From Rural to Digital: Mobile Money in the Development Context—A Case Study in Rural Kasese, Uganda

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Declaration

The research presented and reported in this thesis is my own work and was conducted within the *Australian Code for the Responsible Conduct of Research* guidelines. The research methodology received clearance from the James Cook University Human Research Ethics Committee (H6688). Research was conducted in accordance with ethics and practice approval from the Uganda National Council for Science and Technology (SS293ES).

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Acronyms

B2B: Business-to-Business

BoP: Base of the Pyramid

CGAP: Consultative Group to Assist the Poor

CICO: Cash-In and Cash-Out

COD: Cash-On-Delivery

DFS: Digital Financial Services

GSM: Global System for Mobile Communication

KYC: Know Your Customer

MFI: Micro Finance Institution

MNO: Mobile Network Operator

NGO: Non-Governmental Organisation

P2B: Person-to-Business

P2P: Peer-to-Peer

PIN: Personal Identification Number

SACCO: Savings and Credit Cooperative Organisation

SIM: Subscriber Identity Module

SMS: Short Messaging Service

UFA: Universal Financial Access

USSD: Unstructured Supplementary Service Data

VSLA: Village Savings and Loan Association

WCED: World Commission on Environment and Development

Abstract

With the proliferation of mobile phone technology into even the most remote parts of rural Africa, the ambition of offering Digital Financial Services (DFS) to previously unbanked people in the developing world is becoming a reality. The combination of mobile phone ownership and DFS that allow banking-like services offers enormous potential for wide scale financial inclusion, according to development agencies and multilateral institutions, to lift people from poverty and integrate them into the global economy. Anticipation, however, of a technology-led economic transformation is reflected in what are, to date, very few case studies of how mobile money is used in the rural developing world. This thesis examines the social and economic impacts of mobile money among a variety of users in the rural region of Kasese District, Uganda, testing expectations against the reality of its use in a variety of milieu. It draws on qualitative case study methods to examine mobile money usage and to elicit user's perspectives and experiences with the technology. The thesis draws on the sociology of money and theories of moral economy to inform questions about the social dynamics that arise from engagement with this new exchange technology.

The adoption of mobile money by rural people in Kasese was limited by affordability of mobile phones and poor network infrastructure, the concentration of mobile money service agents in urban centres, high transaction costs relative to cash, and inconsistent government policy toward taxation and regulation. SmartMoney, a new DFS provider that sought to address these problems with no-cost transactions and high levels of customer support encountered, nonetheless, poor financial and technological literacy and low levels of trust in the service among their potential rural customers. Urban people utilised mobile money for large transactions including business payments and services to upstream suppliers but avoided doing so when dealing with rural customers.

For those who did use it, mobile money offered opportunities to diversify income streams and transfer money between family members and businesses. In doing so, mobile money facilitated financial risk mitigation and the extension of livelihood strategies across greater distances—allowing family members to relocate from their home villages to trading and urban centres in search of opportunities. Pressures were apparent, however, in multi-sited households as expectations of income sharing and other social norms were brought into question. Women and young people, in particular, found familial claims on income to, at times, conflict with their own financial goals and ambitions.

Mobile money was implicated in a changing moral economy in which some values were being disembedded while new values were being re-embedded. Within marital relationships, for example, mobile money was used both to challenge and to reinforce gender role expectations. Evidence that mobile money aided financial inclusion and helped to empower some women, and the rural poor more generally, must therefore be weighed against evidence of unintended consequences. These included conflict over financial responsibilities, the use of mobile money accounts to hide money or expenditure from spouses, the use of mobile money to shift greater burdens of financial responsibility to women, and exposure to new financial risks including fraudulent transactions.

At face value, mobile money extended processes of individualisation and the disruption of existing social relations and moral codes in Kasese but with unclear long-term consequences. Possibilities for the development of new forms of sociability and trust were also unclear but, with new DFS offered by mainstream banks entering the market, such possibilities cannot be discounted. This mobile money research calls for a more expansive sociology of money that considers emerging digital finance technologies within the seemingly contradictory processes of disembedding and re-embedding, the sociability of money, and the calculative influence of money and reflexive modernity in the Global South.

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Chapter 1 Introduction

> Mobile money has played a major role in advancing financial inclusion, the mobile phone is arguably the most powerful instrument of development in history... Financial inclusion is vital to improving the livelihoods of the poor and disadvantaged. Providing people in developing countries with access to financial services, such as payments, savings, insurance and credit, helps them to manage their financial obligations and build better futures for their families while also supporting broad economic growth, development and poverty reduction (Alliance for Financial Inclusion, 2018 September, pp. 5-6).

> We can see that to understand the phenomenon of the acceptance/refusal of an innovation, we need to situate the innovation within the framework of society. This means that an analysis of the local society is necessary, along with its political, economic and symbolic conflicts, which turns the innovation into a gamble (Olivier de Sardan, 2005a, p. 97).

Mobile Money in Context

Mobile money has generated substantial interest and excitement across the international development sector since the successful launch of M-Pesa in Kenya in 2007. Founded as a public-private partnership project (PPP), M-Pesa was developed between Safaricom of Kenya (at the time, a Vodafone Group subsidiary), the UK's Department for International Development, the Commercial Bank of Africa, and the micro-finance organisation Faulu Kenya (Anonymous, 2007; Buch, 2010; Hughes & Lonie, 2007; Ivatury, 2006). At the time, mobile money seemed to offer an innovative financial instrument that leveraged the supposedly superior managerial and technical capabilities of the private sector to enrol the world's poor in the global financial system. Multilaterals have promoted PPPs since the 1990s on the basis that private enterprise designed services are deemed superior to public services–arguing that private-sector led PPPs can mobilise more managerial and technical capacity (Dailami & Klein, 1998) while earning profits that benefit all stakeholders (Prahalad, 2005; Prahalad & Hammond, 2002). M-Pesa's mobile money is a prime example of the type of innovation derived from the partnership and capability ideal of economic development fostered by the skill sharing, investment capacity, and efficiency of private industry investment in the Global South (Hughes & Lonie, 2007; Klein, 2015). The service used rapidly developing mobile phone penetration in Kenya to make simple payments between lender and borrower over the mobile phone network using the short messaging service (SMS) platform and unstructured supplementary service data (USSD)(Kirui, Okello, Nyikal, & Njiraini, 2013; Macmillan, Paelo, & Paremoer, 2016).

While the utility of mobile money as a micro-finance tool proved less efficacious than originally foreseen, these organisations perceived that its wide-reaching capability for simple and affordable money transfer opened potential for mobile phone users to conduct digital payments as an alternative to cash. The service was reconfigured as a money transfer and payment service and made available to the wider Kenyan public enabling cheap, fast money transfer to anywhere in the country from one Safaricom mobile subscriber to another. In turn, M-Pesa became an international success story, an exemplar PPP, and a veritable goldmine for Kenya Safaricom's multiple shareholders including the Kenyan government, South Africa's Vodacom, and Vodafone UK (Allen, 2013; Jack & Suri, 2011; Mas & Radcliffe, 2010).[1]

With the claimed successes of M-Pesa in Kenya, mobile money quickly spread to mobile network operators (MNO's) in neighbouring nations in East Africa. In Tanzania,

[1] See www.kenyantribune.com/m-pesa-mobile-data-grow-safaricom-profit-by-14pc/

Vodacom's M-Pesa quickly outstripped Airtel Tanzania that had begun operating in 2005.[2] South African owned telecoms giant MTN launched mobile money in Uganda in 2009,[3] followed by Rwanda in 2010.[4] While M-Pesa in Kenya boasts the highest per-capita user base among these cases, mobile money adoption rates in neighbouring nations demonstrate significant penetration across East Africa (World Bank, 2017).

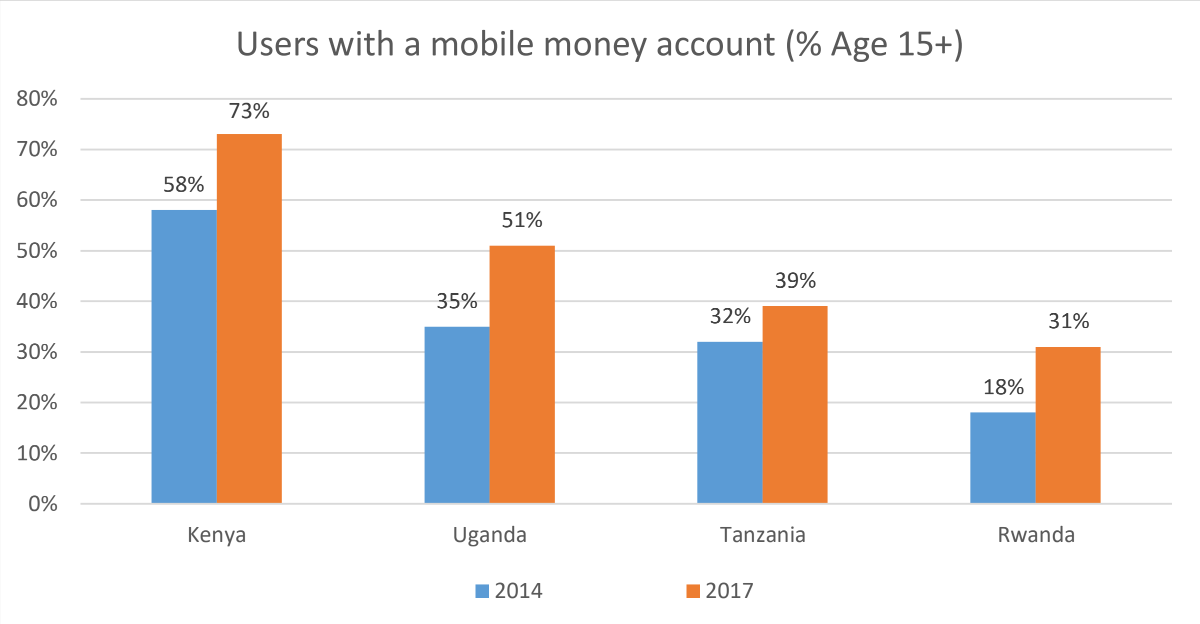

Figure 1. Users with a mobile money account (World Bank, 2017).

Figure 1 shows mobile money subscription as a percentage of the adult (+15) population from 2014 to 2017 in four neighbouring countries in East Africa. Kenya demonstrated the highest overall user subscription rates at 73% in 2017, while Uganda boasted the second highest rate of 51%. Showing significant growth of uptake in all markets, the evidence clearly demonstrates mobile money's high account ownership penetration in Kenya relative to its neighbours.

The causes of variance in mobile money account penetration across East African nations have been subject to some debate (Basemera, Rulangaranga, Mpaata, & Muwema,

2 See www.intermedia.org/wp-content/uploads/FITS_Tanzania_FullReport_final.pdf
3 See www.ide.go.jp/English/Data/Africa_file/Company/uganda03.html
4 See www.finclusion.org/country/africa/rwanda.html

2016; Evans & Pirchio, 2015; Ngugi, Pelowski, & Ogembo, 2010). Development institutions have overwhelmingly expected mobile money to be transformative for the rural poor and M-Pesa, consequently, a model to emulate in other developing nations (Basemera et al., 2016; Jack, Suri, & Townsend, 2010; Mas & Morawczynski, 2009). Yet success in other nations could not be guaranteed. This thesis thus examines variance within an East African country by examining the penetration of mobile money services into a relatively remote rural region, to consider the ways in which rural residents use mobile money, and perhaps most importantly, the ways in which mobile money use is bound up in social and economic change.

Mobile Money for Financial Inclusion

With mobile money experiencing widespread uptake in Kenya and elsewhere, observers in the FinTech and development sectors saw increased opportunity to promote electronic commerce and cash substitution. By enabling a kind of *branchless banking*—due to the ability of users to store digital money on their phones for an indefinite period without visiting a bank to secure their deposit—mobile money appeared an invaluable tool for financial inclusion among hitherto unbanked residents of the developing world. Moreover, the coincidence of mobile money's emergence with other international development programmes, focused on broadening financial inclusion, such as microfinance from which mobile money originally was developed to serve (Hughes & Lonie, 2007), raised questions about additional opportunities to extend access to financial services (Buku & Meredith, 2012; Global System for Mobile Communications, 2015; Mas, 2009). One such programme was spearheaded by the Alliance for Financial Inclusion (AFI)—an affiliation of central banks from across the developing nations and the initiative behind the Maya Declaration—who claim to be the "world's leading organisation on financial inclusion policy and regulation." [5] AFI's hope for mobile money is that it will help the poor make measurable improvements to their financial

[5] See www.afi-global.org/ and www.afi-global.org/maya-declaration

wellbeing. Recombining microfinance with mobile money services remains a chief objective of AFI (2018 September). Their belief in the potential of emergent digital financial services (DFS) offered by the FinTech industry, and thus in the capacity of mobile money to offer inclusion, self-help, and poverty reduction, soon became a tenet of widely accepted expectation amongst international institutions that concern themselves with financial development and those governments with a stake in global poverty alleviation. Uganda is one such member nation of the AFI and the Maya Declaration making financial inclusion a chief priority.[6]

The potential for *good* through enhanced financial access is promoted by large supranational bodies and echoed through the development sector. Pundits for mobile money claim the service helps to alleviate a number of previously intractable problems associated with cash dependence among the poor, freeing money to move more quickly, enabling remittances to flow, and, among other benefits, facilitating poverty alleviation. Since mobile money's success in Kenya drew scholarly attention a number of studies have reinforced these promises. One prominent example is Tavneet Suri and William Jack's (2016) "The long-run poverty and gender impacts of mobile money" in *Science*—a high impact reference point for financial inclusion scholars and consultancies which celebrates mobile money's contribution to poverty alleviation. It reports that "access to the Kenyan mobile money system M-Pesa increased per capita consumption levels and lifted 194,000 households, or 2% of Kenyan households, out of poverty" (Suri & Jack, 2016, p. 1288). The undertaking to improve access to financial services for the world's poor—typically under the moniker of financial inclusion—operates under the assumption, evident even within much of the scholarly literature, that access alone leads to growth, development and, therefore, reduced poverty. In

[6] See www.afi-global.org/sites/default/files/publications/maya_declaration_uganda_update_2014_2.pdf

2019, a blog entry on the World Economic Forum featured Muelbauer and Aron (2019) stating:

> Mobile money has transformed the landscape of financial inclusion in developing and emerging market countries, leapfrogging the provision of formal banking services. …mobile money potentially helps ameliorate several areas of market failure in developing economies, including saving, insurance, and the empowerment of women. It illustrates these effects using examples from a burgeoning empirical literature and concludes that the system-wide effects of mobile money may be even greater than current studies suggest.

Development practitioners and practitioner-researchers themselves produce a large body of literature on DFS, as do local and international businesses and world financial and governmental bodies. Within this broad array of literature, DFS has become a strongly promoted development aim itself. Consequently, world bodies have increasingly focused serious attention and investment in DFS capacity. The UN sponsored group, The Better Than Cash Alliance, a broad-reaching partnership organisation of states, international organisations and companies, are cooperatively focusing on poverty reduction and financial inclusion through DFS means. It also names several bodies within the UN among its list of funding partners and signatories.[7] Their stated aim is to accelerate "the transition from cash to digital payments in order to reduce poverty and drive inclusive growth."[8] The Alliance promotes many benefits such as: (i) cost savings through increased efficiency and speed; (ii) transparency and security by reducing corruption and theft as a result; (iii) financial inclusion that includes savings accounts and insurance products; (iv) women's economic participation that gives more control over their financial lives and improving economic opportunities; and

[7] See the www.betterthancash.org/members webpage for a list of organisations, governments and companies that are affiliated with this initiative.
[8] See www.betterthancash.org/about webpage paragraph 1.

(v) inclusive growth through building the institutions that form the bedrock of an economy.[9] Its members include a number of national governments like Kenya and Uganda, as well as economically powerful and politically influential international companies and foundations such as Coca-Cola, Unilever, Mastercard, the Clinton Foundation, Grameen Foundation and the Bill and Melinda Gates Foundation. As a whole, such international players articulate a powerful developmentalist influence on financial inclusion services and policies onto the Global South.

In 2010, the G20 endorsed a set of principles for financial inclusion with the explicit aim of banking the unbanked. The World Bank Report, "The Opportunities for Digitising Payments," presented to and endorsed by the G20, advocates for widespread adoption of digital payments in order to "significantly advance the global financial inclusion agenda" (Klapper & Singer, 2014, p. 17). In a moralising language of technological positivism, the report argues that mobile money services reduce rates of corruption, crime and government waste while bolstering the economic and political subjectivity of marginalised groups, particularly women.

> Not only are digital payments more efficient than cash payments, but their broader adoption also can reduce rates of corruption and violent crime, reduce the cost of government wage and social transfer payments, offer new pathways into the financial system for the disadvantaged, and, importantly, contribute to the ongoing objective of women's economic empowerment (2014, p. 17).

Digitisation, it is claimed, helps overcome the costs and physical barriers that have beset otherwise valuable financial inclusion efforts. Digital platforms are held to offer opportunities to rapidly scale up access to financial services using mobile phones, retail point of sales, and

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[9] Taken from the Better than Cash Alliance: Why Digital Payments page. Retrieved from www.uncdf.org/article/3043/the-better-than-cash-alliance-programme as well as the UNCDF page: www.uncdf.org/article/3043/the-better-than-cash-alliance-programme

other broadly available access points, when supported by an appropriate financial consumer protection framework. This, in turn, promotes economic empowerment among women and others by facilitating greater account ownership, asset accumulation and economic participation (Klapper & Singer, 2014, p. ii). At face value mobile money services offer international players in the development sphere an opportunity too useful and potentially transformative to ignore.

Uganda's Controversial Mobile Money and Social Media Taxes

Despite the prevalence of positive expectations there is evidence of competing positions on how to achieve the full potential of mobile money. While mobile money is used widely throughout Africa, governments face significant challenges in treating digitised financial flows both as a source of tax revenue and the means to collect it. The telecommunications industry advocate for *light touch* policy and regulation (Aron, 2015; Madise, 2019) in order to allow the technology adequate time to deepen and grow (Rostow, 1959). Others contend that light regulation incentivises anti-competitive activity among major players (Macmillan et al., 2016), enables money laundering, terrorism and customer fraud (Lyman, Pickens, & Porteous, 2008), minimises information security (Kanobe, Alexander, & Bwalya, 2017), and generally has a disproportionate impact on the poor.

Uganda drew international attention in July 2018 for a controversial taxation bill on mobile money transfers that brought to light the divergent perspectives on how financial inclusion should be achieved amongst power brokers. In July 2018, the federal government enacted the Excise Duty Amendment Act 2018 that imposed a 1% tax on all mobile money transactions.[10] While previous gains in mobile money use among even the lower strata of the population were slow but steady over the years, this new tax raised the barrier to effective

[10] See www.parliament.go.ug/news/2056/gov%E2%80%99t-review-law-mobile-money-social-media-taxes and also www.parliament.go.ug/news/2056/gov%E2%80%99t-review-law-mobile-money-social-media-taxes

employment of mobile money for Uganda's majority population—the rural users. Sharp criticism of the tax came from the Central Bank who foresaw this tax would have widespread negative effects on the economy. Along with many NGOs, the Central Bank brought their concerns to the government, highlighting serious misgivings about its negative impact on their work towards financial inclusion and their international commitment to the Maya Declaration.[11] Considering that rural Ugandans make up 83% of the population, their concerns were sound: imposing increased expenses for mobile money use would have a sizable effect on the rural poor's ability to choose mobile money over cash transactions and, therefore, on opportunities for financial inclusion. In response, the government argued the tax was aimed to bring the informal economy into the tax base.[12]

The economic effects of the tax were quick and widespread. In August 2018, the Central Bank governor noted that within the first two weeks of the new tax mobile money transactions decreased by 672bn USh (USD $183M)[13] (Ferracuti, August 29, 2018).[14] International organisations such as the UNCDF were also apt to criticise the government, arguing that such a tax would weaken the gains made so far by mobile money, and disadvantage the poor.[15] Due to popular outcry, and criticism over the following months from the Central Bank, the MNO's and other institutional bodies, the government relented. Consequently, the government levelled a revised Excise Duty Tax, which took effect in November 2018. This dropped the tax on all mobile money transactions with the exception of

[11] See www.csbag.org/wp-content/uploads/2018/08/Budget-Trends-Jul-final.pdf
[12] See www.parliament.go.ug/news/2056/gov%E2%80%99t-review-law-mobile-money-social-media-taxes
[13] Amounts are listed in Ugandan Shillings (USh) throughout this thesis. I provide an approximate currency exchange rate in order for the reader to contextualise the value of the sums discussed. The current currency conversion rate is $1.00 USD to 3670 USh (UGX).
[14] See www.observer.ug/news/headlines/58334-telecoms-bank-of-uganda-want-mobile-money-tax-scrapped.html and www.monitor.co.ug/SpecialReports/Mobile-Money-tax--MTN-Uganda-Bank-of-Uganda-Parliament/688342-4825414-s3rgje/index.html
[15] See www.researchictsolutions.com/home/wpontent/uploads/2019/01/ Africom_2018_ICT_taxes.pdf and www.gsma.com/subsaharanafrica/resources/the-causes-and-consequences-of-mobile-money-taxation-an-examination-of-mobile-money-transaction-taxes-in-sub-saharan-africa

cash-out withdrawals, on which were imposed a lower, revised tax rate of .5% of transaction values.

The regulatory flip-flop of the government provides an example of the contentious politics between and among powerful actors at the national and international level (Basemera et al., 2016; Macmillan et al., 2016). The rapid and profitable growth of mobile money services is a field of complex relations and even conflict among public and private interests, pitting private telcos against the banking sector, NGO's against government policy, infighting among government departments over regulatory oversight, and even the central bank with parliament over regressive taxation impacts.[16]

The implications of mobile money taxation and the high charges for mobile money services were also recurring points of contention even among rural users participating in the fieldwork that underpins this thesis. Over the course of conducting this research, this tax was both enacted and excised. Thus, the opinions and attitudes of rural users in relation to mobile money canvassed for this research were elicited during the period of increasing taxes on the service and the enactment of the Excise Duty Tax.

Research Problem

Mobile money has become regarded as a key platform for achieving digital and financial inclusion. The expectation is that access to financial services will promote economic growth and reduce poverty. A sizable body of scholarly and grey literature[17] takes it for granted that mobile money generates positive social and economic impacts through its contribution to financial inclusion (AFI, 2018 September; Buch, 2010; Dermish, Kneiding, Leishman, & Mas, 2011; Ivatury, 2006; Suri & Jack, 2016; World Bank, 2008). The framing

16 See www.africa-uganda-business-travel-guide.com/how-mtn-uganda-lost-mobile-money-billlions.html and www.newvision.co.ug/news/1510397/regulatory-evolution-mobile-money-value-added-services

17 The APA defines grey literature as: "scientific information that falls outside the peer review process but is written by scholars or summarizes a body of scholarly work. Government departments, corporations and trade groups, independent research institutes (i.e., 'think tanks'), advocacy groups, and other for-profit and non-profit organizations... ." (2012, p. 19)

of rural poverty as a problem of economic exclusion—as opposed to a problem of systemic inequality, neoliberal economic reform, elite capture, political dysfunction, corruption or inequitable trade practices—is not questioned. This thesis seeks, by contrast, to problematise the enthusiastic but uncritical narrative of financial inclusion through mobile money as a global ambition. As Blake Ratner (2004, p. 50) notes, this narrative originates in "that complex of intergovernmental organisations, national agencies, and nongovernmental organizations that make a business of debating and implementing plans for society's future."

A number of critics have highlighted the lack of evidence that mobile money generates positive social and economic impacts in the development context (Aker, Boumnijel, McClelland, & Tierney, 2016; Diniz, de Albuquerque, & Cernev, 2011). Among the critics, are those who argue that the technological positivism (Mukerjee, 1949), or that valourising Fin-Tech, DFS, microfinance and mobile money, is merely moralised reasoning in the service of neoliberalism (Bateman, 2019; Bateman, Duvendack, & Loubere, 2019; Bernards, 2019; Rankin, 2001; Soederberg, 2013) and emergent forms of *philanthrocapitalism* (McGoey, 2012; Mediavilla & Garcia-Arias, 2019). Borrowing from Soederberg (2010), I consider this is a kind of FinTech *fetishism*; that is, the belief that FinTech services are apolitical and yet economically transformative. Such a belief endows mobile money technology with the power of poverty alleviation and other forms of social empowerment,[18] sanitised of any critique of its potentially negative impact on social change, of the economic marginalisation of the poor, or of the gaps in ideologies of the marketplace (such as neoliberalism). The assumption is that a FinTech economy is perfect and pure, and unsullied and unencumbered by social relations.

Debate over the impacts of mobile money, microfinance and the overall financial inclusion objectives deserves further consideration in light of what this thesis aims to achieve.

[18] For example, the UN affiliated Better Than Cash Alliance webpage Why Digital Payments? lists the following: cost savings, transparency and security, financial inclusion, women's economic participation and, inclusive growth (www.betterthancash.org/why-digital-payments).

Research that challenges dominant narratives on mobile money is thus considered in brief here and thence more comprehensively in Chapter 2. As previously mentioned, considerable attention by proponents of mobile money has acknowledged the influential work of Suri and Jack (2016) on M-Pesa, due to their high profile, high impact article published in *Science*.[19] Bateman et al. (2019) provided a forceful critique on the evaluation method and analysis, claiming the research was "extremely problematic," arguing that:

> the recent history of the international development community is, unfortunately, littered with claims of miraculous poverty-reducing policy interventions, a great many of which are then shown at a later date to be quite ineffective and only really promoted for ideological, political, or narrow profiteering reasons (2019, p.3).

For example, there is a sizeable body of credible evidence that critiques the poverty alleviating effects of microcredit (Ghosh, 2013), yet the mainstream narrative of digital transformation of microcredit as a poverty cure-all continues unabated (AFI, 2018 September; Global Partnership for Financial Inclusion, July 2020; Muelbauer & Aron, 2019).

There is no doubt that mobile money is an innovation and a portent of social change. The notability of innovation is perhaps why so many DFS researchers follow E. Rogers' (1962) *diffusion of innovation* hypothesis. But what is less often examined is the way the use of the service highlights a social process that is occurring, a shift in the way relationships of exchange accompany the adoption of the technology. As such, mobile money needs to be recognised as, in part, a development project. It is part of an overarching development discourse that includes voices at the highest supranational level expounding hopeful expectations that financial technology will lift the smallest boats. These developmentalist stakeholders are invested not only in the discourse, but ideologically and often financially as

[19] See Suri, T., & Jack, W. (2016). The long-run poverty and gender impacts of mobile money. Science, 354(6317), 1288-1292.

well (such as the World Bank loans, Vodafone investments in the telecoms companies, or the seed funding for development programmes provided by the Mastercard Foundation).

Mobile money's success equates to success for the institutions that are its main enthusiasts, while it is also a profit mechanism for those developing ICT players in the booming, local telecommunications industries, and the western FinTech companies that provide the investment, expertise and high-tech hardware to the Global South. The development industry (which James Ferguson refers to as the *development apparatus* (1990)) affiliated with DFS development has become entangled with the corporate motivations of the telcos who deliver the service, undermining the independence and therefore credibility of the research they produce because of their embedded interests.

In relation to the top of this pyramid, Olivier de Sardan (2005a) analyses the development discourse led from the highest international levels, concluding that these are to be treated with caution. Olivier de Sardan's point is that this hegemon of a *developmentalist configuration* is led by ideologies and entangled logics that are neither homogenous nor internally coherent. Drawing attention to development dogmas, Olivier de Sardan highlights the developmentalist configuration as an object of study by the development anthropology and qualitative sociology that he characterises as *socio-anthropology* in the research field in Africa. Noting also the "wide gap between discourses and practices" —between the stated aspirations and intended outcomes of a development project, and the practice among those for whom it is intended—the socio-anthropologist's role is to expose the gaps between intent and action. Such an approach urges a shift from ideological populism, to methodological populism—a recognition and analysis of the social actor's own "agency and the pragmatic and cognitive resources" they employ (Olivier de Sardan, 2005, p. 9). Ultimately, Oliver de Sardan recommends that the pragmatic tools of each discipline should be drawn on to understand development discourse in light of current social phenomena as the discourse plays out:

> in the development universe, there is a wide gap between discourses and practices: what is said about a development project when it is a matter of conception, establishment, formatting, shaping, financing, or justifying the project has little in common with the project itself as it exists in practice, once it gets into the hands of the people to whom it is destined (2005a, p. 4).

In like manner, the critical sociology of Jean Baudrillard's neo-Marxism offers the importance of assessing deviations or distortions of normativity, that is, unpacking appearances as opposed to reality.[20] From a sociology of development position, it is important to draw attention to any imbalance or contradiction between *what is said* (by developers) as opposed to *what is done* when development technology is in the hands of the developees. Acknowledgement of these complexities and attention to this contrast is taken into account in this research.

The research problem is twofold. First, many international bodies, state institutions, and development organisations have offered widespread endorsement of mobile money as a tangible solution to poverty alleviation, enhanced economic wellbeing, and overall development. But these lack careful and considered analysis of its impact at the user level in those areas where poverty alleviation policies and practices are most needed, for the rural users in places like Africa. Second, methods that have been predominantly relied upon to conduct the extant research have not been adequate to empirically assess nor explain the impact at the local level of user experience. While evidence among some groups of researchers have indicated their cautionary stance to mobile money's potential to alleviate

[20] For a summary of Baudrillard's critical sociology see Kellner, D. (2009) "Jean Baudrillard" in The Stanford Encyclopedia of Philosophy at www.plato.stanford.edu/entries/baudrillard/

poverty, such cautions appear to have been largely overlooked at the international governance level. Similarly, as highlighted in the third epigraph to this chapter, Olivier de Sardan argues:

> the need to situate the innovation within the framework of society… analysis of the local society is necessary, along with its political, economic and symbolic conflicts, which turns the innovation into a gamble (2005a, p. 97).

In consideration of those critics' recommendations about developmentalist technologies such as mobile money and the "gamble" it represents, more careful analysis in rural contexts is required and will be addressed in succeeding chapters.

In attempting to focus away from high-level supranational development rhetoric and more deeply on the specificities of mobile money in a rural development context, at the grassroots level, this research attends to the call for richer, and specific, user-informed experience of the service in order to respond to and counterbalance macro-level analysis. It aims to provide a more nuanced understanding of the impact of mobile money grounded in the sociological tradition of understanding social, economic and culture change in the lives of the mobile money users of rural of Kasese, Uganda through case study research.

Situating the Research Interest

In 2015, I went to Uganda on a working holiday to see a family member's fledgling mobile money company in operation. At the time, SmartMoney was a start-up mobile money provider operating in rural Kasese District in west Uganda. The working holiday was for five weeks. It included some tourism activities with my relative and his wife, as well as some office and fieldwork activity. My primary task was to help clean up financial data, including reconciliations and entries in their financial management system, while the company was in the process of applying to a lucrative grant programme run by a large, well-financed, international foundation. Soon, the company's financial position and history would be under scrutiny by auditors flown in from Nairobi to conduct their obligatory due-diligence audit of the company's books.

The trip was my first exposure to Africa. In the bustling Ugandan capital of Kampala, I became acquainted with some of the local tourism attractions, as well with elements of the expat, foreign aid, and development sectors that make up a large component of the non-African community there. I spent a few weeks at the head office in Kampala, and the remainder of the visit at the company's operations centre in rural Kasese. In addition to office work, my time in Kasese consisted of long days in the field undertaking site visits to many of the rural villages in the Albertine Rift Valley, or high up in the Rwenzori mountains.

Site visits were comprised by seemingly endless meetings with farmer cooperatives, shopkeepers, and business traders, and a few of the larger agricultural companies who operated large buying, warehousing, and production facilities there. The trip exposed me to some of the complexities of the mobile money industry, while also providing me glimpses of another set of complexities: the dynamics of some of these rural communities in Uganda, their economic activity and agricultural production, as well as the hope, expectations, and attitudes of many locals who aspired to find creative and secure means toward poverty alleviation.

In addition to my first glimpses into the complexity of the mobile money industry and this rural community, I began to gain some basic insights into the dynamic yet violent history of the region, with the political history of the Bakonzo kingdom, the recently diminished insurgent activity of rebel groups operating in the mountains, and the ongoing tribal conflict over land rights, access, and historical claims by the various ethnic groups living in the region. My first exposure to the many complexities of mobile money usage amongst the rural residents in the complex cultural milieu of Kasese was the basis of my research interest in this topic, which has subsequently taken me back to Kasese and Kampala three more times and allowed me to situate a case study of SmartMoney in a larger set of overlapping socio-cultural, economic, and technological complexes.

Seeing and experiencing some of SmartMoney's challenges in their attempts to develop a competitive mobile money service in a burgeoning and rapidly developing mobile money industry was particularly interesting. The dynamism of Kampala, alongside the fabled rise of Nairobi as bustling cities with emergent new players in ICT industries in East Africa heightened my interest in SmartMoney and the emerging digital finance industry there. The prospect of mobile money as a digital technology that was leapfrogging some of the typical infrastructures of development, such as the provision of household electricity, water and telephone services, was compelling.

SmartMoney's aim was to meet the needs of reliable, secure, and cheap money storage and transfer by offering a better solution for branchless banking than the money transfer services offered by national telecommunication companies (telcos) like MTN and Airtel. SmartMoney's challenge appeared to be convincing rural users to take up its free-to-the-end-user service while also presenting itself as a credible and competitive investment opportunity to the donor and impact investment players in East Africa. As a financial services technology focused on the rural development context, SmartMoney's mobile money product provided a fascinating glimpse into some of the social and economic behaviours of the rural poor in Uganda. In light of all the global attention mobile money was receiving in larger, well-known and apparently successful cases, rural Kasese suggested a field of inquiry ripe for consideration of how this new ICT was adopted, used, and with what impacts, in this lesser understood, yet rich and challenging rural development context.

SmartMoney as a cornerstone to research interest.

My exposure to SmartMoney was pivotal to the development of my interest in this research project. I had been afforded a unique perspective into the multiple challenges the company had to face in order to attract seed funding and operational capital from NGOs and investors. I had also been uniquely placed to observe the ways this mobile money provider had navigated fraught relationships of uneven power dynamics between the donor organisation and SmartMoney—the service delivery organisation. Additionally, I was able to observe the company's challenge to create an operational business in the complex social, cultural, and economic situation of a rural region like Kasese. The challenges SmartMoney sought to overcome were, without doubt, more universal to the development industry than mobile money proponents may wish to acknowledge. By analysing the challenges of this unique business in a case study approach, it became clear that various competing and intersecting agendas of politics, money, and values were at play among actors, businesses, developers and developees, researchers, and institutional state bodies who aimed to foster broader financial inclusion, and social and economic development. It may be the case that those issues at stake were not just for this case study in Kasese, but for Uganda, East Africa, and the Global South more generally.

The SmartMoney experience in rural Kasese helped to ground and focus this research—it being noted that so many of the company's challenges are broadly universal for those at the start-up stages, while also being specific to the dynamics of Kasese itself. And yet, while SmartMoney was of particular interest to this project, through return trips to Kasese over the course of this research project, the scope of inquiry broadened to a wider interest in the socio-cultural and economic impact of mobile money service usage more generally in Kasese.

This thesis pays significant attention to the variety of ways in which people manage to integrate mobile money services into their lives. It considers actors' behaviours and values, and the logics they apply in practice and use to make sense of their own behaviour, while acknowledging the diversity of actors' experiences and motivations. Moreover, it analyses the interplay between rural and urban aspects of the economy, highlighting the way mobile money assists those who are conducting business, or who are far from home, to be able to send money, at great distances, with far less cost, and at much greater speed than cash. It also analyses the complex attitudes toward mobile money and social dynamics drawing on a moral economy framework to inform its usage in the specific setting of rural Kasese.

Aim and Objectives

Kasese is a district typical of those in rural Uganda, consisting of heterogeneous tribal affiliations, a strong reliance on subsistence and cash-crop agricultural production, and the presence of a growing urbanising regional centre. This PhD analyses how mobile money is being used, highlighting users' experiences with the service, demonstrating its utility and practical function, while also providing evidence of mobile money's capabilities and shortcomings. In order to critically assess the utility and user experience of mobile money in the context of a poor, rural region of a developing nation, this research considers how mobile money is integrated into, and may offer improvements in subsistence livelihoods, and stronger social and economic participation at a local level.

Aim

The broad aim of the research was to explore how the dissemination and use of mobile money in rural Africa influenced social and economic relationships and how these, in turn, shaped mobile money. Its objectives were to:

1. Understand those factors that facilitate, and those that limit, the use of mobile money.
2. Explore changes in livelihood strategies and outcomes associated with mobile money.
3. Understand how mobile money use reinforces and/or changes social relationships in both supply chains and households.

4. Identify negative and perverse outcomes arising from mobile money use.
5. Evaluate the contribution of mobile money to financial inclusion as advocated through global aid objectives.

Scope and approach

The broad aim of this study invites contributions from a range of theoretical and methodological perspectives in the social sciences. These include political economy, development and livelihoods studies, development economics, micro-credit and finance research, ICT4D, development and cultural anthropology and criminology. The approach to be taken here, however, draws on the sociology of money and exploratory case study methodology to address the objectives articulated above from the unique perspectives of rural Ugandans. This facilitates a deeper understanding of the phenomena of mobile money within the normative lifeworld's of its users, as actors with divergent social roles, agendas, responsibilities, obligations, values and arenas in which they inhabit and act.

The approach is influenced by the complimentary frameworks of the actor-oriented approach and the entangled social logics approaches applied to case study (Long, 2003; Olivier de Sardan, 2016a). Of the actor-oriented approach, Norman Long argues for grounding research in the peoples "everyday life experiences" rather than external or structural factors. Importantly for this approach, in regard to mobile money, it is recognized that:

> to the extent that large-scale and 'remote' social forces do alter the life-chances and behavior of individuals, they can only do so through shaping, directly or indirectly, the everyday life experiences and perceptions of the individuals and groups concerned (2003, p. 13).

This approach acknowledges that actors have agency in their actions and perspectives that are their own, while they also interface with structural conditions and others in their lifeworld. Similarly, Olivier de Sardan (2005a, p. 11) takes a complimentary approach though what he calls an entangled social logic approach which he argues is "centred on the analysis of the embeddedness of social logic" that considers both perspectives of personal agency and power structures, especially where they intersect and take their form. The real logics of actors do not always align with institutional logics, or even socio-cultural ones. Actors within a social group have divergent world-views, knowledges, and even degrees of power in which they seek to balance or counter structural approaches imposed on them.

This approach circumscribes the scope of the study in at least two ways. First, as a place-based case study the results of this research cannot be generalized outside the locale in which fieldwork was conducted. The case method has been chosen as the preferred methodology as it is well suited to putting boundaries around a complex phenomenon (such as mobile money) in order to reduce complexity to manageable categories (Olivier de Sardan, 2016a; Yin, 2013). The approach is well suited to theory development as it draws on its capacity for triangulation between varying data sources to test theory against emerging data (Fiss, 2009). It is also a tested method for the study of organisations serving the study of SmartMoney as a springboard into further insights on mobile money use in Kasese. Such insights, while not generalizable, raise important questions about the social and economic impacts of mobile money that ought to be asked more widely.

Second, and in a similar vein, the exploratory nature of this study draws on the insights of African political economy, especially those oriented to international development research that inform the discourses and logics of the aid agencies, NGOS and foundations that dominate the discourses of sustainable development with multilateral institutions (Alliance for Financial Inclusion, 2018 September; Aron & Muellbauer, May 2019; Global Partnership for Financial Inclusion, July 2020; Ivatury, 2006; Jack & Suri, 2011; Klapper & Singer, 2014; Prahalad, 2005), or their critics (Aker, Boumnijel, et al., 2016; Bateman et al., 2019; Burrell & Oreglia, 2015; Duvendack & Mader, 2019; Soederberg, 2013). But the research does not investigate the phenomenon of mobile money, in depth, from these perspectives. In this respect, the exploratory approach taken here raises questions that demand insight from a broader range of theoretical and methodological perspectives.

This research conducts a local case-study suited to investigating the aims as set out in the previous section. The research was confined to use among residents of the Kasese district to investigate matters where mobile money impacted social and economic relations. The contribution of this research lies in its valuable insights into the use of mobile money among users the technology is supposed to serve. To do so, the research is located within the interpretive paradigm[21] as it sought to understand the experiences and the social action of rural users embedded in their lifeworld's and from their own perspectives in a specific locale where mobile money was in operation. Thus, the scope of the research attends to the macro-level explanations of mobile money by analyzing empirical evidence of its operation at the micro-level.

Throughout, it attempts to consider these social elements and forms by the application of sociological theory especially around the central relationship of social order and human agency in modernity; in particular the local social order and the agency of participants in telling their own perspectives. As such the research values the participant perspective and biographical details in such a way that privileges sub-altern perspectives. Drawn on are observations of user's actions, the information that users provide, secondary sources, and relevant, culturally informed analysis (this is discussed further in Chapter 3). Naturally, such an approach must be cognizant of the various way in which the researcher may choose to interpret practices and be open to exploring emerging concepts.

The scope of the research has limitations, however, such as not being suitable to explore the complexities of mobile money within the national political economy or even the

[21] See Weber's Economy and Society: An Outline of Interpretive Sociology (Weber, 1978)

political intricacies of the region’s local politics. This thesis acknowledges a significant body of scholarly research in areas to which this thesis attends but does not consider in depth; for example, instances of fraud surfaced as an object of emerging inquiry for this research. Stories of its prevalence have been provided here and considered specifically in Chapter 8. There are also broader social implications of a culture of fraud within Kasese and Uganda, and Africa in general to which this thesis attempts to highlight, while acknowledging limitations in deep analysis.

The research has instead aimed to constrain some areas of analysis while privileging others in order to present a coherent dissertation. Investigation of SmartMoney was always an anchor and primary motivation for the research and, as such, the initial inquiry into SmartMoney influenced the overall research scope, the breadth of the research objectives, and even the location of the research site (this is discussed in Chapters 3 and 4). The basis of reasoning *what’s in* and *what’s out* of scope was derived from some of the core challenges that SmartMoney experienced such as challenges with user uptake in agricultural value chains and business trade over the merchant networks. Likewise, livelihoods improvement and women’s empowerment were important elements of SmartMoney’s marketing and public relations platform to donors and users alike. Investigation into fraud practices emerged from time in the field and a few conversations with community leaders. Some topical areas of study are acknowledged but skirted in order to focus on other phenomena, especially when the data available to the researcher for certain topics was more robust or where there was clear evidence in Kasese. As the method is exploratory, it has attempted to open up new ways of analysis of the mobile money phenomenon that seem highly apparent and worthy of deeper study to the researcher’s own sociological imagination as well.

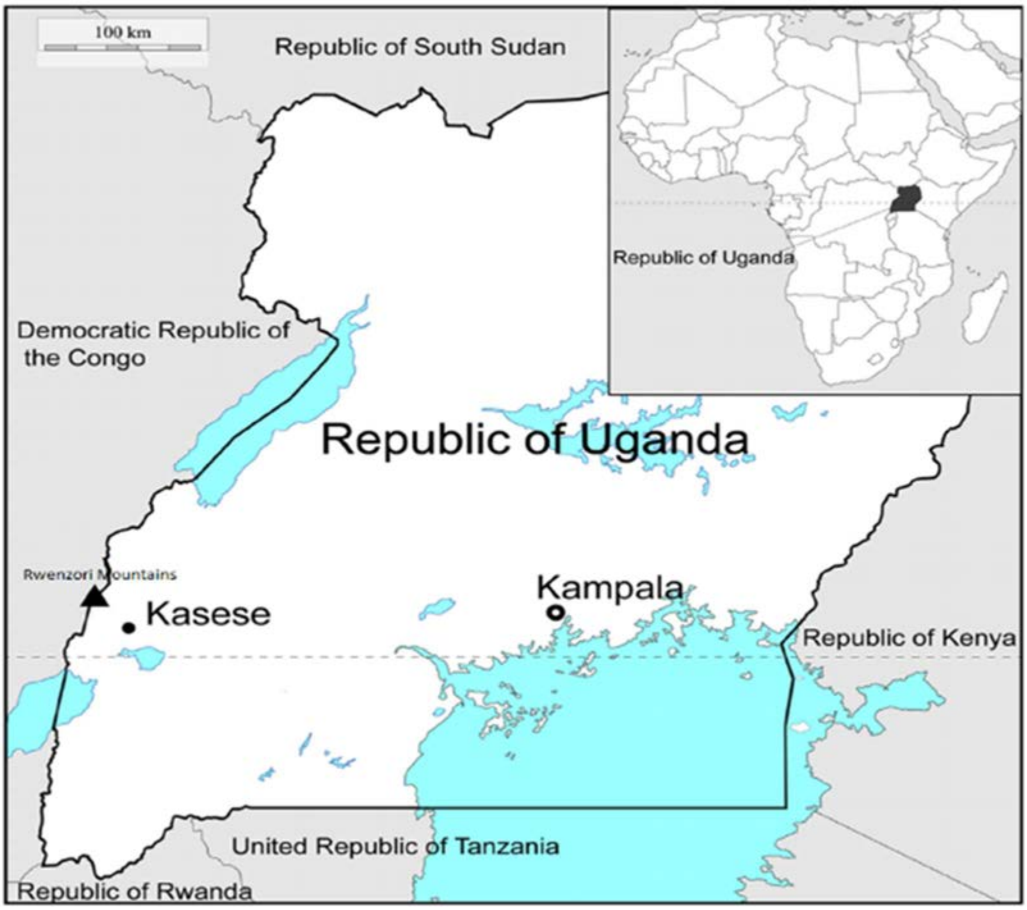

Figure 2. Map of Kasese and Rwenzori Mountains in Uganda (Uetake et al., 2014).

Introduction to Kasese

The Republic of Uganda is a country where much of the population draws its livelihood from subsistence farming. Uganda's population in 2016 was 40.3 million, with a rural population comprising 80% of the total.[22] The National Household Survey 2016/17 conducted by the UBOS, shows agricultural work provides 48% of employment for rural Ugandans (2018). With its unique particularities, the Kasese District is nonetheless typical of Uganda. It features a predominantly rural population with a district centre that provides the majority of institutional, economic, and political administration in the region. Official statistics from the Uganda Bureau of Statistics (UBOS) indicate a population of about

[22] See www.read.oecd-ilibrary.org/development/african-economic-outlook-2017/statistical-annex-tables_aeo-2017-68-en#page13

700,000 (UBOS, 2016) in Kasese District. According to the latest population report, Kasese Central is the only urban centre, with a population of 102,000. Kasese District thus provides a representative sample of a district with a mix of rural and urban populations in which to conduct this study.

The research was primarily conducted in the southern half of Kasese District. The region is highly fertile due to the abundance of rich volcanic soils, relatively stable rainfall, and an adequate water supply. The area is characterised by significant industries like fishing and livestock pastoralism, and a variety of agricultural activities in cash crop and foodstuff production, making Kasese a major producer of food in Uganda. As Kasese region is a productive agricultural area, it has a higher than average reliance on both market and subsistence farming. UBOS (2017) data notes that over 85% of households in Kasese are engaged in agriculture, indicating that 69% derive their primary source of income from subsistence farming while 27% depend on an earned (wage) income.

The District is serviced by a small financial centre in Kasese Central. The region is serviced by a handful of commercial banks there (Barclays, Centenary, Equity, Stanbic, Hofokam),[23] and one local branch Centenary Bank in the border town of Bwera. Kasese also enjoys the major telecoms companies of MTN, Airtel, Africell, and Uganda Telecom. However, MTN is the giant operator.[24] According to local opinion, MTN has the best network coverage across the mountainous region.

Cash crop industries are the mainstays of income for many families. Coffee and cotton are two of the major cash crop industries, with cotton grown in the lowlands and foothills, on either side of the A109 Highway and Arabica coffee produced between the upper foothills and the high elevation slopes of the Rwenzori range. Other cash crop production includes a small

[23] Information drawn from www.banks-uganda.com/kasese-banks-uganda.html
[24] MTN is the largest telco in Uganda, and one of the largest for the whole of the African continent. A recent article in the FinTech news platform Connecting Africa notes that in the last five years MTN holds between 51-55% market share in Uganda (see www.connectingafrica.com/author.asp?doc_id=758785).

but lucrative vanilla industry, a variety of oilseeds, and production of foodstuffs like maize, cassava, ground nuts and *matoke* bananas, as well as garden products such as tomatoes, cabbages, bananas, and mangoes.

The following map highlights the southern region of the Kasese District with the research areas targeted where interviews were conducted.

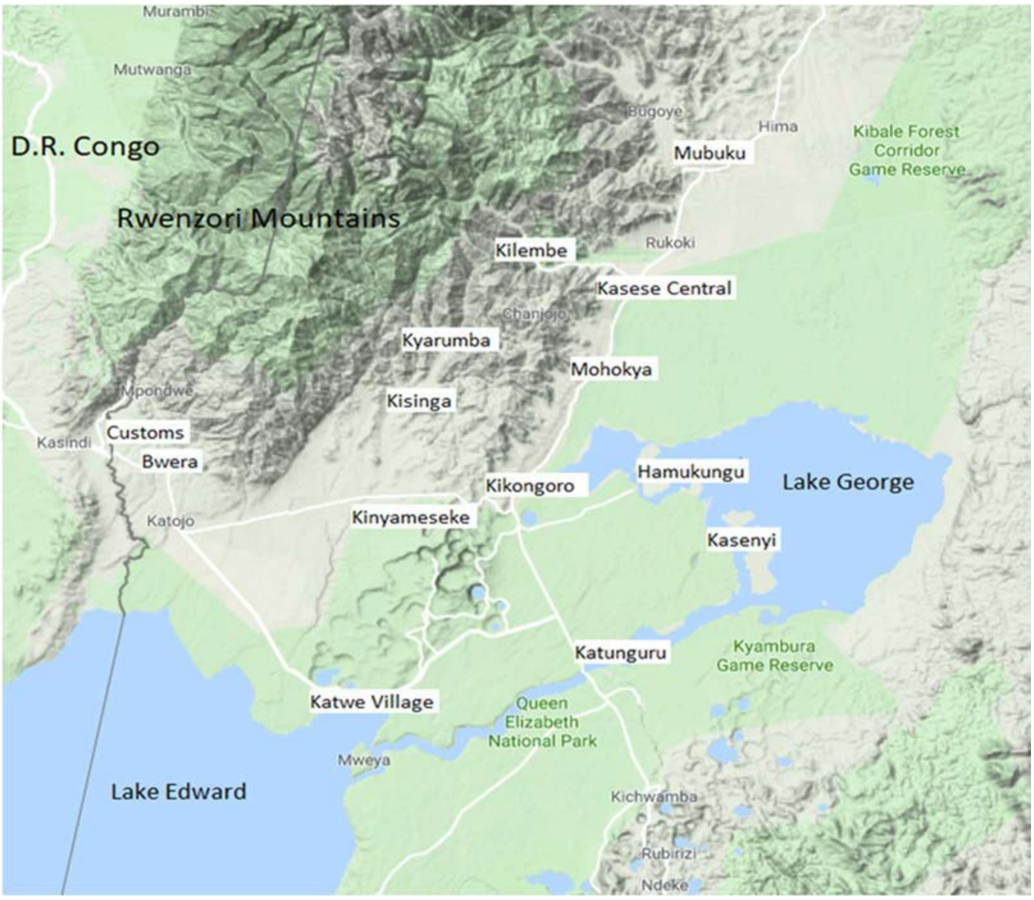

Figure 3. Location map of Kasese District and research sites.

Diversity of actors in Kasese

Kasese District has been a hotbed of political instability and violent conflict between ethnic groups, cross-border conflict, guerrilla activity, and government armed forces intervention for many decades. While the district is predominately Bakonzo, a number of other tribal groups reside in the area, especially in the lowlands of the Rift Valley where there has been ongoing, but low-intensity, conflict over access and rights to contested land (Reuss

& Titeca, 2017). Moreover, Kasese has been the site of a fifty-year independence movement of affiliated tribes of Bakonzo and Baamba seeking to extricate themselves from the control of the Toro Kingdom—within whom they were incorporated under the British Protectorate. The original armed conflict arose out of a movement for recognition as an independent kingdom during successive post-colonial governments (Rubongoya, 1995; Syahuka-Muhindo & Titeca, 2016) and culminating with ongoing political conflict with Uganda's ruling party the NRM. While conflict associated with the movement for independence has been muted of late, the region continues to suffer minor threats and skirmishes between armed groups and the Ugandan Defence Forces (UDF), and the spill-over from ongoing instability in the nearby Democratic Republic of the Congo (DR Congo). The Kasese District shares a 100 km border with eastern Congo and its troubled North Kivu district where ongoing ethnic tension, rebel groups and warlord contestation are all prevalent (Tull, 2003).

The Bakonzo people make up an 85% population majority in the District (UBOS, 2017), and have undisputed control over the Rwenzori mountain range alongside their cultural and ethnic counterparts in the Congo known as the Banande. The Bakonzo claim to have lived peacefully with the smaller tribal group of the Baamba in the range's north for centuries. These groups are primarily peasant farmers on the productive hillsides of the range. However, there has been a history of conflict with the various lowland dwelling groups that are mostly pastoral cattle herders. The most notable is the Batoro tribe who were the dominant kingdom in the area working with the English colonial government and were given responsibility to rule over the Bakonzo people. This relationship was never happily accepted by the Bakonzo and was particularly contested during the lead up to national independence in 1962 and in succeeding decades (Mushanga, 2011).

Alongside complaints of poor treatment and neglect under the Batoro kingdom for decades under British colonial oversight, the Bakonzo contest the encroachment of cattle herding tribes onto Bakonzo ancestral lands and access to the savannah of the Albertine Rift Valley at the foot of the Rwenzoris. These groups include the Batoro to the north and west, the Basongora to the west, and the Banyabindi to the south west. A further complication in the land rights claims was the establishment of Queen Elizabeth National Park in the 1950s which displaced a number of pastoralists previously dwelling within the park boundaries, further exacerbating the contestation for land at the fringes of the park and the base of the Rwenzori range (Reuss & Titeca, 2017).

Furthermore, rumours of oil deposits in the Albertine Rift Valley are a concern for the central government. Any threat of increased seditious violence, and the potential for a land grab of valuable resources by a breakaway Bakonzo Rwenzururu kingdom under King Charles Mumbere continues to threaten the peace in the region and the tenuous coexistence of the Bakonzo majority and the competing minority ethnic groups. Moreover, the region has frequently voted against the ruling party NRM candidates in the region in favour of minor opposition parties, a behaviour that frustrates the dominance of the NRM in the region and continues to be blamed for the heavy handedness of police and military presence and activity there.

During the course of this research, a major incident occurred between the kingdom and the armed forces. An armed standoff occurred on November 26, 2016 at the king's compound over spurious claims of retribution for an insurgent attack on a police post in the region a week before. The one day standoff ended in a massacre with over 100 deaths of pro-kingdom insurgents and 14 dead police, a devastating fire to the compound and the arrest and imprisonment of the king—his imprisonment remains as a house-arrest in Kampala at the time of this writing.[25] The incident made international headlines, but NRM influence over the media appears to have massaged the story in favour of the government, despite the outcry of

[25] See www.monitor.co.ug/uganda/news/national/mumbere-s-palace-lies-in-ruins-four-years-later-1922392

international groups like Human Rights Watch and Amnesty International. No formal investigation into the incident has been taken to justify these actions and appeals from international groups have been largely ignored.[26] These dynamics lead to ongoing flare-ups of land contestation, and resultant bloodshed and demonstrations in the region that upset ongoing political stability.

While these political crises and violent outbursts have not impacted this research *per-se*, this contextual knowledge provides some political and cultural background for the participants in this study. Much of the research was conducted in the south of the district amongst primarily the Bakonzo people, where, of late, there has been comparatively little politically or ethnically motivated violence. Nonetheless, it was important for the research to be attentive to the potential for ethnic differences and attitudes in political views and economic activities where they may present themselves in light of mobile money use, especially for the context of SmartMoney (Chapter 4).

Structure of the Thesis

The thesis consists of two parts. Part 1 (Chapters 1, 2 and 3) offers some background context of the research site, providing an overview of the socio-cultural state of the Kasese community (Chapter 1), a literature review (Chapter 2) and a methodology for the research (Chapter 3). Part 2 (Chapters 4 to 8) are case studies of particular interest to the researcher, drawn from information within the research data set. Chapter 4 is a case study of the original focus of the research project, SmartMoney. The SmartMoney case study details an organisational overview of the company, its purpose, its aims, and its experience in developing a mobile money solution for rural Kasese that competes with the large telcos while also delivering its core service as a solution to cash exchange and secure savings for its

[26] See www.hrw.org/news/2017/03/15/uganda-ensure-independent-investigation-kasese-killings and www.hrw.org/news/2018/10/10/uganda-no-justice-2016-kasese-massacre-security-forces and www.independent.co.ug/eu-asks-for-expeditious-trial-of-rwenzururu-royal-guards/

users in rural communities. The remainder of the case study looks at a number of specific challenges that the company faces in light of its operations as they respond to challenges in growing their customer base. The company insights and its challenges provide an anchor for this research project, and the key objective to understand the factors that facilitate, and those that limit the use of mobile money. In this case, a driving question for the SmartMoney research is to understand how mobile money has diffused through Kasese and whether the company's strategies, informed by macro-institutional ideals and the global aid objective of financial inclusion technology has been successful at promoting mobile money use. Consequently, the SmartMoney case study serves as a springboard for the following chapters in exploring mobile money in Kasese more broadly.

Chapter 5 draws from field research into both the coffee and the cotton industries in Kasese, two of the largest cash crop sectors. The research aimed to develop an understanding of the local challenges that the agricultural industry face in implementing mobile money in a significant way in the first mile of the value chain. Interviews with small farmers, lead farmers, agriculture officers and buyers in the industry inform the research findings. Chapter 6 expands the thesis's investigation of mobile money in the agricultural industry by considering the broader social milieu of mobile money in the various livelihood practices and occupations of rural, peri-urban, and urban Kasese. The chapter considers barriers to mobile money uptake and ways in which mobile money is facilitating the spread of families across greater distances in their strategic intent to generate personal and household income.

Chapter 7 considers the role of mobile money in gender relations, with a particular focus on marital relations in Kasese. This chapter considers the way men and women undertake their utilisation of mobile money in their daily lives and investigates its role in challenging and reinforcing existing gendered social inequalities. Chapter 8 considers how mobile money has created new practices of fraud in rural Uganda. The chapter entails a detailed interview with a police detective, and draws on responses from other participants in the study, which find that alongside the benefits of mobile money, there are also setbacks. The chapter considers the appearance of fraud within the context of how rural users adopt the new technology without the requisite skills and literacy of the technology to mitigate exposure to new risks. The final chapter (Chapter 9) develops a summary of the research findings, interpreting the main features of mobile money in Kasese. It characterises the changing nature and the variety of attitudes and approaches that users take toward integrating mobile money into their daily lives. I argue that development discourses overstate the service's potential to alleviate poverty. While mobile money is undoubtedly a significant innovation that offers particular utility for Ugandans to undertake money transfer (which are explored in this study), persistent and broad social and economic deficiencies limit the service's ability to unseat entrenched poverty and economic stagnation for the rural poor. Moreover, despite the technology's potential as a useful tool for poverty alleviation, its use more often unpredictably nuances existing social complexes, rather than simply improving them.

Chapter 2 **Review of the Literature**

> It should be recognized that most relationships between people can be interpreted as forms of exchange. Exchange is the purest and most developed kind of interaction, which shapes human life when it seeks to acquire substance and content (Simmel, 1971, p. 79).

> Continuing economic relations often become overlaid with social content that carries strong expectations of trust and abstention from opportunism (Granovetter, 1985, p. 490).

It might be considered surprising that research on mobile money treats the role of money in economic relations uncritically. Much of the existing literature reflects generalised assumptions about user's socio-economic relations and leaves unexamined the social forms and ideological positions that shape economic action within different social arenas. It is argued here, consequently, that understanding mobile money as it operates in the Global South requires insight into social relations, moral sentiments and what Granovetter (1985) refers as the "strong expectations of trust" that underpin economic exchange. Understanding mobile money requires insight, moreover, into how its introduction as a new financial technology influences the sociability of economic actions within societies that lack inclusive financial institutions.

The aim of this thesis is to explore the reciprocal relationships between mobile money and the social and economic relationships in which its use is embedded in rural Kasese. This chapter will contribute to this aim by considering the impacts of mobile money (Objective 1) within the broader moral economy of financial inclusion technology (Objective 5).

The chapter advances a sociological conceptualization of money through the works of Georg Simmel, Max Weber and more contemporary theorists of money, modernity and economic sociology. While sociological approaches vary, it is generally held that while money is a rational tool of market exchange it is also, if not primarily, an instrument through which multiple cultural and structural factors are socially embedded (Deutschmann, 1996; Evans, 2009; Simmel, 2011; Zelizer, 1989). Sociology has long critiqued econo-centric approaches to money that tend to ignore the social context and relational qualities of money in favour of a utilitarian and uncritical approach to capitalism (Granovetter, 1985; Scott, 2013). Extending this critique, this chapter examines the tendency of mobile money research informed by econometric models of analysis to overlook social factors of exchange and the embeddedness of money in social life (Dodd, 2016). It argues for an extension to financial inclusion and FinTech research that considers localised social and cultural contexts of exchange, the roles of heterogeneous agents in these exchanges, and nuances in the social meaning of money. The chapter also surveys a number of other disciplinary approaches to mobile money research that, to date, exercise the larger portion of mobile money research and influence on the financial inclusion agenda. The survey attempts to highlight limitations to these approaches that a sociologically informed perspective may address.

Finally, the chapter organises the breadth of research analysis into a general theoretical framework of moral economy as evidenced in the global financial inclusion literature and considers its suitability for application in subsequent chapters. Because it offers a clear connection between sociability and economic exchange, this chapter will articulate the concept of *moral economy* as a broad organising theoretical framework for this thesis. Throughout, this thesis draws, however lightly, on the notion of moral economy operating amongst actors at all levels of the mobile money ecosystem. The moral economy framework proposed here provides a means to explore, test, and extend research taken from alternate, less sociological perspectives in order to clarify how users of mobile money employ the service in their livelihoods and lifeworlds.

While explored in more detail later, in brief, the idea of a moral economy, as proposed by Thompson (1971, 1991), attempts to ascertain the role of norms, values, reasonings, obligations, trust, and sentiments that mediate forms of economic exchange. The moral economy thus provides a framework through which to unpack the actions and logics of actors ranging from the telecoms and governmental institutions that promote, provision and profit from mobile money services, the NGO's and philanthropic foundations that assert mobile money's utility for poverty alleviation, and those affiliated through the production of mobile money research, to, most importantly, the actions and logics of rural Ugandans. A key focus of this thesis is the impact of mobile money on actors in Kasese including SmartMoney as they attempt to break into the field as a viable business while helping people to save money, or the variety of users at the end of the value chain, the poor, at the outer reaches of the network, who incorporate the technology into their livelihoods and householding.

Money in Economic Sociology

Considering its ubiquity, the question of what money is presumes to be simple. Yet mobile money, an electronic exchange mediated by mobile phones and corporate telecommunications platforms, shows the question of what money is to be anything but simple. Georg Simmel's (2004) foundational work, *The Philosophy of Money*, identifies a number of ways in which money can be understood as a social phenomenon and as a form of exchange entangled with modernity. Arguing it constitutes "the purest and most developed kind of action" (1971, p. 79), Simmel conceived of exchange as an act of mutual sacrifice and trust that is productive of society. Simmel asserts that money is the most advanced development of any exchange process as it acts as the valuation unit, the medium, and the facilitator of exchange "chrystalised…as an independent structure" (2004, p. 174). In such a way, money is the “absolute intermediary” (p.176), enabling spatial and temporal extension of relationships in the dynamic and ceaseless motion of modernity.

This understanding of the social nature of money is based on the notion that money is a reified social form—a social and symbolic form concretised into an independent *other*—acting as an intermediary third party between dyadic (or group) relations in exchange. Money is the common denominator in this kind of economy, reducing all objects and services in the market to a quantified value. Social interaction mediated through money tends to subsume exchangeable items and services into values devoid of the unique characteristics of the thing or service being exchanged. This process creates a *psychology of calculation*, or a disposition toward quantification that accompanies the development of modern society. The quantitative disposition of modernity or *calculability* is a specific frame of mind to which Simmel, and his contemporary Weber, both refer (Simmel, 2011; Weber, 1961). On the calculative disposition that modern money promotes Simmel notes:

> The money economy brings along with it the necessity for continuous mathematical operations in everyday life. The life of many people is filled out with determining, weighing up, calculating and reducing of qualitative values to quantitative ones. This certainly contributes to the rational, calculating nature of modern times against the more impulsive, holistic, emotional character of earlier epochs (Simmel, 1991, p. 28).

This special relation between money and modernity is of particular sociological interest in this research because money, with its resultant effect of developing a quantitative disposition in its user, has a disembedding effect on the normative exchange relations constitutive of more traditional societies. Modern money forces a disjuncture in relations between users in favour of itself as the medium of exchange. This disjuncture, and the accompanying push toward calculation, have wide-ranging effects on sociability, sentiments and obligations as they impose new logics, reasonings, actions and relations. In short, money changes the way we think and therefore the way we behave toward things and people leading

Simmel to assert that money erodes the former social and moral order and builds new ones. According to Weber (1978), a mentality of calculation fosters a dehumanised rationality within modern capitalism. He argues that:

> The reason for the impersonality of the market is its matter-of-factness... its participants do not look toward the persons of each other…there are no obligations of brotherliness or reverence, and none of those spontaneous human relations that are sustained by personal unions. They all would just obstruct the free development of the bare market relationship, and its specific interests serve, in their turn, to weaken the sentiments on which these obstructions rest (Weber, 1978, p. 636).

Calculation is thus associated with processes of individualisation and de-traditionalisation (Beck & Beck-Gernsheim, 2001; Bourdieu & Wacquant, 1992; Callon, 1998; Dodd, 2016; Giddens, 1993; Gudeman, 2008) and a biographical or self-calculating and self-regulating approach to governance in the modern state (Dawson, 2013; Foucault, 2008; Li, 2007b).

The effects of money on social relations, production, and the exchange of commodities and labour demonstrates money's unique ability to mediate time and space in human relations. Money mediates because it is capable of substitution for the satisfaction of needs; its inherent transferability (which demonstrates its mobility); and its capacity as a store of value. Money produces social alienation as it weakens the social qualities of relations while it simultaneously connects people (albeit weakly) through exchange with money. Modernity promotes trust in money and the liberation it produces usurps obligation to the person in whom the exchange is occurring (Simmel, 2011); it engenders a transition from thick trust in a person to trust in the quantitative, abstract system of money. Money therefore engenders a complex reorganisation of commodities and affects the division of labour in society in which participants in a money economy become at once more integrated and dependent on the productive capacity of others, while the social relations between each person, and the importance of their unique character, become less important. Following this reasoning, Simmel (2004) argued that money promoted a sense of individual differentiation. In such a way, money of modernity has a *Janus face*: because it establishes individualism and dependency at the same time, it refers one to ever more people—albeit thinly. On the other hand, money offers freedom toward individualisation emancipated from deep social relations and the traditional moral obligations that accompanied them, but rather re-orients the individual to new, complex social conditions, enforcing a deepening dependence on many others in order to fulfil one's needs, provisioning, desires, and even self-identity.

While economics holds that individuals are the cool calculating rational actors of the marketplace, the sociological view demonstrates that such behaviour is the consequence of individualisation in modernity. Yet, the sociological view of economic behaviour does not deny the rationalistic turn in society, but neither does it capitulate to the triumph of self-maximising individuals over other values and sentiments in social relations. As Weber states: "even in cases where there is a high degree of rationalization of action, the element of traditional orientation remains considerable" (1978, p. 691) The effects of money in modern society are not absolute, and neither are its impacts on the modern, calculating, and self-interested individual made complete despite ample evidence of modernity producing demoralisation, *anomie*, deviance, and other deviations and distortions of sociological interest (Beck, Giddens, & Lash, 1994; Durkheim, 1984; Fevre, 2003; Harrington, 2012; Merton, 1938). Rational economising individualism remains moderated by embedded traditions and status-oriented subcultures. Exchange retains both normative and affective characteristics, reflective of the societies in which it takes place.

For Weber, the notion of the calculating, self-interested individual was an *ideal type* open to deconstruction and debate. It is a notion that has become fundamental, however, to the self-regulatory models of economic citizenship promoted by neoliberal rationalities of governance (Foucault, 1991) and on which instruments of global financial inclusion, such as mobile money, depend. Capacities for calculation are likely both to impede or facilitate the use of mobile money (Objective 1) and to shape the outcomes of that use (Objectives 2–5).

Connotations of trust and morality in modernity

Both Simmel and Weber held to the notion that there were non-economic preconditions and consequences of economic actions and of money itself such as trust, calculation, political power, social expectations and even morals. Many decades later, Mark Granovetter (1985) observed that with strong social ties there are “strong expectations of trust and abstention of opportunism.” The sociological position argues that all forms of exchange are built on social relations that are encumbered by positive and negative values, and come with logics, norms, expectations, trust, and attitudes such as reciprocity, for instance.

Another of Simmel’s contemporaries, Emile Durkheim, examined the disembedding of religion and traditional social and moral norms among the consequences of modernity. Durkheim was particularly interested in how the discipline might re-embed a new “science of morality” to address gaps in the “moral conditions of exchange” and anomie that plagued modern society (Durkheim, 1984; Gane, 2002; Trigilia, 2002). In such a way, Durkheim held that despite the problems of industrialisation, with time and political intervention, society and social life could become more harmonious and moral. This Durkheimian functionalist notion of progress through scientific principles, governance, and political intervention into social inequalities strongly influenced the ideology of the welfare state, of politically guided economic growth, and a social justice morality (Gane, 2002; Turner, 2005).

This perspective has had a particularly strong influence on the values that underpin developmentalist thinking and on the aims of the development project–specifically, to re-embed a reformed and re-organised socio-economy via a science of governance, institutions and justice (Liagouras, 2018). Development is conceived both as a rational model of progress and a moral imperative. According to Norman Long (2003, p. 10): “modernisation theory visualises development in terms of a progressive movement towards technologically and institutionally more complex and integrated forms of 'modern' society." Venot and Veldwisch (2017, p. 16) refer to this concept as socio-technical myth making as modern technologies wrapped up with scientific and expert knowledge affirm a "modernist and linear understanding of development" in some legitimising intervention. Likewise, Olivier de Sardan (2005a, p. 70) highlights, the meta-ideology of development identifying its dual-faceted nature that pursues human welfare with "its strong moral connotations" and ideals of economic and technological progress with "its strong evolutionist connotations."

Similar assumptions are evident in the discourses of inclusion and empowerment that accompany the promotion of novel technology-enabled financial services–promotion redolent of what Suarez-Villa (2012) identifies as technocapitalism. The notion of the free, rational, possessive consumer empowered to maximise their welfare in a fair and open market has attracted considerable critique. For this thesis, the question is not why this notion persists but how calculation, modern money, modernity and trust interact with local social and economic relations to produce *bottom-up* processes of individualisation and other social change that Beck, Beck-Gernsheim, Giddens, Lash, Bauman and others express (Bauman, 2013; Beck & Beck-Gernsheim, 1995; Beck et al., 1994; Burgess, 2018; Gane, 2012).

Embeddeness, modernity and individualisation

The sociological concept of embeddedness treats the economy not as an independent sphere of activity but a domain of interaction subservient to social norms and relations (Granovetter, 1985; Polanyi, 2001).[27] Giddens draws on Simmel's work on the calculative nature of money and the modern mind to consider changes in social relations and the calculative basis of trust and risk in the context of modernity and globalisation (Giddens,

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[27] This thesis will not delve into the divergent arguments and interpretation on schools of Polanyi or Granovetter's notions of embeddedness. This is because I do not intents to develop a theoretical framework to account for these differences but rather focus on disembedding and re-embedding impacts of modernity put forward by Giddens and contemporaries.

2012; Giddens & Pierson, 1998). In contrast with Polanyi (2001), who examines only the disruptive separation of social and economic relations as the latter are disembedded by market economies, Giddens extends consideration to the re-embedding of new economic relations in the social domain. Disembedding and re-embedding convey the idea of the restructuring and reforming of relationships across space and time and thus the constitution of different forms of social system. For Giddens, disembedding refers to the "lifting out of forms of life, their recombination across time and space, but also the reconstitution of the contexts from which they came" (Giddens & Pierson, 1998, p. 98). The reconfiguration cannot occur without trust, but that trust is transitioned from personal social relations to system trust. Globalisation with its expansive economic forces is the pinnacle of disembedding and fundamental to the nature of contemporary societies. As Giddens explains:

> With the development of more of an international division of labour, this changes—economic exchange becomes more and more lifted out of the local community and recombined across time and space. The 'local' reflects much larger processes, which in some part reshape it, perhaps in a dramatic way. What happens in the economy happens in many other areas of life as well: processes of 'disembedding' and 're-embedding' or 'lifting out' and 'pushing back'. Today, in a period of intensifying globalization, these effects are more pronounced than before (Giddens & Pierson, 1998, p. 98).

For Giddens, the main features of modernity include the reorganisation of time and space (as disembedding mechanisms reshape and shift local processes to larger domains), detraditionalisation (as religion, government, the family and other institutions lose their authority), and reflexivity (as individuals and institutions become aware of these processes and their consequences). Disembedding mechanisms include systems that involve expert knowledge, symbolic tokens such as money and, importantly for this research, technologies of money. Inspired by Simmel's postulate that money both individualizes and standardizes, Beck

(1992, p. 130) argues that “individuals… become the agents of their livelihood mediated by the market, as well as of their biographical planning and organization,” the consequences of which include disenchantment—an anomic state described as “the loss of traditional security with respect to practical knowledge, faith and guiding norms.” Like Giddens, however, Beck identifies also the emergence of reflexivity, a kind of reckoning with the consequences of modernity that demands new institutional and collective responses (Beck, 1992; Beck et al., 1994; Giddens, 2012).

According to Giddens (2012), re-embedding is one of the likely outcomes of reflexivity. He posits the potential for revaluation to emerge from the reflexive self, enabling the *pinning down* of social relations by way of the *trustworthiness* of symbolic tokens (modern money) and expert systems (ICTs and DFS systems) (Giddens, 2012, p. 83). The impacts of modernity and modern money on the individual and society are far-reaching. As Giddens and others highlight, societies and individuals are undergoing processes of embedding, disembedding, and re-embedding in which the instruments and institutions of technocapitalism are deeply implicated. Mobile money and the discourses through which it is promoted suggest potentially unique processes of disembedding-disenchantment-re-embedding that speak to Objective 3, the impact of mobile money on social relations in rural Kasese.

Cognition and Disposition to Trust

Trust is an essential feature of exchange transactions. Simmel, Durkheim and Weber all identify trust as foundational requirement for exchange (economic or otherwise) to occur (Durkheim, 1984; Simmel, 2004; Weber, 1978). For instance, concerning money exchange, Simmel (2011, p. 177) notes:

> The common relationship that the owner of money and the seller have to a social group—the claim of the former to a service and the trust of the latter that this claim

> will be honoured—provides the sociological constellation in which money transactions, as distinct from barter, are accomplished.

Likewise, mobile money only works if users trust the technology and assume each party is trustworthy—or at least bound within social safeguards. While the two parties engaged in exchange may not need to have deep, affiliate knowledge of each other, socialisation and *moral sentiment* are necessary preconditions for exchange.

A longstanding interest of sociology involves the orientations, dispositions, and socio-psychological differences of rural and urban dwellers. In his essay “The Metropolis and Mental Life,” Simmel (1950a) argues that rural and urban life operate at different tempos. The “metropolis exacts…a different amount of consciousness than does rural life,” he argues, noting that rural life “rests more upon deeply felt and emotional relationships” (1950a, p. 409). Simmel saw the urban person having a cognitive disposition and hardened intellectualism toward financial gain, at odds with a rural person’s predisposition to sentiment and trust. His position echoes that of Durkheim’s (1984) *mechanical solidarity* of village life and *organic solidarity* of the urbanised modern. With its ability to trade across distances, across cities and the rural divide, mobile money potentially erodes this affiliate knowledge.

The review of the sociological literature regarding economic relations thus far shows the money economy is deeply embedded in social relations and its patterns. The objective function of valuation that accompanies the modern money economy demonstrates that users adopt patterns of thinking, calculation, and rationalisation in ways that disrupt traditional socio-economic relations. As the intermediary in these relations, money demonstrates its capacity to extend spatial and temporal relations and even to evince mobile qualities. Money is itself deemed trustworthy and the favoured substitute for all commodities and services in the market. In such a way, money has emancipatory power for the individual, freeing one from traditional social ties, enabling choice, and encouraging individual distinction. But it also alienates. Money transfers dependency on deep social ties to dependency on a risk laden, constrained, labour and commodities market. These are the problematic logics and contradictions of the modern money economy that a sociology of mobile money illuminates. What I propose here is to acknowledge some of the foundational ideas of sociology's conceptions of society, economy, and money for reference over the course of this investigation into the mobile money economy in Kasese.

Research to date on the use and effects of mobile money in Africa provides further insight into the mobile money economy from a variety of disciplinary perspectives. The following sections explore this research and identify opportunities to develop a more holistic understanding of mobile money informed by sociological theory. I later return to the sociological inquiry around moral economy, an approach that examines the relationship between normative, embedded social and economic relations and the rupturing effects of disembedded and even re-embedded socio-economic activities—an approach which, as of yet, has not been applied to the mobile money context.

Mobile Money and Development

M-Pesa's spectacular success story afforded mobile money substantial and rapid attention in the international development sector. It was regarded as a paragon of the public-private partnership ideal:[28] a merger of civil society development ideology of the previous decade and the neoliberal values of profitable, yet sustainably focused, private enterprise.[29] As a unique, African developed technology, M-Pesa suggested that mobile money had all the hallmarks of a runaway success for those institutions aimed at building the capacity of developing nations like Kenya to promote and move rapidly toward international development goals of poverty reduction and financial inclusion. Since the advent of M-Pesa, a

[28] See World Bank webpage on www.pppknowledgelab.org/
[29] See Anthony Giddens (1998) The Third Way: The Renewal of Social Democracy

large number of international organisations have joined in the chorus praising mobile money as a technological marvel of inclusive and *appropriate technology* for the Global South (Lashitew, van Tulder, & Liasse, 2019; Okello, Ntayi, Munene, & Malinga, 2018).

Mobile money's initial ties to micro-finance in East Africa requires some acknowledgement too, considering its development out of a micro-finance programme and the ease of loans and payments it could facilitate. Like micro-finance, mobile money tends to be regarded as a silver bullet solution (Heeks, 2010; Mas, 2011). Mobile money is widely considered as heralding a first wave of digital financial inclusion by promoting virtuous spirals of poverty alleviation (Aron & Muellbauer, May 2019; Global System for Mobile Communications, 2013; Mas, 2011).

Certainly, such assumptions have been questioned in relation to micro-finance (Banerjee, Duflo, Glennerster, & Kinnan, 2015; Kabeer, 2005; Mayoux, 1999; Meier zu Selhausen & Stam, 2013). Due to the similarities between micro-finance and mobile money, concerns with micro-finance highlight a need for critical studies in the newer DFS space. As with micro-finance, mobile money researchers have drawn attention to the problem that "most studies, in particular, non-academic ones, take social and economic impacts for granted…without further investigation or corroboration" (Diniz et al., 2011), and that "rigorous empirical evidence to support these claims" is scarce among those producers of the politically influential grey literature like the Better than Cash Alliance and the Gates Foundation (Aker, Boumnijel, et al., 2016). Diniz et al. (2011) recommend research in areas related to micro-finance that likewise demonstrate whether such interventions have a positive impact on poverty at the "micro (household), meso (community), macro (regional or country) levels" (2011, p. 25). Just as micro-finance was once seen as a cornerstone of poverty alleviation in the development context,[30] critiques of micro-finance signal caution (Buckley, 1997; Mayoux, 1999).

In a similar vein, Richard Duncombe (2016), argues that enthusiasm for mobile money is underpinned by an uncritical predilection toward *technological determinism*, suggesting that economic and social benefits are intrinsic to technology adoption. Mobile money in the development context becomes entangled in what Venot and Veldwisch (2017) critique as the *sociotechnical myths* of technologies for development such as the promise of ICTs improving education.

In some quarters, parallels between micro-finance and mobile money are being explicitly raised without sufficient caution. One such example is the DFS project spearheaded by the AFI and the Maya Declaration Commitments of the Sanasa Accord, of whom the central Bank of Uganda is a member.[31] In light of the coalescence of these two financial and technological innovations, micro-finance critiques draw attention to ways in which exuberant expectations can overlook core structural faults in a service's potential. Mobile money is regarded as the latest solution for poverty alleviation, rather than carefully understanding its actual impacts in relation to its intended recipients.

The global institutions promoting DFS and mobile money, the transnational and local telecommunications companies that are promoting the highly profitable services, and the actions of the users as they adopt the service and integrate into their daily lives comprise a complex web of practices, discourses and outcomes warranting more detailed sociological critique. Social science-led research offers capacity to more fully explore development

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[30] Consider the work of Robinson (2002), The Microfinance Revolution, Sustainable Finance for the Poor. World Bank Office of the Publisher, Washington DC.
[31] See www.bou.or.ug/bou/bouwebsite/bouwebsitecontent/FinancialInclusion/The-AFI-Network-Commitment-to-Financial-Inclusion.pdf

ideologies as well as to examine individual case studies of mobile money usage in the rural development context.

Mobile money in developmentalism and development discourse

Today, mobile money has found a home under the umbrella of digitally led financial inclusion and couched under the label, as previously mentioned, of digital financial services (DFS). While it is a service widely offered by private enterprise telcos operating in developing nations, its origins can be traced to the previously mentioned merger of private and public investment. Western consultants working with central banks in the policy and regulatory environment have facilitated mobile money's growth.[32] Diniz et al. (2013) point out these contexts comprise a "diversified network of organisations…concerned with financial inclusion" that include a variety of public and private organisations interests. Maurer, Nelms, and Rea (2013, p. 53) describe this complex in the following terms:

> These actors constitute global networks of 'mobile money professionals': regulators, policy-makers, and lobbyists; investors, start-up founders, and other business people; design researchers and programmers; philanthropists and NGO staffers; and an assortment of others interested in the business possibilities and anti-poverty potential of mobile money.

Maurer et al. (2013) acknowledge the complexity of stakeholders involved in the successful (or unsuccessful) rollout of mobile money services. Highlighted is the largess of the superstructure of professionals, academics, NGO specialists among others in a large international industry of 'development work' and more specifically, those who promote ICT's as the best option for leapfrogging the poor into modern times.

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[32] See www.bou.or.ug/bou/bouwebsite/bouwebsitecontent/Supervision/Annual-Supervision-Report-2013.pdf for acknowledgement of the Gates Foundation in collecting data on which to base policy. Affiliated group www.intermedia.org/i-financial-inclusion-mobile-money and the consultation services of Consult Hyperion www.chyp.com/wp-content/uploads/2018/06/Fraud-Risk-Management-for-MM-31.07.2017.pdf

Mobile money is a core component in supranational organisations' own derived commitments to development and their values, evidenced in their unique but strikingly similar corporate performance measures and aims: UN's Sustainable Development Goals,[33] the World Bank's Universal Financial Access 2020 (UFA2020) goal,[34] and the G20's 2010 Financial Inclusion Indicators.[35] On this side of the complex equation that is mobile money in the development context, good intentions, noble aspirations, and profit mentalities prevail.

Disciplining Mobile Money: Four Approaches to Digital Financial Inclusion

Mobile money's success in Kenya has not led to the same degree of success in other nations, even neighbouring nations in East Africa (See Chapter 1) (Diniz et al., 2013; Ghosh & O'Neill, 2020). The conundrum faced by proponents of mobile money is why, if mobile money is so transformative in Kenya, should it not be equally successful in other nations?

Several researchers argue there is an active agenda among mobile money and Fin-Tech proponents to institute through roll-out of these services a "market-led regime" (Soederberg, 2010, p. 532) in which the world's poor will be transformed into profitable clientele (Bateman, 2019; Mader, 2016). Critical researchers also argue, however, that mobile money proponents overestimate its transformative capacity while underestimating both the extent to which money is socially constructed in ways unique to each community and the extent of impact on the traditional worlds of those communities (Ghosh & O'Neill, 2020; Parry & Bloch, 1989; Shipton, 1989).

In contrast, most mobile money research and affiliated grey literature is disposed to a worldview that understands money and economy to be value neutral, objective, amoral and asocial. According to economic theorist and apologist for neoliberalism, Milton Friedman (1966, p. 4):

[33] See www.uncdf.org/uncdf-and-the-sdgs and www.unstats.un.org/sdgs/
[34] See www.worldbank.org/en/topic/financialinclusion
[35] See www.datatopics.worldbank.org/g20fidata/

> positive economics is in principle independent of any particular ethical position or normative judgements…(and) is, or can be, an "objective" science, in precisely the same sense as any of the physical sciences.

Underlying this is the premise that a liberal market order is a social good, promoting a free, moral, and (human) rights-based society, while the market itself remains cool, objective, amoral, and value neutral. Jessica Whyte (2019, p. 30) argues that the neoliberal informed economics of the era frame "human rights as the moral language of the competitive market". These concerns notwithstanding, the extant literature on mobile money will be interrogated to identify findings relevant to this study's objectives and the framing of appropriate research questions.

Technology adoption research

As mentioned in Chapter 1, for many practitioners and researchers, digital financial services (DFS) appear to provide ways to meet the goals of financial inclusion through technology. Complemented by the extensive reach of mobile phone technology into more remote areas of the globe, digitally delivered financial services offer potential for greater financial inclusion of the world's poor into the global economy in ways and at a rate not previously believed possible.

Most research on mobile money arises out of studies of mobility, telephony, and mobile services in the business and technology sectors and the affiliated disciplines of ICT, commerce, and economics (Dennehy & Sammon, 2015; Diniz et al., 2011; Shaikh & Karjaluoto, 2015; Tam & Oliveira, 2017). Each of these draw attention to the high number of studies that draw on TAM-derived (technology adoption models) research models that seek to explain behavioural intentions of use and rates of adoption while neglecting research in socio-economic impacts. Such research accepts, for the most part, the potential for mobile money to rapidly move the world's poor into better integration with the opportunities that global capitalism offers.

For those who *prima facie* accept the premise that mobile telephony paired with DFS offers potentially unlimited scope to achieve financial inclusion it makes absolute sense that issues of access and technology adoption predominate. Technology adoption research seeks to understand why a person adopts a new technology while another does not. Drawing on multiple disciplinary perspectives, it has been particularly influential in the emerging development fields of ICT4D (ICT for International Development) and M4D (Mobiles for Development).

Adoption studies in the telecommunications sector consistently point towards the presence and importance of trust in affiliated institutions (Baganzi & Lau, 2017; Gefen, Karahanna, & Straub, 2003), the availability of technological infrastructure (Lashitew et al., 2019), the target technology's reliability and performance (Venkatesh, Davis, & Morris, 2007), as well as user trust in e-commerce relations (Keen, Ballance, Chan, & Schrump, 1999; Kuttainen, 2005; Pavlou, 2003; Wang, Ngamsiriudom, & Hsieh, 2015). Trust in commerce networks is a popular theme, a key determinant in establishing a buyer and seller relationship, and importantly, with e-commerce, trust in the technology and institutional systems through which transactions occur (Corbitt, Thanasankit, & Yi, 2003; Friedman, Khan Jr, & Howe, 2000). Similar approaches toward trust apply to mobile money as an emergent form of e-commerce in the African context (Baganzi & Lau, 2017; Chitungo & Munongo, 2013). Baganzi and Lau (2017), for instance, conducted a study on trust and risk among mobile money users and their adoption behaviours in Uganda. They consider trust as structural assurance (institution-based trust and belief in the legal structures and technological apparatus) and as *trust belief* (trustworthiness in the provider). Their findings suggest trust mediates perceived risks and performance expectations, indicating trust is a major influencing factor on adoption and use.

The relevance of such research findings to this thesis notwithstanding, it is important to understand questions that technology adoption studies leave unanswered as a consequence of their tendency toward technological determinism (de Haan, 2016; Duncombe, 2016). Identifying and addressing such questions is not undertaken to dispute the importance of trust and other factors identified by technology adoption researchers but to understand these factors in their broader social context.

Adoption research is prone to overconfidence both in technologies and in the regulatory institutions that guide their use and provisioning. It is also undergirded by assumptions that economic and social benefits are intrinsic to technology adoption (see also Chapter 1). Chib (2015) draws attention to conventional impact arguments for ICT development projects accompanied by econometric growth measures that justify donor investment. DFS research focuses on data showing high adoption rates of the technology but provides little evidence of substantial well-being improvements for the poor. Furthermore, attention is directed to overall financial transaction and adoption rates while little attention is paid to users' actual practices and the socio-cultural changes that accompany mobile money adoption (Chib, León, & Rahim, 2015), attention this thesis aims to provide (see Objectives 3 and 5). Such studies thereby limit the ability of policy makers to make informed decisions about ways to foster favourable regulatory environments that benefit the impoverished users that financial inclusion is aiming to assist.

To be fair, some scholars within this area of study are advocating for better understanding in the areas of culture and society to enable improved service implementation of mobile money services and more reliable models for measuring their effectiveness (Diniz et al., 2011; Shaikh & Karjaluoto, 2015). Diniz et al. (2011) advocate for a deeper understanding of successful cases of mobile money through comparative research into the failure of comparable, but unsuccessful, cases. Likewise, Shaikh and Karjaluoto (2015) conducted a literature review of mobile banking adoption where they found the literature is heavily reliant on technology adoption models of research. They argue there is opportunity to consider more established research areas of development finance such as micro-finance where opportunity for a greater emphasis on sociological analysis is evident and where discourses around impact shift from the technology itself to the actual practice of the users. In this way, technology adoption research is acknowledging that focusing on people and culture, rather than on technology alone, is necessary to further understand the impact and uptake of digital financial services and mobile money.

Development economics, inclusion, and mobile money

Overall, development economics is a broad area of research in the financial inclusion arena. Much of the research makes highly favourable assessments of the impact of financial inclusion interventions such as micro-finance and mobile money in developing countries. A number of widely recognised studies in the areas of mobile phone and mobile money usage are heavily referenced in grey and scholarly literature alike. Overall findings suggest a clear nexus between financial inclusion and outcomes including poverty alleviation, women's empowerment and entrepreneurialism (Banerjee, Chandrasekhar, Duflo, & Jackson, 2013; Beck & Cull, 2013; Cull, Demirgüç-Kunt, & Morduch, 2012; Jack & Suri, 2011; Jensen, 2007) (see also Chapter 1).

A number of studies on mobile phones and mobile money have considered the impact of the technology on agricultural livelihoods and value chains in Africa using econometric approaches. In general, the findings of such research suggest a positive impact on adopters who see increased access to financial serices, lower transaction costs, and smoothed remittance transfers For example, in Kenya, direct benefits to household welfare derived from mobile money use are evident from the research (Kikulwe, Fischer, & Qaim, 2014; Mbiti & Weil, 2011). Likewise, in Uganda, mobile money provides benefits to rural households through income smoothing provided by remittances and improved farm household benefits as well as improved nutrition and again, women's empowerment (Munyegera & Matsumoto, 2016; Sekabira & Qaim, 2017a, 2017b). Importantly, a few of these studies such as Mbiti and Weil (2011) and Munyegera and Matsumoto (2016) acknowledge uptake is mostly confined among the urban-based, educated, and the affluent and not among the rural poor—findings that this research supports.

Several critical development economics studies suggest a cautious and nuanced perspective on the benefits of mobile money (Aker, Ghosh, & Burrell, 2016; Baumüller, 2018; Fafchamps & Minten, 2012; Nakasone, Torero, & Minten, 2014). While cash transfers with mobile money are found to be highly efficient in terms of secure and speedy transfer, and cost effective remittances, evidence of improved household welfare is harder to establish (Aker, 2015) while threats to wellbeing, such as falling victim to debt and fraud, have been identified (Aker, Ghosh, et al., 2016). Thulani, Chitakunye, and Chummun (2014) argue that access to loans continues to impede deeper adoption and that further education about savings and borrowing and fraud awareness is needed. Other economic impact research into savings among the poor highlights several areas of potential constraint: transaction costs, lack of trust and regulatory barriers, information and knowledge gaps, social constraints, and behavioural biases.

Critical economic research also problematizes impact measurement by highlighting the challenge, in development contexts, of measuring net change in savings, accumulation, well-being, and welfare. Poverty, in short, is dynamic. Establishing real increases in income requires gross income to be offset against a number of parameters including inflation, changes in purchasing power and other household responses to vulnerability (Moser, 1998). This is complicated by low income thresholds, variations in the quality of national statistics, and the seasonal nature of income among those dependent on agriculture (Chambers, Longhurst, & Pacey, 1981). Establishing real improvements in wellbeing are complicated even further by the challenge of developing a comparative baseline that is robust (Sen, 1999).

Economic impact research presents varied perspectives on savings, welfare and mobile money use. Suri and Jack's (2016) influential *Science* article reported that mobile money in Kenya has lifted 2% of households out of poverty. Critics of this and other impact studies assert that the FinTech-led financial inclusion narrative is fundamentally flawed (Bateman et al., 2019; Burrell & Oreglia, 2015). They are particularly critical of the influence of entrepreneurship and market-based economic approaches to poverty alleviation, arguing that development economics research has ignored the full costs of micro-finance and mobile money's respective ability to meaningfully reduce poverty and improve sustainable development (Bateman et al., 2019). Users are limited in their ability to develop competitive businesses due to structural and educational limitations imposed on them, despite having access to easily obtained credit. Moreover most of the debt incurred by these borrowers is found to be used for consumption instead of business investment, thus leading borrowers to higher rates of vulnerability and to debt entrapment (Banerjee & Jackson, 2017). While some successful entrepreneurs may benefit from access to FinTech services like microcredit, most do not possess the skillset required to engage in an economy beyond subsistence-level activities.

The underlying issues highlighted by critics of economic impact research thus include failure to evaluate the assumptions on which Fintech-led solutions are based, to investigate unpaid debt and business failure, or to consider the capability of developing economies to host entire populations of micro-entrepreneurs (Bateman, 2010; Duvendack & Mader, 2019). In order to more comprehensively assess the ways mobile money is integrated into the livelihoods and welfare of the poor, research that incorporates broader perspectives and methodological diversity is required.

Mobile money for human rights, assets and livelihoods

The past decade has witnessed a significant confluence of development approaches including the sustainable livelihoods and human capabilities paradigms and, more recently, information and communication technologies for development (ICT4D). This confluence is not surprising. The underpinnings of sustainable livelihoods frameworks that emerged alongside the Brundtland Report (World Commission on Environment and Development, 1987) adopted an integrating approach to understanding poverty, drawing together the various elements of human experience in coping with shocks and stresses, developing and enhancing equity and capabilities, and fostering intergenerational social sustainability. As livelihoods research has become increasingly broad in scope, certain common principles emerge: the ability to mitigate and recover from shocks, the capacity to access and employ assets, and the potential to develop capabilities into positive outcomes (Scoones, 2009). There is a natural alignment of sustainable livelihood goals to the large body of work in human rights set out by Sen and Nussbaum's capabilities approach (Kleine, 2010; Moser, Norton, Conway, Ferguson, & Vizard, 2001; Nussbaum, 1995; Nussbaum & Sen, 1993; Sen, 1999).

Equally, ICTs offer clear opportunities to develop novel and important asset classes for sustainable livelihoods and capabilities development (Kleine, 2010). No doubt the rapid deployment of mobile phones and other ICTs in the Global South in past decades offered to address the international community's development aims of social justice, empowerment, and sustainable development (Heeks, 2009; Leach & Scoones, 2006). Livelihoods and capabilities approaches to the use of mobile telephony, in general—and to mobile money in particular—provide useful insights into understanding human interaction, technological intermediation, and digital financial services integration into the lives of rural users (Donner, 2010; Duncombe, 2014; Heeks, 2009; Oosterlaken, 2012).

Few theorists have looked at DFS and mobile money in a sustainable livelihoods framework. Richard Duncombe (2014) points out that the mobile phone and its attendant services have been under-theorised in livelihoods studies because the technology is new, and the research area is oriented toward agriculture and not technology impact. It is also subject to, as Duncombe refers, *naïve localism* at the expense of global perspectives on economic and technological change. He suggests that mobile phones are a rapidly spreading development in the lives of the poor where there is little understanding of what is happening in “the interrelationships between the techno artefact and socio-economic development processes, as well as assessment of the outcomes that arise from its use” (Duncombe, 2014, p. 568). Similarly, in their critique of technology adoption research Duncombe and Boateng (2009) assert that geographical focus, and the methodological and conceptual approaches to understanding either impact or the financial needs of the poor are all under-considered. Like the work of Diniz et al. (2011) mentioned previously, Duncombe and Boateng (2009, p. 21) suggest there is a need to “redress this imbalance” by drawing from other, more established, research areas of development finance such as micro-finance and finance for the poor where a greater emphasis on sociological analysis is evident. Likewise, Duncombe establishes the capacity of the mobile phone to improve information access that enhances user’s capability toward action.

These critiques speak, again, to inform DFS research with more holistic and critical approaches such as the sustainable livelihoods and capabilities approaches, as advocated by Klein (2010). Doing so, it is argued, will enable consideration of whether assets like mobile phone technology and services like mobile money are empowering users through genuine choice and improvements in welfare. Both the livelihoods and capabilities approaches depart from simple techno-deterministic models of impact assessment (such as adoption and remittance activities) and encourage a focus on the ways technology is articulated into the lives and livelihoods of its users (see Objectives 2 and 3). While not operationalising a comprehensive livelihoods assessment, this thesis will explore aspects of livelihoods that are particularly relevant to the moral economy. These approaches will thus be explored in more depth to determine whether and how they might inform this thesis.

Sustainable livelihoods and household mobility

The sustainable livelihoods paradigm offers a holistic approach to household wellbeing by locating economic strategies and outcomes in a context that includes the assets and capabilities available to the household, and the social resources such as market infrastructure, policy and regulatory settings that people access in order to derive a living. Its definition also includes the capacity of households to absorb shocks and adversities as well as seize new opportunities to fulfil their lifestyles and social obligations (Long, 2003). Any livelihood analysis of mobile phones and mobile money thus needs to consider its intermediating role in the mobilisation of the poor's asset base as well as how the poor relate to employing capital and financial actions, in addition to their capability to do so (Duncombe, 2014). Such considerations assist in determining the outputs, impacts, and outcomes that the use of the technology engenders. Importantly, analysis should also consider the larger macro structures such as infrastructure and regulation that enable the technology's use, the innovations that users adopt and its affordances as a result of their interaction with the technology, as well as the constraints on the technology or on households that hamper the service's potential benefits.

ICT and DFS technologies have major impacts on geographical mobility. Mobile phones and mobile money are sometimes passively, and other times actively, adopted to assist distant family members and to enable mobility. African households evince a variety of mobility and livelihoods strategies including migration between urban and rural spaces (Bah et al., 2003; Mainet, 2017; Tacoli, 2007) and food and financial transfers between multi-local households (Andersson Djurfeldt, 2015)—strategies that can lead to significant changes in family and social stratification (Greiner, 2011). In order to understand the impacts of mobile money on the lives of the rural poor in Uganda, this thesis will build on the body of livelihoods research by exploring users' employment of mobile money as an asset class, a tool for risk mitigation, and as a contributor to multi-local mobility of household members.

Capabilities approach and literacy

Some development scholars have highlighted the capabilities approach of Nussbaum and Sen (1993) because it re-focuses development toward human wellbeing, rather than the narrow focus on social choice theories derived from utilitarian approaches (Sen, 1999). Education, for example, is invaluable for improving capability (Drèze & Sen, 2010). Of emerging consideration in this approach, alongside the confluence of ICTs in the Global South is concern for developing technological and financial capabilities and literacies. These are important impact factors when considering digital financial services for human development social change research (Chib, May, & Barrantes, 2015; Johnson & Sherraden, 2007; Maddox, 2008; Sayer, 2011). Much of the attention to literacies is of particular import to research in social change in the Global South, particularly in financial and digital literacies in regard to enhancing empowerment (Datta & Mullainathan, 2014; Kaiser, 2017; Yakubu, Dinye, Buor, & Iddrisu, 2017; Yonazi, Kelly, Halewood, & Blackman, 2012).

Yet as in the area of livelihoods research, there is a significant gap in the area of capabilities research into mobile money. Emergent capabilities research acknowledges the potential that technology uptake offers—a lack of financial literacy being a major constraint to effectively mobilise income improvement—but this approach, as both Heeks (2010) and Kleine (2010) point out, is remarkably difficult to measure, especially as neither Sen nor

Nussbaum produce a particular, or definitive framework of capabilities criteria. Rather, Nussbaum (1995) argues for capabilities that are merely *thick and vague*. While measuring economic and adoption outcomes can be achieved to some reasonable degree, the challenge remains for measuring empowerment gained through increased FinTech capabilities and literacy. Again, as mentioned previously, it is difficult to establish a baseline of empowerment to which an increase (or decrease) can be consistently measured.

The capabilities approach’s chief aim in development is maximising personal freedom and empowering users to have choices. Sen (1999) thus argues that financial wellbeing, while important, is limited in determining overall welfare. The expectation here is that with literacy and good institutional regulatory structures in place, the individual is enabled to make good choices and to put their capabilities and assets (like the mobile phone and mobile money) to productive use, thus endowing the individual with a sense of freedom and a life of value. To be sure, digital and financial literacy are important capabilities for mobile money adoption and use. Put simply, users must be able to understand how to implement the technology, be capable of interacting with it, and use it in such a way that the technology becomes a useful tool for income generation and livelihoods activities. So while there is still little available research that uses an applied capabilities approach to understanding the impact of mobile money in the development context, I chose to acknowledge its potential to inform the analysis of capabilities, particularly in financial and technological literacy with employing mobile money.

Critiques of livelihoods and capabilities

Critics of the livelihoods and capabilities approaches argue they encourage a micro-level and individualised focus on poverty (Englund, 2008; Ferguson, 2015). While livelihoods and capabilities approaches address poverty from a people-centred focus, they highlight several non-financial areas of poverty claiming that income is only one part of the poverty problem. In their focus on the individual or household level of poverty, they are potentially open to some of the same critiques levelled at rational choice theory and neoliberal development policy that overlook political dimensions of poverty and exclusion (de Haan, 2017; Moser et al., 2001), contribute to expectations the poor will make use of risk taking in order to secure a living (Ferguson, 2010), but also overlook the social elements of livelihoods in favour of market orientations (Fraser, Cardoso, Steward, & Parry, 2018). In other words, livelihoods approaches might contribute to neoliberal agendas even though authors of these approaches are critical of neoliberalism.

For many, neoliberalism is understood as a set of beliefs and approaches to economic management that assume human wellbeing and social relations are best advanced by maximising personal freedom, access to private property, free trade and free markets guaranteed by the regulatory protections of the state (Harvey, 2005). Other approaches to neoliberalism are more nuanced, treating *neoliberalisation* as an incomplete and contested experiment in political and economic reform (Peck, 2010) or as a *rationality*, or way of thinking, about governance oriented toward solving contemporary governmental challenges (Burchell, Gordon, & Miller, 1991; Li, 2007a). For Foucault, neoliberal governance seeks to address the limitations of state power by encouraging:

> people to calculate for themselves the risks and consequences of particular paths of actions and to respond in an appropriate manner to adopt, in effect, an entrepreneurial, or business-like, approach to management of their own lives (Lockie, 2019, p. 30).

Common to these perspectives on neoliberalism is the identification of policies and programs that emphasise self-responsibility either through the winding back of state regulation and services or the winding out of market-like mechanisms for the allocation of state resources (Bloom, 2017; Lockie, 2019). Expressed in the individualisation logic of modernity discussed earlier, there is a tenable relation within modernity of self-reflexivity and neoliberalism, leading Dawson (2013, p. 29) to argue:

> individualisation reflects, and unwittingly reproduces the tenets of neoliberal capitalism …Individualization, with its focus on self-constituting and reflexive individuals, making decisions as consumers and utilizing individual life strategies, is a reflection of neoliberal governmentality.

Extending this argument to the sustainable livelihoods paradigm, the question arises as to whether promoting individual empowerment through market engagement the approach might promote also the neoliberal objective of self-reliant entrepreneurialism rather than looking to the state for provision of basic forms of welfare and infrastructure enjoyed in the Global North.

Neither the livelihoods or capabilities approaches focus explicitly on structural inequalities nor the power structures and ideologies that produce and legitimate them. These approaches suggest an unexamined devolution of economic development responsibility from the state to individuals. Further still, both approaches have been slow to develop a fulsome critique of the role of ICTs as a livelihood asset class nor challenge the way the financial technologies operate to obscure livelihood enhancement. Duncombe (2014) acknowledged that livelihoods approach had been silent on technological innovations and called for more research. As such both approaches can be readily summoned to appear similar to financial inclusion programmes and their technologies (Duvendack & Mader, 2019) as well as being legitimised by livelihoods discourses (Schwittay, 2011) and in the case of microfinance, even found to undermine livelihoods (Maîtrot, 2018). Similarly, the narratives of financial inclusion technologies only serve to obscure and further mystify the very problem of social relations and of systemic poverty. In particular, they obscure asymmetrical power relations in the marketplace. As Bernards (2019, p. 1443) suggests, “the turn to technology thus needs to be understood as a fraught response to repeated failures in development governance." Both approaches take an apolitical stance and, in such a way, by their exclusion of political and other considerations, may perhaps unwittingly validate the apolitical or antipolitical stance of classical liberal and neoliberal ideologies highlighted earlier (Englund, 2008; Ferguson, 2015; O'Sullivan, 2013).

The Political Economy of Development

In a similar way, the international development sector has been critiqued for its promotion of neoliberal rationalities that mask moral and ideological assumptions and the political and economic interests they serve, leading some critics to characterise development practice as a social-Darwinist approach to modernisation (Barnett, 2003). The question of whether these critiques are relevant to all development interventions notwithstanding, they point usefully to power imbalances that may be evident even within ostensibly apolitical development approaches and tools such as financial inclusion technology.

The treatment of financial inclusion technologies and other examples of innovation and capacity building as unquestionably good, and somehow independent of ethical, social, cultural and political concerns, raises the possibility of unintended and negative consequences. Durkheim, for example, warned that the mentality of economic rationalism threatened social cohesion, arguing the "amoral character of economic life amounts to a public danger" (2013, p. 9). Political economist JK Galbraith argued similarly that the problem with economics is its "wilful denial of the presence of power and political interest,"[36] an intervention aimed squarely at contemporaries such as Milton Friedman associated with neoclassical economics and the emergence of neoliberalism. Echoing these criticisms, scholars from the perspective of world systems theory, dependency theory, Polanyi-inspired

[36] Quoted in *The Economist*: Thoma, Mark. (April 30 2006) John Kenneth Galbraith's contributions to Economics, Economist's View. See www.economistsview.typepad.com/economistsview/2006/04/john_kenneth_ga.html.

political economy perspectives, and so on, have highlighted specific dangers associated with the development project (Gregory, 2014; Hart, 2001; Harvey, 2003; Polanyi, 2001).

Ferguson (1990), for example, identifies two distinct understandings of development: one being of development as the "transformation toward a modern, capitalist, industrial economy," and the other of development as a means to "the reduction or amelioration of poverty and material want" (1990, p. 15). Treating, however, these understandings as two sides of the same coin the development sector frames processes of marketization, industrialisation and urbanization as moral courses of transformation and amelioration regardless of their actual outcomes.

The dynamics of development raise related questions about the sector's objective of global, digital financial inclusion. Today, the development sector in the DFS space holds that technology-led financial access, such as mobile money services, will alleviate poverty. Maurer, Nelms, and Rea (2013, p. 53), emphasise that actors in DFS related development industries are "interested in the business possibilities and anti-poverty potential of mobile money." Corporate investment in mobile technologies and mobile money services is evident in the sponsorship and funding of development programmes and research in the industry (as mentioned above). Scholars such as Ferguson, Maurer, Olivier de Sardan, and others have identified, however, that the conventional ideologies and motivations of development are underpinned by a romanticist and moral imperative about what is good for the 'other' in order to achieve poverty alleviation, human welfare, and a better society. The challenge facing researchers and the development sector is to consider the extent to which the moral imperative (of poverty alleviation) has been conflated with the FinTech and capitalist growth imperative and whether pursuing the latter has genuine benefits for the former.

As previously mentioned, critics of financial inclusion narratives argue that research does not support claims financial technology will alleviate poverty, mitigate risk or empower women. Indeed, research in Africa reveals gaps, asymmetries, and unexpected outcomes when development practices and ideologies encounter heterogeneous local customs and practices (Bateman et al., 2019; Duvendack & Mader, 2019; Olivier de Sardan, 2016b; Wiegratz & Cesnulyte, 2016). As the mainstream mantra of financial inclusion continues unabated (see Chapter 1), a gap clearly is evident between what is said and what is actually being practiced. It is among the main objectives of this thesis to continue exploring the actual impacts of financial inclusion technologies (see Objectives 4 and 5) or, in other words, to better understand the difference between appearances and reality (Olivier de Sardan, 2005a).

Political economy critiques are not only aimed at macro-level perspectives but also at meso and micro-levels as well. Mobile money as a technology and FinTech service is embedded in globalised capital flows while simultaneously demonstrating distinctly localized forms of exchange and behaviour. This distinctive *local-ness* is understood as a market of many coexistent forces, sentiments, and norms that are absorbed, altered, and hybridised. Gregory (1999, p. 84) asserts:

> The values of the market are not the only values that people live by. The values associated with friendship and kinship, such as prestige and honour, coexist with those of commerce. Rationalist economics has its place, but its limits become obvious when it comes to understanding the social and cultural contexts of economic action. People everywhere are motivated by many values; they switch between these according to the contingent circumstances they find themselves in.

Such analysis acknowledges the multiplicity of factors that influence on-the-ground activity, values, and calculations of mobile money users. This research project is interested in understanding the gaps between these various high-level and local-level positions by analysis of the implementation gap: the line of inquiry that examines the difference between policy on paper versus actual practice. According to Olivier de Sardan (2016b) analysis should consider “internal contradictions, inconsistencies and differences and the gaps between discourse and practice, and also in the non-compliant practices that arise" (2016b, p. 119). For a gap analysis, Arce and Long (2000), recommend practicing a *multiple realities* approach that accommodates users' orientations and practices for a *middleground* analysis.

This thesis is interested in exploring the dynamics of opposition, of contradictions and non-compliance, and also alignments between discourses of financial inclusion with the practice of mobile money use, at its attendant justifications for use and utility of money among the users of the service, not to establish a contrarian point of view, but rather to offer up a middleground analysis (see Objective 4 and 5). Such an approach informs the research method of this thesis as it attends to the dynamics of digital financial inclusion in development contexts in general, and as a foil for mobile money in particular in Kasese. In order to explore these dynamics, it is necessary to undertake the research in the field amongst users to understand the practice of mobile money.

As discussed earlier, mobile money, while touted as the newest development fad, lacks credible evidence for its claims to improvements in livelihood, wellbeing, and social equity. At the same time, this research acknowledges the potential of development projects and mobile money to enact a positive influence on the livelihoods and living standards of mobile money's users and the broader community. In order to develop a deeper understanding of the nuances of economic activity with mobile money in the rural context of Kasese, this research draws on multi-disciplinary informed approaches to understand the dynamics of economy as a social form with all its practices and inconsistencies, underwritten by embedded moral codes of obligation, reasonings, and value-orientation as well as motivations for personal gain and profit in operation there.

Moral Economy and Mobile Money

Contemporary moral economy

Moral economy is the notion that actors make socio-economic decisions based on a number of social norms, values, reasonings, logics and morals. According to Historian E.P. Thompson (1971, 1991), who popularised the concept, moral economy could just as easily have been called a "sociological economy." He argues the moral economy is "as much, or more, 'political' than is 'political economy'" (1991, p. 271). Where political economy, especially as informed by Polanyi, is focused on institutions such as capital and the state that exercise power and hegemony, moral economy is concerned with collective norms of *duty and obligation* found in the private sphere of the household as well as in the public sphere of the local (and even global) marketplace.

Early sociology argued that actors in the economic field held particular social dispositions that enabled economic relations. Weber (1978) recognised the presence of self-interested behaviour yet also drew attention to influences acting on individuals (such as the Protestant work ethic) and on institutions (such as the logic, or 'iron cage', of bureaucracy). Simmel's (2004) interest lay in the preconditions that emerged from social action and behaviour, which he referred to as *social forms* that were necessary for understanding phenomena like economy. In order to analyse the social forms of economy, Simmel (2004, p. 53) argued, one must examine the preconditions of exchange:

> The fact that two people exchange their products is by no means simply an economic fact…it becomes the object of philosophical study, which examines its pre-conditions in noneconomic concepts and facts and its consequences for non-economic values and relationships.

These social forms and relationships are not only evident in the transactions of goods and services between people, but also in any form of communication, from the expression of sentiment, to giving and receiving. Social engagement of any kind is constituted within a moral sphere of actors having expectations, assumptions, and conscious—as well as subconscious—behaviours enabling exchange to occur.

Moral economy, similarly, is based on the view of embeddedness of relations of personal interdependency whereby there are normative, moral obligations and internalised behaviours in social relations, including economic relations. Rather than acknowledging merely the self-interested, rational choices of *homo economicus,* moral economy recognises that exchange is a social act that is informed by moral sentiments, empirical calculations, and even coercive power relationships (Booth, 1994; Polanyi, 2001; Thompson, 1991). Moral economy represents not only what *is*, but what *should be* and what *can be* in socio-economic relations. Of course, these actions and expectations are not necessarily explicit; rather, more commonly they are hidden in layers of unspoken rules of internalised behaviours. Moreover, moral economy recognises that actors in any given social arena have various, contingent dispositions, logics, conflicting values and intentions that inform their moral subjectivity and agency; actors engage in economic behaviour, informed by divergent moral positions, legitimations, and power bases. Moral economy therefore can incorporate rational, ethical, and sentimental action as well as accommodate opportunistic, even fraudulent, logics of behaviour by social actors (Olivier de Sardan, 1999; Wiegratz & Cesnulyte, 2016). The challenge is to uncover both the explicit and implicit moral foundations of economic behaviour in locally situated practices that are themselves constantly in-flux.

Palomerra and Vetta (2016) argue for the realignment of moral economy with its original conception as a tool for understanding political economy. They suggest that moral economy understands how capitalism is framed in entangled socio-economic moral positions by identifying "the ambiguous logics and values that guide and sustain livelihood practices" (p. 415). They also suggest the concept offers a critical tool in understanding the dynamics of structural dispossession and struggle framed by logics of "what is good and acceptable [and the] power hierarchies and the political projects they might inform" (2016, p. 415).

Andrew Sayer (2000a, 2000b, 2004, 2007) has produced a significant body of work on moral economy. He argues that while early sociologists (Weber, Durkheim, and Simmel) saw morality and economy as intersecting fields of social action (as did classical economists like Adam Smith), in contemporary scholarship and practice this link has been ruptured. According to Sayer (2000a, p. 80), moral economy analysis must consider:

> the ways in which economic activities, in the broad sense, are influenced by moral-political norms and sentiments, and how, conversely, those norms are compromised by economic forces; so much so in some cases that the norms represent little more than legitimations of entrenched power relations.

As capitalism is defined by the primacy of profit, moral economy analysis ought to provide insight into the ways that problems of inequality and marginalisation are produced and justified. This requires, Sayer (2007) argues, that moral economy approaches have moral values embedded within their frameworks of analysis of economic exchange, adopting a position of critique in relation to whether the economy is achieving moral ends and wellbeing. While offering some advantage to development theorists who may wish to assess the impact of mobile money in terms of the overall *good* it may deliver to a society, Sayer (2000a, p. 80) cautions that all economies:

> including so-called laissez-faire ones, are embedded in particular cultures so that trying to transplant economic practices and norms from one country…to another… is bound to cause problems in the form of a clash of moral economies.

The same is likely true at sub-national levels with unique moral economies developing on regional, ethnic and other bases.

Olivier de Sardan argues that members of society hold to an assumed set of moral values they believe to be inherently reasonable within their "value systems and cultural codes…in ordinary everyday practice" (1999, p. 26). Moreover, Fevre (2003) purports that moral economy operates within assumed norms of good behaviours, defining it as one that "determines how people behave…because they think it is right to do so"(p. 76). Fevre's understanding of the importance of implied feelings and social conventions in economic exchange builds upon Hochschild's (1983) foundational ideas about *feeling rules* in social relations; that is, how feelings are managed and rationalised according to normative rules. Such considerations often involve ideas of "what is due another person" (or not due) in terms of both social feeling and material property. With the individualisation that accompanies modernity the logics and cost-benefit calculus of self-care and self-interest are also among these normative views that make up the moral economy. Importantly, Fevre (2003) cautions about demoralisation that arises as a result of individualisation and rationalisation. Fevre (2003, p. 6) argues demoralisation is:

> the decay of bourgeois values, anomie and the death of the collective conscience, the disenchantment wrought by rationalization, and the use of money as the source of all value.

Fevre, in Durkheimian fashion, holds that the demoralisation pursuant of modern money and rationalisation entails the invention of substitute moralities that align with emerging norms of economic behaviour. These, he calls *ersatz morality* to make up for the demoralisation of economic rationality. He warns that such ersatz morality may have significant social impact:

> It is possible that the ersatz morality produced by capitalism could be turned into a belief system in the category of sentiment that could give rise to a genuine new morality (Fevre, 2003, p. 24).

Emergent ersatz morality promotes the notions of self-concern, reflexivity and regard to one's own interest is part of the broader moral economy. A moral economy may thus be conceived as a system in which participants act according to common beliefs and values about what is *proper*, *common sense*, or *right* but, importantly, in which actors also factor what is *right and good for themselves*. Considering this acknowledgement of unique practices of moral economies, this study attempts to uphold, an actor-oriented and inquiry-based moral economy approach that examines attitudes, practices and responses in the field together with the logics, beliefs, assumed norms, conflicts, clashes and negotiations actors make within the economy in which they engage.

Africanist scholarship has, to date, applied the concept of moral economy in a number of ways including corruption as a moral economy (Olivier de Sardan, 1999), the moral economy of neoliberalism (Wiegratz, 2016; Wiegratz & Cesnulyte, 2016), the moral economy of Islam (Tripp, 2006) and, more loosely, moral justifications of crime (Newell, 2006, 2012) and moral obligations in addressing extreme poverty and the aid industry (Englund, 2008). Broadly, this research highlights the ways in which moral values are invoked for the purposes of control, ideology, divestment of responsibility, enrichment or to deceive.

According to Olivier de Sardan (1999), the prevalence of corruption in Africa is a moral economy developed in response to historical factors that emerged alongside the imposition of colonial capitalism. In other examples, research shows how neoliberalism has informed the moral economies of sex workers and agricultural traders in Kenya and Uganda (Wiegratz & Cesnulyte, 2016). Wiegratz's (2016) approach to moral economy is also integrated within his analysis of neoliberalisation specific to Uganda. Wiegratz utilises a sociological definition of moral economy, acknowledging that all economic practice is underpinned by moral logics determined by *preconditions of exchange*. Interestingly, Wiegratz's analysis of neoliberal impacts in Uganda draws attention to Simmel's hypothesis about the power of money to alter one's values, thinking, and subsequent actions (Wiegratz & Cesnulyte, 2016). Research informs the current state of these neoliberalised economies and the ascendancy of money in these developing nations. Emergent behaviours of deceptive practices, fraud, and even violence attributed to neoliberalised societies is evident from research conducted there.

Moral economy offers a tool to consider an economy in transition where embedded, disembedded, and even re-embedded economic typologies intersect. As Booth (1994, p. 663) states, “this theory insists on the study of the community and its institutions grounded in the ethos that invests them with their life and form as central to an adequate and complete account of the economy.” There persists the problematic of oversimplifying morals as though they amount to a system of consistently applied rules. But moral economy recognises that often moral decisions in economic action are complicated and are deeply problematic while yet they are still constituted within the moral domain. Divergences of competing moral positions are exposed in embedded social relations like marital relations while the economic relations in society are in transition and women, increasingly, become important actors in the money economy. Moral economy is a useful heuristic because it can shed light on notions of social exchange in a mobile money economy with greater explanatory power accounting for heterogeneous exchange practices than rationalist economistic approaches of either Marxist theory or of classical economics.

A moral economy approach can incorporate adoption theory, economics, livelihoods, and capabilities approaches within its purview. Moreover, as this research aims to explore and test the complex dynamics of the mobile money exchange economy in Kasese, this approach accommodates the multiplicity of actors’ positions, economic and class strata, gender, ethnicity, and ethical frames, as manifest in decision-making and internalised behaviours. It can situate user responses within actor-oriented, social, cultural, and economic milieu, accommodating actors’ calculative agency, internalised behavioural norms, and situational and social logics that are entangled in the *normal chaos* of social relations of exchange. In doing so, it informs the direction of the research aim of this thesis: “to explore how the dissemination and use of mobile money in rural Africa influenced social and economic relationships and how these, in turn, shaped mobile money.”

Moral economies of financial inclusion and mobile money

This research argues there is considerable value in conducting a moral economy analysis of financial inclusion and mobile money. It aims to address a significant gap in the mobile money literature that overlooks the embeddedness of a moral economy in the socio-economic life of users in rural Africa—the locus of attention and action that “banking the unbanked” aims to resolve. Consideration is given to financial inclusion as a populist discourse prone to moral assertions of inclusivity for the purpose of developing individualism, human flourishing, and empowerment, as well as fiduciary responsibility and risk mitigation within a broader economic rationalist discourse referred to as neoliberalism.

Financial inclusion does this by asserting a discourse of a moral imperative to re-dress the marginalised status of the rural poor in the Global South. Yet, this discourse appears impervious to the disembedding impacts of modernisation. For instance, mobile money proponents hold that the service alleviates poverty while it tacitly endorses the privatisation of payment mechanisms under corporate ownership of large telecom operators. Financial inclusion is caught up in moral notions of a win-win scenario for the poor and corporations suggesting a virtuous circle enabled by FinTech (Mawdsley, 2018; Price, 2019). Financial inclusion ostensibly promotes individual capability and poverty reduction while simultaneously constrains users through new forms of control exercised by highly profitable, corporately owned FinTech platforms.[37] It asserts that it frees the individual from local constraints, while fostering a new reliance on the global technological and financial marketplace and all the controls, regulations, fees, taxes, and conformities it demands. Modern money presents its Janus-face: it produces the new freedom of individualism and new entanglements of standardisation as both Simmel (1950a) and Beck (1992) noted. The moral

[37] For insight into the profitability of Kenya’s M-Pesa for parent company Safaricom see the Review of African Political Economy blog post: www.roape.net/2019/06/11/another-false-messiah-the-rise-and-rise-of-fin-tech-in-africa/

economy analysis employed here considers the financial inclusion project as an attempt to re-embed the *unbanked* into a new, and more inclusive, version of capitalism through technological innovation.

The FinTech service of mobile money is deeply entangled in globalised technocapitalism while it is simultaneously integrated as a unique form of exchange with distinct local importance and character. This distinctive *local-ness* is embedded in markets with many coexistent forces, sentiments, and norms that are absorbed, altered, and hybridised by mobile money users and non-users. This research project is particularly interested in understanding the conditions of use, informed by socio-cultural nuances that drive economic behaviour: the values, norms, and calculations of mobile money users themselves. The conceptual heuristic of moral economy will be used to develop a sociology of mobile money behaviour and analysis of the re-embedding of disembedded exchange relations in rural Kasese. Such analysis is attentive to two levels of a moral economy, the financial inclusion discourses of the development apparatus contextualised at the local level, paying particular attention to contradictions, inconsistencies, and incoherences as well as accompanying deviant or non-compliant behaviours of norms, values and calculations accompanying use of the service.

Conclusion

This research treats the social act of exchange as the basis of social relations and of economy in both its public and householding forms. This perspective is deeply embedded in the sociological discipline. Likewise, a mobile money economy is embedded in a domain of dynamic social relations between multilateral agencies, industry and governmental bodies, and between rural and urban, male and female, users who have their own, yet intersecting, ideas about the expectations and practice of good, pragmatic, or rational economic behaviour.

Thus, analysis of a local mobile money economy provides a rich environment for sociological inquiry into the dynamics of this contemporary money form in a rural, developing economy.

There are many competing discourses of exchange and of mobile money currently in circulation in the development literature. In order to cultivate a deeper understanding of the nuances of economic activity with mobile money in the rural context of Kasese, this research draws on multi-disciplinary research to understand the dynamics of economic activity and behaviour. As highlighted previously, the majority of the research literature affirms significant positive benefits for digital financial inclusion and poverty alleviation in the Global South where telecommunications companies, the state, and multilateral organisations shape the provisioning and regulation of mobile money services. Also addressed in the literature is consideration of how mobility, time-thrift, and calculative agency factor into user decisions about mobile technology. Yet, mobile money research largely lacks evidence for its big claims to improvements in livelihood, wellbeing and improved social equity.

All economies and exchange practices have moral underpinnings. The concept of the moral economy will thus be used as a heuristic tool to explore the norms, values, sentiments, logics, obligations, and practices that underpin economic relations in the community of Kasese. These characteristics of exchange go beyond the classical tradition of the market and the public sphere to include informal filial and non-filial relations and the private sphere. From this perspective, moral economy is used to identify and interpret a variety of economic behaviours of mobile money use as they are informed by divergent moral dispositions, tensions, behaviour norms and power bases in locally situated practices of individuals and in the community at large in Kasese. This approach is as attentive to positive outcomes for mobile money users and the broader community as it is to the potential for deepening poverty, inequality, vulnerability and/or dependence. The re-embedding of social relations through new forms of exchange are of much interest here as the disembedding effects of mobile money, in particular, and *technocapitalism*, more generally.

The mobile money economy in Kasese, with all its practices, gaps and inconsistencies, is underwritten by embedded moral codes of obligation, reasoning, and values, alongside ambitions for gain and profit in the context of the local *multiple realities* in operation there. The multiplicity of users and, at times, competing (and sometimes complimentary) ideologies, logics and values make it difficult to distinguish the various influences on the phenomenon of mobile money. For this reason, this thesis draws on moral economy as a conceptual heuristic for identifying socially, culturally and historically informed uses of mobile money in a local economy as it extended research beyond the impact of adoption and the impact of remittances. It provides a useful tool for understanding the articulation between society and economy; exploring the context and reasoning behind actors’ economic practice; and drawing attention to the variety of interactions and competing socio-economic norms that emerge.

Chapter 3 **Methodology**

A largely ethnographic approach to research is used in this thesis to develop a *thick description* of users' experiences and of the impacts of FinTech services in context of a contemporary mobile money economy that considers the development of calculative, quantitative dispositions among users and changing social relations and obligations. This research explores embedded exchange relations, the disembedding effects of a money economy, and the re-embedding notions that mobile money will address poverty. Consequently, the methodology outlined here is user focused and attentive to user-level social dynamics in operation. It is designed to concentrate on users' reasonings and perspectives as social phenomenon, and thus to provide a middle-ground perspective that other disciplinary approaches have frequently overlooked or ignored.

The Ethnographer as Stranger

Simmel's foundational work *Sociology* (1950b) includes an essay entitled "The Stranger," an essay in which Simmel notes that "he [sic], who is close by, is far, and strangeness means that he, who also is far, is actually near" (p. 402). This observation anticipates a post-structuralist perspective, conceiving of the stranger both as one who is amidst the group and at a distance, an influence on group behaviours and a benign presence. In another essay entitled "The Stranger," Alfred Schütz (1944) described the stranger as a *newcomer* who, when experiencing a different culture, seeks out, learns, and re-orients to the "cultural patterns of group life" (p. 499). The stranger/newcomer is both influenced by the group, person, or social situation in which they find themselves and, by the very nature of their presence, influences those same actors and experiences. In the new social field in which they find themselves, they adapt, orient, interpret and make sense of a social arena that is itself changed by their presence.

The notion of the stranger is pervasive in much qualitative social research, including the ethnographic methods deployed in actor-oriented approaches advocated by Long (2003) and Olivier de Sardan (2005a) discussed in previous chapters. Of his actor-oriented sociology, Long (2003, p. 15) argues that:

> Central elements of this ethnographic endeavour focus on the elucidation of internally-generated strategies and processes of change, the links between the 'small' worlds of local actors and the larger-scale 'global' phenomena and actors, and the critical role played by diverse and often conflicting forms of human action and social consciousness in the making of development.

Just as Schütz's (1944) newcomer adapts through a "continuous process of inquiry into the cultural pattern of the approached group" (p. 507), so too actor-oriented research emphasises the lived experience and multiplicity of socially constructed realities and practices of actors themselves, including researchers in the field. Long (2003) argues that regardless of their ascribed social strata and historical conditions, social actors have agency and are active participants in the lifeworlds they inhabit every day. Unlike the passive participant, and despite their own biases and behaviours which affect the situations and relationships in which they find themselves, the stranger/ethnographer seeks actively to understand and is attentive to the cognitive, spatial, experiential and temporal experiences they find themselves among.

The sociological notion of the stranger provides useful insight into the *reflexive practice* of qualitative data collection. Researchers utilising ethnographic methods inhabit a curious state of being that is both independent and detached, on the one hand, and dependant and involved, on the other, with the social arena of their inquiry. The ethnographer must reflect critically on their own orientation to the social spaces they are seeking to describe through theoretically grounded methods if they are to interpret the dynamics, changes, negotiations, and contradictions of those spaces (Arce & Long, 2000). The ethnographer seeks to combine both *emic* understanding and *etic* analysis for the purposes of triangulation and validity checking (Bernard, 2006; Risjord, 2007). Naturally, there are many things the outsider will never see or understand but neither can any one individual or group of informants grasp the entirety of lifeworlds in a social space. That is why pragmatism, with its reflexive attention directed to *what works* (Creswell, 2003) in the research field is employed to, as best as possible, mitigate biases while highlighting gaps and contradictions. To establish a research perspective that accommodates and expects flexibility, just as the stranger is oriented to change, the research approach allows for a pragmatic and reflexive methodology that draws on tools and resources, people and approaches to the research site both *in situ* and *ex situ*.

Methodological Considerations

This thesis offers an ethnographic case study account of the socio-economic impacts of mobile money in rural and urban Kasese. Case study is chosen as the preferred mode of conducting an examination of the mobile money phenomena and user behaviour across social strata in Kasese (Scholz & Tietje, 2002; Spillman, 2014; Yin, 2013). This study recognised that Kasese is itself unique and distinct, having its own identity, history and challenges that are both universal to the human condition while also being specific to a time and place. As a method of study, ethnographic case study acknowledges the complexities of the researcher-in-the-field and the impact their presence will have on research outcomes. The approach taken here has attempted to rely on pragmatism in order to accommodate the position of the researcher as a stranger amidst the varied and, sometimes contrasting, discourses and lifeworlds of participants and the multiple source materials used to build an understanding of the phenomenon.

A core challenge for ethnographic and qualitative research is the problem of epistemological distance between researchers and subjects of inquiry. Here, it has been argued that the two are more entangled than discrete. If, as Simmel (1971) suggests, the investigator is both “near and far” from the object of investigation, detachment from the object of inquiry is never fully attainable. Rather, knowledge is developed through informed, purposeful interaction between actors and the researcher, recognizing that exchange itself is implicated here in relationships and knowledge and, as such, that a form of the “purest and most developed kind of interaction” has occurred as the researcher themselves “seeks to acquire substance and content” (Simmel, 1971, p. 78).

This is not to dismiss questions of validity or to reduce the concept of reflexivity to acknowledge that the researcher is an outsider whose cultural and economic background is different from those of participants from Kasese. Instead, it is an acknowledgment of the agency of both researcher and participants and the role both play in research practice and meaning making. Such acknowledgement opens inquiry to a pragmatic sociology of interpreting coherences and incoherences, as well as the obligations and improvisations of actors’ lifeworlds (Creswell, 2003; Neyland, 2008; Silber, 2003). The pragmatic approach considers emergent social forms in the research process, such as those elements that actors draw attention to, or that other similar research asserts, as relevant to understanding the object of study. Despite wide variation in actors’ actions, perceptions and lifeworlds, some perspectives and experiences emerge as common among them. Such an approach has influenced the method of study including the collection, interpretation and presentation of the research data.

The Extended Case Method

This research is influenced by the ethnographic case study tradition of American field sociology. Much of the rationale and method is drawn from sociological ethnography, also referred to as extended case method typically affiliated with the sociology of the Manchester School and Chicago School (and influenced by Simmel) (Brown & Dobrin, 2004; Burawoy, 1998; Burawoy, Blum, George, Gille, & Thayer, 2000; Levine, Carter, & Gorman, 1976).This tradition considers the lived world of actors, their corresponding behaviours, and the meaning actors ascribe to their social world (Bernard, 2006). Its methods rely on iterative lines of enquiry as the researcher moves through the research process, responds to variations, identifies inconsistencies, and refines techniques. In such a way, ethnographic approaches immerse the researcher in everyday social settings as they actively try to make sense of them. This approach acknowledges the personal embeddedness of the researcher in the field and considers how the method of data collection emerges as a result of intentional and planned activity of research, as well as the variables of daily experience and happenstance.

This research thus recognises that the validity and accuracy of the empirical findings are artefacts of the researcher's perspective, reflection and experiences. It draws on observations and themes that emerged from the fieldwork which suggested to the researcher insights into a broader pattern of social and economic change. According to Burawoy et al. (2000, pp. 26-28), the extended case method has four main components:

> (1) the extension of the observer in the world; (2) the extension of observation over time; (3) extending out from micro processes to macro forces, and; (4) the extension of theory.

This approach is relevant to the exploration of phenomena that can be delineated from other social factors but which remain deeply embedded in the social realm or, as Yin (2013, p. 16) puts it, "when the boundaries between phenomenon and context may not be clearly evident." This is reflected in the aim of this study to explore reciprocal relationships between the dissemination and use of mobile money in rural Africa and the social and economic relationships in which participants were immersed—the assumption being that mobile money will be entangled in multiple processes of social, economic and technological change that, like *the stranger*, are both independent and linked.

The ethnographically informed case study method was thus chosen for its ability to provide thick descriptive accounts of social phenomena in distinctive cultural and social milieu (Bernard, 2006; Geertz, 1973; Long, 2003). As Burawoy (2003, p. 649) notes, ethnography and extended case study methodology are similar but differ, nonetheless, in their respective emphases. Where extended case studies focus on the “augmentation of social processes studied through participant observation with external forces and the reconstruction of theory,” ethnography, he argues, “stresses the dialogue between constructivism (observer as participant and reconstructing theory) and realism (internal processes and external forces).” Extended case studies, in other words, are bounded by their focus on the phenomenon of interest while ethnographic methods are deployed in tandem in acknowledgement that the phenomenon must be understood in its social and cultural context.

Modes of Data Collection

Data collection was based mainly on field enquiry drawing on many different sources but, most especially, on participant observation, semi-structured and open-ended interviews that were attentive to actors’ own sense-making of their behaviour toward mobile money use. This mode of inquiry into interactions *in situ* evaluated the social logics of actors—that is, how these actors were enabled or constrained; their cultural dispositions and habitus; and the strategies or responses that informed their use of the mobile money service. These logics cannot be misconstrued as rational in the positivist sense but, rather, rationalities based on a host of socio-cultural, economic, situational and embedded social practices that individuals draw on to reason and even to moralise their actions. Additionally, the field enquiry took special interest in those interactions that deviated from dominant narratives of mobile money in the development literature.

Fieldwork for this study was conducted over a cumulative period of four months through three return trips to Kasese from 2017 to 2019. Due to the scarcity of data sources for rural regions like Kasese, the limitations of access to mobile phone data, and the challenges these factors present to research in similar rural and underserved regions (not to mention budget constraints), methods that drew on multiple data sources were preferred. Census data, grey literature, peer reviewed sources and news reports are drawn on to support overall description and understanding (Spillman, 2014). This allowed incorporation of multiple data sources in the analysis and thus a degree of data triangulation as varied sources provided additional validation (Denzin, 1997).

While more detail on the operationalisation of each method is included in the following sub-sections, the day-to-day realities of fieldwork often saw these methods deployed in unison. Targeted interviews, especially with community leaders (the mayor, DPC, bishop, MTN regional manager) were employed. Formal interviews were organised with other community leaders and mobile money users. Snowball and opportunistic sampling were used to organise many interviews, often as I was working alongside SmartMoney staff and observing their interaction with existing and potential users. Informal discussion and observations were made in the course of daily domestic life in Kasese and when socialising and participating in everyday activities like attending church, shopping, or evening drinks at some of the local hotels. Much of this informal interaction was with people who became key informants—people I relied on to help fill data gaps, test my understanding of what I thought I was learning, and identify new informants. This was not only necessary, but also an effective method for developing a deeper understanding of the phenomenon (Bernard, 2006; Neyland, 2008). The experience of fieldwork and of moving between data collection modes on a daily basis is explored later in this chapter.

Interviews and Data Management

Formal interviews were conducted across a strata of Kasese residents and oral and/or written consent and recordings were collected from participants when possible. A total of 51 semi-structured interviews (interviews and group interviews combined) were conducted (see Appendix A). Table 1 below captures the extent of formal interviews. Eleven of those counted below were women.

Table 1. Summary of research participation

Participants	Interviews		Group Interviews	
	Number of Interviews	Number of Interviewees	Number of Interviews	Number of Interviewees
Community Officials	5	6		
Business Executives	4	4		
Professionals	7	7		
Trader/Merchants	18	19	1	8
Lead Farmers	3	3		
Other Farmers	9	9	3	20
Fishers			1	11
Total	46	48	5	39

The bulk of the data were collected by voice recording with participants. Interviews were conducted in English with translations to the local language, when needed through my interpreter, and repeated back to me in English occurring *in situ*. This enabled me to control the direction of the interview, re-query areas for clarification, and seek richer descriptions. These recordings were self-transcribed, lengthy and detailed, providing me high confidence in the quality of the transcription. In the process of transcription, I developed deep familiarity with thematic markers in each interview. I also kept a diary of field notes which I frequently reviewed and referred to while reflecting on these transcriptions (see Appendix B). The transcriptions were generated mainly in the field in the evenings or on those days when transport was not available to go to the villages. This time set aside to transcribe interviews was immensely important to the research process as it provided opportunity to reflect on the interviews, consider the data, and evaluate fresh recollections, all of which fed into an iterative process that generated further areas of investigation, or deeper inquiry. This reflection time, whilst remaining in the field enabled me to seek out further lines of inquiry, re-assess approaches, seek out clarifications, and attend to negative case analysis. For example, as a result of the early interview with the Reverend during my first trip to scope the research it became clear that gendered dynamics of mobile money use in the household needed closer attention. Similarly, the interviews conducted with the police raised the issue of mobile money fraud as more significant than initially anticipated.

Observation

Many more informal conversations were conducted with Kasese residents including government and business leaders, farmer groups and agricultural producers during the time in the field. Furthermore, many ongoing conversations with my interpreters, their family, friends, and acquaintances informed the research but are not reflected in the tally of interviewees. Importantly many informal interviews were conducted with SmartMoney staff and customers during SmartMoney field operations where I was invited both to observe and participate in meetings and training meetings with users. Often trips to the villages meant long travel times in the vehicle. These were opportune times to reflect on events with SmartMoney staff or my informants for clarification, corroborate observations for triangulation, and check validity (Denzin, 1997; Ybema, Yanow, Wels, & Kamsteeg, 2009). Observation was managed between writing notes in a journal or on my laptop using OneNote (Bernard, 2011)—this made keyword searching easier and allowed me to organise them according to dates and themes. Sometimes I took photographs of materials (such as billboards, pamphlets, posters and newspaper articles) as reference points for future reflection (Creswell & Plano Clark, 2007; Neyland, 2008) (See Appendix C).

Document analysis

Due to the brief and intermittent times I had in the field, I was also reliant on obtaining as many relevant documents to triangulate and contextualise my information against current events, mobile money reports, press releases from NGOs, a USAID financial inclusion listserve, and news reports of the same and political situation developing in Kasese (see

Chapter 1). Newspaper articles have been particularly useful for corroborating research findings. There is little scholarly information available on Kasese; however, where relevant, it has been cited in this research. I was able obtain an important work of ethnographic journalism by Tom Stacy (2003) set in the district in the 1960's and published in 2003. This work has provided remarkable insight into the history of the region and economy during that time.

Having done some previous business and financial work for SmartMoney, I was given access to company records, its communications documents, funding applications and a number of consultant reports developed for SmartMoney. I also had access to three years' worth of call record data. Initially, I had thought to develop in-depth network maps that showed the diversity of heavy and light users transacting over the SmartMoney platform. I soon realised, however, that working with such a large dataset required a more powerful computer than I could easily access and certainly beyond the capacity of my laptop in the field. In order to draw any significant information about financial flows between rural and urban environments, I needed to know the location where transactions occurred to see how and where money was moving. However, as SmartMoney operates over already established telephone networks through short codes, there was no GPS information available to plot these flows. Money movement between users was considered "commercial in confidence" and so I did not use this this data and abandoned the effort.

There is an abundance of grey literature and FinTech industry blogs and press releases produced on the topic of mobile money that have been drawn on throughout this study. I also used a number of online Ugandan newspapers to track current events, especially with changes in the tax structure over mobile money. The written material provided important insights to contextualise mobile money use in Kasese.

Research Ethics Protocols

Prior to conducting fieldwork, I obtained approval from the JCU Human Research Ethics Committee to undertake research in Uganda. I also obtained permission through the Uganda National Council for Science and Technology (UNCST), the regulatory body that oversees human ethics research (SS293ES). Led by the UNCST guidelines, the research advisor at Makerere University in Kampala, as well as the research methods set out in Bernard (2006), I conducted a project scoping field visit in 2017 and returned to the field the following year to conduct the bulk of the research interviews. On the first trip, I sought interviews and permission from community leaders to engage in fieldwork. That trip included a number of interviews and meetings with community officials including the mayor, two clergy leaders, the District Police Commissioner (DPC), the District Internal Security Officer (DISO), the Chief Administration Officer (CAO), and two Local Council Officers (LCIIs). I also interviewed the business manager of the local water department, and the two local electrical supply corporations. In addition, the trip enabled me to conduct a few sample interviews to test questions and refine my research approach.

In the follow-up trips in 2018, I conducted field research, with the aid of a local interpreter, aiming at many levels of the economic strata in the community including small farmers, lead farmers, fishers, traders and merchants, and company executives. In light of the prevailing research ethics mandates, each formal interview required securing both verbal and written consent from interviewees. This involved providing a clear explanation of the research project along with participants' right to withdraw from the interview or to withhold answers to any questions, explanation of confidentiality protections, and obtaining a signed consent form. Before consent was secured, each participant received a copy of the Project Information Sheet in their preferred language of English or *Lhukonzo*. Moreover, projected research outcomes were expressed both in the Information Sheet and verbally at the time of the interview.

Predictably, educated community leaders took most interest in the research. They felt mobile money technology was very useful to conduct business from the comfort of their homes, to pay bills, remit money to family, and to transport money in a secure way. Rural dwellers appeared less interested, if indifferent, toward the research topic. Of greater interest to many rural dwellers was my own interest in Kasese. I was informed on a number of occasions that it was rare to see *white* foreigners outside of Kasese Central or Queen Elizabeth National Park.

I was also advised by the Ethics Office at Makerere University that it was expected protocol to offer a small suitable gift, such as a bottle of soda as recognition of the interviewees' time and assistance. In accordance with both the JCU and UNCST requirements, protocols for data protection and participant anonymity were followed. Throughout this thesis, pseudonyms have been used to ensure the anonymity of research participants.

Data Analysis and Validity

This study set out to produce interpretations of mobile money use and impacts in Kasese informed by direct field observation. In practice, this approach was applied through an iterative process of identifying concepts and themes to emerge, first from the prevailing body of mobile money research texts, previous experience with SmartMoney, and preliminary interviews conducted during the scoping visit, and thence from data produced in the field including interview transcripts, field notes, SmartMoney documentation, and conversations conducted over WhatsApp and email. Drawing on sociological tradition, and on Olivier de Sardan's challenge to explore "both the internal inconsistencies of social orders and the non-compliant practices," (2016b, p. 111). I actively sought out those areas of discrepancies, behavioural gaps, contradictions, and acts of deviance that contradict official and consensual norms or practices drawing on the application of negative or deviant case analysis (Burawoy, 1998; Creswell, 2013; Johnson & Onwuegbuzie, 2004). For example, much of the work to develop Chapter 8 was based on interviews with community leaders that indicated concerns with *uneducated people* getting scammed out of mobile money. Moreover, SmartMoney had experienced a few significant incidences of scams over their own services (see Chapter 4). As is advised in qualitative methods, evidence of deviant behaviour will broaden analysis of social behaviour, and also strengthen the explanations for t*ypical* cases (Bernard, 2011; Burawoy, 1998; Creswell & Plano Clark, 2007; Ybema et al., 2009). These kinds of deviant behaviours led me to seek out information from the police and subsequent informants regarding deviant behaviour that contradicted developmentalist rhetoric of mobile money's inherent safety and security, as well as identifying evidence and impact of deviant economic behaviour in the community (see Chapter 8).

Snowball sampling and reliance on key informants from the larger villages, the urban regional centre, and community leaders did introduce a risk of sampling bias that could influence the validity both of data and their interpretation. While opportunistic sampling was relied upon more often in rural areas, this could not by itself mitigate the risk that interviewees were, as a whole, more representative of some strata within Kasese than of others. Attempts were made to ensure the instruments and data collection were consistent with a valid approach to ensure alignment with this kind of social research more generally (Bernard, 2006; Burawoy, 1998; Olivier de Sardan, 2005b). Formal interviews relied on open-ended, semi-structured interview protocols as defined by Bernard (2006). Other methods consisted of participant observation, field notes, and document analysis both in and out of the field.

On my return to Australia from each fieldwork trip I attempted to compile research findings into a coherent account of mobile money users' experience in a particular space and time without assuming the research is comprehensive or representative. The findings were organised into key themes that *stood out* while sifting repeatedly through the transcripts and re-listening to recordings, paying particular attention to important sociological reference points and the body of theory employed throughout the course of the research. At the same time, the work attempted to situate this study within a larger body of interdisciplinary research on the same phenomenon of mobile money in Africa—seeking to understand why and how people are using mobile money, and the impact of this technology in the society, economy, and culture of Kasese.

Enriching confidences and confessionals of local participants also carries with it the burden of bias for the researcher. Cross-cultural research raises concerns of mitigating the potential for bias in the research collection and interpretation. To mitigate this, as best possible, I looked to triangulate data with other sources such as news media, or other research that supports the claims of participants, or my own interpretation of research finds in order to address biases and methodological limitations.

My post-fieldwork reflection and analysis of the data took time to sift through and explore. I had dozens of interviews to sift through, pages of field notes to organise, photo records (Appendix C) and a few thousand personal photographs to archive. The photographs, I found, while not part of the research project *per se*, helped to diarise my experience in the field and capture moments of importance for further reflection. The interview recordings were of particular utility as I spent several weeks listening and transcribing recordings, sifting repeatedly, and organising statements into groupings of subject area, according to my main research objectives, while allowing openness to new areas of inquiry. WhatsApp became a useful tool for *ex situ* member-checking (Onwuegbuzie & Leech, 2005; Ybema et al., 2009) contacting friends in Kasese for clarification over various interview comments, phrases, or remarks I had missed. Where possible, I have allowed discrepancies in participants' narratives and social norms unanswered and open for further examination. It is my hope, that by doing so, the research makes an honest attempt to represent the phenomenon and participant's experience as fully as possible.

The Research Experience

Integrating Into Family Life: Josephine's Household

In the Introduction (Chapter 1), I offered an account of how this research project emerged from a working holiday to assist SmartMoney with financial and administrative work at a time they were aiming to secure a funding partnership with a large donor. This administrative work included a three-week visit to its field operations office in Kasese. During that visit, I had found the expense of staying at a modest but safe and secure hotel in Kasese to be extremely high. If I was going to conduct future fieldwork there, my preference was to live in more cost-effective lodgings. Ideally, I was seeking a homestay with a local family or, at least, to rent a room of cheaper lodging in the town (Barrett & Cason, 1997). The SmartMoney CEO advised that two of the senior staff there had accommodation that was subsidised by the company for the purpose of short-term housing of company visitors. He suggested I stay with Josephine, the District Manager, as her apartment was spacious, had two large bedrooms and, importantly for me, featured a plumbed toilet and shower facility.

I had met Josephine on my first visit and we had become fast friends as the group of us undertook long days of field visits to the villages. Josephine graciously invited me into her home to stay for the four weeks of my research scoping visit. At the time, Josephine was in her mid-twenties and a recent business college graduate. She was a dedicated worker who had risen in the ranks of SmartMoney very quickly as a competent manager and trainer, despite her quiet and unassuming nature.

Josephine, too, had been a stranger in Kasese. She was a *Mugwere* woman from the Mbale District, at the far eastern side of the county near the Kenyan border. During her teen years, her parents, who were poor rural farmers, had sent her to live with her uncle (her father's brother) and his family as he had a salaried job in Kasese. Josephine had gone to high school and university in Kasese, and learned to speak *Lhukonzo* as a student there. Josephine moved out of her uncle's home during her time in university partly because, as she explained to me, her uncle's wife had become jealous of her. As Josephine was the eldest child and the only salaried member in her family, her parents had sent three of her four siblings to live with her once she became financially independent of her uncle.

Josephine's salary from SmartMoney was providing a home and school fees for all three of her siblings. One sister was halfway through her studies at a university in Kampala, and was home for the month during the semester break. The other sister was in her first year of teacher education at a local college, and the brother was enrolled in a local high school. The apartment was large and spacious, even by western standards and certainly by Ugandan standards. Josephine organised for me to share one bedroom with her brother while she and her sisters shared the other. Josephine also had a boyfriend with whom the relationship was serious. Baluku, a local *Mukonzo* man, was a young doctor in his twenties at the hospital in Kasese. While he did not live with Josephine formally, he spent many hours there in the evenings and was a regular visitor in the household. The family welcomed me into their lives and we developed a mutual friendship.

The access and ease of living that came with staying with a local family was a good experience, not only for becoming better acquainted with and integrated into the community and culture, but also for me personally as I developed meaningful friendships with Josephine's family and social circle. Together, we ate meals, washed clothes, grocery shopped, went to church and socialised. Josephine and Baluku were an integral source of information for me, frequently offering explanations of the culture and of how things worked in Kasese and Ugandan society more broadly. The relationship I formed with Josephine and Baluku (now married) and her family remains to this day. We are still in regular communication. Moreover, my subsequent visits to Kasese have always come with the added benefit of renewing their acquaintance in person and providing for me an easy source of accommodation, as each visit I stayed with Josephine’s family.

The Exploratory Field Visit

The purpose of my initial field visit was to do some project scoping and to meet with a number of community leaders. The technique employed here sought discussions with community leaders in order to gauge attitudes by community elites toward this new exchange technology, as well as to gain permission—tacit or otherwise—to engage the community in this research. Interviews with community leaders and key-informants assisted in understanding broad social trends in the District and the perceived impact mobile money was having on social and economic relations. Typically, snowball and intentional sampling techniques were applied here to gain access to a variety of community leaders.

One of my first community leader conversations happened by accident—as if by luck or providence. As was custom in Josephine’s home, Sunday morning church attendance was expected and I dutifully joined the family to go to the local Anglican cathedral on the first Sunday I arrived. The English service was at eight a.m. We attended with the regular group of parishioners of several hundred people, huddled on crowded wooden benches in the auditorium. I stood out as a very visible presence and was the object of much staring and whispering among the churchgoers—especially the children. The Reverend there, as I soon found out, had a reputation as a charismatic personality who, incidentally, had had a former career in local politics. In the midst of the service, he focused his attention on me, stopped his sermon, smiled and said, “Hello, we have a visitor this morning—Please! Stand up and introduce yourself!" Again, shortly after finishing his sermon, the Reverend called on me a second time, to come to the front of the auditorium and explain the purpose of my visit. Upon interviewing me in front of the church, the Reverend used my research topic and my presence as a brief object lesson on the value and virtue of education, of cross-cultural exchange, and of the mandate of Christian hospitality to visitors. He subsequently directed the parishioners to welcome me into the community and obtained a public promise from me to continue attending church each Sunday over the course of my stay. Not to be outdone by his public gesture of ensuring my attendance the following Sunday, I used the opportunity to secure a face-to-face interview with him the next day.

The following morning, I returned to the cathedral and conducted a lengthy interview, at the close of which the Reverend urged me to visit the Bishop whom he knew had a particular interest in financial technologies and cryptocurrencies. He then promptly set up a meeting between me and the local Bishop that same morning. He also advised me about whom to contact to speak with the Mayor. In fulfilment of my public promise, I became a regular attendee with Josephine's family (and the occasional object of further public inquiry by the same Reverend) for Sunday morning service over the remainder of my stay and subsequent visits to Kasese.

My association with SmartMoney was also a useful platform to engage community leaders. The company was already embedded in the town as an employer and had contacts within the local council, police, schools, farming cooperatives and the large agricultural companies in the district. Through SmartMoney's network of relationships, I had another fortunate encounter.

The Police Headquarters is directly across the street from the SmartMoney office and I had arranged to meet the District Police Commissioner (DPC) there at his office one afternoon. I had been ushered into to his office to wait for his return from another meeting. A man named Jacob was sitting comfortably in the DPC's office with two women on a large couch, also waiting for the DPC to return. Jacob was a staff member at the station working as an Intelligence Officer. I soon found out that he was also a good friend of the DPC with whom he socialised in the evenings. Of the two women in the office, one was Jacob's sister who was visiting from Kampala during the university semester break, and the other was a police lieutenant and friend of Jacob's sister.

Due to Jacob's natural curiosity, and perhaps his training also, he began to query me about my visit to Kasese, my research, and my family. In the time before the DPC returned, Jacob had already made arrangements to meet with me that evening to speak to the local chapter of the Rotaract Club of which he, his sister, the lieutenant and the DPC all belonged. After a brief meeting with the DPC, I returned to my accommodation at Josephine's to clean up and prepare for an evening out, first with a presentation to his Rotaract group, and then for drinks at their favourite pub. Wednesday night drinks with the Rotaract group at the pub became a regular occurrence for me for the remainder of my research there.

Jacob and I quickly became good friends. He was a very useful informant and translator for me too. He was fluent in a number of the local languages, and he was well connected in the community with a number of political leaders, government officials, business owners and, of course, the police. Moreover, he had access to his own SUV and became a dedicated tour guide for me as he possessed deep local knowledge of the area and was keen to show me around. We came to a happy agreement: I would pay for petrol, and he would drive me anywhere I wished to go. Snowball sampling among Jacob's network of community leaders proved an opportune method for raising community interest in my research project and availing me of access to interviewees. I soon came to realise that, like Jacob, the Reverend, Bishop, and the Mayor, were all members of the local Rotary and subsidiary Rotaract Chapter in Kasese.

Return to Field Work

I returned to Kasese a few times since the initial scoping visit, both to follow up on SmartMoney, and to more actively engage mobile money users in general. Access to the field proved more difficult some days as I did not own my own transport. The hire of a motorcycle taxi (*boda-boda*) to the villages was not expensive, but it did involve a degree of risk and discomfort. Most of the villages were located along poorly maintained gravel roads many kilometres from Kasese Central. Motorcycle use meant dangerous exposure to large, poorly handled transport vehicles, dust, sun and, on occasion, risk of lion attacks in the national park where the fishing villages were located. Some days, the SmartMoney RAV4 was available for me to use, sometimes I borrowed Jacob and his SUV. Other times I travelled with SmartMoney managers as they undertook field visits to the coffee grower farm groups or savings clubs high in the mountains. Those opportunities to follow SmartMoney staff were a pleasant way of conducting observation while accessing more remote regions of the district where I would not ordinarily have had reason or wherewithal to visit. On a few occasions, I accompanied SmartMoney when they were conducting tours for visiting delegates of their various investment groups or programme organisations. Time spent driving with SmartMoney staff provided me with ample time to discuss business, culture, politics, local history or any number of topics.

Working with an Interpreter

By the time of my return trip, Josephine and Baluku were engaged to be married. Baluku had moved on from the local hospital and ventured to start his own medical clinic. Because rents and competition for medical services were high in Kasese Central, he had decided to start a clinic in a small but high-traffic trading centre about 20 km south of town. At that location, he was the closest medical facility to villages along the shores of Lake

Edward and Lake George in the national park, and a few small farming communities along the lower slopes of the Rwenzori Mountains.

It was my good fortune that Baluku was now a self-employed doctor. It was my further good fortune that Baluku usually had few patients during the day (most attending the clinic late afternoons or first thing in the morning), meaning he was available to be my interpreter and a guide in the region. Baluku was fluent in all of the local languages: *Lhukonzo*, *Rutooro* and *Runyankole*. While working for *Medicines Sans Frontieres* a few years earlier, he had been enlisted as a research assistant and interpreter for a Danish group of medical researchers conducting AIDS/HIV research in the region. As a member of the research team, he had received training and experience in the conduct of medical research and had become familiar with many of the villages we were targeting. His skill set as an assistant was an invaluable asset (Barrett & Cason, 1997).

Over the course of several weeks, depending on the availability of the SmartMoney car and Baluku's patients' needs, I would drive to his medical clinic to pick him up to do interviews. Each day we would decide where we wanted to go based on distance, road conditions and the target participants we were looking for (like coffee farmers, fishers, market vendors). We would then proceed to drive out to a village site. The district's four key fishing villages (locally referred to as landing sites) were nearby. The Maliba Valley in the Rwenzori Mountains—an area dense with coffee farms, was also nearby. Moreover, since Baluku was a local to the district, he had a number of friends and family members throughout the area. Some days we were able to make visits in order for him to seek out important but more distant family members. On these visits, they would exchange obligatory salutations and family greetings and we would be served a generously portioned traditional Ugandan lunch—sometimes I was also given a live chicken as a gift in honour of the visit. From there we could endeavour to have a conversation with some locals nearby willing to be interviewed.

Baluku was a fast learner and we quickly developed a good working relationship. He was also a confident and personable speaker, with an ability to develop rapport with participants likely enhanced by medical training. The interviews were intentionally conversational, based on semi-structured questions that aimed to cover a variety of areas of inquiry if participants were open and signalled interest. With the time spent together driving, we could take the opportunity to review and discuss the interviews, reflect on certain behaviours and responses, and decide what further kinds of participant information might be valuable to collect. Due to Baluku's temperament and grasp of the research project, with practice, he seemed to develop the capacity to coax participants with more in-depth queries and elicit richer responses. Evidence of this was noticeable over the time I spent transcribing the interviews.

Typically the interviews followed a similar format: Baluku would make a friendly greeting and quickly determine a potential interviewee's preferred language. He would then query whether the person was a user of mobile money and if they would be interested in conducting an interview with us. If they agreed, Baluku would explain to them the nature of the research project and ascertain their willingness to participate. Meanwhile, I would prepare the recording device and notebook, and organise the Project Information and Informed Consent documents. I would ask questions in English, and, if needed, Baluku would interpret both my questions and informants' responses. While a number of participants had better English skills than they were, at first, ready to admit—commencing the interview in a local language only to begin responding in English as the interview progressed—Baluku's presence proved reassuring nonetheless. Even when conversing in English, Baluku was able to rephrase or clarify questions in the more familiar phrasing of Ugandan-English or translate into another language. As much as possible, ambiguities were addressed during the interviews. The ability to review interview recordings in the evening provided the opportunity to hone questioning techniques for the following day, to clarify responses with Baluku, and to consider emerging areas of inquiry.

Being *Mzungu* in Kasese

The presence of *whites* in this part of Uganda is uncommon, at least, for most people in the rural regions. Anonymity, for me, was impossible. The frequency of being referred to as a *mzungu* increases once leaving the more metropolitan culture of Kampala. The experience of this is very common for those of European descent. Everywhere I went, I was noticed by others and frequently became the object of hailing. *Mzungu*! was used especially by the many children who saw me, calling out to get my attention or alert others to the curious presence of a white person in their village.

Mzungu is a Swahili word adopted into all the local languages in those areas of East Africa where Swahili has some influence. Yet despite its ubiquity, the social significance and historical usage of *mzungu* is contested—its etymological origins unsettled and differences in meaning depending on the cultural context. Explanations I received from Ugandans, Kenyans, and Congolese typically varied. Some explained its meaning as literally "person that is white." Others noted *mzungu* can refer to the spirit world of ghosts or, relatedly, someone who roams or wanders aimlessly. The term is sometimes also applied to anyone who is not African in origin—a stranger. Acknowledging the potential for negative connotations and histories of colonial rule, the implications of being *mzungu* cannot be ignored when conducting research in Uganda.

Overall perceptions of white people vary. Many Ugandans view whites as rich and educated and they either treat *mzungus* with distain or with respect—sometimes both. For Ugandans, I was advised, it is considered a harmless term, despite its strong racial connotations. But, it can have a pejorative meaning depending on the context of use. In Kampala, I was more often referred to as *Muzee* (a term of respect for mature-aged people, used interchangeably with "grandfather"). In Kasese, however, I was called *mzungu*, within the context of friendliness, and even respect.

No doubt, underlying assumptions of my personal wealth often affected the social and economic transactions I was involved in. The nature of shopping, for example, is primarily based on negotiation in Kasese. Items marked with price tags are available at only a few shops. I found that if I aimed to buy something without a price tag, the seller commonly would want to overcharge me. For example, if I wanted to buy a litre of water that was known to cost 1000 Ugandan schillings (USh), the vendor might tell me it was 2000USh. While the standard price of some items (like bottled water) are readily known to visitors, many other items are not. Being a stranger meant I had to rely on the shopkeeper to tell me the price of a thing, as I had no reference point to calculate whether the price they stated was reasonable. The problem of overcharging became so common for me that I would rely on friends to conduct transactions for me in order to avoid what we would refer to as the *mzungu* price. Even my proximity to an exchange would sometimes influence the willingness of a vendor to sell to us at reasonable prices and so, on those days when shopping for food or household items, Josephine would regularly have to haggle to get normal prices. At times, she directed me to stay out of sight of shopkeepers to avoid the inflation of purchase prices. While I did not, as an experienced traveller, find this surprising, it was a source of exasperation and embarrassment for Josephine who was often effusively apologetic for people's dishonesty in their trade dealings. Other vendors, we discovered, had no compunction to overcharge. On these rarer occasions, Josephine would happily proclaim to the effect— "This one: she is good! I will continue to shop with her because does not try to cheat us!" From then on, whether it was a housewares seller, or a food vendor, Josephine was disposed to trust those relationships.

But being a *mzungu* also had its advantages for research. The few *mzungus* in Kasese , the handful of tourists, or those visitors in business, research, engineering or in NGO work were looked upon favourably. Kasese Central had itself been developed to service a nearby copper mine established by a Canadian firm in the 1950s and operating until the early1980s. As Jacob explained to me, those decades when the mine was in operation were recalled as good years of economic growth and employment for local families. The roads were paved, a railway was built, the town was developed with electricity, water, and sewerage, and a number of quality administrative buildings and schools were constructed. Jacob's brother Joshua rented one of the original mine engineer's homes and was proud to show me around the spacious house of simple yet practical, solid concrete and brick construction. These houses were a step-up in design and construction from the many mud brick and plaster homes that dominate the region.

Mzungu strangers are also a welcome sight to the town's locals in light of the spending and economic development activities associated with their presence. This is especially pronounced when *mzungu* are affiliated with a local person. According to Schütz (1944), the stranger often has some point of reference within the group, particularly with a person with whom they have a bond who acts as the intermediary with the larger group. The implications of this understanding such that rapport is developed through linkages with community members and the particular positioning of an outsider in a local setting such as being seen in public with well know members of the community, hanging-out at a café, playing pool at the local pub, shopping for groceries at the markets, is fundamental to ethnographic research (Bernard, 2011). Because of my association with a member of the group, such as Jacob, SmartMoney staff, the Reverend, or Josephine's family, my presence was considered acceptable and became familiar to many. My experience in the field demonstrated that in certain situations, in seeking to gain access to a community or a person, my informant would invoke terms like "my *mzungu*" or "my *mzungu* friend." Frequently, queries from locals sought to understand my association: "Hi *mzungu*, who are you here with?" Among the urbanites in Kasese, acquaintances would make a statement like "Because you are so-and-so's friend, then you are my friend!" Being someone's *mzungu* friend often meant preferential treatment in both the public and private arena. In particular, with Jacob, these introductions were important for access to community elites. In fact, it was many of these same officials who were particularly prone to shift discussions from regular pleasantries to more serious matters like business and politics in Kasese. I was frequently asked if I was going to start a business and bring jobs to the area. I also found that some acquaintances and research participants were surprisingly honest and candid about political and social relations. My experience mirrored Simmel's (1950b) observation that the stranger "often receives the most surprising openness in confidences which sometimes have the character of a confessional and which would be carefully withheld from a more closely related person" (p. 404). Being a *mzungu,* it seemed, opened up areas of discussion, and candid and confidential admission from respondents to discuss their personal lives, their politics, and their frustrations. These kinds of conversations were often the richest in developing deeper insights into contextualising the cultural and social milieu of Kasese and the use of mobile money there.

Conclusion

In this chapter, I have presented my field approach, my experience, and the various techniques and methods I employed in the collection of research data. The experience of being embedded in a local household, with SmartMoney, and the various relationships I made, influenced the outcomes and interpretation of the data findings. Laid out in the following chapters are a number of key themes that emerged for me as organising constructs while I was developing the thesis *ex situ*. These themes also loosely follow some of the commonly cited benefits of mobile money that are frequently invoked among the international proponents of the technology: themes such as women's empowerment, entrepreneurialism, safety and security of savings, and cost-effective remittances. The approach in this study has been to try to draw together the perspectives of many different users of mobile money into a compelling body of research. I drew perspectives from as many kinds of users as I could access. Of course, this research is not entirely about mobile money. The research process required my involvement as an embedded stranger into the Kasese community with Josephine's family, SmartMoney staff, Jacob's network, and many other relationships there. These relationships not only facilitated the research but helped to expand its scope and interpretation to make the strange become familiar to me. In like manner, this research recognises that mobile money is entangled in the livelihoods and lifeworlds of a larger socio-economic and cultural milieu where the technology is familiar and mundane to many users.

Certainly, there are limitations to this research, not least of which is the desire for more interviews and deeper insights. Where possible I draw on other data sources from academic research, government and international agency reports (grey literature) and statistics. Other available literature and media sources have also been referenced to triangulate and further validate my qualitative findings; in the case of SmartMoney, some group emails and internal reports have been consulted. Central to this ethnographic endeavour, too, is the juxtaposition and sometimes antithetical perspectives of external sources on the mobile money phenomenon in the everyday practice of *small worlds* actors of rural Ugandans.

In the chapters that follow, I present my main findings. I begin by undertaking a case study of SmartMoney: a small mobile money service engaged in trying to capture a share of the competitive FinTech services environment there. I then present mobile money practice according to generalised themes that emerged from the research (Chapters 5 to 8). I finalise my arguments by summarising the empirical findings and suggest future research imperatives as well possible policy solutions (Chapter 9).

Chapter 4 SmartMoney: A Case Study of Mobile Money in Rural Uganda

> Mobile money allows rural people to store and exchange money using their mobile phone instead of cash. This reduces crime and violence and allows for transactions to occur over long distances without the need to travel (Spencer, 2012).38
> Our mission is to economically empower rural communities through savings. We achieve this mission by delivering demand-oriented, affordable and accessible financial services to rural households, businesses, agriculture companies and other institutional stakeholders (Smartmoney International, n.d.).

This chapter provides a case study of SmartMoney and the challenges it has faced offering mobile money services to potential users in the predominantly rural district of Kasese. The company is of particular relevance to this thesis due to its explicit intent of offering DFS specifically tailored to the needs of rural users. It was also SmartMoney personnel that assisted my entry into this unique field. The case study of this company aims to deepen understanding of many of the factors that facilitate and promote, and those that limit and constrain, the use of mobile money (see Objective 1). Of particular relevance here are observations made of staff and users during the company's daily operations at the head offices in Kampala, the busy operations centre in Kasese, and the many trips to meet with users in rural settings across the district. The case provides unique insights into the challenges mobile money service providers face encouraging the diffusion and regular use of their services. It also provides insight into user behaviour from casual observation and from the perspective of both intentional and strategic, and sometimes reactive and mitigative, efforts on the part of SmartMoney to address business concerns. Exploration of the SmartMoney

[38] See www.huffingtonpost.com/entry/africa-development_b_1462732

experience in this chapter is used to identify issues and themes that are followed up from users' perspectives in subsequent chapters.

This case study explores how SmartMoney conceptualised its value-proposition as a unique payment and savings technology within the FinTech and DFS industry of East Africa. It acknowledges that SmartMoney too, is embedded in a moral economy of developmentalism, as it is caught up in a *moral grammar* of economic empowerment, poverty alleviation, community values, human rights and more (Carchidi, 2020; Honneth, 1996; Mikhail, 2007, 2012). It goes on to explore challenges faced by SmartMoney as it sought to operationalise its vision of economic empowerment and inclusion through *good* financial practices leveraged by mobile technology. This study thus highlights the struggle of a small FinTech company re-embed (digital) financial inclusion into disembedded economic and cultural complexities of a mostly agricultural community in rural Africa.

Background

SmartMoney started in Uganda in 2014. Its aim was to provide a mobile money service for the unbanked rural user. The company's founder and CEO, Michael Spencer, was a former banking IT professional from New York. On a visit to East Africa, he observed the potential of mobile money technology as a practical tool to alleviate some of the most dangerous and frustrating problems associated with cash-based payments in the region. At the time, M-Pesa mobile money was already being hailed in Kenya as a technological solution to the violence, crime, and corruption associated with the cash economy. Evidence suggested (as discussed in Chapter's 1 and 2) that M-Pesa mobile money was a major driver for economic growth by enabling cheaper and more secure transactions for all levels of Kenyan society (Donovan, 2012; Hughes & Lonie, 2007; Jack & Suri, 2011; Klapper & Singer, 2014; Mas & Morawczynski, 2009; Thulani et al., 2014). SmartMoney sought to emulate the reported successes of M-Pesa through the logics of social entrepreneurialism and social impact investment. For Michael Spencer, veteran Wall Street executive cum-social entrepreneur, the potential for mobile money to alleviate poverty and generate other positive impacts while simultaneously turning a profit promised a more sustainable development model for Africa.[39]

In its earliest iterations, SmartMoney aimed to provide an alternative payment solution to agribusinesses to help reduce reliance on, and mitigate, security risks of cash in their field operations. SmartMoney believed that other mobile money providers more suited to metropolitan regions were unable to address the unique needs of agriculture and other rural users due to problems of scalability, utility, and accessibility in the productive, but often remote, locations of East Africa. The service was established as a “mobile-based AgFinTech service designed from the ground up to empower agriculture companies to pay farmers using mobile phones” (Spencer, 2016). The company focused on providing a mobile money service for agribusinesses and rural producers alike, aiming to provide solutions to issues that ranged from reducing the cost of cash reliance, to addressing limited access to cash and banking services, and providing secure savings.

In Uganda, Kasese District was regarded as an ideal starting point for the young company to launch its services due to the region’s high output in a number of cash-crop industries including coffee, maize, cotton and groundnuts. The company’s intention was to secure a solid user-base in the Kasese region before rolling out the service to other areas across the country. Their view was that, in such a richly productive agricultural region, SmartMoney’s mobile money service could assist in the transformation of rural users’ financial practices within the well-established agricultural value chains in operation there.

SmartMoney 1.0 = technology

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[39] In his article for Huff Post, Spencer outlines his perspective on the potential for Americans to combine capitalism and development through social entrepreneurship in Africa. See www.huffpost.com/entry/africa-development_b_1462732

SmartMoney was originally designed to provide e-money services for the underserved rural agricultural producers (farmers) and agribusinesses that buy their produce. The founder saw an opportunity to serve rural users where there was an absence of the intensive competition between telcos evident in urban Kampala.[40] SmartMoney's utility for the agricultural sector addressed two core market needs. First, for farmers, SmartMoney was a service for protecting and enhancing income potential. Second, SmartMoney aimed to be useful for the agricultural wholesalers who consistently incur high cash management costs for their aggregation operations during harvest season.

For agricultural producers everywhere, it is not unusual to receive several months' income in a short period of time during the harvest season. The body of literature on the impact of income seasonality on the rural poor (the on-off nature of income between harvest and non-harvest months of the farming production cycle) is well established (Carney, 1999; Chambers et al., 1981; Devereux, Sabates-Wheeler, & Longhurst, 2012). For farmers producing cash crops, the harvest season is a brief period of income windfall, once or twice a year. A considerable portion of their annual cash income is derived from the sale of produce to aggregators like middlemen, large agricultural companies, co-ops or smaller boutique companies in a highly competitive market.

Receiving large cash payments leaves the unbanked farmer exposed to a number of risks including theft during the transport or storage of cash. The lure of temptation goods when cash is readily available during harvest season increases the risk of impoverishment for farmers at other times of year (Economides & Jeziorski, 2017; Morawczynski, 2011; Morawczynski & Pickens, 2009). SmartMoney claims its service can mitigate these risks and

[40] At the time SmartMoney began rolling out services in Kasese, the networks of the big mobile money players (MTN, Airtel and Uganda Telecoms) were aimed at providing stable coverage to major population centres in Uganda - the Kampala region in particular. Kasese, by contrast, was remote and mountainous, providing a significant and costly challenge for the provision of quality services.

deliver uses all the widely assumed benefits of mobile money while providing extra utility to rural, agriculturally-based users.

SmartMoney argues its services can address key *pain-points* for agribusiness buying operations in rural areas. Cash-crop aggregators (off-takers, agribusinesses, or wholesalers) incur high cash management costs during the harvest season. Aggregators typically operate during the year from regional centres or the capital. But, during the lead-up to harvest season, agribusinesses take on the complex logistics program of sending buyers, support staff and equipment to rural districts where they set up buying posts to collect the harvest. The logistics of these activities require a marked increase in labour inputs and the provision of large sums of cash on-hand—often in remote rural areas—for company delegates to facilitate the weighing, collection and purchase of produce from farmers. Companies incur high cash-management costs along with staff and armed security costs for the buying operations at the weigh scale. Moreover, there are many exposure risks of cash loss due to opportunities for graft among actors in the logistics chain (whether they are staff, middlemen brokers or lead farmers) who handle cash at various points in the process of the setup, aggregation, and transport of the harvest to central processing sites.

SmartMoney marketed their mobile money service to aggregator operations, arguing the service lowered transaction costs and risks, improved efficiency and reduced graft. Moreover, according to SmartMoney, the service mitigates farmers' debt-servitude to unscrupulous brokers by offering a traceable electronic transfer record when sending mobile money transfers throughout the production chain. With these considerations in mind, SmartMoney set out to become an integral digital financial service in the risk-prone cash handling process within the agricultural value chain, with rural Kasese as its launch point in Uganda.

The technology

The SmartMoney service platform, like many other mobile money systems, is built on the text-based Unstructured Supplementary Service Data (USSD) platform, a technology supported universally by Global System Mobile Communications (GSM) phones. Users can effectively interact and transact with their mobile money account from their phone through the secure, but familiar, platform of the short messaging service (SMS) on cellular networks. Unlike the large telcos, SmartMoney in not locked down to a proprietary mobile phone network. Rather, by using a proprietary zero-rated USSD short access code, it can operate on any network. This is a central feature of the service that allows interoperability of payments across the main telco operators. This feature enables a user's mobile money account to be taken out with SmartMoney regardless of the telco their telephone service is with. In contrast, mobile money accounts with the telcos remained in payment systems locked into their own proprietary networks.[41]

In addition, a SmartMoney account can have multiple telephone numbers linked to it, enabling a user with multiple SIM cards from various telcos to have one SmartMoney account that is interoperable between them.[42] By allowing users to make payments across platforms, SmartMoney's interoperability feature smooths network instability and black spot problems. In the event that one telco may be suffering an outage, or the user is in a black spot, a user can still access their money by switching to another telecom service. In this way, SmartMoney

[41] Since 2017, national telcos have been rolling out the capability for users to transfer mobile money across the networks (MTN, Airtel, Africell and UTL). See: www.dignited.com/40286/mobile-money-transfers-in-uganda-just-got-even-better-with-interoperability/

[42] In Africa, it is not uncommon for a user to have multiple SIM cards with different phone providers—evidence for this practice is widespread in the research literature (Aker, 2011; Chib, May, et al., 2015; Morawczynski, 2011). Users do this to mitigate against the frequent instability of telephony services where mobile phone networks suffer from frequent outages and where network coverage black spots are common. These problems are exacerbated in rural areas where network coverage is generally more limited—an acute problem in the mountainous terrain of the Kasese District.

argues its service enhances accessibility to one's mobile wallet as users are able to access their money by switching their SIM cards to any available network.

Figure 4. User on SmartMoney menu.

How it works

Use of the SmartMoney service is generally the same as other mobile money operations. Once the user is registered with an account, they can link their various SIM cards to the same SmartMoney mobile wallet and protect it with a PIN code. The user then loads credit (mobile money) onto their account via a SmartMoney service agent or any other user who is willing to conduct a cash-in or cash-out (CICO) transaction—by adding or reducing funds from their SmartMoney account. The account interface is accessed by using the USSD menus and SMS inputs that enable the user to check their balance, select a preferred language, set up frequently used numbers, and send money by SMS transfer. The SmartMoney approach does not rely on a mobile money agent to facilitate an exchange. Users are able to save on transaction costs by eliminating both the need to travel to a designated agent and the cash-out costs charged by major carriers. In this way, any SmartMoney account holder is able to conduct peer-to-peer (P2P), business-to-business (B2B), or person-to-business (P2B) transactions with any other SmartMoney account holder, a process they call *community exchange*.

Each SmartMoney account is protected by a two-factor security process. In order for someone to access an account, they must be in possession of the user's SIM card and have the account's unique four-digit PIN code. In the event of the loss of a phone, a user can purchase another phone, enable a new SIM card and, by contacting the SmartMoney customer care department, have their account re-established to link with their new phone number. In this way, SmartMoney provides the same benefits as the larger telco competitors such as ease-of use, cash-in and cash-out, and security. Users also derive the value-added features of interoperability between networks, affiliating the user's multiple phone numbers with a single SmartMoney account and, importantly, providing users with the ability to conduct mobile money transactions free-of-charge, a key feature of the company business model.

The company business model

A key point of difference for SmartMoney—besides its interoperability—is that the service is free for end-users. SmartMoney services do not charge end-users for depositing, withdrawing, or transferring within its network. SmartMoney recognises that its target market of end-users—typical of base of the pyramid (BoP) earners—are highly price-sensitive rural customers. To achieve a shift from reliance on cash, the service must be affordable to use. SmartMoney recognised that with the rural poor, there is an affordability gap in mobile money services. Where mobile money services can offer exceptional value to users who can afford them, the high charges incurred with telcos like MTN and Airtel limit the uptake of mobile money among those who might otherwise be the biggest beneficiaries of their services—rural users. Importantly, SmartMoney recognised early on that for mobile money services to benefit the poor, it must be affordable for the poorest of the population to use. The service fees charged by the telcos, combined with the taxes imposed on transactions by the

Ugandan government creates a mobile money economy that is out of reach for daily or regular use by the rural poor—the majority of the population of Kasese and of Uganda. Instead, a SmartMoney user gets the service free of charge just as when they use cash. SmartMoney considers this a 'zero-fee' pricing strategy. Because SmartMoney is free, the benefit of the service to the end-user is automatically realised—besides all the commonly held benefits that mobile money technology offers, SmartMoney is thus cheaper to use and therefore offers greater utility.

Instead of charging end-users to use the service, the company earns its income from two streams of revenue: 1) interest earned on customers' deposits of cash in the system, and 2) service charges incurred by SmartMoney's institutional customers. At the time a user deposits cash value into SmartMoney, the company exchanges the customer's cash for SmartMoney credit which is added to the users' mobile wallet. The cash is held *in trust* in an escrow account in accordance with Ugandan regulations overseen by the Bank of Uganda.[43] For SmartMoney, this escrow account was set up to yield a high rate of interest from which the company could derive revenue.[44]

The other key area of profit is the transaction fees charged to institutional partners. These are companies that partner with SmartMoney to integrate the service into their own internal payment systems. Fees for institutional partners are justified on the basis of financial savings and other benefits associated with the use of SmartMoney for commercial transactions. These include the efficiency and speed of electronic transactions, the availability of an electronic record of each exchange, the increased security of e-money, and the

[43] According to the central Bank of Uganda (BoU) regulation, any mobile money operator must have an escrow account held in partnership with an accredited Ugandan bank. All customer deposits of cash into an e-money environment must be held in trust while the user transacts in mobile money (Basemera et al., 2016).
[44] Commercial lending rates in Uganda and Africa more generally are typically very high. A recent report indicates Uganda's commercial rates in 2018 in excess of 20%. High lending rates also return a high deposit rate which SmartMoney has negotiated with its partner bank to receive on its cash deposits (see www.newvision.co.ug/new_vision/news/1481542 /lending-rates-hampering-business-growth).

minimisation of graft and cash misappropriation. SmartMoney charges institutional clients a 3% fee for all incoming and outgoing SmartMoney transactions. These streams of SmartMoney revenue—institutional partner charges and interest on the escrow account—are thence used to subsidise the end user zero-fee service.

Company Operations

SmartMoney 1.5 = technology + ecosystem

At its inception in Uganda, SmartMoney began a focused effort to acquire customers in the two largest cash-crop industries in Kasese District—cotton and coffee. The rate of adoption of the service, however, was slow. Sales initiatives directed at ginneries and coffee aggregators revealed a high level of interest but there proved persistent reluctance to adopt despite the benefits these companies acknowledged in the service. Companies reasoned that the top-down imposition of a new payment system would destabilise their relationships with farmers – undermining the trust essential for business in the cash crop economy. Many of the agribusinesses considered their market position too precarious to risk the ire of farmers forced into a payment system they did not want. In such a highly competitive environment, companies were reluctant to take on the risk of being first to adopt a new and untested payment system. Reversing the assumed power imbalance in producer-buyer relations in agribusiness, which typically assumes buyer advantage, companies were cautious of retaliation from producers who might take their business to other buyers. Consequently, these companies advised SmartMoney to convince farmer groups and middlemen brokers of the effectiveness of their product before the aggregators would be willing to adopt.

The advice to SmartMoney highlights an issue that arises in relation to the intractability of graft in the agricultural value chain, a common complaint in the African economy (Mude, 2007; Olivier de Sardan, 1999; Wedig & Wiegratz, 2018; Wiegratz, 2016). According to a number of conversations with some local company managers, the problem appears to be pervasive and is a frustrating but nearly impossible problem to resolve because it operates at many layers of the production chain. The activities around aggregating the harvest are further hampered by the problematic role of a group of key actors who are positioned between agricultural companies and the farmers themselves. Between these two stakeholders are any number of brokers more broadly referred to as middlemen, traders, or lead farmers, who are key actors embedded in the midst of the value chain and who hold powerful brokering positions between the producers and agribusinesses. While the larger aggregators see value in a payment system such as SmartMoney in their value chain, the potential of upsetting the delicate value chain relations is considered too high for the aggregator to risk. The leader of a major coffee cooperative informed me that with the level of competition among aggregators to buy high quality arabica beans so high, these aggregators are reluctant to impose new service terms on producers, including mobile money transactions, for fear of producer flight. This sentiment was echoed on a number of occasions from aggregators and lead farmers (see Chapter 5).

Interrupting the coffee value chain with mobile money technology risked a harvest-time revolt amongst middlemen and farmers who may well have sought to sell their crops elsewhere. In this way, farmers and middlemen were able to exercise their own agency in selling their produce to the best buyer—that is, buyers who did not impose disruptive technologies that hamper profitable (albeit at times questionably immoral) business dealings. This is what economists consider strategic action based on market information that access to mobile phones facilitates (Mitchell, 2011). Interestingly, while such benefits of mobile phone access are widely reported in the economic literature (Aker, 2011; Jensen, 2007; Kabbiri, Dora, Kumar, Elepu, & Gellynck, 2018), there is also evidence suggesting the assertion mobile phones help producers gain better prices is a myth (Burrell & Oreglia, 2015). Others argue that brokers are parasitic hustlers and amoral agents who exploit poor producers regardless (Berger & Przyrembel, 2019; Cernea, 1991). In my time in the field, I was unable to ascertain whether the use of mobile phones changed the relationship between buyers and sellers in the coffee industry of Kasese nor whether it improved market transparency. These remain questions open to the possibility of further research this area.

Moreover, accessing farmer groups in the District was a large undertaking for SmartMoney. While agribusinesses are easily identifiable and accessible—clustered in the urban surrounds of Kasese Central—farmer groups and their members are spread throughout the region. These groups ordinarily operate in proximity to their homes and farms which are often in remote and mountainous rural settings. Accessing these groups is time-consuming and costly to the company.

Despite this challenge, the company undertook to meet as many farmer groups as possible in order to muster support for SmartMoney services. Initial feedback from these engagements highlighted a key concern for many farmers. The utility of mobile money was reduced dramatically if there were limited cash-out locations or opportunities to purchase goods from local merchants. SmartMoney was simply not useful if farmers were not able to it in day-to-day exchange. The complexity of these relations and the role of mobile money within these precarious networks will be explored further in Chapter 5.

With these challenges in mind, the company reconsidered its service concept and began targeting other rural economic actors as well—advancing an economic ecosystem approach. As a first effort, they began an aggressive campaign to enlist interest and use of the product with the broader community and the merchant network in local communities.

Drawing on the merchant network

Merchants, SmartMoney realised, are the cornerstone of village economies. Merchants, like the middlemen brokers in agricultural value chains, are networked into their own value chains that are relatively stable and do not suffer the same level of seasonal productivity fluctuations that beset the agricultural production cycle. Moreover, rural dwellers are heavily dependent on merchants for their regular supply of consumable goods like laundry soap, rice, sugar, flour, cooking oil and other items not produced on the family farm. Realising the importance of the merchant network, SmartMoney integrated its service-offering with a number of key players in this network. Their strategy focused on developing a customer base of wholesale merchants in Kasese Central who represented the core distribution points for retail supply chains throughout the district. SmartMoney was able to secure the custom of a large wholesaler in dry goods which helped to establish their profile and embed them in the merchant network.

Recognising the centrality of merchants in local economies, the company trained merchants to act as local service centres for the broader community. These service centres enabled end-users to use merchants to perform cash-in or cash-out (CICO) transactions when required, similar to the model the major telcos use. The idea here was to empower merchants to act like agents or cash points similar to an ATM facility that SmartMoney staff could routinely re-balance. Due to the regularity of transactions that their businesses conduct, the merchants were regarded by the company as being in a strong position to maintain floats of both cash and SmartMoney on-hand—enabling them to act as stable suppliers of cash or e-money. The merchant network was also offered the service free-of-charge.

SmartMoney's targeted approach to utilising the merchant network as a core broker of economic activity in the rural regions was unique. Unlike the agent and telco relationships of other mobile money services—where the agent receives a commission for their transactions—SmartMoney argued merchants were positioned to profit indirectly from offering the service on the company's behalf—thus nullifying the need to pay them as transaction fee earning agents. Users could use a merchant's shop to make deposits or to withdraw cash, provided the merchant had the cash on-hand and was able to exchange cash for e-money. Customers, and potential customers, they reasoned, will become regular patrons of these shops, benefitting shopkeepers from an increased level of side-selling while the customer is in the store to conduct a CICO transaction.

But servicing merchants was also fraught with challenges for the company. For one, servicing required a high level of assistance to shopkeepers to maintain the flow of mobile money across the district. If a merchant found they had too much SmartMoney and not enough cash they required help to unload excess SmartMoney. MTN and other national level mobile money operators had service agents readily available in towns and trading centres, and thus the capacity to exchange surplus mobile money for cash on demand. Moreover, service agents for these national players received a portion of the transaction fee for exchanging mobile money for cash. With SmartMoney however, there we no fees, and thus no direct financial benefits for agents transacting mobile money for cash. The SmartMoney approach required staff to act as exchange agents for merchants in the network. Staff were regularly deployed to the villages to re-balance merchants' floats and ensure they had both adequate cash liquidity and a SmartMoney balance—liquidity being essential for any agent operating with mobile money products (Aron, 2015; InterMedia, October 2012).

In response to this challenge, and concern over the growing costs of sending staff to shop keepers across the regions, SmartMoney trained both users and merchants in the benefits of their concept of community exchange. The company argued that due to the zero-fee nature of transactions, merchants and users could balance each other as needed. If a user had cash, and another had SmartMoney, there is no prohibition on the pair engaging in a cash-for-SmartMoney transaction at any time. In such a way, even a neighbour can help a neighbour without involving a third party. With no charge and no commission for these kinds of transactions, costless community exchange would provide a mutual benefit for each user.

According to SmartMoney, the merits of community exchange far surpass the commissions that merchants are accustomed to as agents for the other telcos.

Merchants were also encouraged to use e-money as the primary mode to resupply their shops from Kasese Central. SmartMoney worked with wholesalers to accept and utilise the service in their distribution chains and successfully secured institutional partner accounts with some of the largest wholesalers in the District. Interviews with some of these merchants indicated that e-money, for them, was preferred to cash-on-delivery (CoD) due to its speed, simplicity and safety.

While this logic of mutual benefit was readily accepted by some of the larger wholesale/retailer merchants, particularly when transacting large sums for resupply, many end-users complained that merchants were unwilling to comply with the community exchange logic. The company received regular feedback from customers about merchants refusing to act as free CICO points unless items were also purchased from their shops. These responses were found regularly by SmartMoney users while I conducted observations with SmartMoney in the field, and during my solo research activities across the district. Many of the smaller shopkeepers were reluctant to act as conduits for cash and SmartMoney transactions unless there was a monetary benefit attached to doing so—rebuffing SmartMoney's attempts to re-embed the value-orientation of community in exchange practices. During the course of my fieldwork the problem was never adequately resolved. While SmartMoney made business arguments about customers being more apt to conduct other transactions with them, and moral arguments about community exchange, merchants refused to accept this logic and argued that they received no tangible benefits from acting as cash out points. Rather, they saw customers demanding cash out transactions as annoyances and distractions from providing service to serious customers. For many merchants, the indirect, intangible and arguably speculative nature of benefits arising from provision of SmartMoney services was at odds with the pragmatic demands of running a business. Yet continuing to supply these merchants with cash balances and training in order to grow the merchant network remained central to SmartMoney strategy.

Community engagement, mass marketing, and signing up the users

SmartMoney transitioned from their first iteration as a provider of FinTech services to the agricultural sector to an economic ecosystem approach oriented to providing services across the Kasese economy. Targeting central players in the merchant network was supplemented with focused efforts to draw in key local institutions and areas of economic activity, targeting local schools, for example, to encourage payment of school fees using e-money and local churches to enable congregation members to pay tithes the same way.

In order to extend the SmartMoney service, a more intensive commitment to community engagement was initiated, quickly becoming a major component of the SmartMoney growth strategy. For SmartMoney to become the preferred mobile money system it had to be as ubiquitous as cash in the community. A dynamic expression of SmartMoney was the high-intensity marketing program it undertook between 2014 and 2016. During this period, the company embarked on an intensive marketing campaign to raise awareness of its services to increase its user subscription base. The focus was on outreach, marketing and education, and subscription rates increased dramatically. This program involved registration activities with groups of staff going to villages with loudspeakers, banners, tents and, importantly, free marketing materials. In addition, SmartMoney hosted community soccer games, dance competitions and other publicity events to generate user interest and registrations. Heavy use of radio advertisements and on-air Q&A interviews with company staff promoted the product and educated users on how to use the service. The program was successful and registration rates grew exponentially over the 18 months of heavy marketing. By mid-2016, the company boasted over 160,000 registered users.

'Know Your Customer' and personal identification

The rate of registration was impressive—sometimes exceeding 200 new registrations a day. The registration process, however, was not without problems. Management of customers' data, for example, was hampered by the inadequacy of customer identification protocols, poor literacy among users and staff, and inaccurate or inconsistent input of paper records (created by field staff) into the company database. Uganda, like many countries, has regulatory requirements for telco and financial institutions to meet know-your-customer (KYC) requirements. The capture of a person's identification records and a photographic identification are minimum registration requirements—details typically available from a national identification (ID) card or a valid passport. But KYC requirements present a challenge in the rural context where many lack valid photographic ID.[45] Customers without adequate ID are an ongoing problem for SmartMoney in two key ways. First, customer data received during the rapid growth phase was unreliable due to errors and inconsistencies in details such as name spelling and residency location. Second, errors in customer information exposed the company and users to a higher risk of fraudulent transactions and criminal activity—risk amplified by the prevalence of untraceable and unregistered SIM cards and fake identification.

Criminal activity and a fraud economy associated with poor customer data protocols is a widely acknowledged problem across the whole FinTech industry in Uganda and is

[45] Locals rarely carry official documentation with them on their person and, additionally, the adequacy of personal details can rarely be assumed as correct due to poor historical record keeping. This is a major problem in many countries in the Global South and is cause for a major push for legal, digital identity programmes promoted by multilateral organisations like the UN. See: www.id2020.org.

explored further in Chapter 7.[46] The mass-marketing program came at a high financial cost to the company as well, given the deployment of so many staff and the logistics of moving teams and equipment around the district. The company built up a fleet of motorcycles and small trucks, circulating staff teams around the district multiple times each week at the height of its marketing operations. Moreover, the high number of user registrations did not translate into similarly high numbers of consistently active users. Despite rural residents' willingness to sign up for the service, active users were limited in number with the active user base peaking at 10-12% of registered users in mid-2016 before a downward trend in use.[47] In response to this dilemma, the company decided further targeted training was needed to encourage active use.

The ongoing challenge of trust

The initial success of its registration programs and confidence in the utility of its product led SmartMoney to assume registered users would commence using the service of their own volition. But user activity was minimal and SmartMoney's own user transaction data showed that many registrants only ever conducted one transaction—the test transaction at time of registration.

The reasons for inactivity were many. Potential users told me they had no spare money to load onto the platform. Others that they had lost their SIM card or did not even own a phone. Some pointed out that few of the merchants they used accepted SmartMoney. Many would-be users and some registered users were suspicious of the company's revenue model

[46] In March 2018, the Uganda Communications Commission (UCC) directed all telecommunications companies to register with them or face being blocked. This was in response a growing problem of criminal activity exploiting poorly controlled registration of SIM cards and a lack of adequate identity documentation of users with registered services. See: www.nilepost.co.ug/2018/03/09/ucc-sets-tough-restrictions-on-registration-of-sim-cards/

[47] There is no agreed metric in the telecommunications industry for defining the status of "Active use." However, GSMA notes in the 2018 State of the Industry Report on Mobile Money the following: "An active mobile money account is a mobile money account which has been used to conduct at least one transaction during a certain period of time (usually 90 days or 30 days)." See page 7 of www.gsma.com/r/wp-content/uploads/2019/02/State-of-the-Industry-Report-on-Mobile-Money-2018-Appendix.pdf

too, claiming they could not understand how the company earned money as they charged no fees. The service, they suggested, must be an elaborate scam. Lack of trust in this new service was amplified by the very strategy SmartMoney used to grow its user base among the rural poor—offering that service free of charge. Locals argued that MTN and Airtel mobile money have fees and charges to use the service, so "How is it with SmartMoney" they asked with incredulity, "can they make money if it is free?" Even if SmartMoney were not a scam, how could they entrust their cash and savings to a service with a business model they did not understand?

Development of trust was slow, with users and would-be users alike indicating a cautious attitude toward SmartMoney. Many stated they were waiting for the company to demonstrate longevity in the district before they would be willing to trial or engage the service. Financial fraud has a long history in Kasese and would-be users were reluctant to adopt early (see also Chapter 7). When pressed, respondents would not clarify what minimum period they thought was reasonable before accepting SmartMoney. One school principal responded, "I'll know when I'm ready."

SmartMoney staff were frustrated by this resistance to using the service, claiming it reflected a cultural trait of pervasive suspicious stubbornness among their own Bakonzo tribe. The Bakonzo, they claimed, are conservative in their actions and in their willingness to adopt innovations. Neither, according to SmartMoney staff, do Bakonzo share information with each other. Common responses to queries about financial practices went something like this: "We Bakonzo don't talk to our friends about what we are doing when it comes to money—here it's everyone for themselves!" Staff claim this trait is particularly unique to the Bakonzo. One SmartMoney staff member explained the dilemma as follows:

> If I tell a friend about a financial service or a business investment that looks good, they might decide to try it for themselves. But if they lose money—like because of

> fraud, they will blame me. But they might also be lucky and earn more money than me, and I will become jealous of them. Because our friendship will be ruined we don't talk about such things with each other.

Whether reluctance to share financial information with others is particularly pronounced among Bakonzo is a moot point. More critical for SmartMoney was the apparent lack of word-of-mouth marketing among satisfied users they might have hoped would promote trust and adoption. Caution and trust will be explored further in Chapter 7.

SmartMoney 2.0 = technology + ecosystem + education

By 2016, the company endeavoured to shift its focus toward maturation of its user base, emphasising the need to provide more training to users and introducing savings and financial literacy as a central platform of its service offering. Hopefully, with better understanding of the service, users would also be able to trust the company (Batista & Vicente, 2013). To achieve this, SmartMoney became active in raising awareness about the importance of savings, rolling out the education platform they were already using in churches and schools more broadly to foster recognition of their services. Traditionally, churches have been strong promoters of re-embedding the morals and obligations of parishioners toward financial stewardship in the household, actively promoting a savings culture, the practice of tithing, and financial responsibility in families. By marketing itself as user-friendly to savings groups, SmartMoney received permission from many church and mosque leaders to promote its services to congregations during weekly gatherings, including after Sunday services or evening prayers. Churches and mosques in general support the training and empowerment of members to improve their financial position—a role encouraged by the state (Jones, 2008, 2013). In 2010, for example, President Museveni exhorted the national churches to be active in encouraging poverty alleviation, reducing dependency on foreign aid, and improving the financial stability of churches through income and savings programs delivered by the same.[48] Many of the churches either operate or provide tacit approval to micro-finance and other poverty alleviation schemes, as do schools. SmartMoney also targeted teachers in Kasese to use their mobile phones as a way to promote savings culture through teacher savings clubs. Bursars and head teachers were enlisted to encourage families to use their service as a means to pay school fees.

At this point, the company entered its own maturation phase as it had evolved from an agriculture-based payment service into a digital financial and training service. A capital funding injection won from the MasterCard Foundation enabled SmartMoney to scale up its mobile money services in pursuit of the Fund's aim to alleviate poverty through access to and training in financial services.[49] The grant would supply large injections of cash into SmartMoney, phased over two years to assist their ambitious growth program. With the funding secured, SmartMoney embarked on a major expansion program. The following excerpt from an unpublished funding proposal summarises SmartMoney's evolution:

> In 2016, with the financial support of the MasterCard Foundation Fund for Rural Prosperity…. SmartMoney Uganda Ltd (SMUG), introduced SmartMoney version 2.0. SmartMoney 2.0 integrates the company's existing business pillars into a fully holistic DFS ecosystem serving the majority of economic actors in rural communities. SmartMoney 2.0 expands support for institutional customers beyond agriculture companies to include other key trust networks such as educational institutions, churches, NGOs and banks. In addition, SmartMoney 2.0 leverages these institutional partnerships to deliver a large-scale training program to drive the understanding and trust necessary for large-scale adoption of digital finance (Spencer, 2016).

[48] See www.newvision.co.ug/news/1296322/church-uganda-fight-poverty
[49] See the MasterCard Foundation Blog post: www.mastercardfdn.org/betting-on-african-innovation-and-scale-to-transform-lives/

The organisation's maturation phases are indicative of the ongoing responsiveness to customer use and the resistance in the community to adoption and regular use of SmartMoney. Financial literacy training and "understanding" the use of their services became central to the company's mission. Moreover, SmartMoney's references to trust in the economy of rural communities is apparent. SmartMoney recognised that institutional *trust networks* of other key economic players such as schools and churches were the new focus as "trust [was] necessary for large-scale adoption of digital finance." This third iteration of the service (SmartMoney 2.0) broadly describes the company's state of play as of the time of writing this thesis.

The Logics of Savings and Financial Literacy

With their unique service, SmartMoney began targeting savings groups throughout the district for training in digital financial literacy. Their rationale for doing so reflected the capabilities literature, which asserts that without requisite training or capacity, appreciable gains from technological change are unlikely (Heeks, 2010; Kleine, 2010)—an insight largely overlooked in the FinTech industry. SmartMoney had encountered a gap between assumptions about technology adoption producing empowerment and users' actual behaviours and experiences—a gap that needed to be addressed. SmartMoney realised that many rural users have never engaged in simple saving practices. Spencer noted:

> [I]f a person SAVES money over a period of time, sacrificing in the present for a future gain, they can actually accumulate capital for investment. Our experience is that they if they save, they are more likely to invest the accumulated capital than use it for consumption because they value it more than "easy money" they receive as a loan. Money saved was first EARNED through hard work and then accumulated through many SACRIFICES. Indeed, it seems that for most people at the base of the pyramid, savings is the ONLY viable road to economic empowerment. And this is precisely why promoting savings is our mission at SmartMoney (M. Spencer, personal

communication, February 16, 2019).

What SmartMoney references is the whole body of evidence of the importance of savings as a wealth strategy (Bank of Uganda, 2013; Jack & Suri, 2011; Kendall, 2010; Prahalad, 2005). The concept finds its deep roots in the proverb attributed to both to Adam Smith and Benjamin Franklin "a penny saved is a penny earned" (Parry & Bloch, 1989; Smith, 1776). SmartMoney's approach to re-embedding (Giddens, 2012) the moral principles of fiscal responsibility and debt obligation is evident here, as is the calculative value of money (Simmel, 2004). These are values and norms of fiduciary responsibility that SmartMoney training works on user behaviour. SmartMoney noticed that before users could be convinced to more fully draw on the benefits of the SmartMoney service they needed to grasp and implement the practice and discipline of savings.

The challenge of low literacy and even lower financial literacy is common throughout East Africa, and a concern expressed by government and Central Banks in the region and became a platform for SmartMoney to address savings practices among its customers.[50] Savings training in Uganda will often include an old Uganda proverb "one by one makes a bundle," and both SmartMoney and BoU draw on this principle, emphasising the act, discipline and moral imperative of savings to develop financial independence and literacy (Bank of Uganda, 2013). This message reflects a pragmatic realisation that citizens' lack of financial literacy and education together form the primary obstacle to financial inclusion.

The company also held that training in the practice of savings must precede rural users' engagement with the micro-finance loan products that saturate rural markets if loans were to be used productively. Users savings groups and NGOs regularly requested that

[50] See the work of Alliance for Financial Inclusion's (AFI's) work through the Global Policy Forum and the Maya Declaration 2011and the G20 Toronto Summit Declaration 2010.

SmartMoney should start offering loans through their service. But, as CEO Spencer pointed out:

> Because these loans are not resulting in increased income to the borrowers, they often drive borrowers into unsustainable debt which actually INCREASES their poverty. My years of experience with SmartMoney confirms this (M. Spencer, personal communication, February 16, 2019, emphasis in original).

SmartMoney found that the relative ease of access to micro-finance loans, without training in how to utilise loans for appropriate purposes, was contributing to widespread debt in rural Kasese. Links between poor financial literacy, micro-finance, debt burdens and deepening poverty (see Chapter 2) have been noted in the moral economy of micro-finance where there is emerging concern over how much credit can be offered ethically to individuals with limited training in the basics of financial literacy (Duvendack & Mader, 2019; Gardeva & Rhyne, July 2011; Schwittay, 2014). Reckless lending actions among frontline MFI agents persist despite these concerns (Bateman, 2019), while all micro-finance borrowers are impacted by the imposition of higher interest rates to diversify and spread risk (Duvendack and Mader, 2019). Emerging practices, noted by Schwittay (2014) and Gardeva and Rhyne (2011), to assist the poor through financial literacy programmes are yet to be fully realised in rural Kasese where debt entrapment remained high.

SmartMoney Literacy Programme

In order to develop a competent base of SmartMoney users, the company needed to focus on the development of a training program that was easily understood by individuals with varying financial, digital and linguistic abilities. Its experience reflected findings from financial inclusion research concerning the widening disparity in digital literacy and skills among users. Digital literacy is often couched in terms of a growing *digital divide*. Eszter Hargittai (2003, p. 837) explains:

> The prevailing approach to the “digital divide” focuses on a binary classification of

> Internet use, merely distinguishing those who are connected from those who do not have access to the medium. . . without expanding the issue to questions of skill, which can only be achieved by also paying serious attention to training.

While users in the Global South, and SmartMoney customers in Kasese, have access to mobile money platforms, they do not necessarily have the skills and knowledge to employ the medium to full effect.[51] SmartMoney customers, lacking capability to utilise the full suite of services offered by the platform, miss out on opportunities to enhance their income, save money and, in some cases, avoid exposure to various kinds of fraud. Negative impacts arising from mobile money use are discussed in later chapters (especially Chapter 5 and Chapter 8).

With funding assistance from MercyCorp, in 2016, the company developed a picture booklet for staff to use as training and marketing material. But this kind of intensive training in a range of literacies was fraught with problems, especially considering the expense to the company. Other researchers too have found literacy training a costly exercise in Uganda (Jamison, Karlan, & Zinman, 2014). SmartMoney staff themselves voiced concerns, not only that the cost of delivering training was high, but about their observation that participants were often unwilling to share this training and information with others in their community. Similarly, Sayinzoga et al. (2016) in the context of Rwanda, found an apparent lack of willingness among participants to share knowledge with peers, suggesting the cultural norm may extend beyond the Bakonzo. Nonetheless, SmartMoney found that in order to expand their services in a rural setting, the training of shopkeepers, savings groups, farmers and other end-users was essential—developing an informed clientele capable of using and promoting the service. One such strategy was the development of a simple image booklet showing a number of the social and financial benefits of using the service (for example Figure 5. below).

[51] In examples where there have been attempts to roll out training in financial literacy, the results of savings benefits to trained participants are varied, demonstrating only marginal increase in overall savings and wealth, or no appreciable increase in income (Datta & Mullainathan, 2014; Niwaha et al., 2016; Sayinzoga et al., 2016)

The simple images depict users imagining their dreams and using the SmartMoney services to realise them. These challenges around the issues of digital financial literacy in the context of rural uptake of mobile money are also explored in Chapter 8.

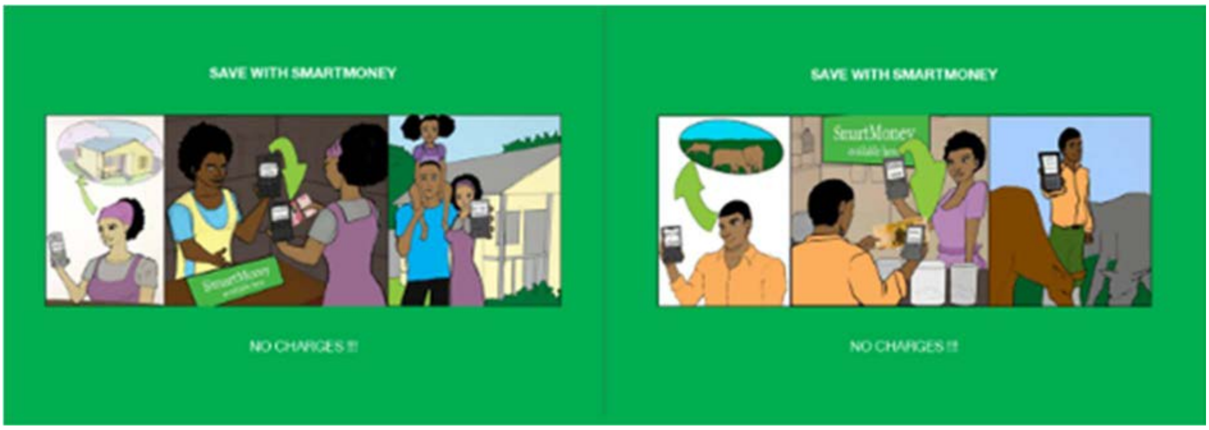

Figure 5. Save with SmartMoney (SmartMoney Booklet). The images shown here are structured around simple language phrases, and cartoon storytelling of users imagining a dream of owning a home (far left image) or of having a herd of cattle (centre right image).

Developing savings groups

Savings groups became a priority for SmartMoney training operations. In savings groups, community members pool their money in a centrally managed savings box from which short-term loans are made to members for entrepreneurial endeavours or, sometimes, for personal expenses. Group savings programs including tontine saving and/or lending groups[52] and micro-finance institutions (MFIs) such as savings and credit co-operatives (SACCOs) and village savings and loans associations (VSLAs) have been important to development programmes in Uganda and much of East Africa for several decades.[53] In west Uganda, SACCOs are the predominant form of savings group (Grayson, Dowdle, Beck, & Khatami, 2013; Meier zu Selhausen, 2015; Mpiira et al., 2014).

[52] A tontine is a formal or informal rotating group lending or savings system popularised by aid agencies in various forms across Africa (Bouman, 1995).

[53] Both of these small-scale and community managed savings groups operate in a similar fashion to the more widely known ROSCAs (rotated savings and credit associations) that are frequently employed in neighbouring states like Kenya (Anderson & Baland, 2002; Dupas & Robinson, 2013; Morawczynski, 2011).

Among savings groups is considerable disparity in relation to adherence to what are otherwise poorly enforced regulatory requirements and consumer protections. While SACCOs are supposed to be registered with the national Registrar of Cooperatives, VSLAs are not, and neither kinds of groups are insured entities. These loose rules of operation and regulation, and the limited resources in the active regulation of these MFI societies mean that some groups experience poor management and even fraudulent activity by members (Duggan, 2016; Schmidt, 2017; World Bank, 2009). Others, of course, do not and SACCOs and other informal savings groups are common in Kasese. The savings groups appear to be most prevalent where access to formal banking institutions is limited and amongst people linked through other institutions including schools, agricultural cooperatives, churches and aid organisations operating in the district (Meier zu Selhausen, 2015).

Typically, these groups rely on a chairperson and a treasurer to manage the savings lockbox or bank account of the group. The chairperson and the treasurer hold two separate locks and keys and the duty to store the lockbox, or maintain a bank account, where withdrawals require dual signatories. Perceived benefits of these kinds of groups include the development of member's financial assets—especially where there is no access to formal financial institutions—as well as the development of financial literacy skills (Hendricks & Chidiac, 2011; Rubangura Teta, 2016; Sayinzoga et al., 2016).

When SmartMoney ventured into this territory, it was in affiliation with a number of local SACCOs who saw the potential for mobile money in their savings programs. SmartMoney also worked with USAID in 2015 to undertake a feasibility study of the use of their mobile money service in savings groups to whom USAID was already providing seed capital and training. Shortly thereafter, SmartMoney withdrew its involvement with the USAID project. The company uncovered a pervasive practice of fraudulent transactions against members among some SACCO leaders. This was typically at the hands of the chairman or treasurer who would find ways to pilfer funds from the lockbox. In one email exchange, the SmartMoney CEO explains:

> In theory the two signatory or two lock solution should protect the pooled money from theft. But too often theft still occurs and the members lose trust in the SACCO or the VSLA. This happens surprisingly often. To the point that most SACCOs either close or lose the trust of their members or both. It is for this reason that we stopped working with SACCOs because we found that we were suffering reputational damage through our association with them (M. Spencer, personal communication, March 15, 2018).

The association of fraudulent activity with MFIs in Uganda is a pressing problem in the industry (Duggan, 2016; Schmidt, 2017) and news reports frequently highlight problems of graft and fraud in savings groups that have left its members robbed of their savings, or worse still, deep in debt.54 SmartMoney sought to protect itself from reputational damage, and the impact of weakening trust if corruption and fraud were associated with their brand.

From savings groups to savings clubs

Rather than working with established SACCOs, and risking reputational damage, SmartMoney decided to rework the concept of a savings group instead. Bypassing the traditional lockbox model of a SACCO, they worked with a number of savings groups to explore the potential for using a SmartMoney account to replace the lockbox. A SIM card, linked to a SmartMoney account is a less attractive object of theft and, moreover, with the two-factor PIN code requirement for SIM cards, security protocols are more effective. SmartMoney also advocated for groups to change their savings model, shifting from a traditional savings group to a savings club. Instead of the micro-finance model, the savings club could take advantage of the benefit of each individual having a SIM card and a

[54] Frequent news reports of frau in savings groups and SACCOs are available in the media. For example, see www.ekyooto.co.uk/2020/02/12/police-sacco-manager-arrested-over-fraud/, also www.monitor.co.ug/uganda/news/national/elders-sacco-loses-shs400-million-in-irregular-transactions-1858768, and www.newvision.co.ug/news/1432681/savers-lose-sh2bn-rakai-sembabule-sacco-fraud

SmartMoney account. SmartMoney advanced the notion of each individual's responsibility for their own personal development rather than relying on the group.

The company's savings club model obviated the pooling of group finances, putting the savings onus and management into the hands of each club member, fostering a savings culture and individualised savings empowerment. Individuals were encouraged to save what they could within the friendly peer-support structure of other like-minded savers. If the savings club chose to do so, they could pool their resources and issue a micro-loan in accordance with the normal processes of group-led microcredit. These strategies were developed to meet challenges and deficits in financial and digital financial literacy, and to overcome some of the issues that beset established SACCOs—namely, fraud associated with cashbox pilfering and poorly enforced MFI regulations.

As Chapter 8 will discuss further, and in contrast with assumptions about its inherent security, mobile money is not immune from fraud—yet another challenge facing the fledgling mobile money provider and the users of mobile money services. As the SmartMoney response to fraud practices in SACCOs demonstrates, there is a clear relation between fraud, the absence of standardisation (by state enforced regulation), and the individualisation process of technocapitalism (in the case of mobile money) and of modernity and money's impact on the individual more generally (discussed in Chapter 2). This relationship suggests an affiliate disembedding-disenchantment-re-embedding process drawn from Beck (1992) and Giddens (2012). The transfer of onus of savings and security practices is thus transitioned, due to disenchantment, from community members and their leaders, to individuals—demonstrating a transfer from trust in others, to trust in the money service that is individualised and self-controlled. While more traditional community values are reflected in the culture of the savings club (including community solidarity and commitments to mutual well-being) (Schwittay, 2011; Servet, 2010), control of one's savings is re-ascribed (thus re-embedded) in this context to the individual saver (traditional ways of community care are considered further in Chapter 7). The emphasis on individual responsibility is bolstered by SmartMoney's efforts to raise awareness of fraud and develop digital financial literacy.

SmartMoney Fraud

Whilst corruption, in general, is the focus of much research in the African social, political, and economic sectors (Githongo, 2006; Olivier de Sardan, 1999; Smith, 2010; Uslaner, 2008), the prevalence of crime, and in particular fraud, in Africa's technology sector is often overlooked. More frequently, the literature on mobile money emphasises the technology's capacity to reduce or prevent fraud—thus ensuring users are protected from, rather than exposed to, criminal behaviour. SmartMoney too, promoted its capacity to reduce fraud exposure to both end-users and the companies it supports. In reality, however, SmartMoney experienced a number of fraud-related challenges including, in particular, internal fraud. Over the course of my fieldwork, I came across numerous tales of people having been cheated out of their money on other mobile money platforms. SmartMoney's experience, especially fraud perpetrated by its own staff, highlights the broader prevalence of fraudulent activity across mobile money platforms and the community in general. There are a number of factors associated with this that warrant attention, including the practicality of attempts to develop tighter internal controls by mobile money providers in context of the lack of robust personal identity information and the enduring problem of the poverty among users and staff.

For SmartMoney, instances of internal fraud caused the company to enact tighter controls of account handling because of overlooked internal security protocols and the ability to *fake* electronic transaction notices. Moreover, it forced redesign of its receipt notifications to provide more information to account holders. In one email, the CEO tells a story of an incident whereby a staff member's wife found an opportunity to scam a prominent businessperson in town:

> As you know, SmartMoney sends SMS messages to customers when they receive e-money on their account. [Name withheld]'s wife figured out that she could save an SMS receipt that she received from SmartMoney and forward it to another customer faking the appearance that the victim received e-money when they did not. The victim was too busy to check their balance and assumed the SMS was real and gave cash to [name withheld]'s wife thinking they were servicing her for a real withdrawal. The victim in this case was [name withheld] and she was very angry. To calm her down I had to refund her the cash, but we advised her that this was a one-time learning experience and instructed her to always check her balance before giving cash. In addition, to avoid this happening on a larger scale, we modified the structure of the SMS receipt to include the receiver's current balance…. We have not seen another incident of this fraud since we made the change (M. Spencer, personal communication, March 15, 2018).

In this unfortunate situation, the staff member's marriage ended soon after, effecting a dissolution of a relationship in a society that typically frowns on divorce (Watson, Bantebya, & Muhanguzi, 2018). In my interviews with the husband and with other staff, the breakdown of the marriage was at least partly attributed to the public humiliation he faced due to his former wife's fraudulent and immoral behaviour; I was told that such impropriety is legitimate grounds for divorce in Uganda especially among the higher social class of the family involved. The husband was nephew to a prominent Anglican clergy member in Kasese and the family's social status was likely a consideration in the separation. When I caught up with him three years after the incident, he was no longer working for SmartMoney and had already remarried. The social impact of these kinds of behaviours among gender relations is further explored in Chapter 7.

Another incident involved a few staff members in an elaborate scheme to steal money from a customer's account by impersonation. A staff member had managed to have the account activation team enable a second SIM card to be affiliated with the customer's account and had knowledge of the user's PIN number—likely given to him at the time of the customer's activation of their service. Once the staff member-controlled SIM card was allocated to the customer's account, the perpetrator subsequently organised a mobile money transfer to an accomplice who cashed-out the funds. The automated SMS transfer notification was sent to the customer's phone, and the customer promptly notified the company. Due to the electronic traceability of the transactions (a capacity of the system the staff member was not aware of) the offending staff member was exposed, terminated, and sent to jail, while the accomplice evaded police by leaving town and has not since returned. The staff member's mother did not know where he was and neither did his wife. While suspicions among the SmartMoney staff remained about his whereabouts, some months later the police found him at his mother's home and sent him to jail.

These situations draw attention to the problem of uneven digital and financial literacy that includes users' practices of ensuring account balances are known, PINs are kept private, and awareness of the various kinds of fraud tactics are known and users can mitigate such risks. In response, SmartMoney introduced further measures to ensure new users are trained to ensure their account balances are checked prior-to and post-transaction to complement tighter internal controls. Financial literacy training was modified to not only include the use of technology, savings discipline and community exchange practices, but also fraud awareness, the importance of PIN security and balance checking.

Use of mobile money to perpetuate fraud was evident in the SmartMoney case despite claims that mobile money reduces exposure to risks—offering a better than cash technology (Klapper & Singer, 2014; Lashitew et al., 2019; Munyegera & Matsumoto, 2016). While the risk of fraud on the SmartMoney platform, relative to risks in the cash economy, cannot be calculated from this case study, it is possible to conclude that the nature of risk and the competences people required to mitigate that risk qualitatively changed. The topic of fraud in the mobile money industry, in this rural context, will be explored further in Chapter 8.

Figure 6. SmartMoney is… (SmartMoney Booklet). The images depict scenes showing the dangers of robbery in the street (right) or theft of cash stored in a cashbox (left). The other scene (centre right) shows users lined up at a crowed teller window in a bank.

Conclusion

SmartMoney’s experience and challenges highlight what mobile money is capable of, providing financial services of a savings and payment system designed to meet the needs of rural, agriculturally based Ugandans. Mobile money is not only capable of provisioning long-distance remittances, and serving as a place to store cash, like the large telcos provide it can also be a useful technology in the development of broader financial inclusion objectives, tailored for unique situations of rural development. These capabilities include provisioning of low-cost services to the lowest income users and hard-to-reach rural locations, increasing the security of users’ income through a mobile wallet, promoting savings and, importantly, building DFS literacy through training and support. However, SmartMoney’s experience exposes what many advocates also overlook, assuming the benefits of the technology are self-evident and determining without attending to a closer examination of the service in practice.

SmartMoney attempted to overcome a series of challenges in implementing and growing a low-to-no-cost mobile money service that was both sustainably profitable and provided for financial inclusion in rural development. The company continued to wrestle with understanding the diversity of its users and to attract widespread appeal. This study highlighted and this thesis will continue to emphasise, rural users have complex and divergent needs and dispositions that led to, among other outcomes, a problem of service affordability.

SmartMoney's experiences revealed complex attitudes toward digital finance amongst rural users and the challenge of varying levels of digital and financial literacy. Technological and financial know-how, capability and literacy are central themes of this thesis emerging as ongoing dynamics on socio-economic relations in each of the succeeding chapters. The company's reliance on merchants highlights the critical role value chain brokers play as gatekeepers of social and economic relations and provides insight into the power dynamics of agricultural value chains and exchange relations. The critical role of the *middleman-broker* is considered in Chapter 5, which more closely examines assumptions of mobile money's utility in agricultural value chains as it is commonly assumed to offer value to agricultural producers. Such utility is considered in Chapters 5 and 6. Importantly, SmartMoney's experience highlights not only the disposition of outside Western influences on the moral obligation to enlist technologies for poverty alleviation, but also the impact of the technology on relations of social and economic action, trust and even implications of fraud. A mobile money economy highlights challenges of cultural attitudes toward exchange and the important social impact of trust and fraud in gender, household, and community relations (which will be explored in Chapters 7 and 8). The chapters to follow aim to bring many of these challenges into sharper focus, examining the larger sociological factors that become evident in the interplay between mobile money and the dynamic and complex rural setting of Kasese.

Chapter 5 Mobile Money in Agricultural Value Chains in Rural Kasese

> The strategic application of ICT to the agricultural industry, the largest economic sector in most African countries, offers the best opportunity for economic growth and poverty alleviation on the continent (Yonazi et al., 2012, p. 40).

Agriculture is essential to the livelihoods of many of the world's poor. Reflecting experiences of the industrial and green revolutions, moreover, theories of modernisation emphasise the importance of technological innovation to improvement of these livelihoods—where technological determinism underpins a conceptualisation of modernisation for the developing world that loosely follows the West's own stages of development (Rostow, 1959). From such a perspective, expectations of major productivity improvement are associated almost automatically with adoption of newly available technologies such as the mobile phone. Possibilities for mobile money services to deliver meaningful social and economic change for rural agricultural production are consequently regarded with great optimism (Aron, 2015; Aron, 2018; Kirui et al., 2013). Certainly, these assumptions were held by mobile money services, including SmartMoney, operating in rural Kasese.

Much of the mobile money research in agriculture assumes the adoption of the technology will make a significant contribution to the productivity and efficiency of agricultural value chains. Benefits are believed to include the safe-keeping of savings held in mobile wallets, reduced transaction costs, knowledge sharing and greater financial inclusion for both women and men (Demirgüç-Kunt, Klapper, Singer, & Van Oudheusden, 2015; Evans, 2018; Lashitew et al., 2019; Munyegera & Matsumoto, 2016). Few studies, however, have empirically assessed the use and impact of mobile money in Sub-Saharan agricultural value chains (Aker, 2011; Furuholt & Matotay, 2011; Jack & Suri, 2011; Jensen, 2007; Kabbiri et al., 2018; Suri & Jack, 2016), and as highlighted in previous chapters, there is valid critique of these studies that is acknowledged (Bateman et al., 2019; Duvendack & Mader, 2019) (See Chapters 1 and 2). This chapter addresses this gap by examining where and how mobile money has been put to use in two key agricultural value chains for Kasese, coffee and cotton, and barriers to more consistent use (Objectives 1 and 3). Mobile money use has certainly been evident in the agricultural value chains of cotton and coffee in west Uganda, but the degree to which mobile money was actually used in Kasese, by whom, and for what purposes, warrants exploration and clarification.

Mobile Money in the Agricultural and Remittance Economies

As previously mentioned, research on mobile money used in agricultural value chains remains limited in sub-Saharan Africa. Extant research is dominated by technology adoption studies and evaluations of the financial benefits of adoption for rural households. Notable examples include Aker and Wilson's (2013) research into mobile money's potential to promote savings in rural Ghana, which found users were willing, with sensitisation, to try the service and to use it for savings. Subsequent improvements in users' incomes were found to derive from the receipt of remittances rather than through improvements in the efficiency and profitability of agriculture or other in situ livelihood activities. Similarly, research in Kenya found that mobile money contributes to rural household income through remittances that subsequently lead to flow-on benefits including added cash liquidity, increased investment in agricultural inputs, income smoothing, and buffeting risk exposure (Jack & Suri, 2011; Kikulwe et al., 2014; Kirui et al., 2013). Research in Uganda finds mobile money provides benefits to rural households through remittances, income smoothing, and income from non-farm sources (Sekabira & Qaim, 2017a, 2017c).

In sum, these research findings highlight changes in rural household incomes driven by the facilitation of remittance income, savings and non-farm income sources but not, importantly, through direct and positively impacts on agricultural productivity, trade or incomes. Indirect impacts (for example, the use of remittances to finance agricultural inputs) should not be discounted. However, there is a significant body of economics research that critiques the assumption remittances support economic development. Indeed, some researchers contend that remittances impair economic growth and foster dependence[55] (Gapen, Chami, Montiel, Barajas, & Fullenkamp, 2009; Sahay et al., 2015; Stark & Lucas, 1988). Others note that the remittance-based research underappreciates the social dynamics of long-established reciprocity relations. The technology may enable a smoother (formal) flow of money transfer, but such transfers are based on social patterns of behaviour that include invisible, long-term (informal) reciprocal expectations (Graeber, 2014; Ojong, 2016). Mobile money may thus function as a facilitating technology to speed the transfer of remittances, reduce their cost and encourage the storage of value. Whether the technology provides similar benefits to those involved in agricultural value chains, leading to improved production or poverty alleviation, however, remains a largely unanswered question.

Saliently, Sekabira and Qaim (2017b) claim mobile money does more than improve rural household welfare by remittances and savings alone. Their research in Uganda showed that mobile money has enabled some farmers to obtain higher prices for their coffee crops in signature markets, and that the service also enabled better household access to other off-farm incomes (see also Chapter 6). Looking beyond remittance measures, this research unveiled a shift in market dynamics in Uganda enabled by mobile money. In this particular case, coffee producers were using mobile phones to access higher value, signature markets and selling hulled green beans that had been stored long-term until sale prices were favourable (Akiyama, Baffes, Larson, & Varangis, 2001; Fafchamps & Hill, 2008; Meier zu Selhausen, 2016). For Sekabira and Qaim (2017b), the non-perishable nature of the produce combined with its

[55] Remittances facilitated by mobile money are a rallying point for enthusiasts of the service, but concerns about the negative impacts of remittances are often overlooked. The World Economic Forum, by contrast, has pointed out a number of significant reservations about remittances and their capacity to drive long-term economic growth (see www.weforum.org/agenda/2015/02/do-remittances-drive-economic-growth/).

storage capacity, combined with the proximity to high-level commodity traders in urban Kampala, is likely to have influenced the outcomes observed. Improvements in income associated with mobile money do not arise in isolation from other factors.

Agriculture in Rural Kasese

Despite apparent gains in the first decade of the 21st Century, Uganda has experienced an increase in poverty in recent years with major impacts on the rural population. According to the Ugandan Bureau of Statistics (UBOS):

> Among households headed by subsistence farmers, the percentage of poor increased from 20.3% to 38.2% between 2012/13 and 2016/17 surveys. Moreover, poverty increased from 23% to 36% among those reporting crop farming/subsistence farming as their main source of income (UBOS, 2018).

Agriculturally dependent families in Kasese have been adversely affected by this overall decline in income. As in much of the world, subsistence farming provides a precarious livelihood for households with limited land, wealth, education/or access to agricultural technologies. Since the Kasese population is predominantly rural, agricultural production accounts for a high percentage of household income. That said, it is important to note that many individuals and families derive income from other sources including wage employment and off-farm, small business activities (this is explored further in Chapter 6). However, wage employment in rural areas is poorly remunerated and unstable. For example, the median main-job monthly wages for males and females in west Uganda in 2017 was just 110,000USh ($30 USD or the equivalent of $1.50 USD per working day) (UBOS, 2018). In order to survive, other forms of income-seeking are actively sought out by rural households to multi-stream household income. Despite a productive agricultural region, yielding a high aggregate volume of cash crops and other farm produce, low-income conditions from both wage employment and farming persist in Kasese.

Cotton Farming in Kasese

The southern half of Kasese district straddles the long rolling foothills of the Rwenzori Mountains which, for half the year, feature expansive fields under cotton production. In this region, cotton is cultivated in a seven-month annual production season, typically planted between July and August and harvested between December and February (Gayi, Lubbadde, Echaku, Ejiet, & Ocen, 2017). For the rest of the year the fields lay fallow or are put to other crop production until the cotton planting season returns.

My first visits to Kasese were during the off season and I missed the opportunity to experience the extent of cotton cultivation. I wondered what so many of these fallow fields were used for and why I frequently saw makeshift shacks in fields that were so obviously uninhabited. However, on my return visit to Kasese in January and February of 2018, the season was in full operation and farmers and cotton activity were evident everywhere.

Participants told me it was uncommon for farmers to live in their cotton fields for extended durations of time. Instead, they undertake short-term stays in makeshift structures during high intensity labour periods such as harvest. Cotton production is a labour-intensive activity with planting, spacing, spraying and picking all done by hand. If the farmer can afford it, machinery is used mainly for ploughing and transport. Once the harvest is over, most of the workers return to villages in the mountains or elsewhere.

On the outskirts of a significant trading centre near the large town of Bwera I found the office of Baluku Theodore, a local who lived and made a living adjacent to the large cotton production region at the southern foothills of the range. Theo, as he is nicknamed, was a field-based extension officer working for Western Uganda Cotton Company (WUCC), one of the largest ginners in the district. As an extension officer, Theo’s role was to train farmers, act as an advisor to stakeholders, and provide overall operations management on behalf of WUCC for the many farmers in this area of the district. The plaster walls of the office were decorated with old posters of various sensitisation programs from the past. One wall, near

Theo's desk, featured a large hand drawn list: *Names of Lead Farmers*, set up with four quadrants, each zone named according to sub-districts and the over 70 lead farmers with whom he worked. As Theo explained, each lead farmer has multiple farmers who work under their oversight.

Figure 7. The cotton shack. Inside a temporary dwelling and storehouse made of poles, tarp and woven mats, on a cotton field in Katojo. A farmer and labourers will store their pickings here, sleeping the nights on the bed of cotton until enough for a truckload is gathered for transport to the ginnery. After the season, this shelter will be abandoned until the start of the next growing season.

I had first met Theo a few weeks earlier when I was following a SmartMoney team during their visits to the area. SmartMoney had organised a meeting at his office with a few lead farmers to discuss how they could improve training and access for growers who were yet to use the service. One of the key concerns among farmers was the issue of trust. That meeting was consequently about generating confidence in SmartMoney among lead farmers so they could communicate this to the other farmers they worked with. After the SmartMoney meeting, Theo agreed to a follow-up meeting to explore in more depth my own questions about mobile money use in the area and especially its use in the economic and social dynamics of the cotton industry there.

The business of cotton

Theo started off responding to my general queries on the cotton economy in the district and some basics about who the local farmers were and how they operated. We discussed farming input averages and labour dynamics. Apart from the ploughing—if it is done by tractor, and the picking—one farmer can manage one acre on their own. If a husband and wife work together, Theo explained, “they can have maybe two or three [acres].” During the peak labour requirements at harvest, farmers can draw on family members and hire neighbours and other labourers to help pick the crop.

In response to my many questions, Theo described the price to rent an acre, the growing season, the cost of inputs, the kinds of debts a farmer incurs, and the expected earnings of a farmer in an average, good and bad year. He explained post-harvest operations including transportation of the crop to the ginnery and who handled money and debt payments of debts, as well as the activities of farmers during the seven-month cotton growing season (from July to January each year). He explained his own involvement in the industry: “Our work, as field officers, we train farmers how to do it, like weeding, spacing and spraying.” Our conversation was largely taken up with a series of facts and figures culled from his deep knowledge of the industry:

> A plant can produce more than 40 balls if it has rained. Ten plants cultivate a kilo. A person can pick 20 to 25 kg a day. Here we pay 1,700USh a kg, then at the ginnery, we pay 1800 kg—if they have paid for the transport. A good worker can pick 30,000USh worth per day, but his wage will be ten percent of that. The farmer pays the labourer by the kg. If at 1,700, then he pays the worker 170, if at 2,000, then at 200. A farmer, if he can pick 200 kgs at once, then [he will] go home and come back

after a week and pick another 200 kgs.

Acknowledging these are off-the-cuff estimates provided from Theo, the following table shows that cotton can produce around a 175% return on investment for a farmer.[56]

Table 2. Earnings and expenses for small scale cotton farming

Expense Item	Quantity	Up Front Cost (USh)	Debt incurred (USh)	Total (USh)
Rent	1 acre	200,000		200,000
Ploughing	1 acre	40,000	40,000	80,000
Seed	6 kg		48,000	48,000
Pesticide/Fertilizer	7 units		21,000	21,000
Labour (picking)	10% *		56,000**	56,000
			Total Expenses	405,000
Income Item	Quantity	Income p/kg (USh)		
Harvest	800(kg)	1400		1,120,000
			Less Expenses	405,000
			Total Profit	715,000

* 10% is based on the scale price of each kg of cotton
** Labour costs are estimates based on labourers picking a 50% portion of the overall harvest and if a farmer can pick 20kgs a day, five days a week, for 4 weeks over the 2-month harvest period.

On account of my interest in the industry and my surprise at the rates of return on investment, Theo tried to sell me on investing in cotton too. He offered to oversee all operations if I supplied the investment capital. He said I should see at least a 150% return. The sales pitch is part of a side hustle he operated: “I have some clients who live in Kampala who I do this with every year” he explained. If I provided the upfront investment capital, he would organise everything else: the rent, ploughing, spraying spacing, picking, and selling. He would return the profits at the end of the season once costs were factored. Because he already had a few clients, he argued he could achieve an economy of scale (reduced costs for example in spraying, ploughing and transport), by reducing input costs and improving profit outcomes for all investors and for himself, as the agent. I jokingly asked if this would be done using mobile money. “Yes, okay. You can send me mobile money and I can do it!” he replied with a laugh.

[56] ROI here is calculated as: Income-Expense/Expense *100.

Theo's entrepreneurial savvy and solicitation might be seen as illustrative of the opportunistic approach to creative income earning in the industry, the agile middleman character, and the culture of the Bakonzo tribe. As I was informed by many people during my fieldwork, the Bakonzo from Bwera are renowned in the region for astute business acumen and efforts at multi-streaming income as a livelihood strategy. When I spoke with Josephine that evening to get her opinion of Theo's offer, she laughed. Josephine affirmed what others, like the mayor, had told me in one of my earliest interviews: "The Bwera Bakonzo, they are into making deals, they like business—making money!" Josephine too noted this "Yes, that's what they do, it is common!"

I queried Josephine whether he would be a trustworthy investment partner—no doubt, I remained somewhat uninterested in such a scheme for myself, not only because of my effort to remain as an ethical observer but because of my scepticism of return value. But it raised for me the questions of trust, trustworthiness, and money. Josephine responded affirmatively, but with a caveat. For these kinds of arrangements, she advised, it is best to release funds only as each production stage—from rent to planting, spraying and picking—is completed. In other words, if I were to invest, in my absence I would need to send her or a SmartMoney friend to check regularly on Theo and the work before funds should be released. This would reduce risk by managing trust through another mediator with whom a stronger relationships of trust was already established. Then, barring unforeseen circumstances, like a drought, the investment would likely yield a favourable return. In a later interview with Joshua, Jacob's brother, a former Cotton farmer and extension officer for the cotton industry, I asked about Theo's offer. He admitted that he knew Theo and acknowledged he had a good reputation and was a skilled agriculturalist. But can I trust him and would this be a profitable venture I asked?:

That would be a good idea. But, I can assure you…. It would be better to have

> someone check on him regularly to make sure your investment was being managed well! Then you will make a good profit.

Joshua had affirmed Josephine's advice which to me settled the matter, at least in-so-far as protocols followed in Kasese to ensure trust.

The opportunity Theo offered me resonated with Giddens'(2012) concept of disembedding and subsequent re-embedding of social systems, stretched across spans of time and space (see Chapter 2). Giddens (2012, p. 21) argues that disembedding is "the 'lifting out' of social relations from local contexts of interaction and their restructuring across indefinite spans of time-space." In Giddens view there are two disembedding mechanisms: symbolic tokens (trusted money) and expert systems (professional expertise). In this case mobile money facilitates the disembedded agent of the remote investor; reciprocally the expert farmer represents the re-embedding a of social relation undergirded by trust. What Theo was seeking from me was faith in his ability to generate a return for mutual benefit. Josephine and Joshua emphasised a systematic approach to investing that also consists of *facework* with Theo to establish trustworthiness. If Theo knew I was being shrewd and monitoring him, Josephine suggested, he would deal honestly—highlighting the process of re-embedding where social relations are again "pinned down" (Giddens, 2012, p. 79). Such socially acknowledged economic behaviour was an accepted norm in Kasese—those with deep ties to an industry seeking out ways to maximise income opportunities. Despite Theo's economic incentives to side hustle, his expertise and competence evince trust to generate a return according to Joshua and Josephine. On Giddens notion of the disembedding mechanisms of modernity and of trust, Steven Loyal (2003, p. 116) notes:

> Expert systems permit the removal of social relations from their immediate context and their transferral across space and time. Fundamental to both forms of disembedding mechanism, as well as to the reflexivity definitive of modernity, is the concept of trust. Trust refers to a form of 'faith', or, more precisely, it derives

> from faith in the fact that certain outcomes will arise, or in the reliability of a person or a system.

The implication of advice from my informants was that with careful release of funds, a shrewd financier could invest with confidence—propriety relations and trustworthiness mitigating potential risks. Theo's business solicitations and Josephine's savvy advice reflect a moral economy that values expertise, shrewdness, profitability, and "making deals" that are inherently reasonable within the value codes and expectations of the Bwera Bakonzo (Olivier de Sardan, 1999; Wiegratz & Cesnulyte, 2016).

I asked Theo about the use of mobile money in the industry. I reminded him that at the last visit (the week prior), during the group meeting with SmartMoney, he said only about 50% of the farmers had a phone or a SIM card. He had also noted though that those without a phone could rely on a neighbour with one if there was a need to make a call or to receive some remittance money from a family member. His earlier response had indicated the operation of the sharing behaviour amongst neighbours—if one lacked a phone, another was obliged to help out. Theo recalled it, 'Yes, yes, it's true" he said.

However, with mobile money, according to Theo and his colleagues in the room, many did not use the service anyway, or at least not for agricultural activities. Those who did use mobile money, they thought, were those farmers who also operated other businesses:

> [They are] saving and putting money, especially ones who have business. If [you] have money, you put it on your phone, go to Kampala, and you withdraw money, then you can buy things. (So how many of these farmers go to Kampala?) There are many. Many! Even they have shops here…many farmers have shops here, houses here [in the trading centre].

But, he cautioned, while some use mobile money for more general purposes, the cotton industry does not:

> For Western Uganda [WUCC], no. Let me say, every ginnery around, we don't pay

> mobile money. We have our agents, the farmers, those who lead the farmers, those who buy the farmers their land. Even those with money, big money, then they come to buy cotton from farmers, they pay a farmer cash, at hand. And these farmers, has workers, who picked the cotton? He will also pay them from there, with cash.

I responded, somewhat incredulously: “Really, nobody uses it?” His colleague interjected emphatically: “There is no e-money in the cotton business!” I was surprised by this matter-of-fact statement. Considering the known practice of receiving cash at the scale, there would be many farmers heading home with large sums of cash in their pockets. I wanted to understand whether these farmers were concerned about robbery (since both the literature and SmartMoney assert they are, in fact, very concerned). Theo responded:

> To me, I see, we have never had a farmer who has been killed here. We have never had a farmer who has been robbed of money, so they don’t mind, they don’t care, because, they have never seen somebody who has been killed. (What about other areas of Kasese?) With cotton, we are a bit safe, but with vanilla, with coffee, people are being killed. But with cotton, we have not yet seen. (Why?) Because money for cotton is not big like coffee or vanilla. A thief cannot kill you for five million. No, they want 30 millions, 20, 50! But if you are killing for two M [million], that is nothing! Because a thief cannot move alone. It starts from two to four people. They connect you, then they rob you like 20 million or 10 in their share. Now they rob you and get two M that is very small to kill you.

Those who work in other industries may have these problems of theft, robbery, and murder even, Theo alleged, but in cotton: all is peaceful. “In cotton, we are all friends here” he said.

I queried him on this point as I understood land used for cotton farming around Bwera was contested between the Basongora cattle herders and the Bakonzo agriculturalists. Theo was adamant though about trust in the industry, such that there is a moral expectation of “strong trust and abstention of opportunism” (Granovetter, 1985). He told me that while he was Bakonzo he was also Mutoro on his mother's side. In the filial industry of cotton, Theo claimed, farmers of all local ethnicities operate in a trustworthy environment and moral economy of reciprocity. No doubt, the example Theo provided seemed a bit extreme, especially considering the extent to which thieves might consort to murder if the calculated pay-off was high enough. But understanding the context of violence among guerrilla groups/armed bandits in the not-so-distant past, and the proximity in this region to the Congo border, his explanation seemed plausible. Ugandan news articles corroborated Theo's explanation, at least of violence in the vanilla trade.[57] It had been in this area near Kisinga, a few months earlier, where three men were shot dead for vanilla. The murders were only a half a dozen kilometres from Theo's office, in the foothills of the mountains. During my research, I heard of an increasing problem in the vanilla trade where farmers, in the lower lands of the Rwenzori's, were finding thieves harvesting their vanilla beans to sell on the black market, or robbing farmers of their cash after being paid. Stories were also circulating of farmers protecting their crop by sleeping in their fields or hiring armed guards.

I had the good fortune to discuss with Josephine's neighbour the emerging situation. He was a journalist working for the Catholic radio station in town and had just run a major news item on the developing problem. The high price of vanilla, at 2-300,000USh per kilo ($50-80 USD), as well as its lightweight and portability, made it an attractive commodity in the black-market economy. The vanilla price had rocketed in the previous year due to a devastating storm in Madagascar that decimated the world's major supply there. Smaller vanilla producers like Uganda subsequently saw huge demand and high prices. Combined with the high portability of vanilla, violence associated with theft and robbery soon followed. The impacts of the global agricultural supply chain, while seemingly far from west Uganda, were also very near, having very apparent social as well as economic impacts. Vanilla was

[57] See www.allafrica.com/stories/201711230147.html.

stolen from farms and smuggled out to Kampala or across the nearby border into Congo and sold into international commodity markets. Cotton though is bulky and hard to hide, and the profits are not as lucrative as vanilla and coffee.

I asked my journalist friend about these activities in the predominantly Bakonzo held lands around Kasese. The Bakonzo don't kill each other he claimed, speculating that the violent crimes were likely perpetrated by outsiders such as Congolese bandits, or perhaps by local Basongora with whom the Bakonzo are regularly in ethnic conflict and land disputes (Reuss & Titeca, 2017). The explanations raised by locals suggest there is a moral economy of violence as a result of poverty and or tribal conflict that is emerging here. This raises the question: If cotton involved the "big money" like coffee or vanilla would this current environment of filial ethnic relations hold?

Lead farmers of cotton in Kasese

I met Edmond sitting on a stool outside a shop in the small trading centre in Muhokya. My assistant sought him out, greeting him in *Lhukonzo*, and proceeded to query whether he used mobile money. He agreed to an interview, and we followed him to the rear of the building to find a quiet spot away from the traffic noise of the main road. Edmond described himself humbly as a "peasant farmer." I soon found out that he actually worked as a lead farmer for Western Uganda Cotton (WUCC), the same company that employed Theo. From where we were in Muhokya, the WUCC ginnery was less than ten kilometres down the highway. Edmond grew more than just cotton, but his role as a cotton lead farmer involved acting as an agent, buying cotton from local farmers, storing it in a small warehouse he rented, and organising delivery to the ginnery.

In contrast with Theo and his colleagues' emphatic denial of mobile money use in the cotton industry, Edmond himself received mobile money from the ginnery. Of note, Edmond's role as a lead farmer was different to that of extension officers like Theo and it became evident Theo and his colleagues had not taken account of the particular role lead farmers play in the supply chain. Of particular importance here was the intermediary role of lead farmers advancing payments to farmers during the harvest season—in effect, short-term loans financed by the ginneries then repaid in small increments via the lead farmers.

Edmond preferred cash when conducting his buying operations from farmers but he was advanced the money for these operations by WUCC using mobile money. When Edmond received mobile money from WUCC, he cashed it with one of the local MTN agents in Muhokya, and used the cash to pay his farmers. Edmond explained it was more cost effective to convert all the money he got from WUCC into cash in one transaction—minimising the MTN mobile money charges of cash-out to a single event. He then used cash as his primary means of payment. Besides, "some of them don't have mobile phones," he explained, so the smaller farmers, he clarified, do not want mobile money. Edmond valued his relations with his farmers. To keep these farmers happy and maintain social and ongoing trust relations, Edmond took on the role of converting the mobile money to cash to pay for their cotton. Edmond's situation was consistent with SmartMoney's experience (see Chapter 4) of the affordability gap faced by the rural poor—low-income earners being dissuaded from using mobile money by transaction fees and the cost of acquiring and maintaining a mobile phone (explored further in Chapter 6).

With the ginnery so close, I asked Edmond why he used mobile money and not cash like the farmers he bought from. It seemed to me that he could easily go the ginnery and get cash from the administration office, avoiding mobile money charges altogether. He agreed. It would be cheaper for him to hire a *boda-boda* to go to the ginnery than to pay the cash-out fees for using mobile money. This is the way they used to do it, but, in the last few years, this had become the course of transactions with mobile money. "It's for safety reasons. One person, after receiving money from there [the WUCC], some people killed him" Edmond explained. In response to the threat, WUCC began requiring lead farmers accept payment in mobile money which Edmond complied with despite his preference for cash. By then cashing out the mobile payments Edmond's exposure to the risk of theft was probably little changed, raising a question over whether the safety measures introduced by WUCC simply shifted the duty of care for lead farmer safety onto the lead farmers themselves (an expression of ersatz morality in Fevre's terms (2003)). Such an action does little to address real concerns for lead farmers if they became the primary holders of cash risk. By adopting mobile money payments, WUCC was merely passing the risk of cash transactions further down the chain. Where once all participants in the value chain absorbed a level of risk with each step of the cash flow, now the buyer's risk was reduced while producer's risk remained unchanged. Thus, an apparently moral action may function instead as a substitute, ersatz morality based on a false premise of good will. Unfortunately, I was unable to follow this up directly with WUCC to understand their own logic for the decision.

Another lead farmer for WUCC made a similar case. Enoch's warehouse was up the highway in Mubuku on the north side of Kasese Central: a twenty-minute drive (depending on traffic and road conditions) from Edmond. As a lead farmer, Enoch received mobile money from WUCC and cashed it. WUCC advanced him up to five million USh ($1362 USD), he told me. If he wanted more, he went to the ginnery to get cash. I discovered later that according to the MTN mobile money service, there was a universal cap of five million shillings per transaction. This draws attention to the upper limit of exchange enabled by mobile money. Up to now, my interviewees had suggested mobile money was not useful for small value payments but this discovery made me aware that transactions had a limit with large quantities too. Low-value transaction are not worth the fees, and high value transactions are not possible. These lower and upper transaction limits suggest that the service is targeted at offering utility to middle-tier financial transactions, thus limiting the utility of mobile money to a smaller overall portion of the Ugandan economy.

Enoch had a stable of about 60 farmers with whom he worked. He indicated that there are only three farmers nearby who accepted some mobile money. But, he cautioned, this is usually a mixed payment; they want some as cash, and some as mobile money. He explained that for these few farmers, from time-to-time, they asked him at the time of a sale to direct some of their money elsewhere. For example, if school fees were due, the farmer might ask him to make an e-money payment directly to the school bursar. The year's school term commences in January, at the height of cotton harvest; much of the cash that families derive from cotton sales goes directly to the bursar at this time of the year. Rather than the farmer incurring multiple mobile money transfer charges, Enoch sent MTN mobile money directly to the school's bursar on the farmer's behalf. I asked Enoch whether this a problem for him, but he was indifferent. If he could help his farmers save money, why not? Hence, Enoch, like his colleague Edmond, while fulfilling a broker role in the value chain, was positioned as one who profited from, and yet also assisted farmers, in a moral order of socio-economic relations. Such an acknowledgement runs counter to the pervasive myth of the coyote middleman—the stereotype of the broker who cheats honest poor workers out of fair prices for their goods (Clayton, 2011). Rather, it affirms research that argues middlemen-brokers fulfil important mediating roles in the value chain as advocates and powerbrokers on behalf of producers (Abebe, Bijman, & Royer, 2016).

Evidence remained inconclusive about the way mobile money was being used where WUCC was involved. A conversation with a WUCC manager at the Kasese office was ambiguous. He was elusive about mobile money use. But, upon reflection, the meeting was in concert with a visit with a SmartMoney sales representative. The manager may have moderated the information he was willing to provide, considering he was using

SmartMoney's main competitor MTN mobile money for payments and may not have wanted to offend the SmartMoney staff member. Despite this, a few key findings warrant highlighting. The preference for cash use remained high for many farmers according to the interviewees. The main exceptions were those farmers and operators who dealt directly with the ginnery. These operators were higher-level actors in the value chain—intermediaries such as lead farmers—who may utilise mobile money as a mode of payment when the need arises, or as required by the ginnery. Amongst most operators, there remained concern about transaction costs associated with mobile money—each transfer increasing the cost of doing business as benefits such as increased efficiency and speed failed to offset transaction fees. Certainly, the evidence here seems to align with Simmel and Weber's notion of a calculative disposition when determining the preferred medium of exchange (see Chapter 2). These farmers were embedded in a moral economy of reciprocity norms, helping each other reduce the unnecessary burdens of transaction fees where possible, while maintaining their preference for cash.

Coffee Farming in Kasese

Coffee is the leading export commodity in Uganda, accounting for 31% of national exports (Organisation for Economic Co-operation and Development, 2017). Uganda is also the second largest producer on the continent, after Ethiopia. While much of the coffee Uganda produces is Robusta, higher value Arabica comprises about 25% of exports. Kasese produces some of the best Arabica coffee in the country due to the ideal growing conditions provided by the high elevation and cool slopes of the Rwenzori Mountains. Nearly a third of district households are engaged in coffee production (UBOS, 2017) and coffee is the highest value crop in Kasese.

Coffee can provide comparatively good incomes for farmers provided they have access to good land on the mountain slopes. Typically, for the Rwenzori region, many farms consist of small to medium sized plots of two acres of mixed subsistence farming (Renno, Twinamasiko, & Mugisa, 2012). Many household plots feature coffee trees among a host of other plants like bananas, cassava, mangos, and more, cultivated for household consumption and local sale. Unlike cotton—another important cash crop in Kasese—coffee is typically grown at, or near, the family home. Being mountain dwellers, the Bakonzo have access to their crop at their place of residence, permitting regular and easier maintenance of their land and increased security for their crop.

Martha was a coffee grower for the large Bakonzo Joint Coffee Cooperative. I met her one day while accompanying SmartMoney staff and Mercy Corps delegates from Kampala on a field visit to a few coffee cooperative groups. Mercy Corps had been funding a project with SmartMoney as part of a joint programme incorporating Agri-Fin and Feed the Future Uganda Youth Leadership for Agriculture Activity—two joint USAID and Mercy Corps projects. They considered SmartMoney a good candidate for cooperation as they were a front-line operator in delivering financial services to the last mile in the coffee value chain. Martha was among a group of coffee farmers and Cooperative members using Smart Money, eight of whom had agreed to meet the delegation at the local warehouse. Mercy Corps was particularly keen to meet with young, and especially female, users of the service as part of their field-research to develop a project update report and KPI validation of their donor funding to SmartMoney.

With her infant daughter, whom she was still breastfeeding, Martha had walked down along a steep dirt track from the mountain spur above the trading centre, where she and her husband farmed coffee for Bukonzo Joint. The interview was slow and stilted, the Mercy Corps interviewer asking vague and effusively explanatory questions which were frustrating for the SmartMoney staff translating into *Lhukonzo*. Martha's responses, by contrast, were definitive yet brief. Yes, she used SmartMoney. Yes, the Cooperative paid her with

SmartMoney. SmartMoney was good for saving money safely. Having money on her phone made it easier to resist temptation items like *mandazi.* [58] After Mercy Corps finished with their questions, I took the opportunity to query Martha as well. She advised that sometimes she split her income, directing the lead farmer to pay a portion in cash and the other in mobile money, "using MTN" she said. Surprised, I asked Martha why she used MTN. She replied that she could not use SmartMoney to pay school fees because the school bursar did not accept it. Martha asked the lead farmer to direct her school fees to the bursar using MTN mobile money but, for everything else, she needed cash. At this remark, the SmartMoney delegates began to chatter discreetly amongst themselves and take notes. They queried Martha about what school she sent her child to and the bursar's name. "That school is supposed to be accepting SmartMoney," they muttered to me. I queried Martha further on her preference for cash which, she explained, was more useful than mobile money in the mountains. The Mercy Corps delegation, satisfied with their own interview data, took no notice.

While the contradictions between Martha's statements about SmartMoney were of little interest to the Mercy Corp delegates they were of considerable concern to SmartMoney staff who had been working with the school bursar for over a year and had secured agreement, from him, to accept SmartMoney. Masika, the SmartMoney sales manager, was determined to investigate further and spent the drive back to town making phone calls to track down the bursar's contact number. It seemed to me, however, that interactions between the bursar and SmartMoney staff, and between Martha and Mercy Corp delegates, may both have been examples of people providing the answers they think questioners want you to hear. In fact, I had been warned that Ugandans, wishing to be polite, may hold it more morally acceptable to bend the truth than to offend.

[58] *Mandazi* is a deep-fried sweet bread similar to a doughnut.

Many farmers in the region have multiple income streams. The more prosperous ones will have a business or a job in one of the local trading centres as well as their farm on the family plot where their home is. The fortunate ones began growing coffee a few generations ago. The stable, regular income provided by coffee production gave them capacity to invest in better houses and in educating their children. Apart from the disruptive influence of the Allied Democratic Forces (ADF) insurgency during the late 1990s (Titeca & Vlassenroot, 2012), the region's coffee production has supported a steady livelihood for farmers in the south of the district for many years. As my SmartMoney friends informed me, some of the local coffee farmers were not as poor as they seemed, having sizable cash holdings "under the mattress"—or, more likely, deposited at a bank in Kasese—despite the lack of visible evidence of wealth to an outsider. Some of these households have had the money to educate their sons and daughters for professional positions in Uganda's emerging middle class as teachers, accountants, health workers, or engineers. But conspicuous consumption is not culturally favoured among the modest, conservative, and business savvy Bakonzo.

Gaspar, I suspect, was one of these sons, a coffee farmer and maths teacher who lived across the Nyamugasani River valley, opposite Martha's spur. On the day I met him, he was walking down the road in new gumboots, *panga* (machete) in hand, returning home for lunch after slashing in one of his fields. It was school holidays, and he was using the semester break to work his farm. Gaspar used mobile money only for sending large amounts to family. When he was away teaching in Mbarara (a city about 150 km away) he would send mobile money remittances to his wife for his family's upkeep. But in farming it was different. Cash was preferred in the coffee industry:

> If you want mobile money, you go to the agent yourself. Because of the charges, it is free to deposit, but if you receive mobile money from the coffee company, there are charges. It is better, to get cash, and then make deposit—is free! You don't get the charge of transfer.

Gaspar explained the simple logic behind the preference for cash, noting that the cost to send multiple small payments for things like bric-a-brac, or to pay workers, was too high. Such expenses were cheaper with cash rather than incurring all the charges that come with mobile money. Just as Martha had acknowledged, rural dwellers usually make many small transactions for which cash is most useful but also, importantly, less wasteful in regard to incurring needless service charges (this will also be explored further in Chapter 6).

James was a lab technician at the Bakonzo Joint Coffee Cooperative laboratory and also a coffee farmer. He had been using mobile money only four months and was finding it very useful. In fact, James wondered why he had not started using mobile money sooner. According to James "some are using it, but many have phones but don't use their mobile money. Most people here have phones, but only a few use mobile money." But James also affirmed that cash was preferred. For receiving his wages and from selling coffee, he still used cash. "If I want mobile money, I go to the agent and change it there," James noted, adding that companies did not use it for wages, and the coffee industry did not use it for buying and selling. As to my questions about who in the community used the service the most, like Theo, he agreed—businesspeople used it to stock their shops.

> Like some, some big businesspeople, have to pay money on mobile, as they go to purchase some of their stocks [from Kasese Central], in their shops, they will just send money over mobile. They are the ones who are using.

James, like so many other users, was careful to add that the cost of transactions was increasing too much, especially with the new tax. In 2017, MTN raised their mobile money transaction fees. In July 2018, the government imposed a new tax—and it seemed to James that the cost just kept going up. For rural users living at the edge of the cash economy, the needless incursion of service charges for financial transactions was considered a moral concern, a wasteful expense, as much as a concern about their own economic vulnerability.

Wages and income in the rural areas are limited. Even when the coffee industry can avail large injections of income into households, the sporadic and seasonal nature of income for agricultural producers means feast and then famine. Cash is highly valued and unnecessary expenses are closely monitored in households. If any kind of fee can be avoided, users will modify their behaviour and make alternative arrangements in order to minimise losses (this is explored further in Chapter 6). Increased charges and taxes imposed on mobile money were a source of widespread discontent (see Chapter 1) and users like Theo and James, consequently, thought that only the big businesses—those able to absorb fees—used the service extensively.

Big businessmen and mobile money

Given that smaller operators and farmers pointed to ginneries and big business operators as the main users of mobile money, I went to speak with one of the large coffee buying companies in the region. AgriEvolve was a new company, only half a dozen years old. It started as a coffee aggregator and washing station that supplied a larger coffee trading company in Kampala. It later became independently owned and operated by the English expatriate founder who still worked exclusively in supplying the former parent company. The head office, with its receiving, scaling and processing facilities was one of the most up-to-date in the region and they were regarded by many locals as a *big business*—the type that the coffee farmers considered the real mobile money users.

The management of AgriEvolve had mixed feelings about mobile money in the industry. Justin, the company owner, said mobile money use in their industry was rare. He had noticed a small yet increasing uptake of the service over the last few years while they were growing their operation in the area. However, with the new Excise Duty Tax in July 2018 mobile money use stopped abruptly. The impact of the tax and the attendant frustration of many local users had a devastating effect on people's trust in the government and the service. Even with the subsequent reversal of the charges, he added, the tax did considerable damage to local users' willingness to use mobile money. His response suggested a dissatisfaction with the government for their encroachment into the financial affairs of users and a belief that users had responded to what they perceived as unfair practices and structural imbalances by disengagement with mobile money services. It remained to be seen whether people will use mobile money again, he admitted, or how long it would take.

In addition to the tax were several other problems with mobile money, according to Justin, that limited its use in the coffee industry. At harvest, he explained, the weighing and payment process is chaotic. The weigh scales are sites of frenetic activity from dawn to dusk as staff grade, weigh and store beans and negotiate with and pay scores if not hundreds of customers. There was no invoicing, receipting or post-transaction payment processing at this level of trade in the coffee industry. Using a small, handheld mobile device to make payments, Justin explained, was not particularly useful in an environment of high activity when attention to detail and accuracy in large transaction payment processing was essential:

> Imagine a buying agent on a busy day making two hundred transactions, and instead of using cash, he was using his mobile phone to make each payment. With MTN this would be a huge and expensive task. With SmartMoney, it might be free, if farmers even wanted it. But to have to enter that much data, accurately, on a busy day, into the keypad on a mobile phone, where even the network is possibly poor, is unrealistic.

The risks of miskeying a phone number or an amount when making payments over the phone was considered too high for many users—particularly given what many believed was poor customer service and limited assistance to reverse charges when mistakes were made. Delays in transaction processing, especially when mobile networks experience problems, would only complicate matters further. With a preference for cash embedded in the community, and a requirement for immediate payment to farmers selling their coffee, the buyers I spoke with avoided the hassle of conducting transfers on mobile phones. If farmers wanted mobile money, they would take their cash from buyers and then proceed to the mobile money agent to load their phones with e-money.

The stability of network access in rural areas was also identified as a major impediment to utilisation of mobile money services—as SmartMoney found in their forays throughout the district. At AgriEvolve's main buildings in the valley, mobile phone access was usually fine, but the network had been known to drop out for hours, even days, at a time. Further, when phone service was interrupted in Kasese Central for periods, these outer regional areas were the last to get the service returned to operation. During one of my trips, for example, a power outage in Kasese District lasted two days before electricity and the mobile phone network returned to normal. But in Kisinga, the same outage lasted another two days Justin complained. Worse still, in the higher reaches of the mountains, above the trading centres, phone service was consistently intermittent. There were also many black spots in the upper reaches of the Rwenzoris—the centre of the coffee growing region—where no mobile phone coverage was available. Visiting villages, if you wanted to find a mobile network, you may be advised to go up the road to another a location where you might get network access. The locals knew where to find the signal, but so often you had to walk, or drive to a specific vantage point to get within range of a tower. Lack of access to the network for many farmers in the district meant mobile money offered them little utility.

AgriEvolve relied heavily on agents to source for them the red cherries of the Arabica coffee for which the industry so eagerly competes.[59] While local farmers in the valley did business directly with AgriEvolve at the main plant, the red cherries that command a better price were best sourced from the higher, cooler elevations. "You can't even get trucks up that high" Justin said, explaining "there's no roads in some areas, let alone phone coverage. But

[59] The industry was in transition with companies like AgriEvolve purchasing red cherries if they are fresh and paying a higher price for them. At their washing station, they were able to monitor the ripening of the red beans themselves in order to produce higher quality coffee likely to attract premium prices.

those are the best beans, in the high elevations, and we want them." The only way to get hold of those beans was to rely on agents who already knew the farmers and could organise transport in the area by hand, cart or *boda-boda*. It was these local brokers who undertook the logistics and cost of transport to get those high value beans harvested and sent down the mountain to the nearest AgriEvolve receiving station. "So many of those farmers and middlemen in the higher elevations don't even have phones," Justin said. Buyer activity in those high elevations relied solely on cash and face-to-face communication as a matter of necessity.

In the trading centres, however, it was different. Mobile money during harvest was more regularly used suggested Justin. At harvest, farmers flush with cash would load some of their income on their mobile wallets for safe keeping but also to make payments for things like school fees. Many schools were accustomed to the ebb and follow of household income in the region. They knew families that grew coffee would be earning their crop money during seasonal cycles and anticipate the larger payments toward school fee debts during both the main season and the secondary fly crop.

Figure 8. A bucket of freshly picked coffee beans with a mix of red ripe cherry and green beans included. These beans will go to the Bakonzo Joint Cooperative who only accept the dry, hulled beans.

But mobile money even suffered the problem of liquidity management in these rural trading centres where they were underserved by banks. This problem became particularly acute during peak coffee harvest times. Agents needed to have to well-resourced cash floats during harvest if mobile money were to become the primary means of payment—a major problem often overlooked by mobile money industry pundits(InterMedia, October 2012; Lake, 2013; Lal & Sachdev, 2015). Providing an analogy, Justin explained that in a busy trading week at the peak of the harvest, the company can pay out 300 million shillings a day ($81,500 USD). Other local, large coffee aggregator competitors like Bukonzo Joint and Great Lakes Coffee would be paying out cash for the harvest in similar volumes too. If all these buyers were paying only in mobile money, and farmers were looking to cash-out, the local MTN agents would run out of cash quickly. These smaller agents do not have sufficient inventory of e-money and cash in order to accommodate such a large trading volume. If buyers were to pay *en masse* in mobile money, and farmers went to the local agents to cash-out, local agents would soon run out of cash. It would force these small agents to travel to the nearest banks in order to resupply their cash holdings in order to rebalance their operating float—an unworkable business expense and impost on time for many. With the nearest bank in Bwera (30 km away), and the banks in Kasese Central being 50 km away, the demand for cash from so many local, small mobile money agents would be too high. That kind of cash, held in such large volumes, with small mobile money agents, would likely bring security risks.

According to Justin, despite mobile money's relative absence in the coffee value chain, the demand at peak periods to convert farmers cash to mobile money was already a problem in the Kisinga area. As it stood, the MTN agents in the area struggled to keep their floats balanced on a day-to-day basis during the harvest season because so much cash money came in such a short period of time. Justin noted that even the banks in Kasese Central, too, struggled to keep up with the cash demand during the busiest weeks of the harvest. At least for him, Justin acknowledged, as a large business banking client, AgriEvolve had leverage with the big banks in Kasese and Bwera to meet their needs for cash liquidity—leverage the small mobile money agents did not have. Instead, it was easier, and indeed safer for the large buying companies (those on secured premises with safe money storage facilities) to dispense cash, allowing the smaller players within the value chain to distribute smaller values of cash and mobile money according to each agent's capacity to maintain an appropriate float.

This was a problem SmartMoney had experienced when it began to focus on merchants as the keystone community cash service providers. SmartMoney tried to overcome this problem by sending its own agents out to the merchants, at company expense, rather than expect merchants to come to Kasese Central to re-balance. The problem has been acknowledged in a number of grey literature publications as well (InterMedia, October 2012; Lake, 2013; Lal & Sachdev, 2015). Intermedia for example observed this problem in 2012 noting rural users faced a number of challenges over their urban counterparts including problems with agent absenteeism, agents lack of adequate float balances, and in some cases, agents charging informal fees (InterMedia, October 2012). As the mobile money network is primarily based on a network of small operators with limited cash holding capacity, or the means to securely hold cash, when agricultural regions undergo the seasonal high-income activity, small operators cannot cope with the demand between cash and mobile money.

For big operators like AgriEvolve, the new tax (as discussed in Chapter 1) was an accounting nightmare for their internal operations and finance management. Typically, a payment made to a staff member in the field included both the payment itself as well as the cost for cashing it out—the custom with mobile money payments. Payments of the tax required careful calculation and recording of liabilities in order to identify each part of the transaction correctly (the payment amount, cash-out cost, and tax) in company accounts.

AgriEvolve decided that the cost of such detailed ledger management was not justified by the benefits of using mobile money internally. Consequently, they returned to reliance on the comparative simplicity of electronic bank transfers between Kampala and their Kasese Bank and cash use, for which procedures were in place and which required no tax payments, tariffs, cash-out costs, or extra book-keeping. While banks and cash had their own shortcomings (e.g. transfer delays and management costs), these were less burdensome from an accounting point of view. Besides, as Justin pointed out, the operations centre had a large and secure safe where they stored cash. They also had around-the-clock security, and the cash was insured.

The middlemen who do so much of the sourcing of produce for AgriEvolve also resisted transitioning to mobile finance, including the adoption of SmartMoney. “I think SmartMoney is ten years ahead of its time here,” Justin opined. Those who would really benefit from the service were the middlemen brokers because SmartMoney imposed no limits on the volume of transactions they made in a day, and no charges either. If there is no charge to use the service, then farmers would likely have no troubles shifting to e-money he explained. Brokers were also in a better position to convince farmers to use the service. Justin added, however, his observation that farmers and middlemen were resistant to change. Besides, the network coverage in the mountains continued to present a problem. Oddly, some of those higher income users had bank accounts and could take advantage of some of the benefits of having a mobile money account linked to a bank account, but they still did not seem to use it effectively. It was a puzzling behaviour, Justin admitted. Many, he said, “still go all the way into Kasese to do their banking—that doesn’t make sense. Kasese is 50 kilometres away!” Justin said that he did not know if this was just a habit or a genuine need to deal face-to-face with the banker. Maybe they used the trip to conduct other business he surmised, or maybe it was an excuse to see a girlfriend.

AgriEvolve believed the financial services industry was changing though, and that the next big shift would not be with mobile money but with new forms of banking. Over the preceding 12 months, for example, a few of the local banks in Kasese had begun offering micro-banking services in locations where the traditional bricks-and-mortar bank branches did not operate. This was developing into a notable transition across Uganda where large banks like Barclays and Centenary Bank were offering kiosk services through agents distributed around the country (see also Chapter 6) and some mobile money agents were beginning to offer certified bank agent services in parallel with the mobile phone airtime and mobile money services they already offered.

AgriEvolve admitted that they had been approached by some banks to establish one of these kiosks on their own premises—an opportunity that they had, so far, declined. However, AgriEvolve expected that sooner or later middlemen in the industry would take up the services that agent banking offered. As this developing group of middlemen brokers grew and became more prosperous, they might transition to using agent banking in parallel with their increasing adoption of smartphone technology. Then, Justin suggested, those who could afford smartphones would likely start using mobile banking apps.

The development of parallel banking services and the proximity of banking agents and smartphone-delivered banking apps could significantly alter the way rural Ugandans engage with digital finance. Justin thus outlined a process through which trust may eventually be developed in abstract systems—online banking in this context—and the subsequent reconfiguration of associated social practices (Giddens, 2012). To date, however, Ugandan banking had been slow to transition to useful smartphone apps and the ability to conduct payments within the apps themselves. [60] "It's not like it is in the UK yet," Justin said. There you could easily transfer money to another company on your smartphone. In rural Kasese, there was limited trust in the institutions of government, telecoms and banks, exacerbated by ever-increasing fees and taxes. Justin was careful to highlight that the choice was obvious: the industry would continue to use cash as the means for small value transfers for the foreseeable future.

Conclusion

Despite a growing body of research into mobile money adoption in East Africa, surprisingly little research has addressed use of the technology at the critical *first mile* of the production value chain of cash crop industries. Because agriculture is such a key part of the economy of the Global South and subsistence level livelihood for many rural Ugandans, this research gap is significant. There is an apparent need to differentiate the employment of mobile money in agricultural production from research that considers the impact of remittances on rural households. While rural and farming families may be gaining measurable income increases from remittances, as other literature suggests (see Chapters 1 and 2)**,** this case study shows little evidence of mobile money use, let alone financial benefits from its use, embedded in the agricultural value chains of cotton and coffee farmers in Kasese.

There were many persistent barriers to widespread adoption of mobile money within both the coffee and cotton industries in Kasese. Too many negative variables existed for electronic transfer to be widespread under current conditions in the region. While some of

[60] Notably, banks were moving to claim market share in the mobile money trade. Since the advent of mobile money in Uganda there has been a long-standing dispute between the banking and the telecoms industry regarding the handling of mobile money—a lucrative industry both want to dominate. Part of the ongoing dispute is the allocation of responsibility for managing mobile money between the Central bank and the government ministry National Information Technology Authority (NITA) and their respective legal responsibilities. This is a complex set of challenges for the industry that has repercussions for the industry which lie outside the scope this research. For further information see: www.mustaphamugisa.com/legal-issues-in-mobile-money-transactions-in-uganda-challenges-and-next-steps/ and www.ugbusiness.com/5221/mobile-money-dominates-formal-sector-financial-inclusion-limitations-and-all

these barriers are widely acknowledged, such as limited ownership of a mobile phone, or the problem with black spots and poor reception, others are surprising.

Overall costs of mobile money use remained high due to transaction fees and taxes. While the Kasese region is a major producer of cash crops, large volumes of export commodities represent the aggregated production of thousands of small household producers involved in many thousands more micro-transactions for the procurement of household consumables, farming tools, labour, etc. and for the sale of small quantities of agricultural surplus. If e-money were used for these many small-value transactions the fees and charges levied on each transaction would themselves aggregate into a sizable financial impost. Mobile money use was the exception rather than the rule among farmers; a problem explored further in Chapter 6.

Another initially surprising barrier was the reluctance of middlemen, as key stakeholders in the value chain, to adopt mobile money in their brokering activities. But considering the other challenges highlighted here, it is an understandable position—the basis of this reluctance becoming clear in light of these intermediaries' familiarity with the preferences and resources of farmers and their own embeddedness within the value chain. Without e-money demand from suppliers, a stable telecommunications infrastructure, an efficient platform for data entry or straightforward transaction auditing capability, mobile money was too cumbersome to fully integrate. In concert with mobile money taxes and fees, the service made little sense even at this node in the value chain. Locals at all strata in society seemed resistant to change despite the potential benefits the technology offered. New developments in the banking industry with decentralised agent banking was only in the earliest stages of development, potentially influencing the future of e-money services offering similar utility, and without the fees and taxes of mobile money. As there seemed to be deeper trust with banks overall—such a shift would renew a disembedding-re-embedding transition from mobile money back to banks, having dramatic effects the tax base the government is reliant upon, and the profitability of MNOs. Undoubtedly, such a shift would have ripple effects on other social relations too, impacts which may be better clarified in succeeding chapters.

For the time being, however, this research finds a rational and strategic as well as values-based and culturally informed resistance to mobile money uptake. SmartMoney believed it was targeting a clear market gap with its free, non-proprietary network dependent service but the infrastructure problems were a persistent challenge for all MNOs. Moreover, participant responses to the knowledge of, and utility of SmartMoney (and more generally of mobile money services), highlight ongoing suspicions of the service based on lack of trust, literacy with its operating system (highlighted in Chapter 4), limited utility in village settings, resistance to change, and an abiding preference for cash. Resistance to mobile money uptake, whether for SmartMoney, MTN or other services is a strategically informed choice of the many users in the agricultural value chains interviewed here. A number of the constraints to uptake are plainly pragmatic, as evidenced earlier, but evidence also points to values based in a moral economy of filial or collective relations between farmers and middlemen and perhaps even (albeit perhaps an ersatz morality) of buyers, and that of trust.

By the time of my follow-up visit to Uganda in late 2018, the government had relinquished many of the latest taxes on the mobile money platform, leaving a tax only on the fees for cash withdrawal transactions. But rural users had also become suspicious of mobile money more generally as a consequence of taxes and there remained limited adoption of mobile services in agriculture. Whether, in the longer term, these policy reversals will help rebuild confidence and interest in mobile money services remains an open question.

As the Yonazi et al., (2012) quote in this Chapter's epigram suggests, the "strategic application of ICT [in this case mobile money]…offers the best opportunity for economic growth and poverty alleviation on the continent" remains in question, at least in Kasese. Evidence from this research suggests that the rational, strategic and calculated action of the agricultural producers is to remain based in a cash economy that features fewer constraints and greater utility than of technological solutions. Intensive usage of mobile money had not trickled down to base of the pyramid users amongst rural producers in Kasese for strategic and rational reasons—mobile money having too many barriers to uptake for farmers in Kasese. Governments, policy makers, and telecoms need to consider and weigh the impact of transaction costs, and the extent and stability of the network on rural smallholder livelihoods if broadening financial inclusion through mobile money is to be achieved. The following chapter will look more closely at rural livelihoods and how mobile money is utilised in the social, economic, and cultural household settings of a broader demographic of Kasese.

Chapter 6 Mobile Money in Households Across the Rural-Urban Divide

> The challenge for the future is to develop livelihoods analyses which examine networks, linkages, connections, flows and chains across scales, but remain firmly rooted in place and context. But this must go beyond a mechanistic description of links and connections (Scoones, 2009, p. 188).

It is near impossible to consider rural poverty in the Global South without drawing on the multidisciplinary concept of livelihoods (de Haan, 2016; de Haan & Zoomers, 2003; Duncombe, 2016). While challenges to the use of mobile money for income enhancement and financial inclusion among rural dwellers have been discussed in previous chapters concerning SmartMoney’s operations in Kasese and the coffee and cotton industries of Kasese. What has not been considered in depth is the role of mobile money flows between rural and urban areas in household livelihoods and how these household are changing, facilitated by the capabilities of the mobile phone.

While some approaches to livelihoods research prescribe very specific analytical categories and frameworks, others adopt a more open-ended approach. The latter, as articulated in the quote by Scoones (2009) above, is drawn upon in this chapter to explore the influence of mobile money on socio-economic relations implicated in household livelihood practices in the rural and urban socio-economy of Kasese. As for the term *livelihoods*, I rely on sociologist Norman Long’s (2003, p. 241) definition:

> Livelihoods are made up of practices by which individuals and groups strive to make a living, meet their consumption necessities, cope with adversities and uncertainties, engage with new opportunities, protect existing or pursue new lifestyles and cultural identifications, and fulfil their social obligations.

Despite the longstanding importance of livelihoods research remarkably little attention has been directed to the impact of the mobile phone—lesser still to mobile money—on household livelihood practices (Duncombe, 2014; Scoones, 2009). Duncombe (2014), as a notable exception, finds that mobile phones play an intermediating role in the deployment of a broad range of capitals the poor have at their disposal including physical, financial, social and cognitive capital. Livelihoods research, however, has developed substantial insight is into the constitution of the household in light of the social and economic changes accompanying globalisation and the affordances, more generally, of modern technology that enhance flows of people, activity and assets across diverse locales.

Contemporaneous approaches to studying the rural poor draw on an increasing acknowledgement of multi-spatial, multi-local, or translocal livelihoods that challenge the binary of static rural or urban domains (Andersson Djurfeldt, 2012, 2015; de Haan & Zoomers, 2005; Greiner, 2011; Lohnert & Steinbrink, 2005; Owuor, 2007; Schmidt-Kallert, 2009; Tacoli, 1998, 2007). Mounting evidence suggests that globally families are being *stretched* over increasing geographical distances to gain, or maintain, an advantage for improving income and hedging risk (Andersson Djurfeldt, 2015; Murray, 2002). The reasons for this are many, including, but not limited to, population pressures on overburdened agricultural lands, increased potential for cash-generating opportunities in towns and cities, increased environmental-climatic constraints, and the expectation of improved access to services and information in urban areas.

Mainet (2017) points out that "urban citizens maintain connections with their village of origin through money transfers, food supplies and the exchange of goods but also social and family networks" (p. 118). Andersson-Djurfelld (2015) highlights the precariousness of multi-local households and their practice of food transfers with family members. Other research considers the developing phenomenon of remittances and migration practices 174) involving youth—primarily young men but also, more recently, young women moving to urban centres to send remittances home (Farrington, Ramasut, & Walker, 2002; Greiner, 2011). Greiner's (2011) research uncovers increasing inter-household social stratification within these complex networks of migration between rural and urban locations that are neither static nor permanent. Still other research considers the phenomenon of return urban-to-rural migration that accompanies economic stagnation or shocks in urban settings, resulting in reverse migration to home villages (Beauchemin, 2011; Potts, 2009; Tacoli, 2007).

Multi-local households are important dynamic sites that expand and contract according to shifts in the social, economic, and political milieu. Increasingly, rural and urban spaces are regarded as a singular social field encompassing dynamic movement of people, goods, information, and money—echoing Giddens (1984) notion of the stretched nature of social relations over greater distances. Like Simmel's thesis on money (see Chapter 2), the mobile phone and e-money mediate time and space and accentuate these social phenomena in human relations and the commodities and services they produce even when stretched over great distances.

This research acknowledges the simultaneous dependency and disparity of rural and urban domains, treating them as *social fields* (Long, 2003) integrated within a *rural-urban continuum* (de Haan, 2017). Within this continuum, importantly, lie peri-urban spaces of sociability and exchange. These include the many smaller towns and trading centres that serve as meeting places or zones of fluid integration between the complex rural and urban livelihoods practices of contemporary African households (Bah et al., 2003; Farrington et al., 2002; Tacoli, 1998). These peri-urban centres are important economic and social intermediation locations in Africa (Bah et al., 2003) and, importantly, in Kasese. They are nodes both of commercial activity and of social change embedded within the rural-urban continuum.

In keeping with the overall aims of this thesis, this chapter examines factors that facilitate or limit the use of mobile money services at the household level (Objective 1); explores how households use mobile money to minimise risk and improve welfare (Objective 2); investigates how mobile money reinforces and/or changes social relationships, particularly affecting families (Objectives 3); and considers mobile money's contribution to financial inclusion for the rural poor (Objective 5). Exchanges between family members, in the form of remittances, between businesses, and so on, will be explored here as examples of the "linkages, connections and flows… rooted in place and context" that Scoones identifies as the key challenge for livelihoods research in the quote at the start of this chapter. Reflecting key livelihoods concepts of capitals highlighted above (physical, financial, social and cognitive) (Duncombe, 2014), the chapter will examine how mobile money is employed as an asset class, a tool for risk mitigation, and as a contributor to multi-local mobility among household members. This chapter will also examine, consequently, the role of peri-urban centres in the facilitation of multi-spatial livelihood practices across rural and urban spaces that mobile money enhances.

Mobile Money for Urban Users

Urban proximity to services

In this study, all the urban users interviewed had bank and mobile money accounts. According to data drawn from the UBOS, utilisation of bank accounts among the urban population of Kasese Central is relatively high by Ugandan standards at 53% of residents and ownership of a mobile phone in Kasese Central is marginally higher than the national average at 59% (UBOS, 2017). Typically, urban dwellers use e-money for payment of utility bills like electricity and water, school fees, and for business activities like shop re-supply. All the urban participants acknowledged they used mobile money for making payments, long-distance purchases, sending and receiving remittances, gifts, and financial support between spouses, parents, and others in their extended family networks. Even schools have mobile money accounts (using MTN and/or Airtel and sometimes SmartMoney) enabling parents to make regular payments toward school fees. Judging by the number of service agent kiosks throughout town, mobile money is ubiquitous within the economy of urban Kasese Central.

Traders in Kasese Central display high levels of technological familiarity and integration of telecommunications technology in day-to-day business activities. For example, a carpenter will take furniture orders via the phone and receive payment with mobile money. A fishmonger at the markets will buy fish on credit from a local lakeside landing site, clearing the debt with mobile money at the end of the day’s trading. Market vendors and shopkeepers resupply their stock from Kampala using mobile money—a task that was markedly more difficult before the service was introduced. One Kasese shopkeeper I spoke with explained:

> But now, like with mobile money, I have a small shop of plastics in town. I just get my phone, send, and the other one [the merchant] puts the things on the bus. And then [I] pick them from here [the Kasese Central bus depot]. Because he’s in his shop, he’s not going to the bank to go and get that money that I have transferred, [to have to] first go and check on the account, no! Just now you can even see banks have also adopted the same system.

This businessperson was an early adopter and heavy user of mobile money services who continued to advocate for change in the way merchants worked with the banking sector. He boasted that he was among the first to establish themselves as mobile money agents in Kasese almost a decade previously when, he admitted, profits as an agent were considerably higher. He explained that while Kampala is some distance from Kasese (a five-to eight-hour drive), daily trade between the two cities was important for Kasese businesses. Business-to-business (B2B) buying from wholesalers in Kampala (and Mbarara too for that matter) was common, often through long-established relationships between companies or among entrepreneurs operating across locations.

Moses was a twentysomething, Rastafarian hipster and entrepreneur who travelled regularly between Kampala, Fort Portal and Kasese. He was a hairdresser specialising in dreadlocks. He rented a chair space from a friend's shop in Kampala where his customers are and worked on an on-call basis, arranging client visits according to his travel "program." He moved between the three locales managing some of his parents' rental houses as well as some farmland he inherited from his grandfather. He oversaw his farm labourers in Kasese, organised tenants and repairs for his parents' rental properties when needed, and styled hair for Kampala urbanites. He relied heavily on his smartphone to conduct business, and to receive income from his various business activities. He estimated that about 50% of his cash flow was conducted over his phone. Mobile money not only made the maintenance of existing arrangements easier but allowed users like Moses to extend their trading networks over increasingly greater distances and with a speed and ease that the traditional banking system did not offer.

Factoring transaction costs in urban contexts

Despite mobile money's ubiquity in Kasese Central, where many day-to-day transactions can be performed using the service, it is not exclusively employed as the preferred payment method. The decision-making process around which form of transaction to engage in depended on several factors—the speed and convenience of mobile money being only one consideration. When prompted, many interviewees acknowledged they considered the cost of fees prior to making a transaction. There was, of course, the facility of in-person cash payments, but users considered other payment options as well such as making a payment through the bank.

Banks were though a notable source of frustration for many in Kasese Central, particularly with respect to delays and inconveniences associated with in-person banking services. Many complained that queues at banks were time-consuming and frustrating. The above-mentioned shopkeeper noted:

> We had problems with the banks, because the banks, there was always a line. To deposit your money, you stand in a long line for 30 minutes! When you are going to withdraw your money you [stand] again in another line for one hour! And then they give you a whole bag of money! If you are going to Kampala, it is not easy for you to carry that money to Kampala.

Many mobile money users whom I interviewed expressed a similar frustration with waiting times at banks and the high fees they incurred for having an account. Queues were long, especially on Saturday mornings when many did their end-of-week business banking prior to weekend closing hours. Holding large volumes of cash increased the risk of theft, especially when conducting business away from home. Access to ATMs across the country was also limited and what machines there were frequently ran out of cash. With mobile money, however, merchants and other higher strata users would commonly transfer large sums of money onto their phones when travelling. They relied on the availability of mobile money agents in other urban centres to cash-out their money as needed rather than risk travelling with cash or relying on walk-in banking services. Interestingly, the Sustainable Development Goals (SDG 8)[61] highlight the problem of banking services as a lack of access for the poor, yet the business elite and even lower strata users of urban Kasese interviewed for this study reported problems with inefficient banking as the more significant problem.

This said, noteworthy changes were evident in banking services available to those with smartphones (largely, those among the higher income strata). Despite criticism for being too slow to be competitive, banks began offering several improved services to compete with

[61] See SDG 8.10: Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all; SDG 8.10.1 Number of commercial bank branches and automated teller machines (ATMs) per 100,000 adults; SDG8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider. For in-depth coverage of SDG8 see: www.sustainabledevelopment.un.org/sdg8

mobile money including smartphone apps that enabled users to transfer money between their bank and mobile money accounts more easily (see also Chapter 5).[62] One businessperson explained:

> I no longer go to the ATM to check my account balance, or [to the bank to] even transfer money. I now use what they call *CenteMobile* on my phone. They give you a PIN and if you want to access your account, you enter that PIN. You are checking your balance, you are now transferring money, you can even transfer money from your bank to your mobile money for MTN. You transfer money from your bank, it goes onto your MTN mobile money and they you pay. So, it's something that has really made life very easy.

Users claimed they never experienced problems accessing a mobile money agent for cash-in or cash-out (CICO) activities. In Kasese Central there are many agents, and banks also provided some mobile money services. One high-ranking clergyman, in responding to my questions about mobile money, noted:

> I think it is making payments easier. Like around here you can put a million shillings [$272 USD] on your phone and with that you can pay for electricity, you don't have to go anywhere, you can just use your phone screen, you can pay school fees, pay for water…and you don't have to go distances to do that. You can just sit in your house making those transactions. However, those who don't know how to read and write they have a challenge. But…if they are able to use a mobile phone, they're able to make those transactions.

The clergyman acknowledged there was a high level of mobile money access in the town centre, and that low transaction costs improved confidence among urban users about the fungibility of their mobile money with cash. Users highlighted the ease with which one could make payments with the technology. Like the shopkeeper mentioned earlier, using mobile

[62] See the webpage: www.dignited.com/17882/bank-mobile-money-transfers-uganda-heres-bank-like-pro/

money meant avoiding the inconvenience of in-person banking to facilitate the transaction, allowing him to "just sit" in the comfort of home to conduct transactions and enjoy the benefits of thicker business relations that the service provides. It is apparent this confidence was a significant factor in users' willingness to engage with mobile money. As the foregoing interview excerpts show, high-income users demonstrated technological and financial *savoir-faire* (Servaes & Hoyng, 2017) and trust with emerging forms of digital finance. Not only were local elites using MTN mobile money, they had begun using mobile banking apps on their smartphones—a development Justin of AgriEvolve also highlighted in Chapter 5.

But mobile money usage in Kasese Central was not restricted to the "big end of town." Lower income residents also utilised mobile money to conduct trade. One carpenter used his phone as the main interface of his trade, advising me he used his phone to take furniture orders and mobile money to receive payments—even from out-of-town customers:

> Monthly we can do almost half a million [shillings] can be a transaction on the phone. Even now, I am withdrawing some money from a customer—he is very far, but he needs some furniture. So, he sends me measurements and some money on my phone.

Mobile money provided small businesspeople, such as this carpenter, a simpler way to make and receive payments—one of several conveniences associated with mobile phones that both enhanced the efficiency of business activities and facilitated their expansion over greater distances. For low-income tradespeople without access to credit lines with suppliers, pre-payments using mobile money enabled the purchase of supplies needed to fill long-distance orders. In concert with the ability to arrange orders over the phone, mobile money thus provided for thicker relations of trust between producers and clients embedded in more spatially extended networks of exchange. Critically, however, these networks appeared to involve predominantly urban mobile money users rather than serving to bridge the urban-rural divide.

Cognisant of fees and charges, urban users reported that they avoided using mobile money for small payments but, when making larger payments, weighed up the convenience it offers before choosing a payment option. Because mobile money so easily enabled long-distance transfers, and the shipping of consumer goods was becoming increasingly reliable and trustworthy, users were comfortable with the level of risk associated with long-distance purchases and orders. High confidence and trust in the nexus of mobile money and goods exchange with Kampala, for example, facilitated a higher willingness to undertake revenue-generating activities using e-money. Likewise, even shopping was conducted using mobile money with vendors in Kampala. In these instances, urban dwellers and merchants were using mobile money for business and personal uses in transactions that extended far beyond district boundaries. Some women interviewees advised, for example, that they buy clothing this way—receiving photos of fashionable new stock from a Kampala-based dress shop on their smartphones and, if they see something they like, making an e-money payment and receiving the product via bus delivery in a few days. As users informed me, these relations, while distant, are typically engaged with someone they know, albeit remotely, being *weak ties* in their network of friends or family. Such relations are enabled by networked relations in an active way that re-enact *close* and proximal relations of trust, despite their distance.

Trust and virtuous cycles

According to Duncombe (2014), trust and reciprocity are among a number of intangible capital assets that enhance the capability of users to participate in economic relations, improve their sustainability and reduce vulnerability. Duncombe (2014, p. 579) argues that:

> these forms of capital are less easy to define and measure but encompass fundamental societal bonding factors and networks of social support which are also critical for sustaining market relationships.

Moser (1998) maintains that reciprocal and social networks of money, food, childcare and crisis responses are often based on a precondition of trust and cooperation that originate in the urban-rural networks of kin and place. Drawing on James C. Scott's moral economy thesis, Moser (1998, p. 4) argues that:

> Community and interhousehold mechanisms of trust and collaboration can be weakened by greater social and economic heterogeneity…[in contrast with]… the 'moral economy' of rural areas, where the right to make claims on others, and the obligation to transfer a good or service is embedded in the social and moral fabric of communities.

As with other assets, the availability of trust is credited with the ability to promote virtuous cycles[63] of economic growth and poverty alleviation (Farrington et al., 2002). Trust, employed as an asset within strong social and household networks, upholds the moral economy of the rural-urban continuum and enables, it is claimed, virtuous cycles of enhanced exchange between centre and hinterland sites (Andersson Djurfeldt, 2012; Bah et al., 2003; Satterthwaite & Tacoli, 2003; Tacoli, 1998).

Treatment in the grey literature of virtuous cycles associated with mobile money use as self-evident (Aron, 2015; Muelbauer & Aron, 2019; Penicaud & Katakam, 2014) is, in part, borne out by the extension of exchange relationships in urban Kasese discussed above. The moral expectations of trust that accompany deepening trade and reciprocity relations amongst users (Uslaner, 2002) emerged here, particularly in relation to reliance on the *proper conduct* and obligations of others to facilitate trade and exchange (Gefen et al., 2003; Pavlou, 2003). As Duncombe (2014) has previously highlighted, the mobile phone and its attendant services operated as a unique intermediation device in livelihoods, enabling the deployment of financial, social, and cognitive capital to facilitate opportunity. Mobile money provided

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[63] Virtuous circles are a key concept of development economics theory building on the notion of interdependency of supply and demand across multiple sectors of the economy (Yang & Sachs, 2008).

urban users a utility that extended marketplace relations in income generation in ways that offer researchers insight into the capacity that DFS offers urban-based exchange, and into its moral dimensions. These results notwithstanding, the notion of mobile money enabled virtuous cycles begs at least two questions: first, whether the basis and nature of trust change through the use of this technology to extend exchange relations; and second, the extent to which rural spaces and communities are engaged in these relations.

Re-embedding trust

Trust relations of exchange, using technology to connect over ever greater distances, resonate with analyses of modernity advanced by scholars like Anthony Giddens and Ulrich Beck. When traditional (embedded) norms of establishing trust can no longer be taken for granted in modern (disembedded) economies, new strategies are required to establish beneficial trustworthy relationships. Trust, in the modern sense, presumes risk— the risk of *opening out* to others to establish *active trust* in useful relations and thence to affirming the process of individualisation and maintaining one's sense of *ontological security* (Giddens, in Beck et al., 1994, p. 187; Giddens & Pierson, 1998). For Giddens, building trust is important, despite the disembedding effects of modernisation, in order to maintain a sense of ontological security—the absence of which risks a dangerous social dynamic of vulnerability, disenchantment, anomie, demoralisation and existential dread (Brey, 2003; Loyal, 2003; Moellering, 2006). Active trust, however, is risk laden. As Sztompka (1999, p. 32) clarifies, there is the "risk of trusting" such that a "trustee is aware of and accepts our credit of trust and is therefore under some moral obligation to meet it." As Moses' example highlighted, using his mobile phone to organise appointments and receive and make payments across multiple sites to conduct his trade, such trust is readily evident when conducting trade, relying on the delivery of services, paying bills and settling debts. Despite the accompanying exposure to risk, users had "strong expectations of trust" in exchange. Mobile phone and mobile money users in Kasese seeking to enhance long-distance exchange relations (that is, to engage in new practices of re-embedding) did so to enhance their businesses and livelihoods, to reduce vulnerability and, critically, to affirm their social identities—identities as urbanites, entrepreneurs, serious business people and so on.

Gidden's draws on Simmel's assertion that modern money begets a transition from thick trust in people to trust in the quantitative, abstract system of money and the social changes that system brings (see Chapter 2). In traditional societies trust is established through myriad social norms associated with predominantly in-person and face-to-face interactions and exchange transactions—what Giddens calls *facework commitments.* But, where proximity between agents (buyers and sellers in this case) and prevailing norms of facework are absent, trust is referred through abstract systems by *faceless commitments* (2012, p. 80). Reflecting this, merchants, traders and consumers in Kasese demonstrated growing trust in abstract systems supported by mobile telephony, trust that was a precondition for the maintenance and extension of social relations in ways that appeared to privilege weak ties across space and time. In this way, trust was a moral mechanism used by different actors to develop stable, trustworthy collaboration in conducting exchange. The mobile phone and mobile money transactions enabled the re-embedding of trust, allowing faceless commitments to fill moral gaps left by the absence of facework. As Sztompka (1999, p. 14) argues, in order "to cope with strangers, trust becomes a necessary resource." Mobile money thus facilitated adaptation in disembedded economic relations by re-embedding trustworthiness.

Users trusted mobile technologies and the moral economy developing around them, having confidence the system will work as it is supposed to. Trust multiplied through inter-connected sites of exchange influencing the use of mobile money in urban business networks: trust in the fungibility of e-money, trust in the B2B and business-to-customer (B2C) relationships over distances, and trust in the transport networks facilitating the movement of goods between centres.

Urban to rural differences

While some urban-to-urban networks in Kasese appeared to demonstrate virtuous cycles of exchange facilitated by mobile money, rural-to-urban e-money networks were less robust. Business operators in Kasese Central complained of having to revert to cash-based transactions with rural businesses and were often disparaging of rural people, citing their alleged lack of education, stubbornness or fear of technology as reasons for preferring cash.

One dry-goods wholesaler had a large network of customers across the district. Fatima sold to both mid-level wholesalers and to a substantial clientele of small retailers across a number of trading-centres. Several years previously, Fatima's business had begun using SmartMoney as she saw how the zero-cost transfer charges could reduce daily operating expenses. She also preferred the speed and safety of mobile money payments rather than relying on her delivery drivers to collect cash-on-delivery (COD) payments. Drivers could be on the road for many hours making deliveries before returning with large sums of cash Fatima would need to count, reconcile and store safely (especially if banks had closed for the evening). Fatima was concerned for the safety of her drivers—the frequency with which her trucks moved about the district across the whole year, the heavy loads, and the cash on board all increasing the risk of hijacking. Moreover, Fatima was anxious about the potential for skimming cash off the sales receipts. For her, mobile money was quick and easy to use, funds were transferred directly to her phone, and she could conduct financial transactions directly with the customer. Using SmartMoney reduced risks of cash loss to theft and freed her drivers to do deliveries only. Using SmartMoney also reduced her transaction expenses and, as part of the service she negotiated, SmartMoney staff visited her office to balance her cash and e-money holdings which reduced her risk of an unbalanced float.

Fatima was one of SmartMoney's largest clients and a major advocate of their service to prospective donors interested in SmartMoney operations in the district. While her largest clients were converted to SmartMoney use she expressed frustration with many of her rural clients who were adamant about using cash for payment. I asked Fatima about this refusal to use mobile money and she was incredulous: "I don't know, I think they are stubborn. You know many of them are not educated. They don't understand it, so they don't use it."

The difference in perspective between Fatima and Justin at AgriForce (see Chapter 5) on rural residents reluctance to use mobile money was marked. Justin was able to list a number of the constraints faced by potential rural users of mobile money in Kisinga and empathised with their situation. Justin did have the advantage of understanding rural dwellers from his regular face-to-face business dealings. However, my conversation with Justin had mostly been about the other carriers like MTN. SmartMoney, he reminded me, was not popular in the valley, for reasons he couldn't entirely explain. For both Justin and Fatuma, rural resistance to SmartMoney, especially among the brokers and merchants, didn't make sense.

The carpenter I had spoken with experienced a similar situation with rural timber suppliers. For him this issue was both an education and an access issue for rural dwellers. He used mobile money for payments with urban clients, even fulfilling orders with customers out-of-town, but his timber suppliers continued to operate on a cash-only basis. These wholesalers buy their wood directly from timber sources in the mountains and rural regions. As in the cotton and coffee industries, the supply chain operates as a cash economy with first-mile producers. Carpenters in the urban centre must bring cash for their transactions when dealing with the timber wholesalers:

> Now, here we still have the challenge, with now the people who give us the materials, they need cash *at hand*. They need to be educated so that [they] shall not be

> embarrassed to go the mobile agent, to withdraw, to do what? So that we should have a transaction just moving on [the] phone. (Why do the wood sellers want cash?) They want cash because they work with people in the mountains who cut the trees. Because they work with people in the mountains, you find somebody [there], they have no phone. (They all want cash?) Yes!

A hardware store operator noted similarly that many of his rural clients insisted on paying cash on delivery for building supplies like cement and rebar, reiterating a familiar story of transactions between urban and rural areas continuing to be cash-based.

Urban moral hierarchy

Almost all urban interviewees attributed their rural neighbours' resistance to mobile money adoption to a lack of education and stubbornness. Even while there is tacit recognition that remote producers may not have phones, they maintain that *others* are simply unwilling to adopt the technology. Disparaging attitudes are pervasive among the urban dwellers despite their own close relations with the rural villages where many, if not most urban dwellers in Kasese, were themselves born and raised. Urban dwellers in Kasese have deep, thick ties with the outer villages. Participants gave accounts of humble beginnings in the surrounding countryside where many continued to maintain responsibilities for land and family members. The basis of dismissive attitudes was not easily determined, but interviewees regularly and typically characterised rural people as uneducated, stubborn, unskilled, and backward thinking accentuating the social differentiation between urban and rural dwellers.

At face value, urban merchants' disparaging comments about rural customers and suppliers reflected frustration over opportunities lost to reduce business risk and improve business efficiency. It is possible too, however, that negative sentiment toward rural people reflected something of the moral character ascribed to entrepreneurialism, self-sufficiency and the productive use of money more generally in discourses of modernity and development. Drawing in Simmel, Bloch and Parry (1989) argue that money is intrinsic to the rationalistic character of the modern world and to the transition from communal to contractual relations. Money, according to Harris (1989, p. 239) comes to represent rationality itself "when those who fail to or refuse to participate fully in the market…are deemed irrational." Ariel Wilkis (2017, p. 13) draws attention to a similar dynamic from his work in Buenos Aries noting the strong relationship between money and morality arguing that:

> as money circulates, people's moral capital is put to the test. Money allows people to judge the virtues and defects of others and thus establish rankings among the people they know, creating moral hierarchies through money.

Thus, rural people are deemed, morally and cognitively inferior in their inability to adequately calculate the utility of mobile money for their business transactions, and their social engagement.

Leaving aside the question of how well these generalizations hold across specific urban and rural sites (investigation of which will inevitably find numerous exceptions), it does not follow from either that rural dwellers will necessarily resist adoption of a new technology. The following section considers whether these hypotheses, or stereotypes, can be justified when considering mobile money in the rural domain.

Mobile Money and Rural Livelihoods

While sometimes separated by only a few kilometres from urban Kasese, rural dwellers were excluded from many of the benefits mobile money technology provided urban residents. As discussed in Chapter 5, rural dwellers, both those in the very low-income strata (the rural poor) and others who were relatively prosperous (the rural non-poor), had limited use for mobile money. The rural-urban disparity reflected a *vicious cycle* of a few key constraints. For rural people, adoption was hampered by the limited availability of agents and the high transaction costs that accompany use of the service. This included transport needs to access agents and the service's inherent fees and charges. Each component was dependent on the other. Such constraints limited further opportunities to earn income via mobile payment. These constraints, acknowledged in Chapter 5, are now further considered and explored in the following discussion.

Rural proximity: Access and agents

A primary barrier to broad-based mobile money usage in rural livelihoods was the problem of proximity to service agents. Like the problem of access to banks in rural regions, mobile money agents had a propensity to establish shops in higher density population areas like the larger trading centres and towns. This aggregation of service providers in urban and peri-urban areas meant far fewer agents in rural areas.

MTN was the dominant telecoms network and mobile money service provider in Uganda at the time of this research. The MTN regional manager told me the company had been trying to encourage all new agents to set up their shops in more rural remote areas—for the last year, he noted, they had been refusing new business applications in the saturated urban area of Kasese Central. Pressure was exerted from head office in Kampala to push new agents to rural locations. But, he admitted, this was a difficult proposition for agents whose business profitability depended on high volume turnover of mobile services. The earning capacity of a mobile money agent was based on commissions derived from the transactions they provide. Therefore, profitability was dependent on a high rate of customer interactions. Agents favoured high population centres, discriminating against rural locations.

The business model for mobile money agents highlights the strategic economic logic that agents employed to enhance their own welfare. Agents in rural areas experienced the challenges and costs of being distant from formal banking services too. Mobile agents depended on banks to secure and supply their own daily needs for maintaining a cash float and for secure storage. Agents' preferences for proximity to larger trading centres created a compounding problem of access for rural dwellers. Limited access to mobile money agents—

acting as service points for cash-in and cash-out (CICO) actions—affected mobile money's utility for rural users (see Chapter 5). Mobile money is purported to be a tool for the rural poor to overcome financial inclusion challenges, yet mobile money agents, like bricks-and-mortar banks, remained predisposed to populated urban settings and the economic benefits afforded to them there.

Transaction costs and calculability in rural contexts

The cost to use mobile money in rural areas was a prominent concern for many potential users. Participants in this study showed a *cost sensitivity* when considering whether to use the service due, in part, to the potential that a transaction may require travel to an agent for a CICO transaction. This was a two-fold problem for most users: first, the user must consider whether the transaction will incur a transportation expense—possibly involving a charge for the hire of a *boda-boda* to get back and forth to an agent, and lost time in travel. Second, the transaction charges involved in mobile money itself increased the overall cost to use the service. One farm labourer explained this conundrum in the following scenario:

> If I was paid for my labour in mobile money today, my boss would receive a charge to transfer money to me [1000USh], I would have to take a *boda-boda* to the village to the MTN agent for 800USh, and I would get charged 700USh to do cash-out.

To pay a day's wage of 6000USh using mobile money, the combined transaction costs for the farmer and labourer would be 2500USh—42% of the base wage. In this kind of situation, as locals informed me, protocol dictated the sender absorb the charge to send mobile money and then add the cash-out fee as part of the overall total sent. In this instance, the farmer would incur a 17% charge (1000USh) to send, plus the 11.5% (700USh) cash-out amount (overall cost of 7700USh). The labourer would incur the transport costs (800USh) from his own pocket (13% of the transaction).

Table 3. Costs to make a mobile money transaction USh

	Cost (USh)

	Wage	Sending	Cash-out	Transport	Total
Farmer	6000	1000	700	-	7700
Labourer	-	-	-	800	800
					8500

For many rural people, it was not only high transaction fees that provided a disincentive to use mobile money but the number of calculations involved in estimating these fees when considering whether to use mobile money or cash for a transaction. The proficiency with which rural users employed this complex calculability challenged urban stereotypes about *backward* rural thinking.

Some participants from the peri-urban locations of the trading centres sympathised with these concerns. They too acknowledged cost sensitivity to mobile money transactions—making deliberate calculations to ascertain the cost of a transaction and to weigh this against convenience and time saving. In contrast, such a careful level of calculation was not as readily observed with the urban dwellers in Kasese Central. While the urban users were concerned about incurring charges for mobile money usage, they appeared to have a higher tolerance for transfer fees than rural dwellers. This was likely due to the ubiquity of mobile money services in the urban regions that facilitated easier transactions across the cash mobile money nexus, reduced transaction costs based on proximity to others in their economic networks, and higher levels of income and income earning opportunity relative to rural counterparts.

The peri-urban, and rural, non-poor were acutely aware of this distinction of transaction cost sensitivity between village users and urban users. I spoke with Alex, an MTN agent in the trading centre of Katunguru, whose wife and children remained “at home in the village” near the town of Bushenyi. He was a frequent user of mobile money, not just because he was an agent, but also because was using it to remit money to his wife and parents to pay family expenses like school fees. He wanted to see more people using mobile money, but his frustration was with MTN's increasing charges. These charges impacted his ability to draw a steady income as an agent because many of his customers are reverting to cash use:

> Some people, at the village level, they are seeing the charges are high. For example, if I send 500,000[USh] it cost 1,600[USh]. Withdrawing is 7000[USh], so when you add it is going to 8,600[USh]. Some people in the village, they think it's too high for them.

A charge like 8600USh ($2.35 USD) is more than an average day's wages—especially in rural areas. To forgo such an amount in mobile money charges for cashing a remittance was an expensive proposition. Villagers were willing to incur significant inconvenience and transport costs in order to use cash rather than incur mobile money charges.

Scovia had been using MTN's mobile money service for seven years. She and her husband Samson had a little shop in the small but bustling mountain town of Kyarumba. They sold food staples like maize, cassava and wheat flour to locals and to resellers in villages in the upper remote regions of the mountains. She sometimes used mobile money to buy her supplies from Kasese Central. While she acknowledged she was a mobile money user, her use was sporadic—she too decided on a case-by-case basis given the cost of charges for using the mobile money service. But Scovia noted that mobile money was useful for some transactions where factors were favourable to absorb the service tariffs. For instance, the electricity service in Kyarumba was provided by an energy supplier based in Kasese Central. They paid the electricity bills with Samson's mobile money account. He said that if he was away for work, he could still pay for electricity, but only because the charges were small—only a 500USh fee ($0.14 USD).

Once, however, when the service was originally connected, Scovia and Samson had a large bill of 1.5 million shillings (about $408 USD). The fee for sending mobile money was 19,000USh ($5.17 USD), but the cost of a return trip on a *boda-boda* to Kasese was only 10,000USh ($2.72 USD). In this instance, it was worthwhile for Samson to take a *boda-boda* into Kasese Central to pay the bill in person, with cash, rather than incur the transaction fee for mobile money. Samson breaks his decision down for me. The trip on a motorcycle from his location to Kasese would be about two hours each way, plus time spent at the electricity office line-up adds to about five hours in total—a significant part of the day. The direct cost was 10,000USh. However, by doing so, he avoided 9000USh [$2.45 USD] of mobile money transaction costs. For Samson, like many in the rural areas, 9000USh is more than an average day's wages. So, despite losing half a day in travel time and 10,000USh for transport costs, he still saved a day's worth of income. For Samson, like so many in the rural areas, time was cheaper than money.

Like Alex, Samson and Scovia told of their concern about the increasing charges for using the MTN service. Even while Samson was a MTN mobile money agent himself, he admitted he would not use MTN if another network like Africell[64] were readily available in the mountains:

> Other networks, like Africell, for them, [to] send is free. So, if network was here, people would prefer using Africell than using MTN because their charges are free, you send free, you deposit free.[65]

In Kyarumba though, MTN was the only service with adequate coverage. Samson's response highlights that there was a high price sensitivity for people using the mobile money service and such high charges limited the use of the service for people accustomed to using cash. While he noted more people were using mobile money than in the past, "the charges are increasing day and night," so usage was limited to very few transactions.

[64] Africell is another telecom and mobile money carrier that has a smaller portion of market share in Uganda. It was also considered a latecomer to the industry after the larger competitors MTN and Airtel in Kasese. During my first few trips to Kasese, there were no Africell services available. It is likely that in order to promote their recent expansion into the district they were offering reduced fees and rates.

[65] At the time of the interview with Samson, the Excise Duty Tax was not in place and Africell did not charge for sending money to other Africell users. There are now fees on all but deposit transactions for Africell users. See: www.africell.ug/afri-money.php

Cost sensitivity is recognised in other research albeit with scant treatment in the literature overall. Notably, Economides and Jeziorski (2017) found fees were a significant detraction for uptake of mobile money in Tanzania. Interestingly, one the major proponents of mobile money Tavneet Suri (Jack & Suri, 2011; Suri & Jack, 2016) acknowledges the Economide and Jeziorski research. Suri (2017) notes that these kinds of costs stand as major impediment to mobile money uptake among the poor noting that transaction fees are too high to encourage basic retail level payments. Mobile money, it seems, is best utilised for remittances, periodical savings, or mitigating exposure in high-crime areas. Suri (2017, p. 517) further acknowledges that:

> Although mobile money may seem revolutionary, aside from the dramatic adoption, it is far from revolutionizing the role of financial markets or cash in these economies. Mobile money has been, in most cases, a cash-in-cash-out system, with the majority of transactions being the purchase of airtime and small P2P remittances, generally once a month.

This acknowledgement appears to contradict the main conclusion of influential articles published in the high-profile *Science* journal (e.g. Suri and Jack, 2016) that have been held up as decisive evidence that mobile money causes economic development and offers overall benefits for the poor.

The cost and opportunity of mobility

Both Alex in Katunguru, and Scovia's husband Samson in Kyarumba, were businesspeople, and like so many in this entrepreneurial class, they often conducted business away from home, wherever they could find opportunities. These are a representative part of the rural non-poor, a social strata of business owners who live and conduct their trade in the urban and peri-urban areas while being embedded in a network of family articulated across the rural-urban continuum. Alex, for example, spent over a year in Kasese Central as an MTN agent before moving to Katunguru trading centre to set up a dry goods shop and his MTN kiosk. Despite Katunguru's smaller size, it was cheaper to rent a shop, and he got more business since there was less competition there than in Kasese Central. Katunguru was also closer to home, enabling him to go home regularly—the village where his wife and children lived being less than an hour up the highway toward Bushenyi. Both men, using mobile money, could send remittances home when needed or, as Samson explained, pay the power bill for the shop Scovia ran regardless of his location.

While both men were in a higher income strata than many rural dwellers, they too needed to consider the costs of transactions, the associated risks, and utility of using mobile money versus cash. These are the kind of businesspeople that others noted in Chapter 5 as the primary users. Samson said that "for us businessmen who normally travel, we like to use mobile money—it is hard for a thief to take our money." But he also acknowledged the high cost of transport in rural areas was a consideration when deciding which form of payment was most efficient. Similarly, a headmaster in the town of Kyarumba related a similar concern over cost and of risk. As a headmaster, his salary put him in a higher income strata than many in the region. His wages were paid to a bank account whose branch was in Kasese Central (a two-hour trip on a *boda-boda*).

> Mobile money? I am using it to clear my debts. So, for example, if I am having a debt with the bank, then I can pay directly the bank, with Stanbic [Bank]. And even I can use mobile money to withdraw my salary. (So do you use it very often to withdraw your salary, or do you prefer to use cash?) I prefer using mobile money, and I get cash … from mobile money. (But then you incur two separate fees? You incur the fee to move it from your bank account to MTN, and then another fee to move it from MTN into cash?) Yes, actually, it is cheaper because [otherwise] it will cost me transport, it will cost me lunch, it will cost me even…the risk of accidents. …Actually, the charge [to transfer salary to MTN mobile money] is very little, the bank charges, compared to the risks on transport, and money you will spend on the hotel, so 'tis cheaper.

Notwithstanding their higher income status, these respondents still took into consideration the costs of transaction fees, the convenience, the cost of lunch,[66] before deciding which form of payment to use. A local from Kasese Central explained to me that needlessly incurring high charges for using mobile money was tantamount to "eating one's lunch." Eating your money and other similar phrases are often used in Uganda to refer to 'wasteful' or 'negligent' spending that stirs up a sense of moral indignation. Lunch is traditionally the day's main meal and references to lunch carry significant social meaning. For the wealthier strata of society, lunch is an important social activity and a signifier of social status. Those in the poorer strata who are wage earners will typically make demands of an employer to provide them with a daily lunch, or better, a daily cash disbursement for their lunch. Those who struggle financially, but have employment, will save their employer's cash contribution for lunch, and instead, they either fast or spend only a portion in order to bring their lunch money home. This practice is not openly discussed, as it is a point of social shame and done discreetly despite being a common practice. The poorest in society, those especially in the rural areas, will often skip lunch altogether, having no employer to feed them and considering the time and cost needed to prepare a hot meal while working outdoors too high.

The headmaster raised the notion of potential risk exposure as part of the overall calculation of when to use mobile money. This was a different kind of risk to those faced by urban Kasese businesses engaged in remote purchases or provision of services. In this latter case, risk was associated with the establishment of trustworthiness. This necessitated expression of a calculative faith for the purposes of re-embedding social (and economic) relations (Giddens, 1991; Moellering, 2006). For the headmaster, the risk was of another kind; that is, the calculable risk of harm exposure either by way of overspending (such as eating

[66] A traditional Ugandan lunch, consisting of a large serving of *matoke* (mashed plantain), rice, a variety of available starchy root vegetables and a meat or bean sauce, in Kasese Central, is around 2500-5000USh.

one's lunch) or from bodily harm. In both cases though the calculation of risk was a moral imperative—a making sense of and calculative logic to accept or ignore moral economic implications. In the case of the headmaster, risk cognition and risk avoidance seem indicative of the modern individualised self's moral stance—evidence of the reflexive biographical self in response to risks (Beck et al., 1994). In both examples, risk calculations and attempts to establish trust demonstrate how users of e-money viewed it as an enabler of economic activities, business transactions, provisioning of individual needs and wants, and risk mitigation.

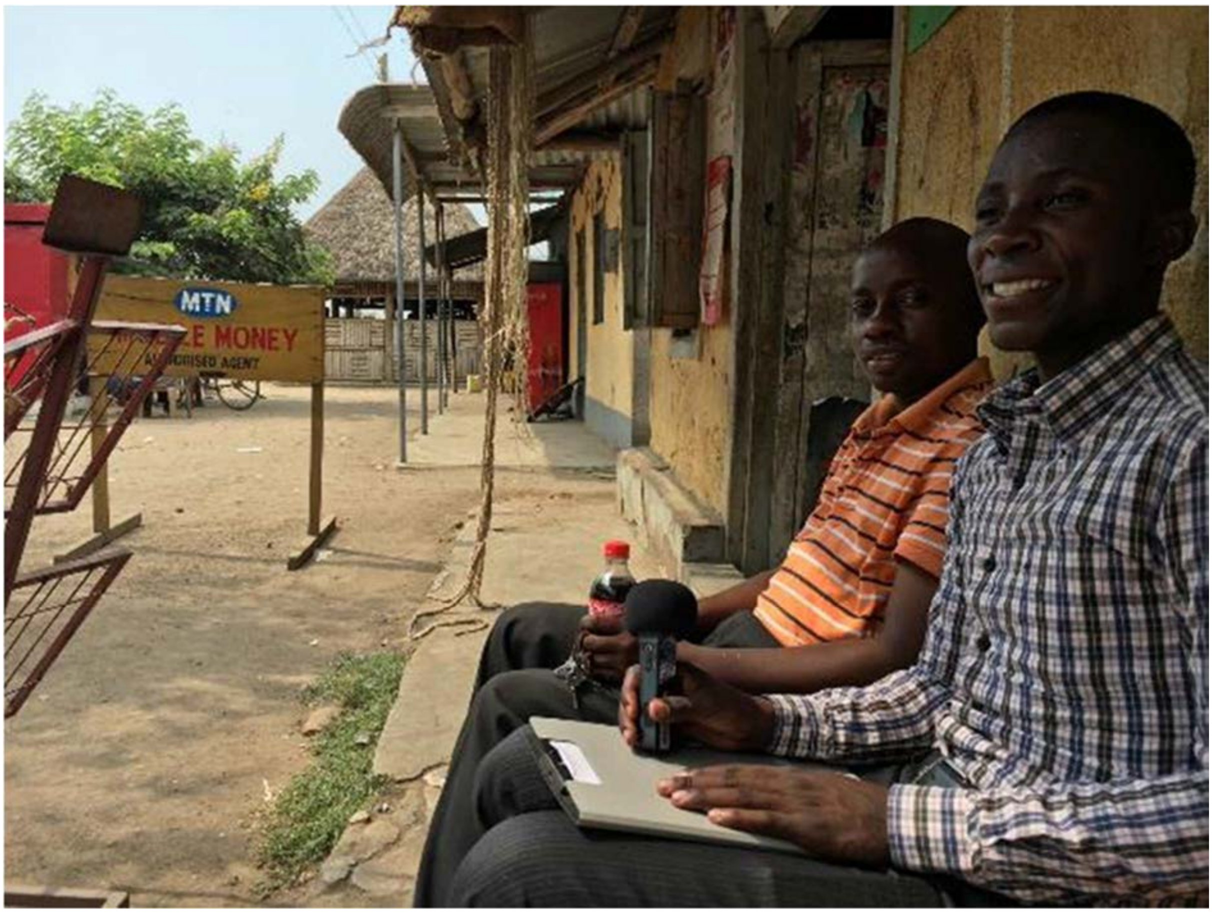

Figure 9. Alex the shopkeeper sits at the front of his store with Baluku my translator.

Rural-Urban Connectivity

This research recognises the problematic of considering mobile money in the dialectical opposition of urban versus rural uses—as if there is an unambiguous division between these categories. As noted earlier, livelihood scholars highlight the high degree of social and physical mobility between rural and urban spheres that is further complicated by peri-urban locations as well. Moreover, the definition of rural [67] is itself problematic for this research, as there are widely varying levels of rural population densities in the district. Considering the variation in rural population densities and the varying proximity of any given rural dweller to a peri-urban or urban centre, a clear demarcation between the rural and urban zones is difficult to assess: where does the urban space end and the rural zone begin?[68] Yet a socio-economic divide is evident despite difficulty determining clear boundaries between the two sites, like the rural versus urban characteristics of the people who occupy them.

The urban-rural divide is complicated by recognition that these two domains are neither spatially nor socially discrete. Rather, they are bound in a complex web of activity. Multi-local families spread across the rural to urban domains to enhance household livelihood, complicating the notion of divided rural and urban domains. Thus, whilst the mainstream notion is one that invokes rural and urban zones as discrete domains, drawing on a long and complex history in the social sciences, and contemporaneous livelihoods scholarship, this research takes a nuanced approach to conceptualising the independence and interdependence of these sites and the socio-economic activity within them. The following sections has attempted to understand the distinctiveness as well as the interconnectedness of each domain, facilitated by the use of the mobile phone and e-money in Kasese.

Mixed Income Livelihoods and the Problem of Remittances

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[67] Drawing on the defined boundary set out by the Uganda Bureau of Statistics (UBoS), rural Kasese in this project is taken to mean all those areas outside of Kasese Central.

[68] In light of the density of population in the ever-growing and essential peri-urban spaces of trading centres and towns in Uganda, demarcation of rural spaces from urban zones in such sites is difficult to assess. This research attest to the growing phenomenon of rapid development and integral function of these towns and trading-centres as peri-urban islands amidst rural settings.

Research in the Ugandan rural-urban context finds rural Ugandan households employ a mix of agricultural and non-agricultural livelihood strategies to sustain household welfare. Mukwaya et al. (2012) estimate that rural households' engagement in non-agricultural activities provides, on average, about half their income. In contrast, 95% of urban households' income is derived from non-agricultural activity (2012, p. 21). The research not only highlights weaknesses in assumptions that rural livelihoods are exclusively agriculturally based, but also reveals that official statistics overlook the diversity of secondary income sources derived from non-agricultural activities. Moreover, urban household reliance on agricultural surpluses (food remittances) supplied by their rural counterparts is frequently overlooked as an asset that offsets financial expenditure (Andersson Djurfeldt, 2012).

Regardless of the modes of livelihood people engage in, the method of transferring resources to family members frequently relies on converting assets such as savings into cash transfers, typically referred to as remittances. Remittances are a common feature of non-agricultural income for many rural households and may help explain income contributions that are non-agriculturally derived.[69] But the practices of remittances remain a vague, largely ill-defined and under-researched despite the importance of the remittance economy for the rural poor in the mainstream literature (Aron, 2015; Global System for Mobile Communications, 2015; Jack & Suri, 2011; Suri, 2017; Thulani et al., 2014). While mobile

[69] One area where official statistics does capture non-farm income for rural households is in the receipt of remittances. Official data from the UBOS and the WorldBank figures warrants consideration. The latest available figures from the UBOS show the Kasese District the 2014 census cites 8.6% of households received a remittance in the last twelve months, a figure slightly less than the 11.9% average for the whole of western Uganda. While this figure is not inconsequential, neither is it substantial. For example, the same data from UBOS for the Central Region of Uganda, (an area that includes the Kampala metropolitan area) shows that 19% of households received remittances—more than twice the number of Kasese households. The Global Findex (Demirguc-Kunt, Klapper, Singer, Ansar, & Hess, 2018) database shows the national average for the rural population receiving a remittance (% aged 15+) was 56.5% and that 37%69 of the adult population received a remittance using a mobile phone. While one dataset compares households and the other compares individuals, the data sets appear significantly at odds with each other. What cannot be easily determined from these variations are the methods used for producing these data sets, nor the official bodies that generate the data. However, assuming the data is correct, Kasese remittances are an income source for less than 10% of all Kasese District households. The basis for the remittances, and who are the beneficiaries are unknown.

money enthusiasts praise mobile money's capacity for reducing transfer costs of remittances, there is lack of clarity regarding what a remittance actually is and how it translates into overall welfare gains for the family, particularly where one family member is reducing cash assets while another is gaining. Research that establishes remittances as a source of income for rural families overlooks the deficit of income by the sending party who, while no longer residing at the home, remains a member of the household. Therefore, intra-household remittances do not equate to overall increased household income, except insofar as they facilitate engagement in higher income activity. This thesis draws attention to the problematic of remittances as an oversimplified construct for household income that obscures important and complex social practices. Remittances also obscure the rules of the accountant's balance sheet. Remittances are indicative of household moral economies that include transfers of wealth (cash, farm produce, etc.) between family members with implications of complex intra-household bargaining in multi-sited Ugandan households (this line of inquiry is further extended in Chapter 7).

Multi-spatial, Multi-local Families

This mobile money research in Kasese region confirms that rural dwellers relied on remittances as an integral part of many families' income (as cash, garden produce, or other services). However, these transactions were not conducted at such a distance as to presume a complete departure of the individual from the *local* space as the term remittance typically implies.[70] Neither was the flow of money or other assets and services unidirectional from urban to rural sites. Instead, families who used mobile money as a key component of their

[70] In common parlance, a remittance is a sum of money "sent home" by a family member working abroad, or in the case of domestic remittances, in a different area of the country. For example, the Global Findex Database clarifies that domestic remittances consists of: "personally sending any of their money in the past 12 months to, or receiving any of it from, a relative or friend living in a different area of their country…." However, the findings in this research ascertains that many of the remittances family members in Kasese receive are local. These differences are important to acknowledge for understanding the economic impact of mobile money for remittances with the rural poor.

livelihood strategies were multi-spatial and multi-local, with developed kinship networks in place, and with family members remaining in proximity to each other within a geographical locale. Akin to the rural-urban nexus considered earlier, is the notion that households themselves exist on a continuum of diverse geographical spread. This research found that a two or three generation family may be stretched across the district from home village, into the peri-urban trading-centre, and extend into the urban centre in Kasese Central. It also uncovered numerous examples of kinship networks extending further afield, even to Kampala, which, along with family members in the urban and peri-urban locales, continued to enable transfers on a regular or as-needed basis.

Off-farm income sources and flows

In Kasese, it was common to find villages mainly populated by women, children and the elderly. As such, these maintained the home farm plot and generated a rural livelihood in the village. This practice enabled men and young adults to go into trading centres and urban areas to conduct trade and generate cash income for the family. Where there were elderly family members to draw on for help with the land, a wife may accompany a husband to conduct a small business venture off-farm, leaving the childcare of the youngest to the grandparents, and—income allowing—sending youths to boarding school for high school education. The behaviour shows a strong disposition toward income diversification; to have as many income-generating individuals in a family network of productivity. These multi-site family networks comprised a moral economy of extended care-chains consisting of child and elderly care, communication, flows of goods and produce, and money transfers in the form of mobile money and cash to enhance the overall welfare of the household.

Mary was an unmarried twenty-something teacher in Kasese Central who came from a big family in a village near the trading centre of Kisinga—a prosperous coffee-farming region. She was primarily raised by her grandparents who continued to be the main caregivers to her youngest siblings at the family home in the rural village. In her household, the children and grandparents maintained the family land and were engaged in subsistence agriculture and coffee production while enabling the youngest children to attend school locally. Her parents took a residence for the working week in Kinyamaseke—a bustling trading centre along the highway with an active fruit and vegetable market about 12 km distance from the village. The distance between the village and town meant the cost of transport was too high to undertake a daily commute from the family farm. Instead, her father and mother rented a meagre residence in the town during the week. Her mother was a produce vendor at a highway-side stand where she sold some of the home village's surplus produce and dry goods at a market stall. The father, a tailor, performed his trade in a shop nearby. There was a higher demand for his skills, and therefore opportunity to earn cash, than in the village. On Saturday afternoon they returned home to the children and grandparents and had the evening and Sunday together.

Mary earned income as a schoolteacher in Kasese Central. She lived with her sister and brother-in-law and infant niece at the outskirts of town where the rent was most affordable. When she could, she took a local bus (a 40 km trip) home for weekends—returning to Kasese Central on Sunday afternoons with a bag of produce from the home village to supplement her living expenses during the work week. Likewise, due to Mary's wage-earning employment, if her family had need of cash, Mary was a phone call, or a bus ride away. Mary made cash contributions to help pay school fees for her younger siblings on a regular basis. So, while the members of the family lived apart, they continued to maintain the semblance of a collective household, with a diversified set of income and productive capacities, shared in mutual obligation and reciprocity toward each other. While Mary remains single, the maternal family would continue to impose expectations that she provides cash to the benefit of the extended family. Notably, her parents paid for her education at university to achieve a high-social rank in the community as a salaried teacher. It was custom in Kasese, and indeed Uganda in general, that wage earning children, remit, if not regularly, then as needed, to the extended family for certain, usually significant expenses such as school fees.

The flow of money and goods in multi-local families

Over the course of the research, several of the participants indicated that they made a living, at least in a part-time capacity, in a village or town setting, and then undertook to send or take money home to the family in the village for the maintenance of spouse, parents and children. Again, these forms of collective capacity are indicative of a moral economy of obligations within the household sphere. Naturally, however, there is a diversity of opinion to the strength of obligation between members. My questions of “how much?” and “how often?” yielded a range of responses from participants. Some indicated remittances were a regular and expected practice while others said that payments were made only *on-demand* and on their own terms.

Paying school fees was the most common reason cited for engaging in family remittances with mobile money transfers. School fees are a large cash expense for many families in this part of Africa. Typically, those family members engaged in cash-earning activities carry the burden of paying the school fees for a family. For instance, in my host family, it was Josephine who was the one with a university degree, and a salary, so she was the one who pays school fees for her brothers and sisters. As her mother and father were peasant farmers who lived in east Uganda, they grew enough food to sustain themselves, but to earn enough cash for school fees for their young adult children was beyond reach.

Apart from paying the rent, school fees, food, and living expenses for her siblings, Josephine was also sporadically remitting money to her parents to pay for an iron roof on the new mud brick house they were constructing. While Josephine’s experience was unusual, in that her parents are on the other side of the country, it was a common practice for those who had the cash earning capability (like Mary or Josephine) to be responsible for—or to at least assist with—the large cash expenses for other members of the family unit.

But Josephine and Mary also derived benefits from having the highest income and education level in the family. Like other educated and employed twenty-somethings, Josephine was embedded in a higher social and economic strata than her parents. She was able to indulge in some of the affordances of modern life as a young, urban woman, away from the daily demands and control of labour and income that accompany proximity to parental oversight.

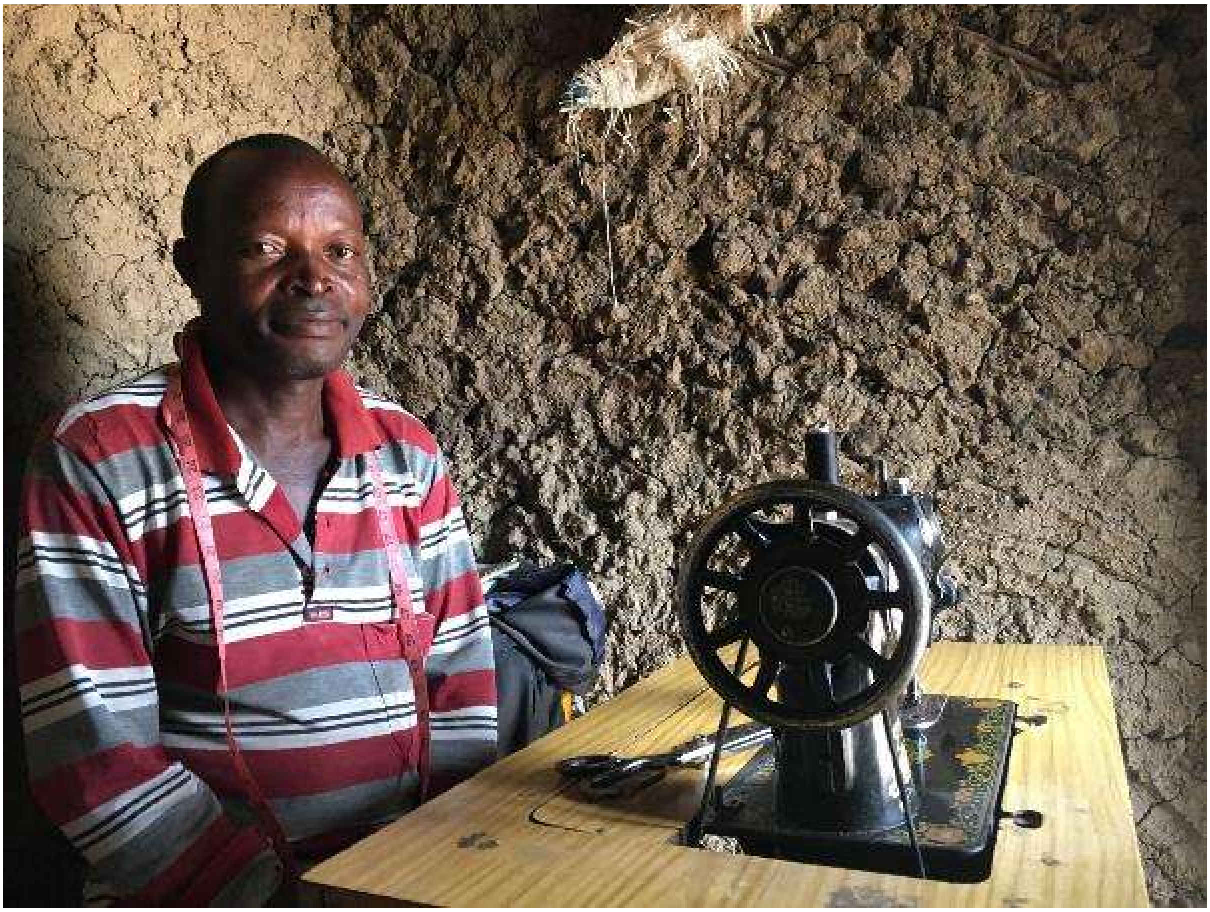

Figure 10. A tailor works in his shop in the small trading-centre of Kikorongo. On weekends, he returned to his home village up in the mountains to be with his family

The independence she enjoyed from her parents also meant Josephine had some ability to control how much assistance she provided them, despite calls from her father “disturbing” her for money. Cash-earners like Josephine also determined the household division of labour, having expectations of her younger brother and sisters to undertake more of the menial activities such as cooking, cleaning, and laundry as acknowledgement of her primary contribution for generating income. Because of their cash-earning capability, and distance and independence from parental authority, Josephine and Mary can exercise greater agency over their income and the obligatory demands of family members. While mobile money facilitated easy remittance payments, it also facilitated the capacity to store money away from family members.

Boniface was a vegetable seller in the town of Katunguru where Alex, whom we met earlier, had his dry-goods shop. I interviewed Boniface at his store where two of his young adult sons looked on from beyond the door. He sourced his vegetables, organised by his wife, from his home area, where food was cheap to buy, through a village network of farmers. Then, he resold them in Katunguru. He used mobile money to send money home to his wife and vice versa, as they needed it. He also had a few sons in Kampala who sent him money, but only when he asked for it. These sons, he said, otherwise sent only a gift of mobile money for a bottle of *waragi* (Ugandan gin) around Christmas or for other special occasions.

Similarly, Edmond, the lead farmer in Muhokya, whom we briefly met in Chapter 5, has his home village in Kibiri, a few kilometres up the mountain from his storehouse. He was married and had 12 children—his wife lived at the home farm in their village. He rented a field in Muhokya growing cotton, bananas, and cassava and maintained the small storehouse as part of his lead farmer role with a cotton ginnery. While he was not a regular user of mobile money for personal uses, he admitted that he did use it to pay school fees for his children who study out of town. He had two adult daughters at university: one at Fort Portal

(85 km away) and another in Kabarole (75 km away). I pressed him about when he makes the decision to use cash or to use mobile money: “Only the ones who are very far, [because] the transport cost is too much” he replied, referring to his daughters at university. Like so many other users, Edmond considered the cost of transport and mobile money when determining which option was the most cost-effective. Most of the time, he said, the family relied on cash. But other members of his family did use mobile money when convenient and cost-effective. His wife also had a mobile money account. She earned money (mostly cash) from farming *matoke* (plantain bananas) and groundnuts at the home farm. Two of their older sons worked at hotels in Kampala and, while they did not come home very often, they sent money home from time-to-time:

> They don’t send me often, but sometimes, when I have a problem, I say “Can you assist me?” And like every three months they can send me like 50,000[USh], or 20,000[USh] but not every month.

When one of the family needed money, they sent mobile money to each other. A son might be asked to send money to a sister, or he might need to send money to a son. But since Edmond went home to the village for two days a week, he relied on cash instead of mobile money because the fees were an unnecessary expense to the household he preferred to avoid.

Transferring money and goods across a family network and across rural and urban settings is well documented in the literature (Andersson Djurfeldt, 2012, 2015; Bah et al., 2003; Farrington et al., 2002), mobile money facilitating these transfers albeit in ways that are less well understood. If mobile money was not used, a family member had to travel or entrust a friend to take cash to family members. In return, a regular supply of agricultural produce may be sent from the home village to the family member, offsetting the cost of living in the urban space. The scenario suggests how families spread multi-locally across a region, by positioning their human capital to maximise the family’s cash earning potential. They then utilise their familial and village networks to leverage diverse livelihoods of agricultural and non-agricultural production between rural and urban locations.

Claims and Diminishing Returns

Households make claims on income earners that also require attention (see also Chapter 7). This behavior is pervasive beyond west Uganda. From his research in Lesotho, James Ferguson (2015, p. 95) notes “money needs to be guarded…against more or less legitimate takings in the form of social and moral claims by those to whom one has recognized obligations.” Individuals are subject to a range of social pressures or “feeling rules” (Hochschild, 1983) on their emotional state that dictate expected norms of behaviour toward others—especially with family. Husbands, wives, mothers, fathers, and siblings readily make claims on income earners. For example, as Josephine’s situation had shown, being the oldest child, with the steady salary she earned, made her the primary income earner for the whole family. She was regularly sought out by parents and siblings to pay for all the necessary expenses of the family. Even to Josephine’s own admission, these claim she felt were both legitimate obligations, but also of her heart. What renders these claims legitimate depends not only on established norms and shifting conventions but also on what Arlie Hochschild (1983) describes as “feeling rules”—shifting and complex ideas of “what is due another person”(Hochschild, 1983) in terms both of social feeling and of material property including money. As Ralph Fevre (2003) points out, these feeling rules constitute a moral economy as it “determines how people behave: what they do because it is right to do so” (see also Chapter 2). In such instances, claims made on the income earners seem part of an embedded moral economy in Kasese.

However, the urban space appeared to foster individualisation that stood, at least in part, in opposition to embedded, traditional norms. Salaried young people were experiencing shifting patterns of family relations brought on by working away from home and the possibilities the mobile phone offered in relation to independence but also to communicate claims and obligations. For example, one informant, a single, male accountant living in Kasese Central, argued that he hated the technology, wishing it was never invented. Both his ageing father and his sister made frequent demands of him for mobile money. Other family members, even distant cousins, would contact him for assistance. He would respond by sending small but regular remittances to thwart their requests for more substantial sums. However, he felt these obligations interrupted his own savings plans as he was regularly sending money to others. Both Josephine and Jacob also attested to similar frustrations when requests for money were too frequent. A noted practice of earners, in response to these claims, was to transfer numerous, but small, payments. Earners forewent the discipline of long-term, high-value savings practices in favour of frequent, small-value remittance transactions in order to satisfy constant demand from family members. “Less money, more often,” the accountant remarked, is the only way to manage, let alone meet, these demands.

Such practices suggest ways in which mobile money may facilitate a remittance economy of diminishing value transactions. Where escalating frequency of claims for remittances are made, the accountant adjusted his support payments by making smaller payments on a more frequent basis. At the time, he had been saving to buy a milk tank to operate a small dairy shop in town, but his plans were constantly frustrated by family support requests. With his income, he could save enough to make a sizeable investment in a new business, invest in a crop, or even buy his father a cow—thus storing financial value in a long-term investment. But with the frequency of remittance requests on him, aided by the ease of mobile money transactions, he was unable to gain the time needed to generate the kind of savings to make more substantial investments.

This practice demands further investigation. Mobile money’s ease of use in small transaction values potentially contributes to diminishing capacity to make higher-value asset investments, or the time needed to grow savings balances among users. Poor households, in the economic precariat, suffer a high demand for liquidity, at the expense of diminishing long-term investment practices. It may be found among the aspirational poor and middle-class (that is, the upwardly mobile), that mobile money exacerbates wealth leakage due to the substantial claims family members make on them. Yet while the demand for mobile money to meet increasingly high expense items continues unabated, long-term investments are at risk of becoming the exclusive domain of the wealthier strata.

Conclusion

Mobile money users showed a complex mix of social and economic logics and calculation in their decision-making around engaging the service in their livelihoods practices. Urban, peri-urban, and rural users demonstrated price sensitive behaviours, showing degrees of financial decision-making, and calculability, in framing decisions that come with decisions to use or not use the technology of mobile money. The technology accompanied and even facilitated shifts in the socio-economic relations that bring to bear complex influences on households. This chapter has revealed that despite evidence for mobile money use broadly in the production of livelihoods, the problem of rural exclusion was mainly distributional. Rural areas continued to be largely excluded from the benefits that mobile money purports to bring. Notably, rural areas were underserved by network coverage and proximity to agents. With small populations and low demand, agents preferred larger population centres. Also, the expense incurred to travel to agents, combined with high fees, exacerbated by low incomes limited the overall utility of mobile money (as seen in Chapter 5). The chapter provides situational examples of the service's limitations, highlighting the logics of rural users in determining their interaction with the service—and thus demonstrating a countervailing response to their urban counterparts who so readily dismiss rural users with stereotyping (mis-)characterisations.

For urban users, easy access to mobile money aided them immensely in developing a broader network of trustworthy trade relations while also maintaining the capability to assist family members in rural areas. Urban dwellers enjoyed the fungibility of e-money with cash, availed themselves of the opportunities mobile money trade can facilitate, and accessed multiple payment options (including bank accounts, agents, and cash). Likewise, businesspeople and the rural non-poor in rural areas also leveraged this access and these supply chains in similar ways to their urban counterparts even when their supply chains are based locally rather than regionally and nationally.

Mobilisation, transactions, and local-remittance behaviour was also evident in the peri-urban trading centres. These trading locations offered households broader access to farm and non-farm trade activities and were important sites to establish connections and opportunities that come with urban interaction. These trading centres are sites of intermediation between the rural and urban, as locations of opportunity. They represent an important node for domestic mobility, and technological adoption, promoting the mobilising of family members between rural and urban spaces. Such mobility is not so much a dramatic shift between distinct rural and urban spheres, but rather, a fluid ebb and flow within a rural-to-urban continuum.

As mobile money facilitates mobility where opportunities for income earning arise those who remain at home trust that relations and obligations can be maintained. Thus, mobile phones at once promote a rural/urban divide while also deepening the fluidity of movement of household members and assets across the terrain for meeting livelihood challenges. But while this mobilisation may assist the household increase its overall welfare, its distribution among members may neither be equitable nor amenable to household cohesion as members are stretched across multi-sited locations. Many attested to mobile money’s utility for remittances and collective productive capacity, but some expressed concern that its inherent ease prompted rurally based family members to make greater demands. There are differences in attitudes and experiences among interviewees toward family obligations. Whether this diversification produces individual and collective family welfare, or whether it increases an individual's burden to share and provide resources for increasingly disconnected family members raises questions: What is the technology's impact on individual agency and intra-family stratification? What is the technology's cultural and social impact in these circumstances where families are stretched across this continuum?

The potential negative impact of mobile money on families dispersed to geographically disparate locations remain to be fully explored. Mobile money seems to perturb embedded social and economic relations and disrupt traditional norms of responsibility to family such as the co-presence of husbands and wives in the home village. Such dispersion of household members has flow-on impacts in the moral economy of disembedding members from the household, promoting urban migration, and renegotiating the household division of labour. Mobile money influence on the changing nature of household relations will be explored further in the following chapter. Chapter 7 will continue to consider the degree of agency individuals have in deciding to relocate to earn, the attendant obligations to earn money on behalf of others, and the impact on families, especially in the way in which mobile money disrupts gender norms and marital relations in Kasese.

Chapter 7 Gender Roles and Mobile Money: Mobile Money in the Gendered Moral Economy of Rural Kasese

> When colonial administrators encouraged cash cropping and labour migration, this had profound implications for men and women, transforming their gender roles, identities and relationships (Silberschmidt, 2011a, p. 101).

> With the transition to modern society, changes took place on many levels that brought about a far-reaching individualisation process, cutting people off from their traditional ties, beliefs, and social relationships (Beck & Beck-Gernsheim, 1995, p. 46).

Research on gender and technology in Africa has addressed women's access to, and use of, the mobile phone, internet, and mobile money; the extent to which gender is implicated in the emergence of new digital divides; and, relatedly, the role of mobile technologies in women's empowerment or, alternatively, exclusion (Buku & Meredith, 2012; Duncombe, 2014; Kusimba, Yang, & Chawla, 2016; Morawczynski & Pickens, 2009; Wyche & Olson, 2018; Wyche & Steinfield, 2016). Much of the literature on gender and mobile money reflects a *women in development* (WID) approach that valorises mobile money as a tool to empower women as model entrepreneurial citizens (Allen, 2013; Jackson, 2002; Suri & Jack, 2016). Unexamined in this literature is the complex and dynamic terrain of gender relations in which women's economic activities are already embedded. Contrary to the moral grammars of entrepreneurialism and self-responsibility evident in WID and capabilities approaches to gender and development (Crewe & Harrison, 1998; Mikhail, 2007; Nussbaum & Sen, 1993; Oosterlaken, 2012), the approach taken here is to examine how particular social norms and justifications construct morally acceptable economic relationships and ways of doing in communities.

Other literature suggests that studies of gendered relations in East Africa often underestimate the complex social challenges facing women, as well as men, living in poverty: namely, unequal access to legal, financial, and other institutional structures (Chant & Sweetman, 2012; Feldman, 2001; Silberschmidt, 2011b; Viterna & Robertson, 2015). Problems of abiding poverty complicate already existing gendered cultural complexities. Relevant research on East Africa indicates that changes in normative gender relations occur when external economic pressures push men and women into unexpected modes, often contrary to prevailing social norms (Leclerc-Madlala, 2003; Silberschmidt, 1992, 2001, 2011b). Silberschmidt (1999, p. 20) rightly points out that “gender as well as gender relations—being largely products of social and cultural processes—are neither universal nor static but dynamic and changeable.” Such changes and dynamics, combined with unstable economic prospects, produce a complex gendered moral economy.

As Silverstone, Hirsch and Morley (1992, p.13) argue “technologies… have an impact on the social and economic order of the household,” but this is an order in which more is at play than the distribution of access to money. Understanding the ways in which mobile money is implicated in the disembedding and re-embedding of gender relations at multiple scales is thus critical to understanding its contribution to women’s empowerment. While mobile money may be a tool for independence, freedom and entrepreneurialism it may also displace norms and values that offer their own social protections—whether in the household, the market, or elsewhere. Marital relationships, as Beck and Beck-Gernsheim (1995) point out, become one of the primary sites at which the battle between contradictory norms, between individualism and collectivism, between rights and obligations, is waged. The same people may be trying to cast off some gendered roles and responsibilities while trying to maintain or enforce others in the household division of labour. In the specific local context of Kasese, gender relations and economic interactions and obligations are similarly dynamic and fluid. Acknowledging the unstable nature of social interaction within any social order suggests a need to consider the possibility of dynamism and tension in relation to women's and men's attitudes towards mobile money usage in Kasese (Objective 1). In keeping with the overall aims of this thesis, this chapter will explore how mobile money reinforced and also sometimes changed social relations for better or worse, particularly those relations that were specific to gender and the household (Objective 3). It begins with the premise that to understand gendered attitudes and engagements with mobile money in Kasese requires investigating ways the service is part of a broader field of norms, expectations, and values of a moral economy. The concept of a gendered moral economy used here acknowledges the social unit of the household, the division of labour that sustains it, and cultural norms of reciprocity, conviviality, and obligations in marital relations that underpin it (Carrier, 2018; Fevre, 2003; Olivier de Sardan, 1999, 2005a; Sayer, 2007; Silverstone, Hirsch, & Morley, 1992). It attempts to understand how mobile money usage either embeds and perpetuates gendered "rules, norms, and values" (Long, 2003, p. 241) such as those around the household division of labour, income responsibilities, and rules of financial disclosure and management in the already complex social domain[71] or, alternatively, transforms the established gendered social order.

Gendered Socio-Economic Relations in Kasese

While gender relations across East Africa are changing, historical and cultural differences among nations and tribal groups necessitate local, contextualised research. Research with one group of people may contradict findings in a neighbouring group, in part because of idiosyncratic histories and cultures. Cultural diversity across East Africa is complicated by pre-colonial tribal differences and by different experiences of colonialism,

[71] I use Norman Long's definition of domain here: "the loci of rules, norms, and values that become central to this process of social ordering and to the establishment of certain pragmatic rules of governance" (Long, 2003, p. 241).

modernisation, urbanisation and migration. Kasese is no exception. Gender relations, norms, and attitudes in Kasese encompass a wide variety of traditional, conservative, and progressive elements that impact existing and changing socio-economic relations.

As briefly discussed in Chapter 1, the Kasese region was mainly outside the money economy during colonial rule. Money use became widespread in the 1950s, according to advanced-aged research participants,[72] which was contemporaneous with the post-War development of cash crop production including coffee and cotton.

The Bakonzo people, who make up the majority of the Kasese population, and most of this research, are a culturally conservative agrarian group who maintain largely traditional ways of life and attitudes to property and propriety (Stacey, 2003). The relative isolation of the Bakonzo from colonial influences may at least partly account for the traditionalism and conservatism of this group relative to other Ugandan peoples— such as the Baganda and Batoro tribes—who have had a more extended history of engagement with Western culture and modern market economy. Moreover, the Bakonzo history of separatist violence and resistance to Toro Kingdom rule during the colonial period has rendered them frequently at odds with central and regional governments even since the 1950s. The establishment of the Rwenzururu Kingdom in the 1960s (eventually recognised by the central government in the 1980s) further exacerbated the Bakonzo's minimal social and economic integration with the rest of Uganda late into the 20th Century (O'Connor, 1965; Stacey, 2003; Syahuka-Muhindo & Titeca, 2016). The obvious question is whether the relative isolation and cultural conservatism of Bakonzo played out in the gendered dynamics of mobile money use in Kasese?

Christian and Traditional Values

[72] A number of participants in this research recall a time when money (fiat currency) was rare. One participant noted that he first saw coins in his teen years (in the 1930s or 40s), which people from his tribe first started receiving, around that time, from merchant Arab traders, in exchange for goats and chickens.

Early into the research, I sought to interview community leaders on mobile money and, as discussed in Chapter 3, I secured interviews with a local Anglican Reverend and Bishop. The Anglican Church of Uganda is the largest church by attendance, established in Uganda at the turn of the last century, concurrent with missional Catholicism. Typically, the church is a moralising influence in the community, responsible for providing an active leadership role alongside—and sometimes, in contrast to—the role of the state (Gifford, 1998; Jones, 2008, 2013). Through these conversations, it became clear that mobile money was not just a transmitter of economic value but of considerable, and gendered, moral value. Echoing Wilkis's (2017, p. 13), claim that money enables judgement of "virtues and defects" that create moral hierarchies, interviewees often spoke of the roles of Christian conduct, or of men and women, according to gendered divisions of responsibility and expectation in relation to money. In a conversation in the local cathedral, I queried the Reverend whether mobile money has helped families:

> I think that that one hasn't done much. Apart from the very committed Christian families, it hasn't benefited the culture. The culture actually empowers men to be very selfish. When it comes to money…, the woman is not supposed to know how much money the man has, and after this the mobile money has increased the problem.

In Kasese, it was common for men to control family resources, assets and capital. While it is likely the origins of this norm pre-date Bakonzo peoples' relatively recent entry into the money economy it does raise questions about the depth of tradition shaping specific economic practices. For example, despite the Reverend's conservativism he was highly critical of the so-called *traditional* practice he described to me:

> The men don't allow the women to access their phones, even with a message, or phone calls, the woman is not supposed to use…, you can't even to know how much money is there. Because even when it came to the times of the banks, a woman was not to know how much was in the account of the man…, so I don't think this system

has changed much.

These comments highlight some crucial aspects of gendered mobile money usage in Kasese. The Reverend remarked on the technology's ability to conceal money in users' private e-wallets. With the inbuilt privacy features of the mobile phone and mobile money, a wife could not know how much money the husband had. Norms of financial privacy required by banks were extended to mobile money technology, the privacy of a digital wallet being an important feature of the service offering a safe store of value to users (Kendall, 2010; Klapper & Singer, 2014; Penicaud & Katakam, 2014). Such features have contradictory effects, however. As some literature identifies, mobile money's private e-wallet empowers and liberates women from male control over their finances (GPFI, July 2020; Kusimba et al., 2016; Suri & Jack, 2016). Conversely, the same privacy function curtails a wife's access to, and knowledge of, her husband's account. This presented a conundrum for the church and its parishioners with programs focused on opening up household finance decisions to a greater gender balance.[73] The privacy function of the technology, according to the Reverend, perpetuated male control over family finances by restricting women's knowledge of, and access to, family savings.

However, the Reverend was careful to make a moral distinction among families in his parish. He noted that among "those who are committed Christian families, this doesn't happen. But for the majority of the families, and the men, they are still very, very, selfish." The church in Uganda tends hold that its dedicated parishioners have higher moral standards than the non-churched who are prone to become caught up in more worldly pursuits (Bantebya, Muhanguzi, & Watson, 2014). Moreover, the church in general is known to get caught up in the *moral politics* of the nation in Uganda and are often outspoken critics of

[73] The Anglican Church was involved in a number of programs that aimed to improve financial literacy among parishioners, with the view to achieving a stronger gender balance in the households of the laity. These programs were especially targeted at young people through church youth groups (Jamison et al., 2014) (see also www.poverty-action.org/printpdf/6566). The church also has affiliations with international faith-based programs like Side-By-Side Faith Movement for Gender Justice and Dan Church Aid (see www.churchofuganda.org/wp-content/uploads/2019/09/annual-report-2018-1.pdf and also www.sidebysidegender.org/1675-2/).

alleged moral decline (Bompani, 2018; Boyd, 2015; Jones, 2008). While the statistics for Uganda show over 80% are Christian (UBOS, 2016), this comment from the Reverend suggests that those who are more than merely nominal Christians, are considerably fewer than the statistics imply.

Interviewees indicated similar sentiments of an established Christian moral economy too. When speaking, especially with those of the older generation, about sociable financial relations, they commonly associated with an ideal of *good* or *committed* Christian families. Edmond, the aged peasant farmer, lamented that couples were not trusting each other with money (see also Chapter 3 and Chapter 7). As for him, having had a church marriage, he and his wife loved and trusted each other. He proudly noted that the two shared their money without conflict: “no one is going to leave one another, so [we] are going to stay together.” The problem, according to Edmond, was the neglect of Christian values in the community, of infidelity and the propensity to divorce that had accompanied modernisation. The youth today, he admonished:

> Nowadays, they no longer behave like…it is easy [for them] to go. For us, we grow up knowing that [we] have to trust our wives—and only one wife! But nowadays, a lady has a boyfriend somewhere, nowadays a boy has a girlfriend. I think that’s why have some misunderstanding, they don’t be contented.

According to Edmond, young people did not abide in long-term committed relations and were too able and willing to have multiple partners, bringing distrust and discontent into relationships. In this way, he lamented that modern ways seemed only to exacerbate discontent in relationships among the youth.

Biira, a woman in her fifties, was a seamstress with a shop in the Kisinga trading-centre. She too noted that the church encouraged the practice of trust and financial transparency in relationships. She echoed Edmond’s concern about young people’s distrust. The church taught that families should share the role of family financial planning: “those others should financially plan together and not cheat each other" she said. Biira's concern was that while young people have been taught, they do not adhere to moral norms of *proper conduct*—that is, what is proper behaviour and virtue in the marriage (Boyd, 2015; Silberschmidt, 1999). Biira was suggesting that financial reciprocity is a moral norm in their culture and aligned with church doctrine but ignored.

The grandfather of my informant and interpreter, *Muzee* (a Swahili term for *grandfather* in this instance), highlighted similar concerns. He recalled a time before money was in the area. According to his recollection, money started to appear around the time of his adolescence, which he believed was in the 1940s when the East African Shilling was still in circulation. However, his responses indicated that the shift in trust in marriage was not necessarily due to a Christian ethos, but rather, originated with even older practices and traditions.

Traditional household relations reflected a number of economic and social obligations on the part of each gender according to Muzee. He raised the former practice of the Bakonzo women, out of respect to their husbands, refraining from eating chicken. This practice of abstinence drew from a widely held belief that upon eating chicken meat a married woman was liable to cheat on her husband—as if the eating of the chicken meat stirred up a carnal desire for infidelity. Abstinence from eating chicken was a sign of honour and respect that a good wife would show to her husband. Muzee clarified: "So a woman who committed to not eating chicken showed she loved you, it was a sign of 'love' that a *good* wife practised toward her husband." My translator, the grandson of this man, expressed immediate and pronounced surprise as it was not a practice or belief he had encountered in his lifetime—his grandmother had died while my interpreter was young, and his own mother did not maintain this tradition. He found it both comical and strange. I later discovered this was a well-known practice among some of my acquaintances in Kasese Central who hailed from other tribal groups.

While no longer holding much currency in Uganda today, it was a practice that was common among earlier, likely pre-Christianised generations. In relating this anecdote, Muzee conveyed the degree of love, trust, and respect for the marital roles and customs that existed in pre-colonial times, before a deeper integration with modernisation occurred.

Bakonzo women in those days, Muzee explained, were not allowed to conduct trade with valuable household items either, suggesting that males controlled the primary household assets. In the days before money, a Bakonzo family's wealth was typically held and exchanged in livestock, usually as goats and pigs. Such items were off-bounds for women to engage in through barter or debts—exchange with these animals was the domain of the husband. However, for lower-value items like garden produce, women typically would conduct exchanges with other women, even without the husband's knowledge or interference he explained. Women were the primary producers of garden produce and could trade and borrow this produce among themselves without sanction, but they did not engage in trade with men or men's assets. Muzee continued, explaining that if a special meal was called for, a goat would need to be cooked. He might need to borrow one from his neighbour. But, he would need to seek out the husband to secure the transaction, since a wife was not allowed to engage in this asset class without her husband's permission. In this practice, there were distinctive asset classes of household goods assigned to specific gendered domains. Such gendered household practices and responsibilities may help explain the persistence of normative conventions of male control over high-value household assets, including money, among the Bakonzo. Similarly, James (2014), for example, finds that money now usurped cattle investments among South African men and Shipton (1989) notes the gendered division of acceptable money transactions among the Luo in Kenya. These older generation interviewees all seem to hold concerns that modern practices have usurped traditional norms of the moral economy and brought conflict into the households of the young. Rules, reciprocity, interdependence and tradition appeared to have been overlooked in favour of growing selfishness, independence and distrust.

Figure 11. Baluku interviews his Muzee in the front room of his hut.

Gender Conviviality

Gendered norms, attitudes, and behaviour toward mobile money usage in Kasese also reveal cultural solidarity and *convivial* economic relations. Conviviality is used here to refer to interdependency of social and economic life between the genders which, in the case of mobile money usage, suggests cooperation and sharing practices between men and women in marital relationships. As Illich (1973) explains, conviviality is the opposite of industrial productivity and is instead an expression of a positive value in society. In Illich's (1973, p. 18) words, conviviality is:

> An autonomous and creative intercourse among persons…in contrast with the

> conditioned response of persons to the demands made upon them by others, and by a man-made environment. I consider conviviality to be individual freedom realized in personal interdependence and, as such, an intrinsic ethical value.

Evidence of convivial behaviours revealed the persistence of favoured norms expressed in a mutual interdependence between genders, acknowledged, at least, among the older generation. These behaviours involved many family or other relational obligations and economic responsibilities toward one another in a moral economy. Overing and Passes (2000, p. xiii) describe conviviality as consisting of "the manufacture and control of the social environment through the creative and communal, yet free and individually autonomous, agency of its members." Thus, it implies a sense of conviviality in relations between men and women, evidenced by mutual interdependence alongside individual agency.

Mobile money usage in Kasese demonstrated convivial relations of interdependence. Notable examples of mobile money featuring in this manifestation of the moral economy included the payment of expenses like school fees, rent, bills (for those with public utilities), and other costs referred to as *support.* For example, there was a near consensus among interviewees that men were responsible for their children's school fees. This was a general assumption within the social order of Kasese society and elsewhere in East Africa (Silberschmidt, 1999, 2004). While public schools are available in some Ugandan communities, they were too few in Kasese to service the whole district. For rural families, access to low-tuition state schools was particularly limited. Many families preferred to send their children to a private school where, they believed, the quality of education generally exceeded that of public schools. Families also prioritised sending their children into private education if they had a connection with one of the many religiously affiliated schools.

School fees were a significant expense for a family—a primary-school-aged student's annual fees amounting to a month's salaried wage, or often, much more. The impost of a

300,000USh to 1,500,000USh fee per child, per year, was a considerable cost and, I was told, many families fell behind on payments. In such cases, children were sent home, unable to finish the term or school year. It was not uncommon to see a teenager enrolled in a primary school grade, or a senior high school student, in their early 20s, in the schoolyard. Social pressures persisted to ensure a father is making and saving enough to educate his children and get them through the schooling system in a timely manner. It is also noted more generally in the Global South that the responsibility for school fees rests primarily with fathers as these are large cash expenses that require male cash earning capacity or the sale of high-value assets, such as cattle, controlled by men (Kusimba, 2018; Silberschmidt, 1992; Singh & Nadarajah, 2011).

From the broader consensus of mobile money research across Africa, it is recognised that mobile money is especially useful for the payment of these fees (Aker, Ghosh, et al., 2016; Aron, 2015; Lashitew et al., 2019; Sekabira & Qaim, 2017c). Participants in Kasese often used mobile money for this purpose and men generally recognised their responsibility for these payments. One group interview with fishermen noted that because they, as fathers, were responsible for school fees it was also more likely and appropriate that they use mobile money. Edmond, similarly, a farmer in Muhokya told me of his twelve children including two at university, in Fort Portal and Mbarara, and others still in primary and secondary school. In order to meet these expenses for so many children, he jokingly described his status as that of a "peasant" digging for money: "School fees are many, that is why I am going to dig, and to find money [there]!"

While it was customary that men are responsible for school fees, some interviewees indicated that responsibility was shifting. For many families, the activity of saving and payment was a group effort involving men and women. While some household needs could be met through self-provisioning (e.g., subsistence agriculture, gardening etc.), school fees required cash income that, in a poor region like Kasese, could exceed the efforts or capacity for the male to earn alone. Of course, fees varied considerably depending on where children attended school—from around 300,000Ush per year to attend a state school in rural Kasese to over 1,200,000Ush a year to attend a private school in Kasese Central. The cost of books, uniform and supplies naturally were additional to these enrolment fees.

One respondent noted he would seek out his wife to assist with school fees if he was unable to raise funds himself. Both had mobile money accounts, he said, and both were involved in various cash earning entrepreneurial activities; “my wife is a businesswoman” he states proudly, so “I can call her if I need [some] money from her for fees." Some young adults indicated they too were enlisted into the activity of making or meeting the cost of school fees for siblings. George was 22 years old and lived and worked with his mother in Kyarumba. His mother owned a small hotel and he helped with jobs like waiting tables, fetching supplies and handyman duties. While his mother had a mobile phone, he claimed she did not know how to use it. Instead, she relied on him to conduct mobile money transactions when the need arose. She kept some of her business profits, as well as money his brothers remitted weekly to her, on her son’s phone, using it as a place to store money.

School fees were not the only mode of mobile money transactions in familial gender relations and many respondents also noted that mobile money was used less frequently than other literature suggests as people maintained a preference for cash (see also Chapters 5 and 6). Instead, where mobile money was used was often in support [74] of others. In Ugandan society, support can mean many things, from money for groceries and household needs, to paying bills like electricity or water, for medical expenses, clothing, and even gifts. George, for instance, noted that:

[74] I am reluctant to use the term “remittance” here as it implies a frequent payment strategy that families undertake rather than as infrequent and needs based assistance payment as discussed in Chapter 5.

> Most girls here, they depend on their boyfriends or their husband to send them money.
>
> So many, many, are using their mobile money to send to their women or girlfriends.
>
> So women are receiving mostly and men are mostly sending.

The behaviour is not unusual—Kusimba et al. (2016, p. 274) finding similarly in Kenya that "men are money senders and women are receivers." During the conversation with George, he coyly admitted to supporting not one, but two girlfriends, each of whom lived in surrounding villages. He used his mobile phone to send money, one of whom he remarks is now pregnant with their child, and so he regularly supports her. The other, he acknowledges, gets money from him when needed, as he describes: "when she has personal problems." I was unable to get George to explain this further.

Miagent (24 years) and her husband set up a dress shop a year before I met her, across the street from George's mother's hotel. Like so many other businesspeople, she used mobile money as a back-up store of cash when travelling for business purposes. Every Saturday morning, for example, she travelled to Kasese Central to buy stock from the used clothes market and resold the items in Kyarumba. She was a frequent user of mobile money which she employed as a means of savings and as a back-up option if the cash she was carrying to Kasese was not sufficient. Like many earners in Kasese, she also used her money to support a few family members with her income.

As Miagent was running a business, she earned sufficient cash to continue supporting her natal family members despite being recently married. While she sent her mother money from time-to-time, she regularly supported her younger brother at senior high school in the town of Bwera. I asked her about her husband's attitude toward her active support of her maternal family. So far, she said, as a young couple, they had no children and so she could use some of her surpluses to help support her mother and brother. She conceded that she had a *good husband*—both trusting each other and even sharing their mobile money PINs as a sign of mutual trust. Miagent's confidence in the convivial nature of her marital relationship provided additional confidence to direct some of her income to support her family—at least while the couple remained childless.

Demoralisation in Familial Relations

Besides solidifying family relations through expressions of conviviality, mobile money usage can also contribute to the breakdown of trust. I use the term demoralisation in this research in reference to the moral dissonance participants experienced in relation to changing social relations characterised increasingly by distrust (as discussed in Chapter 2). The notion of demoralisation has much in common with other sociological concepts used to explain the deep anxiety that accompanies individualisation, the deinstitutionalisation or disembedding of traditional norms, rationalisation, reflexive modernisation, and so on. Durkheim famously drew on the notion of anomie, Weber on disenchantment, and Simmel on the idea of a blasé mentality. Fevre (2003, p. 6),notes that the idea of demoralisation is:

> a kind of shorthand used to describe the end product of several tendencies first identified by classical theory: the decay of bourgeois values, anomie and the death of the collective conscience, the disenchantment wrought by rationalization, and the use of money as the source of all value.

Similarly, demoralisation draws on Ulrich Beck's approach to individualisation as disembeddedness and the impact of "the disenchantment dimension" accompanying the "loss…with respect to practical knowledge, faith and guiding norms"(Beck, 1992, p. 128). I preference term demoralisation here in order to cast the framework of moral economy in relief while expanding on the notion of moral economy to include the processes of individualisation and disembedding that characterise modernity and the outcomes of those processes as captured by concepts like anomie. Responses from research participants spoke to widespread experiences of demoralisation expressed as disappointment, distrust, resistance and counteraction symptomatic of broader social shifts associated with modernisation and individualisation.

Distrust and male demoralisation in Kasese

While much of the research in gender relations in East Africa attends to women's empowerment or subjugation in society and economy, other research, albeit less so, has considered male disempowerment. Notable examples have considered male disempowerment deriving from the impact of colonisation and accompanying capitalist economic changes (Ferguson, 2015; Silberschmidt, 1992, 1999, 2011b). Silberschmidt (1992, 2011b) considers that male disassociation is due to dramatic changes colonialism brought to their social lifeworlds. Likewise, disassociation is symptomatic of broader demoralisation; it exemplifies a strategic logic of distrust, as a response to destabilised and disembedded traditional moral economies. The research of Silberschmidt on male economic precarity is instructive here (2001, 2004). She notes that:

> lack of access to income earning opportunities has made men's role as heads of household and breadwinners a precarious one...The key and the irony of the patriarchal system resides precisely in the fact that male authority needs a material base. Patriarchy used to be closely linked to male entitlement to control all essential resources, to 'own' and decide over the means of production. ...This has made men's roles and identities confusing and contradictory and many men express feelings of helplessness, inadequacy and lack of self-esteem (Silberschmidt, 2004, p. 49).

Among the consequences of this precarity are loss of self-esteem, frustration, dissociation, distrust and, within the household, increases in aggressive and controlling behaviours (1999, pp. 8-9; 2004). In short, male's roles and identities have become increasingly contradictory as they are caught between traditional norms of providing a material base for the household and a context of diminishing economic security.

Beck's acknowledgement of individualisation's destructive effects on social coexistence describes a similar effect: a "disembedding without re-embedding" (Beck & Beck-Gernsheim, 2001, p. xxii) that is productive of individualised biographical selves responding to systemic contradictions and structural dysfunction. In this context, demoralisation may be understood as an adverse social action in response to views that men and women must mediate their lifeworld relative to market forces but, in so doing, no longer meet their convivial responsibilities to each other—instead are demonstrating Western, liberal notions of self-reliance, and autonomy.

Figure 12. The morning catch is hauled in as prospective buyers gather about the boats.

While some men evidenced trust, mutuality, and altruistic sentiment toward their wives, a significant portion of respondents expressed general and specific sentiments of disappointment toward women. Male responsibility, male honour, and gendered ideals of virtue were seen as unattainable or unsustainable due, at least in part, to socio-economic precarity.

When interrogating reasons for the breakdown of trust between genders, and the role of mobile money, interviewees cited reasons including, but not limited to, traditional and religious expectations and the social changes that accompany economic modernisation. For Giddens (in Beck et al., 1994, p. 45), the transition from traditional to "post-traditional society" is indicative of modernity's shift: "the whole institutional apparatus of modernity, once it has become broken away from tradition, depends upon potentially volatile mechanisms of trust." Whatever the reason, men in Kasese expressed frustration with the level of social change in their society and used mobile money in ways that gestured toward attempts to regain self-and household control.

I interviewed a group of men sitting on benches in the shade of a shopfront at lunch one afternoon in the town of Kisinga. One was a motorcycle mechanic, another a *chapatti* seller, and another was a coffee broker. A few worked at the hardware shop where we sat. While responding to my queries, their tone, when it came to gender relations and mobile money, turned to despondency. One man started by saying "women are using it in the same way [as men]," suggesting disappointment about equity and parity in gendered usage of mobile money in Kasese. He subsequently qualified his position:

> When you are sending it to a woman for a reason, she has to use it for that reason. It must be used for a purpose, once it's used for the purpose, it can't be used to do other things…they have to be serious!

The group nodded and murmured in agreement. These men did not regard women as good stewards of money; instead, they suggested women used mobile money for careless, even selfish reasons. I countered, aiming to gauge the level of trust they had in their wives and whether their wives were indeed as unscrupulous with money as these men were attempting to convey. "Do you trust your wives with your PINs?" The group acknowledged that while many of their wives had phones, none shared their PINs. Another offered that while the wife may be able to access his phone if she does not know the PIN code, she cannot access the mobile money account. Another, taking care to note that not all women were the same, offered the following warning:

> Sometimes, [when] you have taken your *waragi* [gin], you are drunk, and she knows your PIN number and withdraws your account—but not all women do this! But, that's what [we] fear—if wives know [our] PIN numbers. The same for women, they are very *hard*, they don't want their husband to access their PIN number.

Assertions of an unfeminine hardness suggested dynamics of non-convivial, negative sentiment toward husbands. Wiegratz and Cesnulyte (2016, p. 10) similarly identify a trend in Uganda toward "hard practice" and the "hardening of economic relationships and interactions between ordinary actors" as a result of neoliberal reforms. This results in the shaping of new moral economies including those of the household. Such findings also echo Simmel's (1950a, p. 411) assertion that the money economy and the dominance of calculating intellect of modernity are "coupled with an inconsiderate hardness" (see also Chapter 2). As a result of this distrust, men found an obvious way to sanction women's behaviour in withholding access to their accounts. In such a way, they mitigated the risk of spousal theft and kept stricter control over household finances.

The men I interviewed also discussed ways in which mobile money was used to affirm more long-standing gender antipathies. When pressed further during out lunchtime conversation the men went on to admit that not trusting their wives was also cultural. "The Bakonzo" one explained, "teach their sons not to trust their wives." Instead, he continued, "men trust their sons; it doesn't bring fights."

A group of fishermen shared a similar sentiment on the shores of Lake Edward, one of the major fishing villages in the district. One expressed a common sentiment: "Sometimes, a married woman, you can trust her with your PIN, but sometimes you don't trust her. So the practice is to keep your PIN secure and store money on your phone." A quick poll of the group indicated about a 50% split between those who knew their partner's PIN and those who did not. Such trust, or its lack, between husbands and wives appeared an essential marker of more general satisfaction in gender relations. In Kyarumba, a *boda-boda* driver was adamant in his convictions of distrust:

> Women are thieves. You can open for her a shop, then after you put her in a shop, she will be saving some money on the phone, so that you don't see how much she has. . . after making some sales, instead of telling 'I sold 100,000' but telling 'I sold only 70,000' but has put 30,000 on the phone, on mobile money, and keeps quiet. That is how they are using mobile money. (And men don't do this?) For us men, well the business is mine so there is no way I should, it's my money, so I am not hiding my money from my wife. But women, most businesses are opened up by their husbands, but they keep on stealing money from them—that's a problem with mobile money. . . there are a lot of fights in the homes about that.

A Mutoro farmer in Muhokya related that each of his two wives had a phone and that they were, he amusingly added, even on a different network from him. None shared their PIN with the other. When asked why not, the farmer explained that he feared a wife who knew his PIN would steal his money. His reasons were pragmatic: "They are still producing children so they can divorce and can run away with my money." Other men appeared more conciliatory or at least, ambivalent about gender relations and the frustrations between men and women. Vincent, a fishmonger in Hamukungu, explained:

> Sometimes, the women are thieves, so now they don't know their [husband's] PIN number. So now they [men] put their money on mobile money, but if they [women] know their PIN, [they] can just now steal their money. But if they [men] just leave their money in the pocket, they [women] can just pick it. But the same to women.

Some men are drunkards, and they can steal money from their wives.

The concerns shared by so many of these men highlighted an ongoing disposition of distrust and disappointment, if not anger toward many women. While many acknowledged their problem was not with all women, distrust was pervasive and normalised in ways that carried over to, and was evidently compounded by, mobile money use. In response to perceived threats to reciprocity and of distrust in their relations, men found ways to sanction women in order to reassert degrees of control and reassert moral rules, norms and conduct (Giddens, 1984). Thus mobile money seemed to exaggerate already embedded gender relations of distrust and jealousy that prompted non-convivial behaviours by attempts to control or dominate, or to withhold and disassociate.

Female demoralisation in Kasese

Sentiments of jealousy, fear, disappointment, and distrust were also common among women and their attitudes toward men and mobile money. Several women disclosed mobile money practices that reflected concern about their relationships with men and how they acted to keep money safe from husbands' attempts to steal it. Others noted their need to beg and cajole husbands into providing them with support to feed and clothe children. Female friends in my social network were also a good source of information about gender dynamics, never being short of opinions about gender relations when the topic of money and mobile money arose.

One morning, at the landing site of Hamukungu, the fishermen had not yet arrived from the previous night's fishing, yet many buyers were beginning to show up to the market, waiting for the catch to arrive by boat at the lakeshore. Olivia drove up in an old Toyota sedan, backed her car up to the concrete slab, opened the boot, and leaned against the car watching the growing crowd. I noticed her because she was the only woman present in the group, and unlike the other women I had seen selling fish at roadside stalls in the area, she was much younger. Olivia walked up to our group and began listening carefully to my interview with a male associate of hers. Greeting her, he recommended I speak with her about mobile money because she was younger and used it more than he did.

Olivia was a 28 year-old businessperson, a fishmonger from Kasese Central. She made the daily trip from Central to Hamukungu along the pot-holed highway and the bone-rattling gravel road to get to the landing site. The drive took at least an hour and a half, the majority of which was spent driving along the dusty dirt track from the highway. Olivia owned a car, was a self-employed entrepreneur, and a successful broker/middleman in the fish industry. Her confidence was impressive.

Olivia used mobile money for business but not for personal uses. I asked about her savings habits and why she did not use her account. She did not keep money in her phone because of fear her husband might steal it from her. It was a familiar story.

> Sometime, my husband, he get maybe get my PIN number, then could now take it [the phone] and he take my money, so that's why now I don't keep money on the phone.

Instead, Olivia used a bank account in Kasese Central for keeping profit and savings "keeping one hundred [100,000USh]," she told me proudly, in the bank every month. I asked her if she knew her husband's PIN number, to which she replied:

> Men don't want their wives to know how much they have. Mobile money helps them hide their money. He hides his PIN. He hides the money on the phone. Then he just keeps complaining he has no money, no money on the account…they are just using it to hide the money from the wife, so that they shouldn't know how much they have. (Only men do this?) Also women do the same. Once the husband know the woman has money, they become lazy and want the woman to pay for everything…. Sometimes men doesn't understand them…men just want them to do all the things. But on the other hand again, women are not supposed to have a lot of money…whenever she [as a woman] has cash in the hand, he will catch her and say

> 'Where have you gotten this money?' So sometimes they are hiding it on mobile money so that these men will not see the cash, otherwise the men will be asking a lot of questions 'Where have you gotten this money?' 'Who have sent you this money?' It brings violence in the house. So if she gets cash she rather keep mobile money, she keeps it separate or in savings, so the man will not know how much she has.

According to Olivia, women hid money from their husbands for a variety of reasons including conflict over responsibilities, jealousy, theft and violence. Foremost in Olivia's response concerning her own behaviour was fear her husband would make claims on her money and, if unsuccessful in attaining it through obligation, attempting to steal it. By providing users with capacity for secrecy mobile money thus promoted both financial independence and possibilities to sanction non-convivial spousal behaviour.

Women living in polygamous households drew attention to how feelings of vulnerability influenced their use of mobile money to maintain secrecy. Masika, for example, was a shopkeeper in Hamukungu. I interviewed her in the shade at her shop door while she was making lunch on a charcoal stove. Masika did not trust her husband, nor his other wives, with her money and never shared her PIN. As the third wife in the family Masika feared her husband would steal money to pay his debts or out of favouritism to another wife. "It is not safe, because he can divorce [me] any time" she said. Like other participants, Masika highlighted the risks of divorce and spousal fraud her fear of subsequent impoverishment. As Masika reminded me, polygyny was common in west Uganda but not universal. The church was against it, and so-called *good Christians* did not practice it for fear of ex-communication (Jones, 2013; Pennacini, 2008). Informants believed that polygyny was

Figure 13. A girl tends to her parents preserved fish stall at the Kasese markets

particularly common among the uneducated and the unchurched including those who practiced Islam. They also believed polygamy more evident in villages and trading centres that have a mixed tribal population and where there are fewer social and institutional controls regulating marital relationships. In the mountains, where the population is exclusively Bakonzo, my informants told me, polygamy, divorce and infidelity were all less common—presumably because the proximity of social relationships allowed the tribally homogenous and conservative Bakonzo population to monitor marital relationships more closely.

To further probe women's economic demoralisation, I interviewed Josephine (see also Chapter 2). She was a good source of information on women's socio-economic state. Having worked for SmartMoney, and then as a micro-finance loans officer for women's cooperatives, she had worked with women's groups and the financial inclusion industry in the Kasese region for over five years. I was keen to get her insights. Josephine was well aware of the common problem of distrust in relationships, talking at length about the nature of the problem and the ways women respond to their husband's actions.

At the time, Josephine was engaged and soon to be married. After two years of courting and payment of the bride price, she and her fiancé had obtained her father's consent to commence wedding planning. The two had been cohabiting for at least a year but her new job meant she had to lodge during the workweek in a town a half-hour north of Kasese Central. Her fiancé, Baluku (as mentioned in Chapter 3) spent the workweek out of town at his fledgling medical clinic, a half-hour south. On weekends, they all returned home to Kasese Central to be together with her sister and brother who went to school in town. Paying rents in three locations was inconvenient and costly for a young couple. However, for middle-income earners—the educated career class in Kasese, multi-sited households were not unusual (see also Chapter 6). Workers must go where the jobs are. For Josephine and Baluku, and her dependant brother and sister, it was cheaper to maintain multiple dwellings than incur the expense and time of commuting daily.

I asked how couples make financial and economic plans and the nature of those decisions where partners relocate to earn a better income. According to Josephine, the logic of dividing income and expenses was often decided by the relative size of each member's earnings and their attendant needs, especially if they were living and working in different communities. Mobile money payments were a cost-effective means to circulate cash to wherever the need is greatest, particularly for those household members that find work in other communities. However, problems could arise with the absence of a partner, leading to dissolution of the relationship or a lack of accountability, the misstating of one's financial position, or indiscreet spending.

> It is good if it is a couple who sit down and make a strategy to make more money, to develop more. But, there is some couples that a man tells his wife, 'I am going to

> make some money' but instead he goes and takes another wife…then he not even sends a little but he forgets about the family. So that is when the woman is also becoming selfish. But if that does not happen, they can work together hand-in-hand, but it will be hard. It is also common, when the man knows when the woman is working, it is hard for the man to send money if he see she is earning money. I'm sorry to generalise, but what African men do, if he sits down and sees she is working, if she can buy food, she can pay rent, she can care for herself, [then the man concludes] 'the work I [the man] am remaining with is to pay fees for the kids, then the remaining for *development*.' (I query Josephine about the meaning of 'development'). For development is like, I want to buy plot of land… it is the big things, like a refrigerator for the shop, that is what can happen, so then they are not sending, what? Money!

Josephine explained that financial responsibilities were organised by negotiation and agreement when there is a strategy in the household. A woman's income would support some items and her husband's income others. Problems arose when trust did not exist in the relationship or when convivial norms are transgressed.

Josephine related a personal story about Baluku from their early days of courtship. One day, while cleaning the house, she came across his payment contract. Looking it over, she realised there was a discrepancy between his actual salary and what he had told her. She was angry because she had been honest with him about her earnings. When she queried him on the discrepancy, his response, as she told it, was puzzling: "No, that is the way us men behave, we don't need to tell you!" She continued, "So, I didn't know that, but that's what happens with African men." However, she noted, that in their situation, like others, trust will develop as the relationship continues:

> But when you sit down and you begin trusting one another, they end up telling you the truth. Because some men…they don't want you to know the PIN number. But as time

> has gone on, [he realises] something [bad] can happen, 'so my PIN is this'. . . so now he has trusted me. But most African men, that is the way they feel [a lack of trust].

Josephine explained that men also have this tendency not to tell their wives about the problems they are facing. More recently, Baluku had been looking to organise the wedding, but he had been having problems meeting the brideprice set by her father. He did not want her to know about the problem because the brideprice is considered men's business. Josephine acknowledged that, on this particular issue, brideprice negotiations were a serious matter between men, and a settled and paid brideprice was also important for her social respectability. The brideprice was made especially complicated because she and Baluku were from different tribes.[75] But, despite Baluku's legitimate challenge in this situation, she explained, with some exasperation, "they always seem to have some extra for emergency, but I have not gotten why he needs to have extra."

I asked her about the basis of these relational expectations and behaviours and the frustration that accompanied these differences. Josephine highlighted the central importance of trust in marital relationships and her previous disappointment with Baluku. In general, though, she noted, women were just as likely to be self-interested actors in relations over money:

> Mostly, we don't trust one another. It is hard to ask Africans, like, coming and telling me what you earn. It is worse with the women, because if I am earning say one million, I will say I am earning 500K. We are thinking, let him do this, let her do this… because if I am bringing money to the table here, if you have brought less and I have brought more…

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[75] I was aware at the time that Baluku had experienced problems with meeting the high bride price her father had demanded, as he had even brought the issue up with me for some advice. He was unwilling to discuss this matter with his fiance as it was a point of embarrassment that he could not come up with the money. Her father had set a high price because of her education. Further, the brideprice was usually paid in cows in Josephine's tribe, not the goats of Baluku's mountain tribe. In the end, Josephine begged her father to lower the price, which he agreed to.

Women's willingness to misstate their financial position was calculative and indicative of self-interested behaviour, demonstrating both sexes' willingness to engage in deceit and counteraction to mitigate distrust. As women increasingly become economic actors and income earners, norms and expectations toward the domain of the household and provisioning conflicted. Intra-household bargaining rules were threatened as each partner expected financial contributions of each other. If conviviality and reciprocity were not forthcoming, punitive countermeasures of withholding and misrepresentation justified, in the minds of respondents, sanctioning in response to perceptions of structural imbalance in the relationship (Giddens, 1984; Sethi & Somanathan, 2005).

So often, Josephine advised, men would stop sending mobile money without explanation, leading to conflict or dissolution of the relationship. Based on the poor economic state of rural Kasese, men needed to be mobile to find employment forcing many to leave home for long periods. In the worst cases, they never returned. The money they were supposed to send became infrequent and eventually stopped. One woman advised me that her husband had left five years' previously to fish in Lake Albert, a few hundred kilometres to the north. Mobile money came from time-to-time until one day it stopped. She was left with two children and an ageing mother, trying to feed themselves. Schooling for the children was not an option. For others, the payments continued, but were small and infrequent.

I queried Josephine further about the dismay women experienced when the money supply from their husbands began to diminish. To her, women in particularly poor situations were extremely vulnerable but even those in higher economic strata experienced men leaving home for long periods of time to secure work. Problems arose when payments were not regular:

> No, it doesn't happen as a surprise. If it is a strategy then it doesn't happen so much. The bad thing with some of the women, they have in this culture, like what the

> Reverend was teaching us, 'It is for the man to provide' which is really a normal assumption. So I sit down, even if I'm earning, but I need the man to do what? Pay school fees, pay the rent, buy food… then what is my money doing? I send to my mother in the village.

Josephine's responses highlighted three significant aspects of the moral economy in Kasese. One was the widespread expectation that men should be providers for the household. This assumption was promulgated through messages from the church and was commonly assumed as a norm of proper conduct. However, Josephine acknowledged that this expectation placed an unfair burden on men as wives held them to account for all major household expenses while not accepting a similar level of accountability—at least not financially. Second was the expectation that men will begin to withhold money, keeping it for themselves, if a couple has not been active in strategising and delegating responsibilities. This, in turn, leads to and justifies the women's practice of sending surpluses to *mother* for safekeeping, rather than directing her earnings into her new family. The action was in contravention to what her brideprice is supposed to cover.[76]

When I asked Josephine whether a woman only does this when she thinks her husband is fooling around, she explained:

> Yes! Most women do those things when they have started feeling there is no security (So women will not cheat with money if they believe their husbands are being honest?) Yes, if they believe their husbands. Now like me at this time, I can't [not] send any money to my mother because I am feeling safe, we are doing everything together… I'm secure, everything is safe.

[76] This was the basis of my query to Miagent previously. Based on the expectation that, once paid, the brideprice means that a wife's income is no longer directed to her family of origin, but rather to her husband, who has bought her productive capacity from her family. In Miagent's instance, her husband did not have a problem with her supporting her brother and mother. Her reasoning: she and her husband did not have any children yet.

While Josephine intimated high trust between her and Baluku, for others, distrust promoted withholding as a risk mitigation strategy. Like the concerns shared by men in the research, distrust between men and women found expression in the use of mobile money to securely, and secretly, store value rather than to facilitate fast and simple transfer among household members. Mobile money supported individualisation and self-empowerment in response to declining convivial relations. The implications of this distrust and these gendered mobile money practices indicate calculative responses to demoralisation.

Instrumentality of mothers

Reliance on mother as a savings mechanism outside the marriage relationship came up in several conversations about mobile money. While many fathers remarked that their children, especially sons, would send money from time-to-time (for example, both Edmond and Boniface mention this), it was more often noted by participants that money would pass to a mother. The trust in mother with the care of money is a theme rarely if ever, addressed in the broader literature.[77] Yet it regularly emerged in interviews here in complete opposition to many men's position on the matter. Remittances of money to mother is part of the support economy and is therefore convivial. The Reverend referred to this practice, remarking that mobile money had become so widespread, that even his elderly mother now used it. His mother would contact him occasionally to complain that he had been remiss in visiting her, and if he was too busy to visit, maybe he should send some money on the phone to her instead. In telling this story the Reverend evinced a mixture of incredulity about his elderly mother's forthrightness about his dereliction of duty to her, and pride in her technological savvy.

Extant, though scant research in Kenya, also observes this practice wherein mobile money is sent to mother for safekeeping, demonstrating that matrilineal ties are an essential

[77] Kusimba, Yang and Chawla (2016) mention as similar practice in Kenya.

factor in the mobile money economy. But while support between son and mother is a normative moral obligation, support between married daughters and mother remained private and discreet, in contravention to social norms (Kusimba et al., 2016). Informants explained that the brideprice[78] reflected an expectation that the woman's future income capability belongs to the groom's family[79] (Anderson, 2007; Bishai & Grossbard, August 2007; Graeber, 2014; Silberschmidt, 1999). If a woman had a university education, her brideprice would include reimbursement for the cost of her education and the perceived value of her enhanced social status and economic capacity. Thus, the cultural, rational, and moral expectation was that a married woman directs income to her husband. When a wife continued to send her income to mother by mobile money, she contravened (or contested) public and patrilineal moral norms and expectations. Such practices were thus usually undertaken discreetly. Even so, the practice was a well-known secret that could be a source of discontent and conflict in marriages.

For many women, their mother was a significant figure in developing and maintaining her own wealth, far from the control of their husband. Mobile money was especially useful for this practice as it offers the ability to quicky, and privately send money—invisible to the husband's household. Like its capacity for hiding savings, its capacity for hiding money transfers facilitated behaviour that deviated from established, or expected, norms. Women privately send their mother mobile money, hidden from the jealous eyes of husbands and his concern about *capital flight* from the household. Even the Reverend acknowledged the prevalence of this practice, indicating that mothers will often hide money for both sons and

[78] Another commonly used term is the "bridewealth" which David Graeber (2014) explains in some detail. However, in my dealings with participants in west Uganda, the term brideprice was exclusively used.
[79] There is a wide variance in the scholarly contextualisation of the meaning of brideprice in East Africa. The explanation cited here is derived from a few key informants, while acknowledging the vast literature and contributions to this complex social form.

daughters: "If the son sends, he sends to the mother, and the mother keeps quiet about it." A male farmer in Muhokya agreed:

> Some [women] they send money to their homes, to keep with them, to hide it. To keep it from their husbands. When they need it, they send back. They save it with their relatives to keep it away from their husbands.

Beyond the practice of remittances for support, daughters would send money to mothers in order to hide income, putting to work their earnings with their mothers as convivial and trustworthy brokers while contradicting other norms. Mobile money facilitates this deviant behaviour while also empowering women to control their own personal finances. Josephine explained this practice of discreet remittances to mothers:

> That's what most women do. She [Mummy] maybe buy a goat, a cow, some of the money Mummy can buy for—like, if I sent a hundred [100,000USh]—Mummy can pick [keep] like 20,000USh but the rest is for her to hold…for safekeeping. (What does Daddy think?) [Laughing] Mummy doesn't even tell Daddy!

Josephine's response suggests that social expectations embodied in brideprice obligations (Sahlins, 1972) are changing and that money is flowing in ways, and for reasons, that have previously been unaccounted for. Another married woman gave an example, highlighting innovative ways women worked with mother to build capacity and earn income. Mother will use the money to buy *g-nuts* (groundnuts), which she then roasts to sell in the trading centre. Daughter and mother will share the profit, and the daughter's initial funding capital will remain secure. In this way, mother acts as a savings bank and a business partner. A woman can do this without her husband's knowledge or consent. It enabled spouses to conduct business dealings in secret, even enabling women to undertake business activities beyond their husbands' knowledge or control. Even sons participated in this practice. And yet, the practice did not extend to fathers, who were viewed as untrustworthy and potentially complicit in the demoralisation of the moral economy. Josephine was candid on this topic:

> Some sons will also trust their mothers, but it is hard to trust the dad. Mostly the daughters can trust their mums and also the sons can trust their mums, but not the dad. (Why is this so?) I really don't know… ahhh, you feel like, if I give money to my dad, he goes and cheats on my mother, using my own money.

For many women, this distrust ran deep and, indeed, the characterisation of African men as untrustworthy is widespread among African women (Bishai & Grossbard, August 2007; Silberschmidt, 2001). Many women informed me that this distrust derives from suspicions of infidelity; competition between multiple wives or jealously of them; beliefs about divergent claims on income; or fears of impoverishment and abandonment. Women responded to these concerns by hiding money. Cash, and more specifically, mobile money, facilitated action in response to this distrust and thus became a tool of risk mitigation in a complex moral economy. New income-earning capacities of women (particularly for the educated or for entrepreneurs) have complicated obligations for household provisioning facilitated by mobile money's capacity for discreet, if not deviant money transfer behaviour.

Engendering Trust

While there was distrust between the genders, evidence also established contradictory perspectives. As the *boda-boda* driver noted, many women in the region were shopkeepers. While some were the business owner, more often they were employees of shops owned by their husband or another businessperson. I asked why, if there is so much distrust, so many women were the shopkeepers. Josephine explained:

> I think it is cultural that women are more trustworthy than men. (Is this a Bakonzo thing?) No! It is common. You try to move to other districts you will see. (Are they business owners or keepers?) No, just keepers. Not even the husbands, you can even run someone's business when it is not even for the husband. A man might be busy earning money from other businesses, so he will employ a woman to run his shop.

Josephine remarked on an example of a local woman who ran a large, dry goods wholesaling business in Kasese Central. The shop belonged to a well-known businessman. His wife was firmly seated in the day-to-day operations of the wholesaling business. Around her were several women she employed, and the men she employed were mostly truck drivers for the delivery fleet. Josephine explained:

> Like big businesspeople, they will feel good when a lady, a woman, is touching the money [rather] than a man. Because they feel like she's trustworthy. Why? When you ask the reason why, they will tell you: 'This [man] here needs a girlfriend, [and a] girlfriend is going to demand a lot,' and you know you men!

Josephine continued, explaining the prevalent belief that women can be trusted handling money because they are more compliant and have fewer needs. Vice versa, men will demand more money because of the expectations girlfriends demand of them or, perhaps, that men happily assume. Josephine reasoned that men's appetite for sexual partners, who in turn, make high demands on his income in exchange for sex, creates further pressures on his income, leading them to dishonest practice in business. A similar practice has been observed in other research noting the complex exchange of transactional sex relations and obligations of money or other forms of support in exchange for sexual access (Archambault, 2017; Gysels, Pool, & Nnalusiba, 2002; Leclerc-Madlala, 2003; Swidler & Watkins, 2007; Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2011).

For a business owner, Josephine reasoned, it was straightforward as to who could be trusted to handle money—the one with fewer financial obligations and a disposition to honesty:

> What you say, a woman will do! You make sure the woman will do what is asked. So if you are working with money, you will what? To touch the money! Then when you [as a business owner], come to the side [preference] of the lady. For us, we need some little things, not expensive things, so it means that the little money you are giving me,

> it will be enough. If you are giving the same amount of money as what you would give a man, it won't be enough [for him]. So if it is not enough, what do you expect? He will begin cheating you in the business. He will start taking extra. So he is doing a disservice to the business. (Why do men need more money?) Well, men have a lot more responsibilities than women. The men's wives expect the man to buy everything!

Josephine circled back to her former point about men needing more income than women because of social obligations to be cash earners. In response to social pressure, a man would make claims for a higher wage based on his social duty as the primary provider, or because of selfishness. If a man felt he was not earning enough to meet his obligations, he may seek out opportunities by illegitimate means, such as stealing from the company (a topic explored further in Chapter 7). Believing this, business owners were prone to entrusting women with money handling.

Gendered practices and attitudes toward mobile money are complex and poorly theorised within existing development literature that tends to focus on the economic empowerment of women arguments. The practice of sending money home is frequently recognised but misconstrued as a remittance, overlooking a number of other reasons for mobile money transfers including reliance on mother as an informal banking service for savings, securing assets, and advancing entrepreneurial ventures. Moreover, mobile money supports prevailing obligations toward household provisioning that are highly gendered and in tension in contemporary Kasese.

Conclusion

As discussed in Chapter 6, claims on income earners were contentious. With the increase in the cash earning capacity of both men and women in Kasese, comes the challenges of trust, reciprocity and obligation in household financial management. There was evidence of a convivial moral economy of mobile money that is conducive to income enhancement, providing overall family benefit from simplified and enhanced transfer, income smoothing, wealth redistribution and sharing (as also discussed in Chapter 6). As the Reverend shared regarding his mother, money can and, therefore, should, be regularly, and convivially remitted—with the earner under a moral obligation to do so. In contrast with the notion of a remittance economy in which mobile money is the preferred tool for money transfer it emerged that mobile money was frequently used as a transfer mechanism for savings, with mothers enlisted as active agents in savings and investment practices rather than the recipient of remittances.

In other cases, the presence of mobile money was associated with tension in marriage and familial relations. The users, both men and women, chose compliant and non-compliant practices of mobile money use to fill gaps and ambiguities in response to a changing social and economic sphere. Mobile money disrupted embedded gender relations and was sometimes conducive of economic demoralisation. Men and women were challenged to maintain embedded norms of householding when these norms no longer seem relevant, nor possible, to achieve. There was an incongruity of traditional norms and expectations of gendered domains with the instability of income earning capacity in the family, and the resultant responses of actors in the moral economy of roles and responsibilities in these contexts. The ongoing economic precarity of Kasese households, and the anxiety this produced, forced changes in the economic contribution of household members leading to new forms of exchange relations that altered moral expectations and undermined social cohesion and normative gender roles. Despite women’s increasing participation in the wage-earning workforce, there persisted a value-laden expectation that husbands were responsible for significant household expenses like school fees, bridewealth, provisioning for the home and property, family support claims, and investment money for development. Both men and women acknowledged this expectation, but conflict arose in obligations toward one another because of it.

Tensions between the genders were evident as households under economic strain evinced distrust, suspicion and demoralisation. Mobile money may not have been singularly responsible for these tensions but it accelerated, nonetheless, changes in gender norms responsibilities within a moral economy of social obligations, particularly in marital relationships. Despite variations in individual behaviours, it is clear that many of those behaviours have challenged collective norms and moral values in Kasese.

Paradoxically, while the grey literature celebrates ways in which mobile money has promoted women's empowerment, and self-determining agency and individualisation, these aspects have been accompanied by marital and household demoralisation and disenchantment (as Beck and Beck-Gernsheim (2001) have cautioned), and in ways reflected in gendered mobile money usage. Mobile money has facilitated individualisation and empowerment but in perhaps deviant and non-convivial ways that the grey literature overlooks but that sociology has long anticipated. Beck and Beck-Gernsheim (1995, p. 56) explain the challenge that accompanies individualisation in modernity:

> Right and wrong turn into vague categories as soon as there is no longer a shared standard but just the standards of two biographies affected by different expectations and restraints, and on top of that a rapid change in stereotypes.

Husbands and wives, notably, responded to what they perceived as the transgression of trust and social obligations by hiding income in mobile wallets and diverting it, in some cases, from the household. The ease and security of storing and transmitting mobile money complicated earners' attempts to protect money from family claims while enhancing individualisation. Earners questioned the legitimacy of family members' claims in light of destabilising changes in the cash earning capacity of men and women, the changing nature of marital relationships, and shifts in the household division of labour, evincing gendered conflict, concerns of divorce and practices of punitive sanctioning.

Mobile money was found to be a useful technology to hedge one's wealth from the claims of either marital partner. In light of relational instability and demoralisation, users made calculated efforts to hide and protect wealth. The technology ensured that a partner's earnings were not garnered so easily. Despite this, the division of labour in the household has not shifted as quickly as the change that has accompanied the preponderance to a money economy, the privacy and ease of transmission that mobile money affords. Mobile money in a cash economy engenders tension in the family unit, and alters, or at least threatens to alter, stabilised norms of the household and the marriage relation. It is perhaps instructive then to view the effects of demoralisation in the mobile money economy as a "canary in the coal mine" signalling a moral economy under strain.

Chapter 8 Fraud and Mobile Money in Kasese

> Because much of the time, these people whom they send same fake message to [de]fraud, they are poor people. They are people with low earn[ings] and generally lay people, or local people who can't quickly understand that this could be [a] fake message, or these people is engaged [them] in hard communication whom [they] don't know. They don't quickly realise that [there] could be something wrong. [Detective Adam]

At Kasese Police Headquarters, Detective Adam described a dispute he dealt with between a local woman and mobile money agent. The woman had received a surprise text message on her phone stating that 900,000USh ($245 USD) was deposited to her mobile money account. A minute later she received a phone call from an anonymous caller saying "Please, mistakenly I have sent you my money, 900,000USh! Please assist me! If you help me, you can eat[80] the balance of 100,000USh but return 800,000USh to me, please!" The woman, while still on the phone call, walked to the nearby mobile money agent and arranged to return to the caller 800,000USh. After the agent sent the 800,000USh, and the caller hung up, the agent asked the woman for the payment he had just made for her. The money, she advised the agent, was on her phone. However, when she dialled the shortcode to make the payment, her account balance read zero—she had never received 900,000USh.

The woman and the mobile money agent began to quarrel. She had no money to pay the agent because nothing had been received. The agent was out-of-pocket for the transaction of 800,000USh. The agent argued that she was to blame and owed him the value of the payment because she had initiated the transaction and he sent the money in good faith. At this time, the police were called to mediate and investigate. The detective candidly informed me:

[80] Like the idea of "lunch" in Uganda, this kind of reference to "eating" a balance of money, means to consume it for oneself. See Chapter 6.

> The fact that people are poor, and they are villagers, when he or she hears, that ‘I am giving you an offer, I am giving you an offer of one hundred [from 900,000USh]’ then they want to rush. One hundred for free? They are excited! But they end up in the shit.

When the detective conducted follow-up work with the network provider, he found the money was irrecoverable. The money was sent to a SIM card registered to a fake ID, and 800,000USh had been promptly cashed-out. Using call data records provided by the telephone company he queried the other numbers the phone had called, finding each number belonged to another victim of the fraudster.

There were many mistakes made here, and the detective was eager to point out to both parties where they had failed to take adequate precautions. In her defence, the woman believed she had received money because of the SMS notification. Based on the receipt notification, she had not thought to confirm the deposit by checking her account balance before responding to it. However, the agent should never have conducted the transaction without first securing the customer’s funds either. The mobile money agent, in good faith, had sent the money to the caller on her behalf before securing the payment. He had no reason to distrust her. After all, they knew each other; they were neighbours. The situation was a common occurrence for the detective, and in such instances, the police would undertake the roles of investigation, dispute management and fraud sensitisation. Ordinarily, they found the mobile money agent and the customer were both victims of misplaced trust in the technology, in the scammer, and each other. Both must, therefore, share the loss.

Mobile Money Fraud as an Emerging Theme

Mobile money fraud emerged as a developing theme in this fieldwork. SmartMoney’s fraud experiences with certain staff and users discussed in Chapter 4 brought to light initial impressions of fraud operating in the mobile money space as an under acknowledged activity in the scholarly and grey literature. The SmartMoney experience also brought to attention a number of concerns the CEO had with SACCOS and savings groups in the region and financial fraud associated with them. Over the course of my fieldwork, many interviewees claimed they knew of cases where people had been cheated of mobile money through fraudulent transactions and a few even admitted to their own experiences. While mobile money was, in general, considered relatively safe to use in Kasese, especially among urban users, there were persistent cautionary tales, warnings and personal stories of scams and frauds that emerged over the course of my fieldwork there.

Sociological perspectives on fraud find it pervasive at many levels of social life leading Harington (2012, p. 632) to suggest that "fraud permeates social life at every level." Unfortunately, statistics for these kinds of crimes in Kasese, and in Uganda more broadly, were not available and, even if they had been, would likely have underestimated the true extent of fraud given the reluctance of victims to report their experiences (Harrington, 2012). Nonetheless, a Helix Uganda industry report estimated that in 2015 53% of mobile money agents had experienced some kind of fraud during the preceding 12 months.[81] There was ample evidence of fraudulent mobile money activity reported in the media too—newspapers publishing enough stories of rampant, large scale, mobile money fraud in Kampala to indicate the problem was a national concern.[82] At the time of commencing this research only a small number of industry reports drew attention to fraudulent use of mobile money technology in East Africa (Lamb & Polverini, Feb. 2015,; Lonie, 2017; Wright, 2015). In Kasese, there was a general sense of concern that fraud was prevalent, common even, but documentary evidence was scarce. It was with this in mind that I sought to meet with the District Police

[81] See the Helix weblog here: http://www.helix-institute.com/blog/working-together-fight-dfs-fraud
82 See the December 16, 2015 article covering a large scale mobile money fraud case conducted by MTN staff at: www.observer.ug/businessnews/38-business/41662-court-sets-date-for-mtn-mobile-money-fraud-case and www.africa-uganda-business-travel-guide.com/how-mtn-uganda-lost-mobile-money-billlions.html

Commissioner (DPC) to discuss the police's experience and responses to mobile money fraud in Kasese.

This chapter makes no attempt to quantify mobile money fraud in Kasese but, reflecting the core aim of the thesis, explores how this problem influenced the dissemination and use of mobile money and the social and economic relationships in which its use was embedded. Perceptions of, and responses to, the risk of fraud are as important in this respect as the objective rate of fraudulent behavior. The chapter seeks to address: Objective 1, by understanding fraud risk and attempts to manage it as factors that facilitate and limit the use of mobile money services; Objective 3, by understanding how mobile money services may change or strain social relations in the context of fraud; and Objective 4 by identifying negative and perverse outcomes arising from mobile money use and, in this case, attempts to manage the risk of fraud.

Criminality and Fraud in Africa

Macro-sociological explanations for crime can be differentiated into two broad categories—those that attribute criminality to processes of social change of disembedding that alienate individuals from society, and those that construct criminality as a response to structural asymmetries of power, exploitation and deprivation. Both these perspectives are reflected in research concerning the nature and extent of criminality in Africa. One perspective explains crime and fraud in society as based on the exploitative effects and excessive inequality of the political economy of capitalism or those produced by the open, unregulated markets of neoliberalism. The moral economy in general, and criminal behaviour such as fraud, according to this approach is an outcome of the same (Wiegratz, 2016, p. 333). In an important body of work, Jörg Wiegratz and colleagues study what they refer to as the "fraud complex" in terms of the neoliberal political economy's effect on the moral economy of East Africa including Museveni's Uganda (Wedig & Wiegratz, 2018; Wiegratz, 2016;

Wiegratz & Cesnulyte, 2016; Wiegratz, Martiniello, & Greco, 2018b). Wiegratz, Martiniello, and Greco (2018a, p. 15) argue that Uganda's neoliberal reforms were:

> generally characterised by an increased level of economic and social insecurity and high unemployment, which for the majority of the people resulted in economic and psychological hardship and an increase in corruption and fraud.

Elsewhere Wiegratz (2019, p. 357) argues that neoliberal restructuring "has produced structures and conditions that are fraud enabling." Importantly, in his analysis of fraud chains throughout society, Wiegratz (2016, p. 124) identifies hard practices against the naïve and the powerless as brokers take advantage of "soft-targets" in their trading activities. The body of work is extensive in its political moral economy analysis of fraud practices in Uganda and is significant in unpacking the nature of the hard practices in exchange and chains of fraud in operation there.

From an anthropological perspective, Olivier de Sardan (1999) produced seminal work on the emergence of moral economy and a culturally embedded *corruption complex* in Africa. He argues that much African corruption derives from European colonialism—reflecting a syncretic amalgamation of the conflicting cultures that created them (the colonising and the colonised). Olivier de Sardan (1999) also identifies petty corruption as a pervasive social activity that entangles all in society with some form of participation in corrupt behaviour. In sum, he argues that generalised corruption in Africa is now a deeply ingrained practice of syncretic derivation emerging from social conditions of colonisation and exacerbated in post-colonial nation-building by a political elite and a culture interfacing with global capitalism.

Others too, have considered fraud from the position of a culture of scamming and fakery influenced as well by capitalism and colonialism in Africa. Daniel Smith (Smith, 2010, 2018) explores the culture of corruption in Nigeria, and his personal experience of being accused of academic fraud around his own research conducted there. Andrew Smith (2009) examines the infamous *Advanced Fee Frauds*, also known as *419 email scams*, operated out of Nigeria. Smith's (2009) account of email scams is pertinent in that despite the amount of distrust that the scam industry has perpetuated abroad, it is also local in its emergence in particular localities in Africa. Burrell's (2012) ethnographic work on internet fraud among urban Ghanaian youth highlights the complexity of scamming culture among marginal users and the opportunities for "big gains" that motivate them to conduct frauds.

Similarly, Beek (2016) investigates cybercrime in Ghana and the socio-cultural embeddedness of practices that entangle scammers and law enforcement in complex associations. Elsewhere Beek, Kilian and Krings (2019) suggest that the proliferation of frauds and fakes are the result of an increased troubled nature of authentication, trustworthiness and genuineness in society. It is a position that echoes Simmel who noted that in an industrial society all items and relations lose their authenticity and distinction—leading to deep indifference (Arditi, 1996; Simmel, 2011). For Beek et al (2019), their focus on fraud highlights social gaps and flaws in the political and moral order of society as conmen seem to easily construct authentic performances necessary for victim entrapment. They identify the slippery nature of trust and authentication in the social realm of relations; frauds that can be *benign* or *exploitative* in exchanges of reciprocity or business conduct and more (Beek et al., 2019). Disturbing in their exploitative nature as sometimes they may be, fraud and fakery serve to emphasise moral norms in society.

Unlike the online spaces that the 419 scams typically inhabit globally, mobile money scams are local and national in scope. While there are alignments between these scam processes and behaviours, in this research, mobile money scams are practised by Ugandans, toward Ugandans. Sacha Newell's (2012) work *The Modernity Bluff* in Côte d'Ivoire is useful here in that it draws attention to the behaviours of urban youths toward rural people of the similar locale. Newell's ethnographic account provides insight into the culture of *Nouchi* gangs (urban youths) and the subculture that valorises the practice of *yere* (to steal) from—typically rural folk—referred to as fools (*gaou)* who make easy targets for scams. The research shows that these urban, aptly named *les bluffeurs* (bluffers), actively prey on rural migrants to the city; their prowess in conducting scams against the poor demonstrates their urban savvy to their peer group (Newell, 2012). In like manner, mobile money is a useful medium for scammers who use the technology to defraud unwitting rural and naïve users—a seemingly recurrent trend in Uganda and Africa more generally. In this context, the dynamics parallel the urban and rural divide that were also explored in Chapter 6.

Marshall Sahlins' (1972) seminal work *Stone Age Economics* offers a potential explanation of this targeting of migrants and rural dwellers, arguing that social distance and impersonal exchange are associated with increases in *negative reciprocity*; that is, with attempts to "get something for nothing" without suffering negative consequences, whether through haggling and barter or through deception and theft. Negative reciprocity, according to Sahlins (1972), is not directed at one's own kin, or tribe, but to those who are *non-kin*, sanctioning trickery or cunning toward an enemy or stranger. As this thesis has already demonstrated, however, through its discussion of SmartMoney's experience of fraud (Chapter 4) and theft within marital relations (Chapter 7), negative reciprocity may well be directed toward other members of the same community or household.

Chapter 5 brought to light the benefits of mobile money, enabling exchange over distances and via weak ties, where faceless commitments of re-embedding trust were important substitutes for face-to-face exchange practices. It is also important to note that many mobile money crimes provide anonymity to perpetrators. They are likely even enhanced by re-embedding of trust and actor's comfort (or sense of ontological security) with mobile exchange. It is well noted that fraud is the other face of trust; that is, in order to defraud, the swindler must convince they are worthy of trust (Beek, 2016; Chang, 2008; Harrington, 2012). This is most easily accomplished when a scam is conducted using normal, routine transactions, the aim being to catch a victim unawares (Shover, Coffey, & Sanders, 2004). Such scams are facilitated by naïve trust.

The technology of mobile money seems conducive to fraudulent behaviours too. Telecommunications media provide anonymous, inexpensive and direct access to potential victims (Beckert & Dewey, 2017; Grabosky & Smith, 2001; Odabas, Holt, & Breiger, 2017). Encounters are often conducted anonymously over the phone—the mark never sees and does not know the thief. Even in person-to-person encounters, the parties are strangers of sorts in the scam. Such encounters offer an acceptable social distance for the fraudster in that they are dealing with non-kin, while affording some degree of socially engineered masquerade of familiarity and social proximity (Goffman, 1959; Mitnick & Simon, 2003). Some researchers refer to this as *social engineering* fraud whereby fraudsters draw on psychological techniques to deceive or entice a victim into disclosing sensitive information, or a compliant action (Chang, 2008; Rusch, 1999; Yeboah-Boateng & Amanor, 2014). Fraudsters make appeals to trust by building rapport which lulls victims into a false sense of security—especially when there is the lure of a reward (Button & Cross, 2017). Socially engineered scamming, or negative reciprocity, is particularly effective where it elicits some form of contrived affiliation, such as an assumed and shared ethical frame, or kin-like, *in-group* relation with the victim, while it disguises the perpetrator's actual social distance and status as a stranger (Sahlins, 1972). In essence social engineering is remarkably effective in establishing a false security of an assumed moral baseline of norms and values that enables mobile money scamming. The following sections will highlight some of the kinds of mobile money fraud and social attitudes toward fraud risk in Kasese.

Cases of Mobile Money Fraud in Kasese

Across the street from the SmartMoney office were the District Police Headquarters, where I had an appointment to discuss incidences of fraudulent mobile money usage in the District with the DPC. It was not the first time I had been to his office. In an earlier visit to Kasese a year previously, I was invited to attend a meeting with the DPC and SmartMoney regarding a staff member who had run off with a customer's cash. At that time, the staff member had disappeared. Having swindled a few million shillings out of a customer they had promptly left the District and disappeared into the thick of Ugandan society (see Chapter 4). But this visit was not about SmartMoney. Instead, Samuel, the DPC, had agreed to help me research instances of criminal behaviour associated with mobile money fraud. After a brief conversation in his office, he proceeded to tour me around the station more generally, on the way to the investigations unit to interview Senior Detective Adam.

Enticements and Inducements

Detective Adam charismatically engaged me with his storytelling as I prompted him with questions about the kinds of crimes he saw with mobile money. He began with the story quoted in the epigraph to this chapter: "Ahh. Like a case in point, we have some fraudsters who at times sends an empty message on somebody's phone… ." I asked him about this situation, wondering why he felt people were so easily duped into believing these callers. The detective found most of the telephone scams happened to these villagers (rural people) who were not as wise to scammers' activities. Fraud was particularly successful on rural people, Detective Adam believed. They were too willing to hold to traditional norms of trust and were too naïve to the potential of scamming behaviour. Paradoxically, these traditional forms of trust were transferred to the disembedded, abstract systems of mobile banking. According to Giddens (1994, p. 89):

> Trust in a multiplicity of abstract systems is a necessary part of everyday life today….The disembedded characteristics of abstract systems means constant

> interaction with 'absent others'—people one never sees or meets…the creation of abstract systems is a fraught endeavour.

The naïve were caught in abstract systems of exchange they did not fully understand. It is this very element of ignorance, and the ontological security characteristic of the user toward establishing daily routines of trust and mutual reciprocity, that the fraudster seeks to engineer and then to exploit (see Chapter 6). The fraudster's ability to misrepresent trustworthiness in order to swindle money is a crucial element of mobile money fraud in Kasese.

Urgency and anxiety

As discussed in previous chapters, residents of Kasese Central were themselves, at most, only one generation removed from village life. Many of the poorest in Kasese Central were recent migrants, having come to the city looking for a job or to try their hand at business. In a city undergoing rapid transformation, migrant villagers accounted for a large part of the urban population (see also Chapter 1). The detective asserted that these villagers-cum-townies were similarly too trusting and naïve to clever ploys, making them easy targets for scamming:

> Just an empty message comes on the phone…as it lands on the phone, and being the fact that many people around here are villagers, they are the ones. He [a fraudster] calls them and says "Ah, mistakenly I have send my money on your line!"

Part of the trickery scammers relied on was the sense of urgency and anxiety, prompting the mark to be taken-up in the empathic feeling of the situation. The scammer aimed to exploit the person's good-will. A mark, caught up in the moment's intensity, and naïve to detecting scamming behaviour, would be betrayed by their own moral-ethical disposition and trusting nature. In wanting to do the right thing by way of the caller, and further enchanted by the deceptive offer of a reward for their honest behaviour, the victim was both obligated and motivated to return "lost" money to its owner. By telling a believable and persuasive narrative, the scammer appealed to the mark's moral and convivial sentiment to act, and their confidence in the reliability of an expert system to yield a favourable outcome. The impersonal relation was held as though it was personal in the way of a well-executed confidence trick.

Wiegratz (2016) draws attention to a similar situation between traders and farmers, where traders had been found to invent problems with the produce in order to gain a price advantage or to offer incentives for high quality products that were never remunerated. These practices were established on entirely false premises, like the false promise that higher quality produce will warrant a higher price, and the assumption of the buyer's willingness to pay. The buyer had no real intent to pay market prices. It demonstrates a bold tactic to prey on the vulnerability and naivety of sellers hoping for a reward for supplying good product.

Ordinarily, when mobile money was sent to someone's phone, the network sent an automatically generated text message notifying the account holder by way of a transaction receipt. For victims caught in a mobile money scam, they were led into the false belief they had received a large deposit into their account by way of a fake transaction receipt via SMS. This is known as a SMishishing attack, where a mark is pulled into a scam through the initial introduction of a surprise SMS (Ali, Dida, & Sam, 2020; Yeboah-Boateng & Amanor, 2014). Trusting that the technology is secure, the victim is seduced into believing the transaction is *bona fide*. Immediately after receiving the bogus text, the fraudster will call the victim in order to induce a state of urgency, confusion, anxiety, and empathy in the victim. The detective explains:

> Then he [the fraudster] tells him, "Now you assist me! Go to a nearby mobile money [agent]. I have sent a million mistakenly, you assist me, send back 700,000 and you remain with 300,000"… but when it is not money, it is not money that has come, when it is just a [fake] message sent.

Chang (2008, p. 13) notes in situations of advanced fee fraud, urgency is aimed to give "the victim less time to evaluate the validity of the message…[pressuring them to make]…

shortcuts in decision making. The scammer aims to keep the victim in a hyper-empathic state, preoccupying the victim with the story they are weaving in order to induce them into making mistakes.

There are simple ways to avoid these kinds of scams. Yet too many users did not check their balance to ensure money had indeed been sent, the detective remarked. The newspapers also noted this problem. An article in one of the national newspapers provides the following warning and action to take in such instances:

> You will receive a mobile money message showing that you have received a huge amount of money. Immediately the message comes through, someone will call you pleading that the money was sent by mistake to your number. They will then tell you to send half of that money to their number and keep the other half. If you are not vigilant enough to first check your account balance, you will comply only to realise that you actually emptied your mobile money account.[83]

As the mobile money accounts are text-based menus, the owner of an account has to dial a short code string **165#* which gives the user their balance on-screen.[84] It is a simple process where a mere balance check would stop this kind of fraud immediately. But victims, in a heightened emotional state, and with limited technological and financial training, do not think to check their balance. Instead, they assume the genuine nature of these strangers.

As well as taking advantage of the trust of their victims, the target price of these scams was also important to their effectiveness. Unlike 419 email scams, mobile money frauds are not pitched at too high an expense for the victim—a high price point may raise suspicions. Where 419 scams appeal to a mark's greed for big gains, the mobile money frauds instead appeal to a sense of reasonable reward for effort. For a rural villager or low-income earner, a

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[83] See the article from The Observer (01/03/2018): www.observer.ug/lifestyle/56521-nine-ways-you-can-be-conned-in-2018

[84] See MTN webpage: www.mtn.co.ug/how-to/how-to-use-mtn-services/

scam that offers even a small reward can be the equivalent of several week's or more wages. Often the reward offered is high enough to warrant attention, as a 100,000USh reward is a month's income for some; the opportunity cost appears positive, compelling the mark to follow through. The potential to earn free money, while meeting convivial and moral norms is too appealing an enticement for many users.

The fraud technique, criminologists argue, takes advantage of a mental state of *bounded rationality* in the victim. The rational decision-making is impaired by the scammer's emotion-laden narrative, and the empathetic force of the bluff (Chang & Chong, 2010). Chang and Chong (2010, p. 345) argue in their research on email fraud, the successful use of the affect heuristic on the emotional state of the victim as a scamming device. Their findings suggest that when offered a fraudulent reward a person will cognitively reduce the concern for risk in light of the attractive benefit:

> fraudsters commonly use the prospect of lottery winnings or other forms of financial windfall to lull their victims into a lower risk perception due the aforementioned positive affect.

The victim's manipulated emotional state, impacting the *affect heuristic*, impairs decision-making. The emotional stimuli produced by *affect* (in this case negative affect), drives a corresponding decision to action (Chang & Chong, 2010; Finucane, Alhakami, Slovic, & Johnson, 2000).

The potential for a financial windfall lulls the victim further into ignoring any perceived risks. The detective continued:

> Then this villager rushes to the mobile money outlet nearby, tells him, 'Ah please, sent to this mobile, send this much to this person' who he doesn't know, and when he has not yet verified on his account that there is money. And [then] the mobile money agent also sends money now to a fraudster without even checking the balance on mobile money, without confirming that there is money.

The victim is thus distracted from performing an account balance check before proceeding with the transaction.

That marks would engage in the scam without first inquiring into the veracity of callers' claims baffled the detective. For him, the risk was easy to mitigate. The detective pointed out that if people were handling cash, this kind of scam would not work. People, he advised, were familiar with cash and its tangibility. With cash, you could not fool a person so easily. According to the detective, users showed a level of trust in the technology they would never apply to the materiality of a cash transaction. Agents were drawn into these scams despite their arms-length distance from the scammer and the victim of the transaction. Too willing to trust the veracity of their customers, agents would send money on their behalf without receiving payment first. Customer's attention would be focused on the phone call while agents made assumptions of their ability to pay for the transaction, again, without checking. The detective was unable to explain this behaviour to me, other than to suggest it is an education issue that the police must address:

> So what we have tried to do. We have tried to educate these, to sensitise these mobile money agents. Seriously to sensitise them and caution them to be very conscious when they are in this business of mobile money because it is a cash exchange.

The detective's frequent reliance on the term *sensitise* is not out of the ordinary. Indeed, this *grammar of education* upon which the detective depended was a recurring theme. To *sensitise* is a common expression in Ugandan education programs—the term is used often in the public sphere and in adult education programs delivered by government and NGOs to sensitise the community on public health issues or development programs.

For the police, sensitisation was the preferred method for changing behaviours and raising awareness around fraud and how to avoid falling for fraudsters' tricks—believing that if the public were sensitised to the pitfalls of mobile money and scamming behaviours, they would see reduced reduction in crime rates. When they found an increase in the number of frauds happening in the community, the police conducted a sensitisation program in the area to raise awareness of the problem via the community services officer. Despite his confidence in the effectiveness of these programs, the detective lamented that programs were limited in their reach and remained a reactive measure rather than a wholesale program of community prevention.

The hypnotic bait-and-switch

The conduct of frauds discussed so far have been over the phone. However, another kind of scam, targeting the mobile money agents themselves, was conducted face-to-face, in the day-to-day business activity of street-side stalls. These were a more complicated kind of theft targeted at unwitting mobile money agents. The detective explained:

> These fraudsters, sees the type of phone you are having, and as he comes, he marks the type of phone, the handset you are having, the exact handset. He goes, buys the same handset, which is similar to yours, he comes to the mobile money agent … "You deposit me 20,000." As the other one [mobile money agent] is depositing, he copies the PIN code. Mostly this has been to ladies [the female shopkeepers]…where they are not so careful. Then the person copies the PIN code, get[s] the similar phone, come[s] to the mobile money agent, to the teller of mobile money, and says "Hello, Hello, yes please!" You know, these men, these fraudsters are bright, and they are calling these ladies…what? They soften their minds! In the process of softening the minds of the mobile money agent, [he] exchanges the phone, puts his, and takes the one of the mobile money agent, which has fraud. They [the phones] look the same. He takes the right phone with the cash, and he goes away. Then this one [the agent] goes to realise when the [next] customer comes "Ahhh, deposit some money for me. . ." [She] goes to check on the phone, the phone it not has, she checks, the phone has not even a line in it [SIM card], the phone has already been taken and the money withdrawn. But we sensitized them, seriously, sensitizing and cautioning them…

Here, the detective drew attention to fraud aimed at the many young women who operated mobile money stalls. My observations back this assertion up—women, not just in the urban centres, but also in the smaller trading centres, often occupied the stalls as well. Throughout Uganda, it is not uncommon to see women as shopkeepers and mobile money agents (see Chapter 7). During daylight hours in Kasese, it seemed that women occupied the bulk of the mobile money workforce in the stalls. The detective thinks the relative youth and gender of this workforce made them especially vulnerable to scammers' ploys and even more sinister crimes.

> Seriously, ladies in mobile money are somehow young, [and they] get fooled. They [the fraudsters] go "Oh Hallo Hallo, yes please, deposit for me …" They get them in stories, then they say, "Today we come and take you for lunch?" They have good cars, they look smart, they have nice shoes, polished, well ironed, smart [looking] guys. "I will come and take you for lunch, it's OK?, Yes?" He comes then for lunch. "You come and we go for lunch." These mobile money agents, you don't know such a person, where he comes from, [and he] has just befriended you. Then as soon as you enter his car, there are like two men or what, they chloroform them. They chloroform this mobile money agents, because they have even cash in their small bags [purses]. When you go for lunch they [the mobile money agents] carry with them cash. [Then] they end up after chloroforming, they are out of their senses, they drive them off, they throw them somewhere on the roadside, or in a town, and they rob them of their cash.

As noted in Chapter 6, the practice of closing the stall for lunch is common in Uganda. For female shopkeepers, this meant carrying the day's cash float in their purse when they went for lunch, making them prime targets for robbery. The issue is also one that has made national news. The aforementioned newspaper article mentions the use of chloroform in robberies against young women. This practice, as the detective saw it, made these young women particularly vulnerable targets. While he conceded that these incidences were uncommon, at least in the Kasese District for now, the risk was concerning especially as mobile money agents were often the targets of such attacks.

This kind of crime displayed a degree of daring and violence (gendered violence, moreover) not typically associated with criminality in Kasese at the time. But like the more recent spate of crime affiliated with the vanilla industry (see Chapter 5), I wondered if this kind of criminal violence was an emerging phenomena in Kasese. I asked the detective about the profile of these fraudsters-cum-violent-criminals. Of these, he was adamant:

> The fraudsters are of high class! They have even vehicles, they drive themselves. They start from, like, Kampala, they move, yes to the districts, they rotate. They rotate as they hit money! They hit cash! They hit cash, and they eat well, they sleep in a good room, in good lodges, because they have money. They like going in clubs, those fraudsters and they drive posh cars. Yes, they are almost always high class with much money, because they hit! They hit money! They hit cash! In large sums.

The detective was confident these fraudsters came from out-of-town, and he assumed they were from Kampala. Similar to the violence with the vanilla trade, locals, including the police, suggested that this level of criminality comes from outside the region. In a number of conversations I had, the general blame for this kind of violence, when it occurred, was directed at strangers like Congolese bandits, or gangsters from Kampala. News reports were also emerging that city gangsters were increasingly found to be operating in the rural regions bolstering the longstanding attitudes of the rural folk toward gangsters from the city, in this case Kampala.[85] As both Montieth (2018) and Teppo (2015) remind us, these perspectives persist in Africa while they also echo Durkheim's sentiment toward cities as immoral hotspots and the breeding grounds for deviant behaviours.

[85] See NTV news report (19 Nov 2019): https://www.youtube.com/watch?v=toV1LFA6SoU

But Kampala was a long way from Kasese—a six-hour drive, or more, by car. Car ownership, too, in this part of Uganda was primarily for classes that are more privileged. Few people I met had one. Most of the population could not afford the purchase and maintenance of a car, or even the price of fuel to drive it.[86] Because of the high level of mobility of these fraudsters, understandably, little was known about them. The detective was unable to give me much information. When I asked him about arrests, he did not recall ever having caught one. He asserted that these fraudsters move too quickly through a region for police to catch them before they move on. These fraudsters, the detective was certain, were young, upper-class men preying on unsuspecting young women and naïve rural people. My subsequent search for newspaper articles of these kinds of criminals in Uganda yielded a number of results of mobile money fraudsters, validating the detective's perspective[87] One recent article on the arrest of a mobile money racketeer in Kampala notes the important distinction.

> Police have since established that mobile money tricksters are not poor individuals but people who look responsible and some with visible businesses…[the racketeer was]…intercepted driving a brand new car along Mityana Road after Kawempe police sighted his vehicle (The Independent, January 23, 2020).[88]

But despite the detective's perspectives, corroborated by news reports of similar findings across the country, the social class of these fraudsters remained speculative. Of course, not all fraudsters could be counted as strangers to their victims either. A shopkeeper I interviewed in Kasenyi spoke of a concerning practice where local agents were stealing from their customers. Depositing cash onto a mobile money account was supposed to be free, but

[86] The price of a litre of petrol was about $1 USD, meaning the price for a tank of fuel (+50ltrs) to drive to Kampala exceeded the monthly income for many in Kasese. Statistics from Actualitix.com indicate the rate of motor vehicle ownership in Uganda was 8 per 1000 inhabitants in 2009 and among some of the lowest rates in the world. See website: www.en.actualitix.com/country/uga/uganda-motor-vehicles.php

[87] See media story on two Facebook fraudsters caught in Kampala: www.newvision.co.ug/new_vision/news/1474325/scammers-invade-facebook

[88] See article *Masavu tycoon arrested in mobile money theft racket* www.independent.co.ug/masavu-tycoon-arrested-in-mobile-money-theft-racket/

they were charging their customers 1000USh to make these deposits he noted. He expressed his “disappointment” with these agents as they were cheating their neighbours of money. It was a comment I discussed with Baluku on the drive back to Kasese that day who was also aware of the practice. Baluku explained that many people especially in the smaller villages, did not understand how and when fees and charges were applied. Moreover, while mobile money agents were supposed to display a sign with all the fees and charges listed, but, Baluku noted, in the rural areas this was not often done, and even when it was, the signs were usually in English or Luganda—languages many rural people in western Uganda could not read. Illiterate users were dependent on the integrity of mobile money agents to charge them appropriately. Likewise, Ali, Dida and Sam (2020) note that agent-driven fraud through practices like excessive fee charges have been a significant problem in Uganda. Many customers do not know how charges work, so they trust agents without realising they are being cheated (Ali et al., 2020; Anderson & Reynolds, 2016; Aron, 2015). The Kasenyi shopkeeper, among others, believed MTN should address this problem by providing more information over radio and TV to users to be wary of local agents fraudulent practices as well.

“Please enter your PIN followed by the hash key…”

The same shopkeeper brought to my attention another scam known to be happening in the area. In these instances, the mobile money agents received a phone call from fraudsters pretending to be engineers from Airtel, or MTN, claiming they were making some changes to the services. The fraudsters then instructed the unsuspecting mobile money agent to enter some codes on their phone, enabling the fraudsters to extract money from the account. The shopkeeper explained:

> There is some fraudsters working as some manager for MTN in Kampala, but he is not the real manager. Then he instructs you on the phone, then ends ups transacting money on his phone, but he is nowhere to be seen. This is happening to those agents. Then they fake those people, to enter numbers [into their phone] to steal their money.

He told me that a few local agents had been caught in this scam and lost so much money it put them out of business. The shopkeeper too was a mobile money agent, and while he found the mobile money service useful for sending money to his family, he noted that it required caution, like the careful use PIN on his phone and the withdrawal of surplus funds into cash holdings to ensure he did not get cheated out of his money. This practice of cashing-out of mobile money was frequently referred to by others as well.

I asked the detective about this scam as I was unclear what the shopkeeper was suggesting and how this kind of scam might work. It seemed to have the hallmarks of a social engineering scam where trust is assumed because of the apparent routineness of the activity. He remarked that it was a new practice. It appeared some fraudsters had been able to hack into the telecom networks and were removing money from unsuspecting mobile money agents:

> It happens rarely but has been happening. Like now, the mobile money agents have been receiving calls from unknown people: "We are MTN Engineers… there [has] been [a] breakdown in mobile money network…" Then they ask the mobile money agents: "Ah, how is the network? How is the area? Is business going well?". . . "Yes it's going well!", in such a manner, saying that they are staff of MTN or Airtel. Then they say, "Ah please, you are agent who?". . . "I am agent so and so. Oh, this is what we are trying to check, we are changing some PIN codes, so please could you place like hash, hash two, hash, what?". . . [They] give you some numbers to place. . . that those are some codes they are adjusting. As soon as you enter it on your phone, the money goes off from the phone.

The detective was unable to explain how this occurred but suggested this hack was perpetrated either by a group of insiders within the telco or, perhaps, by disgruntled former employees exploiting a weakness in the company's system. The detective suspected a spate of layoffs at MTN in 2017 may have been the catalyst behind this activity. Later, news reports emerged suggesting that former MTN employees had been siphoning money from customer accounts through a security loophole in the system.[89] Since that time, other security loopholes had been found and exploited. For example, in 2020, MTN made national news regarding an unprecedented heist of 10bn UGX (+$2.7M USD) using stolen SIM cards.[90] Like SmartMoney, these companies were consistently finding themselves targets of fraudulent activity perpetuated by users and staff alike. Despite the assurances of strong security protocols for the national mobile money services, evidence of poorly developed and managed security protocols of these mobile money operators persisted.

Security and "Know Your Customer" Protocols

Other problems of fraud were highlighted by interviewees, especially with the telcos' registration and activations systems. In some cases, it seemed the company may have issued a duplicate phone number to two different people—a problem a handful of participants experienced. One merchant explained to me what happened to him:

> Like sometime back, like you call it fraud, I don't know that you call it…but I lost money. But it was hard for me to trace where the money went. Up to now. It has got lost. I don't know what happened, I just, like now, my phone was on like usual. Then my phone was blocked [at the network]. I don't know. When I called [MTN] customer care, with my friend, his phone, then I thought there was a problem with my line. T'is when I discovered that they [fraudsters] had stolen my money. My line was out of function. They [MTN] told me that there was a problem. Someone told me that someone had known my PIN number, or maybe a second line. Then my line was dropped. But they had same number, and then took my money away. I lost 170,000USh.

Upon calling customer care, the user was advised at first that someone must have stolen his money because he was careless with his PIN. But when he pointed out to customer care it was

[89] See www.observer.ug/businessnews/38-business/41662-court-sets-date-for-mtn-mobile-money-fraud-case
[90] See www.observer.ug/news/headlines/67123-mobile-money-hacking-shs-10bn-stolen-using-1-500-sim-cards

impossible because his phone was blocked from the network, they acknowledged that someone else must have been issued a duplicate phone number and taken the money from him. A year after the incident, when I interviewed him, his SIM card was still blocked from use. He was an undocumented subscriber, which meant that at the time he originally got a mobile phone and mobile money account he had not provided any, or sufficient, identification. As the company had no legally recognised identification documents to validate his identity he had no recourse with the company to get his money back. Instead, he had purchased another MTN SIM card and made sure that he never left mobile money in the e-wallet. Others offered that they had, in the past, suddenly had money stolen from their account with no explanation as to how it had happened. Like the shopkeeper, they were unable to get any satisfaction of resolution from the MNO and were now in the practice of only keeping a small balance, if any, on their phone.

The scenario highlighted a recurrent and known problem in the industry,[91] where there are security risks of fraud operating through a technology that does not have the same security protocols and levels of regulation required of the banks (Baganzi & Lau, 2017; Kanobe et al., 2017; Macmillan et al., 2016). With rapid growth rates, low levels of regulatory "know your customer" (KYC) oversight, poor consumer protection provisions, and poor data management practices, the banking industry complained that telcos were profiteering from anti-competitive and irresponsible behaviour leading to, among other things, customer susceptibility to fraud (Bank of Uganda, 2017; Lonie, 2017; Macmillan et al., 2016). The industry struggled to ensure the authenticity of its customer base which lead to systemic problems for customers and service providers despite promises that the technology was safe and their customer services were excellent. However, the mobile network operators (MNOs) had trouble

[91] See news article: www.observer.ug/businessnews/38-business/36522-mtn-was-warned-of-likely-mobile-money-fraud-in-2009

authenticating their customers and customers, in turn, found it difficult to authenticate claims against them. The MTN Regional Manger I spoke with acknowledged the problem, blaming the poor quality, government issued personal identification documents meant they couldn't be confident who they were dealing with. Such experiences, on the part of the customers, they noted, lead to general feeling of dissatisfaction for MNO's, especially MTN, despite users need for the service. Disappointment with the customer service they received in regard to "lost" money from their accounts (and its high costs discussed in Chapter 6) led many users to admit they had strong desire to switch operators as soon as other services were introduced in the area.

Kanobe et al. (2017) note that the first mobile money users in Uganda were unregistered and anonymous. It was a significant oversight in the policy and regulatory management of the service which introduced a number of challenges including consumer protections, security, and the inevitable exposure to fraud and other financial risks for user and service providers. These problems have been known for some time. A UNCTAD report (2012) highlighted emerging concerns about consumer protections and inadequate regulatory practices of MNOs. As a result, customers could lose their money with no equitable form of redress from the telco if it was found they had not properly registered their account (Kanobe et al., 2017). This problem was particularly acute for rural individuals, many of whom have little documentation to prove their identity. With poor quality documentation, the great distances they must travel to MNO service centres, and little if any capacity to secure legal counsel, the rural poor had limited ability to contest fraudulent transactions.[92]

As Detective Adam had found, difficulty investigating fraudulent transactions was amplified by the large number of accounts registered to unknown and untraceable persons, not

[92] See the following for a discussion on these barriers: www.blog.microsave.net/2014/08/07/survival-of-the-fittest-the-evolution-of-frauds-in-ugandas-mobile-money-market-part-i/

only of victims but, of course, the fraudsters who took advantage of security loopholes. SmartMoney experienced similar problems and found it could not be confident its customers were who they said they were, leading to deep concerns they were unable to differentiate between valid and false customer complaints. So many rural users lacked any adequate form of identification, while others were prone to make false claims, that SmartMoney was deeply suspicious of its customer base and the quality of its databases. This problem led to curtailed trust between the MNOs and customers as neither could be sure whether they were working for or against each other.

Much of the KYC discussion in the scholarly and grey literature has focused on political concerns expressed at the international and state levels, particularly concerns about anti-money laundering and counter-terrorism financing (Chatain, Zerzan, Noor, Dannaoui, & De Koker, 2011; Di Castri, 2013; Financial Action Task Force, November 2017). Consumer protection appears to have taken a lower priority. But problems with the industry's regulation were becoming apparent, not just in Uganda, but in neighbouring states such as Kenya and Malawi (Buckley, Greenacre, & Malady, 2015; Madise, 2019; Ngugi et al., 2010). Reports suggest there is confusion between regulatory bodies as to jurisdiction and application of standards as well as weak regulatory and frameworks for mobile money industry operation.[93]

Another problem coincident with security risks was the telecoms industry objective of maintaining light touch regulatory environment—an approach advocated since the first introduction of mobile money to East Africa in order, it was claimed, to accelerate growth (Aron, 2015; Macmillan et al., 2016; Madise, 2019; Mas & Radcliffe, 2010) (see also Chapter 1). The industry continued to lobby for self-regulation[94] or, at the very least, assurances that state regulators would make "significant efforts to apply the principle of proportionality

[93] See www.monitor.co.ug/uganda/business/prosper/mobile-money-the-regulators-headache-1604110
[94] See www.monitor.co.ug/uganda/business/prosper/state-or-self-regulation-which-way-for-fintechs--3209034

…[balancing]…the need to preserve the integrity of the financial system with expanding financial inclusion" (Di Castri, 2013, p. 19). A report from Malawi suggested that regulators needed to "find the right balance" between end-user protections and risk-based regulation approaches (Buckley et al., 2015). One *Harvard Business Review* working paper on mobile money services across ten countries suggested deep biases among regulatory authorities that tended to hamper telecoms industry growth:

> regulators also have a bias to keep any new financial transactions within institutions over which they have oversight, so, left to their own devices, will often favour systems in which banks play a key role as they are the primary covered institutions in every country (Lal & Sachdev, 2015, p. 7).

The concern, they highlight, is that a lack of *good sense* and onerous regulation by regulatory bodies that don't understand the telecoms industry, will hamper adoption and the important task of attaining widescale financial inclusion.

The light touch approach has not been without its critics. Harrington (2012, p. 636) argues that:

> deregulation and the emergence of novel financial tools—poorly understood by regulators, and sometimes even by finance professionals themselves—have created unprecedented complexity and opportunities for fraud on a global scale.

The trend toward neoliberal economic practices that are particularly disposed to light touch regulation has been blamed for a number of economic failures even at the global level including the 2008 global financial crisis (Ireland, 2010). General tenets of this economic philosophy include assumptions that customers are sophisticated and don't need protection, that markets are purely economic phenomena, and that financial markets flourish under limited regulatory supervision while state-led regulation suppresses innovation (Harvey, 2005; Tomasic, 2010; Whyte, 2019). Similarly, in Uganda the light touch regulatory practices have helped to shape economic irregularities and fraudulent practices (Wiegratz, 2019).

Despite industry preferences for light touch regulation the government of Uganda has responded to high profile cases of fraud by imposing stricter controls and standards on MNOs in recent years. The government pressed the MNOs to enact tougher standards of identification by, for example, blocking active phone numbers in order to force users to visit customer service centres to properly register telephone accounts.[95] With increased use and reliance on the mobile phone network, it was argued, it was important that customers produce better quality identification such as their national identification card, in order to maintain access to the network.[96] These measures coincided with a nation-wide campaign to create a national identity certificate for all citizens.

While industry applauded the campaigns for improved identity documentation they were also somewhat successful in lobbying the government to ensure regulation took a tiered approach to tightening KYC standards (Allen, Demirguc-Kunt, Klapper, & Martinez Peria, 2016; Aron, 2015; Evans & Pirchio, 2015; Global System for Mobile Communications, 2015). While the full details of a tiered approach to KYC were unresolved at the completion of this research it did appear that consumer protections remained a secondary concern (Anderson & Reynolds, 2016).[97] The government was drafting legislation, moreover, to transition regulation of mobile money to the Bank of Uganda,[98] the implications of which remain to be understood.

We are Sensitising…

My conversation with Moses, the Rastafarian hairdresser (see also Chapter 6) noted a sentiment suggesting that those in the villages lacked understanding of the phone's capability, and accompanying risks, which led to a general suspicion of the technology. He stated the

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[95] See www.observer.ug/news/headlines/68076-report-national-ids-are-state-surveillance-tools
[96] See www.dignited.com/29103/ucc-directive-telecoms-uganda-stop-sale-of-sim-cards/
[97] See www.monitor.co.ug/uganda/business/prosper/ucc-faces-off-with-telecoms-over-subscribers-1578004
[98] See www.monitor.co.ug/uganda/business/finance/central-bank-to-take-over-mobile-money-regulation-1821570

majority of the users in the rural environment were youths as the older generation were slow to adopt the technology in favour of the village savings programs that had been in operation there for many decades:

> When I see the elderly, they are so much into committees and organisations, they form up much of these organisations around the villages like using SACCOs. You find that they take their money there, its recorded down, they can use the organisation, like to borrow money, or sometimes you find that they just put their money to save over a period of time. That is what they trust to do.

The elders remain confident in those financial practices that operate at the local level and face-to-face using what they know and trust. Interestingly, the preference for SACCOs remains in the villages and among the older generation, despite the known susceptibility to fraud, and SmartMoney's attempts to work around them (see Chapter 4). With mobile money, however, for the few that have phones, it was the domain of young people to use the technology on behalf of others:

> I think most are not familiar with them, those gadgets, and they are old in age, they don't so much like to use. Most the people who have the phones are always the younger ones. The way I see, like your phone [pointing to my smartphone], you can do everything. I think young people are a little more enlightened to using the phone but I think older people are, like, a little ignorant [in the villages]. Like we have seen in the past years, anything that is digital, our people are always a little careful because of stealing. They [scammers] come for the phones where they like to trick people around and steal [mobile] money from them.

Moses highlights a number of the key concerns with villager's digital financial literacy, and the concerns they exhibit when it comes to risk exposure. He noticed this was changing however, as he even knew his own mother, while a successful businessperson in the area, still preferred to rely on the banking system for the majority of her financial transactions. She too was using mobile money from time-to-time. In this regard, there was evidence the older generation was slowly adapting. He noted further that “the way technology is coming in, people are getting a little sensitised, and getting more free with it.”

Servaes and Hoyng (2017) draw attention to the questionable yet normative assumption amongst ICT4D actors that “access equals participation.” Such assumptions among technologists are concerning in light of ample evidence of users’ lack of skill or know-how to effectively engage in new technologies. The premise that new technologies generate positive social and economic impacts in a straightforward and deterministic way overlook concerns for users’ lack of technological and financial literacy including literacy of fraud techniques (Button & Cross, 2017; Drew & Cross, 2016). Mobile money use requires more than access to the technology and financial inclusion more than the ability of actors to send and receive texts, phone calls and mobile money. Servaes and Hoyng’s (2017) attention to notions of *savoir vive* (knowledge of how to live) and *savoir faire* (embodied knowledge of how to make or do) usefully augment technocentric research in ways that are informative here. The concept considers the application of subjective agency of expertise knowledge and ability to “know what to do” and “how to do it” (Granovetter, 2005; Olivier de Sardan, 2005a; Servaes & Hoyng, 2017) that is applicable where users interact, or avoid using a technology.

Marginal users not only face challenges of access but, further still, challenges in developing and maintaining competency with the technology, its affordances, and its accompanying risks. With instances of fraud, marginal users lack the embodied knowledge of understanding the technology accompanied by the practice of scamming/fraud within the socio-economic milieu. Users adopt the technology without knowhow of the technology’s capacity, its limitations and its pitfalls and embeddedness within a broader social context that includes a political and a moral economy of corruption (Olivier de Sardan, 1999; Pierce, 2016), of fraud (Whyte & Wiegratz, 2016), and of trickery (Salem, 2001). While the benefits of technology are often apparent to adopters, the necessary caution of the increased exposure to new forms of scamming, unbeknownst to new users, leaves them open to manipulation and harm.

These align with the emerging body of research emerging out of the internet scamming culture in Africa made famous by the notoriety of the *Nigerian 419 scams* that operate internationally and to which a high level of international attention has been paid (Beek, 2016; Pierce, 2016; Rich, 2018; Smith, 2009; Viosca Jr, Bergiel, & Balsmeier, 2004). Just as the Nigerian scams demonstrate, user gullibility, inexperience and technological illiteracy expose victims to new forms of risk that, importantly, these users have inadequate awareness of and the financial and technological nous to mitigate.

While FinTech offers possibilities for improved economic welfare, the concurrent challenge of developing skilled users with the technology is overlooked or ignored. SmartMoney too, experienced similar challenges and sought to address these by undertaking targeted training of users, savings groups et cetera, in order to ensure new customers had the financial literacy and technological capability to use service to its full effect (see Chapter 4), which necessarily includes knowledge of risk exposure and mitigation (Drew & Cross, 2016). The re-embedding of money through mobile money overlooks the capability of the targeted users to adopt the full spectrum of benefits and hazards that accompany new technologies (Slovic, 2000). Alan Warde (1994, p. 878), drawing on Beck's conceptualisation of reflexive modernisation, argues that "the tools of science and technology must increasingly be applied to counteract the hazards bequeathed by the first round of modernisation." New technological solutions are deployed, in other words, to address the dangers unleashed by previous rounds of technological innovation *ad infinitum*. Reflecting this dynamic, mobile money aims to address the hazards of a cash-based economy while introducing new hazards to users unaware of their new, and heightened, risk exposure.

While little attention has be paid to the potential for mobile money to amplify financial risk, ICT adoption researchers have examined possibilities to improve financial literacy and awareness of risk (Chib, May, et al., 2015; Heeks & Molla, 2009; Loh, 2015). Chang (2008, p. 71) points out the:

> need to inform Internet users of the methods employed by advance fee fraudsters. Considering the current and widespread problem of advance fee fraud emails, this information is important for Internet users to improve their capability in identifying fraudulent schemes and avoiding them.

The challenge for ICT and inclusion is in operationalising capabilities (Heeks, 2010; Kleine, 2010), empowerment (Chib, May, et al., 2015), and savoir faire (Servaes & Hoyng, 2017). Mobile money means that all actors, marginal or not, are entangled in an increasingly virtual economy (Hart, 2001), engaging in an impersonal exchange environment that allows transactions to occur across ever greater social, temporal and geographical distances. These forms of transaction have especially exposed marginal users to unforeseen risks including fraud (Button & Cross, 2017).

At the local level in Kasese, police undertook sensitisation campaigns to address the fraud problem. Such actions were evidence of a pragmatic approach to addressing technological and financial literacy gaps among marginal users. Detective Adam drew my attention to the baffling behaviours of mobile money users and the unabated take-up of the service despite attendant risks. I asked him about the success of fraud sensitisation activities and whether incidences of fraud were increasing nonetheless. The crimes, he felt, were reducing, as long as the police could sensitise people to the various ploys of the fraudsters.

> Actually, on mobile money issues, with mobile money banking, we have tried, because people have put too much of their money in mobile money banking. They are using too much mobile money banking. So we have tried, have put much eyes on it to sensitise people. At least they have reduced now some of those crimes of mobile

> money fraud. We are sensitising, [and] it is somehow reducing …But through sensitisation and alerting these mobile money agents—the cash holders—these incidents has reduced. It is getting down, but at first, we were having a very big challenge. The radio and the DPC and Communications Officer went down to sensitise people.

Such sensitisation programs, he suggested, were having the desired effect of raising awareness of the kinds of fraud operating in the region. But despite the apparent successes of sensitisation in relation to mobile money fraud, Detective Adam continued to maintain that too many users were using the technology without a solid understanding of how to handle the accompanying risks.

I asked him about his thoughts on mobile money: Is it good for the community? Are the police supportive of this technology? He was measured in his response, expressing concern that people were too reliant and too trusting of mobile money; he would rather see them carry cash. He found that people were more careful with cash than with mobile money in Kasese. Furthermore, while fraud appeared to be easily achieved using mobile money, outright robbery in Kasese, especially during daylight hours, was uncommon. It seemed, the face-to-face risk of robbery was lower, and something locals could more readily mitigate than the mobile money crimes of faceless thieves. People, he suggested, get careless with mobile money, believing it is secure when it is not. Even at night, he cautioned me, there is more potential for robbery, but people are also cautious at night. Locals did not to move around with valuables after sundown, the detective explained, and if they did, they moved in groups of two or more.

> Cash—the mobile money agent, as they are moving—it is easy to lose, but those are being done in the cities, they rob them [of cash]. But within [Kasese], that issue of robbing cash, is not, is not common in Kasese. Or when they target to rob you they grab a bag from you…after you are working, as you are going back home, they

> grab… and run. (But they are not confrontational? Like "give me your money?") No, no, they don't do that!

He remarked that as long as people are "sensitised" to proper cash handling and security, when they are carrying money, they are cautious and aware of the risks. While the potential remained for some kinds of street crime like bag-snatching after dark, this behaviour was, according to Detective Adam, rare. As Chapter 5 showed, moreover, while robbery was reportedly an issue in the high-value vanilla industry, producers and traders of other commodities believed they were exposed to minimal risk of banditry.

Conclusion

The prevalence of fraud within the mobile money environment warrants consideration within the broader social context. Importantly fraud crimes are inherently social interactions—albeit exploitative and negative ones—as they require both a deceiver and a victim in an exchange. But in order for fraud to take place, there must be established behavioural norms and assumptions of affiliative connection and trust in order for exchange—even fraudulent ones—to occur. For the victim, their participation in the exchange rests on the perception that the fraudster is a trustworthy agent (Beek, 2016), the technology is secure (Grabosky & Smith, 2001), and the transaction appears to be routine or familiar (Shover et al., 2004). Thus, incidences of fraud cast in relief norms within the moral economy. In Kasese, like many regions of the Global South, mobile money fraud offers not only further evidence of a moral economy of fraud but evidence that fraud flourishes where modernisation disembeds moral norms, especially in instances of novel technological introduction.

Critically, fraud is rarely discussed in mobile money research literature, despite incidences being frequent enough to warrant the ongoing attention of local police and national media in Uganda. Certainly, mobile money fraud was common enough in Kasese to be a regular topic of conversation among users as well. This chapter explored how fraud influenced the dissemination and use of mobile money in Kasese and the social and economic relationships in which its use was embedded. The chapter aimed to understand the nature of mobile money fraud in Kasese, its accompanying risks and negative effects and, importantly, the community's attitudes and responses to these risks.

Prevalence of mobile money fraud impacted the use of mobile money services in a variety of ways that influenced how users and potential users were willing and able to use the service. Mobile money fraud in Kasese was found in several basic forms. First, and most significant, were frauds that consisted of the loss of large sums of money for victims. These were typically centered at the site of exchange with mobile money agents, where money in its various forms was changing hands. These frauds, in person or over the phone relied on the carelessness and naivety of users in making transactions and the capacity of professional fraudsters to socially engineer a scam. Second, thieves from Kampala were known to frequent the district looking to take advantage of people and their mobile money accounts. Moreover, rumors circulated in Kasese, however unsubstantiated, that such thieves were even willing to resort to violent means in order to rob people. Mobile money warranted concerns that outsiders were taking advantage of locals in ways that justified out-group social concern. Third, minor scamming was taking place between agents and their clients. The evidence presented here suggests that fraud, or the risk of fraud, operates between in-group and out-group actors. Fourth, trust between groups—specifically, MNOs and users—was strained by an apparent inability to resolve problems with the service. Despite the continuance of users transactions over the mobile money platforms, for MNOs and users, distrust ran both ways. The MNOs were challenged to validate the legitimacy of user concerns, and users were unable to make claims against them. Importantly, many of the users also ensured that when mobile money was used, they were careful to revert back to cash as soon as possible so as not to leave a large balance on their mobile phones. The action was indicative of distrust in the technology and the service providers; believing their mobile wallets were a risk liability and that cash offered greater utility and security (see also Chapter 5).

Mobile money fraud produced social responses to risk that show strained and changing social relations. Extending urban versus rural dynamics, many rural poor in Kasese were reluctant to take up mobile money on account of their perceived exposure to new risks, preferring known and familiar forms of finance management available in the villages. These perceptions were consistent with evidence, moreover, of fraud over the mobile money network and the challenge this mounts to the dominant view of mobile money as a stable, secure and wealth-enhancing livelihood technology for base-of-the-pyramid users. The mobile money apparatus enables an economy of fraud to take place because the technology is productive of anonymous or near-anonymous exchange, its newness means many users lack calculative understanding of their risk exposure and necessary skills to interact with the technology and the new forms of anti-social behaviours it enables.

Chapter 9 **Conclusion**

I opened this thesis with two key quotes. The first claims that "mobile money is arguably the most powerful instrument of development in history" and that financial inclusion services help the poor "build better futures for their families while also supporting broad economic growth, development and poverty reduction" (AFI, 2018 September, pp. 5-6). Better for the individual and better for society, digital financial services such as mobile money are positioned as the preeminent platform for achieving financial inclusion, economic development and poverty reduction in the Global South. Influential voices in the global community and grey literature on mobile money make optimistic and boosterish promises about its potential in the development context that often go unchecked. This thesis has sought to interrogate these mainstream FinTech narratives by focusing attention to the use of mobile money technology by the targets of financial inclusion, the rural poor.

The second quote, by Oliver de Sardan (2005a, p. 97), explains "that to understand the phenomenon of the acceptance/refusal of an innovation, we need to situate the innovation within the frameworks of society," requiring "analysis of the local society … and its political, economic and symbolic conflicts which turns the innovation into a gamble". This supports the explicitly sociological approach to this thesis and the argument that, if mobile money is to be adequately assessed as a tool for poverty reduction, it is necessary to situate the innovation in unique expressions of social relations such as values, conflicts, bargaining, sanctioning, and exchange. The thesis has argued that understanding the potential and actual impacts of mobile money requires examination of how it is used, and not used, by rural people—research exploring the interplay of social relationships, exchange relations, livelihood strategies and mobile money adoption.

Mobile money has been endorsed widely as a poverty reduction cure-all without deep analysis of socio-economic relations and use of the technology at the user level. This research thus addressed the gap between discourse and practice (Olivier de Sardan, 2005a) by examining the fissures between what is *said* by the mobile money industry and what is *done* by the rural poor the industry claims to serve. It did this through fieldwork with rural people in Kasese, Uganda, to document actual practices of mobile money use in a particular location. This research found that while mobile money was implicated in important processes of social and economic change, evidence for its efficacy as a tool for poverty reduction was scarce. Mobile money, in other words, is a significant agent of change, but not of the kinds of change its proponents claim.

The broad aim of this research—to explore the interplay of mobile money and social and economic relationships in rural Africa—provides insight into more critical questions such as whether mobile money supports social and economic development by improving the living standards, livelihoods, and social and economic participation of the rural poor. The key objectives, in summary, of this research were thus to: (1) understand those factors that facilitate or limit the use of mobile money; (2) explore changes in livelihood strategies and outcomes associated with mobile money; (3) understand how its use reinforces or changes social relationships; (4) identify negative and perverse outcomes arising from its use; and (5) evaluate its contribution to financial inclusion.

The sociological tradition requires reflexive consideration of the researcher's own position as an outsider. In Chapter 3, I drew on the notion of the "stranger" to orient myself in relation to the agentic positionings and representations of the research participants. Importantly, the notion of agency invoked here also ascribes to individual actors the capacity to speak for themselves, to understand and respond to social circumstances, and to reason their lifeworld strategy. Because of the key role played by interviewees in this case study's research method approach, this study aimed to recognise its research participants not merely as representatives of demographic groups, but as people, with all their complexities, narrative perspectives, varying education levels, biases, contradictions, internalised norms, frustrations, and passions. The approach enabled actors' different practices, perspectives, and logics, in the circumstances in which they are experienced, to be open for consideration, as the actors themselves explain. The method is aligned with Weberian influenced methods (du Gay, 2008; Kim, 2012; Long, 2003; Olivier de Sardan, 2016a) that recognise actor agency in their lifeworlds and of their worldview. Throughout this thesis, I drew heavily on the voice of users to enable the subaltern voice to explain for themselves the utility and social dynamics of mobile money. The research aimed to demonstrate the wide variety of individual perspectives on a number of topical areas like marital and household relations, business operations, social attitudes, areas of conflict and economic exchange. This approach inevitably influenced the collection, interpretation, and presentation of the research data and its interpretation.

Key findings

Throughout, the research identifies a number of factors that facilitated or limited the use of mobile money (Objective 1). Clearly, mobile money offers less utility than cash for many rural people. Neither SmartMoney nor services offered by larger mobile network operators (MNOs) made significant inroads into the cash crop economies of coffee and cotton or more generally into rural livelihood strategies, providing evidence also of a rural/urban divide in mobile money access and use. Potential rural mobile money users suffered the problems of distance from network infrastructure and service outlets, comparatively high costs to use the services, and the preferences of their peers to use cash. For urban users, by contrast, mobile money was a convenient wallet for engaging in large transactions, offering greater convenience to higher income users for business payments and services to upstream suppliers, but the service was avoided when dealing with rural and remote users.

Trust was critical here alongside issues of access and cost. Potential rural mobile money users brought divergent needs and dispositions, diverse attitudes toward digital finance, variable levels of technological and financial capability and literacy, and divergent perceptions of risk associated with mobile money. SmartMoney found that much of its potential user base required support to develop financial and technical literacy before it would trust and benefit from the service. Moreover, it was found that many people were willing to sign up for the services but did not subsequently use them. Despite the low cost of SmartMoney use in comparison with other MNOs, the company struggled to address widespread lack of trust. Many potential users admitted they had adopted a *wait and see* attitude, arguing the SmartMoney service was too new for them to trust the platform and fearing the company may run off with their money. Lack of trust toward large MNOs was also evident despite higher levels of use. Most users of these services admitted that as soon as they received mobile money they would cash it out, preferring to hold cash than e-money. For some, this was about the convenience of cash, but, for others it was about fear that e-money could be stolen with many rumours circulating of mobile money account hacking and telco mismanagement. Evidence of a shift among users to newer mobile services offered by banks suggested that trust in these institutions was growing relative to MNOs with potential to address lack of trust as a barrier to mobile money use, albeit a potential that could have its own unforeseen social impacts.

Mobile money did facilitate a number of household livelihood strategies (Objective 2), particularly among households stretched across multiple sites and businesses. Many household members engaged in multi-streaming of income through different sources of employment and entrepreneurial endeavour. Mobile money offered improved movement of cash, opportunities to diversify income streams and abilities to mitigate some risks such as access to emergency funding. Households were apt to draw on mobile money when their livelihoods affairs could be oriented toward gain advantage from its use. Families would employ the service in order to make transfers, especially in emergency situations, but avoided regular remittances to save fees and charges when cash could be used. This allowed members to relocate from the home village to trading and urban centres like Kasese, or further afield to Fort Portal or Kampala to seek out opportunities.

Such changes impacted the nature of household and social relations, however (Objective 3). Pressures and fissures in family relations became increasingly apparent in multi-sited households. Expectations of obligations like income sharing and changing social norms in householding arose because of the affordances of mobile money. This was especially evident within the shifting social norms of gender and particularly marital relations where there were emergent signs of strain over money, in general, but signs of strain exacerbated by mobile money, in particular. In addition, some earners were frustrated by familial claims on income that conflicted with their own financial goals and ambitions. Heavy reliance on higher income earning and upwardly mobile children for financial support was associated with strained family relations and resistance, in some cases, to the obligations imposed on children.

Mobile money was implicated in the changing moral economy of gender relations in Kasese—a moral economy in which some values were being challenged, or disembedded, while others were being re-embedded. Within marital relationships mobile money was used both to challenge and to reinforce expectations about gender roles. Spouses used mobile money to maintain or gain control by hiding money, conveying demands and/or sanctioning behaviours. Such practices extended beyond the immediate household with women and men alike using mobile money transfers to their mothers to hide money and business activities. There was clear evidence, in this respect, of women using mobile money to challenge gender inequality. However, there was also evidence of mobile money being used to disempower women and to exact retaliation for alleged wrongdoings suggesting that mobile money can be used to enact coercive control and other forms of gender-based violence.

Evidence that mobile money is enhancing female empowerment—evidence that does seem to support claims about the role of financial inclusion (Objective 5) in providing economic opportunities and agency to women—must be evaluated in light of the unintended consequences that were also evident through this research (Objective 4). The use of mobile money to assert financial independence was associated in many households with increasing conflict over financial responsibilities and new burdens of responsibility where male partners sloughed off financial burdens to newly financially included partners. At the same time, women participating in this research experienced pervasive, ongoing gender discrimination and many had little engagement with the digital financial economy. While women, the rural poor and the disadvantaged used mobile money, it was not with the frequency and not with the benefits that proponents anticipate.

Evidence of mobile money's role in disembedded gender norms and expectations is in a manner consistent with the sociological construct of anomic demoralisation and individualisation. From the perspective of sociological theory, the question here is whether the transition to market-model relations that rely on and promote individualisation subsequently strengthens or weakens the institutional moral foundations of individuals in modern capitalist society. As Simmel had pointed out, and others have subsequently echoed, the process of modernity's individualisation has a tendency to undermine moral cohesion of traditional ways of life (Beck et al., 1994; Deutschmann, 1996; Sayer, 2004; Warde, 1994).

Gender frustrations exhibit the conflicting aims of individuals entangled in complex familial obligations. Participants exhibited patterns of biographical individualisation that stood in conflict with assertions of collectivistic social expectations. Mobile money use within the household and family unit shows the changes it helps foster are having significant impact on the competing interests of reinforcing household structures while enabling individualisation, bringing with it social change and conflict.

Mobile money is no doubt a change-agent, but not all changes were perceived as socially beneficial, rather there were negative and perverse outcomes associated with its use. Evidence found mobile money facilitated new avenues of criminal activity despite assertions it enhanced security. Users were exposed to new and increasingly complex forms of mobile money fraud suggesting that significant social and technological changes take advantage of gaps in users' ability to mitigate exposure to risk. It raises longstanding sociological concerns over the impact of modernization and its attendant considerations toward money on the negative and perverse moral dimensions of society. Social transitions are conducive to changes in the moral economy that enable fraud to flourish in low regulatory, low technological, and low financial literacy environments. This contradistinction has important sociological implications not only in regard to technological and regulatory implications of new technologies but also as it pertains to the impact of FinTech illiteracies on livelihoods and the poor. Further sociological research in this area is suggested.

Theoretical Contribution

This thesis makes two significant theoretical contributions. First, it extends classic sociological thinking by Simmel, Weber and Durkheim and more contemporary sociological theories of modernity and development, including the work of Giddens and Beck, by taking these into the field of mobile money in the development context. By foregrouding how mobile money complicates and magnifies already shifting and modernising elements of a society that did not even begin to transact in hard currency until the 1950s, this thesis has drawn out ways in which the issues of mobile money in development are fundamentally issues about the foundations of sociability and exchange including trust, relationships, values and calculation attenuated, not only across space and time, but into the digital arena through DFS.

Simmel's views were considered in light of the special relationship between money and modernity—its psychology of calculation, of individualisation, and disembedded normative relations of exchange. Modern money changes the way we think, Simmel claimed. Central to sociological theory is the special relationship between the calculative influence of money, impersonal modernity (especially urban modernity), and the moral consequences of capitalist economic growth. A money economy affects sociability, sentiment, moral codes, and obligations in society while it also invites emancipation and freedom—moving individuals from entrenched social moral obligations toward individualised fulfilment and self-identity. For Simmel and Weber, and later theorists such as Giddens and Beck, money contributes to the development of a quantitative disposition at the heart of modernity that transforms normative embedded and convivial social relations into disembedded and rationalist ones. In theory, money's intermediation extends the spatial, temporal and impersonal nature of exchange relations becoming the trusted substitute of all commodities and services. Importantly, however, money also has the power to bridge distance which can contribute to building trust of many kinds, so long as cognisance of risk and risk-mitigation factors are built into the exchange. Money disrupts old social orders but is conducive to developing new ones.

Money has the capability of both disembedding and re-embedding social relations showing the inherent contradictions of modern money. In this research, the relational quality of money has been extended to mobile money showing how exchange involves social conditions and personal values. With the introduction of a new exchange technology, social norms and values are challenged and tested according to the logics of the new exchange mechanism. This thesis demonstrates how mobile money operates as relational phenomenon in a society that involves myriad social processes and norms around risk, trust, morals and values, demoralisation and fraud that are at times contradictory.

Second, this thesis also takes up claims about mobile money and its potential to address the UN goal of financial inclusion by bringing to this promotional rhetoric an applied and sustained case study analysis. By investigating the usage of mobile money in the rural and peri-urban development context of Kasese, Uganda, this research makes a sociological contribution to moral economy theory to more critically reflect on the often overlooked cultural and sociological factors that accompany economic shifts from cash to digital exchange.

This thesis set out to consider the gap between discourse and practice in relation to mobile money in the development context, establishing the need to consider moral economy. The investigation acknowledged two forms of moral ideology operating simultaneously—the moral economy of the developmentalist, typically the cosmopolitan liberal notion of empowered and technologically-aided individuals, and the moral economies of local urban dwellers and the rural poor of Kasese. To date, mobile money has had limited impact on the livelihoods of the poor in rural Kasese—the promise of safety, security, empowerment and wealth production, and the *good life*, are yet to be realised. Mobile money usage has both magnified and changed features of the local moral economy including pre-colonial attitudes toward exchange, trust, conviviality and household relations, on the one hand, and postcolonial factors like anomie, disenchantment and fraud associated with modernisation and capital accumulation, on the other. The thesis thus lends some support to Giddens' and Beck's (Beck et al., 1994; Giddens, 2012) respective theories of reflexive modernisation and their claims that anomie, dissenchantement and demoralisation are part of the fabric of contemporary modernity and globalisation.

As markets are themselves embedded in, and contingent on, social, cultural, political, and moral mechanisms and relations, a moral economy perspective offers insight into the socio-cultural logics, obligations and duties inherent in exchange and the broader political economy. While there is abundant literature of ICT research informed by political economy, and even one moral economy analysis of the mobile phone (Horst & Foster, 2018), there are no other moral economy analyses, to my knowledge, yet of mobile money.

Moral decisions, importantly, may not appear particularly moral in the eyes of the outside observer despite holding rational and reasonable logics for actors in their own cultural milieus. Jarret Zigon reminds that for Durkheim, "morality is socially constituted and differs across time and place according to the very structures of each society" (Zigon, 2007, p. 132). Likewise Weberian sociology argues that morality is constituted among the sub-groups and individuals that make up that society (du Gay, 2008). The sociological contribution to moral economy theory taken here thus encompasses a definition of moral economy that incorporates value orientations that may be contradictory, self-serving, demoralised or deviant while yet contributing to the moral positioning of institutional actors, or local actors in their socio-economic lifeworlds.

A moral economy approach to mobile money shows the diversity of attitudes and shifts in values that align with broader social shifts, conducive of increased individualisation in economic relations while simultaneously having the agency to think through one's moral frame in relation to exchange. Some actors may have moral sentiments that are at odds with others in their heterogeneous lifeworlds, and some participants' attitudes and actions may have a substance of amoral or immoral behaviour which, nonetheless, remains constituted in the moral domain (Karstedt & Farrall, 2006; Shover et al., 2004). This thesis argues that moral economy theory, constituted by the plethora of individuals, their dispositions, logics and moral reasonings that inform their economic actions in their everyday lifeworlds, offers useful insight into the application and utility, and the socio-cultural dynamics that arise from a new financial technology in the hands of rural users. Consideration of moral economy allows for a clearer understanding of the dynamic interplay of embedded, disembedded, and re-embedded exchange relations among contemporary and individualised relations in the marketplace, in the division of labour in Kasese society and households and, more generally, in relation to mobile money in the development context.

Concluding Thoughts: A Future for Mobile Money Research?

One of the core ideas explored here, and a criticism aimed at mobile money enthusiasts, is the assumption the tool can serve as a wealth-enhancing function. Critics of financial inclusion narratives highlight that research does not support the rhetorical leap of faith that financial technology will alleviate poverty, mitigate risk and empower women, among other benefits. The astute observer will see that the rural poor are already financially included—each participating in varying ways in a money economy with access to services such as loans from family and friends, involvement with local savings groups and even, as demonstrated in this research, reliance on the 'bank of mother.'

The rural poor lack inclusion into a formalised and technologised system where money is digitised and held in-trust by large corporate bodies. But does this kind of inclusion produce human flourishing, welfare and empowerment? Rather than emancipating the flow of money, mobile money confines users to 'rails' of privately owned ICT network providers where they endure high costs, dependency on privately owned infrastructure, and exposure to new forms of risk. On the other hand, cash, depite its attendant problems, flows relatively freely and continues to offer the most utility. Many stories of mobile money users relayed in this thesis provide examples of e-money's integration into their lives alongside their use of cash. Yet few, apart from some examples of town dwelling merchants, have been able to state categorically that mobile money has made them measurably better off.

In rural regions like Kasese, the forms of economic exclusion most obvious to the poor are lack of income and lack of income opportunity. So many of the poor I spoke with did not earn enough money to gain many benefits from mobile money. Many of the poorest rural

Ugandans, who rely on subsistence production and modest cash incomes, do not even own phones and have no practical way to engage with the technology. Mobile money certainly offered some benefits to an upwardly mobile strata in rural and urban Kasese but, with limited access and comparatively high usage costs, it did little to change economic conditions for the majority of rural Ugandans in Kasese. While it would be an exageration to say that no members of the rural poor or small entrepreneurs used mobile money or failed to realise benefits such as convenience or reduced transport costs, such benefits were far from economically transformative. Proponents seem to overlook that while mobile money may offer some *banking-like* services, it offers limited utility to users for anything other than digitised transfer and, in this respect, even the notion of transfer versus remittances is problematic. As such, mobile money narratives may be counterproductive, offering an illusory technological panacea to deeper, more intractable problems of economic marginalisation and precarious livelihoods. Access to DFS such as mobile money is useless without the underpinning non-technological factors being accounted for such as skill, literacy and economic oppourtunity to take advantage of what DFS can offer. Of course, mobile money is currently the foremost digital innovation in the Global South among many emerging digitally enhanced services such as *Afterpay-like* services, cryptocurrencies, LETS (local exchange/energy trading schemes), De-Fi (decentralised-finance) loans, and so on. While the social and cultural contexts in which these innovations are applied may diverge, the questions they raise, empirically and theoretically, have much in common, such as the shifting moral economies of local societies.

This mobile money research calls for a more expansive sociology of money that considers emerging digital finance technologies within the seemingly contradictory processes of disembedding and re-embedding, the sociability of money, and the calculative influence of money and reflexive modernity in the Global South. Moreover, while this research focused on the use of mobile money at a local level, it recognises that more indepth political economy and moral economy analyses of mobile money are needed to frame the service within broader perspectives of contemporary capitalism and the ongoing marginalised status of the rural poor, as well as the multitude of various emergent forms of DFS in a time of advanced technocapitalism.

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Appendix A

JAMES COOK UNIVERSITY AUSTRALIA

Mobile Money Interview Instrument

Face-to-Face interviews:

Background of Interviewee:

- What is your family background, education, work experience?
- What languages do you speak?
- Could you share with me about your family i.e. parents, siblings, spouse, children? What are they doing now?
- How long have you had a mobile phone for and why did you get one?

Mobile Money Adoption:

- Could you share with me what is your experience with mobile money? Are you a user of mobile money?
- How long have you been a user of mobile money?
- Which mobile money companies do you use?
- How did you find out about mobile money?
- How has mobile money benefited you?
- Could you share with me why you adopted mobile money?
- Has your use of mobile money changed since you started using it? Why?
- Now that you have been using mobile money, does it live up to your expectations?

Mobile Money Behaviour:

- Was it easy to learn how to use mobile money?
- Do you send mobile money to your friends or family?
- What things/goods/services do you buy with mobile money?
- Do you receive mobile money from your friends or family?
- What things/goods/services do you sell with mobile money?
- Do you use mobile money only for some things? If so, what are they and why?
- Are there any companies you like to use most/ why?

Mobile Money Services:

- Do you use mobile money to save and store your money?
- Do you use mobile money to borrow money like micro-finance?
- If you have/had access to credit do/would you use it?
- Do you buy airtime with mobile money?
- What portion of your income do you use in mobile money?
- How much mobile money do you use every day/week/month?
- Now that you use mobile money, what do you think would make it a better service?
- Do you have a bank account that you prefer to use over mobile money?
- If you don't have a bank account, why not?
- Do you feel that using mobile money is safe?
- Do you think your mobile money is safe?
- Do you often use the cash-out facility of mobile money? And if so, what are the reasons you do? Do you find it is easy to cash-out?

Mobile Money Normalisation:

- How many people you know use mobile money?
- Do most of your friends, family, and businesses in your community use mobile money?
- What is the most popular mobile money platform? Why?
- Do other people use mobile money only for some things? If so, what are they and why?

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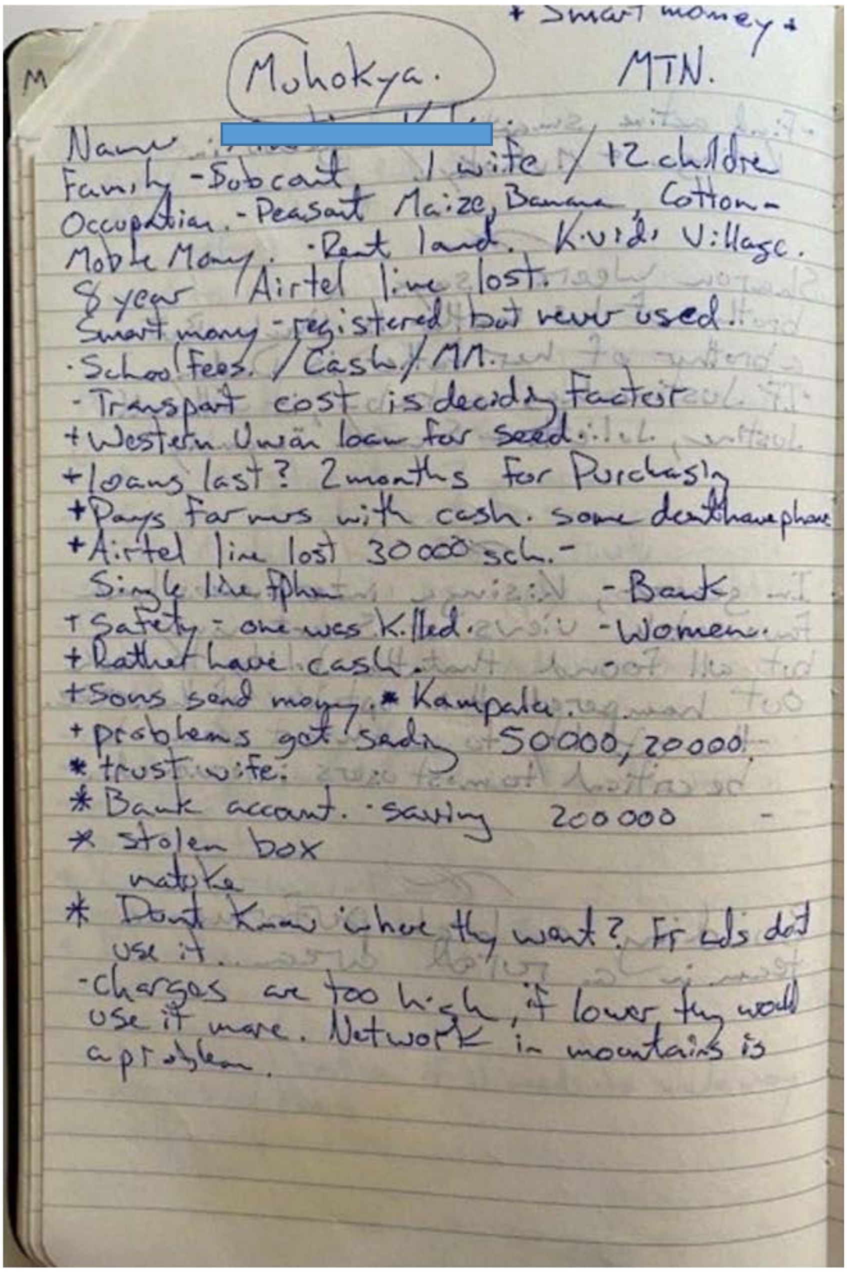
- Do you think more or fewer people are using mobile money?
- What do your family and friends think of mobile money? Is it considered bad/good/neutral?
- What do your friends and family think of people who use mobile money?
- Who do you use mobile money with?
- Who is/are big user/s of mobile money?
- Do men and women use mobile money differently? How and why?
- What about the future, what do you think will happen in the future with mobile money, and what would you like to see?

The face-to-face interview questions used to guide the semi-structured interviews.

Appendix B



+ Smart money +

Mohokya. MTN.

Name [redacted]

Family - Subcount 1 wife / 12 children

Occupation - Peasant Maize, Banana, Cotton -

Mobile Money. · Rent land. Kvidi Village.

8 year Airtel line lost.

Smart money - registered but never used.

· School fees. / Cash / MM.

- Transport cost is deciding factor

+ Western Union loan for seed.

+ loans last? 2 months for Purchasing

+ Pays Farmers with cash. some don't have phone

+ Airtel line lost 30000 sch. -

Single line phone - Bank

+ Safety - one was killed. - Women.

+ Rather have cash.

+ Sons send money. * Kampala.

+ problems got sending 50000, 20000.

* trust wife.

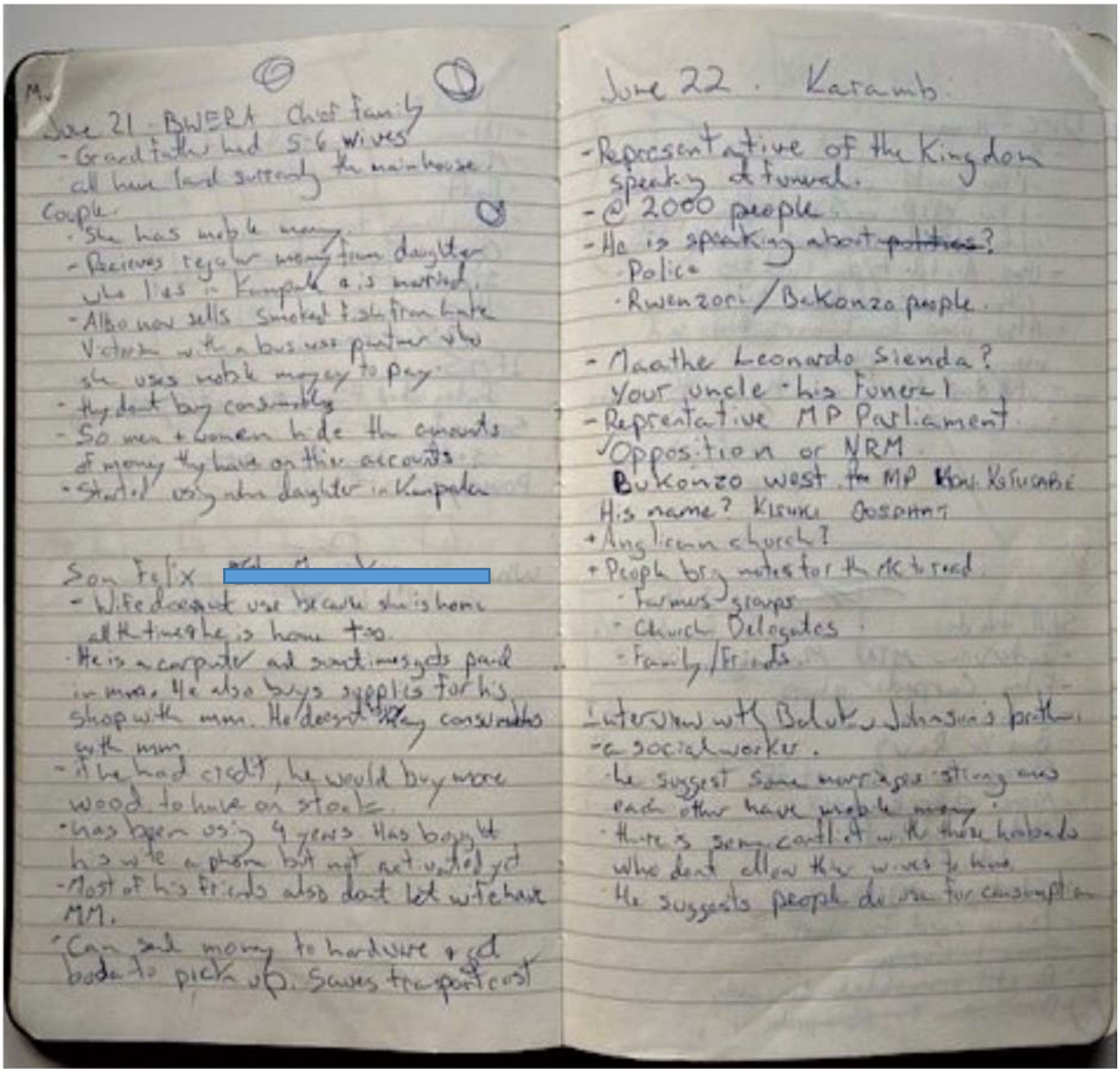
* Bank account. · saving 200000 -

* stolen box
matoke

* Don't know where they want? Friends don't use it.

- Charges are too high, if lower, they would use it more. Network in mountains is a problem.

Sample entry of notebook diary.



M.

June 21 BWERA Chief family
- Grandfather had 5-6 wives
all have land surrounding the main house.

Couple.
- She has mobile money.
- Receives regular money from daughter who lives in Kampala & is married.
- Also now sells smoked fish from Lake Victoria with a business partner who she uses mobile money to pay.
- they don't buy consumables
- So men + women hide the amounts of money they have on their accounts.
- Started using when daughter in Kampala

Son Felix [redacted]
- Wife doesn't use because she is home all the time & he is home too.
- He is a carpenter and sometimes gets paid in mm. He also buys supplies for his shop with mm. He doesn't buy consumables with mm.
- If he had credit, he would buy more wood to have on stock.
- has been using 4 years. Has bought his wife a phone but not activated yet
- Most of his friends also don't let wife have MM.
- Can send money to hardware and boda to pick up. Saves transport cost

June 22. Karamb.

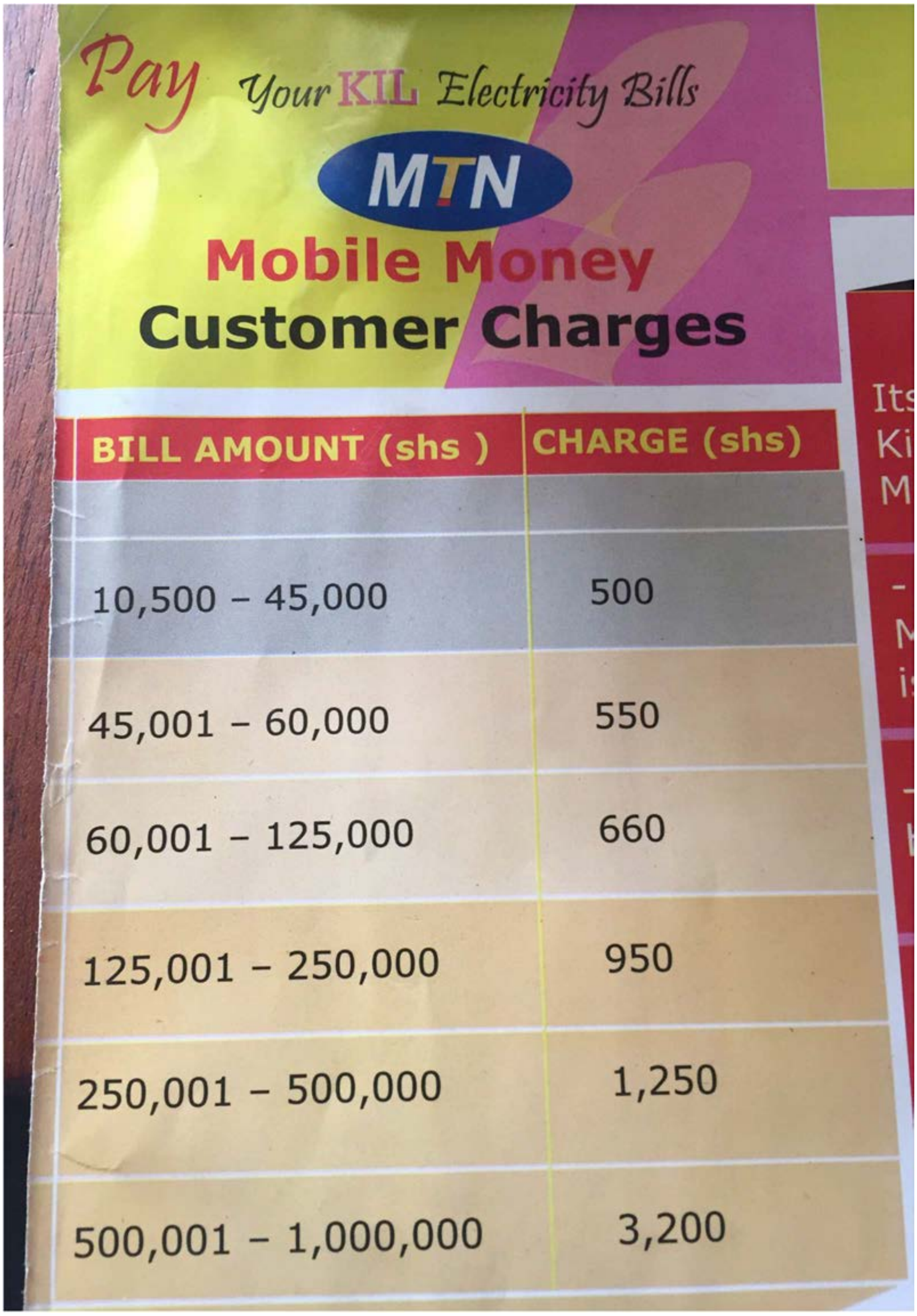
- Representative of the Kingdom speaking at funeral.
- @ 2000 people.
- He is speaking about ~~politics~~?
  - Police
  - Rwenzori / Bakonzo people.

- Maathe Leonardo Sienda?
Your uncle - his funeral
- Representative MP Parliament
✓Opposition or NRM
Bukonzo west the MP Hon. Kafusabe
His name? Kisuki Josphat
+ Anglican church?
+ People bring notes for the [illegible] to read
  - Farmers groups
  - Church Delegates.
  - Family / Friends

Interview with Baluku Johnson's brother.
- a social worker.
- he suggest some marriages strong and each other have mobile money.
- there is some conflict with those husbands who don't allow their wives to have.
- He suggests people do use for consumption

Sample entry of notebook diary

Appendix C



MTN charges for electricity account payments.