a well-developed monetary infrastructure is what triggered mobile money, but in this thesis I present an alternative position that the emergence

[13] As explained in the literature review (chapter 2), digitisation refers to the displacement of cash due to increased use of digital or electronic forms of money comprised of bank money, and most recently mobile money.

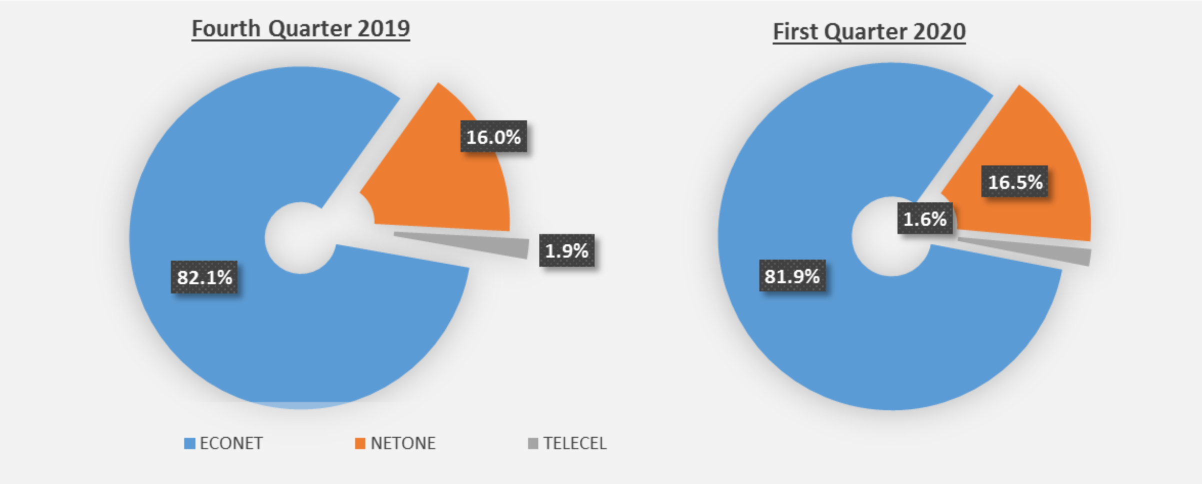
of mobile money was due to the disadvantages associated with remote payments or the transfer of cash over long distances.

The Mobile Money Market of Zimbabwe

At its onset, the mobile money market of Zimbabwe was both bank and mobile network operator- (MNO) centric. By this is meant that the dominant players were both mobile network operators and financial institutions. Today, however, it is dominated by three mobile operators. Two of them, Econet Wireless and Telecel Zimbabwe, are privately owned, while NetOne is government-owned. Telecel and NetOne control only 18% of the mobile money market. The largest market share is controlled by Econet Wireless, which has a significant level of foreign shareholding. According to the Potraz (2018) report, Econet mobile network enjoys a monopoly of 96% mobile subscriber market share. The network successfully launched its EcoCash mobile money services in 2011, and quickly dominated the mobile money market due to its significantly large pre-existing mobile subscriber footprint. Its success followed in the footsteps of other successful mobile money deployments in Africa, but most notably M-Pesa, the largest[14] MNO in the world, run by Vodafone and its Kenyan subsidiary Safaricom mobile network operator (Hughes and Lonie, 2007; Morawczynski, 2011).

[14] In terms of mobile money subscribers

Figure 3: Mobile Money Market Share



Source: POTRAZ (2019-2020)

Because of its monopoly position, Econet is in a position where it can charge exorbitant mobile money fees. Moreover, its other services are also expensive. Mobile text messages and calls cost $0.10 per text and $1.00 (or R13.00) for a six-minute call. This is despite the fact that the quality of calls, particularly in rural areas such as Binga, is extremely poor. It is not uncommon for subscribers to receive text notifications of missed calls even when the phone was neither in use nor out of coverage. There have also been complaints about vanishing airtime, and some participants complained that when a subscriber adds airtime credit (which is typically $1.00), they may be astonished to find that at the next attempt to make a call or access the internet the airtime credit will be depleted. This may be the result of automatic background application software updates and possibly other means. Once the prepaid service has been paid for, it cannot be refunded based on poor service. In Zimbabwe, mobile phone users tend not to speak on the phone for too long, calls are very brief and purposive. If one is not used to this, one could think Zimbabweans are generally rude because of the quick manner in which calls are terminated.

Overpricing in a non-competitive environment has also been highlighted by other scholars (Thando and Robb, 2016). Reports suggest that this exorbitant pricing has been going on for several years, and yet the government has, on numerous occasions, refused to allow competitors to enter the market. Such market protection stances are usually put in place to give new industries an opportunity to grow. Given that the company has been in existence for over 21 years, that rationale does not seem to apply to Econet. As I will show, there are numerous reports in national newspapers about the exorbitant mobile network pricing. Despite these concerns, inaction by the government and its regulatory authorities such as the Competition and Tariff Commission (Commission) suggests there might be some sort of collusion at a national level.

The successful entry into developing markets by mobile network operators was in part due to the *disadvantages of use* of a broken, sparse and in some cases complete absence of infrastructure. Firstly, the Zimbabwe fixed-line telephone network is underdeveloped. According to World Bank (2019) statistics, before mobile phones were introduced into the market, less than 2 out of 100 people had a fixed telephone line. This lack of infrastructure is widely credited with the successful use and adoption of mobile phones first introduced by Econet Wireless in 1998. The second example of innovations spurred by disadvantages from use is financial institutions. Just as is the case elsewhere, including in developed countries, Zimbabwean commercial banks do not have a robust infrastructure in sparsely populated areas, particularly rural areas. This is also why the only bank to have a presence in Binga is the state-run bank. Thirdly and more specific to this study, more comprehensive use and adoption of mobile money was spurred by poor people trying to find solutions to mitigate *disadvantages from use* of cash and coins, in particular the inefficiencies and risks associated with the transfer of cash over long distances, for example theft, loss, delays and so forth.

Mobile money is derived from the conversion of notes and coins (M0/M1) into a digital form. This conversion is on a 1:1 basis: a cash amount of $100 remains as $100 in mobile money. In the literature, this is evidenced in what is referred to as the float (see Hughes and Lonie, 2007; Tarazi and Breloff, 2010; Jack and Suri, 2011; Mas and Radcliffe, 2011; Mbiti and Weil, 2011; Maurer, Nelms and Rea, 2013), in simple terms it relates to the fact that the e-money or mobile money that mobile money agents can sell (to those who want to convert cash to mobile money) is equivalent to the cash that they (the mobile money agent) deposited with the mobile money issuer's registered commercial bank. Thus, the mobile money agent and mobile money users cannot have more e-money than the cash that they paid for it. Put differently, this affirms the fact that mobile money is extracted from cash on a 1:1 basis. Therefore, unlike bank money, no new money is created with the creation of mobile money.

In this paragraph I provide a macro perspective of emerging practices around digital money, for example its widespread use for low-value transactions and lack of evidence of its use as a means to save. This provides an opportunity in the rest of the thesis to assess broader claims about the proclaimed benefits of digital forms of money to the poor. Zimbabwe presents an interesting case in that the majority of fiat money denominated payments are virtually digital. According to a 2018 Zimbabwe National Payments report (see POTRAZ, 2018; RBZ, 2018g, 2018c, 2018d), 98% of all payments are made through electronic forms of money. These are comprised of instantaneous bank-to-bank transfers using RTGS (54.49%). This is followed by mobile payments (29.87%), online web payments (7.93%), point of sale (POS) (5.34%), while non-electronic forms of payments consist of cash (2.14%) and bank cheques (0.02%) (RBZ, 2018f, 2018g). This statistical information shows that notes and coins are being cannibalised by digital forms of money in the national context. In terms of monetary value, the RBZ National Payments Quarterly reports show that the highest worth of payments was made using bank money, which in 2018 amounted to US$85.4 billion (RBZ, 2018c); the average transaction amounts to $13 327 per year. This confirms that these are high-value payments (HVP) made largely by corporations. Given that the majority of participants in this study do not have bank accounts, it is unlikely that they contributed much of the $85.4 billion. Transactions made by the unbanked are however included in the $13 billion mobile payments made in 2018. They include person-to-person (P2P) payments, merchant payments, for example, electricity and water, and lastly airtime purchases. The average yearly transaction amount in this category is between $7 and $5 (see RBZ, 2018a) per transaction. There is another category of mobile payments amounting to $44.1 billion. These are made through the RTGS payment system used by supermarkets and other large merchants. It includes money transferred by individuals and corporations from their bank accounts to their mobile money wallets accounts, an option which is unavailable to the unbanked. If the two (mobile payments dominated by the unbanked and payments dominated by the banked) are added and divided by the total number of transactions, the average mobile money transaction amounts to $35.00 (or just under $3 every month) (POTRAZ, 2018; RBZ, 2018i, 2018f, 2018g) for the whole year. Therefore, we could deduce that, in Zimbabwe, mobile money is largely used for low-value payments (LVP) or micropayments.

To summarise then what I have presented thus far in this chapter, institutional goals are equally a site of cooperation and contestation. Cooperation between the BSAC and the British Sterling Group (BSG) was colonialism, which was sustained by the exploitation of black labour. This was resisted through the armed struggle and some support from broader anti-colonial forces. Once in power, the liberators experimented with socialist redistributive policies, which were strongly resisted by international financial organisations, which imposed neoliberalism on many developing nations. In addition to the half-hearted attempts at redistribution, the black-led fiscal authorities also took part in state-led looting through various means. In response, holders of capital resisted this criminality by various means. In addition, ordinary users of money also resisted through widespread industrial action and civil resistance. More importantly for this study, international development actors advocated that digitisation of money would be an effective tool in reducing corruption and theft, poverty and so forth. In response, and also mainly by coincidence, Zimbabwe gradually digitised its payments infrastructure. Today 98% of national payments are digital. In the next section I introduce Binga and its physical and social infrastructure. This presents an opportunity in later chapters to examine the extent to which the private forms of money are embedded (and or disembedded) from the Binga economy where, as a public good, cash was preferred and do not seem to embody goals that contrast sharing and redistributive practices associated with exchange in Binga. Furthermore, Binga presents opportunities to examine the ways by which monetary practices of households and persons complicates the narratives of development.

3.9 Introducing rural Binga: History and demographics

3.9.1 Introduction

The previous sections of this chapter examined the state of the Zimbabwe money infrastructure and paid attention to the emergence of the mobile money market as one of two principal means by which cash is digitised. In this section I introduce a brief historical context of Binga District. It will analyse the resources that households and persons draw on as they partake in various livelihood activities, which shall be analysed in chapter 4 and 5. Some of the resources that will be examined include non-ecological resources such as education, health, communication network, for example roads, mobile and fixed-line coverage, electricity and water supply. These resources can also be conceived as infrastructures, telecommunications infrastructure, education infrastructure and so forth. The importance of this analytical perspective, in which I pay attention to resources that households and persons draw on in the course of making a living, is that it will facilitate an assessment of their impact on livelihoods in chapter 6. That way, livelihood outcomes (poverty, affluence, vulnerability and so forth) will be understood as dependent variables: not a result of ineptitude or heroic endeavours of individuals. Furthermore, I will discuss the forms that Binga region's incorporation into the wider world take.

The section draws mainly on the fieldwork data, but also the seminal work by Elizabeth Colson (University of Berkeley, 2019) and Thayer Scudder (Cohen, 2001) in the Gwembe Valley (Zambia) which is adjacent to Binga, Zimbabwe, where fieldwork for this study was conducted. In writing this chapter and subsequent data chapters, I was strongly influenced by Colson and Scudder's cautionary approach in analysing fieldwork data. I use the word cautionary in the sense that both researchers privileged rich empirical findings rather than making abstractions. For example, part of Colson's obituary, written by fellow anthropologist Werbner (2018:190), asserted that her various exemplary ethnographies show that "… Her priorities were empirical—the analysis was primarily about her own findings; those of others did figure explicitly but usually for comparison in the background".

3.9.2 Brief History of Binga District

Figure 4: Binga Zimbabwe. Courtesy of Google Earth. 2019

Binga is a district in Matabeleland North, a province of Zimbabwe south of Lake Kariba, situated on the Zambezi Valley. The official population of Binga District is 151,870 and is divided into seventeen chiefdoms (ZimStat, 2018). Its administrative headquarters is at Binga Centre, situated in Chief Sikalenge's area. In relation to the rest of Zimbabwe then, Binga is rural, with little income derived from wage labour. It is extremely impoverished. This is in part due to the colonial history of land dispossession and forced removals. In ethnic terms, Binga is also populated by a minority linguistic and cultural population. As a result, the population have experienced cultural marginalisation not only by the colonial regime but also by post-independence governments.

Binga District shares a border with Zambia's Sinazongwe District, a Southern Province of Zambia. Both districts are known as areas where the majority of the population call themselves Batonga. According to Colson (1971), fifty years ago, there were no distinct linguistic or cultural boundaries between the Zambian and Zimbabwean Batonga. The sociocultural connections between Binga and Sinazongwe District were concentrated across rather than along the Zambezi valley; the Zambezi river, which now marks the border between Zimbabwe and Zambia, was never a dividing line that it now is but one that bound them. The close historical connections between the two were at first weakened by arbitrary colonial borders but were finally raptured by the construction of the Kariba Dam, the largest hydroelectric power station in Zimbabwe, built between 1956 and 1959. The dam widened the Zambezi River, which according to oral accounts by elderly respondents from the Chief Saba area was so narrow that when they were young, they used to ride on floating logs to cross over to the Zambian side. They estimated that its width expanded from about 50 meters (or less) to its current approximately 1 km width (Saba, Mlibizi and Sebungwe areas) going up to 4 km around Binga Centre and 40 km at Kariba Dam. Despite the new constraints, the two Batonga groups produced by the dam continued to sustain kin bonds, socioeconomic and cultural ties.

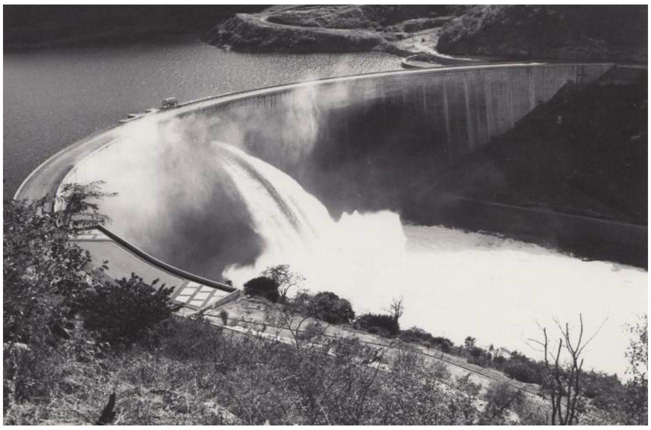


Figure 5: Kariba Dam, (Zimbabwe National Archives Bulawayo)

At the planning stage of the Kariba Dam, expansion of Zambezi River was anticipated. Therefore, the then Rhodesian government forcibly displaced Tongas from their Zambezi riverbank lodgings to avert the risk of flooding. The river was the source: the surrounding communities' principal supply of water and protein (from fish). Significantly, riverbank and riverbed gardens – called *nchelela* – were an essential source of livelihood because of the abundance of rich alluvial soils. Justifiably, many of the Tonga tried to resist forced displacement; they did not want to leave their ancestral homes, the graves of their ancestors and other shrines of worship. To neutralise their resistance, the colonial government resorted to police and military force, shooting dead scores of villagers in the process (Clements 1959; Howarth (1960).

Eventually, the indigenous communities conceded defeat and were relocated upland to an area with poor Karoo soils which were unsuitable for agricultural production. While researching on this at the National Archives of Bulawayo, I came across a glossy brochure advertising the official opening of the Kariba Dam. On its front cover there was a statement by the Mr Balneaves, the High Commission for Rhodesia and Nyasaland, 1958. In it he said, *"The Tonga should gain immeasurably from the balanced exploitation of the Lake's resources and the game, so rudely displaced, find space to reinstate itself in an area secure from man"*[15]. His statement reflects a noncommittal if not disingenuous optimism that Tonga people would benefit from the lake. It also reaffirms arguments made elsewhere that colonial society at times seemed more concerned with the plight of the wild animals and 'nature' than that of humans (see McGregor, 2005, 2008).[16]

This history of land dispossession shaped the history and economics of Binga District. Today, it is one of the poorest regions of Zimbabwe. This is affirmed by various statistical data, but before I go into detail, the ZimStat poverty data on Binga and Zimbabwe as a whole need to be read with great care. Significant parts of the latest UN-sponsored poverty survey by ZimStat (2018) gives an impression of an economically stable country, and yet the nation is facing severe economic challenges and starvation. For example, the official level of unemployment is 1.8%. This is because poor communal farmers who can barely provide for their basic subsistence needs are enumerated as employed and make up 88.2% of the population.[17]

Nevertheless, what the statistics do reveal is that in the whole of Binga District, only 4.4% people are in permanent paid employment. This means that the opportunities for

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[15] Some pages of this brochures were missing, therefore I did not have sufficient citation details; however, Mr Balneaves expressed similar statements cited elsewhere (WCD, 2000)

[16] Further support for this observation emerged after I scoured through the Kariba Studies resources at the Zimbabwe National Archives (Bulawayo), where I noticed that a significant amount of research was dedicated to animal and environment conservation studies, rather than the impact that this giant technology had on the lives of the Tonga. In his award-winning book *Mukiwa: White Boy in Africa*, Godwin (2007, p. 198) and a few others (for example Thomson, 2005) also made similar observations, in which he commented that the Rhodesian government treated wild animals far better than they did the Tonga people.

[17] It is recorded as "Own account (communal resettlement farmer)"

and household income derived from wage labour is remarkably low, even in comparison to the rest of Zimbabwe. The region faces one of the highest poverty levels, which currently stand at 85.6%, but extreme poverty is at 50.1%. This figure represents households whose per capita consumption expenditures fall below the Food Poverty Line (FPL)[18] or the lower poverty line (ZimStat, 2018). I could not find official education statistics of Binga district, but the level of literacy[19] in Zimbabwe is 91.3%, while rural literacy rates are much lower at 88.2% (ibid). The household per annum cash income in Matabeleland North Province is estimated to be US$1584.00, which is the lowest in comparison to 10 provinces of Zimbabwe.[20]

According to Colson (1960) and Scudder (1962), the Tonga society they studied during the colonial period could be described as exogamous and virilocal in terms of marriage, while matrilineal in inheritance and succession. However, more recent literature caution that succession practices are typically more complex than scholars in the 1960s believed them to be (Guyer 1981a; Eriksen 2001). As such, we should not expect practices to necessarily always follow cultural laws, especially when such 'laws' are articulated by elders. For example, I learned during my time in Binga that those people who regard themselves as Tonga follow some aspects of patrilineal succession, in which brothers can succeed brothers, as well as the more common matrilineal succession whereby sister's sons can succeed mothers' brothers. I was told that the chieftainship of Chief Binga, who died around the late 1970s, was inherited by his niece's son, who was born and raised by his mother in Zambia, confirming an earlier study by Weinrich (1977).

[18] *Food Poverty Line (FPL)* represents the minimum consumption expenditure necessary to ensure that each household member can (if all expenditures were devoted to food) consume a minimum food basket representing 2100 calories. *Food Poverty Line* (FPL) is computed by valuing the products in the minimum needs basket by the average prices across all the provinces of Zimbabwe. It is assumed that an individual whose total per capita consumption expenditure does not exceed the FPL is very poor. The FPL is sometimes referred to as the lower line.

[19] The *literacy rate* is the number of persons aged at least 15 years who have completed at least Grade 3 per 100 population for a particular age category.

[20] My suspicion is that this is exaggerated by the Government Statistical Organisation, just as they claim that unemployment in Zimbabwe is less than 10%, while credible estimates elsewhere confirm that unemployment is over 90%.

Others I spoke to claimed that, before colonial rule, Tonga children used to inherit their matrilineal family surname (*mukowa/luzubo*), but this practice gradually came to an end. Some claimed this was because of ethnocentric and paternalistic actions of government birth and death registration officials, who were predominantly white, and in later years Shona and Ndebele. The people I spoke to felt that outsiders, as colonial and post-independence government employees often drawn from majority ethnic groups, imposed their traditions on the Tonga by insisting that a child's surname had to match that of the child's father. This practice had historical precedence, because during the precolonial era, the then militarily powerful Ndebele rulers habitually "Ndebelecized"[21] their subject's names, in other words, changed their conquests' names to sound Ndebele in form and character.[22] This practice continued through colonial rule right up to a few years of post-independence Zimbabwe.

One of my research participants, who was born in the 1970s, uses the surname *Chuma* (Shona) and yet his correct *Tonga* surname is *Muley*a. He explained to me in an interview that his father felt powerless to go against the Shona birth registrar who was employed by the state. A cursory review of my research diary, where I wrote down various fieldwork encounters, revealed additional examples of Tonga names which were changed to their Ndebele translation; *Mwinde* registered as *Nyathi* (can be both Shona and Ndebele, it translates to Buffalo), *Muzamba* changed to *Sibelo* (Ndebele), *Mweembe* to *Nyoni* (Ndebele), *Munsaka* to *Ndlovu* (Ndebele), *Mudenda* to *Dube* (Ndebele). Evidence from this study suggests that "Ndebelecising" (or "Shonalising") Tonga names has since stopped. Similarly, the use of matrilineal surnames on birth registration certificates has also been discontinued. The few who persisted with this practice faced problems when trying to claim or manage their fathers' estates because upon his death, dependents found it difficult to convince government officials – who are still predominantly drawn from Shona and Ndebele ethnic groups – that they are

[21] This word is commonly used to describe acculturation of smaller and weaker tribes by the Ndebele people in the nineteenth and early twentieth century (see Limb, Etherington, & Midgley, 2010; Msindo, 2013).

[22] Equally, this was also voluntary. Cobbing (1976) wrote about how towards the end of the nineteenth century, Europeans began to find it difficult to differentiate between the Ndebele people, who descend from the Zulus and Swazis from local Shona tribes, because by then they had adopted some of the cultural identities of the Ndebele, in particular male ear piercing.

the son or daughter of the deceased because their surnames would not match. However, one of my key research participants informed me that the new format of birth certificates captures fathers' details, therefore if there were political will, Tonga people would revert to matrilineal surnames. Here we can see evidence of the marginalisation of the practices claimed by those who call themselves Tonga by the colonial and postcolonial state. Such marginalisation of the District was a feature in economic and political life as well. Scholars such as Posselt (1935), Colson (1960) and Weinrich (1977) assert that before colonisation, there was no formalised political authority within or among the Batonga people. They state that the Batonga never had a paramount chief, and claim that the word *Batonga* literally translates to those who judge themselves. One of my key informants, Isaac Mupande, a Tonga language expert, protested this assertion, which he says is a stereotype recycled by early writers.[23]

3.9.3 Agroecological Resources

Binga is situated in the drought-prone agroecological Region V, which is characterised by extremely hot temperatures and low precipitation of 250-500 mm per annum (Ministry of Agriculture, 2017). Rain-fed agricultural output in natural regions IV and V is in the order of one good harvest every four to five years (Ibid). As a result, most communal farmers in region IV and V cultivate drought-resistant small grains crops: predominantly millet, sorghum and to a much smaller extent, pulses and maize. Earlier

[23] In an email exchange dated the 27th of November 2019, he writes: "This is where we differ with early writers (Posselt, 1935). This narrative to us is more of a misrepresentation of the Tonga than reflective of what was on the ground. We agree that the Tonga had no centralised political system since each chief operated independently with his own political system. Each Tonga chiefdom had and still up now has a Traditional chief and Kraalheads (now Village-heads but no Headmen) who administered and continue to administer the chiefdom. Was this not formalised political authority? The fact that they did not have a paramount chief, to us, does not mean that the Tonga did not have formalised political authority. Does formalised political authority come with paramount chieftainship? What we agree is that our political system was decentralised not centralised around a paramount chief or having an army/warriors like the Ndebele. Maybe we should go back to the definition of a formalised political authority! ...The challenge has been that writers wrote about the Tonga comparing them with other ethnic groups that were centralised. When they wrote about the Tonga they were looking for administrative and political structures that exists in other ethnic groups instead of understanding the Tonga the way they are, as a different ethnic group with different political structures. This colonial narrative should be discarded."

research and oral accounts from this study suggest that land was once greatly sought after to the point it was a common source of conflict and jealousy among the Tonga. The most demanded land was riverbank and riverbed plains, which are suitable for *Nchelela* gardens, a reliable source of year-long supply of green vegetables. However, the land lost its use value when the Kariba Dam was constructed; as the Zambezi River widened, it flooded their fields. But besides that, communities were forcibly removed from their riverbank ancestral homes to drier and sandier upland soils, which could not sustain any crop production or adequate grazing land. In addition to being useless for agricultural purposes, the tribal trust lands to which communities were relocated do not have a market value; instead it is held in trust by the Chief on behalf of the local community. As a direct consequence of these historical events, land's capacity as a source and symbol of wealth declined significantly (Colson, 1971).

3.9.4 Road Networks and Telecommunication

The transport infrastructure of Binga Region is very poor, and this is a major challenge to its users, who include subsistence farmers, fish and cattle traders, and ordinary people. The road is full of potholes, rusty or non-existent road signage and numerous small bridges with no safety barriers. The interconnections within the district are made of equally poor gravel road networks that are in a state of disrepair, and inaccessible during the rainy season. As I drove around the District, I observed some evidence of minimal effort by the Ministry of Transport's District Development Fund (DDF) and Binga Rural District Council (BRDC) to repair the roads. More often than not, residents complained that the road infrastructure left by the colonial government is more or less all there is. There is limited water transport network through the Zambezi River; it provides a connection between Binga and Kariba Town, but this means of transport is the preserve of rich white Zimbabweans who own houseboats and other tourists who can afford the weekly ferry charges of $150.00 for the privilege of a 24-hour slow cruise. Along the main highways in Zimbabwe a journey of about 100 km costs about $3.00 to $4.00, but in Binga it costs $6.00 due to the bad roads and limited means of transport. Buses tend to be a bit more affordable, but the route is poorly served. As a result of all the above challenges, subsistence farmers who may have excess produce to sell to the grain marketing board (GMB)[24] are not able to deliver their produce to a market that offers favourable prices; cattle traders who buy cattle in Binga for resale at Bulawayo abattoirs, where prices are much higher, do so at increased levels of personal risk, and fish traders who transport frozen fish from Binga to Bulawayo and other towns experience loss due to increased travel times due to breakdowns, accidents and so forth.

Figure 6: Damaged fixed telephone line in Binga Simatelele (2018)

The Binga fixed telephone lines are in a state of disrepair and have extremely limited coverage restricted mainly to district council offices, NGOs and government and other services such as hospitals and a few schools. The second-quarter POTRAZ (2018) report indicates that Zimbabwe only has 263 962 fixed telephone lines, but that is on a steady decline. I observed time and again that the telecommunications infrastructure degeneration was evident – damaged phone poles and loose telephone cables dangling from telephone posts were a common sight. This was due to poor maintenance by the state-owned TelOne, and police ineptitude in investigating vandalism and theft of copper telephone cables by the local communities and in some cases employees of the government parastatal. These incidences escalated when the market value of copper in neighbouring Zambia surpassed Zimbabwean prices. Stolen

[24] An agricultural commodity trading state owned enterprise (or parastatal) designated with the responsibility for national food security. Through its countrywide network of depots, it buys grains from small scale farmers, stores and distributes it to millers.

copper wires were then smuggled across to Zambia via the Zambezi river. This is despite the fact that there is a heavy police presence in several parts of Binga District.

3.9.5 Health Infrastructure

The current Zimbabwe government provides cash-in-kind benefits of free access to health facilities at all clinics in Binga. The open health access is also extended to Zambians who live in the nearby Sinazongwe District. The services that are provided to Zambians include maternity care, malaria, and other healthcare needs. These healthcare facilities are extended free of charge on the same terms that Zimbabweans receive them. However, there is a requirement to pay for all healthcare services at the district hospitals. At the time of fieldwork, the charge was US$6.00 per consultation. The same fee was also charged to non-Zimbabweans. The shared healthcare provisions are being coordinated by the Zimbabwe and Zambia governments and this was confirmed in an interview with senior nurses at Sianzyundu Clinic and Binga District Hospital in August 2017, newspaper reports and NGO reports (The Herald, 2013; UNDP, 2013). Sharing takes place within a context of poor investment in the health infrastructure by both the state and private sector. In addition to fieldwork data, a local NGO found that the health service is underfunded, and water supply and sanitation facilities in the district are well below the national minimum standard for Zimbabwe (WFP, 2016). As a result, large segments of the population are forced to walk up to 40 km to get to the nearest health centre, where they may or may not get treatment.

For example, Binga District Hospital, which is the biggest hospital in the region, is served by only three permanent doctors; two other large hospitals do not even have a single doctor serving them. Furthermore, most clinics only have a limited range of medication in stock, and as a result they fail to manage and treat relatively common diseases such as high blood pressure and blood sugar. About 12% of the population of Binga District suffer from disability (ZimStat, 2018), yet do not get support from the government. In October 2017, I took one of my research participants, who was in his forties, to have his ears examined at Binga District Hospital. He had been hard of hearing since he was in high school. Unfortunately, the doctor had to refer him to Bulawayo, which was 400 km away, because the biggest hospital in the district did not have an otoscope to examine his ears.[25] Despite all these challenges, one of the senior nurses at Sianzyundu Clinic informed me that free access to health helped them to effectively deal with the maternity care needs of the community and challenges caused by Malaria and HIV, which interestingly stands at an 8% infection rate against the national average of 16%. I was told there are not any studies available that explain the comparatively low levels of HIV infection.

3.9.6 Education and Employment

[25] A simple online search indicates that this basic piece of equipment can be procured for less than US$$100.00 or R1200. Another example of poor health services I witnessed involved Budwell, a mentally ill friend[25], with whom I have had numerous interactions in which he was independent and lucid over a period of more than 12 months. In one of our last encounters before the end of the fieldwork, he unexpectedly became incoherent, completely preoccupied and disorientated to the point he could not even string together a basic sentence, nor could he recognise me or my interpreter, whom he had known for many years. His parents explained that he ran out of his medication. To procure more medication, his parents had to commute a 30 kilometre round trip to get to the nearest clinic, only to be told that it was out of stock. The clinic contacted the much bigger Binga District Hospital, but unfortunately the hospital had also run out of medication. Immediately after that, his mental state gradually deteriorated. Hearing about this ordeal, I drove to his local clinic and persuaded them to call Simatelele clinic (40 km from Budwell's House) to ask if they had his medication in stock. Fortunately, they did, but only one of two of his prescribed medications, which I volunteered to collect on his behalf during one of my fieldwork visits.

Figure 7: Early Childhood Development (ECD) class for 3 to 5-year-olds. Binga-Mangani (April, 2016)

In Zimbabwe, the most common requirements to secure employment is five Ordinary Level passes, including English and Mathematics. A cursory review of newspaper job advertisement shows that this applies even to low wage jobs, such as domestic workers, drivers, cashiers and so forth (Classifieds, 2019). Yet, most of my respondents were illiterate in that they did not complete their Ordinary Level schooling. Lack of schooling stems from a long legacy of neglect of educational needs of Africans by the colonial Rhodesian government (for a detailed history of colonial education, see Zvobgo, 1980). During the colonial era, Binga schools were sponsored by church organisations, which included the Church of Christ, the Methodist and the Catholic Church. All the older respondents, especially the ones who were adults or at least of school-going age before independence, reported that there were no schools in their area. In the few catchment areas where there were schools, the majority were primary schools not offering the full seven-year, grade seven school certificate. Several experienced teachers told me that during the colonial era, the whole of Binga District only had eight primary schools. Six of these merely provided a maximum of five years of primary schooling, in other words, grade 1 to 5 or less; the other two offered seven-year primary school education. There were no secondary schools throughout the colonial period. The few parents who were committed to their children getting an education had to send them away to live with relatives in other areas with better educational provisions, particularly Hwange, Harare and, in some cases, Zambia. Tertiary educational institutions are also non-existent save for a small vocational farmer training centre at Binga centre. After independence, the government increased investment in the area; at present there are 130 primary schools and 45 secondary schools, including nine high schools.

Parents and a few headmasters I interviewed told me about the extremely high primary and secondary school dropout rates. These were caused by among others lack of funds, hunger and excessive distances between homes and school (in some cases more than 15 km). There is also a high staff turnover rate due to the remoteness of the district as well as poor housing facilities – some schoolteachers live in mud and pole houses and use pit toilets. I visited more than a dozen schools in the district and all of them held some of their classes under the trees. The rainy season presents additional challenges to schooling because of an increase in household farming tasks such as cattle rearing. Some parents have no access to other forms of affordable labour and are forced to pull their children out of school to assist them with the work that is their livelihood. Headmasters complained that this is a serious challenge, which has a negative impact on pass rates and prospects for higher education.

There is a gender dynamic to the illiteracy problem. Middle-aged and illiterate women explained to me that it was believed that education would turn female children into "prostitutes". This misconception was also corroborated by some of my male respondents and it was clearly a belief shared by some. However, recent male and female primary and secondary school enrolment ratio is at parity (WFP, 2016), suggesting that such stereotypes are becoming less prevalent. Unfortunately, orphans due to AIDS and other causes seem to be the category that now faces the greatest risk of illiteracy. I met children of school-going age who had to stop attending school because of failure to pay school fees. A large proportion of household debts are related to unpaid school fees; children who persevere with schooling do so with great difficulty. To assist with this issue, the government prohibits schools from sending away pupils who cannot afford to pay fees, but despite that, this practice continues. When asked why this practice still persists, one parent said, "The government is too far, headmasters do whatever they want". In turn I pointed this out to one of the headmasters, he laughingly said they don't chase students away from school but merely ask them to go and remind their parents to pay school fees.

The marginal position of the region relative to other regions in Zimbabwe is also reflected in the language policy of both colonial and post-independent Zimbabwe. Before independence (up to the early 2000s), the Tonga language was not included in the school curriculum, and school children were taught in Ndebele. Some scholars (see Weinrich, 1977) believed this situation was necessitated by the shortage of Tonga-speaking teachers, which forced the government to recruit from further afield in Matabeleland and Mashonaland. However, two experienced headmasters whom I interviewed offered other arguments. They argued that after the demise of the once politically and militarily powerful Ndebeles at the hands of white settlers, they persuaded the colonial government to include Binga as part of Matabeleland in order to give an impression that Ndebeles occupied a larger kingdom than they actually did, adding that the Ndebeles had no claim to the territory because it is and has never been inhabited by the Ndebele-speaking people. Although this is true, it is evident that Mzilikhazi and Lobengula respectively had dominion over the territory.

Ncube (2004) wrote about the kings sending raiding parties to Binga, and Cobbing (1976) also asserted that both kings had an interest in ensuring that the area was under their control, because in the unfortunate event that the Ndebeles had to flee Zimbabwe under pressure from the British, Boers or Portuguese, they would have needed free passage up north. Perhaps the legacy of the Ndebele political authority partially caused the marginalisation of the Tonga language, because, once Binga was designated as part of Matabeleland, the colonial government had no problems insisting that Tongas learn Ndebele. There are also arguments that on the whole, the broken educational infrastructure was by design. The most important motivation was to create a cheap source of unskilled labour. I asked two of my key informants (a headmaster and his deputy) why Tonga people did not advocate for their own language to be taught in schools, and was reminded that they had no central authority to represent them.

Be that as it may, there are cultural and structural factors that prohibit young people from completing their education, and when they do, there are not many employment opportunities available in Binga. Education does not guarantee employment, and education together with other forms of work created by the state seems to be one of the few jobs still available outside of agricultural work and making a living through informal trading.

3.10 Banking infrastructure

Binga's relative marginality in relation to other districts and regions means that little money from the state gets distributed to this region. Moreover, there are few capitalist enterprises and few formal employment opportunities outside of the state. As such, it is perhaps not surprising that the whole of Binga District is served by just one bank, the state-owned commercial bank called AgriBank, located at Binga Centre. Given the cost of transport (US$6.00 to US$12.00 return), few people who have bank accounts find it easy and affordable to get there. Additional formal financial institutions are several hundreds of kilometres away in Bulawayo, Hwange and Victoria Falls, and commuting there and back can cost upwards of US$20.00 (excluding costs relating to accommodation expenses, given that it is difficult to return on the same day due to poor bus services and distance). Evidently, poor infrastructure drives up the costs on a variety of fronts. Poor transport pushes up costs and adds to accommodation costs, which all contribute to high costs for banking and financial services.

Most of my research respondents do not have bank accounts. For those who make a living in urban areas and who rely on the regular rhythms of the weekly wage or monthly salary, and who are dependent on a variety of markets through which as access food, housing, labour, education and more, this is shocking and unbelievable. A large part of my thesis is devoted to showing why people in Binga opt out of banking and how financial exclusion works. The few respondents who do have bank accounts are either employed as domestic workers at holiday homes along the Zambezi river, or government and local council employees. However, because of familiar and sustained cash shortages in Binga and all over Zimbabwe – also referred to as the liquidity crisis – many people do not go to the trouble of going to the bank to use their accounts. Instead, they make some of their payments by transferring money from their bank accounts to their mobile wallet accounts, which they then use to make a few payments. These include retail purchases, but because mobile money is not universally accepted by retailers and locals, there is a strong preference for cash. Cash is in such demand that teachers, National Parks officers, domestic workers, dried fish traders and others resort to forming syndicates in which they take turns to travel to Bulawayo or Binga Centre, where they bulk buy sugar for resale to Zambian fish traders for cash. It is not only that they have to supplement their income, it is that they have to access cash somehow and that trading across the border provides them with the opportunity to sell sugar, which is high demand in Zambia for cash, which in turn is in high demand in Zimbabwe. All over Zimbabwe ordinary people are developing strategies to access cash.

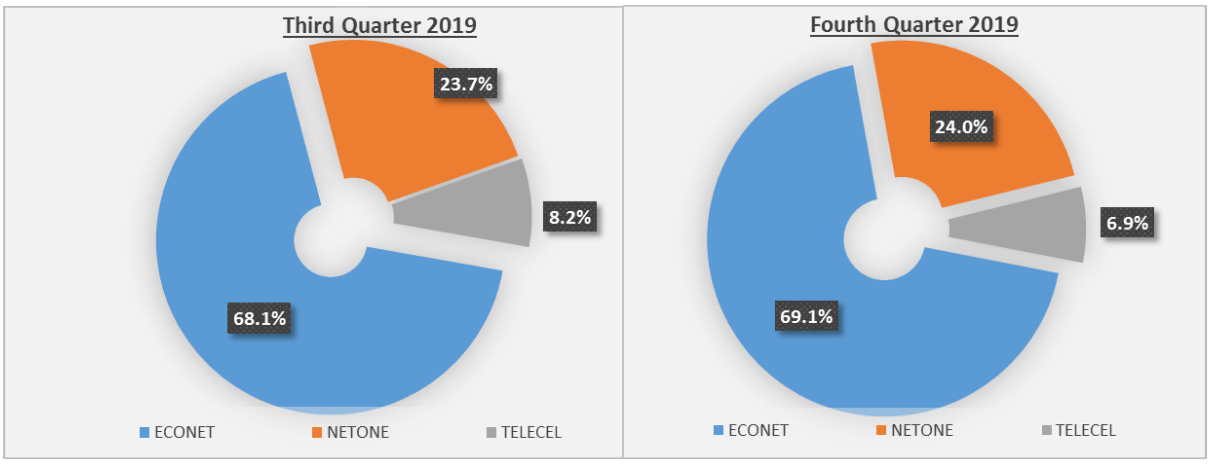
The absence of commercial banks in Binga is in line with observations in the introductory part of this chapter, where I noted that the brief economic history of Zimbabwe affirms that the financial infrastructure follows economic growth. There is little capitalist economic activity happening in Binga. Thus, the absence of banks in Binga District reflects the absence and lack of capacity to sustain a strong economic infrastructure. It is also a reflection of how both the state and capital have avoided Binga.

A significant part of this thesis then deals with the flows of different kinds of monies outside of the commercial and state banking institutions. These institutions do not play an important role in the livelihoods of the persons and households that participated in my research. Rather, other kinds of social and economic institutions play a role in finance, savings, investment and such. It is not that Binga people reject state and commercial banking institutions; theirs is not a resistance. In many ways it does not makes sense for them to participate in these institutions. As I will show, this has implications for people's participation in new forms of monies such as mobile money. A long time ago, Colson noted that Binga people had no universally accepted medium of exchange and that the Tonga preferred dealing in equivalence rather than prices (Colson, 1960; Ncube, 2004). She commented that "… much of the exchange is obligatory, consequent upon institutionalised relationships existing between the parties to the transaction: one has the right to receive and the other obligation to give" (Colson, 1960:21). To this day, kinship plays an important role in the financial lives of many in Binga in the absence of contracts. This is perhaps unsurprising, given how livelihoods depend on agriculture and not on wage labour. Agriculture, as we will see later, is embedded in local relations of kinship and territory (neighbours). It is mediated more by the obligations and expectations that people who are in enduring social relationships have of each other than the dynamics of market exchange and contractual relationships. Thus, and unlike some Zimbabweans who live in cities such as Harare, not all goods and services are exchanged via on-the-spot market exchanges mediated by money and contracts. In Binga, locally produced goods and services – green vegetables, mealie meal, dried fish and piece jobs, for example clearing the fields, building huts/houses, and so forth – are accessed through delayed exchanges between people who often know each other, and thus cannot be typified as typical market exchanges. These exchanges between people in Binga who know each other or know of each other are typically underwritten by social and moral obligations that accompany local formulations of kinship or inform how people who are in long-term relationships relate to each other. Institutionalised examples of such exchanges include obligatory and ritualised gift exchanges, mutual credit and savings systems, and the general sharing and mutuality associated with kinship and neighbourliness.

When it comes to the procurement of goods and services that are not locally produced, people prefer to use state-issued cash. Apart from the locally produced fresh produce and perhaps some meat, most of the items that form part of the average basket of goods and services needed by an average Binga household are manufactured goods bought with cash. These include cooking oil, sugar, salt, flour, tea leaves, and so forth. Most importantly, education is a significant expense incurred by parents with school going children. This is followed by transport costs to access the free health services, and in some instances to buy medication because government hospitals rarely have the most basic medication in stock. People who fail to secure cash from friends and family in the form of a loan have the option to approach local savings groups, which charge them interest rates. In contrast to banks, where interest charged on loans is perceived as the price of the risk of extending loans to customers who may potentially default, in the case of rotational schemes, penultimately, interest charged on loans is a reward for borrowing because proceeds from interest charges are shared as dividends paid out to all group members when the scheme's contribution cycle ends. There are no onerous preconditions to access financial services from the savings groups, for example the requirement to be a registered member of the group. A few of the respondents who were members of rotational savings schemes contributed as little as $2.00 per month typically on a rotational cycle of six to twelve months. The minimum monthly amount that the group contributes is determined by what the poorest member of the group can afford. As savings increase, members can borrow small amounts for short periods of time at variable interest rates. Unlike formal financial institutions, where interest rates are charged in annual percentages determined by the money market, savings schemes negotiate among themselves how much members should repay. Small value loans of around $5.00 attract repayment amounts of $0.50 to $1.00 per month. This works out to a compound rate of 120% to 240% per annum, which may sound excessive, but when the group comes to the end of the cycle, members share the total contributions plus the interest and service charges paid (in the case of banks, income from interest charges become bank revenue not recoverable by customers). How then does mobile money as a relatively new form of money feature in the livelihoods of persons and households in Binga? Before we can answer that question, a central one to this thesis, we need to first discuss the infrastructure required for the emergence of a market in mobile money.

3.11 Binga Mobile Network Infrastructure

Figure 8: Market Share of Mobile Subscribers



Just as is the case with the Zimbabwe mobile money market, Econet Wireless dominates the mobile network in Zimbabwe. According to the POTRAZ (2019) report, the mobile phone penetration rate in Zimbabwe is 91%. What this means is that for every 100 people, 91 have an active mobile phone subscription. The Potraz (2018) report acknowledges that rural areas lag behind urban areas in terms of investment in telecommunications infrastructure. This is affirmed by a study carried out by WFP (2016), which found that mobile network coverage in Binga District was only 50%. The obvious implication is that half the district has no infrastructure for connectivity. Consequently, in the rural areas of Binga, individuals are forced to buy two to three mobile phones or SIM cards, which they constantly switch depending on availability of mobile signal coverage wherever they find themselves. It is not uncommon to find that mobile users have more than one SIM card from different mobile networks that they use depending on the coverage. Another reason for having more than one sim card is the so-called “benefit” of free off-peak calls, which should not be a benefit but should come standard. Mobile networks price their calls such that it is cheaper to call a number listed on the same network than calling a number to another network. Those mobile users who cannot afford the cost of investing in several handsets may have to travel several kilometres to reach areas where there is mobile signal simply to make a call or send a text. Such costs could be seen as yet another transfer of costs associated with poor infrastructure to ordinary users, especially the poor. The mobile companies would not be able to get away with this in urban areas such as Harare, where citizens may mobilise around such an issue, but the rural areas of Binga do not matter to the private mobile companies.

Figure 9: A man holding two mobile phones held together by a rubber band. Mlibizi (April 2016)

3.12 Conclusion

In this chapter I answered the following question: what is the historical context for understanding the monetary infrastructure of Zimbabwe? The brief financial and economic history of Zimbabwe supports the view that infrastructures converge and expand when they pursue similar goals. The reason why the Rhodesian and British monetary infrastructures were once strongly embedded with each other is that the fiscal authorities of both countries were united by a common goal of colonial expansion through exploitation of the country's resources and black labour. Similarly, in Zimbabwe and elsewhere, mobile network operators managed to successfully enrol themselves in the country's digital money infrastructure by pursuing goals and classificatory systems that are similar to banks. The most common categories associated with banks and financial institutions are what I refer to as risk aversion classificatory systems, characterised by the division of citizens into the banked and unbanked. Although it is credible to argue that the sole purpose of the bank risk aversion classificatory systems is fulfilment of their fiduciary responsibilities to depositors. The profit maximisation goal is also at the centre of these practices. When combined, the banking institutions and mobile networks' classificatory schemes and standards, in other words, risk management strategies such as risk aversion and credit worth evaluation, are a source of tension in the sense that they have become a powerful force to include on unfavourable terms or exclude and discriminate against people deemed unbanked. These include the poor, unemployed, elderly, ethnic minorities, the uneducated, and so forth.

Conversely, the chapter provided evidence that poorly aligned classificatory systems, goals and standards can lead to infrastructures disembedding and in the process lead to the creation of new markets, infrastructures or technologies. Another potential source or trigger of new innovations is disadvantages from use of technological artefacts and poor infrastructures. Firstly, the colonial era goal to expand colonialism and promote a racialised economy was heavily contested by the anticolonial liberation movement, which forged the liberation war in pursuance of democracy and a non-racial society. Once in power, early independence fiscal authorities under a black majority government adopted redistributive fiscal policies, including land redistribution and payment of unbudgeted gratuities to ex-combatants. This became a source of conflict with various entities such as the World Bank, holders of capital, and the first two early independence Western-educated RBZ governors, who both attempted to exercise authority as strict bankers to the government.

A more relevant example of infrastructures that disembed due to conflicting standards pertains to notes and coins, specifically, divisibility, portability, durability, homogeneity, recognisability, and so forth (see Jevons, 1910; Lapavitsas, 2005; Naqvi and Southgate, 2013). In recent times, the introduction of digital forms of money curtailed the expansion of the cash infrastructure. This took place through several means, which include rendering the above-mentioned standards redundant, and replacing them with digitised money, which challenges the physicality of cash. This digitisation process has created opportunities for developers of digital money to develop ranking and classificatory systems that are opaque, leading to outcomes and practices that are not yet fully understood and at times masked in poverty alleviation rhetoric and other forms of humanistic euphemism, while aggressively pursuing profit from the most vulnerable segments of society.

All the issuers of money analysed in this chapter have the power to impose their intentions into the country's financial infrastructure, for example colonialism, profit maximisation, racism, redistribution and in some cases outright theft and corruption. Faced with such powerful actors, what do the various users of money do? As Simone (2004) argues, there is power in powerlessness. This was strongly reflected in the currency abandonment and currency discounting. The chapter presents currency abandonment as a three-stage process. The first took place during the late 1990s, but was dominated by capital holders, who offloaded the Zimbabwe dollar on the Zimbabwe money market and stock market. The second phase was the outright rejection of the highly inflationary Zimbabwe dollar as a means of exchange and in the process forcing the government to adopt a multicurrency regime and subsequently dollarise the economy. The third and current one started when the ZANU-PF government introduced a currency known as the Zimbabwe Bond note. This was partially rejected through currency discounting by exchanging it at a rate much lower than the official rate fixed by the government. Thereafter the government discontinued the Bond note and reintroduced the Zimbabwe dollar, which is currently being rejected by Zimbabweans at time of writing the final draft of this thesis (2020).

In the chapter I presented evidence which affirms the fact that, a developed financial infrastructure does not, as argued by World Bank-affiliated scholars, cause economic growth. Instead, it follows economic growth opportunities. The brief account of the colonial and postcolonial monetary infrastructure of Zimbabwe shows that financial development followed the expansion in the agriculture, manufacturing and mining sector in Rhodesia rather than caused it. Similarly, evidence from post-independence Zimbabwe shows that the decline in the country's economic fortunes led to the closure of several financial institutions.

In the concluding part of the chapter, I introduced Binga District. Besides enriching context, it also provided an opportunity to understand the extent to which the district inserted itself in the colonial and post-colonial monetary infrastructure. Furthermore, in the chapter I present evidence that suggests that the discourse about financial inclusion is secondary to economic exclusion. This is supported by an important finding relating to the absence of both the state and market in the provision of various resources and infrastructures analysed. The outcome of this state of neglect is weak public infrastructures, for example, underfunded hospitals and schools, poor housing and social care for the elderly, inadequate management of natural resources and so forth. There is evidence to suggest that the neglect of Binga was not accidental but orchestrated by both the colonial and post-colonial governments of Zimbabwe. Furthermore, deliberate neglect of Binga also points to the marginality of Binga in both spatial and socio-political terms.

In thinking about Binga in relation to Zimbabwe, and its incorporation into the wider world, I found the concept "marginality" to be very productive. Gatzweiler et al. (2011:3) define marginality as "an involuntary position and condition of an individual or group at the margins of social, political, economic, ecological, and biophysical systems, that prevent them from access to resources, assets, services, restraining freedom of choice, preventing the development of capabilities, and eventually causing extreme poverty". I prefer this wider definition of marginality over narrow definitions that treat marginality only in relation to income. Such a wider definition speaks to historical and systematic contributors to marginalisation, poverty and social exclusion.

Chapter 4 of this dissertation I present to the reader a fuller description of Binga, the site for my primary data collection. I employ the concept of marginality to offer not only a description of the area but also as a concept that allows me to think about the ways in which the area has been incorporated into the wider world. In the process I pay attention to long histories of labour migration and continued practices of remitting money, and the relative absence of the state in the region other than through large-scale projects that displaced rural people and dispossessed them of their livelihoods.

In thinking about the marginality of Binga, I make use of the ideas of Anna Tsing (2005), who has written about the role of power asymmetries between centres and margins in the production of human conditions. She conceives of marginality as a site of resistance and argues that there are limits to universalism. I found this useful in examining how the standard neoclassical functions of government-issued money, together with arguments that digital forms of money are beneficial for the poor, play out in the context of Binga. This will, as Li (2007) argues, help to highlight how those who are being governed (in this case, those upon whom new monetary technologies are introduced and in some cases imposed) can complement but at times complicate the goals of those in a position to govern. Day and Papataxiarchis (2000) conceive people in marginalised social positions as empowered enough to enjoy the moment in ways that do not comform to the mainstream, while Shields (2012) argued that something new can come from marginal spaces.

While the above scholars are right to acknowledge the freedom and agency of the powerless, these credible insights may create opportunities to romanticise the concept. In Chapter 4 I draw on it to discuss Binga not as a site of resistance but in relation to the wider world by pointing out its structural position in relation to other parts of Zimbabwe. As I will show later, the marginality that I referred to does not express itself only in material forms. As an area that is described in popular parlance in Zimbabwe as one inhabited by Tonga people, reflecting colonial-era categories and histories, Binga is also situated rather low on what Mashingaidze (2013) has called Zimbabwe's "ethno-socio hierarchies".

In the next chapter I analyse the social infrastructure of Binga, various forms of wealth, additional forms of money, and an examination of the impact that all the resources and infrastructures that have been analysed in this chapter have on livelihood activities and outcomes.

Chapter 4: Households and livelihoods in rural Binga

4.1 Introduction

In this chapter I introduce data on the livelihoods of households that participated in the research. First, I offer a descriptive and analytical discussion of households in Binga region. Households are an important unit of analysis in sustainable livelihoods analysis, given the importance of social relationships of kinship, friendship and neighbourliness in how people engage in agricultural and other livelihood activities. While actor-based approaches have their usefulness in understanding some livelihood activities, households remain an important economic institution and unit of analysis in understanding the livelihoods of people making a living in rural and also urban parts of the world. Moreover, I am interested in understanding how mobile phones come to form a part of the livelihood activities of rural households and persons. This will be addressed more directly in chapter 6.

Secondly, the statistics tell us that subsistence agriculture is the principal way in which rural persons and households in Binga source locally produced fresh food. Therefore, subsistence agriculture is examined. Then I move to a discussion of other sources of income for households and individuals, from hunting to pastoralism to wage labour, trading and smuggling. My aim in this chapter is to provide a descriptive and analytical account of the livelihoods of rural households in Binga. At the end of the chapter, I present case studies that provide further understanding on the domestic household economy of Binga, but more specifically, they partly answer the question about how money and wealth are acquired, stored, and transferred. Lastly, what complications and politics surround the aforementioned monetary activities?

4.2 Binga Households

In Binga, and indeed elsewhere, the household is a very complex social unit that is not fully captured by the standard definitions. Guyer (1981b) has argued that attempts to hold on to definitions of an evolving social phenomenon such as households in Africa miss out on the opportunity to understand its dynamism and complexity. In several African countries, the definition of household was influenced by the UN

Statistical Division (UNSD), which called for the standardisation and streamlining of data collection (Randall et al., 2015). In these documents, the household is defined in two ways. Firstly, it is defined as an arrangement in which one person makes provision for their own food or other essentials for living without combining with any other person to form part of a multi-person household. Secondly, it is a group of two or more persons living together who make common provision for food or other essentials for living (UNSD, 2018). Several countries have had to modify this definition to suit their context by various means, but others have retained the ambiguity of this definition (Randall et al., 2015).

According to Statistics South Africa (SSA), the government department responsible for national statistics in that country, a ‘‘household means a group of people who live together at least four nights a week, eat together and share resources, or a single person who lives alone” (STATS SA, 2018:1). Its counterpart in Zimbabwe, the Zimbabwe National Statistics Agency (ZIMSTAT), defines a household as “a single person or a group of people whether related or not who share the same cooking, eating and living arrangements” (ZIMSTAT, 2018:1). Both definitions are vague in some ways – for example the South African definition talks about “living together” without stating “where” – while in the case of Zimbabwe there is no clarity about what “the same living arrangements” mean. The American and British census authorities provide clarity that in their case “where” and “the same living arrangements” relates to a dwelling, in other words a self-contained unit of accommodation (ONS, 2017). In the next paragraph, I will discuss some of the complexities associated with the demographic and social analysis of households as we try and capture the complexities of “the Binga household”.

Figure 9: Picture of one of my interpreters. The hut behind him is a n'anda.[26] *Zambezi (2018)*

Households are typically about people related to each other in some way sharing some living space and making a living together. Since kinship is the predominant form of relatedness among the households where I worked, we should start with marriage as a primary way in which households are formed. In Binga, marriages tend to be predominantly virilocal. Young men marry in their late teens to early twenties. Once married, the young couple build their *n'anda* (mud and pole rondawel hut) near the husband's parents. Typically, each couple would have one to four of them, made from mud and mopane tree poles or from unkilned clay bricks moulded from empty tins. Only a handful of my research participants had a one- to two-bedroomed house made from brick and mortar and metal or asbestos sheet roofing. The unit of dwellings described herein is headed by a *mutwe wen'anda*[27] (head of the house), who in many cases tends to be a husband living with his wife and children and in some cases may include other dependents, such as orphans or children left in the care of kin after their mothers remarried or when one of their parents migrated to other areas for work

[26] A typical household would have one to four of these, one serving as a kitchen while the rest are used as bedrooms.

[27] In her book about marriage and family among the Tonga in the then Northern Rhodesia, Colson (1958) used the word *Singanda*, instead of *Mutwe Wen'anda*, but her fieldwork was based in Choma, just outside Livingstone which is further away from Binga and the Zambia side Gwembe Valley Tonga.

purposes. As time passes, a conglomeration of household dwellings forms as sons or close cousins get married and set up homes next to their parents' homes. This conglomeration of households is referred to as a *munzi*, but only if the household clusters belong to extensions of the nuclear family. If the households also include other kinsmen, it is referred to as a *gunzi.*

Figure 10: Picture of a Munzi, Binga-Magani (June 2018)

The *munzi* is headed by a *mwani munzi*, who is usually the oldest or senior male member of the family, but in cases where this male member dies, customarily his wife will take over from him. When the *mwani munzi* gets too old, they are compelled to relinquish this responsibility to their oldest son. In this study, over three quarters of households studied were embedded in the residential structure explained above, but there were a few cases of stand-alone households. These belonged to single mothers or young couples who relocated away from their parents houses. One of the common reasons why households may disentangle themselves from the *munzi* to relocate somewhere else is conflict with the *mwani munzi*, who may attempt to exercise disproportionate levels of authority over his married sons.

One of my male participants, married with three wives, emphasised to me that for his family, the *munzi* is the most significant unit. He asserted that the importance of a *mutwe wen'anda* only came about due to the various government food aid programmes, where food relief is distributed to each household (*n'anda*) rather than *munzi*. In this study, most of the *mwani munzi* were not economically active. Ordinarily, the breadwinner would be their children, a younger person with the energy to migrate to towns to work or to local fishing camps. The determining factor for one to become a *mwani munzi* is seniority in terms of age[28], more so than economic productivity.

At the initial stages of this research it was difficult for me to work out the number of households that constitute a *munzi* but, as time went on and I learned more, I could approximate this by counting the number of *katulas* or small grain storage silos that I would observe in a *munzi*, because each belonged to a household. However, there are exceptions to this, such as in the case of polygamous marriages. In such marital arrangements, each wife will have their own *katula* and a separate one for the husband, who in many cases would have the largest one. The reason for this is that, through inheritance, the husband customarily has the biggest piece of land. When it comes to labour to plough, plant, weed and harvest, he simply arranges for the whole *munzi* to come and assist him. When one of the wives finishes her grain supplies, she will approach the husband for replenishment. To be fair to all of them when he distributes the grain, he will give some to all his wives, including the ones who have not exhausted their supplies. These arrangements may vary slightly from *munzi* to *munzi*, but most of the participants in polygamous marriages followed this general practice.

The main responsibility of *mwani munzi* is to take charge of cultural and religious decisions that affect the family. For example, if there is any need for the head of the household to invite a prophet or traditional healer to come to their home for whatever reason, he will have to seek permission from the *mwani munzi*. In some instances, the *mwani munzi* is approached not to seek permission but to inform them about a decision that has already been made. This includes decisions about marriage, in other words, cases where a son wants to get married or to take a second wife. I asked one of my research participants why some young men do not seek permission from the *mwani munzi* before deciding about getting married and he said *"Well, what if they refuse to allow me to get married?"*. Thus, there is a personal sphere in which the individuals' rights to self-determination are unimpeded but there are exceptional situations where a decision to get married may be vetoed by the *mwani munzi* and

[28] Seniority runs from oldest male member of the munzi or gunzi, to oldest female member of the munzi or gunzi

other elders. One example I was given is where the relationship between the bride and groom is so close that by custom, they cannot get married, for example first cousins. The overarching role of the *mwani munzi* is to maintain family unity and address tensions that may arise between different *n'andas*, although, as stated previously, a *mwani munzi* can also be the source of tension and split of the *munzi.*

Typically, a husband tends to be the *mutwe wen'anda* (head of the house), with the responsibility of making economic and financial decisions in consultation with his wife. My research participants who were married men claimed that they consult their wives about how money is spent in the home. In reality, husbands have a dominant say and wives cannot spend money or dispose of assets without the husband's permission. This also works out conversely in that if it is the wife who earned the money or *lubono* (livestock wealth), she will also have overriding control over it. To outside observers, *lubono* is considered to belong to a *munzi* but it is within each individual household that more intimate details regarding ownership are made and known. According to Colson (1958), although the husband, wife and children were considered at the time as a unit in relation to the household that they form, property rights are vested in the individual, rather than the household itself. Similarly, in this study even newly born children have chickens in their own rights. I never came across any case where money and *lubono* are jointly owned by more than one person. Recognition of the notion of joint ownership was reported in divorce cases or where one of the spouses dies or when both parents die and leave *lubono* for the benefit of their minor children. Cattle inherited jointly under such circumstances are referred to as *ng'ombe zyamwenzule*, held in temporary custody of an older relative who can only dispose them for the benefit of the minor dependents, for example selling them to fund their education, family emergencies, and so forth.

As is the case with the rest of Zimbabwe, it is women who do most of the cooking in households I studied. Each *n'anda* cooks separately, but when it comes to eating, members of all the *n'andas* that constitute the *munzi* eat jointly. Wives from each *n'anda* dish out the food and take it to the *mwani munzi's n'anda*, where they sit together and eat. Seating is arranged along seniority and gender lines. Men's eating place is referred to as a *chipala*, while that of women is called a *masuwa*. Typically, the father eats with his younger brother or oldest son while the mother eats with her daughters and daughters-in-law. The young boys and girls follow the same system, whereby those in the same age group eat together but separated by gender. My research participants advised me that this practice solidifies the kinship bond between families. As one traditional healer asserted, "It creates a space where families can also share and solve family problems and, in the process, find each other within the wider family context"[29]. Along the same lines, my interpreter and a village headman further explained that young cousins who grow up following this practice will treat each other as brothers and sisters, to the point that they will not see the individual *n'andas* as separate from each other.

In the above section I analysed the social arena of the household (*n'anda, munzi and gunzi*) and as Ostrom (1990:74) puts it, an arena is a situation in which a particular type of action takes place. In the next section analyse the roles and actions that take place within the context of the household, for example livelihood activities, welfare support, marriage, livestock ownership and sharing of resources. As we will see, much of the livelihood activities and strategies for income generation take place within or are coordinated on some level through the household. As such, it is an important social area through which to explore the incorporation or rejection of both mobile technology and mobile banking.

4.3 Subsistence Agriculture, Hunting and Pastoralist Activities

As I noted before, opportunities for persons in Binge to engage in wage work is minimal. The limited means by which persons can access cash means that persons are not able to access food via markets. This makes persons dependent on their own food production and collection. A local Agricultural Extension Services (Agritex) officer described the soils in Binga as being similar to Kalahari sand but also known as Karoo. This means the soil is acidic and unsuitable for maize, the main staple food of Zimbabwe. Because of poor soils and the low rainfall, farmers who farm communally resort to drought-resistant crops such as sorghum and millet and to a much smaller extent, the growing of cotton as a cash crop. Apart from cotton, these crops are produced strictly for direct consumption purposes or indirectly to purchase small value items such as chickens, goats or in some cases as payment for piece jobs. Payments

[29] Interview with Sanders, held on the 6th of September 2017, in Binga, Mlibizi

made in commodities are converted to their cash equivalent in the local market. At the time of fieldwork, $15 was equivalent to three average-sized chickens. One could also pay using goats ($20 to $30 each) or (four to five) buckets of millet or maize ($4.50 to $6.00 each). Because of prohibitive costs and possibly lack of modern farming knowledge, the farmers I spoke to do not invest in hybrid seeds; instead, they save some of the seeds from the previous year's harvest for future use. Use of fertilisers is also very uncommon. Every season, the government distributes 50 kg of fertiliser per household, but the farmers do not use it. Some smuggle the fertiliser to Zambia, where it is exchanged for five to twelve buckets of maize per bag. Others sell it to local dealers for $2 to $7 for a bag of fertiliser, with a retail price range of $39 to $41. This is yet another strategy people use to access cash. Experienced farmers express a belief that fertiliser damages soil fertility, especially in subsequent years, where fertiliser is not available. Other farmers told me they do not know how to apply it. The three local agricultural extension officers I spoke to about the reported negative link between use of fertiliser and soil fertility were quite dismissive of this claim made by farmers.

Apart from poor agricultural techniques, other factors that contribute to poor harvests are frequent attacks by pests, which, according to a local agricultural extension Officer, include pesticide resistant fall army worm, the high multiplication/reproduction armoured crickets, quelea and weaver birds – all of which attack small grains. The majority of research participants reported that they cannot afford the pesticides required to control these pests, but besides that, there is simply no pesticide to effectively control some of the pests because of the rapid migratory tendencies of for instance weaver and quelea birds. Crop raiding by foraging herbivorous wild animals, hippopotami and elephants were very common, and unfortunately, such animals also attacked people. This particular problem is worsened by the fact that Binga is surrounded by game reserves, which include Hwange National Park, the largest game reserve in Zimbabwe. The park has no peripheral fence and some parts that were fenced originally are now in a state of disrepair, damaged from wear and tear and the livelihoods activities of local villagers that the public authorities describe as "poaching".

Several decades ago, hunting was a principal means of subsistence for rural persons and households in Binga. Earlier studies provide accounts were game nets were observed (Posselt, 1935). This has since changed, and I never came across such hunting entrapments or guns. This has a long history, which can be traced to the implementation of the Game Law Consolidation Ordinance (passed in 1906), prohibiting Africans from hunting in communal areas (Ncube, 2004). The law was put in place to promote good conservation practices by both locals and white settlers, who used to hunt ivory for trade purposes, while some reportedly shot wild animals for the fun of it, especially on the Zambian side of the border (Clements, 1959:163). After this forced shift in their livelihood, hunting was replaced as a main source of livelihood by subsistence agriculture – mainly crop production and cattle rearing, with subsidiary livelihood activities being fishing, vegetable vending, and piece jobs.

Subsistence farming is typically coupled with livestock rearing (sheep, chickens, guinea fowl), but most significantly with goats and cattle. A recent Binga rural livelihoods baseline survey found that households with more than average cattle holdings (six to fifteen) can cultivate a higher crop acreage than those with fewer cattle holdings. As a consequence, those with more cattle tend to be more food secure than the ones who have fewer (WFP, 2016). Besides assisting with food security, certain customary practices require livestock. Disposal of cattle is regulated socially by conflicting interests between husband and wives or other family members (Ferguson, 1985). Men who participated in this study insisted on holding on to and retaining ownership of cattle despite the attendant risks and challenges. At the same time women were more amenable to their disposal in the event of a pressing financial demand. Furthermore, most of the research participants acquired cattle through inheritance, and thus they become a shared asset that cannot be disposed of without the agreement of all interested parties. For most, the politics and social constraints that surround the disposal of cattle in a way acts as a strong incentive to save far more than bank money or mobile money could. Given that cattle play an important role in marriage, the creation of new households, ritual ceremonies and as an important form of wealth, it is not surprising that they are valued, as in other parts of the continent, both materially and symbolically.

Although livestock have a great deal of material and symbolic significance in rural livelihoods, the majority of households that participated in this study owned very few heads of cattle. This is firstly because of widespread poverty levels, but also due to disease. Epidemics have a long history in the region, and Scudder (1962) reported that in 1921 50% of all chickens were wiped out by an unknown disease. Veterinary officers now know the cause to be Newcastle disease. Villagers in and around Chief

Saba, Siatchilaba and Sebungwe areas reported that in recent years their chickens died of this disease. In addition, there have also been reports of goats being lost to rabid dogs. The above problems persist even though the Zimbabwe government has a highly developed support system for crop and livestock development, comprised of Agricultural Extension and Veterinary Officers. Unfortunately, these services are underfunded and poorly managed. I asked about Newcastle disease and rabies cases and was informed that the government did not supply them with the necessary vaccines in 2017 and in cases where they do, not all villagers bring their pets for vaccinations. When government do bring supplies of Newcastle disease vaccinations, they may prove ineffective because of faulty or non-existent refrigeration facilities.

4.4 Mabindauko (piece jobs) and survivalist trading

As noted before, wage labour is very scarce in the Binga region. As a result, people depend on what urban scholars refer to as survivalist (see Rogerson, 1996; Bateman and Chang, 2012; Ferguson, 2015; Meagher, 2015) but the term used in Binga is *mabindauko* (or "piece jobs"). Activities included in the category "piece jobs" are clearing fields, building mud huts, blacksmith, carpentry, selling firewood, weaving mats, selling wild fruits, illicit alcohol (*tototo*), begging and other activities. More specifically, the word is used to describe the dexterity in soliciting and successfully engaging in multiple survivalist livelihoods. Thus, one could say, survivalist is the noun while *mabindauko* is the verb. Typically, *Mabindauko* includes a number of economic activities in order to obtain cash. These activities involve backbreaking work, poor remuneration, are insecure and temporary, often quite dangerous and at times degrading. Research participants in this study simultaneously engaged in at least two to four livelihood activities at the same time or different phases of their life. This is because engaging in only one activity does not fulfil subsistence needs.

Figure 10: Vegetable and wild fruit hawkers, Manjolo (September 2018)

4.5 Pensions, social welfare, subsidies and other forms of state and non-state support

The research participants in this study live a precarious existence, or “hand to mouth” as some of the younger participants put it. The most vulnerable are the disabled, orphaned children and the elderly. To support such vulnerable citizens, the government provides free treatment at all government clinics but most significantly it provides food relief of 50 kg of maize to the elderly and disabled when the summer food reserves are depleted. Typically, this happens between October, or earlier in drought years, and lasts until harvest time, which is April-May. The food relief grant is mired in controversy and accusations of favouritism along political lines. Just before the 2018 elections, there were reports about government workers and other ruling party officials involved in the food distribution asking both recipients and potential recipients of food relief to provide physical proof of their voter registration serial numbers. This was intended to give them the false impression that this empowers the officials to determine whom the registered voters will vote for and if found to have voted for the opposition they would be excluded from future food relief grants.

In addition to food relief, the Zimbabwe government put in place a social protection scheme in the form of monthly cash grants of USD$25.00 for the elderly (over 65), the disabled and people looking after orphans. The funds are delivered by a security company that transports the cash in an armoured vehicle accompanied by armed security guards. On tour would be the Binga council officials, who have the responsibility to disburse the funds to recipients directly. This may seem like an expensive means to remit money, but most elderly recipients do not have mobile phones, so this disbursement excludes the mobile money option. The government does not always make regular payments, sometimes they skip a month and then make double payments on the next disbursement of funds. The variable payment dates cause severe communication and other problems, especially for this segment of society, which does not have access to mobile phones. However, in each location, there is at least one person with a phone and that individual would then inform another recipient nearest to them and spread the word about changes in pay dates through word of mouth. Some recipients are illiterate and unable to sign; they validate receipt of funds using fingerprint signatures. Fortunately, despite all these challenges, there have not been any known cases of illegal deductions being made on the cash grants, as is the case in South Africa where payments are digitised (Vally, 2016b, 2016a).

Given the long history of poverty in the region, several non-governmental organisations are involved in development projects. Increasingly, such development projects also seek to make cash directly available to project beneficiaries. This is part of broader and growing consensus that making cash available to poor people may address their situation better than indirect forms of aid (Barchiesi, 2007; Bähre, 2011; Mettenheim, Fernanda and Lima, 2014; Francese and Prady, 2018). In Binga, the USAID-funded Save the Children (SC) piloted a conditional cash transfer scheme in 2016 (Willis, 2016). The scheme was targeted at households that were assessed and found to be experiencing severe food shortages. Beneficiaries of the SC were selected by the headman and other community volunteers, but during one of the interviews for this study, a husband and his wife and a few of their young neighbours in their twenties complained that headmen and volunteers involved in the assessment process practice favouritism and nepotism.

Nevertheless, this scheme popularised the concept of mobile money much more than local, urban to rural and international remittances did. To expedite the scheme, SC issued mobile money registered Econet wireless SIM cards to all recipients who did not have an EcoCash mobile wallet account before the scheme. However, the main challenge was that people who are experiencing severe food challenges are also the least likely to be able to afford to buy a mobile phone handset.

I asked some people about this scheme, given its relevance to the study. One of the coordinators informed me that SC could have provided beneficiaries with handsets to increase the success of the scheme, but there was a fear that if they did, that would have been misinterpreted by government authorities to be politically motivated. As I shall explain in detail elsewhere, my research participants overcame this challenge by sharing mobile phone handsets, often in the context of the household. Others resorted to bartering a small feature phone with small livestock, or selling small livestock for cash and then using the proceeds to buy a handset from the local shops. Regardless of whether one had access to a handset or not, SC simply transferred the $28 to each recipient. The only condition was that the recipients had to participate in community projects, which included road maintenance and repairing and pumping water into their local cattle dipping tank and so forth. Once the $28 mobile money credit was transferred to them, the recipients approached the mobile money merchants and agents to cash their money. Below I present vignettes and case studies that give some insight into some of the complexities associated with mobile payments and transfers.

At the end of this programme, SC commissioned a MasterCard Center for Inclusive Growth-sponsored study to assess the use and adoption of mobile money. The study corroborated most of this study's findings, in particular concerns about challenges getting to the nearest mobile money agents, the exorbitant fee structure, high levels of digital illiteracy, and so forth (Willis, 2016). However, the report had a few inconsistencies, which may have been due to editorial voices overriding empirical evidence. For example, the author states that one of the factors that enabled uptake and use of mobile money was the "participants' preference for mobile money" (see Willis, 2016:31), and yet at the same time acknowledging in several parts of the report that mobile money was merely a means to an end. For example, 95% of the recipients cashed out their mobile money wallets. 94% of them cited pressure from immediate consumption needs. This observation about immediate cashing of mobile money is also corroborated in the ensuing sections of this thesis.

So, while the state has neglected to invest in and maintain infrastructure in the Region, it does provide some social subsidies. We can expect that in the future, rollout of mobile money will most certainly affect and influence the distribution of pensions and other social subsidies.

4.6 Cattle in marriage, bride wealth and inheritance

In Binga, bridewealth is called *luselo*, commonly referred to as *lobola* in the Zulu, Xhosa and Ndebele languages, which are spoken across southern African. In this context, *lobola* is both a noun (bridewealth) and a verb (to marry), but in Tonga, there are separate words for the two processes: *kukwata* refers to the marriage process, while *luselo* means bridewealth. The main actor who drives the process is a *Sityombo* (or a go-between) (see Thomson, 2005:39). His role is to initiate the marriage process and a *Sityombo* is chosen by the groom and is usually the friend of the bride's father (but there is some flexibility to that; some people choose the groom's family friend). *Kukwata* is comprised of four main stages, first of which is *kumvwamulomo*, which translates to "to be all ears" or "to give audience". The other word is *nchengununa mukosi*. Its literal translation is "to turn the neck", which symbolises a process in which a person turns his head to give attention to people sitting around them so that they can reach consensus or an agreement. In this stage, the S*ityombo* approaches the bride's family to inform them about the groom's intentions to marry. At that stage, if marriage is proscribed for some reason, for example when the two families belong to the same bloodline, or feel that the girl is too young to be married, the marriage process will end there. If all goes well, the second stage, which is called *mvulamulomo* or *bbanunamulomo*, which literally translates to opening one's mouth, commences. This stage signifies that the bride's parents have agreed to open their mouths to expedite the marriage process. At this stage, the bride's family will demand a small fraction of the *luselo* of between $20 and $100. After that, they then proceed to the third stage, where the groom will be allowed to come to the bride's family home for the last marriage process. During this stage, the *luselo* is negotiated between the two families to determine the number of livestock and money that must be paid. The brides' family will try and get the most while the groom's family will attempt to pay less. *Kunjila* is the fourth stage where the groom makes arrangement to come and take his wife from his in-laws. The groom will be expected to pay an additional amount, and therefore many try and avoid this stage by various means which are outside the scope of this research. These four stages should ideally take place over one to four days (not necessarily consecutive) or more if the discussions for each of the stages are not conclusive.

According to Colson (1958) and Thomson (2005), it was possible in "the old days" to pay bridewealth using commodities such as hoes, axes and beards. Today, bridewealth is typically paid in cattle, goats and lastly government-issued money. The latter tends to be a comparatively smaller proportion of the entire bundle of wealth that is transferred between families. Still, I have never come across a case where mobile money was included in this bundle of wealth, despite the cash shortages that the country was experiencing. When asked why, young people just laughed it off as something that is not socially acceptable. It makes sense that mobile money is not acceptable, given how the transfers of wealth between families is often made in the presence of others and involves the transfer of tangible goods. Apart from being a new and perhaps not valued form of wealth, mobile money is not tangible. Moreover, it is not readily convertible into cash, and that is why the seeking out of cash remains an integral part of the livelihood activities of rural persons and households. I can imagine the difficult uncle or the future mother-in-law making quite a scene when the groom and his family arrive not with cash but with mobile money! Conversion between cash and cattle is acceptable when one is paying *luselo*, but only to a limited extent. By conversion here I mean a case where a groom and his family ask for permission to make a cash payment in lieu of cattle, but generally there is a very strong preference for livestock over cash in these exchanges.

In some Southern African studies about *lobola*, scholars found that payment of bridewealth transfers wealth from the young economically active generation to the older generation (bride's parents) (for example Murray, 1977; Ferguson, 1985). In this study I found that during marriage, wealth is typically transferred between the older generations, in other words from the groom's parents to the bride's parents. Firstly, this seems to be the case because young people in Binga marry while in their late teens to early twenties, before they have acquired any livestock. After all, they are typically not engaging in wage labour that would allow them to accumulate cattle via the market. Young men barely have enough opportunities to earn income sufficient to meet their livelihoods needs. To meet the financial demands of *kukwata,* they are forced to depend on their equally poor parents who may however own a few heads of cattle.

However, there is historical evidence to suggest that the transfer of wealth from a younger to an older generation in the course of a marriage may have once been a common feature of the Batonga. In the early nineteenth century, at the onset of the colonial period, when there was a new demand for cheap labour, young men could access the labour market and wages and thus contribute to wealth transfer in marriage. Thus Elizabeth Colson (1960) noted migrant wages and increased household cash income leading to an increase in bridewealth prices and elopement damages. At the time, both Zambian and Zimbabwean Tonga used to seek employment at the coal mining town of Hwange, and several other towns in Zimbabwe and neighbouring countries. In Zimbabwe, I did not come across any recent evidence of similar dynamics, attesting to the generalised stagnant economic situation. The bridewealth transferred by the younger research participants does not differ that much from what their fathers paid when they got married. The story of Household 50, which I tell below, captures these wealth transfer dynamics very succinctly.

Colson (1960) and Scudder (1962) observed that in terms of ownership of large livestock, the scales were tipped in favour of men. I believe this to be partly because of inheritance practices. Inheritance is the most prominent means by which a person acquires *lubono*, but it is equally one of the means that one could be dispossessed of wealth. The two most common means by which *lubono* can be acquired, transferred or lost is through *kukwata* (commonly referred to as *lobola* in Southern Africa), and *kukona lubono*, which corresponds to inheritance of property. Lastly, it can be shared via *mulala cattle*, a form of livestock sharing. I found two types of inheritances practices among people in Binga who call themselves Batonga, namely paternal death inheritance and maternal lived inheritance. In the former, male members of the paternal line are accorded the highest share of the deceased relative's estate. In the latter case, those belonging to the matrilineal line are the beneficiaries, but the inheritance is received while the benefactor is still alive (typically this takes place between a man and his sister's sons). In the section below, where I present case studies, I shed more light on lived inheritance, paternal death inheritance, and wife inheritance.

Research participants who "owed" their in-laws *luselo* told me that at times their wife's parents would send the *Sityombo* to remind them of their debt, but because of lack of jobs and other income opportunities, they simply cannot pay it. To manage *luselo* debt obligations, all they can do is make indeterminate promises to pay. I asked about the possibility of this being perceived as patronising and potentially leading to tensions with the in-laws, but one of the respondents in such a position laughed it off and said it does not affect his relationship with his in-laws at all. This man married two wives. When he married the first wife, he was “charged” *luselo* amounting to $250 payable in cash, two cows and seven goats. He managed to pay all the seven goats and $170, leaving a *luselo* debt amounting to $80 and two cows. For his second marriage, he was supposed to transfer $260 in cash, three cows and six goats, yet so far, he has only transferred $100 and two goats, leaving him with a balance of four goats, $160 and three cows. Despite such “debts”, he reported that he had a cordial relationship with his in-laws. The impression I get about *luselo* debts is that there is no cultural expectation that the whole *luselo* must be paid all at once. It is socially and morally acceptable that a husband can go up to old age before he can finish paying *luselo*, if he does so at all. The worst crime seems to be to deliberately not committing to the traditional channels of marriage more than the transfer of bridewealth itself.

In one study, a researcher argued that *lobola* debts act as some form of informal insurance in rural Zimbabwe, adding that “it explains why bride wealth is not fully transferred at the time of marriage and why it takes a long time to fulfil bride wealth obligations” (Dekker and Hoogeveen, 2002:29). In this study, I never came across any cases where *luselo* debt was explicitly or implicitly relegated to an informal insurance mechanism. In addition, *luselo* was not perceived as payment for rights in children or productive, sexual and reproductive rights in women (for example, Gluckman, 1950). I found that married men in Binga I interviewed talked about the meaning of bridewealth as symbolic of a husband’s love for his wife, a way of showing gratitude and respect for the brides’ family and a commemoration of the creation of strong familial bonds between the two families as part of marriage. Of course, these men did not talk about bridewealth as a tool that buttresses men’s power over women in the household. In some marriage ceremonies, this union of two families is expressly symbolised by a small token payment called *lubanda*. Nevertheless, bride price is one of the most significant lifecycle expenses that a young man incurs in their adult life; thus the partial payment of *luselo* is a practical response to an expense which many cannot afford to pay in full. The debt obligation is believed by some of my participants to help maintain respectful relations between the in-laws and their son in-law, but at the same time, the demand for the immediate repayment of the debt is associated with a breakdown in relations or lack of respect between the son-in-law and his in-laws.

Some of my participants paid *luselo* in full, especially the ones who were employed and got married when the Zimbabwean economy was relatively stable, but this did not signal a break in social ties with their in-laws. Instead, it brought about a sense of pride in both families, and it was something people boasted about explicitly during our interviews. It should become clear that, as many scholars have noted, there is a clear relationship between young men's access to wage labour in a growing economy and the form that bridewealth transfers take.

The men interviewed insisted that discussions about the size of *luselo* transfers are discussed between parents of the grooms and brides, but in reality, it seems the brides' mothers play a secondary role in the decision-making. Firstly, they only get a small fraction of the *luselo*, while the lion's share goes to husband, in other words, the father of the bride. In some of the cases I looked at, wives received no more than one cow while the rest is taken by the husband. One man said to me, *"hanti yimi engilala pezu kombedha"*, which literally translates to "Isn't it I who sleeps at the head of the bed?", which I took to be a reference to his patriarchal position as a man who is the head of the family. Some men expressed the view that it is only fair that a husband gets the lion's share, because when they marry, wealth is transferred from the husband to his in-laws, not the other way around. This raises an important point. The question of why husbands get a bigger share of bridewealth cannot be sufficiently answered without first questioning the cultural precedence whereby men pay the bridewealth and not women. I suggested to two young people whom I gave a lift from Mankobole to Siansyundu in 2018 that perhaps it is because the women bear children for the men, and they reminded me that in Batonga society, children's descent is calculated by the maternal line, implying that it is the father or husband who would be contributing a child to her family. One male teacher told me that it is "outsiders" who came up with such arguments about inequality between men and women in marriage. He held the view that the wealth that a husband receives is not solely for his own benefit at the exclusion of his household, and that the cultural roles of husbands and wives in the marriage process are equally important and cannot be judged on the basis of material wealth and its transfers. On the other hand, wives did not seem to question this practice, adding that it is part of their "culture" but, as I stated in the methodology section to this thesis, I had very limited opportunities to interview women on their own in situations where they could speak freely and openly about such topics.

In this section, I discussed cattle, a primary form of wealth in the households I examined in rural Binga. People can access cattle on the market, but cattle are exchanged between people and social groups in very circumscribed ways on special occasions. Of particular importance in my discussion was the transfer of cattle between families and generations through marriage and inheritance. I showed that cattle are in some circumstances valued even more than cash. It is also a form of social wealth in that while individuals own the cattle in some way, people are related to each other and live together in a household can lay claim to cattle and their products. I showed that it is not acceptable to use mobile money to be a substitute for cash in bridewealth transfers, showing in the process the way in which people mark off and domesticate different kinds of monies and wealth in their livelihood activities. Cattle are also a tangible form of wealth and in that far more like cash than mobile money, which is another reason why mobile money is unsuitable for social and ritual purposes and in ceremonies that are public and deeply social – mobile money is not considered social money (yet). Cattle and cows and chickens and cash can be counted and displayed in public; mobile money is intangible, hidden in a device like money in a wallet and digital, not tangible and public. I also showed how cattle have become more valued than cash during bridewealth transfer, and that is most likely linked to the decline in wage opportunities, a decline in the inflow of cash to the region, and the general cash shortage experienced in the country over the past two decades.

4.7 Livestock ownership, exchange and sharing

In the context of where I did my field research, people used the word *lubono* when speaking about personal, household and social wealth, assets or possessions. I specifically asked my research participants the category of wealth that the fish in Zambezi river belong to, and they all reiterated that it is still *lubono*, but the word is often used in reference to livestock, in particular cattle or *ng'ombe*. Research participants highly regard cattle possession for its use, value, prestige, and a form of social wealth valuable beyond the household. This echoes what Ferguson (1985) wrote about cattle in Lesotho as a form of social wealth – the various ways by which this was achieved will be analysed in more detail in the following sections. In addition to being seen as wealth, *ng'ombe* can also be considered as a form of money in the way that historians and anthropologists have approached the topic (see Comaroff &

Comaroff, 1990; Ferguson, 1985; Hutchinson, 1992; Shipton, 1989 and others on cattle and commodity money). Several decades ago, Scudder (1962) asserted that among Tonga society and economy, cattle function as a durable form of capital. While cattle may have functioned less as a form of money – especially as a store of value – during times when there were more wage labour opportunities, it seems as if the current economic crisis, as well as the deepening hunger and increasing poverty levels in Binga, has meant that cattle are again valued as a store of value.

When she did her research, Colson (1960:48) found that men owned more livestock than women, but she suspected that women might have concealed ownership of livestock. Based on my observations, men or husbands certainly owned more cattle than women or wives. However, this also has to do with the type of livestock owned and the general gendered rules for ownership and use. Based on my observations, women own more of the smaller livestock, and these tend to be, like small change, less noticeable. When I asked about ownership and control of cattle, a male informant said, *"On record the cattle belong to me, but they belong to both of us"*. By this, he meant that the benefits of owning livestock accrue to the entire household, including the wife and other members of the household, and may in fact extend to the extended family and community as a whole. This is the main reason for why we can say that cattle are a form of social wealth; its ownership and especially the benefits of ownership are shared widely. However, in practice men tend to have dominant control over large livestock.

I learnt that both cattle and children are considered as *lubono*, but the latter was largely accepted as *lubono* by research participants who did not have cattle, which happens to be a highly valued symbol of *lubono*. The notion of "people as wealth" or "wealth in people" is well known in anthropology and its conceptual origins are acknowledged in Bohannan's (1955) paper, in which he put slaves and women at the top of the hierarchy of value. In the literature I consulted, this notion seems to speak to the direct and indirect forms of control over people (kin, followers) and its use as a mode of production and accumulation (Guyer, 1995; Guyer and Eno Belinga, 1995). Historians may find that this notion could have been applicable in Binga during the late nineteenth century when there was a time slave trade between the Tonga and Portuguese (see Ncube, 2004). However, based on my observations, the conception of children or other kin as wealth does not emphasise direct and indirect forms of control but rather emphasises the expectation of support and sharing of limited resources within the context of a strong kinship system. The absence of this notion in the historical and anthropological literature on the region and the Batonga may also be related to the alleged lack of centralised political authority and strong cultural preference for autonomy. Perhaps this notion remained as a political possibility but was not developed, given the way in which political power and leadership office was decentralised and dispersed across the region.

In my interpretation of research participants who spoke to me about this idea of children forming part of *lubono*, and who said that they had nothing besides their children, were alluding to the strong cultural obligation for children to look after their parents in old age. Their children were, so to speak, their informal insurance system and pension fund. Elderly parents are usually surrounded by their married sons and their son's wives. All of them provide social, nutritional and physical health support to elderly parents, including toileting, bathing, attending hospital appointments and ensuring that they have adequate shelter. The meal-sharing practice examined in the previous section creates an opportunity for the needs of those who are comparatively less able to provide for themselves, particularly the *mwani munzi*, to be assessed and catered for by younger members of the *munzi.* In the absence of a private healthcare system that people can access on the market, and given the failure of state institutions to provide these kinds of support, persons and households in Binga are very dependent on their family members and the household.

For those not fortunate enough to acquire any *livestock* through the market or inheritance or *luselo,* there are other means to access cattle, and this is through sharing and loaning (*mulala* is a type of livestock loan system). Here it is important to note that cattle are also valued for the role they play in food production, especially agriculture. Cattle sharing typically takes place where a household or a person owns only one or two oxen, which may not be enough to till the land. Pulling a plough requires the draught power of usually two spans made up of two pairs of yoked oxen. So, if there are two *n'andas* with just two oxen each, they can team up to take turns to plough each other's fields. Closely associated with the above sharing tradition is the *mulala* cattle loan system, which is typically practised between close relatives such as between an uncle (*sekhulu or siyanene*) and his nephew (*mzikhulu*). To my knowledge, the practice takes two forms. Firstly, typically *sekhulu* would loan one cow to his *mzikhulu*, and after a few years *mzikhulu* is expected to return all the cattle that may have multiplied from the loaned one but will keep one for himself. In the second example, *sekhulu* will again loan one cow, and after a few years *mzikhulu* will be expected to return one cow but keep the rest of the cattle that would have accrued from the first one. Both systems have characteristics of a gift and loan all rolled into one. This practice is relatable to *mafisa* cattle mentioned elsewhere in the literature (see Ferguson, 1985; Guyer, 1981; O'Laughlin, 1998). The *mafisa* system involves a type of livestock loan, usually between the chief or rich people who loan their cattle to poorer families. The borrower is expected to look after the cattle and, in turn, may benefit from the milk and use the cattle to till their fields. Because the cattle must be returned to the owner, they cannot be used for *lobola* or converted to cash. This practice typically results in the formation of patron-client relationships. *Mafisa* cattle differ from *mulala* cattle in that, as explained earlier, *mulala* has characteristics of both a loan and a gift. Also, the temporary exchange of *mulala* cattle does not necessarily take place between people who belong do different social status that then produces patron-client relationships. In Binga, there is relatively little inequality, and status differentiation is not much developed; most people are poor. As such, *mulala* cattle is exchanged not only between relatives but also between the poor. This is affirmed by some elderly research participants who said that when they were growing up, people who were considered to be rich had less than two to three cattle. In my observations, this has not changed much: more than half of the respondents did not have any cattle. A few owned between two and seven heads of cattle, while the highest incidence of cattle ownership I recorded was 30 and 24 respectively (one of whom was a chief).

In addition to the above four main means to acquire or gain access to cattle – inheritance, *luselo, sharing* and *mulala* – the fifth means would be by upward conversion through exchange. Such exchanges involve converting an item or object of low value into an item or object of higher value (this could be a piece of goods but also a service). Such practices of conversions have been documented in the literature (see Bohannan, 1955; Dyer, 1989; Sillitoe, 2006) and is typically discussed in conjunction with the notion of 'spheres of exchange', which refers to locally organised and ranked spheres of value in which objects and people can be ranked and converted. Indeed, in my research I found that the aim for most persons and households in Binga is to convert small livestock into large livestock. To convert a chicken to a goat, a person would simply spread the word that they have a chicken or chickens available and those in need of chickens would likewise spread the word. As a matter of fact, during my fieldwork, I relied on the same method to obtain chickens or a goat. In this way, those in need of chickens are connected to those wanting to dispose of chickens. The exchange can take the form of a market exchange where people then transact as buyers and sellers, or some other form of exchange can be entered into. People can convert a number of chickens into goats in this manner, or save up the money they obtained for several chickens in order to acquire a goat.

The reason why people acquired large livestock through this means is that they are poor. This reality impressed itself upon me in many ways during my fieldwork and was also expressed by research participants. A young man, Damian, who at the time (2016) was 24 years old, responded to my question about whether he owns any cattle by saying: “I don’t even have a chicken, what more of cattle”, noting “ifirst grade yinkukhu and I don’t even have that”. What he means was that the first phase of acquiring cattle is owning a chicken and that he does not even have a chicken. His reply hinted at this practice of conversion through savings and investment in that most persons start off by buying small livestock, which are cheaper and multiply faster, before moving on to acquire larger and more expensive livestock. Once you own enough small livestock, you can sell them and then purchase larger livestock. During my time in Binga, a goat could be sold for $25 to $30 each[30], or eight to ten goats could be exchanged for a heifer. Thus, the investment in small livestock is a means to the ultimate goal of owning cattle, which are not only a social form of wealth but also an interest-bearing asset[31]. Those persons who do not have access to savings or credit in the form of cash can be arranged for partial payment and delayed acquisition. Those persons with access to financial products and services can pre-fund the acquisition of expensive assets through loans, overdrafts, and so forth. In addition to their upward

[30] This was equivalent to R250 to R300 South African Rands (based on 2017-2018 exchange rate).

[31] According to the local veterinary officer at Sianzyundu business centre, heifers can start reproducing at the age of 18-24 months and then two-yearly thereafter. Therefore, based on an average life expectancy of fifteen years, cows can reproduce six to seven times in a lifetime. If one assumes that half of these will be heifers a single cow can contribute upwards of 30 cattle overall.

conversion as a gradual means to acquire large livestock, small livestock are a source of protein. Most importantly, though, they are a source of liquidity for villagers in Binga. The sight of a man walking along the main road leading to Mlibizi and Sianzyundu Business Centre dragging a terrified goat tied to a rope is a very common one; the goats are sold for cash, which is in turn used to pay school fees and groceries at the local shops. By now, it should become clearer why mobile money does not feature largely in the monetary practices of persons and households in rural Binga.

For the rural people in Binga, human life is contingent on that of livestock and particularly large livestock. Despite the multitude of problems and complexities associated with rearing livestock, without oxen, people would not have the necessary draft power to till the land, transport heavy goods or obtain manure for their sandy soils. As mentioned, cows are also valued for their capacity to reproduce. When asked about his views on the risk of cattle dying from diseases and drought, one male participant responded by asking me if I worry about my own death because of the risk of drought and diseases, hinting at the dependence of humans on cattle in rural Binga. When I asked the same question to another research participant who works as a waiter at a local hotel he said in Ndebele: *"Ingafa iyatatwa ngomlomo*". This translates into "If my cow dies, it won't go to waste, I will eat it". The practice of making sure that cattle and other livestock never "go to waste" when they die of whatever cause seems to be very common in the whole of Zimbabwe. This kind of valuation of cattle, and its juxtaposition to how for example settlers valued cattle, was captured in the title of a historical study (Mwatwara & Swart 2015): "If our cattle die, we eat them but these white people bury and burn them!". Scoones (1992) also found that it was customary for Zimbabweans not to allow carcasses of their cattle to go to waste regardless of the risks.

4.8 Case study about the fragility of livelihoods: Linda and Samuli

In this section and the next I want not only to add some real characters to the livelihood discussion so far, but I also want to show how the various activities, social obligations, relationships and practices combine and converge within the context of the social arena of the household and local kinship systems. To put human faces to the fragile but rather abstract livelihoods I have been discussing to this point, I introduce Linda and Samuli both of whom are heads of households. Linda reported to me in 2016 that she was married to Samuli, but in 2017, she told me that she was in fact divorced. Over time, I got the sense that their relationship status is ambiguous and known only to those close to them. These two characters also complete the narrative of arrival recounted in the first chapter. The reader will remember the uniformed policeman sitting next to me on the bus and his story of a traumatic accident in which several cattle traders and cattle perished while on their way to the abattoir in Bulawayo. The only survivor of the horrible accident was Samuli, whom I finally met on the 20th of September in 2017. He told me he was born in 1971, that he was married to three wives and that he had fathered ten children, six of whom were under the age of eighteen. He told me he was educated up to O Level, yet claimed he did not write his O Level examinations because his parents could not afford the fees. Linda, on the other hand, was born in 1978, and gave birth to two children, with the youngest around three years when I first met her in 2016. The older one she told me worked in Victoria Falls as a cattle herder.

During our first interview in 2016, Linda was distraught about the accident which Samuli survived with his life. She seemed to be at a loss about how she was going to survive without his support. Her earnings as a wild fruit seller at the time were not enough to survive on. She used to sell one to six cups of Nyi (Berchemia discolour) perhaps two to three times per week at R5 or approximately US$0.50 per portion of teacup-sized container. She could typically trade only between one and three months in the year, spread out across the year, this worked out to about $2 to $3 per month. She did not have any savings or assets to help her cope with the financial shock that came with the accident and Samuli's resulting loss of income and ability to work. When asked, she told me that she has rights to use six head of cattle, all of which are shared with her siblings who live nearby. The children inherited the cattle from their father who died in 2001. Although Linda is the oldest, she told me the cattle are registered with the local veterinary authorities in her brother's name. Her brother cannot sell these cattle without the consent of the others. The last time they sold some cattle, three of them to be precise, was when the family had to raise college fees for her younger sister who was to enrol for teacher training in Bulawayo. Since her sister had since completed her training, there was no need for the children to sell any more cattle, because as a newly qualified teacher, she now has the obligation to fund the educational needs of her younger brother, who is currently in secondary school. Linda told the me that she owned four goats, which she said are registered in her own name because she received them as a gift from her ex-husband Samuli. The only time she reported selling one goat was to buy a mobile phone. At the time of her then husband's accident, they were fewer than four in total.

Samuli, the most reluctant of all my research participants, was very sceptical about my presence and questions. I had difficulty in getting him to respond to routine questions. Over time, he relaxed and became comfortable with my presence and my questions. I first met him at his *munzi* in Mankobole, which is located about 10 km away from Linda's home. His *munzi* is dotted with several *n'andas*, but he also has a brick and mortar three-bedroomed house, which he claimed to have built within three months; in other words, quite fast. To achieve that, he had had to save money from "piece jobs" for well over twelve months. Additionally, he also made his own bricks, bought the building material himself, and then hired a local builder whom he paid in cash for putting the house together. He has a bicycle, which he said was bought for him by his nephew as a gift. Another asset, the plough, be bought with cash he earned from piece jobs. He told the me that he owned nineteen heads of cattle and claimed he accessed the cash to do so through doing "piece jobs". However, a fish trader informed me that Samuli was once a well-known fisherman and used to sell fish in comparatively large volumes. Others I spoke to suspected that he owned far more cattle than the nineteen he spoke about in the interview. In an environment of deep impoverishment and hunger, and where demands on wealth, especially social wealth such as cattle, can legitimately be made by members of the extended family and broader community, it is perhaps not surprising if Samuli underplayed his ownership of cattle. Perhaps that was also the reason why he felt uncomfortable about the questions I was asking; in Binga, the ownership of social forms of wealth could lay you bare to claims, jealousy and even accusations of witchcraft. He told me that he had acquired the first three heads of cattle through income he earned from "piece jobs" and selling fish. The goats he purchased for $5 each through money earned from "piece jobs". When he got married, he claimed, he paid a total of six heads of cattle as part of lobola payment (in today's terms that would come to US$2400). On the whole, he maintained a very secretive demeanour about his monetary affairs, far more than any of the other participants.

Samuli and I talked about his 2016 accident at Gwai River Bridge, but he could not remember much from the accident. He told me that an ambulance was called and it transported him to a private hospital in Hwange (about 100 km away), where he was admitted and treated for two weeks, and for that, the hospital charged him US$2500. Asked why he was not transferred to a government hospital, he explained that by law, the ambulance had to take him to the nearest hospital. After those two weeks, he was eventually transferred to a government hospital in Bulawayo, where he was an inpatient for two months and two weeks. The hospital charged him US$2 500, but at the time of our interview, he still owed the hospital up to $1700, an amount he is unable to settle.

Samuli also told me that when he was in the government hospital in Bulawayo, several people in the beds around him passed away. He claimed that these patients died possibly because they were unable to afford the medication. On some level, we do not need to know the facts to know that poverty is a harsh reality for most persons and households in Binga. Nevertheless, what he described was difficult to hear. He also said that when he was admitted to the hospital after the accident, his injuries were such that he could not partake in treatment decisions. As a result, his parents made all the decisions about his treatment. They were left with no other choice but to sell some of his cattle to pay for his treatment. At the time of the interview, Samuli was trying to get back on his feet to work and generate an income, but was struggling financially and with body impairment as he now walked with a limp. What his story tells us is not only how decisions are made concerning the market exchange of cattle but also how cattle serve as a form of savings that can be called upon in a moment of crisis. In the same way that state money is held in an account that only the owner of the account has access to, at least in theory, similarly, cattle cannot be disposed of without the consent of the owners except in very specific circumstances.

Since she could no longer depend on Samuli’s support, Linda had to diversify her income and decided to shift from selling *Nyi* to other *mabindauko*. She started traveling to Victoria Falls, where she would purchase *mucheka* or *chitenge* cloth that women commonly wrap around their waist as they do household work. A single unit cost about $1.00 in Victoria Falls, and in Binga she is able to exchange a piece of cloth for two small chickens or one large one. She would then transport the chickens to Victoria Falls by bus at the cost of $17 plus shipping costs of $3 per cage (which stores 16 to

20 chickens). In Victoria Falls, she would sell the chickens for between $5 and $7 depending on size. On her return trip to Binga, she buys 25-litre plastic containers, a valued commodity in rural areas where they are used to ferry water from the boreholes to homes. Linda herself walks between four and five kilometres with a container when she is fetching water for the household.

In Victoria Falls, Linda buys these containers for $2.50, and in Binga, she sells them for double ($5.00) or exchanges one for a chicken. To transport six empty containers from Victoria Falls to Binga, the bus company charges her $2.00 in cash or $3.00 (if paid using mobile money). In Victoria Falls, she does not have accommodation costs because she stays at her sister's house who does not charge her anything. However, she has other charges. Before she can sell her wares, the Victoria Falls Town Council charges her $4.00 for a vending license fee for the duration of her typical one-week stay in town. Some of her fellow traders who are not fortunate enough to have family or friends in Victoria Falls are forced to sleep in the open at the marketplace. The City Council has stringent monitoring systems to collect fees from traders, yet they do not offer any kind of support for traders in return. The market space itself and its infrastructure are not maintained regularly. Linda told me that she sells her products out in the open sun in a spot where there are no toilets, no washing facilities and no waste disposal facilities. Based on what she told me, the relationship between the public authorities and small traders seems to be extractive rather than supportive or enabling. Street traders are treated as a source of income for the Town Council rather than as providers of public goods and services. As I show in a following encounter, the same is true of the relationship between the fishermen of the Zambezi and the Parks and Wildlife Services. Be that as it may, I wanted to know from her how much money she makes in the process of making all these return trips between Binga and Victoria Falls. She informed me that the number of trips she makes depends on long it takes for her to sell all of her stock, which she carries on her head walking from village to village. Feeding the chicks bring additional expense and labour. At times she exchanges chicken feed for *chitenges* so that they can gain more weight and get a higher selling price. But at other times, she has to deal with losses when chicks die from disease.

Although Samuli was not active at the time of our interview, his main income turned out to be cattle trading. He eventually explained to me how it works. Typically, he would buy small heifers, which he would exchange for a much larger/heavier ox which he would, in turn, sell at the abattoir in Bulawayo. He explained, again reluctantly, that he would rather buy the heifers for cash than buy them on credit. Nevertheless, at times he could buy them on credit from sellers who extend him credit because of his experience as a cattle trader and because they know him, have had previous dealings with him and trust his ability to repay. Once he has exchanged the heifer he bought on credit and made his trip to the abattoir to sell it, he would promptly repay the outstanding amount to the person he owes. He gave me an account of his last transaction, where he bought a heifer for $250, which he exchanged for an ox but had to pay $80.00 on top before selling it at the abattoir for $650.00. When I asked him if this means that heifers have a low market value, he explained that heifers have a high reproductive value in rural areas, while large oxen have a higher market value in urban areas. Typically, in each truckload of cattle he would take to the abattoir, he would have three to four heads of cattle for sale in Bulawayo. After receiving payment, he would at times have in his possession cash amounting to $2600. When I asked him whether he has ever transferred any property livestock to someone else, he said he has only ever given cattle way as part of lobola. When I shared with him the knowledge I had gained from previous interviews regarding *mulala* cattle, whereby uncles could transfer cattle mostly to younger relatives, he explained that according to his knowledge this only happens with specific types of cattle namely *ezemuzi*[32], cattle owned by more than one person which was obtained through inheritance or as gifts from kinsmen which are meant for use by the whole family. In other words, some cattle are more “socially owned” than other cattle. As a cattle trader and businessman, he approached cattle more as privately-owned commodities than as socially owned forms of wealth.

What does Samuli use the profits he makes in cattle trading on? At the time of our interview, Samuli said he was paying a total of $270 per year in primary and secondary school fees for his school-going children. He also noted that he owed the school $90.00 and that he remains indebted to the government hospital by $1700, an amount which he said he has unlikely ever to pay. When I asked him whether he or the police

[32] In Tonga, such cattle are referred to as *ng’ombe zyamwenzule.* This was discussed in detail in the previous chapter.

who attended the accident made any attempt to approach the motor vehicle insurance company for the transporter for compensation, he said nobody did. He could not be persuaded to travel back to Bulawayo to make enquiries about this, not only because of the expense involved but also because of his lack of knowledge about the insurers and how it may work.

By 2018, Linda was facing severe hunger. During all of 2018, she had managed to harvest only five buckets of millet from her fields, and these were now depleted. She was forced to start using cash to purchase mealie meal from the local shops and grinding mill owners. She attributed the poor harvest to treatment-resistant pests that she failed to control. She had bought some pesticides from the local Agritex officer[33], but that did not work. She struggled to pay for her other expenses. She had next to no savings and was increasingly living from hand to mouth. She was paying school fees for her son and her sister's daughter, which came to $19 and $13 every term. For medical care and treatment, she would make use of the local clinic where she could receive treatment for free. For any medical service at the main district hospital in Binga, she needed to pay cash up front. In an emergency, she had the option to approach one of the local savings clubs and workgroups, which she said are referred to as *tubunga* (a Tonga word for groups), for a loan. The members of these groups collectively pool money earned from "piece jobs" or other means by each making small contributions. Very autonomous, these groups are not supported by the government or NGOs but are run and managed by members. Linda explained that her most demanding need revolved around food: cooking oil, salt, snacks for school kids, fish and vegetables. She typically paid $1 for between six and seven small fish, or a cup of carpenter fish. She would also pay $1 for vegetables. Being divorced and not receiving any support from Samuli, she was struggling to make ends meet.

As stated previously, the notion of "wealth in people" in Binga does not refer to social stratification, centralised political authority or a leader amassing followers through cultivating patron-client relationships. People in Binga are very dependent on each other, specifically family and those who share in and make lives together in the context

[33] The government does not sell animal vaccines or pesticides to communal farmers, therefore this was a private business run by the government-employed agricultural extension officer.

of the social arena of the household. Exchanges of various sorts are crucial to the livelihoods of persons and households in rural Binga. Some assets are acquired through gift exchanges with relatives, while other assets are acquired through market exchange. Marriages are important social and economic processes, and the wealth that is exchanged between families on the occasion of marriage could be a substantial addition or expense to a household's economic situation. Similarly, wealth passed down from generations through inheritance of cattle constitute an important form of wealth for children, who can draw upon such wealth to invest in the education of their own children or to use as a buffer against shocks and in the case of emergencies. Costs relating to medical care and treatment are substantial, a medical emergency can literally plunge a household into poverty. Likewise, as Linda's example shows, divorce and the loss of income could bring poverty to one's doorstep. People in Binga are very dependent on each other, on the weather and their fields, and on the animals they own and live with. Cattle have particular importance, as I demonstrated above. Above all, the support one obtains and can draw on from relatives and family members constitute the real wealth for people's survival. As was demonstrated in the case above, Samuli acquired an asset from a cousin; Linda could make her trading work because she was able to access free accommodation by her sister who lives in Victoria Falls. The case also shows the extractive relationship between the state and its poor citizens through the exorbitant licensing fees imposed on traders for no return in basic services. The poor public infrastructure has a negative impact on livelihoods, particularly the inadequate healthcare provisions and road infrastructure. Both Samuli and Linda are people who work hard, who have developed knowledge of commodities and price differentials between urban and rural contexts, and who are willing to travel and work hard to make ends meet. Some scholars may even try to conceptualise them as "microentrepreneurs", not only romanticising their hard work in the process but also disregarding the serious structural drivers of poverty they are exposed to.

In the next two sections discuss other forms of livelihood activities and link this to a discussion about public infrastructure. Thus far in my discussion I have not paid much attention to the role of money and mobile money in the livelihoods of persons and households in Binga. This will be discussed in detail in chapter 5.

4.9 Case study about intergenerational transfer of wealth and lived inheritance: Chief Nonah

Chief Nonah, who I interviewed at his homestead on the 30th of October 2018, told me that he was born in 1968. He inherited the office of the chieftainship from his nephew, who died in 2010. As is often the case, there was a protracted dispute and conflict over who should rightfully succeed the late chief (see Ncube 2016). As a consequence, Nonah was installed as chief only in 2016, a mere two years prior to our interview. I was introduced to him by the headmaster of a local school with whom I became friends in 2016. For some time, my new friend acted as my research assistant, and he had arranged for the interview with Chief Nonah. After some time, I came to learn that my headmaster friend had had other reasons for assisting me, over and above friendship. My friend, I subsequently learnt, had political ambitions and did not disclose to me at the time that he was also campaigning to be a Binga MP under a ZANU-PF ticket for the 2018 general elections. Offering to assist me in the interview, and driving him the 30 km to where the Chief was based, was not entirely altruistic on his part; this was part of his canvassing. This also explained why, during the interview, he kept on answering some of the questions on behalf of the Chief while his supposed role was to address these questions to the Chief. At some points during the interview, he decided that certain questions were not appropriate to be directed to the Chief, especially those relating to his financial affairs.

Despite this, I was informed that Chief Nonah owned twenty-five heads of cattle, the highest amount of all those he interviewed. I was informed that this relatively large head started off as two heifers, which were given to him by his maternal uncle when he was a young man. After several years, the story I was told went, Nonah, in turn, followed the same procedure and gave his five nephews (his sisters' sons) one cow each. In this way, the Chief told the familiar story about upward conversion that everyone in Binga is familiar with, thus showing that he is not apart from the people, but part of them. He was emphasising a shared fate with the people; not distance but proximity.

When I asked whether there are any cases where those who receive cattle refuse or are not able to give cattle in return, he explained that there is a societal and family obligation for one that receives also to give. Failure to do so will cause disharmony in the extended family and elders will continuously put pressure on younger relatives to uphold such societal obligations, especially in relation to a man's sisters' children. After the initial interview, I met the chief on several other occasions, where the interviews became less formal but focused on some aspects that I might have been missed in previous interactions. Once, for example, I asked him about why he gifted cattle only to his sister's sons and not their daughters, and his response was that he was merely "following custom", adding that gifting to his nieces would lead to wealth flowing outside the realm of kinsman or close family. In all my other interviews I never came across any cases where the "lived inheritance" was ever passed to the female line. As to Chief Nonah's gift to his nephews, Nonah's sisters would only benefit indirectly through their sons if the sons end up looking after her in old age, which, as I explained earlier, happens often enough.

4.10 Case study on paternal inheritances: Misozi

What is known as "death inheritance" in Binga forms part of the patriarchal system of power of men designated as heads of households and the patrilineal descent reckoning, while also tied to what is known as "wife inheritance" (*kunjila munganda yasikufwa*). The case of Misozi, who sadly passed in 2019 while I was writing this dissertation, speaks to these matters. At the time of our meeting, I guessed Misozi to be anywhere between 80 and 90 years of age. She was the mother of the head of household, and I had a formal recorded interview with her on the 17th of February 2018. Thereafter, we met several times at least twice every month for the duration of my stay in Binga. Although she was the oldest of my research participants, her memory was very sharp. I realised this early on because she would reprimand me for asking her the same questions more than once. At times during interviews, I did so accidentally, and at other times I did deliberately to signal to my research participants that the question or topic was important and that I needed a more in-depth response.

Misozi was widowed at a young age many years ago. She did not have any assets in her name but a small mud and pole hut which her grandson built through a contractor for $40.00. When I asked her whether she inherited money, cattle or other assets when her husband died several years ago, she replied that all her husband's cattle were taken away from her by his relatives even though at the time she had three young children who needed to be looked after. As a result, all three ended up not attending school. Her husband's estate was shared by some of his relatives, including his father, paternal uncles and brothers at the complete exclusion of her – a wife and mother of three children. However, as I stated earlier, at the time, there were cultural provisions put in place to make sure that the young widow was not left to fend for herself. Her family and the family of her deceased husband arranged for her to marry her late husband's younger brother, who, by custom, was expected to treat his brother's children as his own. I asked her if she had a choice on whom to marry, and she said culturally, all this was arranged by the parents. Such a lack of consultation and autonomous decision-making in such an important life decision was not new to her. She, like most Batonga woman of her time, went through a similar process when she first got married to her late husband. She did not show any bitterness about the marriage procedure or loss of *lubono* that she could have inherited. She merely said in resignation, "That's how things were at the time". She went on to birth more children with her brother-in-law who was also her second husband, but after several years together she divorced him; at the time he had also married another woman of his own choosing. After his marriage, she observed that his love for her was changing for the worse, so she moved out and found a home with her daughter[34].

[34] The post-independence Zimbabwe government put in place regulations that prohibit such customary rules, which it says discriminates against women and leave many women destitute following divorce or the death of their spouse. Nowadays, it is generally accepted that a widow would inherit the wealth of her husband on his death. Of course, some people persist with such practises in the name of "culture" and "tradition". Some women I spoke to fear that this may befall them. One male head of a household I interviewed told me that he had decided to register all his cattle in his wife's stock record book because he feared that his relatives may disregard government regulations. In Zimbabwe, each household has a stock record book and every person who owns cattle would have one, so that for example if both husband and wife and their son own cattle, then all three would have three separate stock books. The veterinary officer or his assistant has the responsibility to make sure that vaccinations are up to date, and would do this when villagers take their cattle to the community dip tank to dip their cattle.

In Binga, people prefer to keep their assets in close proximity. Proximity enhances the capacity of the owner of an asset to have control over it. Most of people's assets are working assets which are acquired for practical use and thus need to be ready at hand. Few inhabitants of Binga who migrated to urban areas on a permanent or semi-permanent basis for work purposes seem to value having cattle as *lubono*. Instead, such persons expressed a preference for municipal houses or residential stands on which to build houses in towns. In an interview on the 8th of April 2016 with Joseph, an unmarried male teacher who works in Hwange but is originally from Chief Saba area, he told me that he only has three cattle which he inherited from his father and that he will not buy any more. He will look after his inheritance but will only do so because he may need those cattle to pay bridewealth with were he to get married in the future. His view of *lubono* was such that it is not exclusively livestock. He does not consider cattle to be an asset preferable over a house, and ownership of cattle would only benefit relatives who are looking after his cattle while he is away working in town.

There are some parallels between how persons in Binga view and treat cash and cattle, both in terms of their use, the rules for usage, and preferences. In the same way that people tend to want to keep their cattle close to them in order to be able to exercise control over the assets, people want cash in hand rather than money in the formal of mobile money.

4.11 Conclusion

The chapter shows that in Binga, persons and households express a clear preference for cattle as a form of wealth. Next to cash, cattle are valued as a store of value. Owning functions as a savings account that people can draw on in times of need. It is tangible and visible and is used both in agricultural food production, in ritual ceremonies, in making visible and cementing relationships, and for its benefits. Cattle are a social form of wealth and this is important in Binga given the local dynamics related to "wealth in people", in that people are the principal forms of social and

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The process of dipping is a pest control method whereby cattle are made to swim through a specially built rectangular pass-through pool filled with a pesticide solution.

economic support in the region. This is so given the marginalisation of the region by successive governments and by the lack of capital investment by industry and business. Cattle, and smaller livestock, are central to the livelihoods of persons and households in this region.

The most common means by which a person can acquire, relinquish or lose cattle is through inheritance, marriage or upward conversion of small to large livestock and buying with cash. There are two forms of inheritance. I refer to these as "death inheritance" and "lived inheritance". The former awards a large proportion of wealth to paternal male relatives, while the latter awards an equally large proportion to maternal male relatives, in particular a man's sisters' sons. That some of the respondents interviewed feared the continuation of inheritance practices that have been outlawed by the state points to the relative distance between persons in Binga and the state. It is not only that laws are poorly enforced; Binga is known for its striving for economic and cultural autonomy.

The "wealth in people" that is commonplace in Binga expresses the idea that people have to rely on care and support from relatives, especially the *mwani munzi*. Vulnerable members of the *munzi*, for example orphans, divorced women and the children of other relatives, are cared for by the extended family. In this context, sharing becomes a critical survival strategy, and it is incorporated into the livelihoods of every household. As such, it is an economic strategy more so than a cultural principle. In the absence of more direct social subsidies and support for households, and the limited means persons and households have to access cash in order to meet their livelihood needs through the market, people and social relationships remain the primary source of wealth and survival. As described in the following chapter, sharing is also present in the monetary practices of persons and households in Binga. So far, I have focused my attention mainly on the non-monetary aspects of livelihoods. In the following chapter I focus more directly on the various forms of monies that are used by persons and households in Binga, and how these are used, by referring to people's monetary practices. As I will show, forms of valuation and sharing are also central to monetary practices; they are not a separate and distinct part of the economies of persons and households in Binga. Instead, they follow the rules and practices that are widely shared in the social arena of the household and the wider community.

Chapter 5: Monetary practices among households in rural Binga

5.1 Introduction

Chapter 3 I briefly discussed the history of money in Zimbabwe and the different kinds of monies that are in circulation today, and I provided an outline of the emergence and organisation of the market in mobile money in Zimbabwe. This thesis is concerned with the mobile money market in Zimbabwe and all the claims that are being made about mobile money and the market in mobile money in relation to poverty, development, financial inclusion, and so forth. What was important in that chapter was to provide context to what many Zimbabweans face today, namely hyperinflation, a cash liquidity crisis, the growing importance of privately-owned mobile money in the economy and the various claims that are being made about mobile money. Equally important, in this chapter I focus on how the Binga households that participated in my research incorporate or reject or deal with the different kinds of money in circulation.

In the previous chapter showed that the household is an important social arena that institutionalises practices of sharing and kinship obligations pertaining to the production of food and the exchanges of goods and services between persons and across generations. I paid attention to the variety of activities that constitute livelihoods in rural Binga. What stood out was the minor role that wage labour plays as a source of money. Furthermore, households have little access to money, and poverty is a reality for many households. This makes it even more important to understand the monetary practices of households in Binga and to evaluate the role of money and mobile money in their livelihoods against the claims that are being made about it.

In this chapter, I focus on money and present empirical data on the monetary practices of households in Binga. As I mentioned in my literature review, the concept of monetary practices is a composite word that I use in place of money ecologies and repertoires envisaged by Guyer (2004) to acknowledge the diverse forms of money and the multiple uses that monies are put to. As noted before, I observed a general preference for cash and cattle as a form of both money and wealth across rural households in Binga, apart from those who have left the rural area to participate in the labour market in urban areas. The reasons for this are manifold and will be outlined.

First, I discuss again briefly the multiple forms of monies that are in circulation in Binga today, followed by discussing the ways different forms of monies are incorporated into the livelihoods of households and persons.

5.2 Forms of monies in circulation in Binga

This section will provide a brief recap of the monetary affairs of not only the research participants, but Matabeleland North[35] province as a whole. Firstly, according to a recent poverty and consumption survey (ZimSTATS, 2017), 24.5% of Binga households are classified as poor. Furthermore, only 4.4% (male and female) are in permanent paid employment, the majority of whom are men. The net cash income in Matabeleland North is US$1400. Out of this comes the household consumption expenditure of US$1113 per annum, the most considerable expense being food and non-alcoholic beverages, which constitutes 39.3%. Based on this province-wide statistical data, one can deduce that only 20% of people's incomes can be considered as savings, but in this study, there was no evidence of cash savings. Rural to urban remittances amount to $552 per annum and constitute 0.3% of all remittances received in the district. To put this into context, this level of remittances happens to be the lowest, not only in the district, but the whole country (Ibid). Cattle were just as scarce as cash. As stated in the previous chapter, more than half of the research participants did not have cattle. The few who did, had between two and seven, while the highest recorded belonged to two people, one of whom was a chief with 25, and the other 24.

Bank money is also not common in Matabeleland North. A FinScope (2014) consumer survey shows that only 19% of the people in the province have bank accounts. Most of the households that participated in the research made it clear that they do not own or operate bank accounts. Thus, they are "unbanked". But as Peebles (2014) has argued, this should not be taken for ignorance. There are clear and rational reasons

[35] Matabeleland North Province has both rural and urban districts. Binga District, where this research was conducted, is 90% rural.

why persons and households opt out of the formal banking system. It is not merely an instance of being abandoned by the formal system but also opting out of it.

It is worth restating here that Zimbabwe has 13 commercial banks, one merchant bank, four building societies, one savings bank, two development institutions as well as 155 registered credit-only microfinance institutions (RBZ, 2015). Of all these, only one government-owned commercial bank, that is Agri Bank, has a network of small branches in rural areas such as Binga. As noted earlier, Binga centre has only own bank, and it is a branch of Agri Bank. The Reserve Bank of Zimbabwe has what is called a "financial inclusion strategy" and it states that the registration of microfinance institutions is to meet the financial needs of low-income households, particularly those in rural areas (RBZ 2016). The researcher never encountered one such MFI in Binga. Furthermore, as is the case in other developing economies, bank branches and ATMs are concentrated in urban areas.

There are other factors at play that result in rural households not banking themselves. One is the issue of registration and "creditworthiness". Very few households in Binga produce any kind or surplus that can become visible to financial institutions that can contribute to making a household "creditworthy". Most of their transactions remain invisible to institutions, especially in the context where more and more households are pushed to save and invest whatever monies they have in cattle and livestock rather than in banks. Moreover, creditworthiness is also determined by employment status, yet as we have seen in Binga, the level of unemployment is well over 98% (see, WFP, 2016; ZimStat, 2018).

As the economy declined due to deindustrialisation and changes to the political economy of migrant labour in the region, persons and households became more dependent on social relationships, and the importance of wage labour and the market declined. This pushed people into depending more on other people and turned social relationships into a form of survival, reactivating norms of social and cultural obligations between people. Relationships of kinship formed through birth, marriage, adoption, ancestry, friendship and even neighbourliness became more critical to the livelihoods of persons and households in Binga and the importance of the market and contracts lessened. Elsewhere Hart (2000a) argues that where communities based on face-to-face interaction and kinship ties are drawn into larger impersonal bureaucracies that seek to coordinate human action (states, armies, churches, markets), it creates a tension between the personal nature of earlier forms of attachment and the impersonality of bureaucracies.

Some bank regulatory policies clearly also act as tools of exclusion. The compulsory precondition for an ID as part of the requirements to comply with know your customer (KYC) regulatory policies is a case in point. In Zimbabwe, as in several other African states and indeed the world over, a national ID card is compulsory before one can access the formal monetary infrastructure. In the context of banking or bank money, the KYC regulation is essential in ensuring that they meet the obligation to safeguard investors' funds and to meet their fiduciary duty obligations (see King, 1983; Scott, 2015; Graeber, 2011:73). The KYC policies are also used as part of anti-money laundering regulations (World Bank & BIS, 2006; BIS, 2014; RBZ, 2016). To comply with these regulations, there is a precondition that potential bank and mobile money customers provide a valid national ID and proof of address, both of which are time-consuming and expensive to acquire. Demands for proof of address documentation is particularly problematic in rural areas where people do not usually receive utility bills. To overcome this, adults are forced to incur transport costs to travel to the Chief's court to get the validation. Nevertheless, some chiefs have been known to demand money or chickens before they can help (see All Africa, 2017; Sibanda, 2017). In this study, potential customers who did not have a national ID were forced to travel to Binga centre or nearby towns where they must apply in person. If the ID is lost or misplaced, they are again forced to incur additional costs. Total expenses for the whole process range between $15 and $50, based on a once-only return visit to the chief, the registry's office and to the financial institution in question, but these can easily double if for any reason one should travel to any of these providers more than once.

Those who advocate that poor people should convert their cash and wealth (for example, cattle) into bank money or mobile money do not adequately acknowledge the complex relationship between cattle and government-issued cash for people who have to make a living in rural Zimbabwe. Cash and cattle are distinct forms of money and are not easily convertible to the other on the basis of utilitarian models. There are strong social and cultural constraints associated with the conversion between cattle and government-issued cash, while conversion between cattle and bank money or mobile money is extremely uncommon and has not been observed or reported by any of my research participants. The main reason to support this is that cattle perform essential social and practical functions that bank money or cash cannot. As discussed in the previous chapter, these include the role cattle play in forming households through marriage and bridewealth transfers, nutritional needs, health and spiritual needs, and as working capital (tilling the land) to enhance food security. Furthermore, in normal circumstances, cattle are not used to meet consumption needs; this makes them a more effective means to save wealth than banking institutions.

Research participants considered cattle to be both *lubono* and money. In the literature, this duality is widely acknowledged by several scholars. For example, Hutchinson (1992) points to the fact that cattle and money oscillate between market and nonmarket or kinship spheres. Similarly, Comaroff and Comaroff (1990) allude to the observation that cattle mediate between production and exchange. Only two of my research participants acquired cattle via cash purchase because cash is difficult to acquire due to unemployment and unavailability of viable self-employment opportunities. Similarly, the downward conversion of cattle to cash is socially unacceptable and thus very uncommon. Cases where cattle were used as a medium of exchange were immersed in what I would describe as unfair exchanges or what Sahlins (1972:195) called "negative reciprocity", an attempt by a transacting party to take advantage of a transaction partner by acquiring goods or services at a price lower than market value through hard bargaining, trickery and coercion, and so forth. Sahlins (1972) describes this as an attempt to make unearned gains and goes on to state that such transactions usually take place between transacting parties who are in distant social relations.

I came across cases where such transactions took place between close kinsmen, but this was usually exacerbated by external shocks and a sign of the dreadful economic circumstances of most of my research participants. Other examples that illustrate the desperation include cattle that were used as money during the hyperinflation period when cash was rendered useless. Research participants reported that during the 2008 drought, it was common practice for cattle to be bartered to purchase grain from Zambia. I was told about occasions where people were forced by the harsh economic conditions to cross over to Zambia, only to exchange a cow for a bag of maize (or six buckets). Transporting the maize back to Zimbabwe on a canoe would cost one to two buckets of maize. To give a sense of how unfair this exchange was, I can point out that I used to buy a bucket of maize for a mere US$5.50, whereas the prices of a cow ranged between US$150 and $500. Such was the desperation that people experienced. When I raised this in discussion with one of the local chiefs, he suggested to me that such unfair exchanges are restricted to transactions between out-of-area sellers, particularly Bulawayo-based traders. As I got to know the area better, I learned that local people also took advantage of the drought to engage in such acts of "negative reciprocity". For instance, members of the community smuggled grain from Zambia into the area and sold it to their neighbours at exorbitant prices. One interpreter used to regularly cross over to Zambia to buy maize at $2.50 per 10 kg bucket and would then smuggle the maize to Zimbabwe, where he exchanged it for goats with a retail price of $20 to $30 each. Therefore, he was effectively buying goats with a market price of $20 to $30 for $2.50.

Cattle can be converted to cash in exchanges where the buyers and seller are domiciled in separate localities and where goods or services that the seller wants to buy are not locally produced or provisioned. For instance, there are no tertiary educational institutions in Binga, so those who would like to do courses such as teaching have to go to Bulawayo. To fund their education, parents back home would sell cattle, typically one to four beasts for the three-year course. In cases like this, cattle would be sold in cash. Not all exchanges between people in Binga are similar to these instances of "negative reciprocity". At least two households used cattle as a means to pay for building services, in both examples two- and three-bedroom houses were respectively built in exchange for a cow which at the time cost $250.00 to $300.00. However, if the houses were paid in government-issued cash, they would have cost up to double the price equivalent of the cow.

5.3 Credit, savings and investments flows on household and community levels

The sustainable livelihoods analysis literature suggests that savings and investments in rural economies are generated when households produce more than their consumption needs (Swift, 1989; Devereux, 1993). Given the persistence of hunger and impoverishment in the Binga region over generations, there is little evidence of widespread savings and investments by persons and households in the region. Some scholars suggest that kinship could be approached as a form of savings, but in their attempt to modify economic models that derived from industrialised societies, they stretched their concepts too far. I prefer instead to approach kinship and the social relationships that are formed through kinship calculations as a form of wealth that people draw on. As such, people and social relationships can be seen as a livelihood resource. In the absence of state support and access to markets, social relationships and people are a form of wealth and much needed to survive.

First, it is important to discuss how persons and households deal with cash. Even though it is understandable that many persons would be reluctant to talk about their own money and finances, some of those interviewed told me that they keep their cash at home rather than in a bank account. This makes much sense, given the high costs associated with travelling to the bank offices in Binga or an ATM. Those interviewed who talked about cash being stored at home said they did that for basic consumption purposes. Such cash is stored temporarily while they wait to use it to meet their basic needs. Thus, such cash is held temporarily for precautionary reasons and transaction purposes, not savings.

Given how little persons and households in Binga rely on formal state and market institutions for meeting their savings and investment needs, it comes as no surprise that the people interviewed seemed to borrow and lend many things, including money, from each other. This is another reason why social relationships are so important; one can only really extend credit to someone you know if you want that credit to be repaid. So, the strong social relationships between people also create channels through which objects and commodities can flow. Also, in some instances. the exchanges may create the relationships, or the possibility for existing relationships to become more durable and thicker. Those interviewed talked about borrowing and lending cash and goods, mostly food products, particularly mealie meal and cooking oil. Usually, the amounts are not too large, anywhere between $1 and $10, and the reasons for asking for a loan usually revolve around buying mealie meal, grinding meal, bus fare to go to the hospital or church functions and perhaps a funeral.

The lending and borrowing of non-monetary goods take place between neighbours, friends and relatives. Delayed reciprocity is the order of the day, and for mealie meal, millet and sorghum there have to be an equivalent repayment. Lending and borrowing of cash are usually restricted to small amounts and carry no interest. Some persons interviewed considered charging interest akin to robbery. Loan amounts are kept small because research participants expressed concern that they would not be able to repay large amounts. In Binga, I did not come across or learn about money lenders capable of or willing to lend large amounts of money to ordinary people. As a result, I did not come across any repayment or debt problems experienced by households, except for a few business transactions that transcend the ordinary households.

Those who talked to me about the money they owed linked their debts to food, education and health expenses. Accessing locally produced food was not what caused them to get indebted; it was manufactured goods they were forced to buy from local shopkeepers on credit. Health-related debts pertained primarily to transportation costs because treatment at local clinics is free. The high education costs caused the heaviest debt burdens. Following independence, education in Zimbabwe was free, but over time school fees were reintroduced and subsequently, it has become one of the biggest financial burdens for most households in Binga. Parents of school-going children reported that they owe school fees ranging from $15 to $400 consisting of unpaid levies. As a result, some school children are excluded from attending school despite the government having put in place guidelines that proscribe the expulsion of school children for unpaid fees.

Generating savings and accessing credit also happens at the level of the community. The two rotational credit and savings associations (ROSCAS) I encountered during my fieldwork worked as follows: the pool of money consisting of members' contributions are distributed to members as a lump sum each month in turn. Each member gets a turn to access to the pool until every member has had a turn. The ROSCAS also offer loans to non-members, usually wild fruit and vegetable vendors, firewood roadside sellers, fishermen and others who use the money for business expenses such as buying stock, fishing nets or whatever it is they need to generate an income.

5.4 Illegal activities and risk-taking as livelihood practices

Money is however not only used for savings and investments; high-risk investment games akin to gambling practices also exist. As has been documented elsewhere in Zimbabwe (Gukurume, 2015), I encountered the phenomenon called *kuspinner* in

Binga. This is a high-risk attempt to multiply cash owned by the holder or in the temporary custody of the holder. The word is used in both Shona and Tonga languages and it literally translates to “to spin”. In this practice, the holder of cash (regardless of whether it is theirs or not) attempts to divert it into a one-off quick return business activity before channelling the money back to its originally intended recipient or purpose. In one example, a woman I know who owns a play school in KweKwe used the fees she received from parents to buy Kapenta fish (Tanganyika Sardines) in Binga for resale in KweKwe. Upon making some gains from this risky trade, she then paid the playschool business expenses, staff salaries, rent, and pocketed what was left. The same practice occurs at times when remittances are sent to Zimbabwe by the diaspora. Usually, these are sent with or via one carrier, with the instruction for the carrier or one receiver to distribute the funds to various beneficiaries who reside in different parts of the same town or different towns and rural areas. Before doing so, the carrier or receiver would “spin” the money, hoping to make some gains in the process. Of course, at times, it does not pay off and ends in much unhappiness. At the commencement of my research, I would on occasions ask friends working as fishermen and fish traders to convert US dollars into Zimbabwe Bond notes or Zambia Kwacha on my behalf, but repeatedly ended up receiving the money after a week or more. Such currency transactions usually took me less than an hour at retail shops, and I realised that the Zambian fishermen and Zimbabwe fish traders were using the cash to “spin”. This phenomenon of *kuspinner* as I understood it is an attempt to mitigate income uncertainty associated with the livelihood activities that the people who engage in this practice are involved with. The economic situation in Zimbabwe is so dire at the moment that ordinary people are often forced into thinking about, planning for and executing a range of practices that are risky and that revolve around using money temporarily in their care to make more money. In important ways, this is not gambling but being pushed into actions that risk ruining the very social relationships that you depend on.

A more sophisticated practice that involves the RTGs payments system emerged during the hyper-inflation period of 2000-2008. According to Gukurume (2015), the phrase *kubhena mari* literally translates to “burning money”; my interpretation is that it evokes the process of smelting gold to mint money. The process involved the rapid exchange of physical cash for electronic money at a premium using the RTG payment system. On the 6th of September 2007, the official Zimbabwe dollar exchange rate was

US$1:ZWE$30 000, but on the black market, the exchange rate was US$1:ZWE$600 000 of electronic money. Thus, if a customer holding US$1.00 approached a commercial bank to exchange their money, they would receive ZW$30 000 in cash or as bank deposit. If they approached street foreign currency traders, the trader would pay them ZW$600 000 deposited into their bank account for the same dollar. Consequently, the overvaluation of the Zimbabwe Dollar led to nationals domiciled both in Zimbabwe and abroad to channel their hard-earned foreign currency through informal dealers offering more market-orientated parallel exchange rates than registered financial institutions. I did not encounter this practice in Binga, but it demonstrates a more general practice of risk-taking that has become important in many people's livelihoods.

The *kubhena mari* practice depended on a network of informal (quasi illegal) money market dealers, bank employees who helped money market dealers and other individuals to bypass RBZ and commercial bank regulations. They did this in various ways, such as disregarding official bank transaction limits, by allowing bank customers to open multiple bank accounts to circumvent cash withdrawal limits (Ibid), and so forth. Government ministers and senior Reserve Bank officials including the governors who were believed to be responsible for supplying some of the young informal money market dealers[36] with useless Zimbabwe Dollars which they used to syphon good money (foreign currency) out of the black market into their state coffers, and private hands. According to their MPS from 2008 (RBZ, 2008), the RBZ tried to curtail the 'burning' phenomenon by temporarily suspending all RTGS personal account transactions. However, like many other reactionary systems that Gono, the RBZ Governor at the time, tried to put in place, this did not last very long because the whole country depended on RTGS. The seemingly endless bank queues which were and still are very common in Zimbabwe clearly indicated that banking halls could not handle the volume of face-to-face transactions.

[36]According to their 2004 Annual Monetary Policy Statement (RBZ, 2005), this was done through what the bank referred to as the Foreign Exchange Purchasing Centres (FEPCs) which they established throughout various towns and cities.

5.5 The role of remittances

In this section, I analyse migration and remittances, particularly mobile remittances. Some studies found that use of mobile money increased the frequency of remittances (see Morawczynski and Pickens, 2009), but this study casts doubts on the validity of this argument in the context of rural Binga. Remittances tend to be a good indication of not only the extent of migration but also the use and adoption of mobile money. For most developing countries, migration-related remittance flows are a significant part of the national income. According to the World Bank (2017), total remittances to sub-Saharan Africa amounted to $33 billion in 2016. Zimbabweans in the diaspora remitted about $1.4 billion in 2017 (RBZ, 2018b). A recent survey found that only 0.3% of households in Binga District were beneficiaries of mobile phone remittances. However, in Bulawayo, almost 100% of households surveyed were recipients of mobile phone remittances (ZimStat, 2018). In the 1930s Colson (1960:50) noted that income flows into Binga were from labour migration and remittances (Colson, 1960:50). While migratory labour work remains an important means through which households in Binga diversify their livelihoods, the above statistical data shows that its significance and role in households have declined over time due to deindustrialisation in Zimbabwe and changes in the regional labour market in the mining industries. What seems to be the case, however, is that remittances today play a comparatively minor role in the livelihoods of people and households in Binga.

The remittance methods that were used before the emergence of the market in mobile money were slow and also unsafe. These included sending money with trusted friends and kinsmen, a process that took several days for monies to reach recipients. Such "informal" methods that are highly formalised still operate today. Other scholars, for example Thebe (2011), who conducted research in the same district and neighbouring ones, made similar findings. There are disadvantages to remitting cash, and these have to some extent been overcome with the growth of mobile money remittances, which are faster and more efficient in some ways. Mobile money remittances have facilitated remote payments, especially person to person (P2P). For some persons and households, remittances in cash remain preferable. For others, such as the Zambezi River fishermen discussed in the next chapter, it is important to carry their contributions to their households themselves rather than to remit it using other channels. The reasons are straightforward: to retain strong relationships with wives and the extended family – which as we have seen is the most important source of social and economic support for Binga households – these men have to visit their homes frequently.

Both the traditional and more recent technology-enabled remittance practices reflect the importance of sharing while highlighting the fact that having excess goods and services is not a precondition for sharing, but it may be a more general principle in livelihoods that rely not on the market and the state but on social relationships. This is reflected in the observation that in Binga, remittance flows are between poor to poor. Only four of my research participants reported that they had sent someone some money by mobile phone in the last twelve months from the date of their interview. Research participants who were lucky enough to receive remittances only received funds ranging from $10 to $40 once or twice per year. Remitted funds were from husbands, children and other close relatives working in low-income jobs. Typically, these include domestic workers, gardeners, hunting guides, and security guards in urban areas. Some of the respondents told me that their children who work as domestic workers earn between $50 and $150 per month. In another example, a security guard employed in Victoria Falls told me that he earns $250, but because of high unemployment, his employers developed a job-sharing system where he works for three months and takes another three months' unpaid leave. His salary is paid into his bank account, but because of the difficulty in withdrawing cash, he transfers his money into his mobile wallet account. Once the money is in his mobile wallet, he converts it to commodity money by purchasing sugar, which he then smuggles to Zambia, where he barters trades the sugar with fishing nets which he sells in his village for cash.

As a result of all of these factors, mobile money remittances play an insignificant role in the monetary practices of Binga households.

5.6 Healers and payments

In this section I discuss traditional healing, not because it is a prominent livelihood activity in Binga, but because it helps us understand monetary practices in Binga and the incorporation or not of mobile money into livelihoods. In this section I will present a case study of Sanders. Sanders is a well-known healer in Mlibizi and Mankobole, or what some still call a "traditional healer". I asked him what forms of payment he accepts in exchange for his services and indeed why his services are not free.[37] In his response to me he first explained that there are three main types of healers. The first type, according to him, is healers who have a direct connection with the ancestors through dreams or spirit possession. The second is healers without the direct connection – such acquire skills through training, usually an apprenticeship under the guidance of someone else gifted with the direct connection. The third is in fact a type that is fake; healers whose backgrounds and training are unknown to the local population and the clients they serve and who advertise their services and run it along the lines of a business. Such healers charge for services upfront before the patient has been healed by their treatment.[38] Sanders distanced himself from such healers by explaining that he does not charge upfront, instead he may ask for a deposit in much the same way a doctor's surgery may ask for a deposit. He only asks for the remainder once the client's problem or illness has been dealt with.

He explained that healers of the second and third type have more latitude to accept or demand a wider range of payments for services which may include mobile money, cash, livestock or goods. Sanders considers himself to be of the first type, and he was widely known in the area as a healer. He informed me that validation of his and other healers' expertise could be gained by asking people who reside in the same area as the healer, by asking former patients whether the person is indeed a traditional healer

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[37] Interview with Sanders was conducted on the 11th of October 2017 at Mlibizi Fish Camp.

[38] This reminded me of a conversation with one of my research participants who told me of an incident many years ago where a white Zimbabwean man who has a beautiful house by the Zambezi River had his water pump stolen. He tried to engage the local police but they were not very helpful, so he ended up approaching a traditional healer to help him recover his pump. The healer demanded a colour TV for payment which, at the time, was a luxury commodity. The white man at that point refused to continue with the consultation because of the exorbitant charge and he also harboured the suspicion that he was about to be conned. Another participant, a middle-aged mother of three, told me that was not so lucky. She sought treatment for her mentally disabled son who was in his early twenties then from two men who came and stayed in her village advertising and offering traditional healing services. They promised her that they could treat his condition but demanded payment of three cows. At the time, her daughter had just been married so she used all three of the cattle that she had received as *luselo*. Predictably her son was never healed and because of this deception Jayne no longer has any cattle; the two men are gone, and she does not know where to find them.

or not, and lastly by braving it – proceeding with treatment and assessing how effectively the traditional healer is able to alleviate the symptoms. I questioned him about the difficulties involved in the tendency to assess someone's skills through word of mouth, in particular the fact that fake healers and Pentecostal pastors use the same means to convince people of their self-professed expertise. He said the other means is by consulting the Zimbabwe National Traditional Healers Association (ZINATHA), who are responsible for certifying traditional healers. He, on the other hand, was not interested in registering with them because "people will come to me if they feel that I'm able to help them". He claimed that he is guided by his ancestors who, through dreams, advise him on what medicines, usually made from natural plants, to use before a patient even comes to consult him or at times soon after. For this reason, he does not keep any medicines at home. Moreover, this ability differentiates him from types two and three healers, who typically stock medicines. Equally, when it comes to payment, his ancestors will usually advise him what form of payment to demand for services rendered. In practice, this usually means, in order of preference, cattle, goats, chickens, millet and lastly money. Of course, it happens that at times a patient or client does not have the kind of payment recommended by the ancestors. In such instances, Sanders told me that he would sleep over the issue and by the next morning, he will have instructions on what conversions to make. Traditional healers with more direct contact with their ancestors would get guidance on such issues right there and then.

Most of the time, Sanders' ancestors ask for payment in livestock. I asked him if he ever disregards his ancestors' direction in terms of what means of payment to accept, asking him specifically about mobile money. He said he may disregard their directive but would rectify the situation quickly. For example, if payment is a small amount, he may accept mobile money rather than cash but would then convert it to livestock by buying a chicken or a goat. So, he would in effect do the conversion to appease the ancestors. The ancestors will be unhappy if he readily accepts cash as payment all the time because cash is too easily converted into consumables, and such consumables cannot be used to "thank the ancestors" in ceremonies and rituals for which livestock is required. He proceeded to say, "*hanti idlozi lidla konapa"*, which literally translates to "Isn't it the ancestors eat here", by this he was referring to the importance of food provisions during ancestral ceremonies.

When I asked about specific details about how a charge is determined, he went on to explain that he does not charge on an hourly rate and that his decision on what and whether or not to charge depends on the medical problem. For example, for a person suffering from a sexually transmitted disease such as syphilis, he could offer free treatment or charge a token amount such as a chicken or $2 because it is easily treatable. However, for more complex problems which could take the same amount of time as treatment of syphilis, Sanders could charge more. Treating a person who had been attacked by a *chipoko* or evil spirit, for example, could take less than five minutes, but he would charge more. He was adamant that the money itself plays no role in the healing process and that it is merely a means to open a relationship between the patient and the healer, adding that "the ancestors gave me the talent to heal, in general it is a means to help others, but equally it is also meant to help the traditional healer to make a living from it". I asked about occasions where a patient or client does not pay, he explained that in such a scenario, he would await instructions from the ancestors. Their response may include, he joked, "downloading" – reversing the treatment.

Another traditional healer interviewed in Sebungwe Mouth named Leonar[39] commented that what Sanders called "downloading" could be a harmful practice, suggesting that the source of expertise of a traditional healer capable of doing that is not authentically from ancestors. Unlike Sanders, Leonard claimed not to charge his clients, leaving it up to them to "pay" or "remunerate" him if they feel grateful for the treatment. According to Leonard, patients usually pay in small livestock; he has never received a cow as payment. He owned only two cows, he said, in part because he lost eight cattle in 2015 due to the severe drought.[40]

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[39] Interview with Leonard on 6th of February 2018

[40] As we left Leonard's *munzi*, my interpreter mused about the fact that this man's patients, including the ones from outside the village, leave the place of treatment, only to come back after several months. He posed a question in Ndebele to me which translates to "But Mr Chips, do you think they come voluntarily, or there is some kind of spell that compels them to come back?" before laughing, saying these so-called gifts from the ancestors can be bought from powerful traditional healers. His observation that apprenticeship is not the only means through which one can acquire traditional healing properties invoked in me several questions which are beyond the scope of this thesis. When the living die and become ancestors, do their spirits suddenly acquire Christ-like qualities, even for those who were unpleasant and considered evil here on earth? Secondly, as Dumalo rightfully states, is there no way of verifying that a

Based on the interviews I conducted with healers, it seems that ancestors prefer forms of payment that are durable and that can "feed" them and the persons in the broader community through feasting at ceremonies. There is a sense in which more authentic healers are more reluctant to accept cash and mobile money than healers who run their healing not as an obligation to their ancestors but as a business. All healers need money and livestock to stay alive and as such these form part of their livelihoods. As Sanders explained, the use of cash and mobile money increases opportunities for it to be depleted, while the preferred means of payment creates an opportunity for money to be durable and continue to be seen over a much longer temporal scale. This could be explained as an ability to store economic value over a long period of time to meet the needs of the owner of the money (or asset) together with those of his community.

5.7 The use and disuse of mobile money

A central question this thesis deals with is the ways in which rural persons and households use and incorporate or reject mobile money. I have already mentioned that unlike in towns such as Bulawayo, there are very few beneficiaries of urban-to-rural remittances in Binga and that mobile money remittances are minuscule. It became clear to me that most persons in Binga who use mobile money keep such monies in their mobile wallet accounts temporarily while they wait for the opportunity to either convert the mobile money to cash or used it to make a mobile payment in cases where they could not access cash withdrawal facilities. During the fieldwork, I got into the habit of asking my research participants how much money they had in their mobile wallet account at every encounter. Most of the participants reported that they had a $0.00 balance. Several Potraz quarterly mobile payments reports collaborate this observation. For example, a Potraz (2017) report found that mobile users cashed in $395 714 150, and cash-out transactions were $365 306 690, which implies that only $30 407 460 was stored in mobile wallets for one quarter (three months). Dividing

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traditional healer communicates with ancestors or not? All that is known is that they claim to communicate with beings whose qualities we can only estimate from the outcome of their interventions. There is a possibility that they are capable of good deeds but equally, they can also be used for deception, as a tool to exploit others. Jayne who was previously discussed never got her cattle back, she did not have the name, or address of the so-called traditional healers whom traditional authorities may have allowed into their community.

that by the total number of mobile subscribers (3 867 676) means that each mobile wallet had an average of $7.86 in the last quarter or $2.62 per month, which is hardly savings.

There are other reasons why mobile money is not popular in Binga. Most important is that mobile money is the most expensive means of payment for the poor who transact in micropayments. This is so because mobile money operators levy the highest transaction fees on micropayments rather than high value payments. According to the August 2018 transaction fee schedule of Econet's EcoCash (which enjoys an 81,6% mobile money market share), each time a customer purchases goods and services using mobile money, EcoCash will charge them a processing fee of between 0.02%-5.8% of the purchase price (see appendix 5.10). The highest fee of 5.8% applies to mobile money transactions of less than $5, yet if a customer purchases goods worth $500, the mobile money provider will only take out total fees amounting to 0.52%. In addition to a pricing system which effectively punishes the poorest by charging greater fees for small transactions, the official transaction fee-charging process is also opaque. For example, there is a requirement by the mobile money operators for all registered merchants to display an official transaction fees chart at their pay point or cash register, but when I conducted a small survey of retailers in Binga Centre, Mlibizi, Simatelele and Sianzyundu, none of them had the official fee schedule on display. Worse still, the mobile payment system itself does not have a transaction audit system that sends out net-to-net automated text messages to inform the customer how much transaction fees were incurred after every transaction. Mobile money users who participated in this research informed me that they accidentally discovered the mobile company transaction charges after attempting to send or pay an amount that was equivalent to their mobile wallet balance. In other words, it is impossible for a customer who has a MM$5 mobile wallet balance to make a MM$5 payment because before he can, the mobile wallet company will first deduct transaction fees from that balance.

Furthermore, peer-to-peer mobile money payments also attract the highest transaction fees on micropayments. For example, if a customer sends $100.01 mobile money to a registered recipient who cashes it out, the mobile money provider earns $5.13 in transaction fees ($2.12 is charged to the person sending the money while $3.01 is charged to the recipient when they withdraw their money). In this P2P setting, it is usually the sender who bears the whole amount for transaction fees. For example, when a receiver asks for $100.01 to pay school fees, it typically implies that they do not have any money. Therefore, the sender is forced to voluntarily send a larger sum ($103.01) than the requested amount ($100.01) to ensure that when the receiver cashes out the money, they will get $100.01 after transaction fees of $3.01 have been deducted. If the sender does not voluntarily add the additional amount, the receiver will only be able to cash out $97.00 ($100.01 minus transaction fees $3.01). This example of a P2P transfer normally relates to dealings between people who are mutually dependent on each other, such as a mother paying school fees for her child, a relative assisting with hospital costs, and so forth. In business transactions, repayment of a debt between independent parties, and so forth, receivers habitually demand that an overpriced arbitrary fee be added to the amount owing to compensate for transaction fees. In the end, the sender pays a mobile network gazette fee plus an unofficial arbitrary fee which in this study and others is exorbitant and illegal. Comninos et al. (2008) made similar findings in relation to 14 sub-Saharan countries.

On the 13th of October 2018, the Zimbabwe government decided to impose a 2% tax on all mobile money transactions. This was a significant increase from the previous $0.05 tax that the government used to charge on each transaction. According to the November 2018 budget statement, the government will earn US$600 000 000 (Zimbabwe Treasury, 2019) from this new tax. That is almost equivalent to the corporate income tax that the government expects to earn (US$783 417 000) in 2019 (ibid). The mobile money transfer tax is additional to the US$970 733 900 pay-as-you-earn income tax that the government expects to earn (Ibid). Add the 2% tax to mobile network charges and subscribers are currently paying upwards of 8% transaction fees, which puts the greatest burden on the poorest members of society, most of whom are restricted to small-value transactions.

Research participants only appreciated the benefits of remote payments (payments whereby payer and payee are located in different places), firstly because of the convenience, and the fact that transaction fees are typically much lower than the transportation costs associated with physically transferring cash from one area to the other. On the contrary, the mobile money transaction fees, government tax, and illegal fees levied by payees in proximity payments (payments where payer and payee are collocated) were considered to be exploitive and extractive.

To illustrate these general points about mobile money use and disuse, I want to recount a few case studies collected during fieldwork. One such case is that of a woman who was employed as a domestic worker at the local Mlibizi Resort. I met her by chance after I transported her to Binga town centre on the 3rd of October 2018. She informed me that she gets paid in mobile money. Each time she gets paid, she travels to Binga centre, a 190 km return journey, to buy sugar which she, in turn, sells to Zambian fish traders and other Zimbabweans for cash. This works out well for her, because the Zambian traders will also be trying to dispose of their Zimbabwe B$ note before they go back after trading in Zimbabwe. When we reached Binga, she bought 10 wholesale cartons made up of 10 x 2 kg packets of sugar for $20.55 each. I charged her $8 (return) transport plus $1.00 per carton. All her costs worked out to $223.50. After that, she sold the sugar for $23.00 per carton, making her a profit of $6.50 in total. This was her strategy to turn mobile money into cash in hand and to do so not at a loss through the formal conversion process. Other middle-class people in Binga formed food buying consortiums and take turns to bulk buy sugar for resale in cash. Much like the domestic worker, they only partake in these transactions once per month on payday.

Another case speaks to how people and households incorporate mobile money into their monetary practices. I interviewed Clive and his wife Messina on the 5th of October 2017 at their *munzi*. At the time of our interview, Clive was a fisherman. His wife would assist him in selling his catch of dried fish in Victoria Falls. A year after our interview, we lost touch because Clive and his whole family migrated to Harare to work as a general hand after giving up fishing due to several near-miss crocodile attacks. Clive was born in 1984, and his wife was born in 1995. They brought four children into the world, all of whom are younger than 18 years old. I consider Clive to be one of my most informative research participants even though he only attended school up to O Level yet failed his final exams; his wife completed primary school grade 7. Clive had both a feature phone which he bought in Victoria Falls for $25 from proceeds of fish sales, and a smartphone which he received as a gift from his cousin-brother who works in South Africa. His wife does not have a phone but stated that she shares Clive's phone to make and receive phone calls. They both do not know how to access the internet, but Clive said he uses the smartphone as a radio. He also plays games on it, but the battery runs out quickly, and when that happens, he has to walk about 1 km to his friend's house where he can charge it on a solar panel. Besides communication and entertainment, Clive uses his phone to receive, send and purchase goods and services using mobile money but has never used it to store money. He explained that he lives from hand to mouth, so each time he receives some money on his mobile money account, he immediately withdraws his cash. If not, he uses the mobile money to purchase goods and services.

At the time of our interview (2017), I asked him when he last received mobile money and he said he received $121, in 2016. The money was proceeds from sales of dried fish which he had asked his friend to sell on his behalf in Victoria Falls. To withdraw the money, he had to leave his village early in the morning and walk to the nearest township (Siatshilaba business centre), which is about 15 km away. He got there around midmorning, but the EcoCash agent could only give him $50 because the agent did not have enough cash. The agent asked him to return later, but when he returned in the afternoon, he was able to get only another $20. For this service, he said the agent charged him about $3 Econet transaction charges. He then approached a local Mobile Money Merchant, to ask if he could withdraw the rest of the cash but they insisted that he must buy goods equivalent to the amount of cash which he needed. In this case, it was $10, so he bought groceries equivalent to that, but when he got his ZWB$10.00 they demanded ZWB$2.00 transaction fee, which the shopkeeper claimed was compensation for the fees that they will in turn be charged by EcoCash. Clive said he knew that the charge was illegal, but he had no choice since he needed the cash and some of the groceries. After all these difficulties, he remained with a MM$35 mobile money balance, which he converted to cash by selling airtime to his friends at the rate of MM$1:$1. Clive identified several costs associated with the use of mobile money, including poor network signal. On several occasions he had tried to withdraw his money, only to be informed that the mobile network was "down"[41]. He was also unhappy about being forced to "impulse buy", as he put it.

The practice of charging extortionate transaction fees is a rural as much as an urban phenomenon (to understand how widespread this problem is, see The Herald, 2019).

[41] In urban areas, this usually results in long queues especially at town-based supermarket till points or customers being forced to make several attempts to execute a simple bill payment, and so forth.

One fisherman who used to regularly travel from Sebungwe Mouth to Bulawayo to sell dried fish told me that he once ran out of cash for bus fare when he was in Bulawayo. Fortunately, he had mobile money amounting to $16.00. With that he approached an EcoCash Agent, who did not have any cash, so he was forced to approach informal currency traders commonly referred to as *abo-usphateleni* to withdraw $15.00 from his EcoCash mobile wallet account. The *usphateleni* demanded $4.00 for this service so instead of getting the $15, he would have only received $11 cash, which as it turns out was not enough for his bus fare. The bus company did not accept mobile money at the time, so he had to make a private arrangement to pay the $15 into the bus driver's mobile wallet account. He agreed, but does not know if the bus driver forwarded the money to the bus company or not.

Another case study speaks to the difficulties that elderly people have in incorporating mobile phones into their livelihoods. I was introduced to Beauty by my interpreter Dumalo, and soon after that introduction, I interviewed her at her house in Sebungwe Mouth on the 6th of October 2017. She did not own a mobile handset, so she shared her husband's mobile phone. Just before our interview, she reported that her husband's nephew, who worked in Bulawayo, sent $90 to his grandmothers but via her husband's mobile phone wallet because just like her, the grandmother did not have a mobile handset. To withdraw the money, she and her husband walked 13 km to the nearest Ecocash Agent in Siatchilaba, but the agent did not have any cash. They then had to approach the local Ecocash merchant, but, as was the case with Clive, the shop could only give them cash if they used some of their mobile money to purchase groceries. She remembered that they had to buy cooking pots costing $18 and groceries but could not remember how much cash they managed to get in the end. The intended recipient of the money had no control over almost all the decisions that were made about her money. After paying for the groceries, the shop deducted $2, which they claimed was transaction fees. However, as I mentioned previously, the Econet Merchant agreement states explicitly that transaction fees are not to be paid in cash, neither are they meant to be paid directly to the merchant.

5.8 The case of Mudimba and his wife Emilia

Earlier in this chapter, I pointed to sharing as a widespread and institutionalised principle in the livelihoods of persons and households in Binga. Another case study speaks to sharing in the context of mobile phones. I interviewed Mudimba and his wife Emilia at their *munzi* in Mankobole on the 16th of November 2017, and we met on several occasions after that.

I also met (or got to know) Mudimba several weeks before our interview. I used to see him at the local shopping centre in Mlibizi, where I used to see him lurking around, shadowing one of the domestic workers as he supplemented his wage ferrying sacks of frozen fish from white-owned riverside homes by wheelbarrow uphill to the bus stop just 500 metres away. For this, I learned later, he charged a meagre fee of $1 to $2 per trip. I observed the duo for several weeks and could not understand why Mudimba kept following this young man nicknamed CAG[42], a fellow I was acquainted with, once or twice every week. After some time, I asked CAG how it was that Mudimba regularly visited him, given that I never got the sense that they were close friends who enjoyed each other's company. I then learned that they have a business arrangement of sorts whereby Mudimba supplied CAG with several cup measures of marijuana to sell on his behalf. Unfortunately, CAG was very unreliable and would always end up using some of the money or giving out the merchandise to his friends for free. Every time Mudimba came to pick up his sales proceeds, there was always some money missing, so he followed CAG around to ensure that his missing money was repaid.

Mudimba told me that he was born in 1960 and Emilia explained that although her date of birth is recorded as 1972, she is much older than that, because her own younger brother's date of birth is recorded as 1972 and yet they are not twins. In the past, they explained, parents never used to pay close attention to their children's date of birth, so they just used to guess when interviewed by government birth and death registrars.

I interviewed Mudimba, his wife and their oldest son on different occasions. Their son was born in 1993, and when I asked him about his marital status he said that he got

[42] CAG is the name of the bus that operates the route from Binga to Bulawayo. He got this nickname because just like this bus, he does not sit still in one place; he walks around the local area nonstop. I have always wondered, where he gets the time to put in the hours as a domestic worker for his Botswana-based employers.

married in 2011. However, Mudimba, his father, interjected and said his son never did get married, explaining that he never lived with the woman he claims to have married.[43] Their son attended secondary school, but they did not have enough money for him to sit for his Ordinary Level certificate exam. Mudimba's wife Emilia never went to school because as she put it, her parent's generation never used to value the formal education of female children, because they were worried that educated girls would become "prostitutes" or fall pregnant before they finish school.

When asked about *lubono*, Mudimba noted that he owned seven cows, for which he pays the local veterinary officer an annual fee of $2.00 in cash as government tax for each cow. He also owned fifteen goats, one plough and had the ownership and use of three hectares of land which the head of the house inherited from his father.[44]

The cattle and goats were obtained as part of *luselo* for the marriage of their two daughters. The small livestock was acquired through monies generated through his wife's small business selling wild fruits and Nyi fruits (Berchemia discolour) that she harvests from their land. The proceeds from these sales are small, and she typically makes between $2 and $5 for sales she makes once or twice a week. Moreover, the fruits can only be harvested between late April to May each year. Emilia would save these small profits in her house, and once she reached a target of $20 to $30, she

[43] There was clearly some disagreement between them regarding this marriage. Mudimba also said that he did not feel obliged to help his son pay *luselo* because as he put it in Shona *mukadzi wacho anga ari sharaude*, which translates to "the girl used to sleep around", expressing his disapproval. Mudimba also claimed that the woman's family even told them that she was not the type to marry. To make matters worse, the son never introduced the young woman to his parents. Mudimba claimed that he even used to deny that he had someone in his *n'anda* so it was difficult to regularise their union. After living together for some time, the woman got pregnant and left but reportedly went to two different men claiming they were responsible. One man was based in Cross Dete and the other in Tumbara so in the end there was uncertainty about the paternity of the child.

[44] During my interview with Emilia, Mr Mudimba would regularly interrupt and attempt to answer questions on behalf of his wife and son, and I had to continuously but courteously remind him that I preferred to hear each person's voice. In terms of the cattle ownership reported, his wife reported that they only owned five heads of cattle. Such discrepancies between answers from different members of the household was a regular occurrence. I am inclined to think that there is an incentive to persons to under-report their assets and income. For example, Mudimba told me that he sold an ox for $270 but after several weeks, in response to a similar question, he told me sold his ox for $500, a more realistic price given average prices in the region at the time.

would use the money to buy a goat or a few chickens. I learned from CAG that Mudimba also made small profits from selling marijuana, but he did not reveal this to me directly.[45] From CAG, I learned that that Mudimba would sell about $10 to $18 worth of marijuana one or twice a month. His sales are bigger during summer. He grows the marijuana near his home in Mankobole (other sellers import it from Zambia and other parts of Binga). He manages to grow marijuana throughout the year, even during the dry season, because he plants them in isolated swampy areas called *kasensa*, which remain wet even in the dry season.

When I asked Emilia about ownership of the goats and cattle, she said they belong to both of them, explaining that she and her husband agreed to register the cattle in her name despite the common practice that cattle are usually only registered in the husband's name.[46] The reason for Mudimba agreeing to this was because up to the 1980s at least it was fairly common practice for livestock to be inherited by the relatives of a deceased husband, leaving a widow with nothing. Registering cattle in his wife's name effectively makes it impossible for this to happen, suggesting that people in Binga use the rules and procedures of the state to circumvent social and cultural practices they do not agree with. When I asked if she could sell the cattle without her husband agreeing to it, Emilia explained that she would have to seek agreement from her husband and that similarly, he would have to seek agreement from her even if the cattle were registered in his name. This suggests that the rules of ownership and selling of cattle are regulated both by the state's procedures and by social and cultural rules.

They both reported to me that they regularly lose goats to rabies (also known as *chimbwa mupengo*), to attacks from infected dogs and stock theft. A far worse problem though is drought; in 2008 they lost twelve heads of cattle. As Ferguson (1995) famously did in Lesotho, I asked him why he would not sell his cattle before they died

[45] I have come across Mudimba and his son sharing a joint of cannabis, but whenever they saw me approaching their *munzi*, they would strike it out. As time went on, they would freely smoke it in my presence. Despite this, Mudimba would never reveal to me directly that he produced and distributed it.

[46] The Zimbabwe veterinary services issues cattle owners a cattle stock card, which is regularly updated by the assistant veterinary officer.

from hunger. He explained that the draught was unexpected but also that he could not sell because the value of Zimbabwean money was volatile. Moreover, people in the local community did not have the cash to buy cattle. So, the instability of the Zimbabwean currency made cattle ownership a more stable and secure form of savings and investment for persons and households in Binga. In an economic situation where one's wealth can quickly be depleted due to the crash of the value of a currency, cattle become more important as a form of wealth. The crisis in effect pushes people to look for more durable forms of monies and forms of savings and investments that not only retain value and that can store value, but that can also fulfil a variety of functions – both economic and social. Cattle do all of these in their local economy.

When asked whether they have ever gone for the whole day without eating anything, Mudimba replied that this has not happened in the recent past. However, he did speak about the dire situation at the height of hyperinflation in 2008. The hyperinflation was exacerbated by a drought which was so severe that they had to kill a goat and eat the meat on its own because there was no mealie meal to make *nsima* (white Zimbabweans call it thick porridge while in SA it is called pap). Their situation was also hard in 2017, when they only managed to harvest two 200 litre drums of millet, which they consumed and finished around June/July. At the time of our interview, their household had already finished the millet and was forced to buy maize or millet. To feed a household of five members, they have to buy six buckets of maize meal at $5 each bucket every month.

As I indicated earlier, education is a large expense for many households. Two of the children of Mudimba and Emilia were in primary school at the time. School fees are $15 per term, which works out to $90 per year for both and this is paid strictly in cash. I asked about the announcement made by the Zimbabwean Minister of Education, who suggested that parents could pay fees in livestock (BBC, 2017; News24, 2017). By the time I had directed this question to Mudimba, four other young men who visited him were present, and they all laughed at the suggestion. Mudimba explained that the main reason why this would not work is that schools, as government institutions, would under-price livestock in comparison to market prices. To pay for food and school fees, Emilia and Mudimba sell goats at $20 to $25 each, and indeed I have witnessed his son selling a goat to the manager of a local hotel. Like many other people, Mudimba does "piece jobs" for people in the village such as *kuliminina*, cultivating other people's fields, at a fee of $5 per *mfolo*.[47] It should become clearer now how they combine, like most households, doing “piece jobs” and selling produce from their land to make a living, coupled with the selling of livestock when need be.

Mudimba and Emilia told me that they have no funds for emergencies but that they may approach community savings clubs to request a loan. When I asked if anyone in the household had a bank account, they, like most of my respondents, laughed in response to my question. How and why, Emilia asked me, would anyone with no money need a bank account? They save their wealth using livestock. It is more stable than money and is fairy liquid even if it is much trouble and involve other costs such as transport and time to convert livestock into cash.

When I inquired if they owe anyone money, Emilia estimated that she owes friends and neighbours about $70. She has not loaned money to anyone because she does not have money, and no one had asked. At the time of their respective interviews, they both claimed not to keep any money in the house. Emilia told me that in 2017, the year prior to the interview, she joined a savings club where she used to contribute $2 per month. She participated for only nine months before some issues emerged in the club. Some members borrowed money which they failed to repay, while it was also claimed that other members stole money. At the end of Emilia’s savings cycle, the group members shared the saved contributions by buying three five-litre cooking pots for each member, which totalled $18.00. She claims to have lost some of her contributions and the interest the pooled money would have earned in the form of loans made to others. When asked what recourse she might have to the law and assistance from the police to recoup monies she explained that this was not really an option, in part because some members are protected from the criminal justice system because they are members of the ruling party.

When they were talking about their debts, they mentioned that they owed school fees amounting to $200 from previous years and the current school year. At times, they are forced to approach a local money lender that charges high interest on loans. A loan of

[47] This term most probably derives from “furlong”. In my early teens, my late father, who was an agronomist but later became a veterinarian told me that it was a distance that could be ploughed by oxen without resting. Respondents would estimate *mfolo* to be an acre.

$20, for example, could accrue up to $5 interest per month. Their most demanding financial needs were school fees, food and clothing for their children.

Emilia was one of the beneficiaries of the SC conditional cash transfer scheme mentioned earlier. Both Emilia and her husband informed me that before the scheme, they did not own a mobile phone and had never heard of mobile money. When SC issued her with the EcoCash SIM card and transferred $28 into her mobile wallet account, she had to approach friends and random people to ask them if they could allow her to insert her new SIM card into their phone so she could withdraw her funds from her mobile wallet account; they all refused. Asked why, she explained that their fear was that if they allowed her to do so, this would somehow interfere with their own mobile wallet credit.[48] After several failed attempts, her husband was compelled to sell one of his goats for $25, and out of that, he purchased a mobile handset for $15. The couple's problems did not end with ownership of a new feature phone. In order to cash her mobile money, Emilia, who lives in Mankobole, had to pay $4 return transport fees to commute to the nearest Ecocash Agent in Siachilaba (20 km away). The merchants closer to her based in Sianzyundu did not have Ecocash Merchants or agents, possibly because the whole area did not have Econet mobile signal at all. When she got to Siachilaba, the Ecocash Agent did not have any cash. After this, she was forced to approach several merchants in Siachilaba, but they all claimed not to have any cash,

[48] I found this to be an odd explanation, but after several months I befriended Roark, who worked at one of the absent landlord houses by the river. The owner of the house died, and his wife migrated to South Africa. Roark was illiterate, but was sent a letter by his employer informing him that he can look for work elsewhere as she could no longer afford to pay him. She told him that if he decided to stay, she could no longer send him money on a regular basis. Roark could not leave that job because he said it was better than nothing. One of the white holiday home owners said to me once that "over here, gardeners and housekeepers are kings, they are the only ones with cash" (except of course the white employers). In Roark's case, he used to get his money in Ecocash because the money was wired from South Africa to a property manager, who kept the foreign currency and gave him mobile money. One day, Roark came to me offering me mobile money for cash and noticed he had two phones. People commonly invest in two phones so they could save on call charges by using different networks but I noticed that both his handsets were operated by the same mobile network. I asked him why and he said *ah Chipere, ngiyasaba nginga deleter imaliyami nge mistake*, meaning "I'm worried I might delete the money by mistake". I laughed but could not convince him that it was impossible to delete his money from his phone because his transaction records are securely kept by the mobile network, not on his phone; his phone was merely a channel to access the records.

insisting that she must first buy goods from their shop. She ended up buying goods worth $8; only then was she able to withdraw the remaining $20 in cash.

I asked Emilia and her husband why they did not just keep their money as mobile money. In response, Emilia explained that she could use cash for exactly what she needs, whereas with mobile money, she is forced to make additional purchases. She added that with mobile money, she never knew exactly how much she was getting because the transaction fee charges were unclear to her. They both dismissed the idea that mobile money offers advantages as a means to store value or mitigate the risk of loss of money through theft.

The case of Mudimba and Emilia and the evidence from their household income and expenses show how difficult it is to sustain themselves in an unstable and uncertain economy. The liquidity crisis and the hyperinflation, coupled with drought and illness and the high cost of education, places high demands on their livelihoods. They have to combine various practices and relationships in order to survive. Cattle and livestock play an important role, and its prominence in the livelihoods have probably increased as cash became scarce and an instable for of wealth. That they laughed at my question about whether they have a bank account shows the true face of financial exclusion. It is clearly not a rational decision for households such as this one to open a bank account and to engage with the formal financial system. This formal system offers them very little. Not banking makes more sense than being banked.

5.9 Conclusion

In this chapter I examined various monies used by households and persons in Binga. I discussed how various forms of money are used (or not used) in the context of the livelihoods of persons and households.

I discussed how households save and invest and how they access credit on both household and community level.

I discussed how hustling and risk-taking have become an important livelihood practice, especially for those who are connected to institutions or markets where pools of money are temporarily in their hands.

We saw that remittances play a remarkably small role in the livelihoods of households in Binga. Coupled with the decline of wage work in the region, it means that there is a massive scarcity of cash in the region in comparison with other regions in Zimbabwe. The economic realities, specifically the cash shortage and the hyperinflation, means that persons and households in Binga have had to find ways to save and invest money and wealth outside of the monetary system. In this regard, cattle and other livestock have taken on a new importance, especially cattle, as they also mediate relationships between people and as we have seen, wealth in people has become more important in Binga. Wealth in people translates to wealth in cattle. Cattle are valued because people are valued.

Chapter 6: The fishermen entrepreneurs of the Zambezi and mobile money

In this chapter I describe and analyse the use and adoption of mobile phones and mobile money by Binga fishermen. In the process, I engage with claims raised in the literature and which I outlined in the literature review of this thesis. Some of these claims include the argument that ICT has a positive welfare effect on poor households (Jensen, 2007), that poor people benefit from and have a preference for forms of money that leave a digital trail (Breckenridge, 2005; Radcliffe and Voorhies, 2012) and so forth. In this chapter and the preceding ones, I have presented evidence that makes more complex the at times simple claims that are being made in the literature on the benefits of financial inclusion. After my focus on household livelihoods and the monetary practices of persons and households in the previous two chapters, here I highlight some of the complexities associated with making livelihoods in a border economy. Lastly, but equally important, the chapter continues to evaluate the impact of agroecological resources and infrastructures on livelihood and livelihood outcomes.

One of the prominent studies on fishing and ICT was by Jensen (2007), who conducted research at Kerala fishing camps in South India. He found that the use of mobile phones increased information efficiency – it reduces information asymmetry and subsequently leads to a reduction in the dispersion of fish prices because fishermen were able to phone several fishing camps in search of higher prices. Underlying his observations are economic theories of market equilibrium, assumed to arise in a perfect competition environment, composed of a large number of buyers and sellers with perfect information about market prices of a homogenous commodity (Merton, 1987; Berentsen and Rocheteau, 2004). In the long run, this brings about a pareto optimum, or state of equilibrium, whereby the quantity supplied is equal to demand. In such a case, both buyers and sellers become price takers, incapable of influencing prices (Ibid). Jensen’s paper remains a favourite of ICT scholars, who often cite it for being demonstrative of the positive welfare attributes of mobile phones and ICT in general.

Writing on behalf of the Bill and Melinda Gates Foundation, Radcliffe and Voorhies (2012) argue that anonymity of cash leads to cases where market traders may be reluctant to buy goods from a new vendor if their anonymous cash-based transactions are not backed up with a digital record. They argue that failure by the poor to digitise their monetary affairs makes it “costly for banks, insurance companies, utility companies, and other institutions to transact with them” (Radcliffe and Voorhies, 2012, p. 2). They effectively blame the poor for being invisible, disregarding the evidence produced in the previous chapter that shows the rationality of rural households opting out of the formal financial and banking systems. They further argue that the use of cash is costly in the sense that it poses storage risks, not paying attention to the incredible costs for poor people as they seek to convert other forms of wealth into cash. They claim that cash and jewellery can be stolen, whereas the respondents often pointed to how mobile money seemingly disappear from phones. Cash, Radcliffe and Voorhies claim, incurs transportation costs, but persons in Binga incur transport costs with their use of cash, their use of banking facilities in Binga, and their use of mobile money as they travel around looking for a signal. When they claim that cash acts as a phycological barrier to savings, because it presents poor people with “self-control challenges over and over again amidst pressing consumption demands (for food, housing) and requests from friends and neighbours who are also poor” (Radcliffe and Voorhies, 2012, p. 2), they ignore the fact that the best way for poor people to survive when states and markets are not supportive is to depend on other people. As such, poor people value interdependencies that come with social relationships as much as they value self-control. The views expressed by these authors are, in my view, typical of those expressed by international financial institutions and affiliated development agencies interested in eradicating cash in the name of ‘financial inclusion’.

Many of the claims being made about digital and mobile money do not hold up for Binga. As I will show in this chapter, fishermen do not accept mobile money and instead demand cash. On rare occasions, fishermen may take fractional payments split between cash and mobile money, but with mobile money being used to pay for the smaller fraction of the outstanding amount. This usually happens when the fish trader who has a long-term trading relationship with the fisherman has run out of cash, rather than by choice. Fishermen may also accept mobile money if they intended to make a remote payment. Purposive or limited acceptance of mobile money also applies to Zambian traders who come to sell fish in Zimbabwe. Such traders accept Zimbabwe mobile money so that they can purchase Zimbabwe mobile network phone credit. This enables them to use Zimbabwe mobile networks in parts of Zambia border areas that are not adequately serviced by Zambian networks. For the most part, buyers who go to the fish harbour to buy fish using mobile money without any prior arrangements would come back empty-handed. Similarly, buyers sell fish in towns for cash, only accepting mobile money for pragmatic reasons explained in previous chapters.

6.1 Binga Fisheries

In Binga, the fishing market is composed of various actors, including the local and town-based fish traders and small-scale fishermen who operate as fishing cooperatives. However, their catch is not pooled and equally distributed among cooperative members; each man can only accrue the rewards of his sweat. Some of the fishermen take on the role of fish traders by storing fish in fridges they own or rent kept at the local hotel, holiday resort or nearby riverside homes. They market their fish by two main means. The first one is by selling fish in the local market, but to urban-based fish traders, especially in Bulawayo; some sell directly to town markets. The latter option is made possible by liaising with bus companies to transport fish to Bulawayo and other small towns for direct supply to butcheries and supermarkets. However, traders selling in Bulawayo and other urban areas constitute the largest group of frozen fish traders. They purchase the fish directly from local fishermen at the fish harbour and then distribute it by bus or small private cars. Their main customers are town-based butcheries and supermarkets. Those who sell door-to-door in residential areas go to long-standing customers who purchase fish worth $1 and upwards depending on size.

As I mentioned previously, local fish traders only sell at local shopping centres where they wait for shoppers and travellers commuting by bus. Both the fisherman and fish traders fall under the regulatory authority of the Zimbabwe Parks and Wildlife Management Authority (ZimParks). This is a government agency with the responsibility to issue fishing permits to fishing cooperatives, and fishing licences to local traders and out-of-area traders. Out-of-area fish traders complain that they are charged licence fees of around $20 per month, even though they do not sell their fish in the local market. The principal fish harbours I regularly visited for research purposes include Mlibizi, Sebungwe Mouth, Simatelele, Munjeri and Zambezi. The biggest, better developed and most active fish market is Mlibizi. Its infrastructure is extremely poor but comparatively more advanced in the sense that it is linked with a tarred road, though poorly maintained. It has a daily bus service, overnight accommodation facilities, electricity and refrigeration facilities, which are illegally secured through domestic workers employed by absent white landlords who own holiday homes along the Zambezi river.

Figure 11: Fisherman Standing next to his hut at Mlibizi fishing camp, Mlibizi (2016)

The fishing cooperatives in Sebungwe Mouth are located several kilometres from the main Binga highway. The fishing camp is composed of several huts near the Zambezi River. For several years, the fishing camps have operated without electricity, so they specialise in dried fish. However, since 2017 this changed slightly because the cooperative received a donation of a solar-powered refrigerator from a nongovernmental organisation based at Binga centre. This donation enabled them to diversify into the more financially lucrative fresh fish market, but the long distance between the camp and main highway makes frozen fish sales a subsidiary activity because of the difficulty in accessing the main road that links with several towns.

Approximately 8 to 10 km from Sebungwe Mouth is Simatelele fishing harbour. Again, the fishing camp does not have electricity, but fishermen and fish traders can access refrigeration facilities within walking distance (less than 5 km) from the river where their camps are located within 1 km from the river. The refrigeration is provided to both fishermen and fish traders by local businesses owners who run bottle stores, butcheries and grocery stores. The fees for such a service are typically $3 per night. Much like Sebungwe, Simatelele is further away from the main highway. Furthermore, the tributary road network to the highway is poorly maintained. There are no bus services, so fish traders are forced to walk for three to four hours from the main road. On occasion, they get a lift from the very few cars and scotch carts that occasionally ply the route. Hiring a donkey-drawn scotch cart costs between $4 and $5 per person, plus $1 for each bag of fish, just to get to the main tarred road. Because of all these constraints, all the fishing camps (besides Mlibizi & Binga) specialise in selling dried fish, which are much cheaper and easier to store and transport.

6.2 Fish price dispersion and mobiles

Mobile phones are starting to play an increasingly important role in coordinating activities of both fishermen and fish traders.[49] Fishermen generally work in pairs but stay in different parts of fishing camps. They work unsociable hours, starting patrols that involve inspecting gill fishnets at various sites in the Zambezi River in the evening or very early in the morning at around 4 a.m. The main means of communication to alert each other that it is time to get to the river include beeping, which entails calling their partner and cutting the phone before the other party picks it up. To acknowledge that the receiver has received the message the called person would, in turn, call the original caller and terminate the call immediately. Another method involves very quick flash calls which last as short as five seconds. Both methods are a means to minimise call charges by taking advantage of the per-second billing. Despite these cost minimising efforts, call charges remain extremely high at US$0.16 per minute. However, there are several fishermen who do not have mobile phones, do not have a good mobile signal or prepaid call credit to beep. Those in these situation resort to coded whistles whereby the caller intermittently whistles until the receiver whistles back. One would wonder how the caller and receiver uniquely identify each other, but

[49] In this context, the word “coordination” does not include Jensen (2007)’s broader claims about information efficiency and positive welfare effect of mobile phones.

I have been informed that with time most of the fisherman resident at the camps or nearby homes get to know who the caller is and their intended recipient. This method of communication does not cannibalise but works hand in hand with mobile telecommunication technologies.

Fish traders and fishermen do not overly depend on mobile communication to negotiate prices. They simply meet at the fish harbour, where prices are bartered face to face. However, when the fishermen's customers are away in town selling fish, both parties may resort to mobile communication for social purposes to share information about a trader's itinerary, enquire about prices and availability of fish at the harbour. There was no evidence that fishermen and fish traders could influence prices through mobile communication. In a study about fisheries in Kerala in India, the same place where Jensen conducted his 2007 study, Tadesse & Bahiigwa (2015) and Srinivasan and Burrell (2013, p. 10) cautioned that "claims about the empowering qualities of information or ICTs can make underlying and ongoing political struggles invisible" Srinivasan and Burrell (2013, p. 10). They added that ICT4D scholars misunderstand "the enduring power dynamics of trade and its basis in person-to-person relationships" (Ibid). In this study, fish price fluctuations were found to be associated with seasonal shifts and the state of infrastructural provisions – particularly electricity, road network and transport costs. For example, at the more developed Mlibizi Fish Market, prices are at their highest level (US$1.50 to $1.80 per kg) during the dry season between April and November. This period is associated with meager daily fish harvests of 2 to 8 kg per fisherman. During the rainy season, which is from December to April every year, the fish harvest increases to an average of 5 to 15 kg per day; concurrently, the selling price gradually declines to $1.00 to $1.50. The retail selling price of fish in towns remains relatively stable. Traders sell the same kilogram for $4.50 to 6.00 in Bulawayo and other nearby towns throughout the year even where producer prices – the price that fishermen sell to traders – drops to $1.00 during the rainy season. Prices at other fishing camps in Simatelele, Sebungwe, Zambezi and Munjeri are depressed to around 25 to 40% of Mlibizi prices throughout the year. If the information hypothesis was true, then fishermen from these camps would travel to Mlibizi, where in the dry season they would get $1.80 per kg instead of the current $1.30.

Aside from seasonal and infrastructural price fluctuations, prices also vary due to manipulation by both buyers and sellers and first-mover disadvantage. Both usually work very well when there is an imbalance between the number of sellers and buyers. For example, there is a relatively small number of buyers of tigerfish, which is a much larger species than the smaller and more common breams, so at times the buyers collude and offer prices that are around 10 to 30 cents per kg less than the going rate. They do not usually abuse this position because of the fear that the sellers could play the same game on them when there are more buyers than sellers. Insight about first-mover disadvantage came to me after several fishermen told me that when fish traders make the first move to enquire about buying fish, they bump the prices up slightly. The same happens when fishermen approach fish traders. The fish traders whom I have made friends with routinely feigned a complaint about the fish being too small for their market, or they lie that they are not really interested in the type of fish on sale. In other cases, some will claim that a small sample of the fish has gone bad or that they have been offered a much lower price by someone else that very same day. Fearing that their fish might spoil while they search for the right selling price, the fishermen will end up yielding and bring their prices down. These strategies for maximising gain happen in face-to-face exchanges and do not depend on the use of mobile phones.

6.3 Sharing Fish & Complexities of a Border Economy

Figure 12: Zimbabwe-Zambia border at Binga Mlibizi Fish Harbour, Mlibizi (October 2017)

As stated earlier, the mighty Zambezi River is the borderline between Binga in Zimbabwe and Zambia's Sinanzongwe District. The two countries share the resources in the Zambezi River, where they judge by eyesight where the middle of the river is positioned to ensure that they fish on the correct side of the river. Sharing resources from the Zambezi River between fishermen from both sides have not been without its issues. The main problem seems to be the lack of policy coordination, which has led to a situation in which Zimbabweans fishermen preserve fish while their Zambian counterparts deplete stock. Zimbabwean fishermen whom I became acquainted with protested that Zambians use glass fishing nets, which are illegal in Zimbabwe because they harvest far too much fish due to the invisibility of the nets. On the other hand, ZimParks restricts Zimbabwean fishermen to cotton fishnets as a means to reduce overharvesting because a fraction of the potential fish harvest can detect and avoid the more visible white gill nets. The other source of conflict concerned claims that Zambians were encroaching onto the Zimbabwean side of the river to poach fish, but Zimbabweans may do the same. However, each time I attended the fish market at Mlibizi, there were indications that Zambians sold more fish than Zimbabweans. By law, Zambians are restricted to sell a maximum of 5 kg of fish per person twice per week, but in practice, they routinely exceed this limit.

Because of the above issues, Zimbabwean fisherman convened a grievance meeting on the 31st of October 2017. The meeting provided insights into the multitude of ways in which marginality plays out in livelihoods. In their attempts to empower themselves, the fishermen exercised their right to criticise and protest, but this did not result in effective resistance to unreasonable conservation policies or empowerment but accommodation and sustenance of unfair human conditions. I attended the meeting, to which senior government officials were invited together with ordinary members of the local community, the chairman of the Mlibizi fishing co-operatives, his secretary (and also my interpreter). At first, I was surprised that the meeting was conducted in Shona and Ndebele in some cases, and yet the local community and all the members of the fishing cooperative were Tonga speakers. The reason for this is that all the senior officials invited to this meeting were Shona and Ndebele-speaking who could not speak Tonga, even though some of them have worked in the district for several years.

The fishermen raised an important point that reflects the need for policy coordination between Zambia and Zimbabwe, but this was ignored by the government officials in attendance. The point raised by the fisherman was that since ZimParks disallow glass nets, the parks service and the police should also enforce the same laws on the Zambian fishermen. In response, the senior officials strongly affirmed that they could not enforce a Zimbabwean policy on Zambians. Although this was a logical response, it was unfortunate that it was not followed up with a statement, plan or strategy that demonstrates that as senior civil servants, they were aware that this issue had to be escalated to policy makers. This deepened my understanding of the effect of political marginalisation and an absent state on the livelihoods of rural households in Binga. Without the presence of an active state to regulate markets, unleashing markets such as mobile money markets could cause severe damage to people's livelihoods.

The limit of market logic was further reflected in the tension brought about by the fish price differences between Zambian and Zimbabwean traders/fishermen. The Zambians sell their fish at a much cheaper price (10 to 30 cents per kg less). The main contention was that the price discrepancy is eating into their meagre means of livelihood, but they were advised that they should respond to market demand by reducing their own prices, rather than calling for policy intervention. After failing to get support on this, the Zimbabwe fishermen demanded that the 5 kg maximum limit per person should be stringently enforced, but in response, the Binga District police chief said this would put Zambians at risk of drowning because the likelihood is that Zambian fishermen and fish traders would attempt to beat the 5 kg limit per person restriction by simply inviting a larger number of family members and friends to come along with them on their twice-weekly trade days; in the process, this may increase the risk of drowning.

Disagreements about sharing natural resources were not restricted to cross border relations but also along racial lines pertaining to the white houseboats and holiday home-owners whose properties are dotted along the Zambezi river – especially at Binga centre, Mlibizi and Musuna resorts.[50] Their businesses depend on recreational

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[50] Some of the holiday home owners left their homes and relocated to Australia, New Zealand and South Africa because of political instability and racial tensions of the early 2000s, but they continue to maintain their homes through friends and domestic workers, some of whom have not been paid for several years. In one sad case, I found out that Robbie, who I became friends

fishing business and renting out riverside homes to fellow white Zimbabweans who drive from Bulawayo and other smaller towns for weekend fishing excursions. Resort owners and their rich customers were concerned that the river was running out of large fish sizes because fishermen were not only prematurely harvesting them but over-harvesting them before the fish have had the opportunity to breed and grow. This issue was raised at the meeting, and the main complaint was a local chief, which others claimed was colluding with the white business owners to form an aggressive voluntary fish conservation group called Mabuka Trust, an organisation that was established without consulting the local fishermen, fishing cooperatives or village heads. Moreover, the Trust is wholly funded by the holiday resort owners, who provide them with speed boats, minivan hire, provision of life jackets and other expenses. The Trust's conservation officers had no links to the local community, but despite that, they forcefully imposed themselves on the local fishing cooperatives through draconian policing techniques. These included confiscating fishing nets, removing nets if left in the water for longer than the designated fishing times, and reporting fishermen to the police or ZimParks for minor misdemeanours. The fishermen alleged that the chief was paid money for allowing such excessive levels of force to be imposed on them. What angered them the most was that this initiative was not necessarily about fish conservation but the protection of the bottom line of businesses owned by the rich, which comes at the expense of their own livelihoods.

The meeting provided some evidence that the Zimbabwe government prioritised rent-extraction for officials, primarily via corruption, over good public policy that may have resulted in effective implementation and monitoring of fish conservation policies. ZimParks' failure to fulfil their mandate effectively contributed to the formation of a private conservation group that disproportionately enforces regulations that the

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with, has not been paid since 2012. I asked him why he has not reported his Australia-based boss to the ministry of labour, and he said his employer is like family to him; he remains hopeful that his outstanding wages will be paid amicably. To make ends meet, he used to rent out his employer's fridges to fish traders for $2.00 per night, but unfortunately electricity was eventually disconnected due to non-payment. For a long time he was stuck, as he could not afford to make international phone calls to Australia. He then tried the cheaper option of texting, but the employer never replied. On one occasion, when I tried to make the call on Robbie's behalf, his employer said he did not know him.

National Parks, a public authority, is meant to enforce. Admittedly, there was some level of effort by ZimParks to enforce fish conservation policies through various means such as safeguarding fish breeding zones and making sure that fishermen do not use prohibited fishing nets, especially ones that harvest small fish. ZimParks officers have the authority to impose fines of up to $30, confiscate fishing nets, impound offenders' boats, especially in relation to fishermen found fishing in the breeding areas. However, they do not have the legal authority to impose fines on all infractions. I have witnessed cases where fishermen's boats were seized and asked to pay an illegal release fee of up to $50. In such a case, the ZimParks officers do not issue an official ticket but simply emboss the fake fine on top of a genuine ticket for a different offence.

Their conservation efforts to limit premature fish harvesting are complicated by the fact that small fish sizes (palm size and below) are the most financially viable. This is so because the fishermen's customers, namely the fish traders, find them easier to refrigerate and transport. Most importantly, palm-size fish sell better because of the ease of divisibility into lower denomination selling prices that are affordable to poor people. Several fish traders explained to me that a fish that weighs over 5 kg is beyond the reach of most of their customers. Some have attempted to subdivide large fish but found that customers still do not buy them.

Further evidence of state-sponsored rent extraction is reinforced by the excessive fees and licenses imposed by ZimParks on both fisherman and fish traders. Aside from the minimal contributions they make to their conservation obligation, the conservation agency does not offer anything else in return besides harassment of fishermen and traders for both legal and illegal licence fees. There is no effort by ZimParks, the National Parks Services, to invest some of the money extracted from fishermen and fish traders in basic infrastructure such as health and safety, for example cold rooms, secure warehouses, toilet facilities or shelter at the market place. Worse still, the crocodile population is not regulated by culling or relocating them to other parts of the river. The consequence of this neglect is that the research participants in this study, especially in Sebungwe Mouth, have had to discontinue fishing due to several crocodile attacks and near misses. Some of these attacks have resulted in several fishermen, especially in Sebungwe, Zambezi and Mlibizi, losing their lives because of poor health and safety services by both the parks services and the police. During the fieldwork for this study, at least five people who I knew died from crocodile attacks and boats being capsised by hippopotami. Of course, it is entirely possible that there were far more casualties than what became aware of.

How to govern shared and common resources is an old question, both theoretical and practical (Dietz, Ostrom, & Stern, 2003; Ostrom, 2011). It is clear that the complexities relating to the common governance do not seem to be acknowledged by the state institutions responsible for managing fish in the Zambezi. The case shows that conflict is not being effectively managed in a manner that accounts for institutional diversity in order to meet the needs of the diverse range of stakeholders. The goal of the meeting held in October 2017 was conflict resolution. However, the exclusion of relevant institutions – white business owners/associations were not in attendance, Zambian National Parks authorities were not invited, traditional authorities did not attend (the chief attended but refused to participate, stating that he was not invited in his capacity as the chief) – all these critical factors make the achievement of the conflict resolution goal remote. The financial sanctions imposed on fishermen have become one of their many means for rent-seeking than managing commons. Provisioning of infrastructure such as refrigerated storage facilities and a well-organised trading space would facilitate governance of commons, for example measure/monitor how much fish is being harvested and developing more effective conservation policies that meet the demands of the diverse range of stakeholders with diverging interests.

6.4 Conclusion

The aim of this chapter was to examine the impact and role of ICT and infrastructures on livelihood activities. The chapter demonstrates the need to put new technologies under close social scrutiny, and not to readily accept expert claims about the societal benefits of technology. The chapter offers a critique of some claims made about ICT and fishing businesses, in particular, the arguments presented by Jensen (2007). He argued that the information efficiency of mobile phones led to a reduction in price dispersion. In turn, he argued that this leads to positive welfare effects. The basis of the argument is that fishermen would simply make phone calls and search for a market that offers the highest prices. In this study, price dispersions were influenced by the physical infrastructure of Binga, particularly electricity and road network facilities. Fishing camps in which the two infrastructures were relatively developed attracted the highest prices. An additional disconnect with the positive welfare belief is caused by exorbitant pricing, which inadvertently excludes the poor from mobile phone networks. Evidence provided to support this includes users deliberately switching off mobile data, making brief calls, and flash calling.

Previous chapters have demonstrated the importance of sharing in spaces shunned by both the state and private infrastructures. The Binga fisheries present a case which reveals the complexities associated with sharing outside the household arena. The tensions between the two agroecological infrastructures stem from the fact that although ZimParks is associated with state extraction activities, the agency has also made genuine efforts to enforce fishing conservation policies. The source of tension stems from the fact that the Zimbabwe fish conservation goal conflicts with the lack of interest in adopting (or failure by the Zambian government to enforce) the same goal.

Chapter 7: Discussion and Conclusion

7.1 Introduction

The purpose of this chapter is to summarise key findings of this thesis, interpret my results, discuss their implications and make future recommendations. Most importantly, I will also attempt to re-articulate research contributions. Clearly, the expected contribution is contribution to theory, but in the introduction I pose as my research problem, the lack of a credible framework or theoretical concept of monetary innovations for people living in poverty. While international development actors take a domineering position in defining monetary innovations for the poor, in this section I will articulate a framework which puts the governments of people living in poverty at the centre of their monetary innovations i.e. defining research policy and technological development priorities. This is supported by indications of misplaced development priorities, in particular, the abundant evidence which support economic exclusion as a more urgent development priority than digital money or digital inclusion imposed by international development actors. Secondly, the framework also presents the mutually exclusive relationship between money as a means of exchange and its role as a means to store economic value as a problem towards which technological (and non-technical) solutions are required. Lastly, the framework decentres digital money to a secondary innovation inconsequential to poverty alleviation, but beneficial to the poor only in facilitating remote payments. Its limited role in wider international development stems from its susceptibility to appropriation by private entities as an instrument for indiscriminate identity harvesting (monetizing and profiting from personal identity and behavioural attributes of both rich and poor people).

The overall aim of this study was to reconceptualise monetary innovations for people living in poverty in developing countries. A relevant follow-up question is, why is this significant? This important question was fully responded to in the introduction, where I draw on Swanson and Ramiller (1997)'s organising visions concept and integrated my own personal experience as a developer of mobile and web payment technologies to underscore the inscrutable ways by which technology promoters and developers circumvent social critique of their innovations. One of the most prominent risks that emerged from this is the fact that technology developers and promoters routinely overestimate the social benefits of their innovations. Thus, it is vital to re-examine the drive to eradicate cash by digitisation, and the unsubstantiated claims that this would be beneficial for the poor.

In pursuance of the above aim which also encompasses pertinent debates about the convergence of money and technology, I embarked on an 18-month ethnographic study in rural Binga, Zimbabwe, where I gathered data to answer the question; what new insights can monetary practices of rural households and persons reveal about money and monetary innovations (or needs) of the low-income group? The study draws on the infrastructure concept as envisaged by Star (1999) and Simone (2004) and others to examine the monetary infrastructure of Binga, Zimbabwe, which I analysed in conjunction with issuers of money, who I also refer to as infrastructure builders. For clarity, I provide a brief recap of the Zimbabwe monetary infrastructure, where the constituent material infrastructure and issuers of money or regulatory authorities are bracketed. It is comprised of the cash infrastructure (notes and coins issued by fiscal and monetary authorities), bank infrastructure (bank money issued by banks and other financial institutions), mobile money infrastructure (mobile money issued by mobile network operators), cattle or livestock money, regulated by the head of the household, and lastly, commodity money, which is in direct control of the user. I refer to the conglomeration of all these infrastructures as the monetary infrastructure, but I specify a particular monetary infrastructure or material monetary infrastructure where clarity is required.

The monetary infrastructure of Zimbabwe and elsewhere is imbedded with or into the economy; therefore, a study of money at the exclusion of the economy in which it mediates (or not) would be an unfortunate oversight. Thus, the study draws on the SLA to analyse the Zimbabwe national economy and the local economy of Binga.

In the second chapter of this thesis I provided a brief review of literature on the epistemology and ontology of money and technology, sufficient to position my own ontological position of critical realism. By that, I acknowledge money as a social technology but also pay attention to its practicalities, in other words in what ways does it fail to meet (or successfully meet) the needs of its designers, developers, promoters, users, and or nonusers? I argued that social scientists and anthropologists tend to privilege social epistemology of both money and technology. By social epistemology, I refer to an interest in the social consequences of money and technology. This leads to ontological positions in which both money and technology are perceived as being socially constructed. In science and technology studies, this is referred to as social constructivism, while in economic anthropology and other social studies of money, reference to money as a social technology is not uncommon. This strong social perspective is also reinforced through criticisms that economists narrowly define money on the basis of its Aristotelian functions. In this study, I aligned myself with SSK scholars in particular (Mackenzie, 1996; Star, 1999) and other anthropologists who are opening the black box of money and digital finance (Tett, 2010) or what some refer to as the pragmatics of money (Guyer, 2011; Maurer, Nelms and Swartz, 2013).

In chapter 3, I provided the historical context for understanding the monetary infrastructure of Zimbabwe, analysed the various infrastructures that constitute the Zimbabwe monetary infrastructure, together with institutions that issued various forms of money during and after the colonial era. I introduced and examined the actors and infrastructure that played a role in the convergence of fiat money with ICT and technology in Zimbabwe. In the conclusion of the chapter, I articulated the conventions and classificatory systems that characterise the monetary infrastructure of Zimbabwe. The most important insight from the research endeavour explained above is power dynamics relating to the regulation and control of the monetary infrastructure. Arguments that for a country’s monetary system to be effective, the monetary authorities have to be independent of the fiscal authorities could not be upheld. There is a clear power hierarchy in which the fiscal authorities are situated at the top, their dominant authority is not only in relation to cash infrastructure, but various other types of money examined in this study.

During the colonial era, the main standard or goal that was embodied in the monetary infrastructure of Rhodesia was colonialism and a racial classificatory system in which black males were exploited for their labour. These two conventions became a site for tension and contestation. Firstly, when the British abandoned colonialism, the white settlers insisted on continuing with colonialism, not for queen and country, but for self-determination. To assert this, the Rhodesians disembedded from the British monetary system, first by printing their own money. In response, the British confiscated financial assets belonging to the Reserve Bank of Rhodesia and made court rulings to reverse dispossession of Africans of their wealth – land in particular. At the same time, the black nationalists embarked on guerrilla warfare to challenge colonialism, including the exploitation of black labour. Eventually, Zimbabwe attained independence in 1980, the post-independence fiscal authorities embraced redistributive policies to extend the provision of basic services to Black people. However, as the years progressed, redistributive policies were reversed through various conditions imposed by the IMF. This partly contributed (or led) to increased levels of corruption and kleptocracy by the post-independence political elites who have undue influence on both fiscal and monetary policies of the country.

In chapter 4, 5 & 6 I stepped back from examining the national economy and historical context to looking at the local economy of Binga Zimbabwe. The chapters highlighted the spatial and socio-political marginalisation of the district by both the colonial and postcolonial government. Firstly, the agroecological resources are incapable of sustaining commercial agriculture, let alone subsistence agriculture, the main constraint being low rainfall and soil fertility. Secondly, private actors and the state did not invest in public infrastructures, in particular health, education, roads and telecommunications infrastructure. Additional evidence of marginalisation includes employment of non-Tonga speakers into senior government positions and a school language policy in which Tonga speakers were denied an opportunity to learn their own language.

In addition to marginality, the poor investment in private infrastructures, for example mobile telecommunications, is also partly explained by the fact that embodied in the mobile network infrastructure is the profit maximisation goal. In Binga, this goal is difficult to achieve, for it is a low-income district, and has the lowest population density in the country. The implication for this is that compared to an urban area, the revenue per unit (amount earned from each mobile subscriber) would be much lower.

On the whole, the sparse infrastructural resources (and other resources) available to Binga households contributed to consumption deficit, or a lack of capacity to engage in livelihood activities that meet basic human needs. Consumption deficit is critical in this study. It will be analysed further in the following sections, where I deduce what this economic reality translates to in terms of the money that mediates in a consumption deficit household economy. In such a household economy, money is held for transaction purposes only, not as a means to save, but in the case of livestock, it will be held primarily to meet cultural obligations and working capital purposes. Some monetary practices associated with this economy include the *kuspinner mari* (high risk one-off business activity/deal), which further increases household vulnerability.

In this thesis I found evidence to support the view that economic exclusion is a critical research and development priority over financial inclusion. This stems from the observation that access to the monetary infrastructure is conditional on the capacity to actively participate in the economy through various means, which include employment, self-employment and other livelihood activities. In turn, the bare minimum required before one can sustainably participate in the economy is access to health and education; thus, the unwritten categories and classificatory systems that act as preconditions for accessing a country's economic infrastructure are educational qualifications and good health. In addition to that, financial institutions and issuers of mobile money impose risk aversion classificatory systems whereby users and potential users of mobile money and bank money are excluded by dividing them into the banked (desirable to both infrastructures) and unbanked (undesirable to both infrastructures) categories that explicitly exclude the poor or incorporate them on disadvantageous terms. Thus, the genesis of financial exclusion is economic exclusion.

In the introduction, I argued that *disadvantages from use* of a technological artefact or infrastructure have the potential to trigger new innovations. This notion is influenced by Petroski (1994) and Christensen (2013), who carried out robust long term studies that show that new technologies can be triggered by unmet user needs. In this study, the concept (disadvantages from use) has been supported by several empirical findings, but equally, it is embroiled in complexities that will be discussed in detail in the conclusion. Nevertheless, some of the examples of its relevance pertain to events leading to the Zimbabwe cash infrastructure merging with the ICT in the late 1990s and eventually culminating in the development of the country's digital payment system. This development is attributed to the disadvantages from use of the cash (cheques, notes and coins), which took several days to clear in the banking system. Similarly, the widespread use and adoption of mobile phones and thereafter mobile money was impelled by the sparse telecommunications infrastructure of Zimbabwe. It catered only for urban-based business corporations and affluent residential areas. In turn, the main trigger for mobile money was challenges or problems associated with the use of cash in remote payments. The risks associated with the physical transfer of cash include risk of theft, loss and transportation costs. It is for this reason that, in my view, the widely accepted view that mobile money was triggered by the poor banking infrastructure in most developing countries is an inaccurate explanation about the emergence of mobile money.

In the next section I will first analyse the various monetary practices revealed in this study. In this part I integrate SSK insights on evaluating technological properties of a technological artefact, in other words, induction (experience from use), deduction from theory, and lastly expert claims, for example, international development practitioners' claims that digital money alleviates poverty. Firstly, I analyse two insights (currency abandonment and a hierarchy of money) gained from analysing monetary practices of rural households in Binga, Zimbabwe.

7.2 Dis-embedding though currency abandonment

The currency abandonment phenomenon (refusal by users or potential users of a particular currency to use and or adopt it) suggests that *embeddedness*, as envisaged by Star (1999), gives an erroneous impression that infrastructures seamlessly embed into other structures, social arrangements and technologies. The reason being that, the currency abandonment phenomenon could be seen as *disembedding* (from the formal monetary infrastructure). The *disembedding* process took effect through various practises, which include dollarisation, financial disintermediation (conversion of digital forms of money to cash in an effort by households to not only take full control of households' financial affairs, but in some cases a deliberate attempt to make financial affairs opaque) by ensuring that their monetary affairs are not mediated by a bank or mobile network operator. Additional mechanisms by which it is effected include digital money discounting (price inflation of goods and services priced in the currency being abandoned). These activities reflect a desire by the holders or users of money to have direct control over the money they use. The currency abandonment process was and continues to be a response to various problems or disadvantages from use of various monetary infrastructures, for example heavy losses resulting from an artificially inflated exchange rate, aversion to a currency (bond note in this instance) with limited spatial and temporal reach i.e. not trusted in Zimbabwe and not accepted outside Zimbabwe, lack of banking infrastructures in poor communities, excessive transaction fees associated with mobile money and bank money, and so forth.

Thus *disembeddedness* is an opposing force to *embeddedness* of infrastructures, the failure to acknowledge its relevance is a limitation of the infrastructure concept as envisaged by Bowker and Star (1999). The limitation relates to the fact that users or those who refuse to use an infrastructure do not seem to be meaningfully accounted for. This weakness forms part of the reason why I integrated Simone's (2004) idea of people as infrastructure, which in this instance shows what users of money do in cases where the infrastructure is missing, weak, or embodies standards and goals that are perceived to be unfair or unacceptable. In line with this, disembeddedness can also be seen as resistance to unwritten classificatory systems, categorisations, goals and standards embodied in the monetary infrastructures. These include rent extraction by the state. For example, in chapter 3, I discussed how the Zimbabwe monetary authorities artificially inflated its exchange rate since early 2000. In effect this dispossessed tourists, exporters and other incoming remittances of their hard-earned foreign currencies[51], exorbitant mobile money transaction fees, discrimination through the previously discussed bank and financial institutions' risk aversion classificatory system, and so forth.

Currency abandonment can be partly explained by Grasham's law, which is a theory that holds that "bad money" drives out "good money" (see Jevons, 1875; Guyer, 2018). This theory became public through a letter written to the Queen of England by her advisor Sir Thomas Gresham (1519-1579). In the letter, he argued that "debased currencies" drive away ones which are not. For example, a coin with an intrinsic value that is less than its par value will drive away one in which the intrinsic value is equal to its par value. This theory applies well to what is known in the literature as the era of metallic standard, during which the value of money or moneyness was measured by

[51] In early 2000, the England rugby team visited Zimbabwe and had to change their foreign currency through the official money market. Consequently, a few players ended up buying a toothbrush for the equivalent of £20, and yet if they had used the informal market to exchange their foreign currency, it would have cost them less than a pound.

the purity of the metal out of which it was made (see Selgin, 1996; Davies, 2002; Graeber, 2011). In this theory, bad money would have consisted of worn-out coins, counterfeits and clipped coins, and so forth. Like most countries, Zimbabwe now uses fiat money, thus Grasham's law has become much less relevant, but I believe the general idea still has significant explanatory value. In her review of Sidney W Mintz's classic 1964 chapter 'Currency problems in eighteenth-century Jamaica and Gresham's Law (Mintz, 2017), Guyer (2018) explains that the bad money in eighteenth-century Jamaica was used for transactional purposes or as a means of exchange, while the good money tended to be used as a means to store value by more powerful segments of society. In Zimbabwe, "bad money" (inflationary Zimbabwe dollar) was and still is not being used as a preferred means of exchange. It is currently in the process of being abandoned, while the good money (US dollar) is being driven in (rather than out) as a preferred means of both exchange and store of value by all segments of society.

Drawing on Tsing (2005:6), who argues that "hegemony is made as well as unmade with friction", attention must be paid to the underlying asymmetric power relations between those in a privileged position to develop and introduce (and in some cases impose) new technologies. Tsing (2005:5) further asserts that "… friction reminds us that heterogeneous and unequal encounters can lead to new arrangements of culture and power". Closely related to Tsing is Simone (2004), who talks about the often unseen power or agency of the marginalised. What do they do when faced with an infrastructure that is weak, broken and at times, non-existent? Similarly, in her review of Mintz's (2017) 1964 research paper, Guyer (2018) highlights the significance of locations of power in money, in particular the asymmetric power relations between dominant social groups, which hold political-economic power, and marginalised segments of society. The relations are not defined purely by the domination of the weak by the powerful, but can also be a reflection of creativity by the marginalised. Their creativity can challenge, confront and, at times, complicate the agenda of those in powerful positions.

7.3 Hierarchy of money

Cash, and cattle as money and a symbol of wealth, sit at the top of the hierarchy of money that emerged from this study. This preference directly contradicts the IFIs and other development institutions' proclamation that digital money (especially mobile money) is a desirable innovation for the poor (see Mas and Porteous 2012). The hierarchy of money theory (see Bell, 1998, 2001) asserts that the degree to which money is accepted is dependent on the extent to which the government accepts it as a means to pay tax. However, the evidence provided in this study does not suggest that the degree to which money is accepted influences monetary preferences (what money or asset to hold). There was a marked preference for currencies that serve as working capital or capable of being quickly converted to working capital without losing value. Closely related to this was a preference for assets or money that is within physical control of the person who owns or took the risk to acquire it. Rural households preferred cattle and cash, while people who originate in Binga but domiciled in urban areas preferred to have municipal houses. Related studies in finance, particularly on tax farming (see Krause, 2013; Bonney, 1975; Ferguson, 2002; Kiser and Linton, 2007; Johnson and Koyama, 2014) suggest that one of the reasons for this is that the further the distance between the holder of the asset (or monetary instrument), the higher the risk of skimming by those on whom the responsibility to manage the asset have been temporarily bestowed.

In the following concluding sections, I continue to analyse monetary practices but focus on proposals or required innovations (technical and non-technical) or rearticulate problems that research, technology developers and policymakers should be working towards. This section continues with the analysis of technological properties of money, through the deductive process articulated by Mackenzie (1996). The pertinent theoretical concept for this deductive process is the neoclassical economist's conception of money as a medium of exchange, unit of account and measure of value. Thus, I evaluate the extent to which the research findings affirm these pregiven functions.

7.4 Quantitative Deficit

As stated previously, consumption deficit defines a type of local or household *economy*, but what remains undefined is the money that mediates in such an economy. Based on findings from this study, I conceptualise the *quantitative deficit* to characterises the money which mediates in a consumption deficit economy. It (quantitative deficit) is a property of fiat money that relates to the conflict or mutually exclusive relationship between the role of money as a means of exchange, and a means to store economic value (the ability to convert money to a basket of goods and services in the short term and foreseeable future (Pedersen, 1954; Carruthers and Babb, 1996; Miller, Michalski and Stevens, 2002; Papadopoulos, 2009; Guyer and Pallaver, 2018). Besides being a monetary phenomenon (or property of fiat money) associated with the consumption deficit, quantitative deficit is further supported by the previously introduced and examined observation that households and persons in Binga do not have savings; they hold money for transactional and precautionary purposes only. This property of money applies only within the confines of low income. It relates to embeddedness as envisaged by Leigh-Star (2002) in the sense that as the tentacles of the monetary infrastructure embed or assimilate into the local and household economy defined in the thesis and introductory section of this chapter, it takes on new properties, in this instance the quantitative deficit. In other words, if this study was based on affluent households, the relationship between the role of money as a means of exchange and a means to store value would not have been characterised as mutually exclusive. Therefore, the quantitative deficit would not have applied.

The quantitative deficit does not only apply to cash but also mobile money. Some studies found that some people use mobile money for value storage purposes (Morawczynski and Pickens, 2009; Camner, Pulver and Sjöblom, 2010) and arguing that such value storage may increase financial savings opportunities (Jack and Suri, 2011; Shambare, 2011). Nevertheless, other scholarship has strongly disputed their claims (Bateman, Duvendack and Loubere, 2019). Similarly, in this study, none of the research participants used mobile money for savings purposes; they only kept money in their mobile wallet accounts temporarily while waiting for the opportunity to either withdraw it or spend it. These observations apply to both Binga and the broader economy. As I state previously, the average amount that mobile money users hold in their account is $7.86 per quarter or $2.62 per month which is hardly a savings. Thus, there is no evidence in Binga or Zimbabwe at large that mobile money is used for value storage purposes but for immediate exchange.

In my view, this problem (quantitative deficit) presents technology developers and monetary authorities with opportunities to problem-solve. As I deliberate in Chapter 3, currently, the cash-to-mobile money ratio is 1:1, this creates the scope for future policy and technical innovations whereby the cash to mobile money ratio is reduced to say 1:1.50 or more. In other words, this creates a situation where digital money can be created out of thin air. The additional (or unbacked) e-money could be issued as a government issued mobile money (a public good as opposed to a privately issued mobile money) which will have the same qualities as cash, but exclude the various disadvantages of mobile money discussed in this thesis. However, under untrusted monetary authorities, as is the case in Zimbabwe, this form of money creation from thin air could be abused, just as the RGTS was and is still being abused by the RBZ to extend unauthorised and unbudgeted overdrafts to Zimbabwe government departments and parastatals.

7.5 Qualitative deficit, identity and identity harvesting

In this study, I denote the Qualitative Deficit to be the inability of cash to combine the unit of account role of money with identity attributes of the transaction parties. I perceive this anonymity property of cash to be a disadvantage associated with the use of cash and a source of potential innovation. However, this property of cash (anonymity) can also be perceived as a standard that once facilitated the expansion of local trade to broader impersonal markets (for more on the links between a cash and impersonal markets see Graeber, 2011a, p. 103). Scholars who pay attention to the anonymity of cash include Zelizer (1994) and Guyer (2004, p. x), who both argue that a qualitatively constant type of money, in other words, a type of money believed to have the capability to homogenise all qualitative distinctions into an abstract quantity is an extremely limited perspective. The limitation that they are alluding to relates to the failure to pay attention to cultural and social attributes of cash, but in this study, the failures and limitation that I pay attention to pertains to the failure to pay attention to personal identity and behavioural attributes and their role in payments and or money.

As discussed previously, the use of an anonymous form of money such as cash is problematic when it comes to mediating remote payments, in other words, payments where the payer and payee are domiciled in different locations. The advent of mobile money resolved the above problem (or disadvantage of use of cash). It provided a technological solution that merged the unit of account function of money with personal identity attributes of the holder of mobile money. This technical capacity facilitates remote payments such as urban to rural remittances that are beneficial to the poor. However, the same monetary innovation is also afflicted with the conflicting convention that Bowker and Star (2000) alluded to. These arise from the fact that although mobile money resolves the disadvantages from use of cash, it also contributes to identity harvesting, a low kinship density exchange, in which the state and powerful mobile money issuers rent-seek from the poor. The advent of mobile money made it easier for mobile network operators to collate data relating to monetary affairs of the poor. The mined data includes metadata about mobile phone users' behaviour and personal identity attributes. The information is digitised and packaged into raw material from which value will be extracted from users of mobile money, including the poor and extremely poor. The ability to identify poor people's financial lives through mobile money is what has made it possible for the government to impose a 2% tax on their transactions, and has also created an opportunity for the largest mobile money operator in Zimbabwe to charge 520% interest per annum on airtime sold on credit. Based on 2018 interest rates, this is over 43 times more than the short- to medium-term commercial banking lending rates in Zimbabwe. Recent literature conceptualises the habit of technology companies, including banks and mobile network operators, of tracking monetary practices of poor people as surveillance capitalism (Gabor and Brooks, 2017; Haering, 2018; Zuboff, 2019). This concept also applies to many in contemporary society who subscribe to online services falsely marketed as free and yet in effect are paid for in privacy and personal identity.

In chapter 6, I noted that promoters and developers of digital money speculate that informationally rich forms of money are beneficial for users of the cash infrastructure and will facilitate their inclusion into the formal financial sector. However, no such advantages accrued to the poor. Instead, they face complexities well beyond the technical capacities of mobile technology, including mobile money. These include rent-extraction and governance failures associated with a kleptocratic and failed state, political and geographic marginalisation, and most importantly, poor physical infrastructure to facilitate fishing as a sustainable livelihood activity.

7.6 Public authority deficit, sharing and redistribution

I conceptualise Public authority deficit in reference to the weak role of developing countries in defining and provisioning the financial needs of the unbanked poor. In the place of the state, are received discourses propagated by powerful IFIs and their proxies, which are currently promoting the drive to eradicate cash by digitisation in pursuance of the financial inclusion goal. As Schwittay (2011), asserts, the absence of formal financial products and services was simply turned into a need. By so doing, the powerful international development entities simplified complexity. Evidence from this study suggests that the precondition to gain access to any monetary infrastructure is meaningful economic inclusion. Thus, economic exclusion is perhaps the most urgent development priority for developing countries. As stated earlier, embedded in the economic infrastructure are categories and classificatory systems, the two most important ones being health (healthy) and education (educated). These public infrastructures are critical, but like most public infrastructures, they are best provided by the state. Their absence and state of disrepair led to unsustainable livelihoods, caused by the lack of capacity to engage in employment, self-employment and other livelihood activities.

To cope with the sparse resources and infrastructures, and resultant consumption deficit, households in Binga resorted to sharing and redistribution. An important example of the latter is the paltry conditional $25 monthly government cash grant paid to the elderly, by the social welfare department of Zimbabwe. Sharing is the most consistent attribute underlying monetary practices in Binga; the most prominent examples include sharing mobile handsets, *mulala* cattle, job sharing and poor-to-poor urban to rural mobile money remittances. Because of kinship ties and obligations, sharing within the household arena is complex but not overly problematic, while sharing at a macro level was very problematic and infused with high levels of conflict and politics. Pertinent examples include the shared resources in a border economy; in this case, Zambezi river resources which are shared between Zimbabwe and Zambia. Zimbabwe regulatory authorities held the position that conflict could be alleviated through market forces, but the weaknesses of such an approach were fully analysed in chapter 6, which shows that the tensions between the two countries could escalate. However, there are successful examples of sharing outside the household economy. These pertain to shared healthcare provisions between Zambia and

Zimbabwe. What seems to have made this work was policy coordination between the two countries not market forces.

I concur with Ferguson (2015), who makes the proposition that sharing and redistribution deserve close attention, especially in environments in which there are inadequate employment or entrepreneurship opportunities. He goes on to critique what he refers to as production fundamentalism, which is the undue attention on production, and yet we live in a world of overproduction. I believe this is a valid argument, but only on a global scale. This is because, during the course of this study and review, I have not come across evidence to suggest that increased number of the educated and qualified (or to apply the symbolism of the proverb used as the title of his book, *Men taught to fish*) signals a case of over-production in Southern Africa or Zimbabwe in particular. The case of Zimbabwe shows that redistribution without careful attention to production has its limits. Redistributive efforts during the post-independence Zimbabwe led to an excessive budget deficit. Thereafter, the IMF agreed to fund the deficit but imposed terms that negated existing and future state redistributive efforts. This historical fact suggests that productive efforts are just as important as the redistributive ones, but in saying that, I am not in support of the IMF's suggestion that production is a pre-condition for redistribution. This viewpoint stems from several strands of thought; firstly, the international remittance flows into Zimbabwe are from Zimbabweans who benefited from the then highly developed post-independence health and education possibly funded through a budget deficit. Secondly, in the household economy context, sharing revolves around production, but even those who fail to produce enough for themselves still manage to share with their kinsmen the little they have. Ferguson (2015) makes arguments in support of universal sharing in which every citizen demands a share of the nations' resources, but my fieldwork experience supports the view that careful assessment of households' needs is critical. Some households and persons are more vulnerable than others, especially children, the elderly and disabled, orphans and single mothers. Thus, redistribution of wealth to people in this category should not depend on their (or the nation's) productive capacity. I believe this vulnerable group have a right to the basic necessities of life. Sharing and redistribution contribute to a crucial question that Sharp, Hart and Laterza (2006) pose about how the redemptive properties of money could be instituted.

7.7 Conclusion

In this thesis I set out to examine the monetary practices of rural households and persons in rural Binga, Zimbabwe, and to determine what the new insights gained from this study reveal about money and monetary innovations (or needs) of the low-income group. The study comes on the back of extant IFI literature, which promotes the drive to eradicate cash by digitisation based on claims that this would promote financial inclusion and in the process, alleviate poverty in developing countries. In the thesis I argued that the drive to digitise cash is a speculative endeavour, which is a credible means by which new technologies could emerge, but as shown in this study, this approach tends to be poorly aligned to people's needs. Evidence of poor alignment includes identity harvesting, which is a powerful tool for rent extraction by the state and mobile money issuers. The study elicited evidence, which shows that users of money are actively disembedding from the digital money infrastructure.

Furthermore, monetary practices of the low-income households revealed a hierarchy of money in which cash and cattle (which is also a symbol of wealth) are situated at the top. This reflects the importance (not eradication) of the cash infrastructure, and the issuers of cash (monetary and fiscal authorities). The cash infrastructure acts as an installed base that various monetary infrastructures plug into and out of. For example, higher bank money categories (M2+M3+M4) can only be repurposed for use in exchange once converted back to cash or near-cash (M0 or M1). Similarly, a treasury bill cannot be used to pay for goods and services, it first has to be converted to cash. Additional reasons why cash emerges as a preferred form of money is the freedom and control that it accords to the user, it is free to use (no transaction fees are deducted from poor people's meagre monetary resources). Further evidence of increased levels of freedom to impose on cash, differing goals and values to the ones held by the issuers of cash has been acknowledged elsewhere, but most prominently Zelizer (1994b, 1994a) who provides a detailed ethnography about how cash is earmarked for a range of purposes.

What remains unanswered thus far is, in the absence of valid theoretical and empirical justifications for the drive to digitise cash, what therefore are the required monetary innovations (or needs) of the low-income group? In this study, the required innovations or more specifically, the problems towards which research, policy and technological development priorities should focus on are incapsulated in what I refer to as the QPAD framework. It is a framework in which I divide monetary needs into primary and secondary needs. The former consists of the Public Authority Deficit (absence of developing countries in defining and addressing monetary needs of the unbanked poor). It is plausible that the absence of developing country governments in defining their own problems and development priorities is perhaps the reason why *economic exclusion* is undermined, even though empirical evidence provided herein suggests that the genesis of financial exclusion is economic exclusion. The second primary problem/need is the quantitative deficit which refers to the mutually exclusive relationship between the property of money as a means of exchange and means to store economic value. It is a property of money which is associated with a household economy characterised by a consumption deficit, in other words, absence of a capacity to produce or access goods and services that meet basic consumption needs. Lastly, I designate the Qualitative Deficit (QD) i.e. the anonymity of cash or inability of cash to combine the unit of account role of money with select identity attributes of transacting parties as a secondary problem. As I argued previously, this (anonymity) is a problem that has partially been addressed by digital money which has the technical capacity to combine the unit of account property of money with identity attributes of users. In other words, this can be understood as digitization of money. The relegation of this problem to a secondary problem directly contradicts the position held by proponents of the digitisation of cash, in particular the World Bank Financial Development Report (2014), which advocates that developing countries should set up credit bureaus to facilitate technologies for knowing the financial lives of the poor. In other words, I'm arguing that anonymity of cash is steeped in complexity, for it is a desirable property of money and a curse at the same time. The introductory part of the thesis gave examples of the important role of concealed monetary exchanges in the informal economy of Zimbabwe, while the data chapters highlighted identity harvesting and extractive processes that it is associated with.

Another critical question that remains unanswered is: Who is best positioned to solve the problems articulated in the QPAD framework? Based on findings from this study, I believe that the problems encapsulated in the QPAD framework are the responsibility of developing country governments where citizens are economically excluded. The fact that the only intervention that shows great promise in meeting the monetary needs of low-income rural households was the conditional cash grants emerging from the Zimbabwe social welfare department rather than financial institutions reflects the limits of financialisation of poverty, and speculative technocentric ideals about the future of money.

The bottom-up approach adopted in this and advocated by the HE was effective in eliciting new insights into monetary practices and rearticulating research, technology and policy innovations. Indeed, there are historical examples and others which are specific to Zimbabwe, which provide support for the HE bottom-up approach. However, the reality of these innovations is that although users may discover new innovations, the innovations end up being appropriated by powerful social groups to serve their purposes; not the users who shaped, contributed or triggered the new innovations. For example, mobile money was triggered by poor people, but neither the financial rewards nor other purported benefits accrued to them. Similarly, poverty alleviation and transaction cost savings (save for transactions costs associated with remote payments) claims have also not been realised. Pertinent historical examples include the development of fractional reserve banking. It emerged from the observation that, instead of painstakingly transporting gold and silver from one place to the next for purposes of mediating exchange, there was a gradual transition whereby worthless papers (a deposit note to confirm that the holder has gold deposited at the goldsmith) circulated instead (for more on deposit notes see, Davies, 2002, p. 50; Graeber, 2011b, p. 269; Naqvi and Southgate, 2013, p. 318; McCann and Ryan-Collins, 2015, p. 9; Di Muzio and Robins, 2017, p. 57). This was because goldsmiths realised that people do not actually come back to physically demand the gold or silver. This was to become the origin of fractional banking (creating money from thin air) that commercial banks depend on. It was not designed by a single individual but emerged from bankers noticing that depositors who deposit cheques into their bank accounts do not always demand all their money in cash.

Because of the reasons cited in the preceding paragraph, I align with Jacobs and Mazzucato (2016) and Mazzucato (2016), who caution against the vilification of capitalism, but take the position that the state should take centre stage not only in regulating the market, but leading and creating it. In this study, I have taken a firm position that innovations (research, policy, and technology development priorities) for poor, vulnerable people should rest in the hands of their governments. A call for their active participation does not preclude international development communities and private entities but calls for the responsible government to be in a position where they can take full responsibility of developmental outcomes not entities that are neither responsible nor accountable to the electorate. Several examples which support this position have been provided in the thesis, a good example being ESAP which was imposed on countries in the Global South by powerful IFIs and other development agencies who are now misappropriating its grave consequences on developing nations. This may seem controversial, especially in Zimbabwe where the state does not seem to have any capacity or willingness to make credible and consistent monetary policies, a country blighted by cronyism, corruption, and kleptocracy, but it is important to note that this should and will not define what a developing country government should be or will be in the future. The evidence presented in this thesis supports the idea that the severe poverty and deprivation in Matabeleland North is an outcome of poor public infrastructure, in other words poor roads and telecommunications infrastructure, underfunded schools, and poor healthcare and so forth, all of which can only be effectively provisioned by the state. The legacy infrastructure upon which mobile network operators depend is state-owned, most prominently the Zimbabwe Post and Telecommunications – Public Switched Telephone Network (PSTN), the regulations under which mobile money operators' function are decided by the government. The lack of insight about what people are doing is perhaps what leads to a situation where developing country governments end up reacting to what people do, and yet the evidence provided here shows that this insight can be useful for developing policies, and supporting research agendas that are appropriate and relevant for context rather than depend on externally imposed misdirected efforts to meet financial needs of the poor.

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Appendixes

Appendix 3.1

Government Notice,

Administrator's Office,
Bulawayo,
7th April, 1900.

IT is hereby notified for general information that, in order to meet the scarcity of silver currency at present prevailing in Matabeleland, the Government have issued cards bearing revenue stamps of the values of 3d., 6d., 1s., 2s., and 2s. 6d., which may be redeemed for cash at the Office of the Civil Commissioner, Bulawayo, on or after the 1st day of August, 1900, but not later than the 1st day of October, 1900.

The stamped cards may be purchased at the Office of the Civil Commissioner, Bulawayo, from 9 a.m. to 1 p.m. daily.

No cards presented after the 1st of October, 1900, will be redeemed by the Government.

A. Lawley,
Administrator.

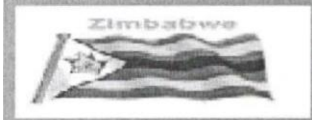
By command of His Honour the Administrator,
(Signed)

H. Marshall Hole,
6 Secretary.

Appendix 4.1

INKAMU YAMULAKA ATUNSIYANSIYA TWABATONGA

{Tonga Language & Culture Committee – TOLACCO}



C/o Binga Rural District Council, Box 36, Binga.

Cell #s: 0773507435/0712764039*{Chairperson}*, 0772457703*(Secretary.)*, 0712398369*(Member)*

29 September 2017

The Managing Director

Priority Projects Publishing
789 Glen Garry Ave

Highlands

Harare

Dear Sir/Madam

REF: MISREPRESENTATION OF THE TONGA CULTURE IN THE HERITAGE STUDIES BOOK

The Tonga Language and Culture Committee (TOLACCO), traditional leaders (Chiefs) and the community in general commends the Priority Projects Publishing (PPP) for publishing the Heritage Studies textbook which incorporates various Zimbabwean ethnic groups. It is our hope that such a spirit will continue and spread to other publishers because the marginalized ethnic groups have long been excluded from many Zimbabwean history textbooks.

However, TOLACCO and the traditional leaders (chiefs) are very disturbed and concerned about the contents in your book (p.53) on the Tonga traditional courtship (Matseketsa, B.B & S. Mashaah (2017) Heritage Studies, Priority Project Publishers, Harare, p53.)

Firstly, some of the contents about the Tonga people portray us as still backward and uncivilized people, a long standing unfounded stereotype and myth that the Tonga people have been battling to demystify in Zimbabwe.

"The Tonga people have managed to continue with their traditions and culture. One good reason for this is that modernization and ICTs reached this part of the country a bit late. Although this may be some kind of marginalization, it has helped to keep this part of the country pure culturally. However, the government is making efforts to set up transmitters which will enable this part of the country to be connected to the global village as well. When this happens, we may see them accepting Western culture as well. " p. 53.

This paragraph portrays the stereotypes, myths and lies about the Zimbabwean Tonga people that were peddled by the colonialists and are being further spread by fellow Zimbabweans (like these authors) who have never visited the Zambezi Valley. The sentence that says ' . we may see them accepting Western culture as well' ,suggest that the Tonga people, 37 years after independence, are yet to be exposed to, accept and embrace the . Western culture, thus are still uneducated, backward, barbaric and uncivilized.

1

We take this as a deliberate strategy by the authors and publisher not only to demean the Tonga people but also to perpetuate and entrench, in school textbooks, this unfounded stereotype and myth so that the current and future generations of Zimbabwe continue to be misled about the level of development among the Zimbabwean Tonga people. We wonder whether the book intends to build the image of the Tonga people in Zimbabwe or entrench the stereotypes and caricature the people. Is this nation building or destroying the image of other ethnic groups in the country?

Secondly, we are also concerned with the level of recklessness and disregard of ethical research principles by your authors whereby they misrepresented our culture. Instead of doing proper research among the Zimbabwean Tonga people, they chose to uproot an article (written by Lolo Masi about the Pacific Tonga) from the internet and reproduced it almost verbatim in their book purporting to be the Zimbabwean Tonga culture (we hereby attach the article). The authors did not only disregard the research ethics and rigour of verifying and triangulating information but are also ignorant of accessing credible sources of both primary and secondary data.

May we bring to your attention that since the textbook was released to schools, the Zimbabwean Tonga parents have been receiving endless questions, without answers, from their Form I children who genuinely want to know; What is kava? What is faikava? What is aa aa or aa aa aho' ia? as contained in your misleading textbook. The bewildered Tonga parents have been and continue to be at pains, explaining to their children to set the record straight. Unfortunately, the children always insist that the textbook cannot lie. Surely, for how long will the Tonga parents be subjected to the children's stressful questions, if the books are not withdrawn from schools? This is evidence of the magnitude of the misinformation and damage that has already taken place amongst the Zimbabwean Tonga.

In view of the negative impact of your publication on the Zimbabwean Tonga people, TOLACCO and the traditional Tonga Chiefs demand the following:

a) That PPP makes a public apology over the content of the book on the Zimbabwean Tonga culture.
b) That PPP recalls ALL the textbooks that have been sold to schools or bookshops to avoid further misinformation to the current and future generations about the Zimbabwean Tonga people.
c) That PPP replaces the whole section on Tonga traditional courtship by a properly researched material.

We would appreciate if PPP responds to us by not later than 10 October 2017 to enable us determine the next step.

Please note that writing about the cultures of marginalized ethnic groups (Tonga, Nambya, Venda, Kalanga, Shangane, etc) should not be viewed as "doing them a favour" as some people erroneously believe. It is the writers and publishers' responsibility and mandate to correctly document Zimbabwe's history, culture and embrace the "ethnic rainbow" nature of the country. This will help us build this nation and portray its true heritage and history. Zimbabwe is a multi-cultural country and any book covering the heritage of Zimbabwe should desist from a sectorial and divisive approach of focusing on Ndebele and Shona cultures only.

We would appreciate if this issue is resolved urgently.

Yours faithfully

Rev. J. Muleya

TOLACCO Chairman

On behalf of TOLACCO and Zimbabwean Tonga Traditional Chiefs

Appendix 5.9

Gmail **mike chipere <mikechipere@gmail.com>**

Accommodation August to November 2017

2 messages

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mike chipere <xxxxxxx@gmail.com> 18 July 2017 at 00:11

To: xxxxx@gmail.com

Dear Marie,

I'm a phd student at University of Pretoria and I'll be conducting a research in and around Mlibizi area for a period of three months. I'm looking for accommodation from the 7th of August to the 7th of November 2017 but sadly I'm on a tight student budget. I was wondering if you'd be able to accommodate me for US$500 for the duration of my research. I have a few pictures of your beautiful chalets - I got them from Shupani (he's my interpreter) who came in to see you this afternoon. I don't really need much just a quite environment where I can braai, cook, relax, read and write. Would it be possible for me to use a debit card (FNB) to buy fuel at the resort petrol station and to pay for accommodation? Alternatively I can make a bank transfer into a South African bank account if available. I would be grateful if you could help me out, I know your going rates are well above what I'm asking. I will be leaving Pretoria for Zimbabwe on the 25th to attend a wedding in Harare on the 5th after that I'll then drive to Binga on the 7th arriving late afternoon.

Regards,

Mike Chipere

Mike Chipere-Ngazimbi xxxxxxxxxx@gmail.com> 28 July 2017 at 17:05

To: xxxxxxxxxxxxx@gmail.com

Dear Marie,

Just wondering if you have managed to get some feedback regarding my enquiry?

Regards,

Mike

[Quoted text hidden]

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Skip to content
Using Gmail with screen readers

Enable desktop notifications for Gmail. OK No thanks

1 of 3

Accommodation August to November 2018

Inbox x

Mike Halfpenny <mikehalfpenny00@gmail.com> Apr 29, 2018, 2:45 PM

to mlibiziresort

Dear Marie,

I'm a doctoral researcher at University of Pretoria and I'll be conducting a research in Binga particularly around Mibizi for a period of three months. I'm looking for accommodation from the 1st of August to the 1st of November 2018. I'm on a very constrained research fieldwork budget and was wondering if you'd be able to accommodate me for US$500 for the whole three months' duration of my research. I don't really need much just a quite environment where I can cook, relax and do a bit of writing. Would it be possible to make payment for both accommodation and fuel at your petrol station using a debit card (FNB), alternatively I can make a bank transfer into a South African bank account if available. I would be grateful if you could help me out, I'm very much aware that your current going rates are much more than what I'm asking. I will be leaving Pretoria for Zimbabwe on the 30th of July - sleep over in Bulawayo on the 31st then Mlibizi on the 1st of August before noon.

Regards,

Mike Halfpenny

Mike Halfpenny <mikehalfpenny00@gmail.com> May 20, 2018, 12:44 PM

to mlibiziresort

Just making a follow up on my previous email regarding accommodation. I would be grateful for your help.

XXXXX@gmail.com> Jun 26, 2018, 8:20 AM

to me

Good morning Mike,

We will accommodate you for the period you require in CHALET 17 for the amount you are offering. ACCOMMODATION ONLY.

The cleaning of the chalet and any extras will be an extra cost for you to pay.

There is NO FUEL STATION AT MLIBIZI RESORT,nearest is at BINGA which is 80 kms away.

These are the challenges you will have to sort out yourself.

Have a nice day.

Marie

Thank you for the information.

That's great, thank you.

Thank you for your response.

Appendix 5.10

Remmitance Band		Send	Remmitance	Send	Remmitance	Cash-out ($)	Cash-out costs	Remmitance costs	Remmitance cost
From $	To $	Unregistered $	Cost %	Registered $	cost %	Registered Tariff	%	sender&Receiver $	Sender&Receiver %
1	1.99	0.11	5.53%	0.11	5.53%	0	0.00%	0.11	5.53%
2	5	0.3	2.20%	0.12	2.40%	0.17	3.40%	0.29	5.80%
5.01	10	0.47	1.10%	0.21	2.10%	0.26	2.60%	0.47	4.70%
10.01	20	0.89	0.55%	0.37	1.85%	0.52	2.60%	0.89	4.45%
20.01	30	1.31	0.37%	0.53	1.77%	0.78	2.60%	1.31	4.37%
30.01	40	1.74	0.28%	0.69	1.73%	1.04	2.60%	1.73	4.33%
40.01	50	2.17	0.22%	0.87	1.74%	1.3	2.60%	2.17	4.34%
50.01	60	2.96	0.18%	1.22	2.03%	1.74	2.90%	2.96	4.93%
60.01	75	3.28	0.15%	1.28	1.71%	2	2.67%	3.28	4.37%
75.01	100	4.3	0.11%	1.69	1.69%	2.61	2.61%	4.3	4.30%
100.01	150	5.16	0.07%	2.12	1.41%	3.01	2.01%	5.13	3.42%
150.01	200	5.86	0.06%	2.47	1.24%	3.39	1.70%	5.86	2.93%
200.01	300	6.76	0.04%	2.54	0.85%	4.22	1.41%	6.76	2.25%
300.01	400	6.84	0.03%	2.58	0.65%	4.26	1.07%	6.84	1.71%
400.01	500	6.92	0.02%	2.62	0.52%	4.3	0.86%	6.92	1.38%

Appendix 6.1 & 2

WHEREAS Econet is desirous of appointing

____

____

as its Merchant to accept payments through Econet Mobile Money Transfer ("EcoCash") as well as to provide related mobile money transfer services offered by Econet Wireless (Private) Limited ("Econet") as part of its mobile phone services and products within Zimbabwe on non-exclusive basis;

AND WHEREAS the Merchant is agreeable to the provision of such merchant services to Econet

NOW THEREFORE IN CONSIDERATION OF THE AFOREGOING THE PARTIES HAVE AGREED AS FOLLOWS:

1. DEFINITIONS

1.1 **Cash-Out** means the process of redeeming e-value for cash from the Agent.

1.2 **Customer** means every person in whose name an EcoCash account is registered in connection with the use of EcoCash services and who also purchases goods and/or services from the Merchant.

1.3 **E-value or e-money** means the electronic money in the Mobile Money Transfer System which will equate to the deposits in the Econet Trust Account at TN Bank.

1.4 **E-wallet** means an E- value repository.

1.5 **EcoCash Agent** means an entity registered by Econet to fulfill functions of registering customers and effecting deposits and withdrawals.

1.6 **EcoCash Transfer and Payment system** means the EcoCash mobile money system on which the Mobile Money Transactions are done.

1.7 **Merchant** means an entity that accepts E-value as a payment mode for goods and/or services and also for bulk disbursement of cash as E-value to beneficiaries.

1.8 **Merchant Code** refers to a five digit number assigned to a business or organization by Econet upon registration as a Merchant

1.9 **SMS** means short message services.

1.10 **USSD** means the Unstructured Supplementary Service Data menu on your cellphone that lists all the services.

2. SCOPE OF MERCHANT AGREEMENT

Econet hereby appoints and retains the Merchant, on a non-exclusive basis, to perform functions, services and such other acts as the Merchant is specifically required to do pursuant to the terms of this agreement. The Merchant agrees to perform its duties under the supervision of Econet within Zimbabwe commencing __________________20__, subject to renewal, extension or termination by the Parties.

3. MERCHANT'S RIGHTS AND OBLIGATIONS

3.1 The Merchant shall forthwith upon execution of this Agreement, if not already done prior to such execution, register with Econet as a Customer and have an Econet line to facilitate registration as an Econet mobile money Merchant ("Ecocash Merchant").

3.2 The Merchant's outlets shall be staffed by appropriately qualified and trained staff members to handle Ecocash payments. Should Econet organise training for Outlet staff, the Merchant will ensure that Outlet staff are in attendance. The Merchant shall not do or omit to do anything which could reasonably be regarded as inconsistent with this obligation.

3.3 The merchant shall accept EcoCash payments from customers for goods and services bought. The procedure for accepting EcoCash payments shall be as follows:

3.3.1 The merchant shall display his merchant code at all times where it is clearly visible to customers.

3.3.2 The customer will initiate a payment transaction for good and/or services through USSD (cell phone) menu dial string *151*200#

3.3.3 The Merchant shall ensure that the customer quotes the Merchant Code in all payments made through Ecocash.

3.3.4 The Merchant shall not deduct any charges for the payment transactions made by the Customer. In this regard the amount transferred by the Customer shall be equivalent to the price(s) of goods and/or services displayed on the till.

3.3.5 The Merchant shall release the goods and or/services to the customer upon successful completion of the transaction and the money reflecting in the Merchant's e-wallet. In this regard the Merchant shall receive an SMS notification showing inter alia the amount paid by the Customer, their name and customer number. A receipt shall be generated where systems are integrated.

3.3.6 At any time The merchant may choose to liquidate his/her e- wallet at any EcoCash agent's outlet for amounts of up to US$500 or by issuing a bank transfer instruction for amounts more than US501 to the EcoCash Department situated at David Livingstone House, Corner Seventh Street and Livingstone Avenue.

3.4 The Merchant shall exercise full control over and take full responsibility to ensure that all payment transactions are done as per the procedures provided by Econet as well as for its employees, their acts and omissions when carrying out Ecocash payment transactions.

3.5 Where the Merchant gets involved in money laundering, terrorist financing or any unlawful activities not governed by this agreement; the Merchant shall be solely liable for any such illegally perpetrated activities. Econet will not, in any way be party or held liable to such illegal activities.

4. OBLIGATIONS OF ECONET

Econet shall:

4.1 Ensure that the Mobile Money Transfer and Payment System operates effectively in accordance with the provisions of the EcoCash Procedures Manual.

4.2 Ensure that adequate marketing campaign material is available for use by the Merchants.

4.3 Have a fully operational Call Centre manned by qualified employees and/or automated systems to assist in the resolution of problems related to the EcoCash Services.

4.4 Econet excludes warranties of all kinds and shall not be liable for any costs, loss, liability or damage whether direct, special or consequential whatsoever and howsoever arising whether from any suspension or termination of this Agreement or otherwise.

4.5 Econet will train outlet staff so that they are proficient with EcoCash before they start offering the EcoCash services to the market. Econet will meet all expenses related to the training venue and training material, while the Merchant meets all travel and accommodation expenses incurred by their officers when they attend training.

5. CHARGES

5.1 Econet will prescribe a charge for the Merchant for the liquidation of e-money and the transaction charges are as follows:

5.1.1 Cashing out through an EcoCash Agent will attract a charge of 3% of the amount being cashed out with a maximum cap of $6. The charges may change from time to time at the discretion of Econet.

5.1.2 A bank transfer will attract the prevailing bank charges for bank transfers.

6. INDEPENDENT CONTRACTOR

6.1 The Parties acknowledge that, save for the duties and powers of the Merchant as stated in clause 3, hereof nothing in this Agreement shall be construed to create a relationship of employment or partnership whatsoever between the Parties, whether for tax or any other purpose.

6.2 Subject to clause 3 hereof neither Party shall have the right to bind the other to any Agreement with a third Party or to incur any obligation or liability on behalf of the other Party.

7. SECURITY MANAGEMENT

7.1 In the event of loss of the Merchant's SIM card, the Merchant is required to inform Econet immediately so that the SIM card is blocked. The Merchant can contact the Econet call centre or send an e-mail to ecocash@econet.co.zw. Reporting immediately will prevent unauthorised use. The Merchant will be liable for any losses and costs incurred before the disconnection of the SIM card is made by Econet.

7.2 The Merchant will be liable for any losses and costs incurred before they notify Econet. The Merchant is responsible for securing their EcoCash and the cell phone used for mobile money transaction. Econet will not be liable for any loss of valuables from the Merchant's premises.

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

EcoCash

UNIQUE AGENT CODE:

AGENT APPLICATION FORM

AGENT DETAILS

Name of Company/Partnership:

Physical Address:

Postal Address:

Telephone No: Fax No: E-mail address:

Cell phone No:

VAT Registration Number:

Opening Time: Monday-Friday: Saturday: Sunday: Public Holidays:

DIRECTORS' /PARTNERS' DETAILS	
NAME	RESIDENTIAL ADDRESS AND TELEPHONE NUMBER
1	
2	
3	
4	

BANKERS

Bank Name & Address:

Branch:

Bank Name & Address:

Branch: Account No:

TRADE REFERENCES			
COMPANY NAME & ADDRESS	ACCOUNT NUMBER	CREDIT TERMS	CONTACT DETAILS
1			
2			
3			

APPLICANT'S DETAILS	
Name	Designation:
Signature:	

AGENT QUERIES TO BE ADDRESSED TO	
Name	Designation:
Contact Details:	

AUTHORISED AGENT TRANSACTOR		
Name	Particulars: ID No.	Tel No:
Name	Particulars:	
	(ID /PASSPORT NUMBER)	

REQUIRED ATTACHMENTS	
CERTIFIED COPIES OF;	
1. CERTIFICATE OF INCORPORATION	
2. CR 14	
3. DIRECTORS' IDs	
4. VAT CLEARANCE CERTIFICATE	
5.COMPANY PROOF OF ADDRESS - UTILITY BILLS, ZESA,WATER	

6. OPERATING LICENCE	
7. BANK STATEMENTS - 3 MONTHS - FCA	

DECLARATION BY AUTHORISED SIGNATORIES

We, the undersigned:

(Full Names of both Signatories)

hereby make application to be appointed as an authorised Agent for the Econet Money Transfer service provided by ECONET WIRELESS ("Econet"). By our signature/s hereon we agree that the Agent will be subject to the following conditions:-

1. Compliance by the Agent with the vetting criteria determined by Econet in their sole and absolute discretion.
2. Acceptance and signing of the Agency agreement between ECONET WIRELESS and the AGENT.
3. The legal costs of any recovery of any overdue account shall be our responsibility and shall be on an attorney-client scale including, for the avoidance of doubt, collection commission in terms of the by-laws of the Law Society from time to time.
4. Our domicilium citandi et executandi (address) for the purpose of any suit, writ or other process of any court shall be:

(Insert Physical not Postal Address)

5 The Agent hereby declares and warrants that all information furnished in this document, including all supporting documentation, is true and correct in every respect and that Econet may rely upon it.

The Agent indemnifies and holds Econet harmless against any losses, expenses, costs or damages of whatsoever nature, whether direct, indirect or consequential, incurred by Econet arising out of the information provided herein being false, inaccurate or otherwise incorrect in any respect and / or failing to timeously advise Econet in writing of any changes to the information, for any reason whatsoever.

Signed at____________________this day ____________________

WITNESSES

1 ________________ ________________

(Signature) (Name & Capacity)

________________ ________________

2 (Signature) (Name & Capacity)

FOR OFFICE USE ONLY:

APPROVED / DECLINED
ECONET:________________

________________ __________

(Signature) (Name & Capacity) Date

ECONET Wireless

EcoCash Agent Terms & Conditions

WHEREAS Econet is desirous of appointing

____

as its Agent to provide mobile money transfer and payment services facility (EcoCash) offered by Econet Wireless (Private) Limited ("Econet") as part of its mobile phone services and products within Zimbabwe on an exclusive basis;

AND WHEREAS the Agent is agreeable to the provision of such agency services to Econet;

DEFINITIONS:

Agent means an entity registered by Econet to fulfil functions of registering Customers and effecting deposits and withdrawals.

Agent's Initial Payment means the cash payment that the Agent will make into the Econet Trust account in exchange for e-money float.

Agent float means the total amount of e-money that an Agent has in their mobile money account on the EcoCash Transfer and Payment System.

Agreement means the Agent Application form together with these rules, which form a legally binding agreement between the Agent and Econet.

Application form means the application form issued by Econet for Agency application.

Call Centre means the Econet customer call centre.

Cash-In means a cash payment done by a Customer to an Agent for the purchase of E-value from the Agent to be credited to the Customer's EcoCash account.

Cash-Out means the process of redeeming E-value for cash from the Agent.

Contract period means the number of months this agreement shall be in operation for as specified in clause 2.

Customer means every person in whose name an EcoCash account is registered in connection with the use of EcoCash services.

E-value or e-money means the electronic money in the Mobile Money Transfer System which will equate to the deposits in the Econet Trust Account at the bank..

EcoCash Procedure Manual means the EcoCash instruction booklet or guidebook that contains information and instructions about EcoCash.

EcoCash Services means the mobile money transfer and payment services that Econet is offering.

EcoCash Transfer and Payment system means the EcoCash mobile money system on which the Mobile Money Transactions are done.

Float Liquidity means the ability of the Agent to offer EcoCash services. This is determined by how much the Agent has deposited into the Econet Trust Account.

PIN means the Personal Identification Number chosen by the Agent.

Outlet means a store that sells goods or services to the public.

RBZ means the Reserve Bank of Zimbabwe and or its regulatory Divisions.

Start PIN means the PIN allocated to the Agent that the Agent must use to activate their account, after which the Agent can change it to one of their choice.

The Parties means Econet and the Agent.

Transaction fees mean the charges payable by the Customer for use of the EcoCash services.

Trust Account means the account that Econet holds for the EcoCash Agents to make deposits in exchange for e-money.

NOW THEREFORE IN CONSIDERATION OF THE AFOREGOING THE PARTIES HAVE AGREED AS FOLLOWS:

SCOPE OF AGENCY

Econet hereby appoints and retains the Agent, on a non-exclusive basis, to perform functions, services and such other acts as the Agent is specifically required to do pursuant to the terms of this agreement. The Agent agrees to perform its duties under the supervision of Econet within Zimbabwe commencing_20 , subject to renewal, extension or termination by the Parties.

AGENT'S RIGHTS AND OBLIGATIONS

The Agent shall forthwith upon execution of this Agreement, if not already done prior to such execution, register with Econet as a Customer and have an Econet line to facilitate registration as an Ecocash Agent. The Agent shall market the EcoCash Services offered by Econet, including any other products and services as may be determined by Econet and its partners, from time to time.

The Agent shall be obliged to furnish financial transaction and float liquidity management reports, and other regulatory reporting requirements prescribed by monetary authorities from time to time.

The Agent undertakes to use its best endeavours to register new Customers for the EcoCash Services.

The Agent shall be obliged to register Customers through the Outlets in accordance with the requirements set out by Econet and the regulatory guidelines from time to time, which shall include but not be limited to informing Customers about the EcoCash Services, providing the Econet Mobile Money Customer Registration form to Customers, checking the Customer's identity document, causing the Customer to complete and sign the registration form and entering the Customer's name, national identity number, mobile number, physical address and any other information so required for registration on the Ecocash Transfer and Payment system.

The Agent's outlets shall be staffed by appropriately qualified and trained staff members. Should Econet organise training for Outlet staff, the Agent will ensure that Outlet staff are in attendance. The Agent shall not do or omit to do anything which could reasonably be regarded as inconsistent with this obligation.

The Outlets shall perform cash-in and cash-out transactions for Customers and shall maintain appropriate levels of cash and Agent Float liquidity in order to meet market demand for these transactions.

The Agent shall not effect any transactions that are over and above the amounts placed in the Trust Account or where the Agent has insufficient funds to meet the value of transactions and charges applicable thereto.

The Agent shall not effect any transaction without checking and verifying the customer's identity details by checking the customer's identity document against the information on the confirmation SMS of the transaction appearing on the Agent's cell phone. The Agent shall be liable for any losses suffered by the customer as a result of the Agent's negligence and Econet reserves the right to recover any monies lost by the customer as a result of the negligence to restitute the customer.

The Agent shall not effect direct cash-in transactions from the Agent's EcoCash account other than into the EcoCash account of the Customer making such transaction. All Cash-In transactions should be made into a Customer's EcoCash account with the Customer present and upon the Agent checking and verifying the Customer's identity details. Econet reserves the right to recover any lost commissions resulting from direct Cash-In transactions made into third party Customers' EcoCash accounts and levy a penalty on every such transaction. The applicable penalty shall be communicated to the Agent by Econet. Econet reserves the right to review the penalty from time to time.

The Agent shall not display or procure the display of any advertising or promotional material pertaining to the subject matter of this Agreement, without obtaining the prior written approval of Econet as to the format and content of such material.

The Agent shall actively participate in and promote all Ecocash Services special offers and packages offered by Econet from time to time.

The Agent shall furnish Econet with written progress reports detailing the conduct of its activities under this Agreement promptly upon being requested to do so by Econet.

The Agent shall comply, at its own cost and expense, with all laws, licence conditions and the requirements of any legislative body or government, provincial, regional or local authority relating to any of the matters contemplated in this Agreement.

The Agent shall exercise full control over and take full responsibility for its employees, their acts and omissions.

The Agent shall provide all necessary human and other resources required to efficiently sell, supply and/or distribute EcoCash Services and to adequately fulfil its obligations in terms of this Agreement.

The Agent shall comply with manuals and quality charters with regards to offering EcoCash Services as Econet may publish from time to time.

The Agent shall reconcile all EcoCash Service transactions on a daily basis and keep paper records of all transactions for a period of not less than 5 (five) years.

The Agent shall compile any reports, details, schedules, forecasts, statistics and any other necessary information required for regulatory purposes and these shall be verified and signed by the Proprietor or Director or appointed Manager of the Agency as true and correct in all respects.

The Agent shall ensure that the Customer is aware that upon registering, by virtue of inscribing their signature on the registration form, they are agreeable to EcoCash Service terms and conditions and applicable fees, which are subject to review from time to time.

The Agent shall notify every Customer and potential customer of any terms, conditions, provisions and any other additional information which Econet may require the Agent to pass on to such Customer and/or potential customer from time to time;

The Agent shall not on itself grant any discount or rebate pertaining to any Customer nor offer such a discount or rebate without the prior written consent of Econet even if the Agent is prepared to do so at its own cost,

The Agent shall ensure at all times during the contract period, that the balance of the EcoCash float shall not fall below the minimum balance required and in the event that the balance does fall below the minimum balance, the Agent shall immediately effect a payment of a sufficient amount of money into the Trust Account to raise its EcoCash balance to at least the minimum balance.

In facilitating the registration of new customers, the Agent shall:

Ensure that the applicant is an Econet subscriber with an active SIM card;

Ensure that the registration forms are completed accurately and signed by the applicant;

Ensure that all the Supporting documents submitted are complete;

Ensure that details contained in each Registration Form are verified against the Supporting documents;

Ensure that copies of all Supporting documents are verified against and conform to the originals thereof;

Satisfy himself as to the identity of the applicant; and

Upon receipt of an applicant's registration form duly completed together with all Supporting documents, subject to the documents being in order, register the applicant with Econet who will open and activate an EcoCash account in the name of the applicant.

Where the Agent gets involved in money laundering, terrorist financing or any unlawful activities not governed by this agreement; the Agent shall be solely liable for any such illegally perpetrated activities. Econet and the bank holding the Trust Account will not, in any way be party or be held liable to such illegal activities.

OBLIGATIONS OF ECONET Econet shall:

Supply and make available to the Agent, the registration forms.

Ensure that the Mobile Money Transfer and Payment System operates effectively in accordance with the provisions of the EcoCash Procedures Manual.

Ensure that adequate marketing campaign material is available for use by the Agents.

Have a fully operational Call Centre manned by qualified employees and/or automated systems to assist in the resolution of problems related to the Ecocash Services.

Ensure that the Call Centre is open for query resolution between 8:00 a.m. and 10:00 p.m. on Mondays to Sundays, which operating times may be reviewed by Econet from time-to-time.

Econet reserves the right to disconnect the Agent from Econet's network at any time, if it determines, at its sole discretion that the Agent's licence is being used unlawfully or for purposes other than in connection with the EcoCash Services or that the Agent is not complying with the terms and conditions of this agreement.

Econet excludes warranties of all kinds and shall not be liable for any costs, loss, liability or damage whether direct, special or consequential whatsoever and howsoever arising whether from any suspension or termination of this Agreement or otherwise.

Econet shall have the right at any time during the contract period to inspect the Agent's premises, Outlets and business operations to ensure compliance with the terms of this Agreement.

Econet reserves the right to vary the terms of this Agreement, the Ecocash Procedures Manual and the rates at which the commission is payable at any time and for any reason whatsoever. Variations will be notified by way of letter, advertisement in a daily newspaper, SMS, or on Econet's website and/ or by using any other suitable means and the Agent shall be deemed to have been notified of any such variations whether or not they have actually come to the Agent's attention. The Ecocash Procedure Manual will be provided by Econet as part of the Agent starter pack.

Econet will train Outlet staff so that they are proficient with EcoCash before they start offering the EcoCash services to the market. Econet will meet all expenses related to the training venue and training material, while the Agent meets all travel and accommodation expenses incurred by their officers when they attend training

COMMISSION & APPLICABLE TAXES

A commission shall be paid each month to the Agent; a statement in electronic form shall be rendered monthly by Econet to the Agent showing all income and disbursements.

The Agent shall be advised of the applicable commission rates before signing this Agreement. The commission rates may be reviewed by Econet from time to time at its discretion.

Any rates, duty or taxes levied upon or in respect of the commission and/or performance of Ecocash Services by the Agent by any competent authority shall be borne and paid by the Agent.

The Agent shall defend, indemnify, and hold Econet harmless from liability to any competent authority resulting from Agent's failure to (i) make timely payment of or pay any of the above, including interest, penalties and any other liability arising from such failure, or (ii) comply with the reporting, filing or other procedural requirements with respect to their payment.

INDEPENDENT CONTRACTOR

The Parties acknowledge that, save for the duties and powers of the Agent as stated in clause 3, hereof nothing in this Agreement shall be construed to create a relationship of employment or partnership whatsoever between the Parties, whether for tax or any other purpose.

Subject to clause 3 hereof neither Party shall have the right to bind the other to any Agreement with a third Party or to incur any obligation or liability on behalf of the other Party.

CONFIDENTIALITY

The Agent shall treat as confidential all information relating to Applicants, Customers, Transactions and Econet.

Each Party agrees to keep all information confidential and agrees that it shall not without the prior written consent of the Agent, Customer, or Econet, divulge information relating to the Agent, Customer, or Econet; unless required to do so by law enforcement agents upon which the affected Party should be consulted.

RECORD KEEPING

The Agent shall keep records in line with Econet requirements. These records shall include:

The particulars of all transactions undertaken by the Agent; and

The registration particulars of each applicant. The registers for recording the registration particulars will be provided as part of the Agent starter pack.

SECURITY MANAGEMENT

In the event of loss of the Agent's SIM card, the Agent is required to inform Econet immediately so that the SIM card is blocked. The Agent can contact the Econet call centre or send an e-mail to ecocash@econet.co.zw. Reporting immediately will prevent unauthorised use. The Agent will be liable for any losses and costs incurred before the disconnec- tion of the SIM card is made by Econet.

The Agent will be liable for any losses and costs incurred before they notify Econet.

The Agent is responsible for securing their EcoCash and cash float and the cell phone used for mobile money transaction. Econet will not be liable for any loss of cash or other valuables from the Agent's premises.

BREACH

Econet shall have the right to terminate agency in the event that the Agent:

commits any act of fraud or theft against customers, Econet or banks involving the use of the Econet mobile money facility; and/or

fails to meet Agent requirements set by Econet for two consecutive months; and/or

commits an act that brings Econet into disrepute; and/or

fails to perform any of its obligations in terms of this Agreement.

TERMINATION

If the Agent is in breach of the provisions of clause 10 hereof, Econet may terminate this Agreement immediately and thereafter inform the Agent in writing of reasons thereof.

Econet may also terminate the agency for whatever reason by giving 30 days' notice to the Agent.

LIMITATION OF LIABILITY AND INDEMNITY

Econet will not be liable for any costs, loss, liability or damage whether direct, special or consequential, howsoever and when so ever arising from any suspension or termination of this Agreement.

The Agent shall indemnify Econet, from and against any and all costs incurred by the Agent of whatever nature and any loss, damage or liability, whether criminal or civil, suffered by Econet resulting from a breach of this Agreement or any laws and regulations governing the provision of Mobile Money Transfer Services by the Agent including but not limited to breaches caused by any act, neglect or default of the Agent and/or its employees, or any subscriber or third party claim in respect of any matter arising from the Agent's or its employees' conduct.

No warranties or representations are made with regard to potential revenues that may be earned by the Agent from the provision of the Mobile Money Transfer services and no reliance should be placed on any statements or projections provided, whether verbally or in writing in this respect.

RIGHT OF SET-OFF

Econet shall have the right to set off any sums owed to it by the Agent against any sums due and owing to the Agent whether under this Agreement or otherwise.

DISPUTE RESOLUTION

In the event of any dispute between the parties arising from this Agreement, the parties shall endeavour to resolve it by negotiation between their authorized representatives within seven

(7) days of such dispute arising.

In the event that the parties fail to reach agreement within the aforesaid period of seven (7) days, either party may refer the dispute to arbitration.

Notwithstanding anything to the contrary contained in this clause neither party shall be precluded from obtaining interim relief from a court of competent jurisdiction including any arbitral tribunal pending the decision of an arbitral tribunal appointed in terms of this clause.

The arbitration shall be held:

in Harare, Zimbabwe; and

with such legal and other professional representatives as the parties may require; and

in terms of the Arbitration Act (Chapter 7:15), as amended from time to time, it being the intention of the parties that the arbitration proceedings shall be held and completed as soon as possible.

The arbitrator shall be, if the matter in dispute is principally:

a legal matter, a registered legal practitioner of at least fifteen (15) years' standing;

an accounting matter, a practicing chartered accountant of at least fifteen (15) years' standing;

any other matter, an independent person who is an expert in the field in which the dispute has arisen, agreed upon between the parties.

Should the parties fail to agree whether the dispute is principally a legal, accounting or other matter within seven (7) days after the parties' agreement to refer the dispute to arbitration, the matter shall be deemed to be a legal matter.

Should the parties fail to agree on an arbitrator within seven (7) days after the matter was referred to arbitration in terms of clause 14.2 hereof, the arbitrator shall be appointed at the request of either party to the dispute by the Executive Secretary of the Law Society.

The decision of the arbitrator shall be final and binding on the parties and may be made an order of the court referred to in clause 14.3 at the instance of either of the parties.

The provisions of this clause:

constitute an irrevocable consent by the parties to any proceedings in terms of this clause and neither party shall be entitled to withdraw therefrom or to claim in any such proceedings that it is not bound by such provisions.

is severable from the Agreement and shall remain in effect despite the termination of or invalidity for any reason of this or any part of Contract.

MUTUAL CO-OPERATION

The Parties undertake to act in good faith with respect to each other's rights under this Agreement and to adopt all reasonable measures to ensure the realization of the objectives of this Agreement.

ENTIRE AGREEMENT

This Agreement-

Supersedes all prior discussions and constitutes the entire Agreement between the Parties with respect to the subject matter hereof,

Constitutes the whole Agreement between the Parties as to the subject matter hereof and no Agreements, representations or warranties between the Parties other than those set out herein shall be binding on the Parties, and

may not be altered or amended in any manner whatsoever except in writing and signed by all Parties. Any addendum to this Agreement shall not be valid and binding unless signed by the duly authorized representatives of the Parties.

Econet reserves the right to vary the terms of this Agreement. Such terms shall be communicated to the Agent and negotiated between the parties. Once agreed the new terms shall form part of this agreement and shall be binding on the parties.

shall not be assigned or ceded without prior written consent from the parties.

shall inure to the benefit of the successors in title, administrators and assigns of the parties.

WAIVER

Any failure, laxity, delay or omission by any Party to enforce any of the terms and conditions of this Agreement shall not be deemed to be a waiver of such terms and conditions or of the right at any time subsequent to enforce them.

APPLICABLE LAW

This Agreement shall be governed by the laws of Zimbabwe.

DOMICILIUM CITANDI ET EXECUTANDI
The Parties choose as their domicilia citandi et executandi for all purposes under this Agreement the following addresses
Econet Wireless (Private) Limited
No. 2 Old Mutare Road Msasa
Harare
The Agent

____

____

____

HUS DONE AND SIGNED AT .... ON THIS …….................…. DAY OF ……..........….............…….
20................. IN THE PRESENCE OF THE UNDERSIGNED
WITNESSES

AS WITNESSES
1…………………………………………
2 …………………………………………   …………………………………………..…….
FOR AND ON BEHALF OF AGENT

THUS DONE AND SIGNED AT .... ON THIS …….................…. DAY OF ……..........….............…….
20................. IN THE PRESENCE OF THE UNDERSIGNED
WITNESSES

AS WITNESSES
1…………………………………………
2 …………………………………………   ………………………………........…….
FOR AND ON BEHALF OF ECONET LIMITED

SUPPORTING DOCUMENTS

All applicants must submit the documents enlisted below:

Duly signed out Econet Agent Application form
Certified copy of Certificate of Incorporation
Certified copy of CR14
Certified copy of Tax Clearance
Coloured passport photo of the Directors
Certified copies of National Identity Documents
Physical address of one permanent outlet
Start-up minimum amount as stipulated in the offer letter.
Valid Trading licence.