



Introduction

Money and Finance at the Margins

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A rotating credit-association meeting filled with food, music, laughter, and community spectators. Migrants who negotiate state borders by foot and sim cards. Traders creatively swapping between international and socialist currency spheres. A complex semiotic world of visual bargaining cues in a busy street market. Creative technology uptake and adaptation among visually impaired members facilitating participation in a women's savings group. Such are the types of lively stories that animate this volume on technology, inclusion, and design – stories drawing on everyday practices around money, value, storage, savings, and transfers among oftentimes marginalized communities across the Global South.

Money, commonly conceived of in its various material currency forms, offers critical insight into a range of practices surrounding notions of value, including the diverse ways it is managed by individuals, groups, and societies. Recent technological innovations – from dispensing cash transfers via ATM to the ability to store, transfer, and cash out credit via mobile phones – have had a significant impact on much of the world's population. In the process, such mediums have targeted and brought to light often financially “invisible” populations, whose marginal capacity for participation has left them either dismissed or forgotten in mainstream economic arenas: those living under the global poverty line of two dollars per day, often referred to as “the unbanked.” And yet, their economic activities are significant and complex, and quite visible for those who choose to look.

The authors in this volume who look at such financial activities represent a variety of interdisciplinary academic, design, and policy backgrounds, bringing together fields of research and practice. Each of the chapters addresses changes in the uses and meanings of money that occur through more general political and economic but also technological transformations. Indeed, technology is a central point of inquiry in the volume. Across a range of locales, the authors examine how recent and

ongoing technological developments in the money sphere – in particular the digitalization and thus dematerialization of money – have dramatically altered practices of and attitudes toward monetary storage, accounting, exchange, and transfer.

These intriguing developments are the subject of concerted discussion among academics as well as researchers and policymakers. In order to contextualize our contributors' work, we will turn to three of the topics at the core of these discussions: (1) new understandings of money and finance in economic anthropology and sociology, especially as pertains to studies of low finance; (2) everyday uses of new financial technologies aimed at poverty reduction and financial inclusion; and finally, (3) forms of collaborations between academics and practitioners in industry and philanthropy relating to new designs of money for inclusion.

Money, Value, and Wealth in Contexts of Low Finance

In recent years, the financial lives of the so-called “poor” have come to constitute a field of interest in development economics (Banerjee and Duflo 2011; Rutherford 2000) as well as a new market for global capital (Roy 2010). Proliferating alongside multiplying microfinance initiatives, exemplified in the initial success of Muhamed Yunus's Grameen Bank, this literature draws attention to the complex financial lives of “the poor” in various parts of the Global South. In particular, the landmark publications *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty* (Banerjee and Duflo 2011) and *Portfolios of the Poor: How the World's Poor Live on \$2 a Day* (Collins et al. 2009) have laid new ground in thinking about low finance – that is, the various strategies and resources that the unbanked (people excluded from formal financial institutions) mobilize in their everyday financial lives. This line of research asserts that “the poor” also engage on a daily basis in financial activities such as saving, loaning, hedging risk, and investing. While recognizing the agency of the unbanked in their daily lives, however, such studies are narrower in their approach to notions and forms of money, limiting the definition to legal tender and stripping away any recognition of its broader cultural, social, and moral meanings (see for example critiques by Guérin, Morvant-Roux, and Villarreal 2013: 11; Schwittay 2011: 385).

A long tradition in anthropology and sociology of money has critically engaged with the definition of the classic functions of money in economic theories (as a means of exchange, unit of account, means of payment, store of value), further diversifying the ways of thinking about

money as a commodity *and* a token (Hart 1986), as a mediator of sociality and intimacy (Zelizer 1997), as “a memory bank” (Hart 2000), and as “a relationship” (Maurer 2015a).¹ Further, economic anthropologists have for some time now challenged the ways that notions of “value” and “wealth” are defined in economic theory and policy by exploring how such notions are produced and deployed differently in variant cultural contexts (Weiner 1992; Munn 1986; Guyer 1993; Graeber 2001; Shipton 2007, 2009). Rather than thinking about value in purely economic terms, for instance, a number of old and recent classics in economic anthropology explore various forms and regimes of value (Appadurai 1986; Guyer 2004; Roitman 2005; Truitt 2013) as defined, negotiated, and transformed by people on the ground.

This book builds on these notions of money, value, and wealth to expand the discussion around the practices and meanings of financial transactions at the margins of global capital. The chapters in this volume span a wide range of money objects or objects used *as* money—from cattle to cash to mobile—and provide a rich tableau of practices and institutions that format and operate around such objects. Coming from diverse disciplinary backgrounds, the authors in this book nonetheless share a similar ethnographic sensibility to the study of money and finance. The book is attuned to money’s “repertoires, pragmatics, and indexicality” (Maurer 2006: 30) as well as to people’s creative uses of different forms of money in their everyday lives. The authors examine how people in diverse cultural and socioeconomic settings understand and use monetary repertoires for various purposes (for instance, to make social payments or to accumulate savings, pleasure, and/or prestige); how they differentiate (earmark) different kinds of money based on their materiality, provenance, and/or use; how they combine and move across different financial institutions and monetary repertoires as they seek creative ways to save, loan, and invest. Further, the book identifies the variety of institutions that enable and/or are enabled by such monetary repertoires; the chapters ask how formal and informal banking institutions intertwine in and may govern people’s daily financial transactions; how money mediates social and cultural rituals, obligations, and events; and how various financial practices are subject to sociocultural institutions such as rank, class, and gender. These ongoing projects continue to underscore the interplay between multiple forces and actors—states, markets, people—in shaping the meaning and uses of money in everyday life.

In addition to highlighting complexity and diversity of the forms and functions of money, the book offers a more expansive approach to the very notions of value and wealth—economic, social, cultural—as defined,

created, and applied by actors on the ground. The chapters explore the incredibly diverse practices of wealth creation by people living on less than two dollars a day—from storing wealth in piggy banks and ROS-CAs (rotating savings and credit associations) or as foodstuffs and jewelry (Tankha; Bajracharya; Villarreal, Guérin, and Kumar), to making payments (financial, social, cultural) via lottery networks operators (Echeverry and Cuartas) or mobile-money services (Nandhi, Kusimba, Kunyu, and Gross). Further, several of the chapters highlight the creative acts of conversion, performance, and play that permeate transactions with non-bank financial institutions such as rotating savings associations in the Kathmandu Valley (Bajracharya), shared store-credit cards in Chile (Ossandón et al.), or mobile-money ritual payments in Kenya (Kusimba, Kunyu, and Gross).

Recent works in cultural and social studies of finance contest a long-established narrative on the encroachment of the economic over the social and cultural worlds, advocating instead for a turn to practices, pragmatics, and performativity of economic concepts and objects (Maurer 2006, 2007; Callon 1998; Callon, Millo and Muniesa 2007; MacKenzie 2008; Zaloom 2009). Rather than fixing a particular notion of value, the ethnographic lenses turn to the repertoires, moralities, and materialities of money (Bloch and Parry 1989; Akin and Robbins 1999; Guyer 2004; Musaraj 2011; Truitt 2013), and to the practices and processes of valuation and value transformation in the marketplace and beyond (Çalışkan and Callon 2009, 2010; Kjellberg and Mallard 2013). Key ethnographic accounts look closely at the particular technologies, discourses, and economic theories that create and perform financial markets (see Zaloom 2006; Mackenzie 2008; Ho 2009; Holmes 2013). While introducing a whole new way of thinking and studying financial markets, these studies by and large focus on centers of global finance, on official and regulated markets, and on professional entrepreneurs/traders/bankers. One exception to this approach to finance is the growing literature on remittance transfers among migrant communities that bridge the Global North and South. This literature has contributed key anthropological insights into the generative capacities of the remittance economy in mobilizing, shaping, and transforming localized and transnational relations, imaginaries, and desires (see, among others, Levitt 2001; Glick-Schiller and Fouron 2001, Coutin 2007, Chu 2010; Small 2012; Pedersen 2013; Kwon 2015; Paerregaard 2015). We follow along the footsteps of this literature and advocate for an anthropology and sociology of low finance that may well provide unique analytical insights into the uses and meaning of money and finance be-

yond the bank and the trading room.² Such approach would make a contribution not just to scholarly debates but also to policymaking.

One of the crucial shortcomings of traditional approaches to economic development and microfinance is the assumed separation between the formal and informal sectors and a clear preference of the latter over the former. The very notion of “informal economy” was first introduced by anthropologist Keith Hart in his study of economic practices among low-income populations in the slums of Accra, Ghana (1973). The term was adopted by the International Labor Organization and took on a life of its own in development circles; however, it quickly departed from the intended purpose (the claim that the poor in urban Accra were, indeed, economically active, albeit formally unemployed).³ Economic anthropologists have long challenged both the idea of that separation as well as the hierarchy of values imposed on these two categories. This has been supported by ethnographic research from various parts of the Global South that explores how informal practices are always already intertwined with formal institutions (Roitman 2005; Elyachar 2003, 2005; Han 2012; Lucia 2014; Wilkis 2014) and the ways that the informal is used to circumvent the structures of exclusion integral to those institutions.

In this book, we maintain the focus on finance at the margins but caution against the formal/informal binary. We use the term low finance to refer to economic transactions that take place mostly (though not entirely) outside of formal banking systems and official regulatory regimes, are mostly mediated by cash in soft currencies (see also Guyer 2011), and that often entail multiple financial platforms and mediums of payment and exchange.

A number of the chapters in this book provide insight into the intertwined spheres of low and high finance, exploring the specific forms of inclusion/exclusion and ways people have navigated around financial barriers. Chapters by Taylor and Horst, Villarreal, Guérin and Kumar, Mesfin, Echeverry and Cuartas, and Bajracharya, for instance, discuss the multiple forms of wealth that various groups of the unbanked in Haiti, the Dominican Republic, India, Mexico, Ethiopia, Colombia, the Philippines, and Nepal mobilize as a means of everyday financial survival and asset-creation. These accounts take a closer look at the financial lives of people living on less than two dollars a day, going beyond the model of “financial diaries” (Collins et al. 2009) by examining, instead, the various financial resources that are economic as well as other functions. Thus, these authors note how women in India, Mexico, Kenya, and Nepal mobilize various social, economic, and cultural resources in order to gen-

erate multiple forms of wealth. These resources include social and kin ties (among family, neighbors, women's groups, political patrons) as well as different types of capital (cash, jewelry, mobile money, government grants). Their desired forms of wealth, or assets (Guyer), include savings (in cash or other valuables) (Tankha; Villarreal, Guérin, and Kumar; Mesfin), economic opportunities (Taylor and Horst; Echeverry and Cuartas), pleasure (Bajracharya), and prestige (Villarreal, Guérin, and Kumar; Mesfin).

A common thread that runs through a number of these chapters is the intertwining of financial technologies and social ties in the everyday practices of wealth-creation. As Jenna Burrell points out in her commentary, this theme runs against the grain of assumptions prevalent among development and industry practitioners about the impersonal and individualistic nature of technology. By ethnographically tracing how people on the ground embed new and old monetary technologies in social interaction and cultural practice, this book seeks to address the gaps in the design of and policymaking around new technologies of financial inclusion. We explore these gaps in the next section.

Technologies of Financial Inclusion

Poverty reduction has long been a moving target for development economists and policymakers. The World Bank estimated that 1 billion people still lived in extreme poverty in 2015. Identifying effective tools for addressing poverty has been a challenge ranging from top-down infrastructure modernization projects to participatory community projects driven by methodologies (Chambers 1997) for engaging local stakeholder needs and capacities. Economist Jeffrey Sachs's famous call to an "end of poverty" (2005), taken up by the development community, identified key strategies, including the harnessing of technology for development purposes. Technology for development has become mainstreamed, as numerous program initiatives by the United Nations Development Programme, USAID, the World Bank, and other international aid organizations attest. In the money arena this has included an emphasis on the digitalization of money in a variety of sectors, from government cash transfers to mobile money. Cashlessness is viewed as a potential development strategy for increasing financial transparency, reducing corruption, and facilitating savings and transfers – particularly international and urban-rural remittances, which are widely recognized as important sources of local development financing (Ratha 2006 et al.).⁴ It is in this context that we can better situate and understand the current global campaign

toward financial inclusion, a campaign that resonates with earlier policies that advocated the formalization of the informal economy as a site for economic development in the Global South.⁵

We trace the history of the current global campaign for banking the unbanked to the emergence of microfinance in the late 1970s. As described earlier, following the initial success of the Grameen Bank a number of international development agencies, governments, nongovernmental organizations, and private philanthropists joined in a global campaign advocating microfinance as a means of including the “bottom of the pyramid” in regulated financial institutions (banks, credit, and, consequently, debt). More recently, such campaigns see the dematerialization of money—the movement from cash to digital payments—as a technological fix to the broader problems of poverty and financial exclusion. Thus, leading international organizations (the World Bank), government bodies (USAID), and private philanthropic foundations (the Bill & Melinda Gates Foundation, MasterCard Foundation) have embraced (and are heavily investing in) developing mobile money and other electronic and digital financial instruments under the banner of financial inclusion (see, for instance, Demirgüç-Kunt et al. 2015).

A number of chapters in this volume focus on several such initiatives for financial inclusion via digital forms of money, credit, and payments. These chapters explore mobile money as an arena of cashless interest and development potential. The ubiquity of cell phones in the developing world and the success of certain countries such as Kenya and the Philippines in creating agreements between banks, regulators, and telecom operators to use cell phones to perform functions such as storing and transferring value or applying for microloans is seen as a potential boon for those traditionally excluded from formal financial participation.⁶ As the chapters in this volume illustrate, however, efforts to promote formal financial inclusion should not dismiss the diverse ways that the poor already participate quite actively and creatively in the economic arena (Rutherford 2009). Furthermore, the mapping and adaptation of existing monetary practices to new technological tools and infrastructures often have unintended consequences.

The emergence of mobile money—originally the use of airtime as a form of currency to send monetary value from person to person (P2P) via cell phone transactions—has been a particularly interesting example of a development in the sphere of finance that has been widely adopted in parts of the Global South (Mas and Morawczynski 2009; Kendall et al. 2012). The unprecedented success of Kenya’s mobile-money company, M-PESA, in gaining a greater share of the market of P2P transactions than

banks (Omwansa and Sullivan 2012) has prompted many in the development world to look into mobile payment technologies and services as a potential new market for microfinance initiatives. In other contexts (such as GCASH in the Philippines and EKO in India), mobile-money services seem to succeed in areas such as state cash transfers or P2P transfers among migrants (Gusto and Roque; Nandhi). But the emergence of mobile money and its success in some (but not all) countries of the Global South has raised a number of issues around money and development more generally. Thus, the success of M-PESA in particular is routinely used in industry discourse to make a case for cashlessness as a strategy for economic development, increased security, and even antiterrorism. What this particular discourse of cashlessness often fails to address, however, is the market politics that are often driving the push for mobile money – the rivalries between brick-and-mortar banks and telecom companies, the particular agent networks that emerge around mobile-money services, and potential monopolies in the telecom industry. Most importantly, while mobile money promises to expedite transfer, it is not always clear how such services might create new sources of income for the poor or how they might address deeper infrastructural problems. Does mobile money in its digital record of financial transactions create a big data trail that raises concern over issues of privacy, discretion, and governance? Or does it contribute to a financial record that might ease access to credit? Other questions are of an analytical order: Does mobile money present a new money form, and, if so, how are we to think critically about what this form enables/disables?

Several of the chapters in the book explore the application and effects of mobile money (Nandhi; Kiiti and Mutinda; Kusimba, Kunyu, and Gross; Taylor and Horst) as well as other emerging technologies such as biometric identification (Donovan) and government cash transfer programs (Gusto and Roque) for the purpose of financial inclusion. These contributions, however, present a nuanced picture of the effectiveness of new technologies in poverty alleviation. While in some cases mobile-money services facilitate the sending of remittances or even savings (Nandhi), other accounts point to persisting concerns about trust, privacy, and personal relationships to the service providers. Others raise questions about the new forms of governance enabled by such technologies (Donovan) as well as new forms of inclusion/exclusion for client populations (Kiiti and Mutinda). A number of the chapters come from practitioners in technology and development economics – the ethnographic insights that these contributions bring together are, therefore, also aimed at future policy and design.

Humanitarian Design and Collaborative Research Practices

An ethnographic approach to apprehending emerging intersections of finance and technology is also finding relevance among industry designers, who over the years have recognized the importance of catering to what is now often called human-centered (also known as humanitarian) design (HCD).⁷ Human-centered design encourages an ethnographic approach to ascertaining how human behavior offers important insights into product design and adaptation that maybe be overlooked in the engineering process. One key feature that distinguishes this design approach from others is investing in ethnographic methods of research (as opposed to traditional market research) by deploying teams of social scientists and designers to engage in participant observation, tagalongs, and long-term face-to-face interactions with people on the ground. A number of these firms are now partnering with philanthropists and industry to develop tools aimed at increasing financial inclusion, often including various types of mobile-money and conditional cash-transfer applications or other technologies that would potentially solve deep structural and infrastructural problems.⁸

While subject to the “neoliberal” critique of commodifying and marketizing ethnography (after all, such firms bid for contracts in a highly competitive environment), these players nonetheless have carved out a new “assemblage” of actors that cross-cut design, development, and social sciences (Schwittay 2011; Maurer, Nelms, and Rea 2013). Such collaborations recall the concept of para-ethnography (Holmes and Marcus 2008) as well as a number of collaborative projects (Maurer and Mainwaring 2012; Riles 2013) whereby anthropologists and other social scientists engage in research with subjects in other fields who share similar methods and forms of expertise. Further, our notion of collaboration also seeks to address ongoing calls for more serious engagements with theories from the South (Comaroff and Comaroff 2011). In bringing together authors who either live and work in various parts of the Global South or have conducted extensive ethnographic research at various sites in Africa, Asia, and Latin America, we hope to expand on the few remarkable projects that have provided a space for voices outside of the Euro-American academy (Guyer 1995; Hart and Sharp 2015; Hart 2015). Such an approach recognizes that subjects of research are “epistemic partners” (Holmes and Marcus 2008) rather than radically other “informants.” The epistemic and practical work that transpires through such collaborations takes shape laterally (Maurer 2005), with ethnographers and research “subjects” mu-

tually shaping one another's forms of knowledge and, potentially, design of new products, services, and policies.

This is a challenging path to take, and many of the authors in this book attest to the methodological, cultural, and political challenges that such collaborative work entails. But it is a path that helps ensure that social theories and methods are not mired in the academy, but instead may be put to work and offer reflective insight in the wider world. Some of the projects featured in this volume experiment with a different kind of engagement with their field by, among others, actively seeking to advocate financial literacy among poor rickshaw pullers in Delhi, India (Nandhi); providing social support to marginalized indigenous populations in the Philippines (Gusto and Roque); or thinking about alternative ways to measure creditworthiness among informal workers in Colombia (Echeverry and Cuartas). As microfinance inclusion initiatives target and expand the financialization of the poor (Roy 2010), these chapters also caution against importing ready-made models of inclusion, and provide design guidelines attuned to local institutions and practices of financial resourcefulness and responsibility.

Organization of the Chapters

In order to expand this discussion on the role of money and everyday practices of its use in anthropology, policy, and industry, and to reflect fully on the materials of the volume's authors, we have organized the thirteen chapters of this volume under four main themes: "In/Exclusion," "Value and Wealth," "Technology and Social Relations," and "Design and Practice." For each section, an established scholar or practitioner in the field was invited to contribute a short essay discussing the authors' findings—including theoretical, ethnographic, and practical contributions, how the section chapters intersect with and inform each other, and the doors they open for further discussion and reflection.

The first part, "In/Exclusion," includes chapters by authors from various disciplinary backgrounds—anthropology, political science, communications, and environmental sciences—and spans three countries (Haiti, Dominican Republic, Kenya). The section explores the experiences of various groups of people excluded from formal banking institutions (migrants, refugees, persons with visual impairment). As Ananya Roy points out, read together, these chapters invite us to think more critically about "the organization and institutionalization of financial inclusion" and the

everyday practices of navigating, negotiating, and contesting categories of included and excluded populations.

Part II, “Value and Wealth,” brings together chapters by anthropologists, a sociologist, and an economist working in four countries (Nepal, Cuba, India, Mexico) and drawing upon a wide range of concepts and theories in the anthropology and sociology of money. The three chapters highlight complex and diverse notions of value and wealth that go well beyond economic measures and that also include social, cultural, and political considerations. Reflecting on this section, Jane Guyer draws attention to the temporal dimension of practices of value and wealth creation. She highlights the efforts by a number of the protagonists in these chapters at creating “enduring value” in a context of uncertain “monetary temporalities.” This attention to the temporalities of finance and life is especially pertinent to the everyday experiences of people living at the margins that this book explores. “Living on two dollars per day,” Guyer observes, is “actually not in dollars (a stable currency) nor is it daily (on a regular rhythm).” Guyer thus identifies a blind spot in the very definition of poverty in global development discourse – namely, the uncertain temporalities of finance and life for people at the margins of global capital.

Part III, “Technology and Social Relations,” draws attention to the everyday uses of various financial technologies (mobile money, digital government cash grants, retail credit cards), in ways not always anticipated by the designers of such technologies or by the authors researching them (see Ossandón et al.). The three chapters in this section come from scholars with interdisciplinary backgrounds in anthropology, sociology, and science and technology studies and focus on three different countries (Chile, South Africa, Kenya). The chapters share a perspective on technology and finance as being entangled with social relations and cultural norms. In her commentary, Jenna Burrell notes that this relationship between technology and social ties “has not been given the same weight and consideration.” Bringing attention to this relationship, as authors in this section do, would be of particular interest to industry and philanthropy practitioners advocating the application of new digital technologies as a solution to financial inclusion.

It is with this ethos that the authors in the final part, “Design and Practice,” approach existing and future digital technology aimed at financial inclusion efforts. Authors in this section are practitioners in design, international development, and communications technology; one of them has engaged in applied social science. The chapters in this section are

written in a different style; the authors draw upon their ethnographic insights for the purpose of informing better designs of financial services and products. As Blumenstock notes, the research and design proposals discussed in these chapters are “a powerful reminder of the chasm between current design and current practice.” All authors in this section, while not anthropologists by training, seek to bridge this chasm by way of ethnographically informed design and policy.

The afterword by Bill Maurer further echoes this commitment to ethnographic research in discussions, assessments, policies, and designs of new technologies aimed at promoting financial inclusion. Drawing upon authors in this volume and others working on similar projects, Maurer makes a case for collaborative, grounded research that attends to the “ingenuity and the cultural and social forces at play whenever people pay.” This is a call for deploying a “diversity of knowledge forms” in policy and industry researching and designing money and payment infrastructures for the poor. We hope that, by mobilizing diverse knowledge forms, the contributions and discussions of this volume will help highlight and rethink the various ways that “money” and “value” are recognized and practiced among communities at the perceived margins of the traditional economic mainstream, and further inform broader debates and agendas related to technology, inclusion, and design.

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Smithsonian, India China Institute, Ford Foundation, and World Policy Institute.

NOTES

1. For a comprehensive review of the anthropology of money, see Maurer 2006 and Hart and Ortiz 2014.
2. For similar ethnographic approaches to the everyday pragmatics of money and finance beyond the centers of global finance, see also Hertz 1998; Elyachar 2006; Çalışkan 2010; McFall 2014; Langley 2013; Deville 2015.
3. Keith Hart has situated the emergence of the notion of “informal economy” within the context of the Cold War, and especially of the failure of states, both east and west of the iron curtain, to “deliver economic democracy in adequate measure” (2000: 148). Further, Hart notes, “the idea came out of the lives of Third World people, whose money makes them about as conventionally poor as it is possible to be in our mechanized world” (ibid). The concept was further taken up by development scholars and practitioners working within the framework of structural adjustment policies of the 1980s and 1990s.
4. Calls for cashlessness as the future of money are increasingly voiced by a wide range of actors. The Better Than Cash Alliance (www.betterthancash.org) has brought together a number of such actors that cut across industry, philanthropy, and regulatory bodies to promote “cashlessness” and “cash-lite”-ness. For reviews of these developments, see, among others, Maurer (2015b); Kendall et al. 2012; and the World Bank (2015) report *Payment Aspects of Financial Inclusion*. For critical overviews on cashlessness and financial inclusion, see Donovan (2012a, 2012b).
5. An influential study by Hernando de Soto (1989) defined the specific approach towards the informal economy that prevails among international development institutions to this day, namely, that formalizing the informal economy is beneficial to all (see Elyachar 2003, 2005 for a critical history of the use of the concept of informal economy and advocacy of formalization of the “bottom of the pyramid”).
6. For an illustration of the euphoria around Kenya’s story of mobile money lifting millions out of poverty, see Omwansa and Sullivan 2012. Recent efforts by the international telecommunications giant Vodafone repeatedly cast new mobile-money initiatives in countries such as Romania and Albania as “technology honed in Africa [and] exported to Europe” (Shadbolt 2015; see also Finnan 2014). A number of international organizations, private and public, publish ongoing reports that also proclaim the positive effects of mobile money on financial inclusion. Leading voices in this include reports and blogs by the Consultative Group to Assist the Poor (CGAP), the World Economic Forum, and the GSM Association (GSMA).
7. For a popularized version of “human-centered design” see Brown 2009 and the IDEO HCD toolkit. For a critical review of human-centered design and its application by design firms, see Tonkinwise 2011.

8. The design firm IDEO, for instance, has partnered with CGAP to research the impact of mobile money on low-income communities in Ghana (see project overview “New Mobile Money Solutions in Low-Income Communities,” <https://www.ideo.org/projects/new-mobile-money-solutions-in-low-income-communities/completed>). See also CGAP’s study of the benefits of HCD for financial inclusion, Seltzer and McKay 2014.

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