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Collateral damages: Cash transfer and debt transfer in South Africa

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ABSTRACT

Over the past decade, two development programs-cash transfer and financial inclusion-were bundled in global development discourse. Despite differences in their purported objectives, cash transfers are increasingly delivered via financial inclusion infrastructures and technologies. One important yet under-appreciated consequence of this bundling is the possible transference of credit and debt to cash transfer recipients. In this paper, I explore how the South African cash transfer program incorporated recipients into a highly coercive and monopolistic financial system predicated on proprietary technologies. The proliferation of such technologies enabled cash grants to be transformed into collateral for credit and encumbered by debts to private companies. Specialized payment technologies encouraged recipients to accept loans and ensured that they could not default, making cash transfer a site of nearly risk-free profit. My work is informed by over two years of ethnographic fieldwork, hundreds of qualitative interviews, and archival data from the South African Parliament and Constitutional Court. My study finds that while grant payment technologies promise to mitigate the contradictions between providing cash transfers for basic needs and offering profitable financial products, in practice, they can worsen indebtedness. By focusing on the materiality of financial inclusion technologies, I demonstrate how the efficacy of cash transfer programs can be undermined, when debts as well as grants are passed on to recipients.

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Over the past two decades, cash transfer programs have proliferated as a commonsense strategy for poverty alleviation. Cash transfer is based on the notion that people need money to provide for their needs - needs that they know best (Hulme, Hanlon, & Barrientos, 2012). Around the world, governments and nongovernmental organizations (NGOs) provide regular payments to poor and vulnerable people, who choose how to allocate these resources. One under-appreciated consequence of cash transfer is that the regularity and security of payments generates a form of surety, which can be used to transform social entitlements into collateral for credit. Financial technology firms, contracted to implement cash transfer payment systems, can both distribute social entitlements and sell financial products and services alongside them. They can build digital distribution systems that reallocate risk between lenders and debtors: where they control financial flows and deduct loan repayments early and automatically before cash is transferred to recipients. With limited risk, lenders face almost no prohibition against issuing burdensome and irresponsible loans. In this way, cash transfer payment systems can subordinate the goals of poverty alleviation to the expansion of the financial sector. Between 2012 and 2018, this is exactly what

happened in South Africa. The power-laden, techno-financial arrangements of a government-sponsored cash transfer program (locally referred to as the social grant program) eliminated nearly all risk on loans issued to grant recipients.

South Africa's social grant system evolved in step with a global effort to bundle cash transfer payments with so-called "financial inclusion" initiatives. While cash transfer promotes "just giving money to the poor" (Hulme et al., 2012), "financial inclusion" promotes giving money to the poor through biometrically-secured bank accounts and in conjunction with a suite of other financial products (such as savings, loans, payments and insurance). Despite these differences, mainstream development agencies and new development actors (banks, mobile phone companies, technology firms, MasterCard/Visa, think thanks) have advocated for cash transfer recipients to manage their social assistance payments with the help of financial products and services (Clemence & MacLellan, 2017; Bold, Porteous, & Rotman, 2011; Porteous, 2006). A significant consequence of this shift from "cash" transfer to digital transfer is the availability of credit.

Scholars have shown how social policy has been reconfigured to generate financial assets for investors, in Brazil (Lavinas, 2018), Mexico (Soederberg, 2014), and the United States (Cooper, 2017). They demonstrate how the commodification of social programs

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https://doi.org/10.1016/j.worlddev.2019.104711 0305-750X/© 2019 Elsevier Ltd. All rights reserved. and public services leads to the conscription of individuals and households into regimes of credit. Theorizing from South Africa, I follow this work to illustrate how relations of power work in and through technologies of "financially inclusive" cash transfer to promote credit with minimal risk for lenders. To this end, I begin with a review of development literature to explain how cash transfer programs became discursively and practically linked to financial inclusion principles. Second, I use the example of South Africa to describe how a private corporation, Net1 UEPS Technologies (Net1), incorporated grantees into a segregated and monopolistic financial system. Third, I clarify how Net1's technologies worked to commodify social grants, making them available as collateral for low-risk credit. Fourth, I demonstrate that Net1 did not only lower the risk for itself, but transformed the low-income lending sector as well. Net1 often contends that their products are cheaper, more accessible and more appropriate for their target market of social grantees. However, it is important to move beyond a comparison of this sort to understand how Net1's digital payment technologies facilitated a shift across the formal (and to a lesser extent the informal) credit market, decreasing the burden of risk for creditors throughout the sector. Under Net1's banking system, grantees could not default, miss a payment, or renegotiate the terms of their loans, making these debts feel more onerous. In mid-2018, the Constitutional Court directed the South African Social Security Agency (SASSA) to reform the social grant program. I conclude this article by demonstrating how, despite these changes, complications around indebtedness persist.

With one of the largest and most comprehensive cash transfer programs in the world, South Africa is an ideal place to consider this emergent phenomenon. According to the World Bank (2016), South Africa (3.3%) outstrips India (1.5%) and Brazil (1.4%) in social assistance spending as a percentage of GDP due to its robust cash transfer program. South Africa provides non-contributory, unconditional, means-tested monthly stipends for 17.6 million people (30.8% of the population),² including children under 18 (R400/\$26.67), adults over 60 (R1690/\$112.67) and people with disabilities (R1690/\$112.67).³ And yet, to say South Africa provides these grants is a misstatement: while the program is government-funded, the material provision of grants was outsourced to a global financial technology firm. In 2012, the South African Social Security Agency (SASSA) contracted Cash Paymaster Services (CPS) to distribute grants nationwide. 4 CPS embarked on an enrollment drive, collecting personal information for around 17 million beneficiaries and opening bank accounts for 10 million recipients (Vally, 2016). Their parent company, Net1 UEPS Technologies (Net1), listed on the Johannesburg and NASDAQ stock exchanges, used subsidiaries to sell financial inclusion products to grantees, including loans (Moneyline), insurance (Smartlife), utilities (uManje Mobile), and payments (EasyPay).

As a monopoly service provider, Net1 had unrestricted access to South African grantees both in person and via their electronic data. Net1 was well positioned to make grant payments, sell financial products, and extract repayments for these products without bearing any risk. There was no possibility for grantees to default on their debts because repayments no longer depended on consumer behavior. As loan repayments to Net1 whittled away the promised

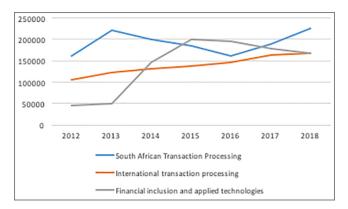


Chart. 1. Net1 Profits in '000 Dollars (Kotzé, 2018) (Belamant, 2016). The lines represent the three segments of Net1's business as "South African transaction processing" and "linclusion and applied technologies" are based in South Africa; while "Lordon and transaction processing" is based in South Korea, Hong Kong and the European Union (Kotzé, 2018). South African transaction processing consists of the welfare benefit distribution service, ATM infrastructure, and transaction processing for retailers utilities and banks. Financial inclusion and applied technologies consists of short-term loans, bank accounts, prepaid products, life insurance, and the sale of hardware and software (*ibid.* p. F-67–68).

value of social entitlements, grantees turned to other formal and informal lenders, many of whom were also repaid early and automatically through this same financial system. Net1 reaped significant profits from social grant payment through their government contract and their sale of financial inclusion products. In fact, between 2015 and 2017, Net1 made more money from their financial inclusion products than from the distribution of social grants (Chart 1).

While it is difficult to estimate the cost to grantees – in part, because this information is controlled by Net1 - there are some useful proxies. The Black Sash, a leading South African social security NGO, conducted a survey between October and November 2016. Enumerators surveyed grantees at seven SASSA pay points in three provinces, in rural and urban areas. Out of 1591 grantees surveyed, 25.5% answered "yes" to the question: "was any money deducted from your grant without your consent?"6 The most common non-consensual deductions included loans, insurance, and utility payments. In the urban township of Khayelitsha, 40 km from central Cape Town, around 50% of grantees said they experienced non-consensual deductions. After a public outcry, Net1 commissioned a report by auditing firm, KPMG (2017), to defend their lending practices. KPMG⁷ found that between March 2016 and February 2017 grantee bank accounts were subject to 15.5 million debit orders, over half of which (53.4%) were deducted by two Net1 companies: Moneyline (loans) and Smartlife (insurance) (p. 11-12). This report, however, excluded over two million grantees with EasyPay bank accounts⁸ and many more grantees with uManje Mobile utility deductions (both Net1 products). Though difficult to specify exactly, the problem of deductions is significant (Chart 2).

This is not just a problem for South Africa. Powerful development actors, such as the Group of Twenty (G20), are calling for

¹ World Bank Open Data: https://data.worldbank.org/.

 $^{^{2}\,}$ 43.8% of all households receive at least one grant (Stats SA 2017).

 $^{^{3}\,}$ There are several other grant categories, like war veterans, but these are by far the largest.

⁴ At the time, this was the second largest government contract ever issued after the Strategic Defense Package, which was a R30 billion (US \$4.8 billion) purchase of weapons in 1999.

⁵ While there are 17.6 million beneficiaries, there are only 10 million recipients, because some recipients receive grants for multiple beneficiaries, e.g. mothers with multiple children

 $^{^6}$ Complete survey data available at the Black Sash website: $\label{eq:blacksash.org.za/survey-types/sassa-paypoint-citizen.}$

⁷ This report begins with this caveat: the auditors "do not express any assurance" on the reports' contents (KPMG, 2017).

⁸ From 2015, Net1 encouraged SASSA grantees to transition to a second bank account controlled entirely by them, called EasyPay. By the time of this survey, 2 million grantees had transitioned. I found that most people transitioned to the EasyPay account in order to get a Moneyline loan. Therefore, one would expect a much higher percentage of EasyPay account holders to have consensual and non-consensual deductions.

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COMMUNITY MONITORING Social Justice Coalition SASSA Pay Point: Khayelitsha Site C, New Hall MAKING ALL VOICES COUNT B L A C K S A S H MAKING HUMAN RIGHTS REAL

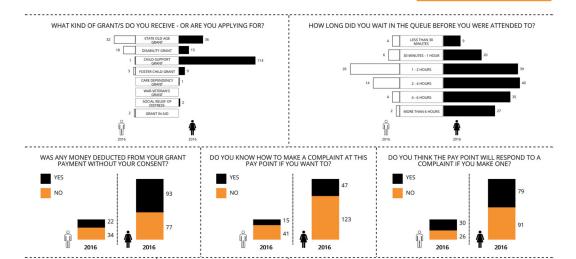


Chart. 2. SASSA Pay Point: Khayelitsha Site C, New Hall (Black Sash, 2016). Poster created by the Black Sash based on a survey conducted by the Social Justice Coalition at a SASSA Pay Point in Khayelitsha between October and November 2016. Over 50% of participants said they had money deducted from their grants without their consent.

the bundling of cash transfer programs with financial inclusion products worldwide. Likewise, the international donor community has funded several major reports written by financial inclusion think tanks to elaborate the rationale for such bundling (Clemence & MacLellan, 2017; CGAP, 2011a, 2011b, 2011c, 2011d; GPFI, 2010), and Silicon Valley investors have rushed to fund universal basic income trials because of the financial inclusion potential (see McCullough, 2019). Additionally, the International Finance Corporation (IFC) invested \$107 million to support Net1's expansion into African countries with "limited banking infrastructure and financial services" (IFC, 2016, p. 1). While South Africa's cash transfer program might seem extreme, the model could expand worldwide.

This research is based on 28 months of fieldwork between 2015 and 2018. In partnership with a community-based organization (CBO) in Khayelitsha, I conducted over 100 interviews with grantees about their household financial practices. In association with the Black Sash, I assisted over 40 grantees seek recourse for non-consensual deductions. I also participated in the Black Sash's enumerations at pay points to understand the extent and impact of credit and debt, and attended Parliamentary inquiries and Constitutional Court proceedings to explore the possibilities of regulation. 9

1. Financially inclusive cash transfer

Before describing South Africa's grant payment infrastructure, I will explore the ways financial inclusion technologies and products were materially and discursively linked to cash transfer programs.

In the wake of the Asian financial crisis, mainstream development agencies surveyed the damage of free market capitalism and, in a move Polanyi (2001)/1944) would recognize, began to promote redistributive forms of social protection to curtail its worst effects (Hickey & Seekings, 2017). Building upon efforts in the global South (Oportunidades in Mexico, Bolsa Familia in Brazil), international development agencies promoted non-contributory donor and tax-funded cash transfer programs for old age pensioners and poor families with children (Garcia & Moore, 2012; WB, 2001; ILO, 2000). Cash transfer programs spread very quickly around the world. There are now two decades worth of nuanced studies showing how and under what circumstances cash transfers can improve childhood nutrition (Augero, Carter, & Woolard, 2006; Gertler, 2004; Leroy, Ruel, & Verhofstadt, 2009), reduce child labor (Barrientos, 2012; Soares, Ribas, & Osório, 2010; de Janvry, Finan, Sadoulet, & Vakis, 2006), and advance educational outcomes (Barrera-Osorio, Bertrand, Linden, & Perez-Calle, 2011; Duryea & Arends-Kuenning, 2003). There is also significant work on the effectiveness of cash transfers around the world, including in countries with limited government capacity (Seekings, 2017). Much of the consensus around cash transfers as simple, affordable and adaptable to a wide range of contexts is underpinned by a subtle technological optimism. As one popular book describes, "new computer and electronic communications systems" are vital to making distribution possible (Hulme et al., 2012, p. 145).

Enter financial inclusion. Financial inclusion is a recent development effort that encourages banks and financial technology firms to design these "computer and electronic communications systems" to connect poor people with financial markets. Only a decade after the Asian market collapse and the rise of social protection programs, the 2008 global financial crisis produced a different response. The economy had just been undermined by agents of high-risk financial products, marketing subprime mortgages to unqualified buyers and hedging against them (Chakravartty & Da Silva, 2012). Though subprime mortgages were themselves a financial inclusion product, the global response to the crisis, authored by the G20, was not to curtail the effects of finan-

⁹ I published a series of articles in *GroundUp* on how the technological apparatuses of grant payment gave a private company a competitive advantage in the low-income financial sector (Torkelson 2017a, 2017b, 2017c). I also researched and co-wrote a 24-minute segment for an investigative journalism program, *Cutting* Edge, which aired on national television (Black Sash, 2018b). My research on indebtedness was used by the Black Sash in their social grant protection campaigns, and in evidence to the Panel of Experts appointed by the Constitutional Court.

cialization, but to expand its reach. In 2009, the G20 leaders at the Pittsburgh Summit produced a statement on the need to "stabilize" (G20, 2009, p. 1) the global economy and a plan for including "the most vulnerable" (p. 15) in financial markets worldwide. One year later, at the Toronto Summit, the G20 promulgated a set of principles to "spur innovation for financial inclusion" while safeguarding "financial stability" and "protecting consumers" (GPFI, 2010, p. 1). This was a moment of definition: although the G20 proposed financial access as a moral advance – for equity and inclusion – the expansion of finance to the poor was contained within their broad strategy to rebuild the global economy.

Financial inclusion could not be spontaneously enacted without being combined with existing development initiatives. Cash transfer was an ideal partner. While cash transfer programs needed technologies to deliver money to program recipients, financial inclusion programs needed new markets for their technologies and product offerings. Despite different theoretical underpinnings, numerous reports make the association between financial inclusion and cash transfers seem obvious. Bankable Frontier Associates (BFA) published a Scoping Report on the Payment of Social Transfers through the Financial System (Porteous, 2006); the Consultative Group to Assist the Poor (CGAP) published Social Cash Transfers and Financial Inclusion (Bold et al., 2011); and the Department for International Development (DFID) published Designing and Implementing Financially Inclusive Programs (Porteous, 2009). These repetitively titled reports, along with global exchanges, working groups and donor funding, advocated the techno-financial delivery of cash transfers. By techno-financial I mean the development of technological platforms and products that claim to "disrupt" more traditional banking services for the "unbanked." 10 According to a study of 212 cash transfer programs (Clemence & MacLellan, 2017), 20% are now bundled with at least one financial product.¹¹

The need for financial inclusion was, perhaps, most persuasively argued in the Portfolios of the Poor (2009), wherein four researchers interviewed 250 families from South Africa, India and Bangladesh every two weeks for a year about the "minute details" of their financial transactions (Collins, Morduch, Rutherford, & Ruthven, 2009, p. 4). Over the past decade, the *Portfolios* project has expanded to ten countries in the global North and South. The Portfolios was innovative because it moved "financial inclusion" beyond its historical focus on credit by turning critiques of microfinance on their head. Microfinance was under fire because borrowers were using loans for consumption and very marginal businesses (Bateman & Chang, 2012), failing to increase their capital and leading to over-indebtedness. The Portfolios authors, particularly Rutherford, suggested that instead of critiquing the way poor people actually use credit, development professionals should learn from them. He argued that, through their financial practices, people demonstrated that they needed a broad range of technofinancial products - particularly savings, credit, payments and insurance - to more effectively manage their money (Collins et al., 2009; also see Morduch, 2017).

This research produced a temporal rationale about how and why poor people required particular sorts of techno-financial instruments to overcome poverty.¹² The Portfolios authors argued that savings and credit products would enable people to reallocate their income and expenditure across time to respond to crises. During their interviews, the *Portfolios* authors tracked all instances when poor households did not spend their income in one lump sum. Such moments were used as evidence that their interview participants were sophisticated financial managers, saving their money and planning for their futures (Mader, 2018). Their problems did not just stem from a lack of money, but a lack of money at critical times. Poor people have "not just low, but also irregular and unpredictable" incomes (Collins et al., 2009, p. 16). Temporality, not poverty, was seen as a common problem across participants and countries (Mader, 2018). Picking up on this justification, the Global Partnership for Financial Inclusion (GPFI) argues that financial services provide people "with capacity to increase or stabilize their income, build assets and have much greater resilience to economic shocks" (2010, p. 1).

While the Portfolios project demonstrated why poor people needed access to financial products, other reports elaborated who should deliver these technologies. Banks, financial institutions, and technology companies emerged as key, for-profit delivery agents of financial products. The Consultancy Group to Assist the Poor (CGAP), for example, structured a series of reports around the question: how can "financial institutions offer financially inclusive services to recipients on a profitable basis?" (Bold et al., 2011; CGAP, 2011a, 2011b, 2011c, 2011d). However, in attempting to make the "business case," CGAP revealed that it is quite expensive to deliver decent services to low income clients, living in remote areas without existing public infrastructure. CGAP subtly suggested that profitability for the private sector required governments to subsidize investments in infrastructure and generate clients in the form of cash transfer recipients. The World Bank Development Research Group (WBDRG) suggested that governments should shift cash transfer payments to electronic form, creating "a foundation upon which the private sector [...] can build" (2014, p. 3). Reports like these change the focus of cash transfer programs from poverty alleviation to the statesubsidized development of a general retail payment system (e.g. Bold et al., 2011, p. 22).

Likewise, financial inclusion experts advocated that governments ease protective regulations in order for private contractors to profit. Financial inclusion claims to use technology to overcome stru and geographical obstacles to banking, but only once nts create an "enabling environment" (GPFL 2010, p. 1). Instance fulfilling the standard expectations of ba service -- i.e. document-intensive enrollment procedures, acc ical infrastructure, and adequately trained employees -- financial inclusion proffers low-cost services like "mobile money" or "branchless banking" as alternatives. As GPFI (2010) says, changes in legislation "provide the right conditions for innovation to thrive" (p. 1). Yet, the language of "innovation" can excuse the delivery of substandard or inappropriate service to a population unaccustomed to banking. Such reports reveal that cash transfer recipients can only be made into a profitable customer base if they are excluded from normal banking arrangements.

Once cash transfer programs are associated with private service providers, recipients themselves become key to subsidizing grant delivery through credit. As far back as 2006, David Porteous, of Bankable Frontier Associates, recommended that one way to recover costs was for corporations to sell financial products to cash transfer recipients, particularly credit. At the time, Porteous was cautious about this suggestion and offered an ominous caveat: "The regular cash flow of grant recipients may also make them

¹⁰ The rise of techno-finance in development is part of a broader turn toward "little development devices and humanitarian goods" (Collier et al., 2018) geared toward individuals rather than grand public projects. Critiques of post-WWII capital-intensive industrialization and modernization projects have paved the "way for smaller-scale interventions. Such devices are no longer directed toward *the* "public" or *the* "nation," but the social capital and developmental savvy of individual users (*ibid.*). Silicon Valley donors and application designers claim to avoid the top-down imposition of development projects as well as the corruption of local solutions or "bottom-up" safety nets.

¹¹ The number 212 comes from every cash transfer program listed in two reports: World Bank State of Social Safety Nets (2015) and ODI Cash Transfers: What does the Evidence Say (2016)

¹² See Roy (2010) for a good critique on the development of financial subjects.

an attractive target for lenders who may use irresponsible marketing techniques to lead to unsustainable indebtedness" (2006, p 23). Porteous' prescient comment elaborated how cash transfers could be profitably linked to credit and how their very purpose could be undermined through these very links. Even so, many development actors continue to suggest that cash transfer programs can be subsidized by recipients through lending (CGAP, 2011; GPFI, 2010).

Financial inclusion has enabled techno-financial firms to bring new consumers into credit markets through cash transfers (Mader, 2018; Lavinas, 2018). Credit has long been used to absorb surplus liquidity and delay the potential for crises in capitalism (Harvey, 2006/1982). Historically, under industrial capitalism, when workers did not earn enough to purchase what they produced and demand declined, financial innovation permitted them to buy products on credit. More recently, financial capitalism is ascendant and capital accumulation in the global economy increasingly relies on profits from finance, not production (Epstein, 2005; Krippner, 2011). Under financial capitalism, there are increasing concerns over changes to the labor market via automation and rising unemployment or casual and precarious employment. Previously, unemployed people were typically unable to access credit through the formal market. Financial innovation around cash transfer, however, allows grant recipients to become a viable, low-risk credit market. Through cash transfer programs, credit can be attached to reliable state entitlements rather than waged labor or peer pressure (as per microfinance).

Since 2012, and the inception of the Net1 contract, South Africa has broadly followed these prescriptions for bundling cash transfer and financial inclusion. The social grant income opened up a new market for formal creditors to tap into. Under apartheid, most Black South Africans were disqualified from formal credit markets on the basis of race (James, 2014). Since democracy, politicians and bankers alike asserted that improved access to financial services can benefit those previously excluded (e.g. Manuel, 2011; Nation Credit Act 2005). Against a history of racialized financial exclusion, financial inclusion appeared as potentially reparative. As a result, the consumer credit sector rapidly expanded, marketing loans to a growing middle-class Black population in stable government jobs (ibid.). Before long, South Africa had one of the largest household debt-to-GDP ratios in the world (36%), and 50% of people were indebted (25 million). But there was a real limit to the number of loans that could be issued to a small (and shrinking) workforce. Official unemployment in South Africa stands upwards of 25% and unofficial unemployment is around 40%. More people receive social grants than formal wages (Institute of Race Relations, 2017). Net1 made social grant recipients accessible to creditors, in a way they had not been previously.

This is not to say that South African grantees were previously excluded from all forms of credit. In fact, earlier studies documented informal lenders, waiting near payment queues to offer credit and recoup payments (James, 2014). Informal lending in South Africa tends to refer to mashonisas (loan sharks), who face significant risk of non-payment and are known for mitigating their risk through abusive practices, such as keeping clients' grant cards and charging very high interest (James, 2014). Indeed, while some mashonisas are certainly brutal, others are far less so, differing considerably in their lending practices due to their size and their relationship with borrowers (James, Torkelson, & Neves, 2019). Some mashonisas even offer fairer and less restrictive terms, and allow for the negotiation of payment plans and interest rate caps (ibid.). Net1 captured borrowers who could previously only access informal credit. Cash transfer offered a perfect opportunity to create new markets

for finance capital, in a largely uncompetitive space of low risk, inadequate regulation and rampant experimentation.¹³

2. Making a parallel banking system

Net1 describes itself as a provider of "financial inclusion services such as microloans, insurance, mobile transacting and prepaid utilities to our cardholder base" (Net1, n.d.). The benefits of financial inclusion products seem self-evident - no one would argue that exclusion is preferable. Yet, to see inclusion and exclusion as a binary fails to capture the range of problems people experience (Hickey & Du Toit, 2013). Financial inclusion advocates see exclusion from markets as the primary problem faced by poor people, and yet, financial inclusion programs can produce exclusions themselves. Net1's social grant payment system introduced a type of financial inclusion that did not bring people into existing financial markets, but created a segregated financial system, exclusively for grantees. In this section, I will describe how the power-laden techno-financial infrastructure of grant payment separated grantees into a monopolistic banking environment, outside of the national financial system.

In 2012, the South African Social Security Agency (SASSA) contracted CPS, a subsidiary of Net1, for five years to pay grants nationally.¹⁴ Before 2012, the payment of social grants had been a provincial function, conducted by three different companies (one of which was Net1) governed by separate contracts in nine provinces. After 2012, SASSA sought to institute a national standard and streamline grant payment under one contractor. CPS was chosen in a bidding process that was later ruled invalid by the Constitutional Court. The Department of Social Development (DSD) had long aspired to build a national biometric database for grant payment (c.f. 1997 White Paper on Social Welfare), and the call for tenders indicated that it was "preferential" for contractors to have biometric capabilities. Just days before proposals were due, the word "preferential" was changed to "mandatory," ensuring that there was only one bidder who could be awarded this contract, CPS (Torkelson, 2017a). Rival bidder, AllPay (a subsidiary of ABSA, a large South African bank), brought this last minute change before the Constitutional Court, which ruled that the tender process was uncompetitive and invalid (Froneman, 2013). Because of the importance of social grants to the nation, the Court suspended its declaration to ensure people were paid.

These tender irregularities suggest that CPS was SASSA's preferred bidder, due to their history as a provincial service provider. CPS delivered cash transfer payments in rural areas on behalf of South Africa's social security administration since the 1980s (while owned by First National Bank, another large South African bank), and continued after it was purchased by Net1 in the 1990s (Breckenridge, 2014). Perhaps because of this intimacy, SASSA failed to involve either the National Treasury or the Reserve Bank in the design of the new national grant payment system. Then CEO of SASSA, Virginia Petersen, effectively contracted CPS and approved their grant payment system, without consulting other relevant departments. Pravin Gordhan, the former Minister of Finance, underscored the jurisdictional difficulties in a 2017 presentation to Parliament. Gordhan clarified that the Minister of Social Development pays social grants, while the Minister of Finance ensures that resources are available to make payments and that legislation is in place to contract service providers. Gordhan stressed that the role of the National Treasury is not to intervene in departmental processes, but offer oversight and advice upon request. CPS and Net1 designed a parallel banking system with only the approval of SASSA - a government agency which

¹³ See Kish and Leroy (2015) for their argument about racial finance capital in the

US.

14 The contract was subsequently extended for a sixth year.

arguably did not have the capacity to oversee the development of banking infrastructure. 15

The Net1 payment system combined several technologies that they developed (or acquired) to pay grants in rural areas outside of the National Payment System (NPS). These technologies had material effects on recipients – effects that went largely unnoticed for the first few years of the contract. Net1's techno-financial infrastructure was made up of bank accounts, smart cards, biometric identification, and geographic access. With regards to the first, Net1 did not partner with one of South Africa's "big five" banks. 16 Instead, Net1 chose Grindrod Limited, a shipping company with a small specialized bank for high-income clients. Lacking the capacity to quickly absorb 10 million new clients, Grindrod commissioned Net1 to design their IT system for social grant payment. Essentially, completing a circular organogram, Grindrod became a subcontractor of Net1; and Net1, a subcontractor of Grindrod. Net1 consultants automatically opened Grindrod bank accounts for every grantee during enrollment. This happened en masse and did not result from 10 million people, acting as individuals, knowingly entering into private contracts with banking institutions of their choosing. In principle, grantees could be paid into personal accounts with other banks if they filed declarations with SASSA. In practice, very few people knew this was an option, and only about 40,000 ever did so (0.4% of grantees). Grindrod, therefore, was never the equivalent of an independent commercial bank but a monopoly service provider. Through this partnership, Grindrod's banking business grew significantly: it became the second largest bank in South Africa by number of accounts, and its profits increased from R18.6 m/\$1.3 m in 2012 before grant payment to R57m/\$4.1 m in 2013 after grant payment.

Second, while Net1 needed Grindrod's banking license, Net1 did not actually need its banking system. Grants were paid to smart cards that Net1 CEO, Serge Belamant, developed in the 1990s (Breckenridge, 2019). Initially commissioned for Nedbank, the Universal Electronic Payment System (UEPS) was designed for a rural client base to use in an offline environment (ibid.). While many of South Africa's largest banks initially adopted UEPS, they later abandoned it for the globally operable Europay MasterCard Visa (EMV) payment technology. Despite this setback, the UEPS smart card system had all the capabilities needed to pay social grants: it was an independent blockchain system separate from South Africa's main banking infrastructure that worked where online service was limited. UEPS smart cards are small computers with operating software, data processing and memory (ibid.). Information about each grantee and each transaction was stored on these smart cards. CPS agents brought mobile card-readers into townships and villages to make grant payments, and contracted grocery store chains to use their card-readers as well. When a grantee slotted their smart card into a card reader, both the card and card reader made an encrypted record of the transaction, even in an offline environment. Once the smart card or card-reader interacted with an online environment, the entire transaction record was uploaded and recorded. 11

Every subsidiary within the Net1 group – including those that sell insurance (Smartlife) and credit (Moneyline) – had the same card-reader necessary to "read" smart cards. When grantees put their cards into card-readers and placed their thumbs on biometric scanners, their entire banking history became accessible. As Roelof Goosen, a former National Treasury official told me, "it's all on the chip, everything can be read off the chip." This information stor-

age enabled the smart card itself to serve as a very comprehensive credit check for Moneyline (Breckenridge, 2019). From the smart card, Net1 could access a complete picture of a grantees spending habits and other liabilities. This technological intimacy enabled Net1's subsidiaries to sell financial product full relation in a (mostly) non-competitive environs he National Credit Regulator (NCR) requires lenders to ask borrows for their bank statements (three months), proof of income, proof of address, and identification. Net1 subsidiaries could access all this information through the smart card and biometric fingerprint.

Third, SASSA's desire for biometric identification justified the creation of a separate banking system for grantees. South Africa already had a biometric standard for Home Affairs and was intending to develop a biometric standard for the banking sector. The big five banks were hesitant because of the cost of replacing their existing infrastructure with biometrically-enabled infrastructure. While a fingerprint is simply an impression of a biological pattern of ridges, an algorithm turns that impression into something calculable. There is no single algorithm by which a fingerprint comes to be recognized as a biometric signature (Breckenridge, 2014). Net1 developed a biometric standard that could only be "read" by their own proprietary hardware and software. By default, Net1's smart cards were secured with a biometric fingerprint, not a PIN number (although a PIN could be activated). This meant that Net1 smart cards could only be used in Net1 devices as no other bank had access to their proprietary security infrastructure. The National Treasury had to allow retailers, like grocery stores, to have two card readers at till points: Net1's biometric machine and their bank's PIN-based machine. If grantees used their smart card in an ABSA machine with a PIN, their transactions would be settled between ABSA and Grindrod through the National Payment System (NPS). But, when grantees used their card in a Net1 machine with biometrics, their transactions would be settled outside the National Payment System on the smart card itself. As the only financial institution in the country with this exemption, Net1 converted a significant percentage of transactions that should have been settled between banks - using the NPS - into transactions settled within their own infrastructure. This made settlement cheaper for Net1 and invisible to South Africa's banking oversight bodies. According to a presentation in Parliament by Tim Masela, the South African Reserve Bank Head, an exemption was granted because SASSA and CPS had opted to use a biometric standard in advance of the other major South African banks. 19

Another major consequence of the biometric infrastructure was that Net1 could quickly and efficiently achieve "consent" for the sale of financial products from grantees. There is a specific gesture grantees repeat when discussing their interactions with card readers: they position their left hand in a loose fist with their thumb outstretched, while their right hand guides their left thumb toward an imaginary machine. This gesture illustrates how consultants "assist" grantees, who are unfamiliar with the pressure or time needed for a reading. Consultants preside over this action authoritatively, melding their hands with the recipient to ensure consent. As one pensioner from Ceres said to me: "All I did was put my finger there, nothing was signed. I can't read, I didn't have any school. I can't read or write, and I don't understand sometimes what people say." The same action was used to withdraw social grant money and purchase airtime, electricity, loans and insurance. Grantees often insisted that they were instructed to put their finger on the scanner multiple times without knowing why. The standard of

 $^{^{15}\,}$ This has led to speculation of corruption by the Minister of Social Development.

¹⁶ ABSA, Nedbank, Standard Bank, FNB, and Capitec.

¹⁷ Belamant is credited with inventing this blockchain payment technology – a technology that underpins contemporary cryptocurrencies (Gist, 2018).

¹⁸ Interview, Roelof Goosen, Durbanville, 12 May 2017.

¹⁹ Presentation: South African Reserve Bank Head, Parliament, Cape Town, 1 March 2017. https://pmg.org.za/committee-meeting/24075/

informed consent was undermined by the ease of Net1's biometric system, particularly for a less financially literate population. Net1's subsidiaries could sell financial products in a way that was fast, efficient and made it appear grantees were exercising financial choice.

Fourth, Net1's geographical knowledge of recipients, derived from the practice of paying social grants every month, was invaluable for their business. Each month, Net1 and CPS agents drove to 10,000 pay points around the country with large silver briefcases, containing their grant payment systems. They set up their machines and paid social grants on the first few days of each month. Given the temporalities of grant payment, Net1's business was cyclical: the early part of the month was busy, after which their responsibilities tapered off. Still funded by the government contract, they had all the technologies and vehicles needed to spend the rest of the month selling other products where grantees were concentrated. Net1 established formal premises in larger towns, from which consultants could drive to more rural areas, marketing products from their cars. The same staff employed through the government contract were repurposed for Net1's other businesses. When I was sitting in a SASSA office in Port Elizabeth, one beneficiary drove this point home. She pointed to a CPS consultant and said, "That one. See that one? vas at KwaNobuthle this morning."²⁰ In the rainbow pants? The consultant spent brning at a semi-permanent shack in front of a house in Kwanoputhle township selling loans and insurance policies, and her afternoon at the municipal SASSA offices fielding questions and complaints. The distinction between public and private service provision was eroded as Net1 provided a specialized service to the government that subsidized their profitdriven spin-offs.

Net1's control over bank accounts, smart cards, card readers, account histories, and biometric consent as well as their geographical knowledge of grantees allowed them to create a parallel banking infrastructure. Net1 marketed and sold financial products in a non-competitive environment highly subsidized by a government contract and further subsidized by grantees themselves. Many grant recipients had not previously had bank accounts or financial experience and had no way of understanding the hidden implications of this distribution regime. Other grant recipients did not know what information was controlled by Net1, or what conditions they were consenting to with their biometric fingerprints. This is not to say that cash transfer recipients are simply the dupes of Net1. Rather, grantees were effectively conscripted into Net1's monopolistic distribution system and had limited ability to access alternative banking services. South Africa's grant system shows how social relations of power work in and through technologies to produce consequential effects.

3. Transforming grants into collateral for credit

The contradictions of this parallel techno-financial regime come into sharp relief, when considering the effects on social grantees. Grants can be transformed into collateral for credit because of the imprimatur of the South African state. Old age pensions were expanded toward the end of apartheid, and child support grants were introduced in the early years of democracy. While many other social programs have fallen short of targets (housing, land redistribution), and other essential services have been privatized (water, electricity), the social grant program represents the government's largest and most consistent poverty alleviation strategy. Although there has been some criticism about grants encouraging dependency (described in Ferguson, 2015; Barchiesi, 2011; Taylor,

2002), the program has been steadily expanded since democracy to benefit more people.²¹ Social grants form part of every State of the Nation Address and every National Budget Speech.²² Additionally, in 2012, the Constitutional Court and National Treasury went to great lengths to ensure grant payment continued despite irregularities in the tender procedure. The centrality of grants to the South African nation generates a form of surety – a firm promise from the government to regularly pay monthly entitlements. Social grants can serve as security for so-called "unsecured" short-term credit.

Moreover, the government grant program both provides the security for credit, and makes credit necessary. There is a key paradox in South Africa's social welfare system: while grants are designated for individuals outside of the economy - caretakers of children, the elderly, and people with disabilities - they often comprise the only income available for households and families. Designated categories of grants are provided for certain "deserving" individuals on the basis of their presumed exclusion from the workforce. Yet, 40% of working aged adults are unemployed, and deemed undeserving of social support through the grant program. Working-aged unemployed adults have little choice but to congregate around their mothers or grandmothers who are entitled to social grant benefits (StatsSA, 2017). In providing grants to those deemed "legitimately" unemployed, but neglecting those who are not, the government effectively expects grant recipients to care for additional family members on an individual social entitlement. One of the only ways to extend the grant for household consumption and emergencies is through credit.

Because of this, Net1 did not market loans to the low-income sector generally, but to grantees specifically. As early as 2008, in their financial statements, Net1 described the difference between their two moneylending businesses: a "traditional" one (accessible to everyone) and a specialized one (accessible only to grantees: Moneyline). Net1 revealed that their "traditional" micro-lending business was unprofitable due to the high default rate, but their specialized business was a boon for the company. "We consider [social grant-based] lending less risky than traditional microfinance loans because the grants are distributed to these lenders by us" (as cited in McKune, 2017). Here, Net1 drew attention to their ownership of the entire grant distribution process, from the South African Reserve Bank to beneficiary bank accounts. This occurred as follows: grant money moved in a lump sum from one National Treasury (NT) account to one Department of Social Development (DSD) account and then to nine provincial SASSA accounts (all of which were held at the South African Reserve Bank). SASSA, then, transferred this money to nine CPS/Net1 accounts (at Nedbank), and then to nine CPS/Net1 accounts (at Grindrod Bank) about a week before grant payments were made (Gordhan, 2017). Grindrod and Net1 earned interest on R12.6 billion (almost \$1 billion) (ibid.), before dividing up this money into ts on smart cards. Net1 could reconcile individual grantee a most grantee debts ally, without going through the National Payment System. Net's specialized" microfinance business was more profitable than its "traditional" one because of its ability to garnish repayments through its control of social grant flows.

Net1's control over financial flows limited possibilities for beneficiaries to default. Through their UEPS system, Net1 could "apply an automatic debit against any incoming funds to the card in respect of the premium amount" (Net1, n.d.). According to SASSA, money was only supposed to be moved from the provincial CPS/Net1 account to individual accounts, when beneficiaries offered

²⁰ Interview: ILDA advice office client, Port Elizabeth, 28 June 2017.

²¹ The only time grant amounts have gone down was when the Family Maintenance grant, an apartheid relic given to white and coloured families, was replaced with the non-racially restrictive Child Support grant. While more people were provided for under this grant, the amount given to each recipient was much less.

²² Mbeki 2002–2007, Zuma 2010–2017, Ramaphosa 2018.

"proof of life," i.e. their biometric fingerprint. Once grantees scanned their thumbs, all debits were processed as their grants were transferred into their accounts.²³ Receipts showed a series of deductions coming off at the exact time as grantees laid their thumbprints on the scanners. The overall result was that recipients were unable to choose whether or not to pay (or delay) their debts through, for example, "push" notifications. Grantees could not elect to have these deductions occur later in the month on a day of their choosing. Likewise, there was no protective threshold under which deductions stopped. Cash transfers could be whittled away to nothing, even less than nothing, as grantee accounts could run negative balances. Any of these possibilities, though empowering to the grantee, would have introduced more risk for the lender.

Since the government guaranteed the grants, and Net1 controlled the repayment process, there was virtually no risk that these debts would go unpaid. Given that Net1 collected and stored beneficiary data, they knew when grantees would receive their money and when their grants might cease. They knew what day temporary grants would expire and when children would age out at 18. They knew if the grantee had taken other loans, or had other debits coming off their accounts. The only remaining risk, for Net1, was the risk of death, or the incertitude of biological life itself. Of its "traditional" moneylender, Net1 reported: "Despite the fact that we attempt to reduce credit risk by employing credit profiling techniques, the rate of default on loans has been high due to the high credit risk of these borrowers" (as cited in McKune, 2017). No such difficulty collecting payments was experienced with Moneyline, due to their monopoly over infrastructure and information. Indeed, one Net1 insider, revealed that Moneyline's default rate was close to zero, bragging that it was "the lowest in the entire microfinance industry" (ibid.).

And yet, even though the risk of non-payment was close to zero, interest rates on social grant-based credit were significant. Serge Belamant, the founder and former CEO of Net1, often asserted that his products were the cheapest available: "To me, we've been able to reduce costs and without a shadow of a doubt, our loans are probably 1/3rd of the price of any other lender in the country, 1/3rd of the cost" (in Hogg, 2016). Indeed, there is some truth to this. Net1's interest rates were 0% per month, but the costs of credit were hidden in service fees of around 5.33% per month (on R1000, six month loan). This was within the law: the National Credit Act (NCA) allows interest rates of 5% per month on "short-term credit" (under 6 months), as well as initiation fees up to 15% of the value of the loan, and service fees of R50 per month. Short-term credit has the highest allowable interest rate (up to 60% per annum) of any category of credit under the NCA. Even unsecured credit, another category of credit under the NCA, has a lower allowable interest rate of only 27.7% per annum. In this context, Net1's effective interest rate (service fees plus interest) amounted to 32% over six months for R1000 loan (or 64% per annum). Given Net1's vastly reduced risk, credit linked to social grants should not have been priced at the same rate as other forms of short-term credit or even unsecured credit. It should, perhaps, have been priced in line with forms of "secured" credit, like mortgage payments.

This begs the question of how Net1 compared to the rest of the low-income lending market. Net1 is not the only lender benefiting from early and automatic deductions. All other formal lenders are paid in roughly the same way. This is because Net1's infrastructure provides a platform for other formal financial providers targeting

grantees. As such, many registered credit providers made the Net1 bank account a precondition of lending to grant recipients, as stated clearly on signs in their windows. Additionally, I met several informal lenders, i.e. mashonisas, who told me that they had recently formalized their operations to take advantage of Net1's payment platform. Net1's payment system included a perverse incentive that led to over-indebtedness for many borrowers. Lenders could give grantees more loans than could be repaid each month through their grant incomes. Such lenders would get paid some months, and would have their charges reversed in other months. Yet, even if a loan extended beyond the normal contract term, it would eventually be paid off through the regularity of the grant. Meanwhile, for every processed payment or bounced transaction, Net1 and Grindrod took a fee from the recipient, profiting from reckless lending without screening for abuses. The Black Sash collected dozens of bank statements from grantees where monthly debit orders far surpassed income (Torkelson, 2018). The question of whether or not Net1 is better than the rest of the low-income lending market becomes moot: Net1's banking system lowered the risk for all formal (and even some informal) lenders and provided the platform for creditors to reach grantees.

From the perspective of grantees, borrowing money became more necessary than it had been before. Some people felt that Net1 used the sale of products like airtime and electricity to generate a need for borrowing. Grantees showed me long receipts with R100 deducted in R5 increments for airtime, and R200 deducted in R50 increments for electricity. Many people did not know how these debts were contracted: people without phones had airtime deductions for unknown numbers, pensioners in residential care facilities had electricity deductions for homes they never occupied (Black Sash, 2016; Torkelson, 2017a). This was a massive problem, with over 78% of all complaints to SASSA being about utility deductions (SASSA, 2018). There is no consensus regarding how so many people were registered for deductions without their consent. But, once registered, grantees struggled to end these automated debits, and instead, were told by Net1 consultants to borrow money from Moneyline. One grantee in Khayelitsha suggested intent: "First they steal are our money, then we are forced to beg them for a loan."²⁴ Other people stressed that after borrowing from Moneyline, they had to visit additional lenders to get through the month. A grantee from Delft explained: "I borrow from Moneyline. I borrow from the Chinese.²⁵ I go to the people who sell meat. They put extra [interest] on the meat. When I buy the neckies [chicken necks], they get it for R15 and they ask for you R25. Before SASSA [the social grant], I did not know this credit thing."²⁶ Net1's credit-linked cash transfer program should not be seen as a panacea for previously exploitative informal credit arrangements. Instead, their payment platform reveals how the formal and informal are entangled.

Additionally, over the course of their contract, Net1 created another product geared toward grantees: the EasyPay account. This second account gave Net1 even more control over grantee banking beyond SASSA's purview. Net1 innovated this service for two reasons: first, the Minister of Social Development, Bathabile Dlamini, attempted to amend the Social Assistance Act to stop debit orders on the previous account; and second, Net1 wanted to ensure that they had continued access to grantees' bank accounts when their

²³ I have been told by two people from the Banking Association of South Africa that these payments are not processed as Early Debit Orders (EDOs) through the National Payment System (NPS), and seem to be processed internally on smart card accounts before or as beneficiaries are being paid. If these debits were processed as EDO's there would be certain codes from the NPS on each statement, which are conspicuously absent.

²⁴ Interview: Grantee, Khayelitsha, 2 October 2016.

²⁵ Many of the lending businesses in poor communities come from old Afrikaans agricultural capital (James, 2014) or new Chinese migrant capital. Recent Chinese migrants (separate from an older Chinese South African population) have set up a network of shops and money-lenders throughout South Africa, in even remote villages. The racializing language of "the Chinese" is used to refer to a certain type of payday lender that gives loans, and recoups the entire loan plus 25% interest the following month. It is worth noting, not all lenders practicing this business model are Chinese, nor are all Chinese lenders practicing this business model.

²⁶ Interview: Grantee, Delft, 28 July 2018.

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government contract ended. Net1 essentially designed EasyPay to move beneficiaries into a separate virtual domain, beyond SASSA's reach. Net1 aggressively marketed EasyPay through misrepresentation: some people were told that the EasyPay card was the "new SASSA card"; others that credit was "not allowed on the old SASSA card"; still others that EasyPay was the cheapest, safest bank account "for life" (Black Sash, 2016). Over 2 million grantees (20%) opened EasyPay accounts without filing the necessary declaration with SASSA. Grantees "consented" with their fingerprint, moving themselves out of the SASSA banking environment into a private arrangement with EasyPay. One SASSA official in Port Elizabeth, explained it this way: "When beneficiaries sign up for the green card [EasyPay card], they just disappear from our computer. We can't see them on our system anymore. We don't know where they go. And we can't help them when they come here crying."²⁷ This switch happened behind SASSA's back. Grantees were removed from SASSA's database and moved into a separate domain controlled

One whistle-blower told the Black Sash that Net1 forced him to sell EasyPay cards by setting high monthly sales targets. ²⁸ He said that employees would have to sell upwards of 300 cards per month in order to not be penalized by the company. He also explained that the only way to get grantees to take these cards was to make them a precondition for Moneyline loans. Consultants had to work fast to achieve their targets, and rarely explained the process to grant recipients (Black Sash, 2018b). As one grantee from Khayelitsha told me, "I go there [to Net1] by the train station for a loan, but I come back with a card and [insurance] policy. I don't want these things."²⁹

Finally, for grantees recourse was almost impossible. With the original Net1 account, beneficiaries could go to SASSA and fill out a form to dispute their deductions. These were processed slowly, if at all, and while some people got their deductions stopped, few were reimbursed (Panel of Experts, 2018). With the EasyPay account, however, recourse became even more difficult because grantees were not allowed to use the SASSA mechanism. They had to visit one of only 144 Net1 branches or 4 Grindrod banks in the country. One grantee in a rural area explained to me how EasyPay consultants drove to her village every month: "you can take a loan from the boot [trunk] of the car. You get the card. You get the loan. But if something goes wrong, there's no help." She went to the consultant every month for three months to ask for a bank statement. Each time, he would "forget" her bank statement and she would have to wait for him to return the following month.³⁰ Likewise, the Net1 call center was not free for grantees, who reported long wait times and very expensive phone calls.³¹ When their calls were answered, consultants often did not speak their home languages and they waited again for consultants who could. If grantees requested bank statements over the phone, they would need access to an email address, computer and printer, which are rarely accessible in poor communities. Since most of Net1's infrastructure relied on digital access, they did not offer recourse that was accessible to grantees.

Net1 built a technological system through which the social grant given to the poor for poverty alleviation was made available as collateral for credit. This type of control over the entire grant payment stream reverberates with earlier processes of monopolistic capital accumulation under colonialism and apartheid, a company town-type capitalism. There are strong legacies of monopoly corporations, particularly mines or farms, where one

company controls everything a worker needs to survive: paying salaries, selling products, extending credit, and collecting repayments (James, 2014; Scully, 1987). Net1 essentially occupied the same monopolistic position in a digital space: paying grants, selling products, extending credit and collecting repayments. People effectively used their future social grant payments for present needs through credit, diminishing the value of their grant in upcoming months, and causing further consumption crises. The grant meant to be given to the most vulnerable people for basic needs was transferred instead to a private corporation through the repayment of debts.

4. Conclusion

After a massive public outcry. Net1's contract ended in September 2018. For over a year, SASSA had resisted designing a new grant payment regime, and the press speculated that the (then) Minister of Social Development had a corrupt relationship with Net1. The Black Sash, Corruption Watch, and Freedom Under Law initiated multiple lawsuits to force a change to the grant payment system. The Constitutional Court appointed a Panel of Experts to compel SASSA to implement a new system and ruled the former Minister of Social Development should be held financially responsible for her negligence. Additionally, the Supreme Court of Appeals decided that grantee accounts should be protected from deductions, and the Parliamentary Standing Committee on Public Accounts investigated R1 billion of "unlawful, fruitless and wasteful expenditure" by SASSA. These regulatory actions led to the roll-out of a new grant payment system. Instead of a monopoly service provider, grantees can now choose to be paid through the Post Office (70%), commercial banks (20%) or EasyPay (10%). While loans are still allowed on commercial bank accounts and EasyPay, the Post Office accounts are ring-fenced to prevent deductions.

This should offer some hope for grantees, but debt remains implicit in this new system (James et al., 2019). There has been confusion around the implementation of this new payment regime and recipients have not been given enough information to make informed decisions about their options (Black Sash, 2018a). Simultaneously, SASSA decommissioned around 80% of all physical paypoints around the country. Recipients in remote areas now have to travel long distances to access their grants at the Post Office, grocery stores, or commercial banks. They often find the Post Office to be out of money, and instead use ATMs that charge fees or retailers that require purchases. This had the unintended effect of enabling Net1 to keep just under 1 million people on their EasyPay card. Net1 consultants told grantees that, with the EasyPay card, they could access their grants in the same places and on the same days as before. Old debts followed grantees to commercial bank accounts and EasyPay accounts, and there has been no debt jubilee to forgive ill-gotten debts.

In this paper, I have shown how cash transfer programs can lead to indebtedness. In South Africa, the importance of the grant to the post-apartheid nation mades it very reliable, and this reliability made it available to be transformed into collateral for credit. Social grants, which are provided for basic needs, were converted into disadvantageous and inappropriate financial products and services. Within this power-laden techno-financial system, there was no ability to default, as Net1 exerted near total control over social grant payments. Many grantees failed to receive the value of their state entitlements and were forced to seek out additional loans from formal and informal lenders. Each additional debt solved a consumption crisis in the present, but made it more difficult for grantees to provide for their families in the future, thereby undermining the gains cash transfers are meant to introduce. Because South African social grants are targeted toward people outside of

²⁷ Interview: SASSA official, Port Elizabeth, 28 June 2017.

²⁸ The whistle-blower appeared in a documentary for *Cutting Edge*. The documentary can be viewed here: https://www.youtube.com/watch?v=Qa97QSi8F80&t=185s.

²⁹ Interview: Grantee, Khayelitsha, 2 October 2016.

³⁰ Interview: Grantee, Ceres, 21 February 2017.

³¹ Interview: Grantee, Limehill, 29 August 2017.

the economy – the elderly, children, people with disabilities – loans were taken against future grant income, not future labor or other entrepreneurial income. In other global contexts, cash transfer payments are meant to be developmental, directed toward investment in productive enterprise. More work needs to be done to assess the effects of credit on those recipients.

Given the global optimism about cash transfer programs in general, and financially-inclusive cash transfer programs in particular, there is a need to explore the potential consequences of such programs more closely. It is, of course, possible to see the South African situation as both unfortunate and exceptional. But, development actors are pushing for the combination of cash transfer with financial inclusion worldwide, which could produce unintended consequences similar to those experienced in South Africa. Net1's financially-inclusive cash transfer exacerbated the vulnerability of grantees – and weakened their resilience in the face of emergencies or consumption crises – the very problems social grants were meant to fix. South African social grantees became a terrain of struggle: simultaneously supported by a state-sponsored social assistance program, and undermined by a private regime of credit in the service of global poverty alleviation goals.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- Aguero, J., Carter, M., & Woolard, I. (2006). The impact of unconditional cash transfers on nutrition: The South African Child Support Grant. Cape Town: University of Cape Town.
- Barchiesi, F. (2011). Precarious liberation: Workers, the state, and contested social citizenship in post-apartheid South Africa. Albany, NY: SUNY Press.
- Barrera-Osorio, F., Bertrand, M., Linden, L. L., & Perez-Calle, F. (2011). Improving the design of conditional transfer programs: Evidence from a randomized education experiment in Colombia. American Economic Journal: Applied Economics, 3(2), 167–195.
- Barrientos, A. (2012). Social transfers and growth: What do we know? What do we need to find out? *World Development*, 40(1), 11–20.
- Bateman, M., & Chang, H. J. (2012). Microfinance and the illusion of development: From hubris to nemesis in thirty years. World Economic Review, 1.
- Belamant, S. (2016). Net 1 UEPS Technologies, Inc. Chairman's letter 2016 Annual report. Johannesburg: Net1 UEPS Technologies.
- Black Sash (2016). Community based monitoring: SASSA paypoints: October 2016-November 2016. Cape Town: Black Sash. Retrieved from https://cbm.blacksash. org.za/survey-types/sassa-paypoint-citizen.
- Black Sash (2018a). Community based monitoring: Monitoring the transition: June 2018-November 2018. Cape Town: Black Sash.
- Black Sash (Producer). Philander, E., Cousins, C. C., Abrahams, J., & Torkelson, E. (Writers) (2018b, March 27). Grant grabs III. Cutting Edge. Johannesburg: South

- African National Broadcasting Company. Retrieved from https://www.youtube.com/watch?v=Qa97QSi8F80&t=185s.
- Bold, C., Porteous, D., & Rotman, S. (2011). Social cash transfers and financial inclusion: Evidence from four countries. CGAP Focus Note 77. Washington, DC: Consultative Group to Assist the Poor.
- Breckenridge, K. (2014). Biometric state. Cambridge University Press.
- Breckenridge, K. (2019). The global ambitions of the biometric anti-bank: Net1, lockin, and the technologies of African financialization. *International Review of Applied Economics.*, 33(1), 93–118.
- Chakravartty, P., & Da Silva, D. F. (2012). Accumulation, dispossession, and debt: The racial logic of global capitalism–an introduction. *American Quarterly*, 64(3), 361–385.
- Clemence, Z., & MacLellan, F. (2017). Cash transfers get an upgrade. FinDev Gateway. Washington, DC: FinDev Gateway. Retrieved from http://www.findevgateway.org/blog/2017/may/cash-transfers-get-upgrade.
- Collier, S., Cross, J., Redfield, P., & Street, A. (2017). Little development devices and humanitarian goods. *Limn*, 9.
- Collins, D., Morduch, J., Rutherford, S., & Ruthven, O. (2009). Portfolios of the poor: How the world's poor live on \$2 per day. Princeton, NJ: Princeton University Press.
- Consultative Group to Assist the Poor (2011a). *G2P research project: Brazil country report.* Washington, DC: Consultative Group to Assist the Poor.
- CGAP (2011b). G2P research project: Colombia country report. Washington, DC: Consultative Group to Assist the Poor.
- CGAP (2011c). G2P research project: Mexico country report. Washington, DC: Consultative Group to Assist the Poor.
- CGAP (2011d). G2P research project: South Africa country report. Washington, DC: Consultative Group to Assist the Poor.
- Cooper, M. (2017). Family values: Between neoliberalism and the new social conservatism. Boston, MA: MIT University Press.
- de Janvry, A., Finan, F., Sadoulet, E., & Vakis, R. (2006). Can conditional cash transfer programs serve as safety nets in keeping children at school and from working when exposed to shocks? *Journal of Development Economics*, 79(2), 349–373.
- Duryea, S., & Arends-Kuenning, M. (2003). School attendance, child labor and local labor market fluctuations in urban Brazil. World Development, 31(7), 1165–1178.
- Epstein, G. A. (Ed.). (2005). Financialization and the world economy. Cheltenham, UK: Edward Elgar Publishing.
- Ferguson, J. (2015). Give a man a fish: Reflections on the new politics of distribution. Durham, NC: Duke University Press.
- Froneman, J. (2013). Allpay Consolidated Investment Holdings (Pty) Ltd and Others v Chief Executive Officer of the South African Social Security Agency and Others. Johannesburg: Constitutional Court.
- Garcia, M., & Moore, C. M. T. (2012). The cash dividend: The rise of cash transfer programs in Sub-Saharan Africa. Washington, DC: World Bank.
- Gertler, P. (2004). Do conditional cash transfers improve child health? Evidence from PROGRESA's control randomized experiment. American Economic Review, 94(2), 336–341.
- Global Partnership for Financial Inclusion (2010). *G20 principles for innovative financial inclusion*. Toronto: Global Partnership for Financial Inclusion.
- Gordhan, P. (2017). Presentation to the Standing Committee of Public Accounts: SASSA and related matters. Cape Town: South African Parliament.
- Group of Twenty (2009). *G20 leaders statement*. Pittsburgh, PA: Group of Twenty. Harvey, D. (2006/1982). The limits to capital. New York, NY: Verso.
- Hickey, S., & Du Toit, A. (2013). Adverse incorporation, social exclusion, and chronic poverty. In *Chronic poverty* (pp. 134–159). London, UK: Palgrave Macmillan.
- Hickey, S., & Seekings, J. (2017). The global politics of social protection. WIDER Working Paper 2017/115.
- Hogg, A (2016). Net1's Serge Belamant: Business is ugly. Disrupt at your reputational peril. Biz News. Retrieved from https://www.biznews.com/ entrepreneur/2016/08/09/net1s-serge-belamant-business-is-ugly-disrupt-atyour-reputational-peril
- Hulme, D., Hanlon, J., & Barrientos, A. (2012). Just give money to the poor: The development revolution from the global South. Boulder, CO: Kumarian Press.
- International Labor Organization (2000). World labor report 2000: Income security and social protection in a changing world. Geneva: International Labour Organization.
- International Finance Corporation (2016). IFC invests in Net1 to promote technology that expands financial services to poor in Africa. Washington, DC: World Bank Group. Available at: https://ifcextifc.org/IFCExt/Pressroom/IFCPressRoom.nsf/ 0/D334AA9DF30D017E85257F92006205C5.
- James, D., Torkelson, E., & Neves, D. (2019). Reckless lending research: A nine city study of grant linked credit. Cape Town: Black Sash.
- James, D. (2014). Money from nothing: Indebtedness and aspiration in South Africa. Palo Alto, CA: Stanford University Press.
- Kish, Z., & Leroy, J. (2015). Bonded life: Technologies of racial finance from slave insurance to philanthrocapital. *Cultural Studies*, 29(5–6), 630–651.
- Kotzé, H. (2018). Net 1 UEPS Technologies, Inc. Chairman's letter. 2018 Annual report. Johannesburg: Net1 UEPS Technologies.
- KPMG. (2017). Net1 Applied Technologies South Africa (Pty) Ltd: Factual findings report on agreed upon procedures. Johannesburg: KPMG. Retrieved from http://media.corporate-ir.net/media_files/IROL/73/73876/press/2.%20KPMG% 20report%20April%202017.pdf.
- Krippner, G. R. (2011). Capitalizing on crisis. Boston, MA: Harvard University Press. Lavinas, L. (2018). The collateralization of social policy under financialized capitalism. Development and Change, 49(2), 502–517.

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- Leroy, J. L., Ruel, M., & Verhofstadt, E. (2009). The impact of conditional cash transfer programmes on child nutrition: A review of evidence using a programme theory framework. *Journal of Development Effectiveness*, 1(2), 103–129.
- Mader, P. (2018). Contesting financial inclusion. *Development and Change*, 49(2), 461–483
- Manuel, T (2011) Address by Minister Trevor Manuel on financing business innovation for Africa's development. The Presidency. 9 May 2011. Retrieved from https://www.gov.za/address-minister-trevor-manuel-financing-businessinnovation-africa's-development.
- McCullough, E. (2019). Cash transfers: Theory and practice in Neoliberal Aid. Dissertation. Berkeley: University of California.
- McKune, C. (2017). Serge Belamant, SASSA, and the war chest of poor people. Amabungane. Retrieved from http://amabhungane.co.za/article/2017-03-16-serge-belamant-sassa-and-the-war-chest-of-poor-people.
- Morduch, J. (2017). Microfinance as a credit card. Limn, 9.
- Net1 website. (n.d.). The U.E.P.S. Technology. Retrieved from http://www.net1.com/key-products/the-ueps-technology/.
- Panel of Experts (2018). Reports to the Constitutional Court on the SASSA transition. Johannesburg: Constitutional Court.
- Polanyi, K. (2001/1944). The great transformation. Boston, MA: Beacon press.
- Porteous, D. (2006). Scoping report on the payment of social transfers through the financial system Bankable Frontier Associates. London, UK: Department for International Development.
- Porteous, D. (2009). Designing and implementing financially inclusive payment arrangements for social transfer programs Bankable Frontier Associates. London, UK: Department for International Development.
- Roy, A. (2010). Poverty capital: Microfinance and the making of development. London: Routledge.
- Seekings, J. (2017). State capacity and the construction of pro-poor welfare states in the developing world. In M. Centeno, A. Kohli, & D. Yashar (Eds.), States in the developing World. Boston, MA: Cambridge University Press.

- Scully, P. (1987). The bouquet of freedom: Social and economic relations in the Stellenbosch district, c1870–1900 (Doctoral dissertation). University of Cape Town database.
- Soares, F. V., Ribas, R. P., & Osório, R. G. (2010). Evaluating the impact of Brazil's Bolsa Familia: Cash transfer programs in comparative perspective. *Latin American Research Review*, 173–190.
- Soederberg, S. (2014). Debtfare states and the poverty industry: Money, discipline and the surplus population. London, UK: Routledge.
- Institute of Race Relations (2017). South Africa survey. Johannesburg: Institute of Race Relations.
- Stats SA (2017). General household survey 2017. Pretoria: Statistics South Africa. Retrieved from http://www.statssa.gov.za/publications/P0318/P03182017.pdf.
- South African Social Security Agency (2018). Dispute resolution mechanism 2016– 2018. Cape Town: Department of Social Development.
- Taylor, V. (2002). Transforming the present: Protecting the future. Report of the Committee of Inquiry into Comprehensive Social Security for South Africa. Johannesburg: Committee of Inquiry. Retrieved from http://www.cdhaarmann.com/Publications/Taylor%20report.pdf.
- Torkelson, E. (2017a). Deductions from social grants. Ground Up. Retrieved from https://www.groundup.org.za/article/deductions-social-grants-how-it-works/.
- Torkelson, E. (2017). Sophia's choice. Ground Up. Retrieved from https:// www.groundup.org.za/article/sophias-choice-farm-worker-has-decide-which-her-children-feed/.
- Torkelson, E (2017). The World Bank's role in SA's social grant payment. Ground Up. Retrieved from https://www.dailymaverick.co.za/article/2017-03-24-groundup-the-world-banks-role-in-sas-social-grants-payment-system/.
- Torkelson, E. (2018). Reckless lending research. Cape Town: Black Sash.
- Vally, N. T. (2016). Insecurity in South African social security: An examination of social grant deductions, cancellations, and waiting. *Journal of Southern African Studies*, 42(5), 965–982.
- World Bank (2001). World development report 2000/2001: Attacking poverty. Washington, DC: World Bank.